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Load capacity of shallow embedded flat plate steel fixings

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LOAD CAPACITY OF SHALLOW EMBEDDED FLAT PLATE STEEL FIXINGS

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2.0 ABSTRACT

A series of experimental investigations were undertaken on cast-in concrete anchors manufactured from varying arrangements of flat steel plates. This form of anchors is relatively unique to the construction industry in New Zealand and as such very little research has been undertaken to determine their ability to resist applied loads. The experimental investigations were aimed at determining the load deformation responses of the anchors under direct tension, direct shear and a combination of tension and shear loads.

The experimental results obtained from the investigation were compared to the CCD design method which has been adopted in Appendix D of ACI 318. A series of modifications were suggested to allow the CCD design to be used with flat plate anchors and to convert the approach into Metric units suitable for use in New Zealand.

An analytical investigation compared the lower 5th percentile experimental results obtained from the tested anchors with the modified CCD design approach. It was found that the modified CCD design method developed in this investigation lower 5th percentile experimental results and it is suggested that the design approach be adopted in New Zealand to predict the theoretical load carrying capacity of concrete insert anchors.

3.0 INTRODUCTION

Shallow embedded anchorages have a wide range of applications in the construction industry. They are commonly used to connect precast concrete panels and for the fixing of structural steel members to concrete panels. The shallow embedded anchors can take numerous forms, include cast in proprietary anchors, post installed proprietary anchors, hooked or bend reinforcing bars and cast in flat plate anchors or weld plates. The force transfer mechanism of the anchors relies on mechanical interlock between the anchors and the surrounding concrete, which allows them to have a reduced embedment depth when compared to conventional anchorage lengths for deformed reinforcing bars.

Extensive research has been completed into the load resisting characteristics of proprietary cast in and post-installed anchors, hooked reinforcement, and head anchors. Very little research has been undertaken to determine the response of shallow embedded anchors which are formed from hooked flat plates. These anchors are commonly used in New Zealand to form the anchorage of cast in weld plates to which structural steel members are attached, as shown in Figure 1. The design of these anchors is typically based on 30 years of perceived best practice and inappropriate extensions of design rules for reinforcement embedments.

This research report presents a series of experimental and theoretical investigations into the load deformation characteristics of cast in hooked flat plate anchors. The key objective of the research were to gain a greater understanding of the failure method of these anchors and to develop a series of design guidelines which could be implemented by design engineers when using cast in hooked flat plate anchors.

3.1 New Zealand Specific Detailing

In the design of concrete and masonry structures, attachments for the introduction of concentrated loads as well as primary structural connections for prefabricated components involves the use of a fastening system. The fastening systems can be classified into cast-in-place systems and post-installed systems.

Cast-in-place systems are placed in the formwork prior to casting the concrete. The element which is fixed to the concrete member can be attached to the fastening system using mechanical fasteners or welding.

Post installed systems may be installed by drilling a hole into the concrete member into which the fastening system will be installed. The fastening system is attached to the concrete member using a range or mechanical and chemical fixing techniques.

In New Zealand cast-in anchors are often manufactured from flat steel plates which are either hooked to form a 90° bend or to which the end is flared, often called "rag-tails". These anchor plates are often used with an additional steel plate welded to the end and embedded flat into the surface of the concrete panel. The additional steel plate forms a surface to which structural steel members can be fixed to, using either mechanical fixings or more commonly by welding. Shallow embedded anchors of this form are commonly referred to as weld plates

Typical shallow embedded weld plates used in New Zealand are shown in Figure 1. The steel plates are typically manufactured from mild steel with a lower character yield stress of 250 MPa. The hooked plates are typically 6mm thick and can vary in width between 75 and 150 mm. The length of the hooked section is commonly between 100 mm and 250 mm long. The embedment depth typically varies between 50 mm and 200 mm.

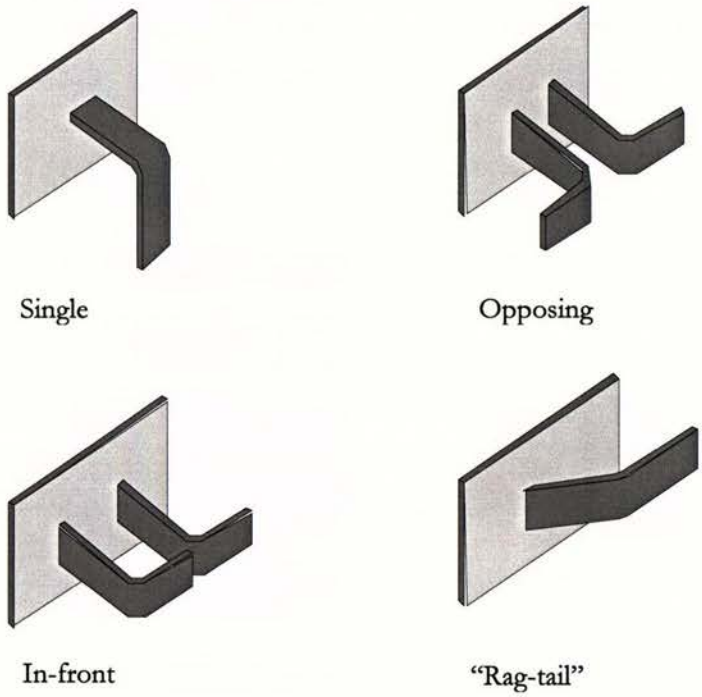


Figure 1 *Typical weld plate details used in New Zealand*

Very little experimental testing has been undertaken on the shallow embedded weld plates shown in Figure 1 and as such no design guidance is provided to engineers to determine the load deformation response of the anchors. Due to the unusual shape of the weld plates it is unclear as to how they will fail when their strength is exceeded, or whether they will follow the trend observed in the failure modes of more commonly used circular and headed cast-in anchors.

4.0 DESIGN CRITERIA

4.1 Failure Modes

Previous experimental testing undertaken on cast-in and post-installed concrete insert anchors have determined that the anchors can fail in different failure modes, depending on the relative strength of the anchors, the concrete and the mechanical or chemical bond between the anchor and the surround concrete.

Anchors which are loaded in direct tension have been found to fail by fracture of the anchor, pullout of the anchor, breakout of a large piece of concrete surrounding the anchor (a pullout cone), fracture out the side of the concrete member, and splitting of the concrete member. The failure method of the cast in anchor will be found to be the weakest of the failure modes listed above. Visual representations of the failure modes are presented in Figure 2(a) below.

Anchors which are loaded in direct shear have been found to fail by fracture of the anchor, pry out of the anchor, and breaking out a large piece of concrete from the member. Figure 2(b) provides visual representation of the various shear failure modes.

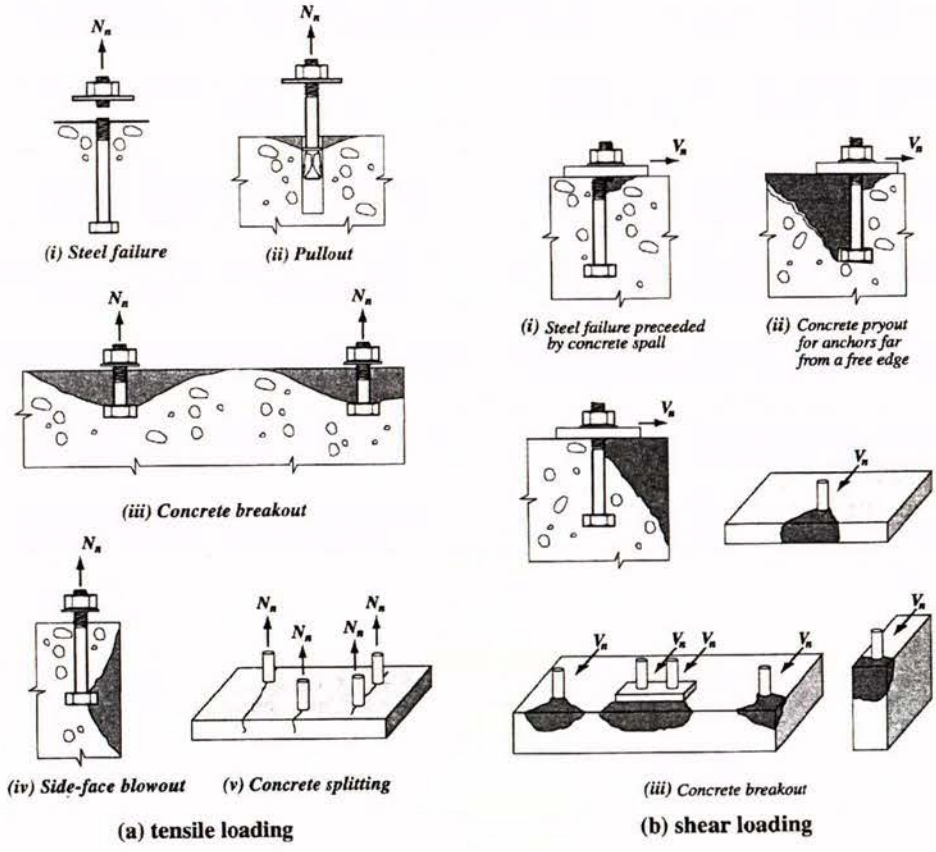


Figure 2 *Failure modes for anchors [A1].*

4.2 Concrete Capacity Design (CCD)

It is generally accepted that the Concrete Capacity Design (CCD) method provides an accurate prediction of the lower characteristic failure load of concrete anchors which are tested under direct tension, direct shear, or a combination of the two. As such it has been adopted by a large number of countries as a design method for concrete anchors. Detailed descriptions of the CCD method and background history are provided in numerous references.

Most recently ACI 318 [A1] adopted a modified version of the CCD into Appendix D as design requirements for anchors used in concrete to transmit structural loads by means of tension, shear, or a combination of the two. The design procedures are intended for in-service conditions and do not apply to short term handling and construction conditions.

Appendix D of ACI 318 is applied to both cast in and post installed anchors, but does not apply to specialty insert anchors, adhesive or grouted anchors, powder or pneumatic anchors. Reinforcement which is used as part of the embedment of the anchors is required to be designed by alternative means. Appendix D can also be used to design headed anchors and hooked bolts which have been proven to have a pull out strength in uncracked concrete which is greater than 1.4 x the strength in cracked concrete.

Anchors designed in accordance with Appendix D shall be designed to ensure the nominal design strengths of the anchor or anchor group for the lowest potential failure modes in shear and tension are greater than the maximum applied loads in shear and tension respectively. The behaviour of the anchors to the interaction of combined tension and shear are also considered in the design methodology.

The following section summarises the requirements of Appendix D from ACI 318. Wherever possible the original symbols and notations have been used, however it was required that some notation be modified to remain in accordance with New Zealand convention. The units and dimensions used in Appendix D of ACI 318 have been converted from U.S Customary to metric.

4.2.1 Strength Reduction Factors

ACI recommends that the following strength reduction factors shown in Table 1 are used when determining the design load of concrete insert anchors. Cat 1 is defined as anchors which have a low sensitivity to installation and have been shown to have a high reliability. Cat 2 is defined as anchors which have a medium sensitivity to installation and have medium reliability. Cat 3 are

anchors which have a high sensitivity to installation tolerances and have been shown to have a low or unproven reliability.

Table 1 *Strength reduction factors*

Failure Mode	Strength Reduction Factor	
	Tension	Shear
Anchor Failure		
Ductile Steel	0.75	0.65
Brittle Steel	0.65	0.6
Concrete Failure - With supplementary reinforcement		
Cast-in studs	0.75	0.75
Post installed (Cat 1)	0.75	0.75
Post installed (Cat 2)	0.65	0.75
Post installed (Cat 3)	0.55	0.75
Concrete failure – Without supplementary reinforcement		
Cast-in studs	0.70	0.70
Post installed (Cat 1)	0.65	0.70
Post installed (Cat 2)	0.55	0.70
Post installed (Cat 3)	0.45	0.70

4.2.2 Tensile Strength

4.2.2.1 Steel strength of Anchor

The nominal strength of an anchor in tension is given by:

$$N_s = nA_{se}f_{ut}$$

Where

N_s = nominal strength of an anchor or group of anchors in tension, as governed by the steel

n = number of anchors in a group

A_{se} = effective cross sectional area of an anchor

f_{ut} = specified tensile strength of the anchor (but not greater than $1.9f_y$)

4.2.2.2 Concrete Breakout of Anchor

The nominal breakout strength of an anchor or group of anchors in tension shall not exceed;

$$N_{cb} = \Psi_1 \Psi_2 \Psi_3 \frac{A_n}{A_{no}} N_b$$

Where

N_{cb} = nominal concrete breakout strength of an anchor or group of anchors

Ψ_1 = modification for eccentrically loaded groups (equal to 1.0 for individual anchors)

Ψ_2 = modification factor for edge distances

Ψ_3 = modification for anchor type, in uncracked concrete only

A_n = projected area of the failure surface for the outside of the head of the anchor or group of anchors (must be taken as less than nA_{no}). Calculations of A_n for various configurations are shown in Figure 3

A_{no} = projected concrete failure area of one anchor when not limited by edge distance.

N_b = basic concrete breakout strength in tension of a single anchor in cracked concrete

And $$N_b = k\sqrt{f_c'} h_{ef}^{1.5}$$

Where

f_c' = specified concrete compressive strength recorded from concrete cube tests

k = 24 for cast in anchors (in U.S Customary units)

k = 17 for post installed anchors (in U.S Customary units)

Also:

$$\Psi_1 = \frac{1}{\left(1 + \frac{2e_n'}{3h_{ef}}\right)} \leq 1 \text{ when } e_n' \leq 0.5s$$

Where

e_n' = eccentricity of normal force on a group of anchor; the distance between the resultant tension load on a group of anchors in tension and the centroid of the group of anchors loaded in tension (always taken as positive)

h_{ef} = effective anchor embedment

s = centre to centre spacing of the anchors

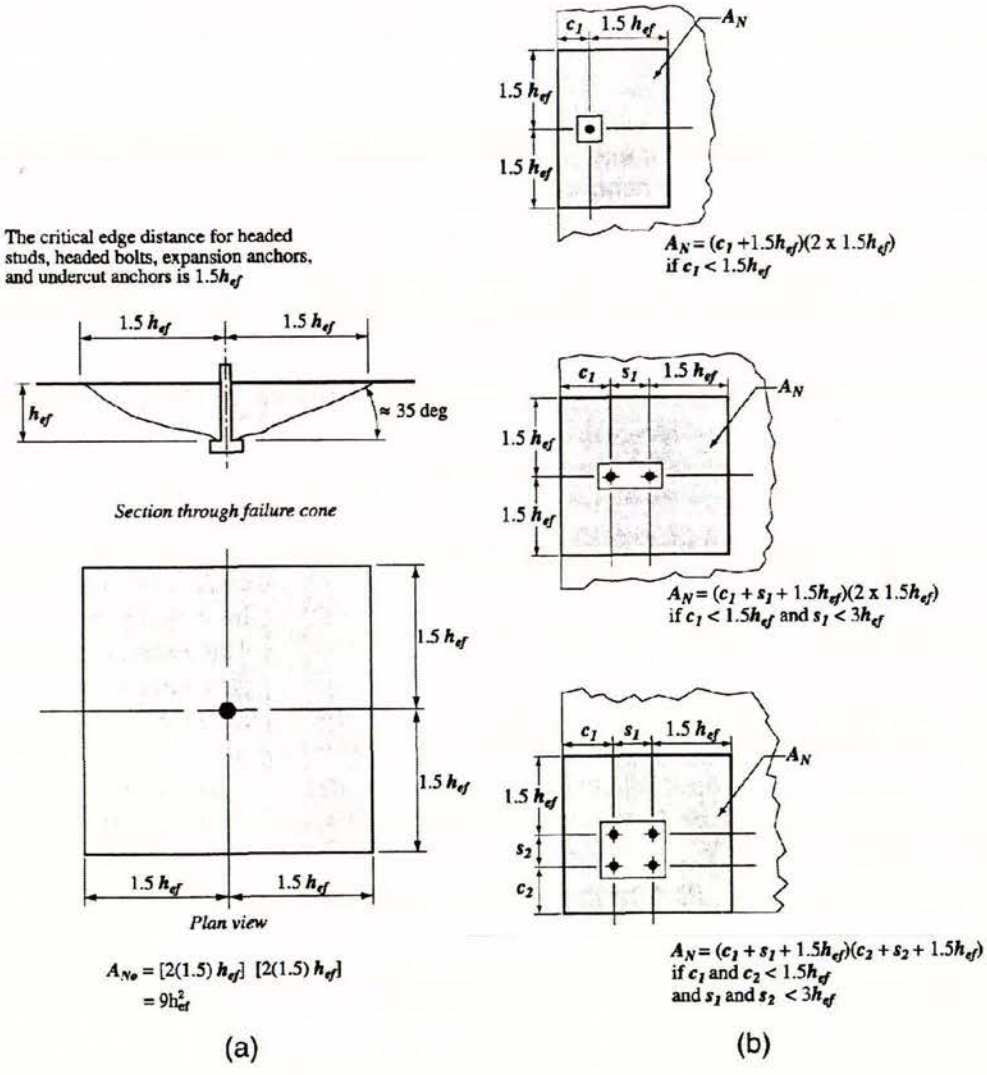


Figure 3 *Calculation of A_n and A_{no} for single and group of anchors [A1]*

For $c_{min} \geq 1.5h_{ef}$ then $\Psi_2 = 1$

And for $c_{min} < 1.5h_{ef}$ then $\Psi_2 = 0.7 + 0.3\frac{c_{min}}{1.5h_{ef}}$

Ψ_3 = 1.25 for cast in anchors in uncracked concrete

Ψ_3 = 1.4 for post-installed anchors in uncracked concrete

Ψ_3 = 1.0 for concrete which is cracked at service load levels

4.2.2.3 Pullout of Anchor

The nominal pullout strength of an anchor or group of anchors in tension shall not exceed;

$$N_{pn} = \Psi_4 N_p$$

Where:

N_{pn} = nominal pullout strength in tension of a single anchor

Ψ_4 = modification factor for pullout strength

N_p = pullout strength of a single anchor in crack concrete

Now $N_p = A_{brg} 8f_c^{'}$ for a headed stud or headed bolt

Or $N_p = 0.9f_c^{'}e_h d_o$ for a hooked bolt

Where $3d_o \leq e_h \leq 4.5d_o$

And

A_{brg} = bearing area of a headed stud or anchor

e_h = distance from the inner surface of the shaft of a J or L bolt to the outer tip of the J or L bolt

d_o = outside diameter of the anchor or shaft diameter

Ψ_4 = 1.0 for cracked concrete

Ψ_4 = 1.4 for concrete with no cracking at service load levels

4.2.2.4 Concrete Side face Blow-Out

The side face blow-out strength of a headed anchor with deep embedment close to an edge ($c < 0.4h_e$) shall not exceed;

$$N_{sb} = 160 k_1 c \sqrt{A_{brg} f_c'}$$

Where

N_{sb} = side blow-out strength of a single anchor

c = distance from the centre of an anchor shaft to the edge of the concrete

A_{brg} = bearing area of the head of a stud or anchor bolt

k_1 = multiplier for edge distance

If $c_2 < 3c$ then $k_1 = \dfrac{1 + c_2/c}{4}$

And $1 \le c_2/c \le 3$

Where

c_2 = distance from centre of shaft of the anchor to the edge of the concrete, perpendicular to the distance c

4.2.3 Shear Strength

4.2.3.1 Steel Strength of Anchor

The nominal strength of an anchor in shear governed by the steel shall not exceed;

For cast-in headed stud anchors:

$$V_s = nA_{se}f_{ut}$$

For cast-in headed bolts and hooked bolt anchors:

$$V_s = n0.6A_{se}f_{ut}$$

For post installed anchors:

$$V_s = n(0.6A_{se}f_{ut} + 0.4A_{sl}f_{utsl})$$

Where:

A_{sl} = effective cross section of expansion or undercut sleeve, if sleeve is within the shear plane

f_{ut} = specified tensile strength of anchor

All other terms have been previously defined.

4.2.3.2 Concrete Break-Out

The nominal concrete breakout strength of an anchor or group of anchors in shear when loaded perpendicular to an edge shall not exceed;

$$V_{cb} = \frac{A_v}{A_{vo}}\Psi_5\Psi_6\Psi_7 V_b$$

For shear parallel to an edge the shear strength, V_{cb}, shall be twice that recorded in the above equation. For anchors or anchor groups located at or near corners the shear strength shall be determined in each direction.

Where

V_{cb} = nominal concrete breakout strength in shear of a single or group of anchors

A_v = projected concrete failure area of an anchor or group of anchors in shear, as shown in Figure 4

A_{vo} = projected concrete failure area of an anchor or group of anchors in shear, when not limited by corner influences, spacing, or member thickness

Ψ_5 = modification factor for anchor group eccentricity

Ψ_6 = modification factor for edge distance

Ψ_7 = modification factor for cracked concrete

V_b = basic concrete breakout strength in shear.

Now for a single anchor in cracked concrete:

$$V_b = k_2\left(\frac{l}{d_o}\right)^{0.2}\sqrt{d_o f_c'}\,c_1^{1.5}$$

Where

k_2 = 7 for single anchors (in U.S Customary units)

k_2 = 8 for cast in headed studs, headed bolts, or hooked bolts that are continuously welded to steel attachments having a minimum thickness equal to the greater of 9.5 mm or half the anchor diameter (in U.S Customary units)

l = load bearing area of anchors for shear, not exceeding $8d_o$.

d_o = outside diameter or shaft diameter

c_1 = distance from the centre of an anchor shaft to the edge of the concrete in the direction which the load is applied

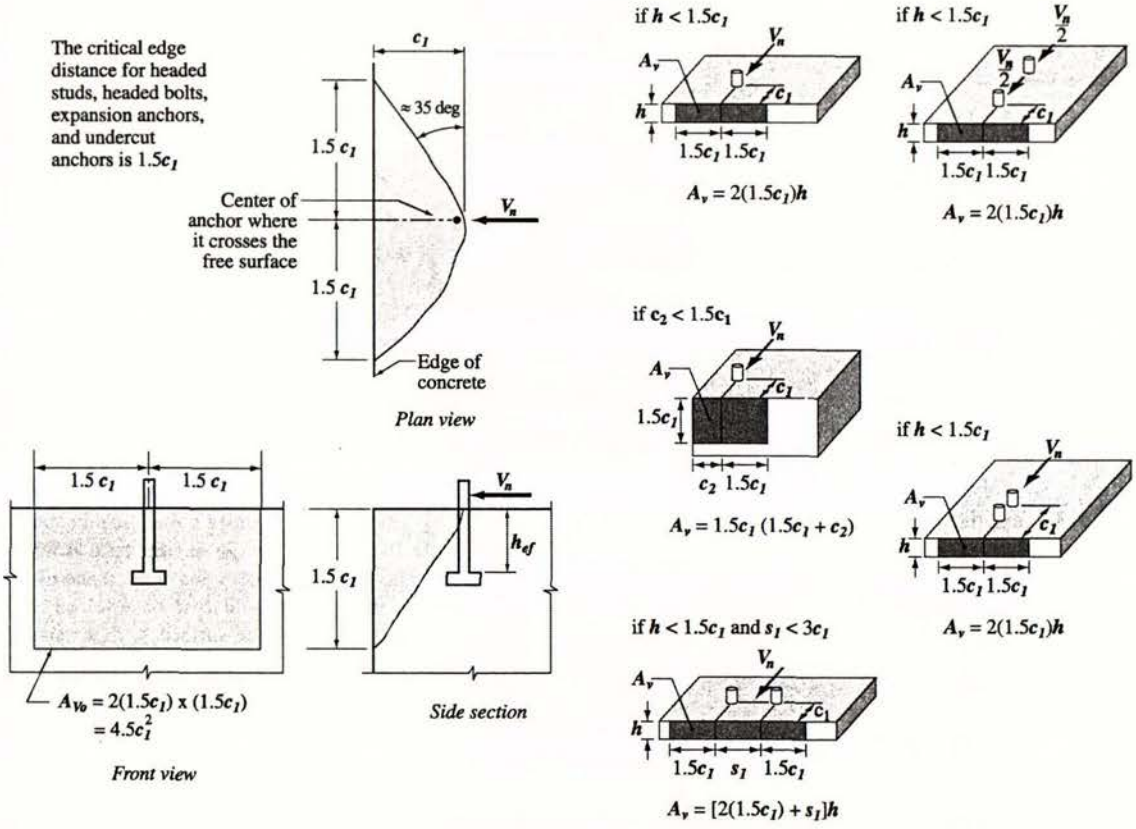


Figure 4 *Determination of A_v and A_{vo} for anchors and anchor groups*

And $$\Psi_5 = \frac{1}{1 + \frac{2e_v'}{3c_1}} \leq 1 \qquad \text{when } e_v' \leq 0.5s$$

Where

e_v' = eccentricity of shear force on a group of anchor. The distance between the point of shear force application and the centroid of the group of anchors resisting the shear in the direction of the applied shear.

For $c_2 \geq 1.5c_1$ $\Psi_6 = 1.0$

And for $c_2 < 1.5c_1$ $$\Psi_6 = 0.7 + 0.3\frac{c_2}{1.5c_1}$$

Ψ_7 = 1.0 for anchors in cracked concrete with no supplementary reinforcement

Ψ_7 = 1.2 for anchors in cracked concrete with supplementary minimum of a 12 mm diameter reinforcing bar as supplementary reinforcement.

Ψ_7 = 1.4 for concrete which is not cracked at service load levels.

4.2.3.3 Concrete Pry-out

The nominal pry-out strength of an anchor shall not exceed:

$$V_{cp} = k_{cp} N_{cb}$$

Where

V_{cp} = nominal concrete pry-out strength

k_{cp} = coefficient of pry-out strength

N_{cb} = nominal concrete breakout strength in tension of a single anchor

And

k_{cp} = 1.0 for $h_{ef} < 63$ mm

k_{cp} = 2.0 for $h_{ef} \geq 63$ mm

4.2.4 Interaction of Tension and Shear

Concrete anchors are often subjected to combined axial tension and shear. In such circumstances it is necessary to consider the interaction of the two loads on the performance of the anchors. It is recommended that the strength of a concrete anchor when subjected to the interaction of shear and axial tension be determined using a trilinear approach, as follows:

If $V_u \leq 0.2\phi V_n$ then full strength in tension is permitted ($\phi N_n \geq N_u$)

If $N_u \leq 0.2\phi N_n$ then full strength in shear is permitted ($\phi V_n \geq V_u$)

If $V_u > 0.2\phi V_n$ and $N_u > 0.2\phi N_n$ then:

$$\frac{N_u}{\varphi N_n} + \frac{V_u}{\varphi V_n} \leq 1.2$$

5.0 EXPERIMENTAL TESTING

5.1 Test Specimen

A series of 30 panels were constructed with various configuration of cast in weld plates (defined as anchors). All of the panels were 2400 x 2400 x 200 mm thick. The panels were reinforced with XD12 reinforcing bars at 250 mm centres each way. An XD reinforcing bar is a 12 mm diameter deformed reinforcing bar with a lower characteristic yield strength of 500 MPa. The reinforcement was designed to be representative of likely reinforcement used in tilt up concrete panels in the New Zealand construction industry.

The anchors were held in location prior to pouring of the concrete by inserting the weld plate component in preformed voids in sheets of 10 mm gypsum board. This resulted in the weld plate component of the anchors being proud of the top surface of the concrete in the finished panels. It was decided that a suitable lower bound strength would be achieved by having the weld plates proud of the concrete surface, as the top 10 mm of surface concrete has virtually no influence on the failure cone. The critical zone in terms of concrete fracture is at and adjacent to the bend of the anchor plate.

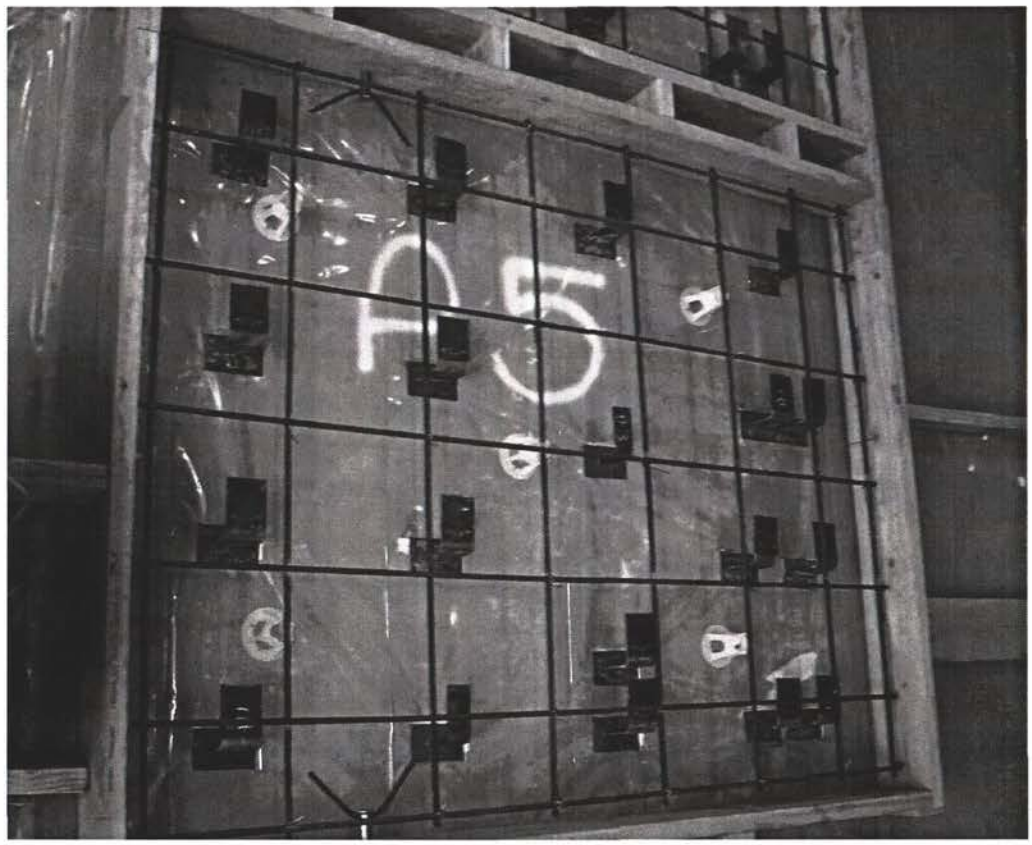


Figure 5 *Panel A5 prior to pouring of the concrete*

The anchors were designed to be representative of the cast in weld plate details which are commonly used in the New Zealand construction industry. All anchors were manufactured from Grade 250 steel plate and welded using a 6 mm fillet weld. Grade 250 steel has a lower characteristic yield strength of 250 MPa. No testing was undertaken on the either the steel or the weld strengths. The actual dimensions of the anchors were confirmed to be in accordance with the drawings prior to installation in the panels.

The location of the anchors in the panels was chosen to minimise the interference between anchors. A minimum clearance of five times the effective embedment depth was maintained between anchors, unless the interaction of the anchors was required. During the testing it was found that the failure cones generated by a small percentage of the anchors did interfere with surround anchors. The anchor points which were interfered with were noted and a due allowance for their likely reduced holding capacity was accounted for in the data reduction and analysis.

The panels were produced by pouring the concrete directly into the wooden formwork. A mechanical vibrator was used sparingly to remove air voids from with the specimen and to facilitate the flow of the concrete around the anchors. The specimens were covered with wet hesian cloth and plastic sheeting for 7 days after pouring. The mould work was removed from the specimen 24 hours after pouring.

Concrete for the panels was provided by a local ready mix concrete supplier. Care was taken to ensure the concrete used in the panels was representative of concrete used in the New Zealand construction industry. Concrete test cylinders were produced from concrete near the middle of each delivery of concrete. The test cylinders were stripped from their moulds 7 days after pouring and stored next to the panels until tested. On the day of testing the concrete panels a total of three concrete test cylinders were tested to provide a measure of the concrete strength in the panels. The mean concrete strength recorded from the test cylinders for the various concrete panels are present in Table 2 below.

The concrete panels were cured for 7 days before being removed from their casting bed. After the 7 day curing period were turned over to expose the weld plates of the anchors and stacked prior to testing.

Table 2 *Concrete compressive strength recorded from 100 mm diameter test cylinders*

Specimen I.D	Target 28 day Strength (MPa)	Measured Strength, f'_c (MPa)
A1	25	30.0
A2	35	36.0
B1	25	32.0
B2	35	40.0
C	35	36.0
D	30	30.0

5.2 Instrumentation

The load was applied to the concrete anchors using a 300 kN central pull double acting actuator with approximately ± 100 mm of travel. A 150 kN load cell was attached to the top of the actuator to provide a digital record of the load applied to the anchors. The vertical and horizontal displacements of the anchors were recorded using 30 mm travel linear potentiometers. The potentiometers were attached to the top surface of the concrete panels at a location with sufficient clearance to the anchor being tested so as not to be affect by the large concrete cone pull out. An extension arm was used to translate the potentiometers from the mounting point to the anchor being tested.

A 16 bit serial box data acquisition system was used to log the information provided by the instrumentation. A Compaq Evo N800v laptop computer was installed with the Universal Data Logger (UDL) software and used as the logging computer.

Photographic evidence was taken throughout the testing sequences, during failure where appropriate, and at the completion of each test. The photographs provide a detailed record of failure sizes and the shape of failure areas. A strong reliance was placed on the photographic evidence when analysing the numbers and determining cone pull out dimensions. These recorded are presented in Appendix B.

All instrumentation was calibrated against certified calibrated equipment prior and after the testing.

5.3 Test Setup

A self equilibrating reaction frame was used to brace the hydraulic actuator and load cell whilst applying both the tension and shear loads to the test anchors. The load was applied to the test anchors using a connection rod and rotational bearings. Care was taken to ensure the feet of the reaction frame remained outside of the failure plane of the anchors. Throughout the testing no failures were observed to interfere with the location of the reaction frame. Anchors located on or near the edge of the panels were tested using a modified cantilever reaction frame. The tie down force required for the cantilever was provided by other anchor locations in the panels. The level of load imposed on the anchors being utilised as tie down points was less than 10% of the pull out capacity and was thought to have had no significant impact on their performance.

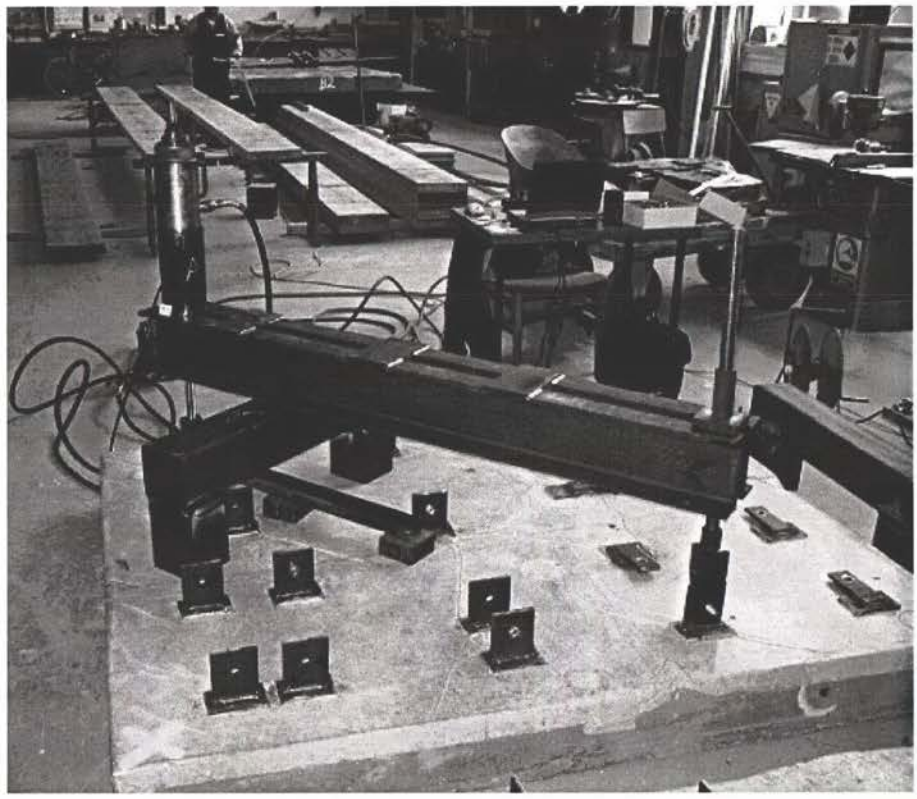


Figure 6 *Cantilever reaction frame for tension testing corner and edge anchors*

A second reaction frame was produced to apply the shear loading to the anchors. A horizontal threaded coupler was welded to the top of the weld plates. A threaded joint rod was then used to attach the actuator and load cell to the test anchor. Care was taken to ensure the mounting feet of the reaction frame remained outside of the failure zone of the test anchors. No anchors were found to have failure planes which intersected with the feet of the reaction frame during the testing.

Panels which were tested in a combination of shear and tension utilised both reaction frames and hydraulic actuators.

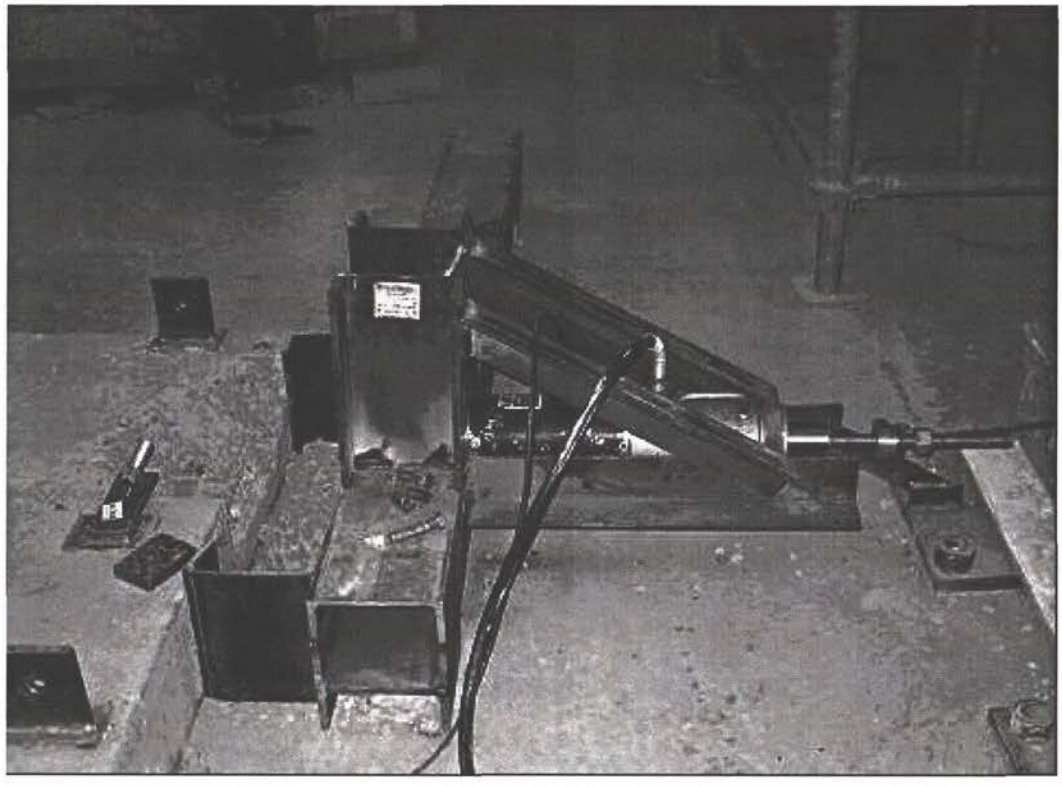


Figure 7 *Shear loading reaction frame*

5.4 Testing Protocol

A series of differing protocols were developed for the test specimen, dependent on the loading regime to which they were subjected. A tension load case, defined as a load perpendicular to the face of the panel, is indicated by direction 1 in Figure 8 below. Direction 2, 3 and 4 are defined as shear loading (parallel to the face of the panel). The oblique loading directions have a result force which is at an angle of inclination, other than 90°, to the face of the panel. This is caused by loading the panels in both shear at tension simultaneously. The final angle of the oblique resultant is varied by altering the relative ratio of tension to shear loading.

Figure 8 shows the resultant forces from the oblique testing. Loading direction 5 is the combination of loading directions 1 and 2, and loading direction 6 is the combination of directions 1 and 4.

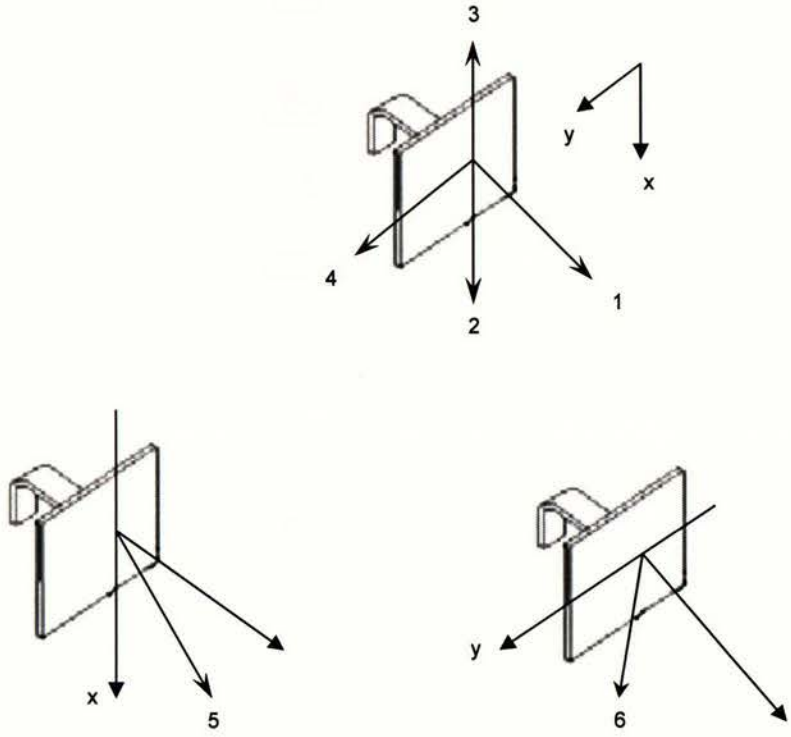


Figure 8 *Tension, Shear, and Oblique loading directions*

All of the cast in anchors were tested any a continuously increasing level of uni-directional load until failure was obtained. Failure was defined as significant drop of in the load carrying capacity of anchors and was usually accompanied by a brittle failure of the anchor, the bond with the concrete, or of the concrete panel. No reverse loading or cyclic load was applied to the anchors.

The anchors which were tested under oblique angles were subjected to incremental increases in the tension loading followed by incremental increases in the applied shear loading. This form of incremental loading was applied due to the interaction which occurs between the two applied loads. A more accurate representation of the correct oblique angle was obtained by varying the individual load directions independently.

5.5 Test Results

The purpose of the experimental testing programme was to determine the suitability of the CCD design method for determining the load resisting performance of standard cast-in weld plate details used in New Zealand. As a result a number of the experimental parameters were designed to define the boundaries established in the CCD design method, such as the influence of edge proximity and anchor spacings.

The following section outlines the experimental results which were obtained from the pull out tests on the concrete panels. Where appropriate a series of observations are made which relate the experimental performance to the predicted performance from the CCD method. The experimental results are divided into three sections; tension loads, shear loads, and oblique.

A large degree of scatter was generally found for the experimental testing, making the direct comparison of individual results and theoretical predictions very difficult. This was expected when establishing the testing programme and as such a large number of identical tests were conducted for each series of test parameters. This allowed a detailed statistical analysis to be completed on the results, which could then be compared to the theoretical predictions. The observations and general trends observed during the testing were also important in establishing the failure behaviour of the anchors.

The peak load resisted by each series of identical test anchors in the experimental programme was averaged and the standard deviation was computed. Based on these results the lower 5th percentile results were calculated as shown below.

$$N_c = N_u(1 - 1.654\sigma)$$

Where

N_c = lower 5th percentile load resisted by the anchor or anchor group, defined as the lower characteristic load

N_u = average failure load from the series of 5 anchors in the series

σ = standard deviation

In accordance with standard engineering philosophies the lower 5th percentile experimental results were taken to represent the lower characteristic strength of the anchors. This number was then compared to the theoretically predicts strengths to determine the accuracy of the theory in predict the failure loads.

5.5.1 Tension Loading

The experimental testing programme for anchors loaded in direct tension was aimed at determining the influence of each of the key variables from the CCD design method on the pull out resistance of the cast in weld plates produced from bend metal plates. As a result a total of 46 different anchor arrangements were tested. For each of the anchor arrangements a series of five identical anchors were tested, resulting in a total of 230 individual direct tension tests. It was considered important to undertake a minimum of five tests for each type of anchor arrangement

to allow the lower characteristic strength of that anchor type to be determined with a high degree of confidence.

In general a good degree of agreement was obtained between the failure loads recorded for the five identical tests undertaken on an anchor arrangement, which resulted in relatively low values of the standard deviation. In circumstances where the load achieved by the anchor was doubtful, due to interaction with the failure surfaces of other anchors, the results were not included in the averaged strengths.

For the majority of the tests completed the cast-in anchors displayed a brittle failure method. The load was found to rise quickly with very little relative displacement between the anchor and the surrounding concrete. Once the peak load was reached the level of load resisted by the anchors dropped dramatically and the anchor displaced a significant distance out of the concrete panel. The load deformation response for a typical series of 5 tests for an anchor arrangement is shown in Figure 9.

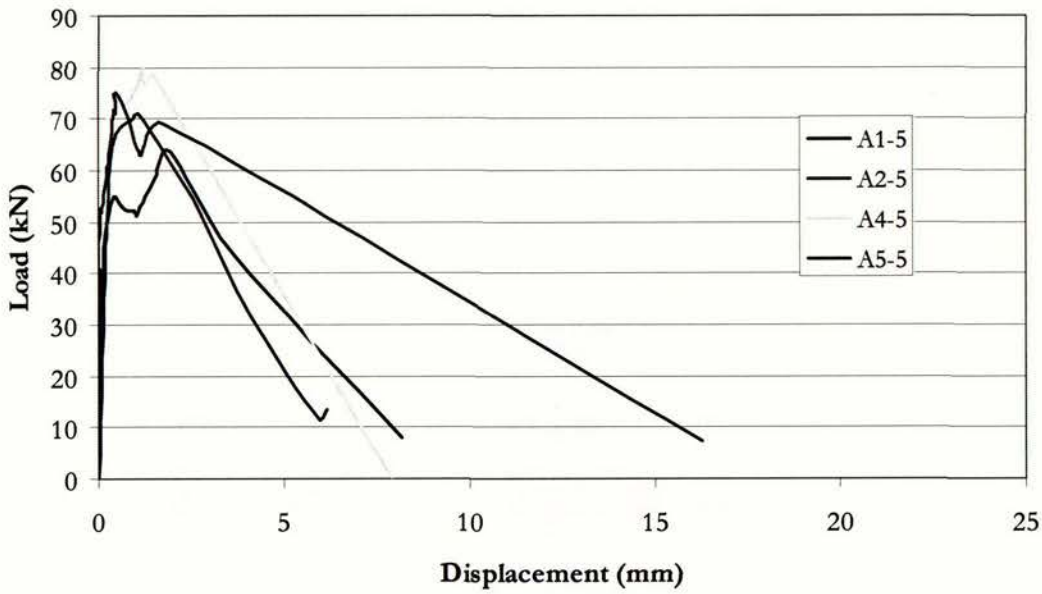


Figure 9 *Typical load deflection plot for an anchor group subjected to direct tension loads*

In all of the direct tension tests it was observed that the cast in concrete anchors failure due to the displacement of a large volume of concrete surrounding the anchors from within the concrete panel. This form of failure is defined as a cone pullout failure in the CCD design method. No failures were observed to occur due to fracture of the anchors, direct pullout of the anchors, or side splitting of the panels.

It was observed during the testing of the central anchors in some panels that a degree of panel flexure was occurring between the loading points on the reaction frame. This was especially noticeable when a large number of anchors had already been removed from the panel, resulting in a significantly reduced depth of panel in the affected areas. It was not felt that the flexure affect the level of load achieved by the anchors. The displacements recorded for each test were measured relatively between the concrete panel surface and the weld plates, as a result any movement of the panel due to flexure would not have affected the results.

5.5.1.1 Influence of Failure Surface

It was observed that the shape of the failure cone displaced from the concrete panels was asymmetric about the back face for the anchors, as shown in Figure 10. This was somewhat surprising and was in direct contrast to the symmetric shaped failure surface predicted in the CCD design method. It is believed the lack of a back cone was caused by discontinuities introduced into the concrete due to the large planar shape of the cast in plates. This may have affected the stress flow around the plate and resulted in a plane of weakness.

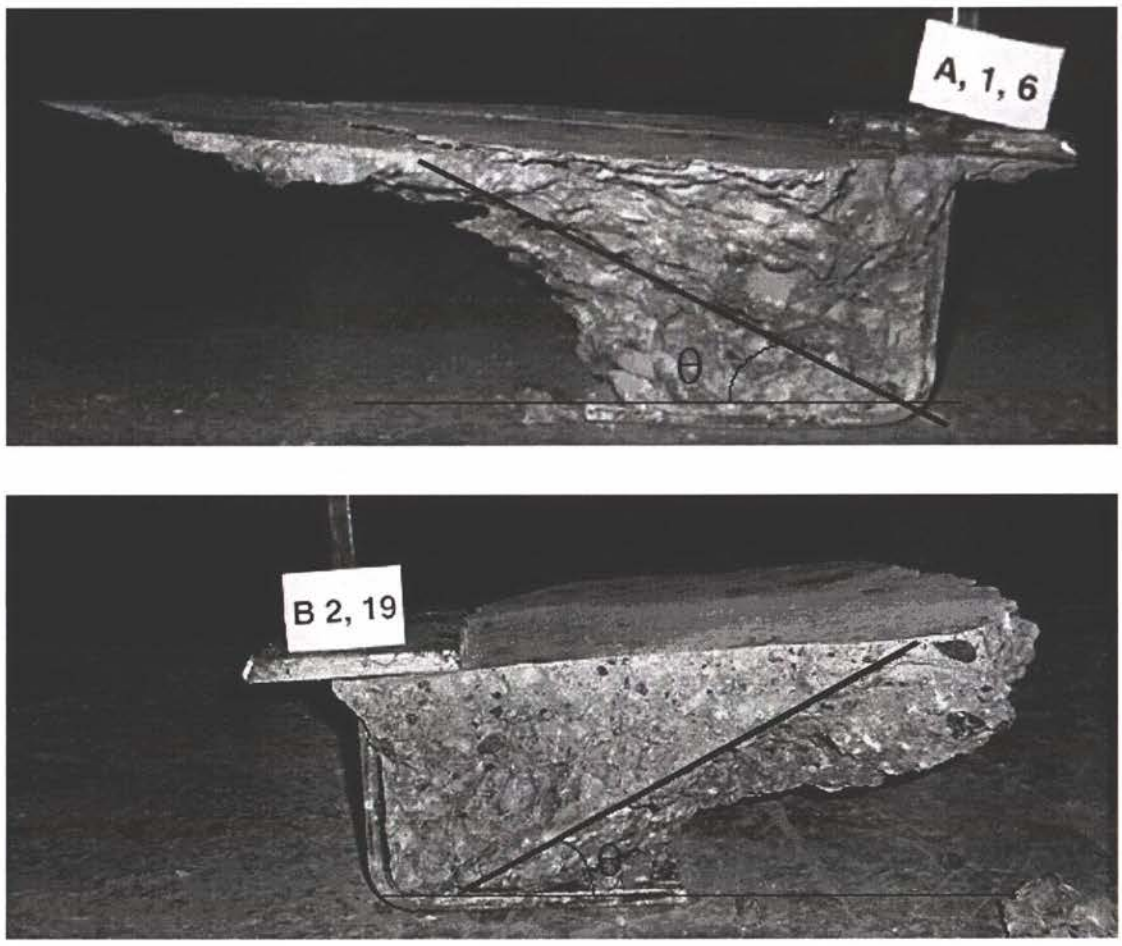


Figure 10 *General shape front and back concrete pullout cones observed during direct tension tests*

The angle of the front of the failure surface relative to the surface of the concrete panel was found to vary significantly between tests. However, for the tests in which a clearly defined failure surface was observed the average failure angle, θ, was found to be approximately 34°. The angle of a typical failure surface relative to the top surface of the concrete panels is shown in Figure 10 above. The CCD design method assumes a failure angle of 35°.

The location at which the front failure surface began, relative to the vertical leg of the weld plates was found to vary between tests. Typically the failure plane intersected the horizontal leg within 50 mm of the vertical leg. The location at which the front failure surface started was not found to be significantly influenced by the width and length of the cast in anchor or with the effective depth to which the anchor was embedded in the concrete. Based on the significant scatter in the experimental results it is recommended that the failure surface to the front of the anchor plate be assumed to start from the centre of inside face of the vertical leg. This would consistently produce a conservative estimate of the size of the failure surface in front of the anchor.

Figure 11 *General shape of the side concrete pullout cones observed during direct tension tests*

The shape of the failure surface to the sides of the anchor plates also showed a high degree of variation. In general the failure surface formed a plane shape starting from close to the outside edge of the plates and projecting up onto the top surface of the panels. The angle of the failure surfaces was found on average to be close to 35° as assumed in the CCD design method.

The area of the concrete projected onto the surface of the concrete panels was often observed to be significantly larger than that predicted by a 35° propagating crack, as seen in Figure 12. It was found that the angle of the crack often flattened as it approached the surface of the member. It is not believed that the additional area of concrete attached to the pull out cone, which is located close to the surface of the member significantly altered the pull out strength of the anchor.

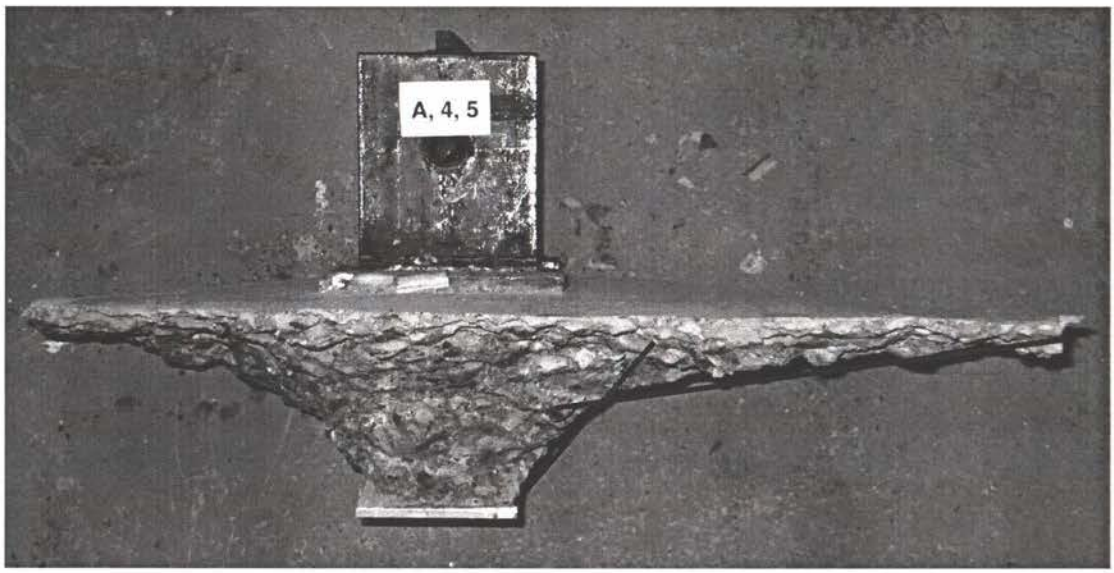


Figure 12 *Flattening of the crack profile near the surface of the concrete member*

5.5.1.2 Influence of Embedment depth

Testing was undertaken on anchors with embedment depths of 75 mm, 100 mm, and 150 mm. It was observed that the anchors with the greatest embedment length failed at a significantly higher load and resulted in a larger volume of concrete in the pull out cone. Figure 13 presents the results obtained for cast in anchors with different effective embedment lengths. The anchors with an embedment depth equal to 150 mm had a pull out resistance which was approximately 2.5 times the resistance of an anchor embedded 75 mm.

The level of relative displacement between the concrete panel and the anchors at the peak load of the anchor was also found to increase as the effective embedment was increased. The anchors which were embedded 150 mm into the panel were found to be displaced approximately 2.5 times the anchors embedded 75 mm.

The effective elastic stiffness of the anchors, determined as the slope of the ascending portion of the load deflection plot were found to be similar for the anchors, independent on the effective embedment depth.

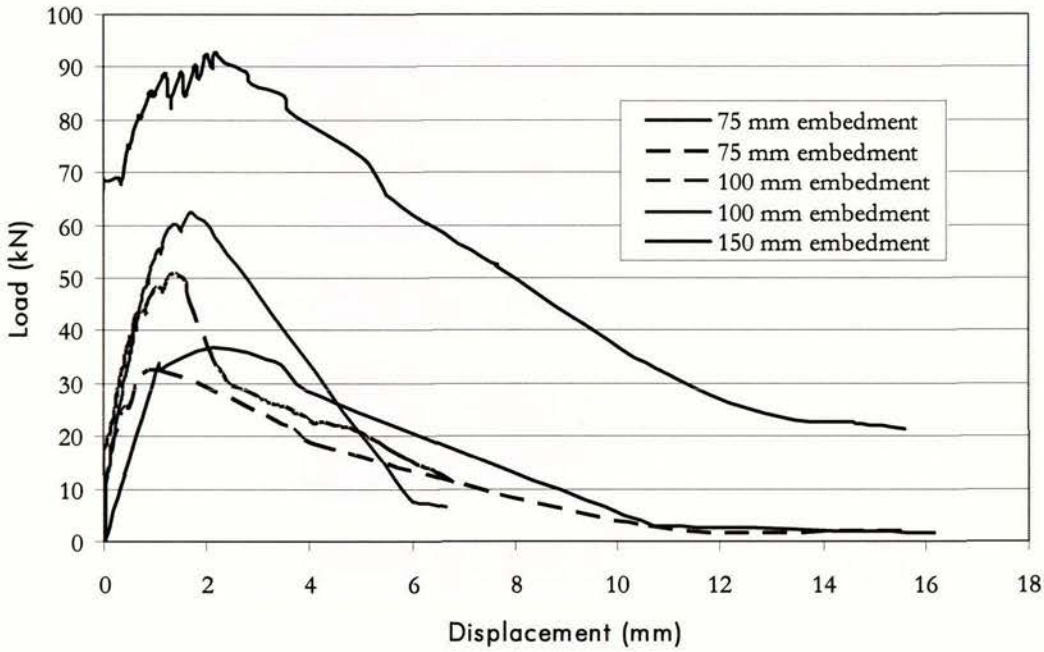


Figure 13 *Load displacement graph for cast in anchors with different embedment lengths*

5.5.1.3 Influence of Anchor Width

It was observed during the testing of the anchors that the failure surface of the concrete pull out cone began at or near the edges of the cast in anchor plates. This was previously discussed in section 5.5.1.1. This resulted in a wider concrete pull out cone for anchors with wider cast in plates. The CCD design method allows the width of the concrete cone to be taken at the edge of a headed anchor if it has been shown experimentally that the size of the head increases the effective width of the pull out cone. Based on the observation during the experimental testing it is recommended that the width of the pull out cone be determined from the edge of the plate which is cast into the concrete.

A significant amount of scatter was observed in the experimental data, however anchors with a wider cast in plate were found to generally develop a higher level of pull out resistance. It is believed that the increased level of load resisted by the anchors was due to the increased dimensions of the pull out cone, as discussed above. The lower 5th percentile experimental

results for the tensile pull out resistance of the anchors in panels A and B are presented in Table 3 below.

Table 3 *Tensile pullout resistance for anchors with varying widths*

Concrete Panel ID	f'c (MPa)	Embedment depth, he (mm)	Anchor width (mm)	Pull out Resistance (kN)
A1	30	100	50	48.4
A1	30	100	75	55.2
A2	32	150	75	81.0
A2	32	150	100	87.9

5.5.1.4 Influence of Cast in Plate Length

Anchors with two different tail lengths were subjected to uniaxial tension loads. The tail is defined as the horizontal section of the cast in plate which runs parallel to the top surface of the concrete panels. The tests were undertaken to determine the influence of the tail length on the pull out resistance of the anchors.

The length of tail on the anchors was varied from 150 mm as the standard length to 125 mm and 200 mm. The modifications were found to have no significant influence on the tensile pull out resistance of the anchors. The sizes of the concrete pull out cone developed by each of the anchors were found to be similar in size, with failure plane angles of approximately 35°.

No experimental pull out tests were undertaken on cast in weld plate anchors with a tail less than 125 mm in length. If the tail of the anchors was continued to be shortened the failure mode of the anchors would transition from a cone pull out failure to a anchor pullout failure, where the anchor would pull directly from the concrete member. No research was undertaken to find this minimum tail length required to obtain this transition. As such, it is recommended that the length of the tails used on the concrete insert anchors be limited to the greater of 125 mm or 2 x the width of the anchors.

5.5.1.5 Influence of Edge Distance

Testing was undertaken on anchor plates with different orientations and proximities to the corners and edges of the concrete panels. It was found that the tensile load resisted by anchors that were in close proximity to the edge of the panels were lower than the tensile load on identical anchors located near the centre of the panels. The concrete pullout cone for the anchors that were near the edges of the panels was also found to be truncated where it intersected the edge of the panel, as shown in Figure 14.

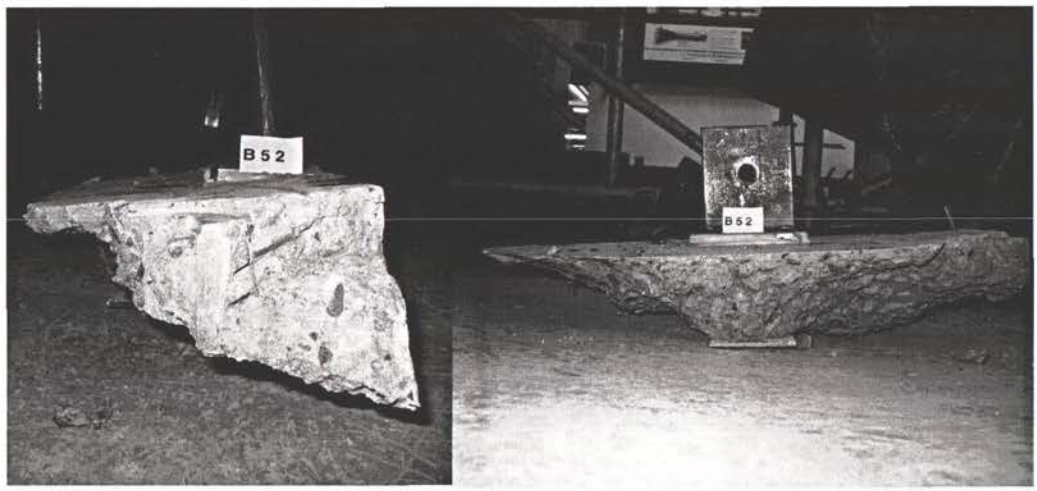


Figure 14 *Truncated failure surface of an edge mounted anchor*

Anchors which were oriented with the backs towards the edge of the panels were found to have similar tensile strengths as anchors which were located in the centre of the panels. This was observed for concrete anchors which were located with their back edge within 100 mm of the edge of the panels. The shape of the concrete cone developed for anchors with their back towards the edge of the panels was very similar to anchors which were located near the centre of the panel. Their concrete pullout cone was truncated across the back face of the cast in plate, as discussed in section 5.5.1.1.

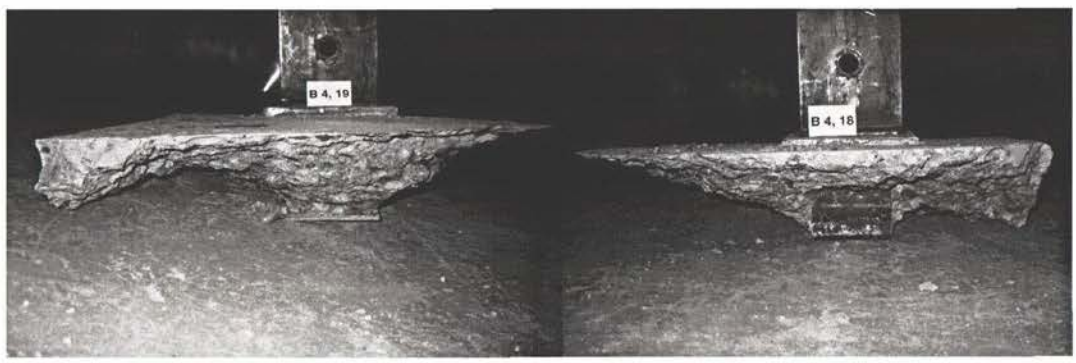


Figure 15 *Truncated failure surface of an edge mounted anchor*

Anchors which were located on the corners of the panels were found to have a reduced tensile pullout load when compared to both edge located and centrally located anchors of the same dimensions. This finding was independent on the orientation of the anchors. The failure surface for anchors which were located on the corner of the panels was truncated in two directions, where the failure planes contacted the edge of the panels. No testing was completed on anchors with the back of the cast in plate located towards the interior of the panel. Had this testing been completed it is expected that the concrete pullout cone would have been truncated on three sides.

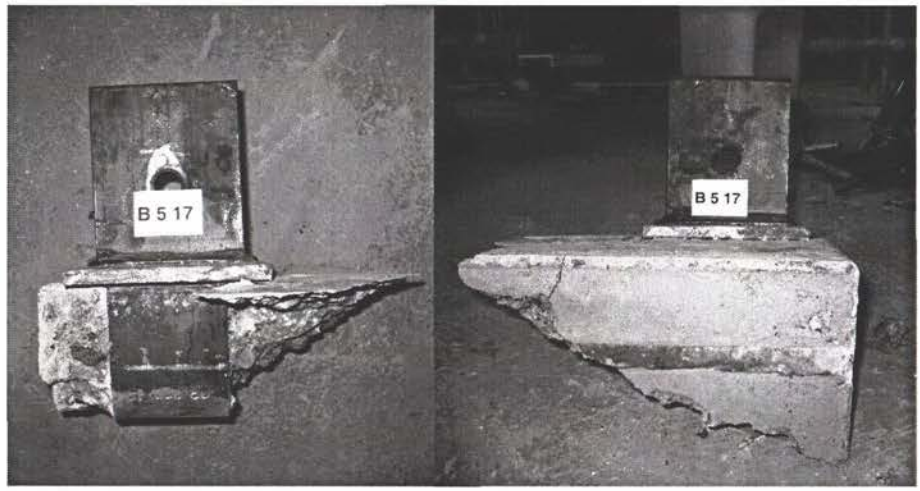


Figure 16 *Truncated failure surface of a corner mounted anchor*

It was generally found that anchors which were located greater distance than twice the embedded depth of the anchor away from the edge or corner of the panels developed a similar tensile pull out resistance to anchors which were located in the centre of the panels. The CCD design method assumes that the failure surface of an insert anchor will extend for a distance of 1.5 times the embedment depth of the anchor in all directions, forming a truncated pyramid failure surface on the top surface of the panel.

5.5.1.6 Influence of Anchor Spacing and Proximity

A series of direct tensile pull out tests were completed on groups of anchors. The spacing between the anchors was varied to determine the influence of anchor spacing on the tensile capacity of the group. In all tests the groups comprised of two identical anchors. The influence of the orientation of the anchors is discussed in section 5.5.1.7.

During testing of the concrete anchor groups it was observed that generally one anchor failed in by concrete cone pull out followed immediately by the second anchor in the group. This was thought to be caused by uneven load sharing between the anchors resulting in one anchor of the group resisting a higher proportion of load that the other. Once the load applied to the anchor exceeded its capacity it failed which transferred the entire load to the remaining anchor which failed immediately after. It is believed this form of uneven load sharing is likely to occur in anchors used in the construction industry and it is suggested that a reduction factor be applied to the maximum load applied to the anchor group to allow for the likelihood of an uneven load distribution.

The failure surface observed for the group of anchors was the formation of a failure surface as shown in Figure 17 and Figure 18. The failure surface propagated from the outside edge of both of the cast in anchor plates as was observed in the single anchor tensile testing. However, it was found that when the anchors were located relatively close together no failure surface was generated between the anchors. The maximum spacing of anchors in a group which were tested was equal to 1.5 times the effective embedment depth of the anchor. In all situations, where the load was relatively evenly distributed across the two anchors it was found that anchors formed one distinctive failure surface. A large degree of scatter was observed in the failure surfaces, however the angle of the failure surfaces were generally found to be 35° to the top surface of the panel.

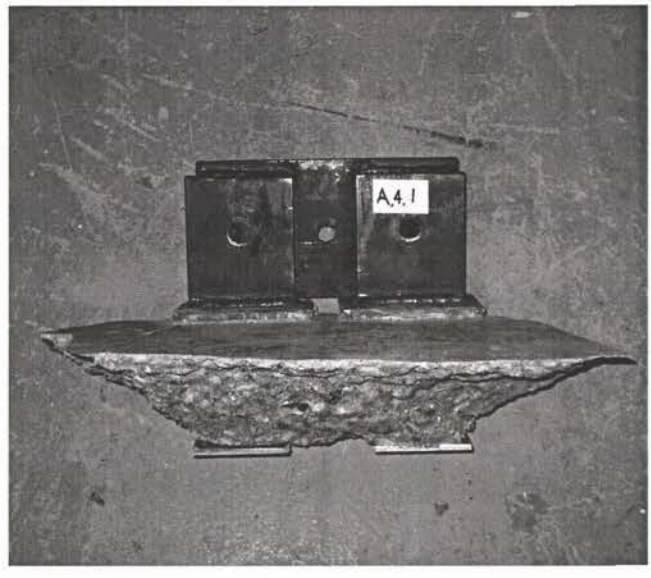


Figure 17 *Truncated failure surface of a corner mounted anchor*

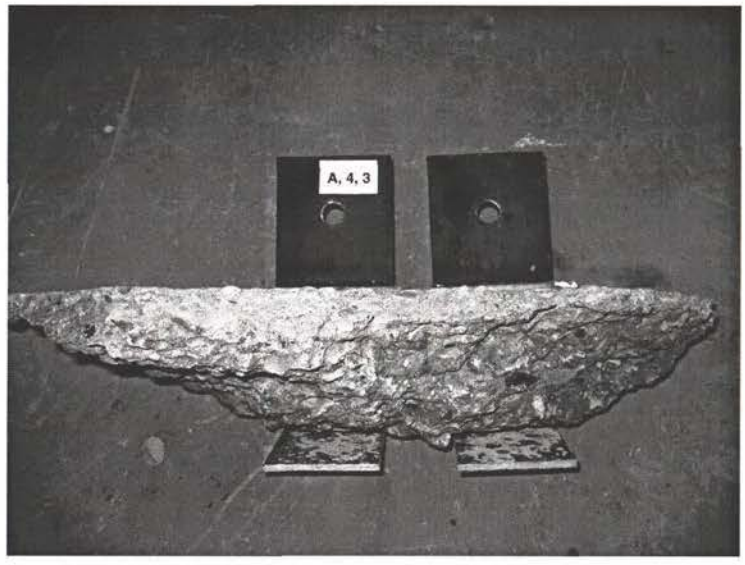


Figure 18 *Truncated failure surface of a corner mounted anchor*

The level of tensile load resisted by an anchor group was found to increase as the distance between the anchors increased. Anchors which were separated by 25 mm developed a reduced tensile pull out load that was achieved by anchors separated by 150 mm. A high degree of scatter was observed in the experimental results which were believed to be caused by non-uniform load sharing in the anchor groups. However, in general the load resisted by the anchor groups was found to increase as the spacing between the individual anchors increased and none of the anchor groups with overlapping failure surfaces were found to develop a tensile pull out load was equal to or greater than that of two individual anchors of the same geometry.

The CCD design method suggests that anchors which are located closer than 3.0 times the effective embedment depth will have a degree of interaction in their failure surfaces and will develop tensile load resistance which is less than the sum of the tensile loads of the individual anchors. This was observed for all of the anchor groups which were tested under direct tension in this experimental series.

5.5.1.7 Influence of Anchor Orientation

The influence of the orientation of the anchors within a group of anchors was investigated in this experimental programme. Three different configurations were tested; side by side, opposing tails, and in-front tails (same direction).

The failure surfaces of the different anchor configurations were found to be combinations of the failure surfaces found for individual anchors. When the anchors were located in close proximity the failure surfaces of the concrete pullout cones for the individual anchors overlapped and

formed a single failure surface and pullout cone, as shown in Figure 19. This was observed for all of the anchor groups with the exception of the opposing tails grouping. As was observed for the single anchor pull out tests, the concrete pullout cone was truncated at the back of the anchor plates. The failure surface for the opposing tails anchor group were found to always develop two separate failure cones, due to the truncated nature of the cones.

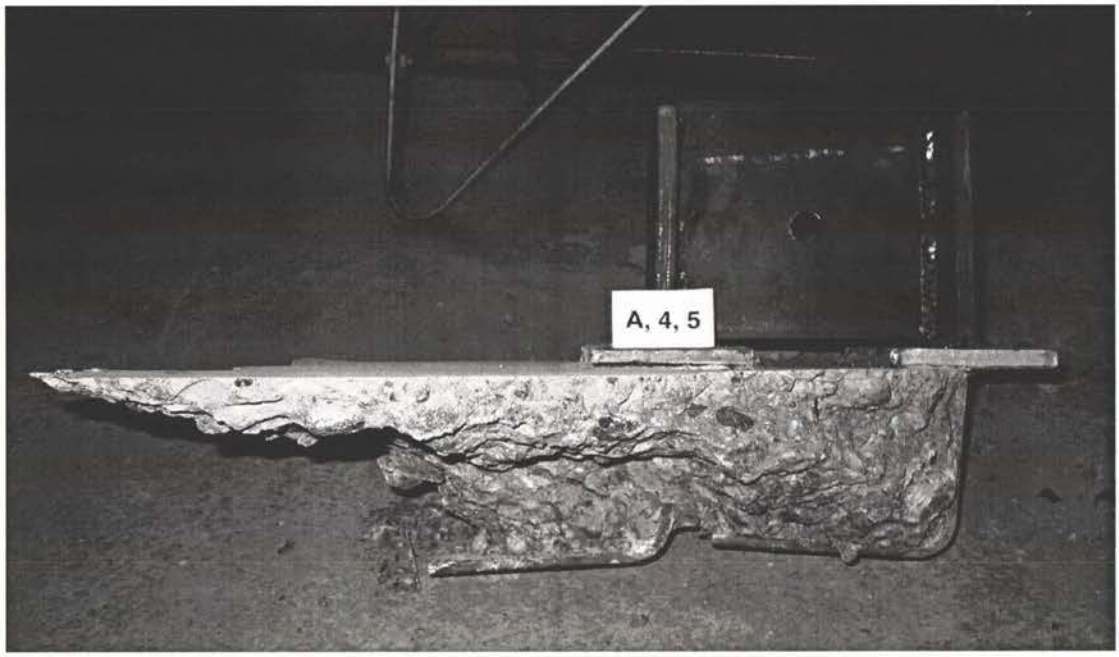


Figure 19 *Failure surface of an In-Front anchor grouping*

The opposing tails anchors were found to achieve a significantly higher tensile pull out resistance than in-front tails of the same relative separation. This was thought to be a function of the enlarged failure surface which developed for the opposing tails anchors.

The side by side anchors, discussed in the previous section, were found to form one singular failure surface when located up to a maximum distance apart of 1.5 times the effective embedment depth of the anchor. Similar levels of load were achieved by the side to side anchors as the in-front anchors of similar separations.

In general the anchor orientation was found to influence the size of the failure surface which was correlated with the level of load resisted by the anchors. The orientation of the anchors was significant as to when the failure surfaces of the individual anchors in the group intersected.

The CCD design method has no allowance for anchor orientation as it was developed for anchors which formed a symmetric failure surface. Consideration for the anchor orientation will be required when determining the overall dimensions of the failure surface and the level of load resisted by the anchors.

5.5.1.8 Fixed Angles and Wrag-Tail plates

A series of tests were completed on "rag tail" anchors and edge mounted angle brackets. The embedment depth of the anchors was 100 mm and the width of the plates was varied between 75 mm and 100 mm. Typical failure surfaces for the corner mounted rag tail anchors are shown in Figure 20 and Figure 21 below.

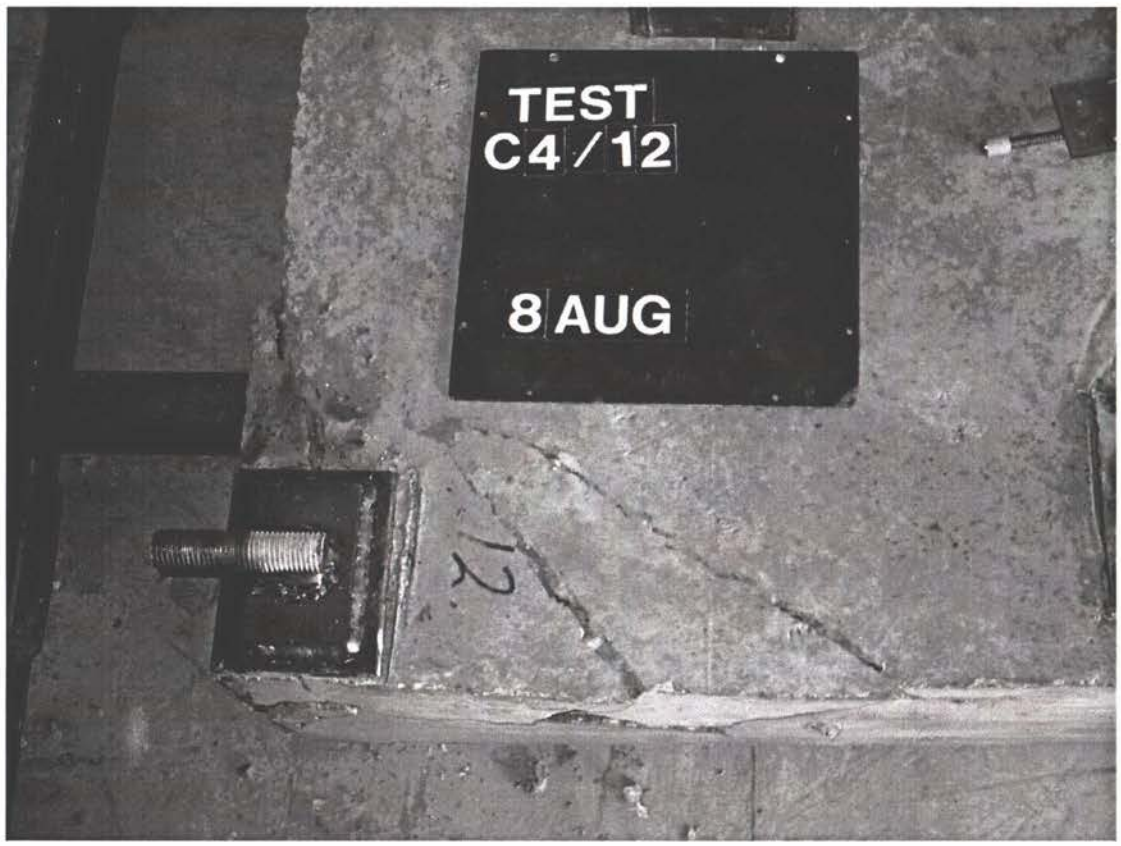


Figure 20 *Failure pattern for a corner mounted rag tail anchor*

The failure surfaces generated by the corner mounted rag tails were generally similar to those for the other hooked cast in anchors in the plan dimension; however the failure depth into the concrete section was significantly reduced. The failure surface for the edge mounted angle brackets was significantly reduced compared to the other forms of edge mounted bent flat plate anchors.

Figure 21 *Failure surface of a corner mounted rag tail anchor*

The level of direct tension load resisted by the rag tail anchors was significantly less than found of other hooked anchors of the same dimensions. It is felt that the reduced level of tension load resistance was due to the smaller area of concrete being dislodged from the concrete member. The level of shear load resisted by the rag tail anchors was similar to other forms of hooked flat plate anchors which were of identical dimensions and embedment depths. It is felt that the overall performance of the rag tail anchors was reduced to that of other anchors with greater length along the tail of the anchor.

The tension and shear loading resisted by the edge mounted anchors were both found to be significantly reduced to other hooked anchors which had a minimum of 90° bends to the tail of the anchor.

Based on the experimental findings on the tensile load deformation characteristics of the fixed angles and rag-tail plates it is recommended that cast–in anchors manufactured from bent or hooked flat plates should be provided with a minimum of a 90° bend and a minim tail length of 125 mm or 2 x the width of the plate.

5.5.2 Shear Loading

The experimental testing programme for anchors loaded in direct shear was aimed at determining the influence of each of the key variables from the CCD design method on the pull out resistance of the cast in weld plates produced from bent metal plates. A total of 27 different anchor arrangements were tested. For each of the anchor arrangements a series of five identical anchors were tested, resulting in a total of 135 individual direct shear tests. It was considered important to undertake a minimum of five tests for each type of anchor arrangement to allow the lower characteristic strength of that anchor type to be determined with a high degree of confidence.

The shear loading was applied to the anchors by welding a short length of threaded bar in a horizontal position to the top surface of the weld plate details. This was then coupled to the hydraulic actuator using a threaded coupler and an additional length of threaded rod. The centroid of the threaded couple was approximately 16 mm higher than the top surface of the concrete which introduced a small moment into the anchors when tested. This loading arrangement was considered to be representative to a typical load situation where a couple may be subjected to a predominately shear loading.

In general a relatively low degree of scatter was observed in the maximum load resisted by each of the five anchors in each of the anchor arrangements. This resulted in low values of standard deviation being obtained for the peak load resisted by each member. A significantly higher degree of scatter was observed in the displacement recording for each of anchor arrangements.

The concrete insert anchors tested under direct shear where found to fail by either prying out of the concrete member (see Figure 2 (b) ii) or by breaking of the edge of the concrete panel (see Figure 2 (b) iii). Anchors which failed in a prying motion were found exhibit a more ductile failure than anchors which failed due to breaking out the edge of the panel. In general for all anchor arrangements the peak load achieved by the anchors when loaded in direct shear was found to be developed immediately after the strength of the sections were exceeded. In no situations did the inelastic strength of the anchor exceed the load resisted by the anchors in their pre-failure state. A typical load-deformation response for a cast in weld plate anchor loaded in direct shear is shown in Figure 22.

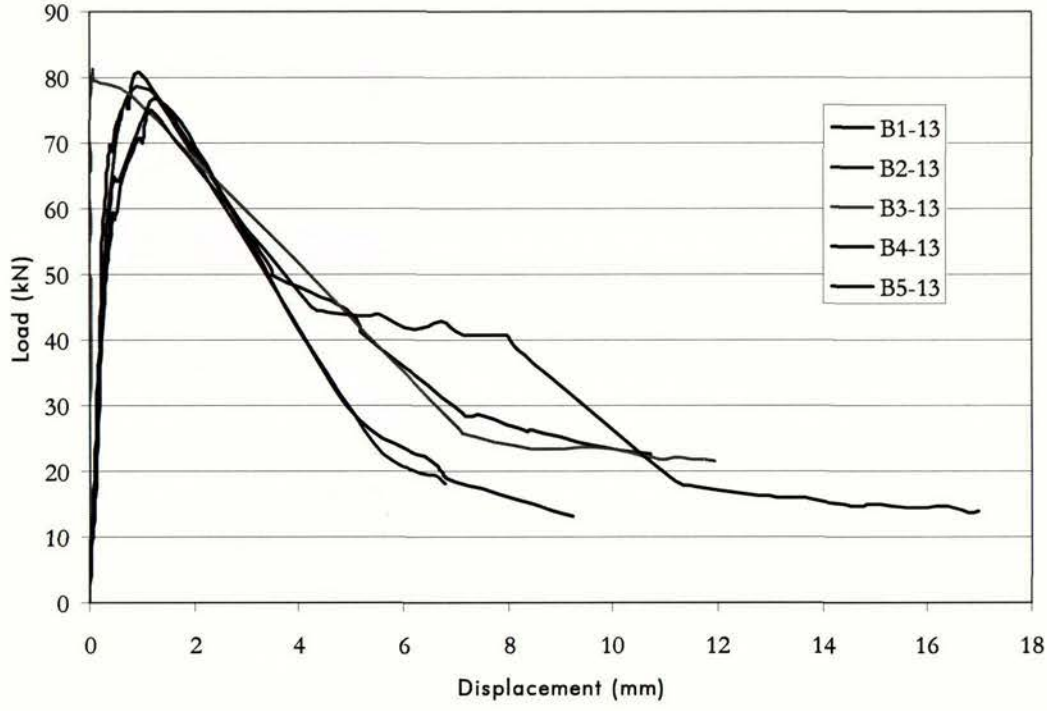


Figure 22 *Typical load deflection plot for an anchor group subjected to direct shear loads*

It was observed during the testing of the central anchors in some panels that a degree of panel flexure was occurring between the loading points on the reaction frame. This was especially noticeable when a large number of anchors had already been removed from the panel, resulting in a significantly reduced depth of panel in the affected areas. It was not felt that the flexure affect the level of load achieved by the anchors. The displacements recorded for each test were measured relatively between the concrete panel surface and the weld plates, as a result any movement of the panel due to flexure would not have affected the results.

5.5.2.1 Failure Type

It was observed during the testing programme that all of the anchors which were located on or near to the edge or corner of the concrete panel, which tested in direct shear, failed due to breaking out a wedge from the panel, as shown in Figure 23. This form of failure mode is defined as concrete break out in the CCD design method for concrete anchors. The shape of the failure surface and the influence of the proximity to the edge or corner of the panels is described in more detail in the following sections.

Figure 23 *Concrete break out failure of an edge mounted anchor*

Concrete anchors which were located away form the edge or corners of the panels were found to fail by pulling out or prying out of the anchor from the concrete panel. This form of failure is defined as a prying failure mode in the CCD design method. The level of load resisted by the anchor and the ductility exhibited in the failure were both found to be influenced by the orientation of the anchor in relation of the direction of the applied shear load. Anchors which were loaded perpendicular to the anchor plate obtained a lower peak load and failed in a less ductile manner than anchors which were loaded parallel to the cast in anchor plate. The anchors loaded perpendicular to the anchor plate were found to pry out a small section of concrete with the anchor, as predicted by the CCD method. Anchors loaded parallel to the anchor plate were removed from the concrete with little or no disruption of the surrounding concrete. All of the anchors which failed due to prying, independent on their orientation or cast in length, were found to undergo some degree of straightening to the cast in plate, as shown in Figure 24.

Failure of the anchors which were loaded parallel to the cast in plates was not adequately described or predicted by the CCD design method. This form of failure is thought to be peculiar to this form cast in anchor, where there is a high degree of non-symmetry in the properties of the anchor for the two different orientations of loading. The non-symmetric shape of anchor plates induce a moment in the plates which results in the rotational damage observed in Figure 24.

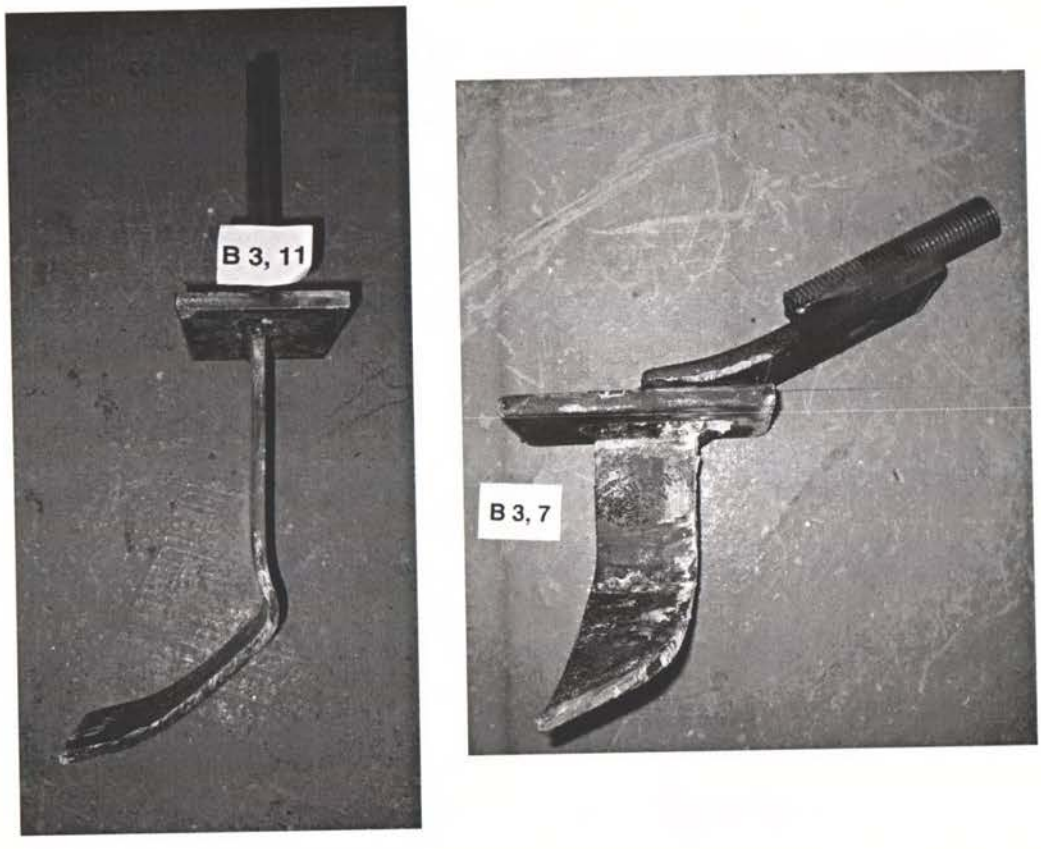


Figure 24 *Damage to the cast in plate on anchors which failed due to prying under applied shear loads*

5.5.2.2 Influence of Failure Surface

The failure surface of the anchors which were located on or near the edge of the concrete panels was found to start at the edges of the cast in plate and project out towards the edge of the panel. A significant amount of scatter was observed in the exact angle which the failure surface formed with the edge of the concrete panel. In general it was felt that the angle could be represented as 35° as predicted in the CCD design method.

The angle which the failure surface formed with the edge of the concrete panel was found to be relatively independent on the orientation of the cast in anchors. Anchors which were located with the cast in plate towards the edge of the panel formed similar failure angles as plates which were orientated with the cast in plate facing the centre of the panel.

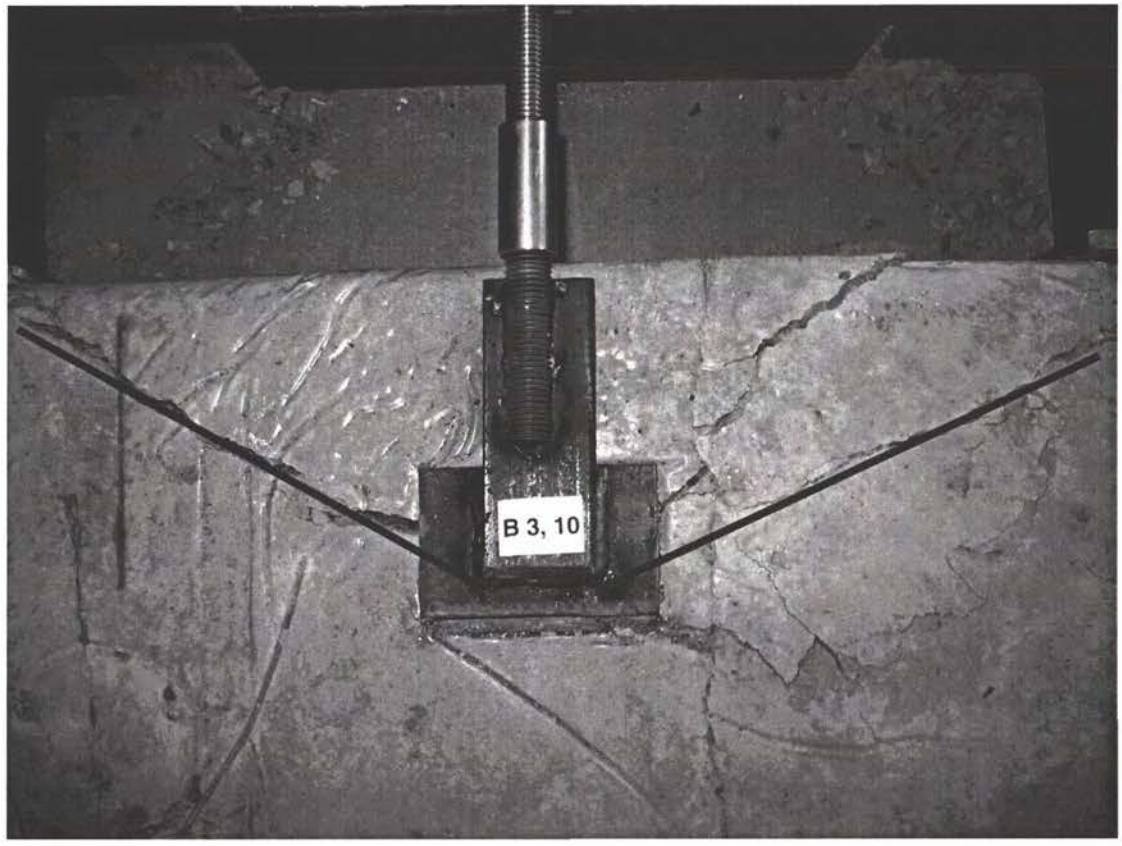


Figure 25 *Crack pattern developed during shear testing of an edge mounted weld plate anchor (leg facing towards the edge of the panel as shown in Figure 26 below)*

Figure 26 *Failure surface developed in an edge mounted weld plate anchor tested under shear*

The total depth of the failure surface was found to be equal to the entire depth of the concrete panel. The CCD design method suggests that the failure surface depth of 1.5 times the distance the centre of resistance of the anchor to the edge of the concrete member (c_1) can be used as the depth of the failure surface. The photo graphic evidence obtained from the testing indicates that this design approach provided a good representation of the depth of the failure surface for the tested anchors. It is recommended that the failure surface be calculated based on 35° crack angles and a depth of 1.5 times the effective anchor embedment of all cast in weld plate details, in accordance with the requirements of the CCD design method.

5.5.2.3 Influence of Anchor Width

It was observed during the testing that anchors manufactured from wider plates generated a slightly high peak load and had an enlarged failure surface. This was true for all failure modes of the plates, including pry-out parallel to the plate direction. It is believe that the increased load resistance of the wider plates was due to an increased failure surface, as predicted by the CCD design method. It was noted in the previous sections that the failure surface generated by the concrete anchors started at the edge of the cast in plates. Wider plates were found to produce a wider failure surface, which required a greater force to be fractured. This was also found for the cast in weld plates when loaded in direct tension. Based on the experimental observations it is recommended that the failure surface be determined from the edge of plate which is cast into the concrete member.

5.5.2.4 Influence of Edge Distance

Testing was completed on anchor plates with different orientations and proximities to the corners and edges of the concrete panels. It was found that the shear load resisted by the anchors that were in close proximity to the edges of the panels were lower than the shear loading on identical anchors located near the centre of the panels. As discussed above, anchors located near the edges of the panels failure by breaking away a section of the concrete panel, as shown in Figure 27.

Anchors which were located on the corner of the panels were found to have a reduced shear capacity when compared to anchors located on the edges of panels and near the centre of the panel. This finding was independent on the orientation of the anchors. The failure surface for the corner mounted anchors was truncated by the edges of the panels, as shown in Figure 28.

Figure 27 *Concrete breakout failure from an edge mounted anchor loaded in direct shear*

Figure 28 *Concrete Breakout failure from an edge mounted anchor loaded in direct shear*

5.5.2.5 Influence of Anchor Orientation

The influence of the orientation of the anchors relative to the concrete panel and the direction of the applied load was investigated in this experimental study. The overall influence of the anchor was found to be dependent on the failure mode of the anchor; concrete breakout or pry out failures.

Anchors which were located at or near the edge of the concrete panels failed due to concrete break out, as discussed in the section above. The orientation of the anchors in these locations was found to have an influence on the overall size of the failure surface and on the level of shear resisted by the anchor. Anchors which were orientated with the cast in plate facing the centre of the panel were found to have a slightly longer failure surface and generated higher peak loads that anchors which were orientated with the cast in plate facing the edge of the panels. It was thought that the increased failure surface was due to the centre of resistance of the anchors being located at or near the centre of the bend of the cast in plates and not at the centre of the vertical leg. This therefore increases the distance from the centre of resistance to the edge of the panel for anchors facing the centre of the panel and decreases it for anchors facing the edge. This distance is represented by the variable c_1 in the CCD design method.

Anchors which were located in the centre of the panel, remote from the edges, failed due to pry-out of the concrete panel. The orientation of the anchor had a significant influence on the exact nature of the failure mode and on the level of load resisted by the anchor. Anchors which were loaded perpendicular to the face of the steel plate which was cast into the concrete failed in a conventional concrete pry out method. This failure mode is caused by an uplifting tension forcing being generated in the anchor plates which results in the concrete surrounding the anchors failing in tension. The overall failure surface size and level of load resisted by the anchors loaded with shear perpendicular to the face of the cast in plates was not significantly influenced by the orientation of the tail of the cast in plate. Anchors which had their tail facing in the direction of the applied shear load tended to pull a larger piece of concrete from in front of the anchor. Anchors which had their tail facing in the opposite direction to the applied loading where observed to dislodge larger concrete pieces from behind the anchors. This form of failure is common with conventional headed anchors and is adequately described in the CCD design method.

Anchors which were located in the centre of the panel and loaded parallel to the face of the cast in steel plate also failed in pry out, however the failure mode was significantly different to that of the anchors loaded perpendicular to the face of the plates. The flat plates were found to severely distort and be dislodged from the concrete panel with little disruption to the surrounding

concrete. This form of failure is not commonly observed in conventional headed anchors and is felt to be caused by the asymmetric shape of the cast in plate details. The total load resisted by the anchors which were loaded perpendicular to the plate was found to be approximately 20% higher than identical anchors loaded parallel to the face of the plates. The failure mode of the anchors loaded parallel to the anchors was also found to be more ductile, with a lower slope being recorded on the descending branch of the stress-strain curve. The failure mode of the anchor plates loaded parallel to the face of the plate is rather unusual and is not adequately predicted using the CCD design method.

5.5.3 Combined Tension and Shear Loading

A series of experiments where completed on single anchors loaded in a combination of tension and shear. The testing programme was aimed at determining the influence of each of the key variables from the CCD design method on the resistance of the cast in weld plates to a combination of applied loads. Three different anchor arrangements were tested, and for each of the arrangements a series of five identical anchors were tested. This resulted in a total of 15 tests being conducted under a combination of shear and tension. It was considered important to undertake a minimum of five tests for each type of anchor arrangement to allow the lower characteristic strength of that anchor type to be determined with a high degree of confidence.

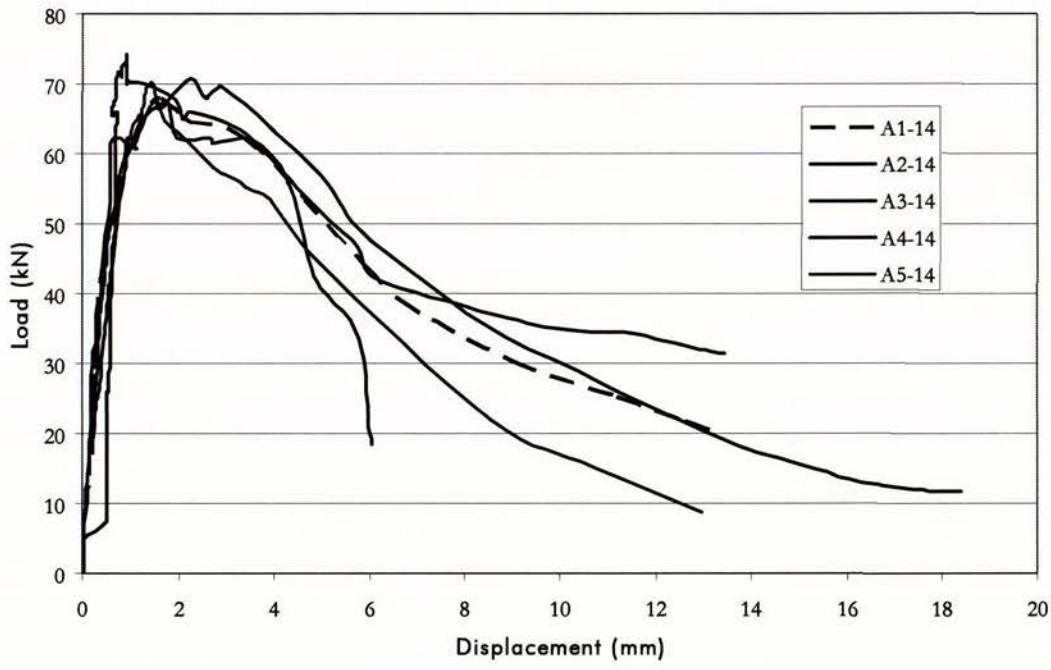


Figure 29 *Load deformation response of an anchor group loaded under combined tension and shear*

Figure 30 *Combined tension and shear loading on Anchor A4-14*

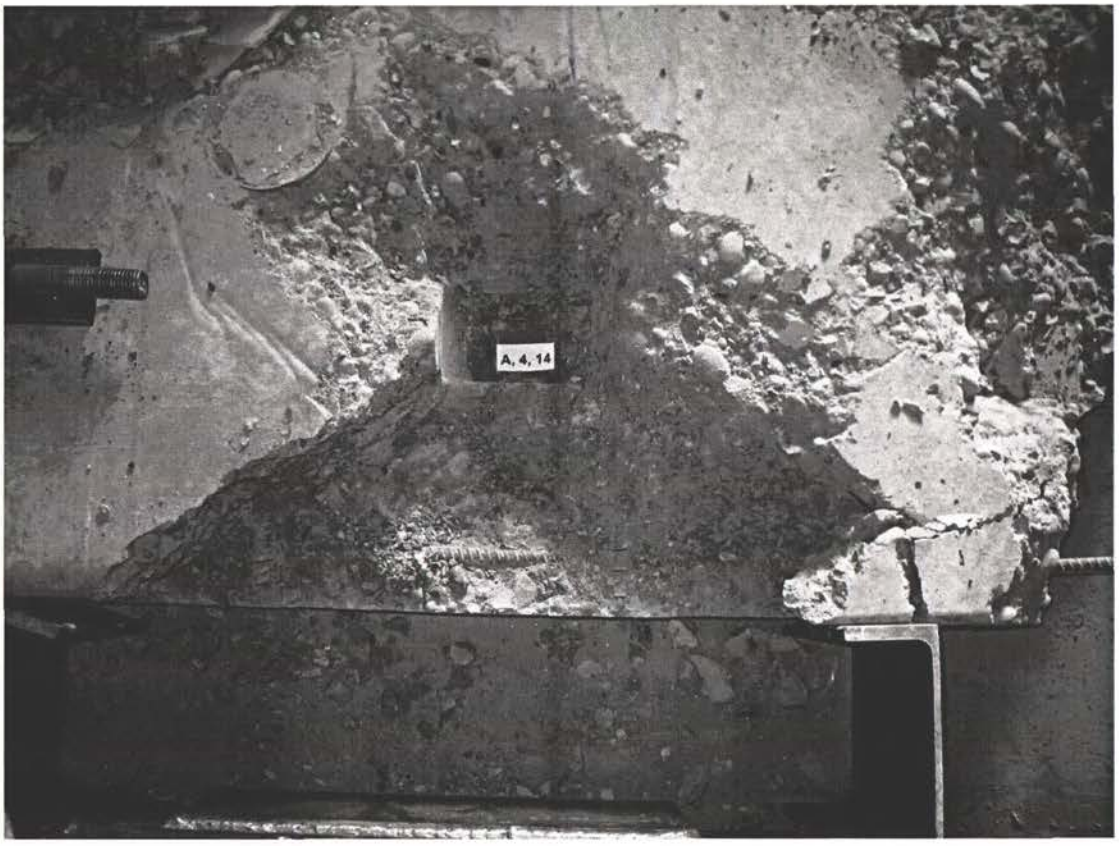


Figure 31 *Failure surface of Anchor A4-14 under combined tension and shear loading*

The failure surface for the anchors subjected to combined shear and tension loading were found to approximate the 35° angle with the edge of the panel, as was found in the tests on anchors subject to direct tension and direct shear. The depth of the failure surface was also similar to the failure surfaces found for anchors subject to direct shear loading.

The failure mode of the anchors subjected to both shear and tension load was similar to that of anchors subjected to either tension or shear load. Once the peak load was reached the level of load resisted by the anchors dropped dramatically and the anchor displaced a significant distance out of the concrete panel. This form of failure showed very little ductility and would be described as a brittle failure mode.

The level of load resisted by the anchors was lower than the anchors which were subjected to either direct tension or direct shear.

6.0 MODIFICATIONS TO CCD METHOD

It is generally accepted that the Concrete Capacity Design (CCD) method provides an accurate prediction of the lower characteristic failure load of concrete anchors which are loaded under direct tension, direct shear, or a combination of the two. As such it has been adopted by a large number of countries as a design method for concrete anchors. Detailed descriptions of the CCD method and background history are provided in numerous references.

ACI 318 has adopted a modified version of the CCD into Appendix D as design requirements for anchors used in concrete to transmit structural loads by means of tension, shear, or a combination of the two. The design procedures are intended for in-service conditions and do not apply to short term handling and construction conditions.

Appendix D of ACI 318 is applied to both cast in and post installed anchors, but does not apply to specially insert anchors, adhesive or grouted anchors, powder or pneumatic anchors or cast in weld plates manufactured from flat metal plates. Reinforcement which is used as part of the embedment of the anchors is also required to be designed by alternative means. Appendix D can also be used to design headed anchors and hooked bolts which have been proven to have a pull out strength in uncracked concrete which is greater than 1.4 x the strength in cracked concrete.

The following section highlights a series of modifications which are suggested to the CCD method outlined in Appendix D of ACI 318. The modifications are required to allow the design procedure to be used on cast in concrete anchors manufactured from hooked reinforcing bars and hooked metal plates, which are both commonly used in New Zealand.

6.1 Failure Modes

It was observed during the experimental testing undertaken in this research that the cast in metal plate anchors failed due to plate bending when loaded under shear parallel to the face of the anchor. The level of load achieved by this failure mode was higher than the pry-out shear when loaded perpendicular to the face of the cast in metal plates. The increased level of strength achieved by the anchors was not consistent and as such it is recommended that the strength of this failure mode is determined using the conservative pry-out failure mode calculations detailed in Appendix D of ACI 318.

All remaining failure modes can be adequately predicted using the existing requirements of Appendix D or ACI 381.

6.2 Strength Reduction Factors

Section D4.4 of Appendix D in ACI 318 outlines a series of strength reduction factors which are used with cast in and post installed concrete anchors. It is recommended that these figures be replaced with the following numbers to be consistent with the requirements of NZS 3101:

The strength reduction factor, ϕ, shall be as follows:

Shear	0.75
Concrete Tension:	0.65

6.3 Failure Surface

It was observed during the testing of the cast in metal plate anchors under direct tension that the failure surface was truncated to the back of the anchor, due to the large discontinuity which the anchor plates made in the concrete. To this extent it is recommended that failure surface for concrete insert anchors manufactured from flat plates be truncated to the rear of the anchor.

No modifications are required to the failure surfaces of the anchors when loaded in shear.

6.4 Anchor Spacing and Orientation

No modifications are required to the anchor spacing requirements and overlapping concrete failure surfaces of Appendix D in ACI 318. However, care will be required by the user of flat plate metal anchors to consider the influence of the orientation of the anchors, with regards to the truncated shape of the failure surface. No prescriptive measures will be provided to account for this influence.

6.5 Edge Proximity

No modifications are required to the edge proximity requirements of the Appendix D in ACI 318. Care will be required by the designers when determining the failure surfaces in proximity to edges for flat plate anchors to consider the influence of anchor orientation and edge truncation effects.

6.6 Eccentric loading

It was found during the testing of the anchor groups that the load was commonly distributed to the anchors in the group in an uneven manner, which resulted in the premature failure of one or more anchors in the group. It is recommended that an anchor group reduction factor of 0.8 be applied to all anchor groups to allow for any potential uneven loading transfer. This reduction

factor will apply to anchors load in both tension and shear and will be implemented as changes to the variables Ψ_1 and Ψ_5., as shown below:

$$\Psi_1 = \frac{1}{\left(1 + \frac{2e'_n}{3h_{ef}}\right)} \leq 0.8$$

$$\Psi_5 = \frac{1}{1 + \frac{2e'_v}{3c_1}} \leq 0.8$$

6.7 Concrete Break-Out Variables

The concrete break-out failure mode for anchors loaded in shear is partially dependent on the variable d_o and l. The definition for these variables used in Appendix D of ACI 318 is given below:

d_o = Outside diameter of the anchor or shaft diameter.

l = load bearing length of anchor for shear (equals h_{eff} for anchors with a constant stiffness over the full length of the embedded section)

It is recommended that the variable d_o be defined as 0.8 times the width of the flat plate used as a flat plate anchor and the variable l be defined as 0.8 times the effective embedment depth of a flat plate anchor. These values were chosen to provide consistence with experimental evidence. The new definitions shown for d_o and l are given below:

d_o = outside diameter or shaft diameter of the anchor, or 0.8 times the width of a hooked flat steel plate.

l = load bearing area of anchors for shear, not exceeding $8d_o$ or 0.8 times the effective embedment depth for hooked metal plates

6.8 Shear Edge Distance, c_1

The variable c_1 is used to determine the proximity of an anchor to the edge of a concrete member when loaded in shear. The definition of c_1 provided in Appendix D of ACI 318 is given below:

c_1 = distance from the centre of an anchor shaft to the edge of concrete in one direction; where shear force is applied to anchor, c_1 is in the direction of the shear force.

This definition was established for symmetric anchors which develop their centre of resistance along the centroid of the shaft. Hooked plates, bolts and reinforcement do not generate the centre of their resistance along the centroid of their shaft, but rather a distance along the hooked portion of the leg. As a result the variable c_1 is dependent on the orientation of the anchor relative to the edge of the panel. It is recommended that the definition of c_1 be modified to specify the centre of resistance as opposed to the centre of the shaft. The suggested modification is provided below:

c_1 = distance from the centre of resistance of an anchor to the edge of the concrete in the direction which the load is applied. For a hooked anchor the centre of resistance shall be taken to the centre of the bend radius forming the hook. For straight anchors it shall be taken to the centre of the shaft of the anchor.

6.9 Calibration constant, k

A calibration constant, k, is used in the calculation of the basic concrete tensile and shear break out strengths, N_b and V_b. The single variable k represents three key calibration components; nominal concrete strength of the failure area, the nominal size of the failure area, and the influence of the size effect. The values of the calibration constant was derived to ensure the theoretical value of anchor strength determined using the methodology in Appendix D of ACI 318 provided a suitable correlation with the lower 5th percentile results obtained from the experimental studies. The values of k shown in Appendix D of ACI 318 are calibrated for U.S Customary units and are based off experimental testing undertaken in Europe.

The European testing was completed on using concrete cubes as the direct measure of concrete compressive strength. In New Zealand the concrete compressive strength is most commonly measured using 100 mm diameter x 200 mm tall concrete test cylinders. There is no single, reliable conversion from concrete test cylinders to concrete test cubes, however it is commonly assumed that 100 mm diameter concrete test cylinder achieve approximately 20% increase in compressive strength when compared to concrete cubes.

The k values used in the ETAG No. 001 (European Technical Approval Guidelines) for tension and shear testing are shown below:

For the determination of the nominal concrete tensile strength, k = 7.2

For the determination of the nominal concrete shear strength, k = 0.45

Based on the experimental investigations completed in this study it is recommended that the following values be adopted in New Zealand for all anchors, including cast in flat plates:

For the determination of the nominal concrete tensile strength, k = 6.2

For the determination of the nominal concrete shear strength, k = 0.4

7.0 Comparison with Modified CCD Theory

7.1 Tension Loading

The experimental results obtained from the anchors loaded under direct tension were statistically analysed to provide a lower 5th percentile strength for each of the anchorage arrangements. These lower 5th percentile strengths were then compared to the modified CCD design method to determine the level of correlation. The results obtained from this analysis are shown in Figure 32.

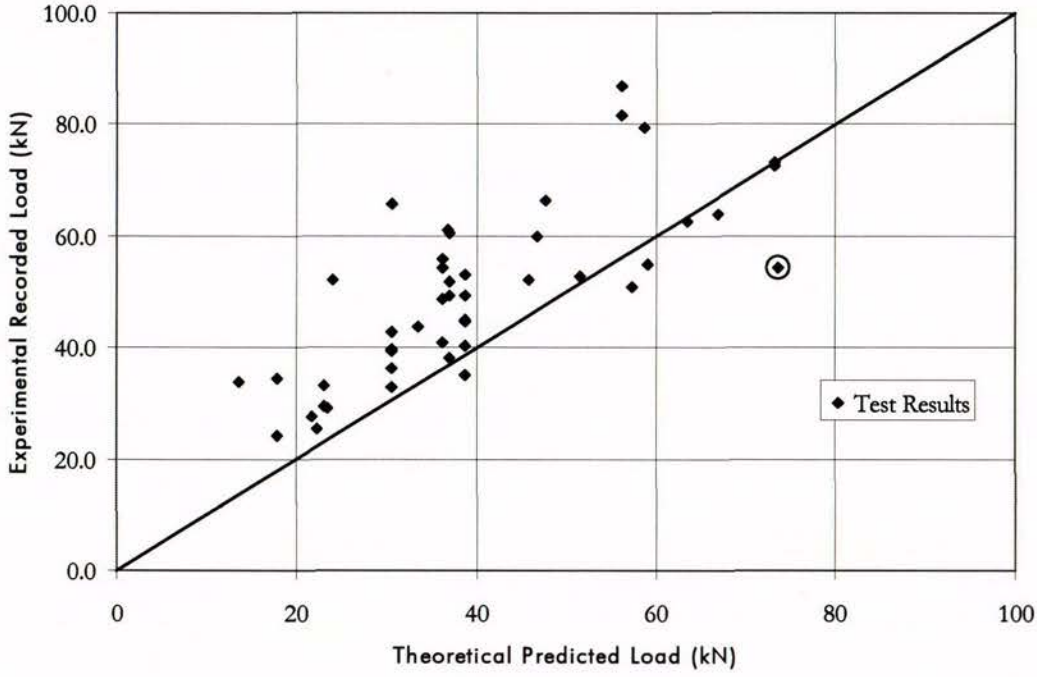


Figure 32 *Comparison of lower 5th percentile experimental results with the modified CCD design method for anchors loaded in direct tension.*

The red line shown in Figure 32 represents a perfect correlation between the theoretical prediction and the experimental results. Any results shown above the red line were conservatively estimated by the theory (the strength was under-estimated) and any test results shown under the red line were non conservatively estimated by the theory (the strength was over-estimated). The results shown in Figure 32 indicate that the modified CCD design method suggested in this report provides a conservative estimation of the tensile load capacity of cast in concrete anchors manufactured from hooked flat plates. It should be noted that the experimental result highlighted with a circle in Figure 32 was over predicted due to a lower than expected experimental strength. It is believed the low experimental strength was caused by damage occurring to the concrete around the anchor from previous cast in anchors being pulled from the panel. It is believe that had this anchor point been tested earlier in the testing programme, when

less damage existed to the panel, the experimental strength would have better matched the theoretical predictions.

The theoretical prediction shown in Figure 32 is the nominal concrete capacity, N_n, and will be required to be multiplied by the strength reduction factor, ϕ, when used in a design situation. This will provide an additional factor of safety between the experimental strengths and the theoretical predictions.

7.2 Shear Loading

The experimental results obtained from the anchors loaded under direct shear were statistically analysed to determine the lower 5th percentile strength for each of the anchorage arrangements. These experimental strengths were then compared to the modified CCD design method to determine the level of correlation. The results obtained from this analysis are shown in Figure 33.

The red line shown in Figure 33 represents a perfect correlation between the theoretical prediction and the experimental results. Any results shown above the red line were conservatively estimated by the theory and the test results shown under the red line were un-conservatively estimated by the theory. The results shown in Figure 33 indicate that the modified CCD design method suggested in this report provides a conservative estimation of the shear load capacity of cast in concrete anchors manufactured from hooked flat plates.

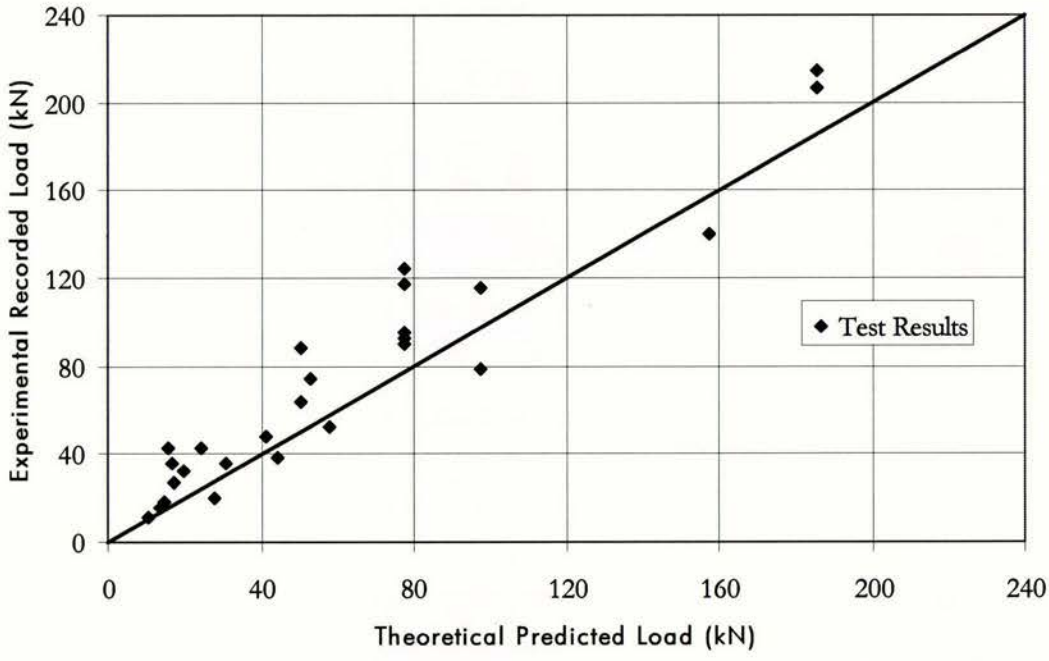


Figure 33 *Comparison of lower 5th percentile experimental results with the modified CCD design method for anchors loaded in direct shear.*

The theoretical prediction shown in Figure 33 is the nominal concrete shear capacity, V_n, and will be required to be multiplied by the strength reduction factor, ϕ, when used in a design situation. This will provide an additional factor of safety between the experimental strengths and the theoretical predictions.

7.3 Combined Loading

The experimental results obtained from the anchors loaded with both tension and shear analysed to determine the lower 5th percentile strength for each of the anchorage arrangements. The experimental strengths were then compared to the modified CCD design method to determine the level of correlation with the theory. The results obtained from this analysis are shown in Figure 34. The horizontal axis shows the experimental tensile load (N) divided by the nominal tensile capacity (N_n) using the modified CCD method. The vertical axis shows the experimentally obtained shear capacity (V) divided by the nominal shear capacity of the anchor (V_n) determined using the modified CCD method.

The red line shown in Figure 34 represents a perfect correlation between the theoretical prediction and the experimental results. The results shown above the red line have the theory underestimating the experimental capacity which produces a conservative estimate of load carrying ability. The results shown in Figure 34 indicate that the modified CCD design method suggested in this report provides a conservative estimation of the shear load capacity of cast in concrete anchors manufactured from hooked flat plates.

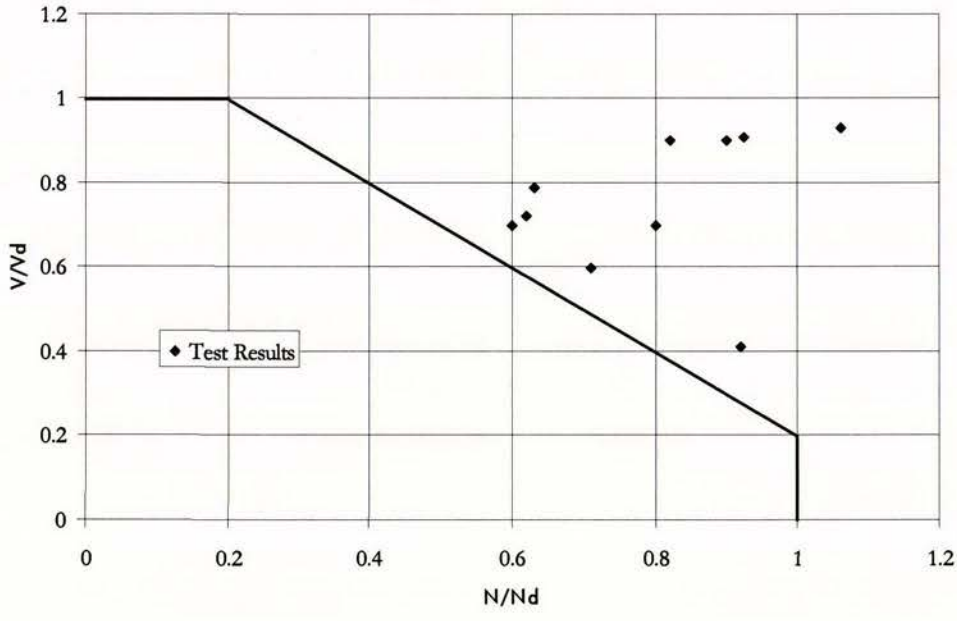


Figure 34 *Comparison of lower 5th percentile experimental results with the modified CCD design method for anchors loaded under tension and shear.*

The theoretical prediction shown in Figure 34 is the nominal concrete shear capacity, V_n, and will be required to be multiplied by the strength reduction factor, ϕ, when used in a design situation. This will provide an additional factor of safety between the experimental strengths and the theoretical predictions.

8.0 MODIFIED CCD METHOD

8.1.1 Strength Reduction Factors

The following strength reduction factors should be used in conjunction with the Modified CCD method:

Shear: $\phi = 0.75$

Tension: $\phi = 0.65$

8.1.2 Tensile Strength

8.1.2.1 Steel strength of Anchor

The nominal strength of an anchor in tension is given by:

$$N_s = nA_{se}f_{ut}$$

Where

N_s = nominal strength of an anchor or group of anchors in tension, as governed by the steel

n = number of anchors in a group

A_{se} = effective cross sectional area of an anchor

f_{ut} = specified tensile strength of the anchor, but shall not be taken greater than $1.9f_y$

8.1.2.2 Concrete Breakout of Anchor

The nominal breakout strength of an anchor or group of anchors in tension shall not exceed;

$$N_{cb} = \Psi_1\Psi_2\Psi_3\frac{A_n}{A_{no}}N_b$$

Where

N_{cb} = nominal concrete breakout strength of an anchor or group of anchors

Ψ_1 = modification for anchor groups comprising of more than one anchor (equal to 1.0 for individual anchors)

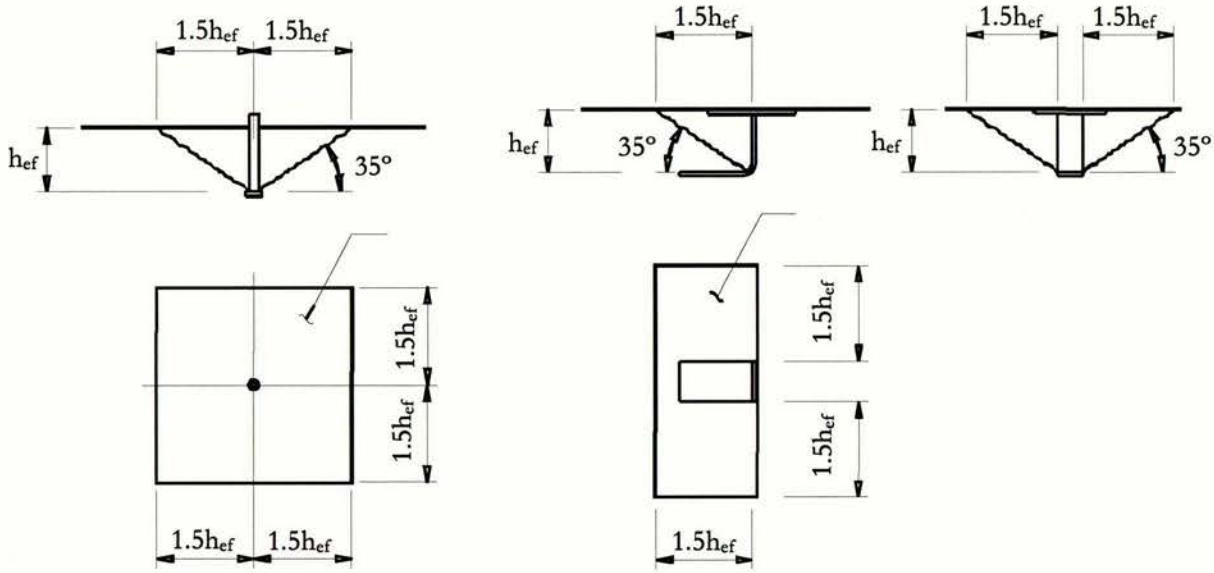
Ψ_2 = modification factor for edge distances

Ψ_3 = modification for anchor type, in uncracked concrete only

A_n = projected area of the failure surface to the outside of the head of the anchor or group of anchors (must be taken as less than nA_{no}). Due consideration should be given to the overlap of failure surfaces and interference with the edge and corners of concrete panels.

A_{no} = projected concrete failure area of one anchor when not limited by edge distance, as shown in Figure 35.

N_b = basic concrete breakout strength in tension of a single anchor in cracked concrete



a) Headed Anchor **b) Flat Plate Anchor**

Figure 35 *Typical failure surface areas of individual anchors, not limited by edge distances*

And $$N_b = k\sqrt{f_c'}\, h_{ef}^{1.5}$$

Where

f_c' = specified concrete compressive strength, measured from 100 mm diameter concrete test cylinders

k = 6.2 for cast in anchors

Now: $$\Psi_1 = \frac{1}{\left(1 + \frac{2e_n'}{3h_{ef}}\right)} \leq 0.8$$

Where

e_n' = eccentricity of normal force on a group of anchor; the distance between the resultant tension load on a group of anchors in tension and the centroid of the group of anchors loaded in tension (always taken as positive)

h_{ef} = effective anchor embedment

s = centre to centre spacing of the anchors

And, $\Psi_2 = 1$ when $c_{min} \geq 1.5h_{ef}$

or $$\Psi_2 = 0.7 + 0.3\frac{c_{min}}{1.5h_{ef}} \quad \text{when} \quad c_{min} < 1.5h_{ef}$$

And, Ψ_3 = 1.25 for cast in anchors in uncracked concrete

Ψ_3 = 1.4 for post-installed anchors in uncracked concrete

Ψ_3 = 1.0 for concrete which is cracked at service load levels

8.1.2.3 Tension Pullout of Anchor

The nominal pullout strength of an anchor or group of anchors in tension shall not exceed;

$$N_{pn} = \Psi_4 N_p$$

Where:

N_{pn} = nominal pullout strength in tension of a single anchor

Ψ_4 = modification factor for pullout strength

N_p = pullout strength of a single anchor in crack concrete

Now $N_p = A_{brg} 8f_c^{'}$ for a headed stud or headed bolt

Or $N_p = 0.9f_c^{'} e_h d_o$ for a hooked bolt

Where $3d_o \leq e_h \leq 4.5d_o$

And

A_{brg} = bearing area of the head of stud or anchor

Ψ_4 = 1.0 for cracked concrete

Ψ_4 = 1.4 for concrete with no cracking at service load levels

When hooked bars or flat plates are used as cast in anchor systems a minimum hook bend of 90° shall be used. The return length on the hook shall comply with the hooked development lengths of NZS3101 and shall be a minium of 125 mm.

8.1.2.4 Concrete Side face Blow-Out

The side face blow-out strength of a headed anchor with deep embedment close to an edge ($c < 0.4h_e$) shall not exceed;

$$N_{sb} = 160 k_1 c \sqrt{A_{brg} f_c'}$$

Where

N_{sb} = side blow-out strength of a single anchor

c = distance from the centre of an anchor shaft to the edge of the concrete

k_1 = multiplier for edge distance

If $c_2 < 3c$ then $k_1 = \dfrac{1 + c_2/c}{4}$

And $1 \le c_2/c \le 3$

Where

c_2 = distance from centre of shaft to the edge of the concrete, perpendicular to c

8.1.3 Shear Strength

8.1.3.1 Steel Strength of Anchor

The nominal strength of an anchor in shear governed by the steel shall not exceed;

For cast-in headed stud anchors:

$$V_s = n A_{se} f_{ut}$$

For cast-in headed bolts and hooked bolt anchors:

$$V_s = n 0.6 A_{se} f_{ut}$$

For post installed anchors:

$$V_s = n(0.6 A_{se} f_{ut} + 0.4 A_{sl} f_{utsl})$$

Where:

A_{sl} = effective cross section of expansion or undercut sleeve, if sleeve is within the shear plane

f_{utsl} = specified tensile strength of anchor strength

All other terms have been previously defined.

8.1.3.2 Concrete Break-Out

The nominal concrete breakout strength of an anchor or group of anchors in shear when loaded perpendicular to an edge shall not exceed;

$$V_{cb} = \frac{A_v}{A_{vo}} \Psi_5 \Psi_6 \Psi_7 V_b$$

For shear parallel to an edge the shear strength, V_{cb}, shall be twice that recorded in the above equation. For anchors or anchor groups located at or near corners the shear strength shall be determined in each direction.

Where

V_{cb} = nominal concrete breakout strength in shear of a single or group of anchors

A_v = projected concrete failure area of an anchor or group of anchors in shear, as shown in

A_{vo} = projected concrete failure area of an anchor or group of anchors in shear, when not limited by corner influences, spacing, or member thickness

Ψ_5 = modification factor for anchor groups

Ψ_6 = modification factor for edge distance

Ψ_7 = modification factor for cracked concrete

V_b = basic concrete breakout strength in shear.

Now for a single anchor in cracked concrete:

$$V_b = k_2\left(\frac{l}{d_o}\right)^{0.2}\sqrt{d_o f_c'}\,c_1^{1.5}$$

Where

k_2 = 8 for cast in headed studs, headed bolts, or hooked bolts, or hooked steel plates.

l = load bearing area of anchors for shear, not exceeding $8d_o$. Shall be taken as 0.8 times the effective embedment depth for hooked metal plates

d_o = outside diameter or shaft diameter of the anchor. Shall be taken as 0.8 times the width of a hooked steel plate.

c_1 = distance from the centre of resistance of an anchor to the edge of the concrete in the direction which the load is applied. For a hooked anchor the centre of resistance shall be taken to the centre of the bend radius forming the hook. For straight anchors it shall be taken to the centre of the shaft of the anchor.

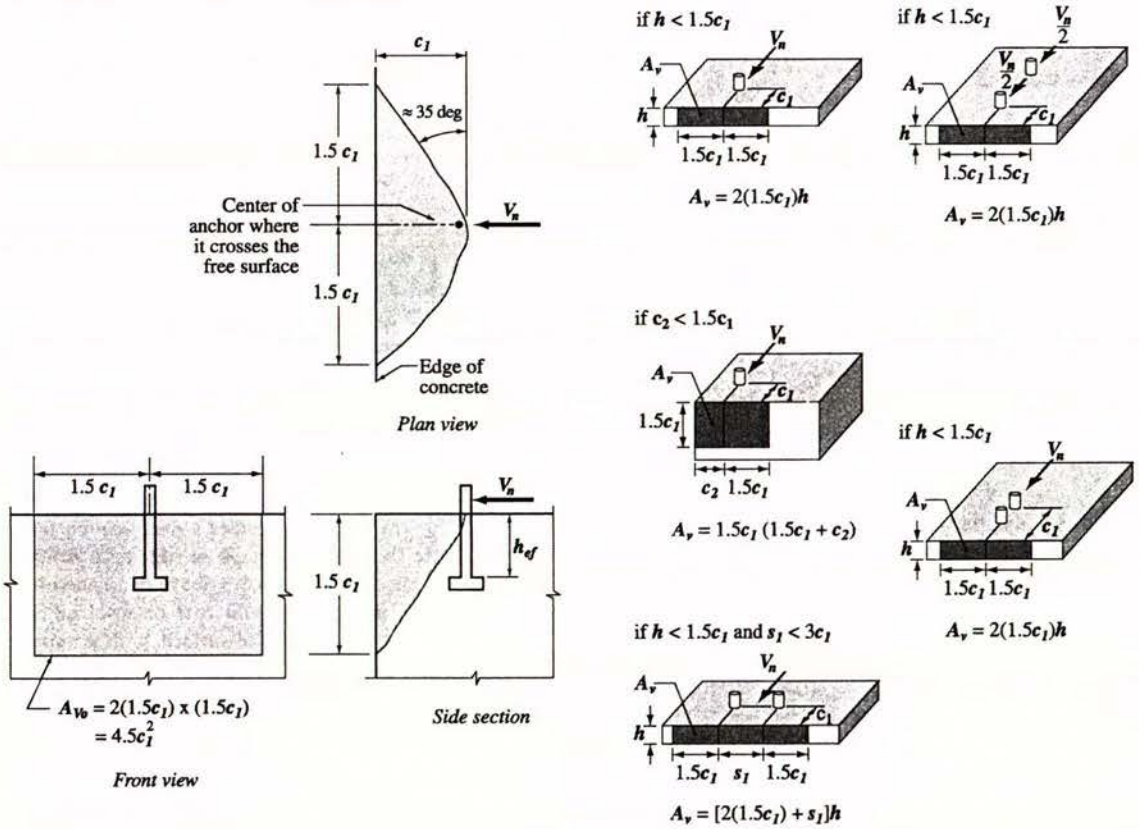


Figure 36 *Determination of A_v and A_{vo} for anchors and anchor groups*

And $$\Psi_5 = \frac{1}{1+\frac{2e_v'}{3c_1}} \leq 0.8$$

Where

e_v' = eccentricity of shear force on a group of anchor. The distance between the point of shear force application and the centroid of the group of anchors resisting the shear in the direction of the applied shear.

And, $\Psi_6 = 1.0$ for $c_2 \geq 1.5c_1$

Or $\Psi_6 = 0.7 + 0.3\frac{c_2}{1.5c_1}$ for for $c_2 < 1.5c_1$

And, Ψ_7 = 1.0 for anchors in cracked concrete with no supplementary reinforcement

Ψ_7 = 1.2 for anchors in cracked concrete with supplementary minimum of a 12 mm diameter reinforcing bar as supplementary reinforcement.

Ψ_7 = 1.4 for concrete which is not cracked at service load levels.

8.1.3.3 Concrete Pry-out

The nominal pry-out strength of an anchor shall not exceed:

$$V_{cp} = k_{cp} N_{cb}$$

Where

V_{cp} = nominal concrete pry-out strength

k_{cp} = coefficient of pry-out strength

N_{cb} = nominal concrete breakout strength in tension of a single anchor

And

k_{cp} = 1.0 for $h_{ef} < 60$ mm

k_{cp} = 2.0 for $h_{ef} \geq 60$ mm

8.1.4 Interaction of Tension and Shear

Concrete anchors are often subjected to combined axial tension and shear. In such circumstances it is necessary to consider the interaction of the two loads on the performance of the anchors.

It is recommended that the strength of a concrete anchor when subjected to the interaction of shear and axial tension be determined using a trilinear approach, as follows:

If $V_u \leq 0.2\phi V_n$ then full strength in tension is permitted ($\phi N_n \geq N_u$)

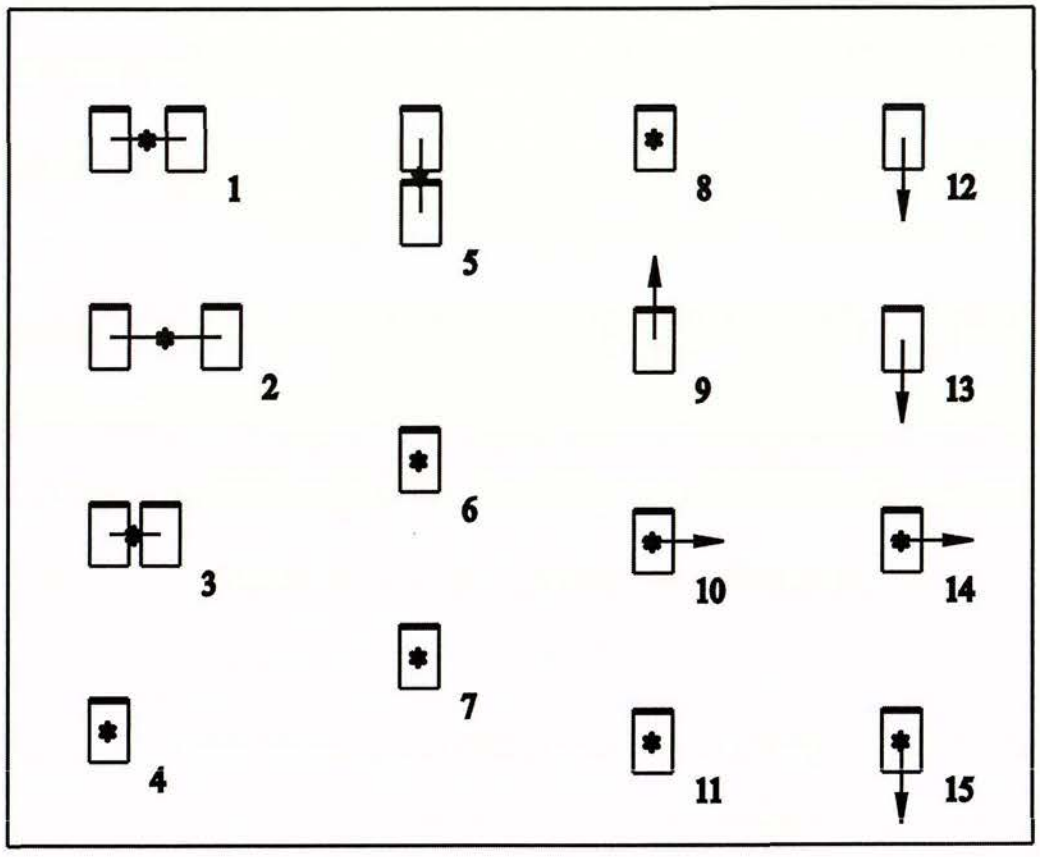
If $N_u \leq 0.2\phi N_n$ then full strength in shear is permitted ($\phi V_n \geq V_u$)

If $V_u > 0.2\phi V_n$ and $N_u > 0.2\phi N_n$ then:

$$\frac{N_u}{\varphi N_n} + \frac{V_u}{\varphi V_n} \leq 1.2$$

APPENDIX

A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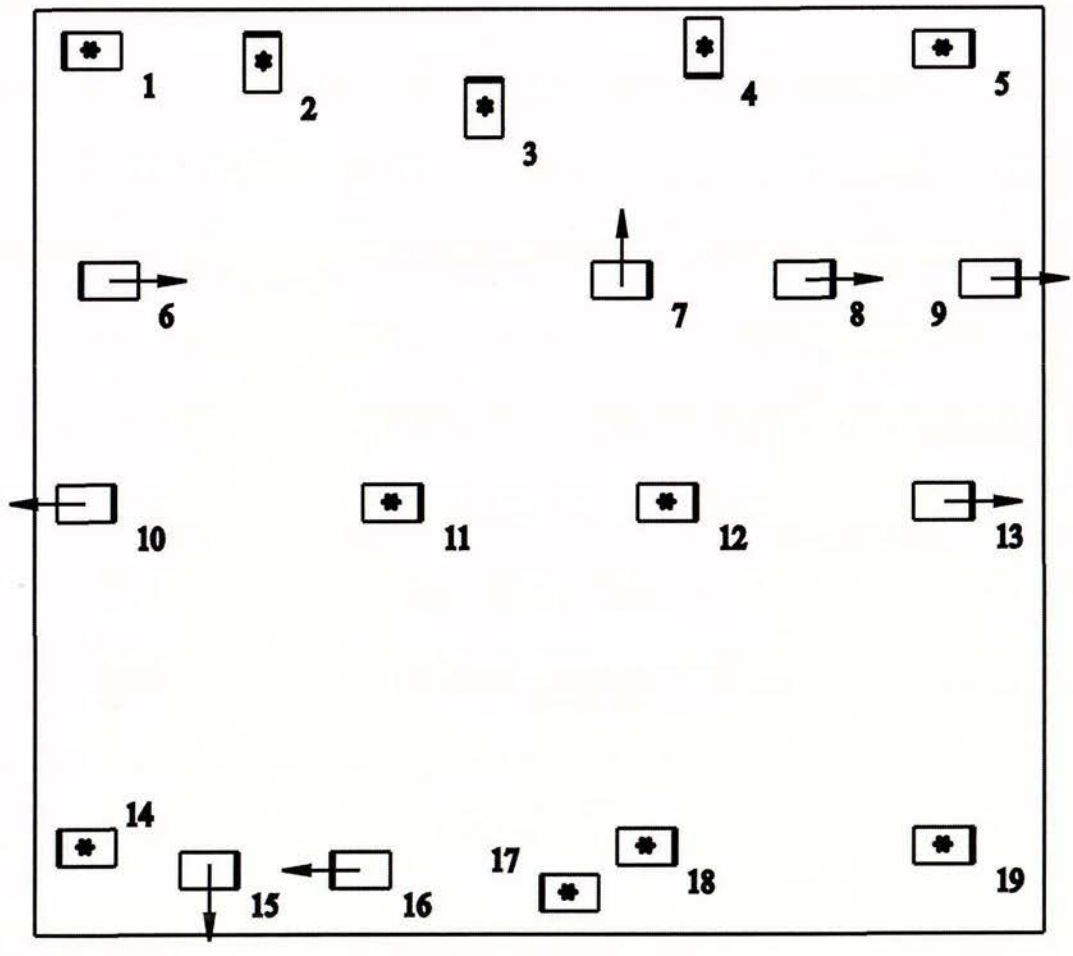
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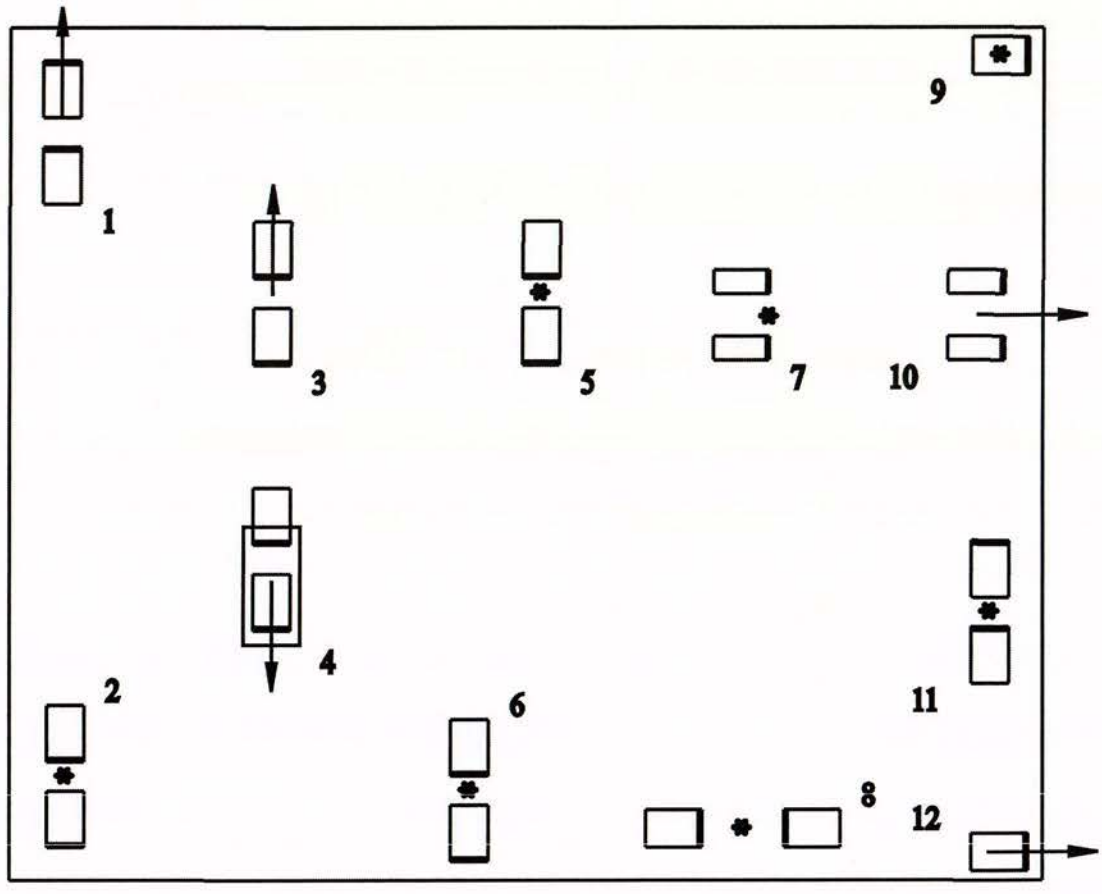

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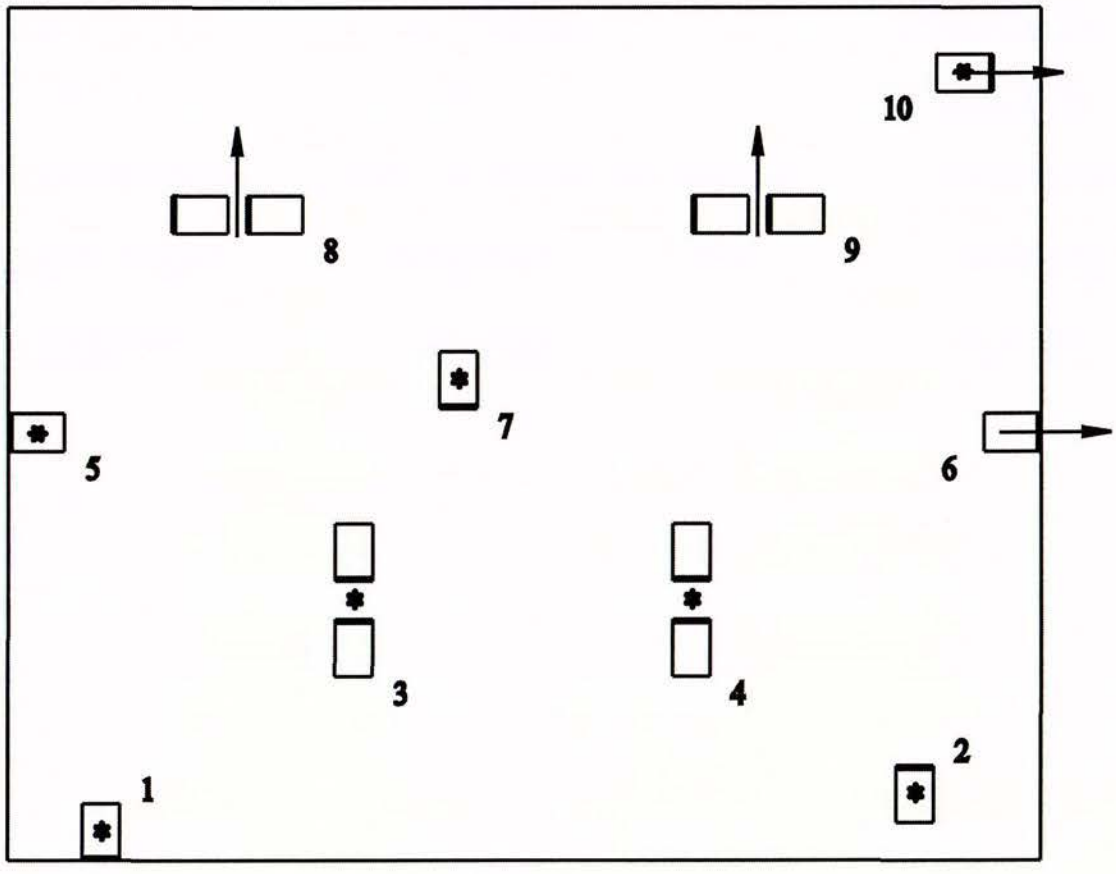
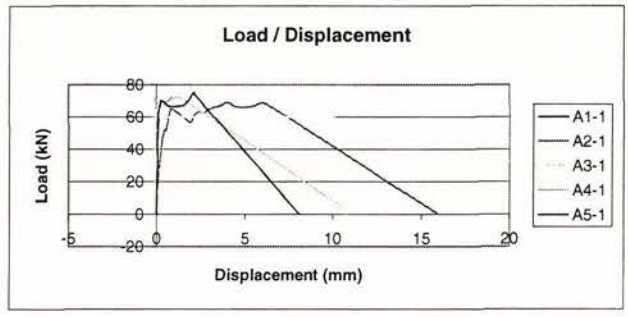


Panel Type = A2
Bracket No = 1
Test Type = T,7

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	75mm(y)
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	A1-1 (T,7)		A2-1 (T,7)		A3-1 (T,7)		A4-1 (T,7)		A5-1 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0	0	68.97	15.87	64.68	10	72.06	10.6	75.3	8.093

Test Data

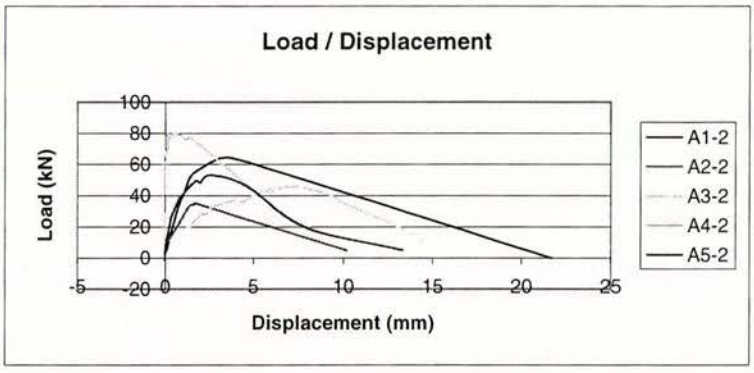
Designation	A1-1 (T,7)		A2-1 (T,7)		A3-1 (T,7)		A4-1 (T,7)		A5-1(T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
			0.3583	-0.0133	0	-0.0085	37.45	-0.0627	-0.3548	0.0126
			3.58	-0.0008	5.967	-0.0085	41.15	-0.0627	1.197	0.0126
			14.8	0.0493	14.68	0.0165	43.06	-0.0752	4.061	0.0001
			17.42	0.0743	18.14	-0.0085	45.68	-0.0627	9.55	0.0126
			37.59	0.2372	26.37	-0.0085	47.83	-0.0627	14.92	0.0001
			47.14	0.3249	27.09	0.0165	50.34	-0.0627	16.35	0.0126
			52.63	0.4752	27.21	0.1543	49.38	-0.0627	21.36	0.0001
			51.79	0.5128	26.97	-0.0211	51.89	-0.0627	28.76	0.0502
			55.37	0.5754	28.4	-0.0211	50.81	-0.0627	36.64	0.0502
			59.19	0.6256	32.7	-0.0085	52.37	-0.0501	45.11	0.0377
			58.35	0.6381	38.42	-0.0085	51.65	-0.0501	47.26	0.0502
			61.69	0.7258	44.03	-0.0085	53.08	-0.0501	52.63	0.0753
			64.8	0.8886	47.97	-0.0085	52.13	-0.0627	60.15	0.1003
			57.88	1.741	52.27	0.004	51.29	-0.0877	61.46	0.0878
			56.44	1.891	45.7	0.0165	45.56	-0.0877	66.35	0.188
			61.22	2.129	50.12	0.2044	47.95	-0.0877	70.17	0.2882
			63.13	2.392	52.51	0.2295	45.21	-0.0877	66.71	0.7016
			62.65	2.655	53.46	0.2295	46.88	-0.0877	66.83	1.428
			65.16	3.068	56.44	0.242	46.28	-0.0752	67.19	1.528
			66.59	3.532	58.83	0.2295	52.01	-0.0877	70.77	1.842
			68.97	4.008	61.1	0.1919	51.29	-0.0877	75.3	2.105
			66.59	4.384	59.67	0.1794	55.95	-0.0877	72.92	2.23
			65.87	4.973	58.71	0.0792	59.65	-0.0877	0.0032	8.093
			66.83	5.574	61.22	0.0165	58.93	-0.0752		
			68.26	6.188	58.71	0.0165	62.75	-0.0752		
			0.597	15.87	59.43	0.0165	61.79	-0.0877		
					61.69	0.0165	65.61	-0.0752		
					59.07	0.0165	69.79	-0.0752		
					60.02	0.029	68.95	-0.0752		
					62.05	0.029	71.94	-0.0627		
					59.67	0.0165	69.55	-0.0627		
					60.74	0.029	67.04	-0.0501		
					61.69	0.0416	69.67	0.476		
					60.26	0.029	67.64	0.476		
					61.46	0.029	72.06	0.8393		
					60.5	0.029	70.39	0.8518		
					61.1	0.1167	71.94	1.303		
					62.89	0.0416	3.798	10.6		
					60.86	0.0416				
					62.17	0.0541				
					64.68	0.0416				
					62.29	0.0541				
					63.6	0.0666				
					62.77	0.0541				
					63.72	0.0666				
					64.68	0.0666				
					62.17	0.0666				
					63.37	0.0666				
					61.81	0.0792				
					62.41	0.0917				
					63.6	0.0666				
					63.13	0.2545				
					62.29	0.2545				
					61.58	0.1293				
					60.98	0.0792				
					61.22	0.2671				
					60.26	0.0917				
					60.26	0.242				
					59.79	0.0917				
					59.67	0.0792				
					60.14	0.2545				
					60.02	10				

Panel Type = A2
Bracket No = 2
Test Type = T,7

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= 150mm(y)
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation		A1-2 (T,7)		A2-2 (T,7)		A3-2 (T,7)		A4-2 (T,7)		A5-2 (T,7)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		64.02	21.69	35.2	10.2	45.77	14.44	79.71	8.369	52.98	13.32

Test Data

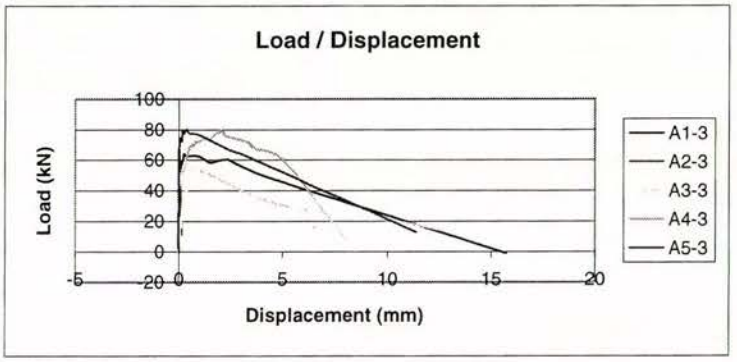
Designation	A1-2 (T,7)		A2-2 (T,7)		A3-2 (T,7)		A4-2 (T,7)		A5-2 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-1.379	-0.0123	0.4776	-0.0131	-0.1694	-0.0122	-0.5957	0.0128	-0.7157	-0.008
	-0.7821	0.0002	7.28	0.037	2.098	0.0128	1.433	0.0253	0.1196	-0.008
	2.082	0.0253	21.24	0.7385	4.365	0.2133	14.8	-0.0123	6.564	0.0171
	4.111	0.0628	33.29	1.39	15.34	0.8647	14.08	-0.0123	7.399	0.0171
	5.901	0.113	34.25	1.678	16.9	1.053	34.37	-0.0498	22.67	0.2676
	8.168	0.1631	35.2	1.678	27.87	2.067	39.74	-0.0498	26.85	0.3679
	13.9	0.2883	4.774	10.2	28.47	2.355	39.14	-0.0498	39.26	0.8439
	19.27	0.4261			32.29	2.631	42.6	-0.0373	40.22	0.9316
	24.4	0.5389			36.94	3.884	48.09	-0.0373	49.4	1.708
	29.65	0.6642			35.87	4.322	56.8	-0.0248	48.69	1.934
	35.14	0.827			38.49	4.773	61.34	-0.0248	47.97	1.984
	39.67	0.9899			43.63	5.901	60.38	-0.0373	52.98	2.473
	45.04	1.19			42.07	6.039	59.55	-0.0624	50.24	3.851
	49.93	1.341			44.58	6.327	64.92	-0.0498	43.32	4.978
	52.2	1.453			45.77	7.279	71.12	0.1631	19.33	7.935
	54.23	1.604			43.51	8.306	70.29	0.1631	5.132	13.32
	56.5	1.892			41.48	8.97	76.25	0.1506		
	59.12	2.255			38.73	9.559	74.94	0.1631		
	61.63	2.669			35.75	9.922	79.24	0.1631		
	64.02	3.107			15.46	13.93	76.61	0.1631		
	64.02	3.821			11.05	14.44	79.71	0.6266		
	59.84	5.099					75.66	1.215		
	-0.0661	21.69					76.85	1.466		
							28.04	6.69		
							17.66	8.369		
							17.07	8.344		

Panel Type = A2
Bracket No = 3
Test Type = T,7

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	25mm(y)
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		A1-3 (T,7)		A2-3 (T,7)		A3-3 (T,7)		A4-3 (T,7)		A5-3 (T,7)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		63.9	15.72	66.23	0.1599	54.48	12.62	79.36	8	80.31	11.39

Test Data

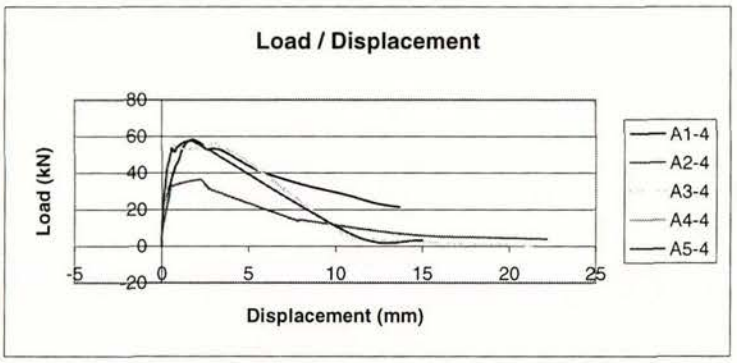
Designation	A1-3 (T,7)		A2-3 (T,7)		A3-3 (T,7)		A4-3 (T,7)		A5-3 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.4241	-0.0044	0.7163	0.0095	0.0692	-0.0001	0.0009	-0.0122	-0.1191	0.0131
	6.378	0.0081	7.041	-0.003	4.007	0.0124	4.774	-0.0248	3.58	0.0006
	9.361	-0.0044	22.32	0.0095	22.15	0.0124	18.26	-0.0122	7.757	-0.012
	13.54	-0.0044	39.26	0.0221	15.82	0.1252	22.32	-0.0122	34.73	0.0131
	17.6	-0.0044	41.89	0.0095	19.4	0.1252	25.66	-0.0248	46.78	0.0006
	18.91	-0.0044	41.29	0.0095	34.79	0.2379	42.01	0.0379	55.37	0.0006
	21.77	-0.0044	54.42	0.0346	33.48	0.3632	47.14	0.1005	54.77	0.0131
	25.35	-0.0044	55.61	0.0221	35.15	0.3757	47.85	0.1005	55.49	0.0006
	29.17	-0.0169	55.01	0.0221	41.72	0.3883	51.79	0.1005	67.42	0.0006
	33.23	-0.0169	58	0.0221	44.1	0.4384	52.03	0.2258	66.83	0.0006
	38.72	-0.0044	61.46	0.0346	43.51	0.4509	56.56	0.2884	66.23	0.0006
	42.89	0.0081	64.56	0.0221	46.73	0.501	61.22	0.3886	73.99	0.0757
	47.91	0.0332	63.13	0.0346	46.13	0.5135	66.23	0.4638	72.79	0.0632
	47.31	0.0207	66.23	0.0471	48.52	0.5887	70.29	0.6267	72.32	0.1634
	51.37	0.0332	65.04	0.0346	50.55	0.6388	68.86	0.7144	73.75	0.1509
	55.07	0.0708	64.2	0.0471	52.22	0.6889	72.2	0.8146	79.71	0.1885
	54.47	0.0958	56.21	0.0596	54.48	0.739	71.24	0.8271	78.16	0.2386
	58.05	0.1209	13.01	0.1473	51.38	1.353	73.51	1.165	77.45	0.2636
	57.45	0.1334	12.41	0.1599	33.24	4.209	74.94	1.353	80.31	0.3639
	60.67	0.2086	10.98	0.1599	23.34	7.592	72.91	1.441	77.57	0.5017
	63.9	0.2461			21.55	9.02	76.02	1.704	76.37	1.003
	62.58	0.384			20.36	10.26	79.36	2.067	66.47	2.481
	62.7	0.9352			13.91	12.62	75.42	2.318	62.17	3.345
	58.41	1.486					71.96	3.295	12.77	11.39
	59.36	1.862					67.42	3.696		
	60.2	2.376					60.14	5.024		
	57.21	2.827					7.877	8		
	47.67	4.543								
	-0.9014	15.72								

Panel Type = A2
Bracket No = 4
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	276mm
y edge proximity	=	-237.5mm



Peak Loads

Designation		A1-4 (T,3)		A2-4 (T,3)		A3-4 (T,3)		A4-4 (T,3)		A5-4 (T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		57.93	13.68	36.28	22.22	56.27	21.32	0	0	57.16	15.01

Test Data

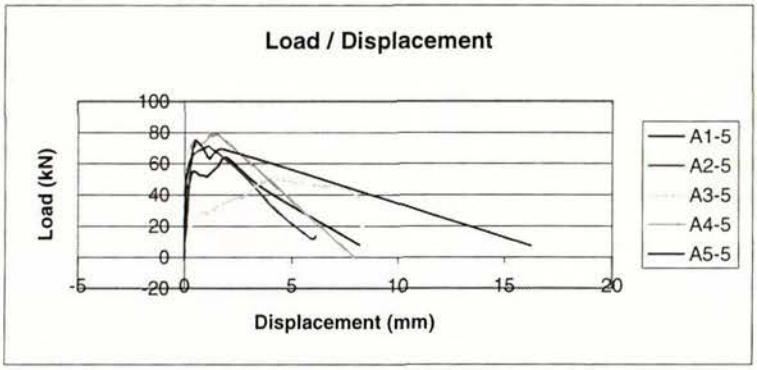
Designation	A1-4 (T,3)		A2-4 (T,3)		A3-4 (T,3)		A4-4 (T,3)		A5-4 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.1854	-0.0035	0.597	0.0003	-0.1694	0.0116			-0.2384	0
	1.605	-0.0035	1.313	0.0128	1.263	-0.0009			11.1	0.0251
	13.66	0.0466	7.757	0.0253	10.45	0.0116			24.34	0.1003
	23.08	0.1343	28.04	0.4387	21.43	0.0993			39.5	0.2631
	33.35	0.4725	32.94	0.6267	30.02	0.2622			42.6	0.3007
	32.75	0.4725	36.28	2.23	29.42	0.2622			53.34	0.5888
	40.27	0.673	34.13	2.456	35.51	0.3248			52.27	0.6765
	45.04	0.8483	32.82	2.593	44.22	0.425			51.43	0.7642
	46.23	0.9486	32.1	2.656	48.16	0.4751			54.3	0.9647
	53.16	1.199	31.38	2.719	47.44	0.4751			57.16	1.854
	57.93	1.675	13.84	7.843	52.81	0.5378			5.49	11.17
	57.09	2.101	14.32	7.98	55.68	0.5879			3.222	15.01
	54.95	2.414	7.638	12.98	52.93	1.327				
	53.63	2.502	5.37	15.89	53.17	1.866				
	52.92	2.54	4.774	18.55	54.84	2.53				
	52.44	3.429	3.938	22.22	56.27	3.231				
	42.3	5.321			54.37	3.382				
	37.52	6.711			48.88	4.559				
	33.11	8.265			5.439	10.71				
	27.62	10.8			3.53	12.2				
	23.44	12.3			3.172	12.97				
	21.41	13.68			1.382	17.46				
					0.4272	21.32				
					0.1886	21.22				

Panel Type = A2
Bracket No = 5
Test Type = T,7

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	150mm(x)
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		A1-5 (T,7)		A2-5 (T,7)		A3-5 (T,7)		A4-5 (T,7)		A5-5 (T,7)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		63.78	8.183	70.89	6.15	50.19	16.09	80.19	7.918	75.19	16.26

Test Data

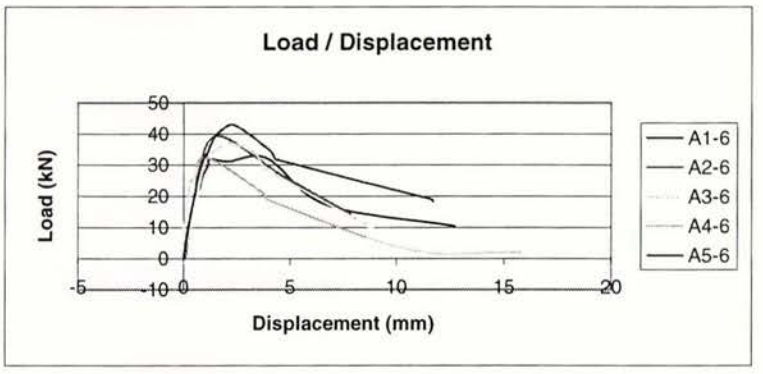
Designation	A1-5 (T,7)		A2-5 (T,7)		A3-5 (T,7)		A4-5 (T,7)		A5-5 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-1.498	-0.0101	0.0032	-0.0008	-0.0501	-0.023	-0.5957	0.0006	0.0073	0
	1.127	-0.0101	43.32	0.1997	3.649	-0.0355	2.507	-0.0119	0.8426	-0.0125
	13.66	-0.0101	49.76	0.2122	11.29	0.1399	16.95	0.0006	5.735	-0.0125
	12.94	-0.0101	56.09	0.2623	13.08	0.1399	22.79	-0.0119	19.1	-0.0125
	38.12	0.1152	62.18	0.3249	23.7	0.4405	28.04	0.0132	40.7	0.0251
	49.81	0.253	66.95	0.4753	28.83	0.9542	34.61	0.0382	39.74	0.0125
	55.07	0.4034	69.81	0.8887	28.23	1.054	37.71	0.0507	52.63	0.0626
	52.56	0.704	70.89	1.127	34.32	1.693	39.14	0.0633	51.8	0.0752
	52.2	0.9671	51.91	2.78	38.02	2.47	42.84	0.0633	62.54	0.2631
	51.37	1.005	31.63	4.133	38.14	2.708	46.9	0.0883	61.82	0.2756
	54.83	1.268	11.94	5.937	45.18	3.259	51.67	0.1009	69.7	0.3884
	58.53	1.543	13.61	6.15	49.47	3.936	55.25	0.1134	71.96	0.4385
	63.78	1.944			48.88	4.211	55.85	0.1134	71.13	0.451
	43.61	3.711			50.19	4.337	60.5	0.1384	75.19	0.4886
	7.929	8.183			46.01	5.89	65.28	0.151	69.94	0.8268
					44.58	7.356	68.5	0.176	64.69	1.04
					36.82	8.195	71.12	0.2888	63.73	1.102
					16.9	8.458	74.7	0.4767	63.37	1.14
					6.036	10.12	72.2	0.5894	63.01	1.165
					6.036	10.37	73.51	0.8525	69.1	1.766
					5.32	10.5	76.61	1.065	7.287	16.26
					3.888	16.09	80.19	1.216		
							76.97	1.278		
							78.28	1.554		
							0.3589	7.918		

Panel Type = A2
Bracket No = 6
Test Type = T,1

General Commemts

Variables

he	=	75mm
w	=	50mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		A1-6 (T,1)		A2-6 (T,1)		A3-6 (T,1)		A4-6 (T,1)		A5-6(T,1)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		32.1	12.72	39.38	7.845	36.94	16.17	32.46	15.8	42.73	11.71

Test Data

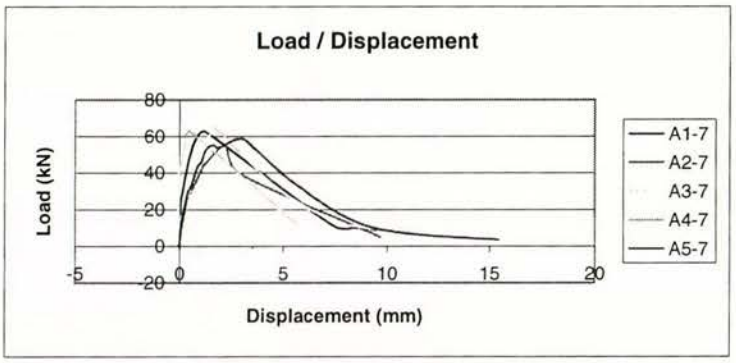
Designation	A1-6 (T,1)		A2-6 (T,1)		A3-6 (T,1)		A4-6 (T,1)		A5-6(T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.0017	0.0037	-0.1188	0.0908	-0.1694	0.0143	-1.073	-0.0003	-0.4701	-0.0129
	5.488	0.1164	18.74	0.5418	10.81	0.3526	4.416	-0.0003	11.34	0.2628
	11.1	0.2417	27.33	0.6796	12.84	0.4152	9.428	0.0122	10.75	0.2502
	15.03	0.4421	39.38	1.632	33.72	1.067	24.82	0.3379	15.52	0.363
	16.35	0.5048	26.13	4.764	33.12	1.067	25.66	0.4632	28.29	0.7764
	17.66	0.5424	14.32	7.845	32.53	1.092	25.06	0.4632	33.54	1.039
	18.38	0.5674			36.94	2.132	32.46	1.052	32.94	1.065
	19.33	0.605			33.48	3.447	21.24	3.695	38.07	1.403
	20.52	0.6426			28.47	3.961	18.74	4.009	41.42	1.816
	21.36	0.6676			2.814	10.7	2.865	10.59	42.73	2.468
	22.79	0.7679			2.814	10.81	2.03	15.8	34.61	4.096
	25.77	0.8681			1.621	16.06			33.06	4.234
	30.07	1.156			1.501	16.17			32.35	4.297
	31.86	1.231							31.87	4.334
	31.14	2.146							25.78	7.692
	32.1	3.962							19.1	11.6
	17.18	6.706							18.27	11.71
	10.38	12.72								

Panel Type = A2
Bracket No = 7
Test Type = T,1

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		A1-7 (T,1)		A2-7 (T,1)		A3-7 (T,1)		A4-7 (T,1)		A5-7 (T,1)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		62.65	9.534	54.77	9.683	64.15	11.47	62.89	5.838	58.71	15.45

Test Data

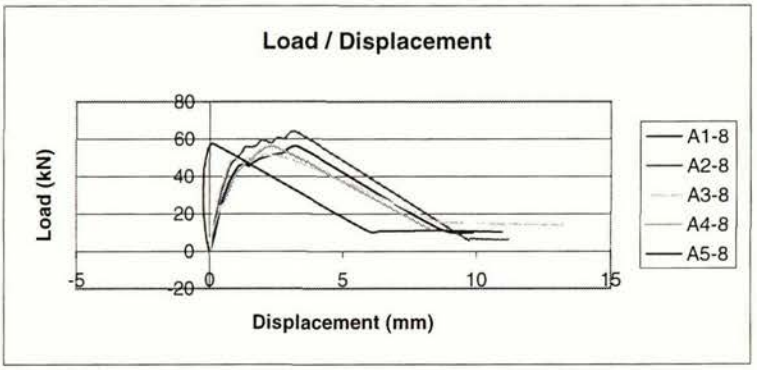
Designation	A1-7 (T,1)		A2-7 (T,1)		A3-7 (T,1)		A4-7 (T,1)		A5-7 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.0017	-0.0123	-0.9541	0.012	0.1886	-0.0004	-0.8344	0.0006	-0.9544	-0.0007
	10.86	0.0128	5.012	0.0246	4.723	-0.0004	3.462	0.0006	2.626	0.0118
	23.03	0.0629	23.75	0.3377	6.274	-0.0004	27.09	-0.0119	12.29	0.087
	34.84	0.2383	26.37	0.4004	20.12	0.175	31.39	0.0006	29.83	0.4127
	46.3	0.4513	40.45	1.014	30.74	0.5258	35.44	0.0257	32.22	0.5505
	52.27	0.5891	44.63	1.19	48.76	0.9517	36.87	0.0132	42.12	0.8261
	56.8	0.7269	44.03	1.19	54.48	1.14	38.07	0.0257	45.59	1.014
	60.38	0.8897	54.77	2.217	56.75	1.265	42.36	0.0257	44.99	1.014
	62.65	1.24	39.74	2.906	56.16	1.265	46.66	0.1008	53.22	1.327
	10.98	7.454	5.012	9.683	55.56	1.277	51.19	0.1384	55.25	1.678
	10.02	8.469			61.05	1.478	50.6	0.176	54.06	1.741
	8.829	9.534			64.15	1.766	55.01	0.2386	53.7	1.878
					30.62	4.835	59.55	0.3013	58.71	2.981
					13.08	7.579	61.7	0.3389	52.86	3.67
					11.64	7.98	62.89	0.4892	33.29	5.674
					9.019	9.633	12.29	5.626	10.14	9.332
					7.587	11.19	11.58	5.726	3.58	15.35
					7.706	11.47	11.1	5.838	3.58	15.45
							10.98	5.826		

Panel Type = A2
Bracket No = 8
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	50mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	-200mm
y edge proximity	=	N/A



Peak Loads										
Designation		A1-8 (T,3)		A2-8 (T,3)		A3-8 (T,3)		A4-8 (T,3)		A5-8 (T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		55.73	9.892	63.72	11.21	50.43	13.28	55.49	8.243	57.41	10.97

Test Data

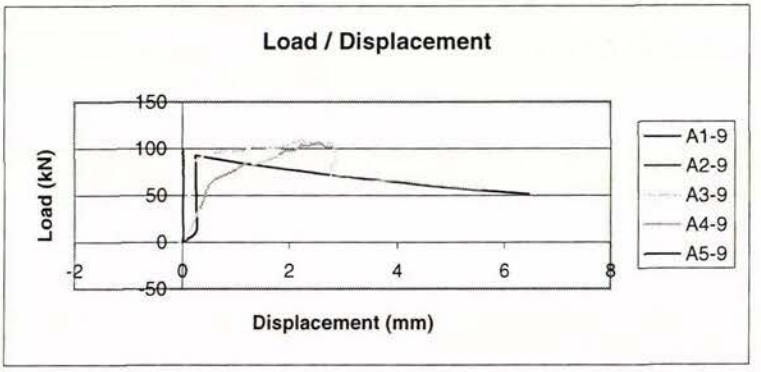
Designation	A1-8 (T,3)		A2-8 (T,3)		A3-8 (T,3)		A4-8 (T,3)		A5-8 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.3597	0.0077	0.0006	0.0119	-0.1694	0.0251	-0.8344	-0.0129	-0.2314	0.0007
	7.158	0.1705	8.354	0.1247	15.46	0.1003	5.49	0.0121	8.003	-0.1245
	29.23	0.5338	22.2	0.2875	14.87	0.1003	23.51	0.4255	24.35	-0.2247
	44.99	1.073	35.08	0.513	35.27	0.426	26.61	0.5633	43.92	-0.1997
	46.06	1.461	34.49	0.513	36.7	0.4886	40.93	1.002	46.07	-0.1621
	45.34	1.473	40.33	0.6508	46.61	0.7266	49.05	1.515	54.54	-0.0744
	48.81	1.799	45.94	0.7886	50.43	0.9145	48.33	1.578	57.41	0.126
	51.07	2.238	49.4	1.002	50.19	1.027	52.15	1.766	10.75	5.951
	52.62	2.751	53.82	1.24	48.52	1.077	55.49	2.505	10.75	6.39
	55.73	3.327	55.61	1.327	49.95	2.794	11.93	8.243	10.99	8.783
	12.29	8.577	56.09	1.691	16.42	8.394			10.39	10.97
	10.02	9.892	59.43	1.966	15.58	8.531				
			57.88	2.304	13.79	13.28				
			60.62	2.542						
			60.14	2.818						
			63.72	3.219						
			5.848	9.708						
			6.683	9.783						
			6.325	10.37						
			6.206	11.21						

Panel Type = A2
Bracket No = 9
Test Type = T,2

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Shear -x
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		A1-9 (T,2)		A2-9 (T,2)		A3-9 (T,2)		A4-9 (T,2)		A5-9 (T,2)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		92.55	6.476	0	0	111	3.434	105.1	5.569	98.29	0.0167

Test Data

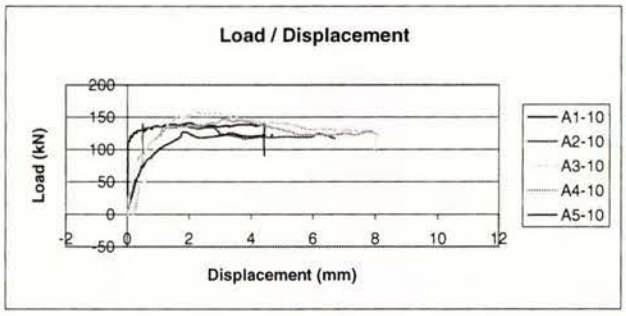
Designation	A1-9 (T,2)		A2-9 (T,2)		A3-9 (T,2)		A4-9 (T,2)		A5-9 (T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.0078	-0.0005			0.244	-0.0514	0.2439	0.0051	-0.0039	0.0041
	6.821	0.1896			8.293	0.0753	7.683	0.1065	9.264	0.0167
	14.5	0.2657			29.63	0.1387	30.24	0.2713	36.83	0.0041
	35.72	0.253			33.05	0.1387	29.39	0.2713	60.85	0.0167
	47.07	0.253			32.32	0.1387	31.59	0.2713	72.92	0.0167
	61.94	0.2403			44.15	0.1387	37.68	0.3346	71.95	0.0041
	69.02	0.2403			54.88	0.1134	46.95	0.398	78.04	0.0041
	76.94	0.2403			70	0.1134	55.12	0.436	77.43	0.0167
	84.02	0.2403			81.59	0.1134	63.41	0.5121	84.14	0.0167
	86.94	0.2403			85.37	0.1134	66.46	0.5881	88.53	0.0041
	88.77	0.2403			92.68	0.1134	70.61	0.7275	87.43	0.0041
	92.55	0.2403			91.59	0.1007	76.1	0.9557	90.48	0.0041
	85.11	1.013			92.44	0.1007	85.37	1.222	93.17	0.0167
	78.53	1.837			87.2	0.2401	83.17	1.349	95.36	0.0041
	71.33	2.801			94.15	0.4175	89.63	1.691	92.43	0.0041
	69.87	2.889			92.8	0.4429	95.12	1.856	94.14	0.0041
	66.21	3.675			95.85	0.6837	97.56	1.906	98.29	0.0167
	60.24	4.6			96.71	0.6837	98.17	2.096	94.26	0.0167
	55.48	5.526			97.8	1.191	101.7	2.21	95.36	0.0041
	51.33	6.476			101.8	1.305	104.5	2.248	91.34	0.0041
					100.7	1.812	102.6	2.324	85.97	0.0041
					109.5	2.243	105.1	2.578	89.02	0.0167
					106.7	2.369	101.8	2.705	87.07	0.0041
					105.9	3.193	102.9	2.844	85.48	0.0041
					106.8	3.434	101.2	2.844	84.14	0.0041
					110.9	3.434	95.49	2.844	87.43	0.0167
					108.8	3.434	85.61	2.857	82.07	0.0041
					111	3.434	79.76	2.768	83.04	0.0167
					108.2	3.434	75.24	2.768	81.09	0.0167
					106.8	3.421	74.39	2.768	85.48	0.0167
							70.98	2.768	80	0.0167
							70.24	2.768	81.58	0.0167
							65.98	3.351	79.02	0.0167
							65.24	3.389	78.29	0.0167
							65.85	3.985		
							62.2	4.543		
							56.22	5.569		

Panel Type = A2
Bracket No = 10
Test Type = T,2

General Commemts

Variables

h_e	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Shear y
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		A1-10 (T,2)		A2-10 (T,2)		A3-10 (T,2)		A4-10 (T,2)		A5-10 (T,2)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		140.7	4.441	139.5	6.692	158.8	10.53	147.4	8.087	126.5	4.428

Test Data

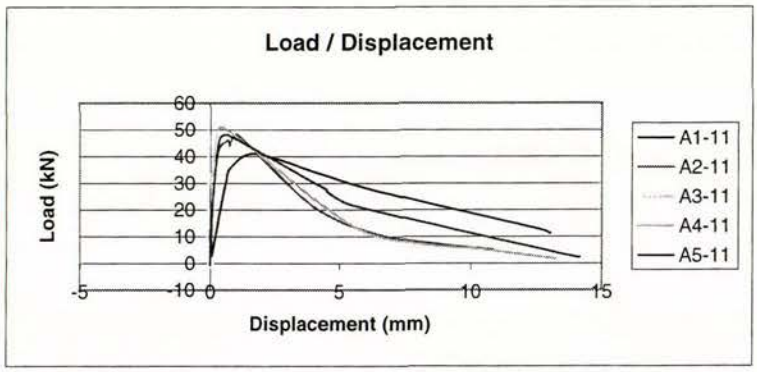
Designation	A1-10 (T,2)		A2-10 (T,2)		A3-10 (T,2)		A4-10 (T,2)		A5-10 (T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	28.89	0.0054	-0.4869	0.0001	5.609	0.1135	-0.3659	0.0008	25.49	0.1441
	35.84	0.0054	1.464	0.0001	9.024	0.1895	0.3659	0.0134	31.83	0.1821
	41.21	0.0054	4.757	0.0254	12.07	0.2529	1.22	0.0134	38.54	0.2201
	53.28	0.0054	10.12	0.0634	14.51	0.2782	8.293	0.0388	44.88	0.2581
	61.21	0.0181	17.07	0.1015	18.29	0.3289	14.39	0.0641	51.83	0.2962
	65.36	0.0054	25.24	0.1395	24.88	0.3923	22.32	0.0768	54.51	0.3088
	78.16	0.0181	33.9	0.1648	32.68	0.4557	30.12	0.1148	58.66	0.3469
	85.6	0.0054	38.66	0.1902	41.46	0.5064	38.78	0.1402	65.85	0.4229
	89.62	0.0181	42.68	0.2155	43.78	0.519	42.44	0.1402	74.02	0.4863
	99.87	0.0181	51.1	0.2536	48.78	0.5571	49.02	0.1782	72.8	0.5243
	98.65	0.0181	51.71	0.2789	56.46	0.6204	59.15	0.2162	79.02	0.5877
	101.7	0.0054	62.44	0.393	65.49	0.6711	62.56	0.2162	84.02	0.6384
	107.1	0.0054	73.54	0.4944	64.39	0.6838	69.51	0.2543	86.22	0.7398
	106.1	0.0181	72.2	0.507	71.34	0.7345	75.24	0.2923	95.12	0.9172
	113	0.0308	81.83	0.507	78.29	0.7725	80.49	0.3176	103.9	1.145
	112.4	0.0688	90.98	0.507	87.93	0.8486	86.46	0.3557	111.8	1.462
	121	0.1068	99.88	0.507	90	0.8613	89.02	0.4064	119	1.716
	119.5	0.1322	98.42	0.507	96.34	0.8993	95	0.457	125.6	1.779
	118.8	0.1448	106.5	0.507	105.2	0.9626	93.9	0.4951	126.5	1.918
	118.2	0.1448	114	0.507	104	0.9626	9.634	0.305	118.5	2.299
	120.4	0.1702	120.4	0.4944	106.1	0.9753	0	0.2036	119.3	2.692
	124.4	0.2082	119.5	0.507	113.2	1.026	3.659	0.2289	122.4	3.135
	126.2	0.2589	126.2	0.507	122.3	1.115	3.049	0.2162	125.2	3.351
	125	0.2969	124.1	0.507	121.7	1.115	-0.2439	0.2036	120.4	3.807
	128.6	0.3223	129.9	0.507	130.1	1.191	1.463	0.2289	121.5	4.377
	129.3	0.4744	127.3	0.507	129	1.203	3.78	0.2289	123.7	4.415
	127.9	0.5377	131.5	0.4944	136.2	1.28	4.39	0.2289	120.1	4.415
	133.9	0.7025	130.7	0.4944	135.4	1.292	10.85	0.2543	122.1	4.415
	131.1	0.7912	133	0.4944	136.2	1.292	16.59	0.2796	125.1	4.428
	136.2	0.8926	139.5	0.507	142.4	1.343	20.85	0.2923	117.1	4.415
	135	1.133	134	0.507	141.1	1.368	21.34	0.305	111.2	4.415
	137.2	1.197	139	0.507	146	1.406	25.24	0.3176	108.7	4.415
	138.6	1.552	135.1	0.507	144.5	1.52	26.22	0.3303	100.5	4.428
	137.1	1.64	132.2	0.5451	149.4	1.596	32.56	0.343	99.51	4.428
	140.7	2.046	134.8	0.8746	146.2	1.66	35	0.3557	97.56	4.415
	136.8	2.274	135.4	1.001	145	1.698	42.44	0.381	99.51	4.428
	136.8	2.806	133.9	1.559	144.3	1.698	51.59	0.4064	91.46	4.428
	134.6	2.908	138.4	1.724	148	1.736	62.93	0.419	90.73	4.428
	136.9	3.25	132.2	2.231	149.3	1.786	73.78	0.4444		
	135.5	3.301	134	2.75	148.5	1.85	85.49	0.4951		
	138.2	3.643	128	2.953	147.9	1.863	85.12	0.5077		
	137.8	4.074	128.8	2.941	152.7	1.939	95.24	0.5838		
	136.2	4.125	125.1	2.953	151.1	1.989	94.27	0.5711		
	137.8	4.441	124.5	2.953	152.2	2.002	103.4	0.6598		
	136.2	4.441	119.3	3.612	155.4	2.103	102.3	0.6725		
	135.6	4.429	117.3	3.701	153.8	2.154	110.6	0.7359		
	135	4.441	116.5	3.739	152.9	2.154	109.3	0.7739		
	131	4.429	118.4	4.195	157.7	2.23	112.6	0.8119		
	129.3	4.429	119.5	4.246	156.5	2.319	116.5	0.926		
	125.7	4.429	118.4	4.664	155	2.344	115.9	0.9387		
	123.5	4.441	123.3	4.664	158.8	2.408	123.2	1.053		
	121	4.441	118.4	4.664	156.2	2.496	122.3	1.078		
	118.8	4.441	121.7	4.677	154.9	2.522	130.1	1.141		
			118.4	4.664	157.1	2.56	128.2	1.205		
			119.9	5.146	157	2.674	134.3	1.281		
			119.4	5.273	155	2.724	132.4	1.446		
			118.8	5.906	156.7	2.775	135.4	1.509		
			124.3	6.21	154	3.079	134.5	1.826		
			117.7	6.629	151.1	3.333	135.1	1.915		
			116.6	6.692	152	3.434	137.3	2.307		
					150.7	3.523	135.6	2.384		
					145.4	3.523	142.3	2.802		

Panel Type = A2
Bracket No = 11
Test Type = T,3

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= 276mm
y edge proximity	= N/A



Peak Loads										
Designation	A1-11 (T,3)		A2-11 (T,3)		A3-11 (T,3)		A4-11 (T,3)		A5-11 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	40.93	13.07	47.97	10.9	48.88	0.0928	50.96	13.27	47.86	14.18

Test Data

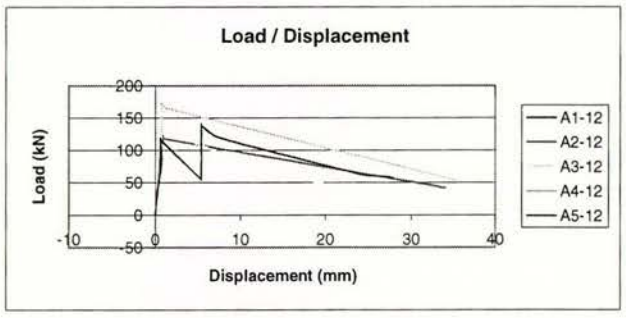
Designation	A1-11 (T,3)		A2-11 (T,3)		A3-11 (T,3)		A4-11 (T,3)		A5-11 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.7177	0.0004	-0.5961	-0.01	-0.5274	-0.0575	-1.192	-0.0066	-0.4701	0.0008
	8.351	0.1632	1.313	0.0151	-0.4081	0.0803	-0.2377	-0.0066	4.303	0.0008
	30.19	0.5892	3.819	0.0401	0.5466	0.0928	10.14	0.0185	11.94	0.0008
	35.68	0.7646	5.609	0.0401	6.871	-0.0575	24.94	-0.0567	23.4	0.101
	40.93	1.804	7.16	0.0526	32.05	-0.0701	33.53	0.0435	40.1	0.2514
	27.68	6.202	8.234	0.0526	31.45	-0.0575	32.94	0.0811	47.26	0.4017
	12.77	12.64	19.21	0.0902	48.88	-0.0701	32.82	0.0936	47.86	0.7149
	11.1	13.07	25.54	0.1028	1.979	-0.0701	38.55	0.0936	28.53	4.348
			26.25	0.1028	0.3079	-0.0575	37.95	0.1187	27.45	4.523
			42.36	0.3283	-0.0501	0.0427	41.17	0.1688	26.86	4.523
			46.06	0.6665	-0.0501	-0.0575	46.18	0.2314	21.61	5.525
			44.75	0.7291			50.96	0.4444	2.275	14.08
			44.03	0.7542			43.08	1.584	2.275	14.18
			47.97	1.055			14.44	5.43		
			21.6	3.961			7.638	7.761		
			10.98	6.379			5.252	10.49		
			7.041	8.947			1.672	13.27		
			5.132	10.9						

Panel Type = A2
Bracket No = 12
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Shear x
x edge proximity	=	-200mm
y edge proximity	=	N/A



Peak Loads

Designation	A1-12 (T,5)		A2-12 (T,5)		A3-12 (T,5)		A4-12 (T,5)		A5-12 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0	0	122.6	34.08	135.2	23.27	172.2	35.51	141.1	27.9

Test Data

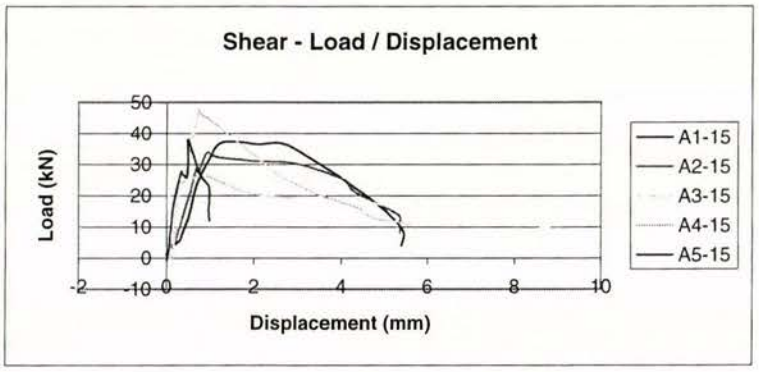
Designation	A1-12 (T,5)		A2-12 (T,5)		A3-12 (T,5)		A4-12 (T,5)		A5-12 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
			0.487	-0.0007	-0.2438	-0.0254	0.3659	-0.0634	0.2433	-0.0002
			6.706	0.0373	0.8537	0.0127	12.32	0.0887	4.268	0.0252
			9.145	0.0627	4.268	0.0253	13.54	0.1013	26.83	0.1646
			21.58	0.1514	9.512	0.076	23.54	0.114	28.05	0.2153
			20.97	0.1514	15	0.114	31.59	0.1647	53.41	0.4434
			33.41	0.2528	20.49	0.1394	52.93	0.2661	52.56	0.4561
			34.76	0.2655	27.07	0.1521	52.32	0.2661	55.24	0.4688
			38.54	0.2908	32.44	0.2028	61.59	0.3041	59.02	0.5195
			44.39	0.3669	36.71	0.2154	63.41	0.3295	66.46	0.5828
			51.22	0.4302	37.44	0.2408	72.19	0.3802	74.27	0.5955
			58.66	0.519	42.93	0.2788	81.59	0.4182	75.24	0.5955
			65.73	0.6203	40.02	0.2788	80.98	0.4309	79.27	0.5955
			73.29	0.7344	48.05	0.3168	89.76	0.4942	85.85	0.5955
			80.12	0.7851	53.9	0.3675	91.1	0.5576	92.68	0.5955
			81.46	0.7851	60.61	0.3929	101.3	0.6337	97.19	0.5955
			86.71	0.7978	59.76	0.3929	100.6	0.6337	102.4	0.5955
			94.27	0.7851	67.07	0.4309	110	0.7097	104	0.5955
			102	0.7851	67.68	0.4563	108.5	0.7097	106	0.5955
			100.7	0.7851	72.07	0.4816	109.4	0.7097	111.8	0.5955
			107.4	0.7851	78.54	0.4943	116.7	0.7224	114.3	0.5828
			113.2	0.8231	84.76	0.507	115.9	0.7224	118.3	0.5828
			111	0.8738	91.34	0.545	122.4	0.7224	116.5	0.5828
			114.8	0.9119	97.8	0.4943	124.6	0.7224	55.24	5.386
			119.8	0.9119	96.71	0.4943	123.5	0.7351	54.63	5.386
			116.5	0.8992	101.8	0.5323	130.1	0.7224	62.68	5.386
			118.8	0.9119	105.9	0.545	128.9	0.7351	63.9	5.386
			122.6	0.9119	106.5	0.5703	133.9	0.7351	68.29	5.386
			117.8	0.9879	105.7	0.583	133	0.7224	75.49	5.386
			43.41	33.18	111.1	0.5957	140.1	0.7097	80.12	5.386
			42.8	33.45	115.4	0.6337	138.7	0.7224	82.19	5.399
			42.32	33.56	114.1	0.6464	146.2	0.7224	88.41	5.399
			42.19	34.08	117.1	0.6844	144.3	0.7351	87.19	5.399
					121.2	0.7224	152.3	0.7224	92.68	5.399
					118.5	0.7604	126.8	0.7351	97.44	5.386
					122.4	0.7478	137.1	0.7351	96.71	5.386
					123.2	0.7478	141.2	0.7351	100	5.386
					125.6	0.7351	143.3	0.7351	102.9	5.386
					130.7	0.7478	147.7	0.7351	103.7	5.386
					128.8	0.7478	146.2	0.7477	108.8	5.386
					132.1	0.7351	154.1	0.7477	107.2	5.399
					135.2	0.7478	152.3	0.7477	111.7	5.386
					133.3	0.7351	151.5	0.7224	116.1	5.386
					76.83	11.47	156.7	0.7351	120.7	5.386
					46.1	20.48	154.8	0.7224	119.4	5.386
					43.54	22.93	161.8	0.7351	123.7	5.399
					42.93	23.16	157.4	0.7224	126.7	5.386
					42.68	23.27	161.5	0.7351	132.4	5.386
							162.9	0.7351	130.2	5.386
							161.6	0.7224	133.8	5.386
							168.4	0.7224	135.1	5.386
							165.5	0.7097	136.1	5.386
							171.6	0.7097	141.1	5.386
							167.1	0.7224	137	5.386
							164.5	0.7351	137.4	5.513
							168.9	0.7477	119.1	7.554
							167.7	0.7351	64.63	23.51
							165.7	0.7351	62.19	24.18
							172.2	0.7477	58.54	27.49
							165.5	1.217	57.32	27.79
							52.8	35.51	56.83	27.9
							50.98	35.51		
							49.88	35.51		
							49.15	35.51		

Panel Type = A2
Bracket No = 15
Test Type = T,4

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Oblique x
x edge proximity	=	276mm
y edge proximity	=	262mm



Peak Loads Shear										
Designation		A1-15 (T,4)		A2-15 (T,4)		A3-15 (T,4)		B415 (T,4)		A5-15(T,4)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		37.31	5.413	33.78	5.361	26.83	9.088	47.32	5.628	37.8	0.9759

Test Data

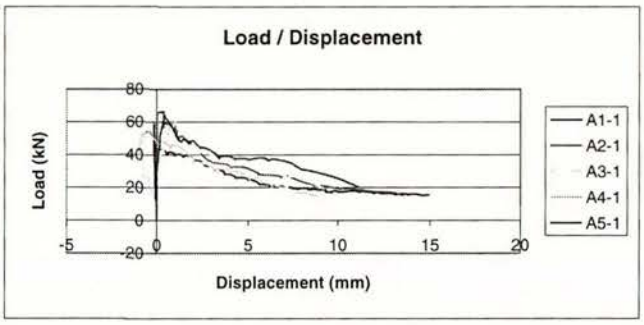
Designation	A1-15 (T,4)		A2-15 (T,4)		A3-15 (T,4)		B415 (T,4)		A5-15(T,4)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.7219	0.0133	-0.0009	0.0002	0.0001	0.0634	0.122	-0.0119	-0.7317	0
	1.332	0.0006	4.755	0.1523	1.707	0.0761	0.122	0.0895	2.805	0.0507
	3.283	0.0767	4.389	0.1523	15.49	0.1268	1.341	0.1402	16.71	0.1521
	4.258	0.1781	3.78	0.1523	14.88	0.0634	2.317	0.1528	27.68	0.3295
	4.868	0.2415	3.902	0.1649	14.76	0.0507	3.049	0.1655	27.07	0.3549
	5.844	0.3048	9.145	0.279	14.51	0.0634	3.293	0.1655	26.59	0.3802
	8.649	0.3809	14.51	0.3931	19.39	0.0634	3.171	0.1528	26.22	0.4182
	13.28	0.5076	20.97	0.5325	22.32	0.0634	3.415	0.1528	25.85	0.4689
	18.53	0.5963	28.66	0.6846	21.83	0.0507	3.659	0.1655	31.59	0.4943
	24.99	0.7357	27.68	0.7353	21.34	0.1014	4.024	0.1655	37.8	0.4943
	30.72	0.9385	33.78	0.9254	20.61	0.0634	4.268	0.1655	27.32	0.7478
	36.58	1.192	32.44	1.141	26.83	0.1014	6.829	0.1908	23.05	0.9632
	37.31	1.623	31.1	2.053	24.88	0.0634	10.24	0.2415	18.66	0.9759
	36.45	2.105	30.24	2.979	23.29	0.1014	9.634	0.2542	15.37	0.9632
	35.84	2.827	25.24	4.043	25.12	0.4943	9.268	0.2289	11.95	0.9759
	19.26	4.652	21.34	4.309	26.34	0.8999	9.024	0.2289		
	9.38	5.413	13.9	5.336	20.49	2.003	8.293	0.2162		
	4.015	5.4	11.1	5.361	18.29	4.068	7.561	0.1782		
			9.024	5.361	15.24	6.515	11.59	0.1782		
			8.048	5.361	11.83	8.048	17.93	0.2415		
					8.781	9.088	25.37	0.2796		
							24.76	0.2922		
							24.15	0.3303		
							24.27	0.381		
							24.15	0.4063		
							31.46	0.5077		
							39.51	0.5711		
							38.66	0.6091		
							40	0.6091		
							47.32	0.7358		
							46.1	0.7739		
							44.02	1.015		
							27.56	2.485		
							26.1	2.612		
							24.76	2.789		
							19.88	3.575		
							15.61	4.462		
							14.88	4.449		
							12.44	4.842		
							11.71	5.286		
							10.49	5.628		

Panel Type = A#2
Bracket No = 1
Test Type = T,7

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= 75mm(y)
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation	A1-1 (T,7)		A2-1 (T,7)		A3-1 (T,7)		A4-1 (T,7)		A5-1 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	58.65	14.941	66.52	13.563	59.68	9.2162	54.17	8.83	64.09	11.131

Test Data

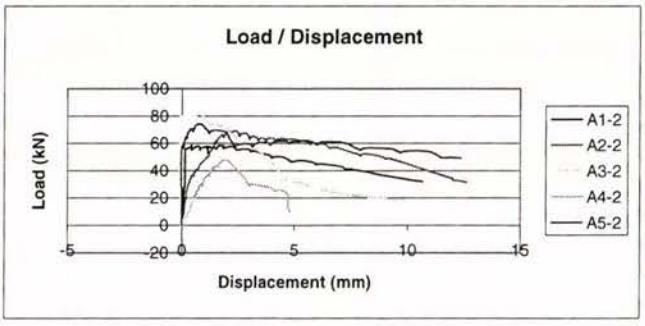
Designation	A1-1 (T,7)		A2-1 (T,7)		A3-1 (T,7)		A4-1 (T,7)		A5-1(T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.2419	0	-0.1901	0	0.1901	0	0.7603	0	0.2419	0
	1.209	0	0.5702	0	3.611	0	2.281	-0.012	1.572	0.012
	2.298	-0.01	1.33	0.013	4.372	0	4.372	-0.037	3.023	0.012
	3.628	0	1.901	0.013	5.512	0	5.702	-0.05	4.475	0
	5.2	-0.03	2.661	0.013	8.363	0	6.462	-0.05	6.772	0.012
	7.498	-0.03	3.231	0	9.313	0	7.032	-0.062	7.74	0.012
	9.191	-0.06	3.991	0	11.02	0	7.983	-0.062	11.37	0
	11.37	-0.04	6.082	0	13.87	-0.0124	8.933	-0.074	13.42	0.012
	13.18	-0.05	8.933	0	16.35	0.0124	9.883	-0.062	15.24	0.012
	14.75	-0.06	11.02	0	17.3	0	10.45	-0.074	16.81	0.012
	15.48	-0.06	13.87	0	17.87	0	11.02	-0.087	18.26	0.012
	19.11	-0.06	17.68	0	18.82	0	12.16	-0.124	19.23	0.012
	21.53	-0.08	21.67	0.013	19.39	0	13.3	-0.149	20.68	0.012
	23.46	-0.09	27.56	0	19.96	0	15.02	-0.199	22.25	0.012
	25.76	-0.08	28.51	0	20.53	-0.0124	15.78	-0.223	25.52	0
	27.94	-0.1	27.94	0.013	21.1	0	16.73	-0.248	28.3	0
	29.39	-0.1	29.27	0	22.24	0	17.3	-0.273	30.35	0.025
	30.72	-0.1	32.12	0	22.81	0	18.44	-0.298	32.17	0.025
	32.05	-0.1	34.4	-0.012	24.14	0	19.2	-0.335	33.74	0.05
	33.26	-0.11	37.44	0	28.13	0.1615	20.15	-0.36	35.19	0.062
	34.34	-0.11	39.53	0	30.98	0.1366	20.72	-0.385	36.76	0.074
	35.31	-0.11	41.43	0	32.69	0.1615	21.86	-0.41	38.21	0.087
	36.76	-0.13	43.14	0.013	34.02	0.1615	22.43	-0.435	39.55	0.099
	38.34	-0.13	44.86	0	36.49	0.1615	23.38	-0.435	40.51	0.112
	40.39	-0.13	46.95	0	38.01	0.1615	24.52	-0.447	41.72	0.124
	42.57	-0.14	46.38	0.013	39.91	0.2236	25.66	-0.472	43.17	0.137
	44.26	-0.15	46.95	0.013	41.81	0.236	26.8	-0.509	44.87	0.149
	43.66	-0.14	50.18	0.013	42.38	0.236	26.61	-0.584	46.08	0.161
	47.65	-0.15	51.7	0.013	42.76	0.3602	27.37	-0.608	45.47	0.161
	49.95	-0.15	52.46	0.013	43.72	0.3602	26.8	-0.695	48.74	0.174
	51.88	-0.15	51.89	0.013	43.14	0.3726	26.23	-0.708	50.79	0.174
	54.42	-0.15	53.6	0.013	42.38	0.385	27.56	-0.733	52.73	0.199
	57.08	-0.15	55.31	0.013	43.14	0.3726	28.13	-0.745	53.09	0.223
	58.65	-0.15	56.07	0.013	47.14	0.4347	30.03	-0.733	54.66	0.261
	57.56	-0.16	57.02	0	46.38	0.4472	32.5	-0.745	56.6	0.298
	45.71	-0.09	57.78	0.013	48.47	0.4472	33.64	-0.758	58.05	0.323
	44.99	-0.1	58.35	0.013	50.18	0.472	34.78	-0.782	59.26	0.323
	47.65	-0.09	59.11	0.025	51.13	0.4968	36.11	-0.807	58.77	0.348
	43.41	-0.08	58.54	0.013	50.56	0.5217	36.87	-0.844	58.53	0.348
	42.21	-0.08	57.97	0.025	52.08	0.5217	36.3	-0.869	59.14	0.36
	41.48	-0.08	58.92	0.013	53.03	0.6459	36.87	-0.894	61.43	0.373
	43.29	0.28	60.06	0.025	53.79	0.6459	39.34	-0.894	62.64	0.397
	42.57	0.43	60.63	0.013	54.55	0.6459	41.05	-0.894	64.09	0.41
	41.24	0.52	61.77	0.025	55.12	0.6707	42.38	-0.907	63.49	0.447
	40.51	0.56	61.2	0.013	55.69	0.6831	42.19	-0.919	62.89	0.459
	39.91	0.59	62.72	0.013	57.02	0.7082	41.81	-0.969	56.96	0.832
	41.24	0.64	64.24	0.013	57.4	0.7572	41.24	-0.969	49.7	1.155
	41.6	0.76	65.38	0.025	57.59	0.8572	43.53	-0.969	48.49	1.242
	41.36	0.89	66.52	0.385	57.02	0.8942	45.05	-0.981	48.01	1.341
	40.39	0.98	65.95	0.385	56.45	0.8822	45.62	-0.969	47.77	1.366
	39.55	1	65.38	0.385	55.88	0.8822	45.05	-0.956	48.86	1.416
	40.39	1.13	64.81	0.385	56.45	0.8822	44.29	-0.956	49.7	1.515
	40.03	1.33	64.24	0.398	58.16	0.9812	43.72	-0.969	48.49	1.627
	39.18	1.43	63.67	0.398	58.92	0.9932	43.14	-0.969	47.77	1.714
	38.7	1.46	62.91	0.385	59.68	0.9932	42.57	-0.969	47.04	1.726
	38.58	1.46	63.86	0.385	59.49	1.0182	45.43	-0.969	46.8	1.801
	39.67	1.63	64.81	0.398	58.54	1.0432	47.71	-0.969	47.89	1.813
	38.46	1.85	64.24	0.398	57.21	1.2172	48.47	-0.969	48.49	1.962
	36.64	1.99	62.91	0.385	56.07	1.2292	47.9	-0.944	47.89	2.074
	36.04	2.02	61.96	0.385	55.12	1.2172	47.33	-0.931	46.08	2.186
	36.76	2.04	61.39	0.385	54.55	1.2292	46.76	-0.931	45.11	2.31

Panel Type = A#2
Bracket No = 2
Test Type = T,7

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	150mm(y)
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	A1-2 (T,7)		A2-2 (T,7)		A3-2 (T,7)		A4-2 (T,7)		A5-2 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	58.41	10.682	68.99	12.62	81.35	9.7957	47.71	4.794	74.25	12.3653

Test Data

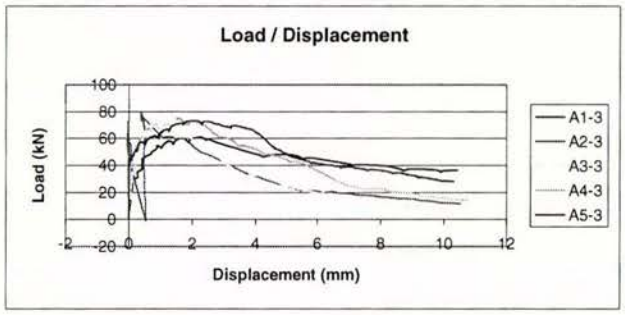
Designation	A1-2 (T,7)		A2-2 (T,7)		A3-2 (T,7)		A4-2 (T,7)		A5-2 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0	-0.1901	0	0	0	1.711	0	0.7256	0
	2.781	0.025	0.3801	0	2.851	0	4.752	0.099	1.33	0
	5.2	0.05	3.991	0.038	4.562	0	6.652	0.211	2.298	-0.0126
	6.047	0.05	4.942	0.05	7.603	0	7.413	0.236	3.87	-0.0126
	7.498	0.05	5.892	0.062	10.83	0	6.842	0.261	6.409	0
	10.88	0.062	8.743	0.087	13.3	-0.0125	7.603	0.248	8.586	0
	13.18	0.074	9.503	0.1	15.78	-0.0125	9.313	0.298	10.64	-0.0126
	15.96	0.074	12.73	0.125	19.01	-0.0373	9.313	0.323	11.97	0
	19.11	0.087	14.25	0.125	20.91	-0.0373	9.883	0.323	14.87	0
	21.28	0.087	15.78	0.149	23.38	-0.0497	10.64	0.348	17.78	0
	23.34	0.112	16.73	0.162	25.28	-0.0249	11.97	0.373	21.16	0
	25.03	0.112	20.15	0.199	24.52	-0.0373	12.92	0.373	24.55	0
	26.85	0.112	20.72	0.199	25.66	-0.0497	13.87	0.397	27.45	-0.0126
	28.06	0.137	24.52	0.224	27.18	-0.0373	14.64	0.385	29.02	-0.0251
	29.14	0.137	28.51	0.274	28.32	-0.0373	16.35	0.435	32.53	-0.0251
	30.48	0.137	30.22	0.298	29.65	-0.0373	17.11	0.459	34.34	-0.0126
	31.68	0.149	31.74	0.348	30.98	-0.0373	18.06	0.484	33.62	-0.0251
	34.59	0.137	33.26	0.361	32.5	-0.0373	19.01	0.509	33.01	-0.0376
	33.98	0.137	34.97	0.41	33.45	-0.0249	20.15	0.546	34.95	-0.0251
	35.43	0.149	36.11	0.435	34.4	-0.0373	20.91	0.559	38.09	-0.0251
	38.34	0.149	36.68	0.485	35.35	-0.0497	21.86	0.571	40.75	-0.0251
	41.36	0.137	36.11	0.522	36.49	-0.0373	22.62	0.609	42.69	-0.0251
	43.66	0.149	37.25	0.534	37.63	-0.0497	23.57	0.633	44.38	-0.0251
	45.23	0.149	41.05	0.634	38.58	-0.0497	24.52	0.658	45.71	-0.0376
	46.44	0.149	40.48	0.683	39.34	-0.0497	25.85	0.695	45.11	-0.0251
	47.04	0.137	41.05	0.708	40.29	-0.0497	26.61	0.733	44.5	-0.0376
	47.89	0.149	45.24	0.82	41.05	-0.0373	27.94	0.758	45.83	-0.0251
	48.74	0.137	47.9	1.006	41.62	-0.0621	29.46	0.807	48.74	-0.0251
	50.07	0.149	50.18	1.093	42.38	-0.0621	30.03	0.832	49.34	-0.0251
	49.46	0.149	49.61	1.131	42.95	-0.0497	29.46	0.857	48.74	-0.0251
	48.74	0.149	50.75	1.155	43.91	-0.0621	28.89	0.857	52	-0.0251
	50.43	0.149	53.41	1.218	45.05	-0.0497	30.79	0.919	53.57	-0.0251
	53.21	0.149	54.93	1.267	46.57	-0.0497	32.31	0.931	52.97	-0.0126
	54.78	0.149	56.45	1.317	46	-0.0373	33.64	0.981	52.24	-0.0126
	54.18	0.149	55.88	1.329	45.43	-0.0373	34.59	1.031	51.64	-0.0126
	55.39	0.161	56.45	1.379	46.38	-0.0373	35.73	1.08	53.94	-0.0251
	57.08	0.4098	59.11	1.416	50.18	-0.0373	36.3	1.13	55.99	0.0125
	57.81	0.4098	60.44	1.466	52.65	-0.0373	37.06	1.143	57.56	0.025
	58.41	0.4098	61.96	1.503	53.98	-0.0373	36.49	1.192	58.53	0.0501
	57.69	0.4346	61.39	1.528	55.69	-0.0373	38.96	1.242	57.69	0.0751
	56.72	0.4098	64.05	1.615	55.12	-0.0373	39.91	1.267	57.08	0.0751
	55.87	0.4222	65.38	1.702	56.64	-0.0373	40.86	1.316	56.48	0.0877
	55.02	0.4222	66.14	1.764	59.87	-0.0373	41.62	1.354	58.05	0.1002
	57.32	0.6085	65	1.814	62.15	-0.0249	42	1.379	60.35	0.1253
	57.69	0.7451	64.43	1.826	63.1	-0.0249	42.57	1.403	62.28	0.1378
	56.48	0.7824	67.09	1.913	64.05	-0.0249	43.14	1.466	63.85	0.1754
	55.63	0.7824	68.23	2	65	-0.0249	43.53	1.49	64.82	0.2004
	54.78	0.7824	68.99	2.087	64.43	-0.0249	43.91	1.528	64.09	0.2129
	56.11	0.7824	68.23	2.137	63.86	-0.0249	43.34	1.552	63.37	0.2129
	57.08	0.9935	67.66	2.161	64.43	-0.0249	42.76	1.577	64.7	0.2505
	57.69	1.1177	67.09	2.174	66.52	-0.0249	43.34	1.59	67.12	0.2631
	56.72	1.1177	66.52	2.186	68.04	-0.0125	44.1	1.602	68.57	0.3132
	56.11	1.1053	68.61	2.248	68.99	-0.0125	45.43	1.627	69.9	0.3633
	55.51	1.1177	68.8	2.36	69.75	-0.0249	46.19	1.677	70.87	0.4134
	54.9	1.1177	67.85	2.472	71.08	-0.0125	46.38	1.726	70.14	0.4384
	54.3	1.1177	66.14	2.509	72.04	-0.0249	46.76	1.764	69.17	0.476
	53.69	1.1177	65.57	2.534	72.61	-0.0249	47.33	1.801	68.45	0.4886
	53.09	1.1177	65	2.534	72.04	-0.0125	47.71	1.863	69.66	0.5136
	52.48	1.1177	66.9	2.633	71.46	-0.0249	47.33	1.987	71.23	0.5387

Panel Type = A#2
Bracket No = 3
Test Type = T,7

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= 25mm(y)
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads

Designation	A1-3 (T,7)		A2-3 (T,7)		A3-3 (T,7)		A4-3 (T,7)		A5-3 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	61.07	10.429	78.88	10.521	73.18	10.016	74.98	10.7784	73.29	10.31

Test Data

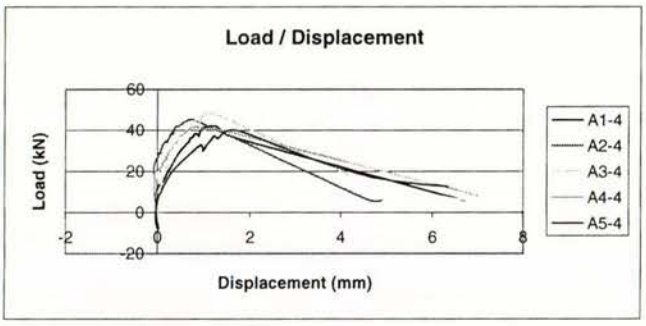
Designation	A1-3 (T,7)		A2-3 (T,7)		A3-3 (T,7)		A4-3 (T,7)		A5-3 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.2419	0	0	0	0	0	0.7256	0	0.3628	0
	1.451	0	2.851	0	1.14	0.013	1.814	-0.0125	0.9675	0
	3.023	0	4.562	0	1.711	0	2.661	0	1.572	0
	4.837	0	5.512	0	2.661	0	3.628	0	2.298	0
	6.289	0.012	8.363	0	3.991	-0.012	5.079	0	3.023	0
	8.707	0.025	9.313	0.012	5.702	0	6.893	-0.0125	4.233	0
	11	0.025	10.64	0	6.842	0	7.982	0	5.684	0
	11.61	0.037	11.78	0	9.503	0	8.586	0	6.772	0
	13.67	0.05	12.73	0	11.21	0	10.52	0	7.74	0
	15.96	0.037	13.3	0	12.54	0.013	12.94	0	9.433	0
	18.38	0.062	13.87	0	14.06	0	15.48	0	11.49	0
	20.2	0.062	15.02	0	15.21	0.013	17.41	0	13.54	0
	22.49	0.112	15.78	0.012	16.54	0.05	19.11	0	15.48	0
	24.07	0.112	16.54	0	18.25	0.062	20.92	0.0125	16.57	0
	25.76	0.112	17.49	0	20.53	0.05	22.01	0.0125	18.38	-0.012
	27.57	0.112	18.25	0	22.81	0.062	22.86	0.0125	20.2	-0.012
	29.27	0.112	19.2	0	25.09	0.075	24.43	0.0125	21.77	0
	31.08	0.273	20.15	0	28.7	0.087	26.12	0.0125	22.61	-0.012
	33.5	0.273	21.48	0	28.13	0.112	26.73	0.0251	25.27	-0.012
	35.07	0.273	22.43	0	29.84	0.1	27.57	0.0251	26.85	-0.012
	36.64	0.397	23.57	0	35.35	0.149	28.18	0.0251	28.54	-0.012
	37.97	0.41	24.33	0	34.78	0.174	29.27	0.0251	30.23	-0.012
	39.55	0.422	24.9	0	34.21	0.174	30.11	0.0376	31.56	-0.012
	40.39	0.41	25.66	-0.012	34.78	0.174	31.08	0.0251	32.77	-0.012
	41.96	0.422	26.23	0	34.21	0.174	32.17	0.0251	34.1	-0.012
	43.05	0.422	26.99	0	37.25	0.186	33.38	0.0251	34.83	-0.012
	44.02	0.422	27.56	-0.012	40.48	0.199	34.83	0.0251	36.76	-0.012
	43.29	0.422	26.99	0	43.53	0.211	35.8	0.0376	38.09	-0.012
	42.69	0.422	28.13	-0.012	45.24	0.211	37.13	0.0251	37.49	-0.025
	44.75	0.422	29.08	0	44.67	0.249	38.21	0.0877	36.88	-0.012
	48.49	0.695	30.03	-0.012	44.1	0.261	39.18	0.0877	39.06	-0.012
	49.7	0.708	30.6	-0.012	45.62	0.261	40.27	0.0877	40.63	-0.012
	49.1	0.708	31.17	-0.025	48.85	0.298	41.36	0.0877	41.72	-0.012
	48.49	0.708	30.6	-0.012	51.13	0.311	41.72	0.1002	42.57	-0.012
	49.82	0.72	31.17	-0.012	52.84	0.323	41.96	0.0877	44.14	-0.012
	52.48	0.882	32.12	0	52.27	0.336	41.36	0.1002	43.54	-0.012
	54.54	0.882	33.26	-0.012	54.55	0.398	44.99	0.0877	44.38	0
	53.69	0.994	34.4	-0.012	57.21	0.398	47.53	0.1378	45.11	0.025
	52.97	1.018	33.83	-0.012	58.54	0.422	48.86	0.1378	44.5	0.025
	55.02	1.08	34.78	-0.012	59.87	0.435	48.25	0.1629	43.9	0.05
	56.72	1.167	35.54	-0.012	61.2	0.46	47.65	0.1754	44.87	0.05
	58.05	1.267	36.68	0	60.63	0.46	49.58	0.1754	44.26	0.075
	57.2	1.341	37.63	0	60.06	0.447	51.4	0.213	44.02	0.1
	56.35	1.391	36.87	-0.012	62.34	0.497	52.97	0.213	44.99	0.075
	55.63	1.391	38.2	0	64.62	0.522	54.3	0.2631	45.83	0.1
	57.08	1.428	39.15	0	65.76	0.559	53.69	0.2881	46.44	0.113
	59.02	1.503	39.72	-0.012	67.47	0.596	53.09	0.2881	47.04	0.113
	60.1	1.652	40.48	0.012	68.42	0.621	54.78	0.3007	47.65	0.138
	59.38	1.764	39.91	0.012	67.85	0.646	56.84	0.3132	48.25	0.138
	58.41	1.801	40.67	0	67.28	0.671	59.26	0.3633	48.86	0.151
	57.69	1.863	42.38	0.012	69.37	0.683	60.95	0.4009	49.46	0.163
	57.44	1.875	43.53	0.037	71.27	0.708	61.43	0.4134	50.07	0.188
	57.08	1.888	44.48	0.025	72.04	0.745	60.35	0.4385	50.79	0.201
	58.17	1.9	45.05	0.037	73.18	0.77	61.19	0.451	51.4	0.213
	59.38	1.975	44.48	0.05	73.18	0.919	63.37	0.451	52	0.226
	60.1	2.037	45.05	0.05	70.13	1.019	65.79	0.5011	51.4	0.226
	60.59	2.149	46.76	0.05	68.23	1.093	67.24	0.6013	50.79	0.238
	61.07	2.273	48.66	0.062	66.52	1.18	66.39	0.6514	50.19	0.251
	59.98	2.36	49.8	0.062	65.19	1.255	65.67	0.664	51.03	0.263
	59.38	2.409	50.94	0.062	64.24	1.292	65.06	0.6765	51.64	0.276
	58.65	2.434	51.7	0.062	63.67	1.317	65.55	0.7015	52.48	0.263
	59.26	2.521	51.13	0.062	64.24	1.453	67.84	0.7266	53.33	0.276

Panel Type = A#2
Bracket No = 4
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	276mm
y edge proximity	=	-237.5mm



Peak Loads										
Designation		A1-4 (T,3)		A2-4 (T,3)		A3-4 (T,3)		A4-4 (T,3)		A5-4 (T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		42.08	6.719	45.24	4.894	48.47	6.759	41.72	7.012	40.15	6.341

Test Data

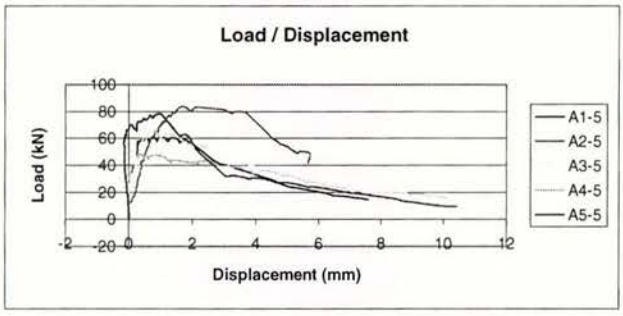
Designation	A1-4 (T,3)		A2-4 (T,3)		A3-4 (T,3)		A4-4 (T,3)		A5-4 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0	-0.1901	0	0.3801	0.1015	0	0	0	-0.0356
	0.9675	0	0.3801	0	0.9503	0.089	0.6047	0	-1.209	-0.0356
	3.265	-0.025	1.14	-0.012	2.661	0.1015	1.33	0.01	-5.805	-0.0231
	4.354	-0.025	1.711	0	3.991	0.1015	2.056	0.01	-7.982	0.027
	5.926	-0.038	2.281	0	4.942	0.1015	2.781	0	0	-0.0231
	6.772	-0.025	2.851	0	6.272	0.1015	3.628	0	0.9675	-0.0231
	7.377	-0.038	3.801	0	7.983	0.1015	4.354	0.01	2.419	-0.0231
	7.982	-0.038	5.702	-0.037	9.503	0.1015	4.958	0	8.707	0.052
	9.191	-0.025	7.603	-0.049	10.07	0.1015	5.563	0.01	9.433	0.0771
	10.04	-0.025	8.933	-0.062	12.35	0.1015	6.772	0	11.61	0.1147
	11	0	12.16	-0.062	14.25	0.089	7.498	-0.02	19.59	0.3151
	11.85	0.012	14.83	-0.062	15.97	0.1139	8.223	-0.02	24.19	0.503
	12.82	0.037	16.54	-0.062	16.73	0.1139	8.828	-0.02	29.02	0.7411
	13.79	0.087	18.44	-0.062	17.87	0.1263	9.675	-0.03	32.89	0.9415
	14.75	0.111	20.15	-0.074	19.77	0.1387	10.76	-0.03	32.17	0.9666
	15.6	0.136	21.86	-0.074	22.05	0.2008	11.37	-0.03	31.56	0.9791
	16.33	0.149	22.62	-0.062	23.57	0.2629	12.46	-0.04	30.96	0.9791
	17.41	0.186	23.38	-0.062	24.52	0.3002	13.67	-0.03	30.35	0.9916
	18.5	0.198	24.71	-0.037	25.47	0.3126	14.39	-0.04	29.75	0.9791
	19.47	0.223	25.28	-0.024	26.23	0.3375	15.6	-0.03	37.13	1.217
	20.8	0.26	26.04	0	27.37	0.3623	16.93	-0.04	36.52	1.267
	21.65	0.285	27.56	0.025	27.56	0.3871	17.9	-0.03	35.92	1.292
	23.22	0.323	29.27	0.05	29.08	0.3871	18.5	-0.02	40.15	1.656
	25.88	0.385	28.7	0.075	32.31	0.4492	17.9	0	31.93	2.67
	28.9	0.472	29.27	0.063	34.02	0.4865	16.45	0	26.36	3.322
	30.72	0.534	31.55	0.1	37.06	0.5238	17.78	0.01	22.01	3.911
	32.17	0.596	33.83	0.149	38.39	0.5486	19.11	0.01	19.59	4.261
	33.38	0.633	34.78	0.187	40.1	0.6852	19.95	0.02	18.62	4.412
	34.34	0.683	34.21	0.212	39.53	0.6852	20.68	0.06	18.14	4.512
	35.8	0.708	36.11	0.249	40.29	0.6852	21.77	0.07	17.66	4.575
	36.76	0.77	37.06	0.274	43.34	0.7349	22.61	0.1	17.29	4.625
	38.34	0.819	38.77	0.311	44.48	0.797	23.34	0.11	15.24	5.176
	37.73	0.881	38.01	0.336	45.24	0.8343	24.07	0.12	14.27	5.539
	37.13	0.894	40.48	0.361	44.67	0.884	24.67	0.13	13.54	5.84
	40.63	0.956	42	0.41	44.29	0.9088	25.88	0.18	12.94	6.153
	42.08	1.1175	42.76	0.51	44.1	0.9212	26.24	0.2	12.46	6.341
	42.08	1.2541	44.29	0.597	45.05	0.9212	26.85	0.18		
	41	1.3162	45.24	0.783	47.52	0.9957	27.69	0.22		
	39.67	1.3907	40.86	1.218	48.47	1.108	28.54	0.23		
	38.46	1.4528	5.892	4.621	47.14	1.331	29.27	0.27		
	37.61	1.5025	5.702	4.894	43.72	1.679	30.11	0.28		
	34.83	1.9			17.87	4.188	30.6	0.3		
	5.563	6.719			16.73	4.275	30.96	0.31		
					16.16	4.349	31.93	0.33		
					15.4	4.374	32.53	0.33		
					14.83	4.374	33.26	0.37		
					13.49	4.387	33.74	0.4		
					12.73	4.387	33.98	0.4		
					12.73	5.032	33.38	0.42		
					11.21	5.529	34.34	0.42		
					10.26	5.529	35.07	0.43		
					9.693	5.753	35.92	0.46		
					7.032	6.374	36.64	0.47		
					5.892	6.759	37.25	0.5		
							37.85	0.535		
							38.09	0.598		
							38.7	0.598		
							39.3	0.623		
							40.15	0.648		

Panel Type = A#2
Bracket No = 5
Test Type = T,7

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= 150mm(x)
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads

Designation	A1-5 (T,7)		A2-5 (T,7)		A3-5 (T,7)		A4-5 (T,7)		A5-5 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	60.35	7.578	83.82	5.714	65.95	8.718	48.09	10.12	78.24	10.433

Test Data

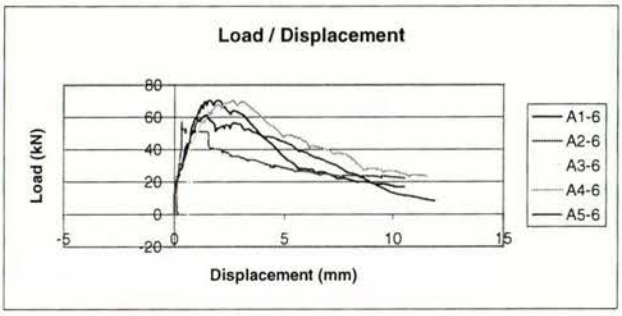
Designation	A1-5 (T,7)		A2-5 (T,7)		A3-5 (T,7)		A4-5 (T,7)		A5-5 (T,7)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0	-0.1901	0	0.1901	0	5.132	0.0142	0.2419	0
	1.088	0	0.3801	-0.012	2.281	0	6.272	0.0142	2.54	0.012
	2.298	0	2.091	-0.012	4.752	0	7.032	0.0142	5.079	0
	3.507	-0.013	2.661	-0.012	8.363	0	7.983	0.0018	6.047	0
	4.595	0	3.611	-0.012	12.54	-0.012	8.743	0.0142	9.796	-0.012
	5.321	0	4.181	0	16.35	0	9.693	0.0018	12.09	-0.025
	4.595	0	4.752	-0.012	21.1	0.013	11.97	0.0142	13.54	-0.025
	5.2	0.012	5.702	-0.012	23.57	0.025	12.73	0.0018	15.96	-0.025
	6.047	0	6.842	-0.012	26.8	0.063	14.45	0.0142	17.54	-0.037
	6.893	0	8.173	0	28.89	0.075	15.02	0.0142	18.74	-0.037
	7.982	0	9.123	0	32.12	0.087	16.16	0.0142	19.47	-0.05
	8.707	0.012	11.21	0.025	33.20	0.137	17.40	0.0142	20.32	-0.062
	9.312	0	12.73	0.062	32.69	0.137	18.44	0.0142	21.53	-0.05
	10.28	0	13.49	0.099	33.45	0.137	19.58	0.0142	22.86	-0.074
	11.73	-0.013	14.64	0.112	36.68	0.174	20.72	0.0142	23.7	-0.062
	12.7	0.012	15.78	0.137	38.01	0.199	21.48	0.0142	24.31	-0.074
	13.91	0	17.11	0.137	37.44	0.212	22.62	0.0267	25.15	-0.074
	15.48	0.012	17.87	0.186	38.77	0.199	23.57	0.0267	26.12	-0.074
	18.87	0.025	21.29	0.236	42.57	0.249	24.33	0.0142	27.57	-0.087
	22.25	0.025	22.62	0.236	43.34	0.274	23.76	0.0267	29.14	-0.099
	25.15	0.037	23.95	0.248	47.14	0.299	24.71	0.0142	30.35	-0.099
	27.45	0.049	25.47	0.286	50.75	0.336	27.75	0.0391	30.48	-0.112
	29.75	0.074	27.18	0.273	53.03	0.373	29.27	0.0391	31.81	-0.099
	31.44	0.087	27.94	0.286	52.27	0.385	30.03	0.0267	32.77	-0.112
	33.01	0.111	29.08	0.298	54.36	0.398	31.36	0.0391	33.62	-0.112
	34.71	0.111	29.84	0.31	57.21	0.423	32.12	0.0267	34.22	-0.112
	36.52	0.136	30.6	0.298	59.3	0.46	32.88	0.0391	35.8	-0.124
	38.46	0.161	31.74	0.323	61.39	0.497	33.64	0.0391	36.88	-0.112
	39.67	0.174	32.69	0.348	60.82	0.535	33.07	0.0515	36.28	-0.124
	41.6	0.186	33.45	0.348	60.25	0.559	34.02	0.0639	36.88	-0.124
	42.57	0.223	34.02	0.348	59.68	0.559	36.11	0.0639	36.28	-0.137
	41.96	0.223	34.78	0.36	62.91	0.572	37.63	0.0888	39.06	-0.137
	41.36	0.223	35.54	0.373	64.62	0.646	38.77	0.0888	39.67	-0.124
	42.33	0.236	36.87	0.373	65.38	0.696	39.91	0.1136	41.96	-0.137
	45.47	0.248	37.63	0.397	65.95	0.783	40.86	0.126	42.81	-0.137
	46.8	0.273	38.39	0.41	63.29	0.895	41.62	0.1509	42.21	-0.149
	46.08	0.261	37.82	0.41	61.77	0.957	41.05	0.1881	44.99	-0.137
	48.49	0.261	39.53	0.41	61.2	0.994	43.91	0.2005	46.92	-0.137
	50.55	0.273	42	0.385	60.63	1.007	45.05	0.2378	48.49	-0.137
	52.12	0.273	43.72	0.472	62.91	1.106	46.19	0.2502	47.89	-0.149
	52.73	0.273	45.43	0.472	62.72	1.243	46.95	0.2875	49.82	-0.137
	52	0.273	46.57	0.497	62.15	1.441	46.19	0.2999	52.12	-0.137
	51.4	0.273	47.52	0.509	61.58	1.565	45.62	0.2999	53.57	-0.124
	53.21	0.273	48.09	0.522	59.87	1.615	45.05	0.2999	52.97	-0.137
	54.42	0.273	49.42	0.522	59.11	1.64	44.29	0.2999	53.82	-0.137
	55.15	0.273	50.94	0.559	58.35	1.69	46	0.3123	56.35	-0.161
	56.11	0.273	52.46	0.571	57.21	1.739	47.33	0.3123	57.93	-0.137
	57.32	0.273	53.6	0.596	56.26	1.789	48.09	0.3123	58.89	-0.149
	56.48	0.285	54.55	0.621	55.5	1.839	47.9	0.3993	61.19	-0.124
	55.87	0.298	55.69	0.621	55.69	1.963	46.57	0.4862	62.4	-0.124
	57.44	0.298	56.45	0.658	54.17	2.348	45.81	0.4862	61.8	-0.087
	58.65	0.472	57.4	0.671	33.45	4.546	45.24	0.6104	63.73	-0.087
	59.38	0.459	59.68	0.696	29.46	5.18	44.48	0.6104	65.3	-0.074
	60.1	0.534	61.39	0.758	28.13	5.316	46	0.6104	66.39	-0.062
	59.98	0.583	62.34	0.807	27.56	5.403	47.71	0.7843	66.39	0
	59.14	0.608	63.86	0.832	27.18	5.428	47.14	0.9334	68.57	0.012
	58.41	0.621	64.81	0.845	28.13	5.677	46.57	1.07	70.14	0.05
	57.81	0.633	65.38	0.882	27.37	6.037	45.05	1.182	69.78	0.112
	59.02	0.646	64.81	0.907	25.66	6.548	44.1	1.182	69.54	0.112
	59.74	0.695	64.24	0.907	24.14	6.658	43.53	1.306	68.93	0.112
	60.22	0.819	66.33	0.931	23.38	6.708	42.76	1.294	68.33	0.137
	59.02	0.857	67.66	0.944	23.19	7.058	42.19	1.318	67.72	0.162
	58.29	0.882	69.37	0.994	21.86	7.588	43.14	1.306	67.12	0.186
	57.69	0.894	70.51	1.031	20.72	7.808	43.72	1.455	66.76	0.224

Panel Type = A#2
Bracket No = 6
Test Type = T,1

General Commemts

Variables

he	=	75mm
w	=	50mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads

Designation	A1-6 (T,1)		A2-6 (T,1)		A3-6 (T,1)		A4-6 (T,1)		A5-6(T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	70.14	10.517	57.02	10.52	57.02	0.8783	70.26	11.57	61.31	11.889

Test Data

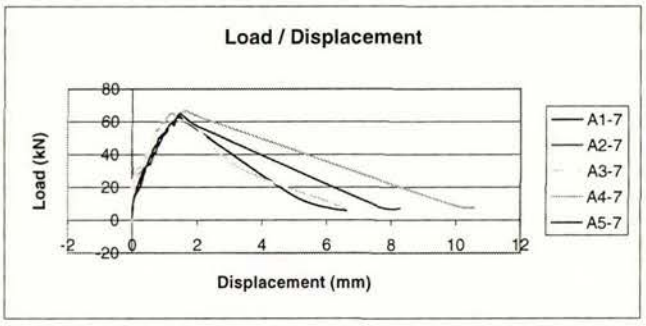
Designation	A1-6 (T,1)		A2-6 (T,1)		A3-6 (T,1)		A4-6 (T,1)		A5-6(T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0	-0.1901	0.1496	0	0.6174	0.3628	0.0242	-0.2419	0
	2.661	0	0.5702	0.1496	0.5702	0.6174	1.209	0.0367	0.4837	0
	3.87	0	6.842	0.1	1.901	0.6174	2.056	0.0367	1.088	0
	4.475	0	9.693	0.1124	3.421	0.6174	3.144	0.0367	1.935	-0.025
	5.805	0	13.49	0.1	5.132	0.6299	3.87	0.0493	2.661	-0.012
	7.135	0	15.02	0.1248	5.702	0.6299	4.837	0.0367	3.87	-0.012
	8.465	-0.012	17.87	0.1248	8.363	0.605	6.893	0.0493	5.2	-0.012
	9.433	-0.012	22.43	0.1124	9.883	0.6174	8.707	0.0618	5.926	-0.012
	10.16	-0.012	24.52	0.1869	12.16	0.6174	10.4	0.0618	6.772	-0.012
	11.25	-0.012	25.85	0.1993	17.68	0.6174	9.796	0.0618	7.377	-0.012
	12.7	0	27.75	0.1993	20.34	0.6174	11.73	0.0618	9.07	0
	13.42	0.012	28.89	0.1993	23.19	0.6174	14.15	0.0743	11.13	0
	14.15	0.012	30.6	0.2117	26.04	0.6174	15.84	0.0869	12.94	0.013
	15.84	0.037	31.17	0.2366	26.99	0.6174	19.83	0.0994	14.39	0.026
	17.05	0.05	30.6	0.2366	26.42	0.6174	21.89	0.1119	15.84	0.051
	18.38	0.075	31.36	0.249	27.18	0.605	22.49	0.1495	17.29	0.063
	20.68	0.099	32.31	0.249	30.22	0.6299	24.67	0.1996	18.02	0.076
	22.25	0.124	35.16	0.2614	34.78	0.6174	25.64	0.2372	18.87	0.101
	23.7	0.186	38.39	0.2987	38.77	0.6299	26.61	0.2622	19.71	0.101
	24.31	0.224	41.43	0.3235	42.76	0.6299	29.02	0.3124	21.04	0.138
	26.85	0.273	42.76	0.3111	46	0.6174	30.48	0.3499	22.61	0.163
	28.42	0.311	44.1	0.3235	47.9	0.6299	30.96	0.375	23.58	0.176
	32.77	0.385	45.24	0.3235	49.23	0.6299	32.53	0.4	25.27	0.201
	37.37	0.46	46.19	0.3235	48.66	0.6299	35.07	0.4877	26.73	0.213
	41.24	0.509	48.47	0.3235	50.94	0.6174	36.76	0.5629	27.45	0.301
	42.08	0.547	49.8	0.3235	53.03	0.6174	38.82	0.6381	28.3	0.326
	41.48	0.547	51.32	0.3235	52.46	0.6299	39.91	0.6882	29.02	0.339
	44.87	0.621	53.98	0.3111	51.89	0.6423	42.08	0.7508	29.63	0.351
	47.16	0.671	55.12	0.3111	53.6	0.6299	43.29	0.8009	29.02	0.376
	48.49	0.708	56.07	0.3111	55.12	0.6299	42.69	0.826	30.96	0.389
	47.89	0.708	57.02	0.3235	57.02	0.6299	42.08	0.826	32.77	0.426
	49.22	0.72	56.26	0.3111	56.07	0.6423	42.69	0.826	34.22	0.451
	51.76	0.758	55.5	0.3235	54.36	0.6299	44.5	0.851	35.19	0.477
	53.82	0.807	54.93	0.3111	53.41	0.6423	46.08	0.8761	36.16	0.489
	56.84	0.882	54.17	0.3235	52.46	0.6547	48.37	0.9513	37.01	0.527
	59.14	0.944	54.74	0.3235	53.03	0.6423	50.19	1.001	38.7	0.552
	60.1	0.981	53.98	0.3484	55.12	0.6547	50.43	1.051	39.91	0.577
	59.86	0.994	52.65	0.3732	51.7	0.6547	49.58	1.064	40.88	0.602
	59.38	1.019	51.89	0.4726	48.85	0.6547	50.79	1.077	41.84	0.627
	60.83	1.031	51.13	0.4726	44.48	0.6547	53.82	1.152	42.69	0.652
	62.89	1.081	50.56	0.4726	42.19	0.6671	55.75	1.214	43.78	0.664
	64.22	1.118	51.13	0.4726	39.72	0.6671	56.96	1.29	44.87	0.715
	63.61	1.13	52.46	0.4726	35.73	0.6795	56.23	1.352	47.65	0.74
	62.89	1.143	52.65	0.5471	34.21	0.6795	57.56	1.365	49.95	0.815
	65.91	1.18	51.7	0.5595	33.45	0.692	59.98	1.44	51.64	0.865
	67.48	1.23	51.13	0.5719	32.31	0.692	61.68	1.502	51.03	0.877
	66.88	1.255	50.56	0.5719	31.55	0.692	63.13	1.578	50.43	0.902
	66.27	1.292	49.99	0.5595	30.03	0.7044	62.52	1.64	51.28	0.915
	65.55	1.304	51.13	0.5719	29.46	0.7044	61.92	1.653	53.09	0.94
	68.21	1.341	51.89	0.5719	28.89	0.7168	62.76	1.69	54.66	0.953
	69.66	1.391	51.13	0.5595	29.65	0.7168	64.46	1.728	56.35	1.003
	68.93	1.453	50.94	1.528	28.89	0.7168	65.79	1.803	58.05	1.0528
	68.21	1.466	49.99	1.553	28.32	0.7168	67.12	1.891	58.41	1.1154
	67.48	1.478	48.09	1.566	27.56	0.7292	68.21	1.979	57.44	1.1405
	70.14	1.553	42.38	1.566	26.99	0.7292	67.36	2.041	58.05	1.1781
	70.14	1.664	40.48	1.764	26.42	0.7168	66.27	2.091	58.77	1.2031
	69.05	1.702	39.72	2.162	27.18	0.7292	65.55	2.129	59.5	1.2156
	68.21	1.751	39.15	2.162	25.28	0.7541	67.48	2.204	58.89	1.2282
	67.48	1.776	38.58	2.162	24.52	0.7416	68.45	2.292	59.98	1.2908
	70.02	1.888	37.82	2.162	23.95	0.7416	68.81	2.404	61.07	1.3409
	70.02	2.087	38.96	2.162	24.71	0.7541	69.54	2.517	61.31	1.4411
	67.36	2.199	37.06	2.534	23.19	0.7541	70.26	2.68	60.47	1.5163

Panel Type = A#2
Bracket No = 7
Test Type = T,1

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation	A1-7 (T,1)		A2-7 (T,1)		A3-7 (T,1)		A4-7 (T,1)		A5-7 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	62.89	6.6206	43.14	0.0249	61.77	6.5576	66.51	10.576	64.58	8.2807

Test Data

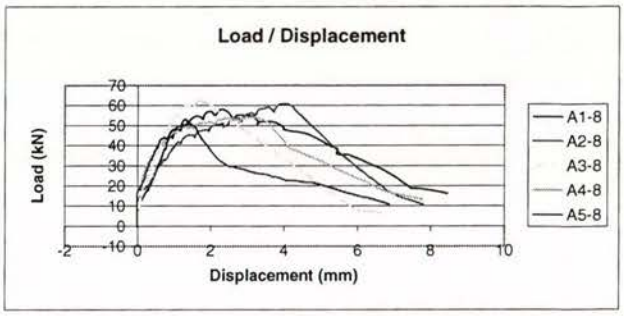
Designation	A1-7 (T,1)		A2-7 (T,1)		A3-7 (T,1)		A4-7 (T,1)		A5-7 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0	-0.1901	0	0	0	0.1209	0	1.814	0
	1.209	0.0124	0.7603	0	1.33	0	0.9675	0	3.144	0.0126
	2.298	0.0124	1.521	0	3.991	0	1.572	0	4.716	0.0126
	3.023	0	3.041	0.0125	4.942	-0.0124	2.419	0.01	11.85	0.0501
	4.716	0.0124	4.181	0	5.892	0	3.144	0.01	24.31	0.2381
	5.926	0.0249	5.322	0.0125	6.842	0.0125	6.893	0.01	25.88	0.2756
	10.16	0.0249	6.652	0	7.603	0	11.97	0.03	25.27	0.2756
	13.91	0.087	7.793	0.0125	9.693	-0.0124	15.84	0.03	30.6	0.3508
	16.21	0.1366	9.693	0	12.16	0	17.05	0.04	34.47	0.5638
	18.02	0.1987	12.35	0	14.45	-0.0124	16.45	0.04	33.86	0.5638
	19.23	0.2236	14.83	0	15.97	0	19.71	0.04	41.24	0.7016
	20.68	0.2609	16.73	0	19.2	0	24.67	0.1	40.51	0.7141
	22.01	0.2857	18.44	0	21.29	0	28.78	0.23	44.62	0.7767
	23.34	0.2981	19.01	0.0125	23	0	28.18	0.24	45.23	0.8143
	24.79	0.323	20.91	0	25.47	0.0373	30.23	0.28	46.8	0.8519
	26.61	0.3478	22.24	0.0125	27.18	0.0746	32.41	0.32	47.89	0.8895
	28.42	0.3726	23.19	0	27.75	0.0994	33.26	0.34	51.15	0.9521
	29.75	0.3975	23.76	0	28.7	0.0994	35.31	0.38	53.57	1.0022
	31.08	0.4099	24.33	0	28.7	0.1118	37.49	0.42	52.97	1.0524
	34.47	0.4844	25.47	0	29.27	0.1242	38.58	0.45	57.08	1.115
	36.76	0.5217	26.23	-0.0124	30.6	0.1367	37.97	0.47	59.74	1.2277
	39.06	0.5714	25.66	0	31.55	0.2112	39.18	0.48	59.02	1.2403
	38.94	0.5962	27.94	0	31.74	0.236	40.15	0.49	60.35	1.2904
	38.46	0.5962	29.46	0.0125	32.31	0.2484	41.96	0.53	64.58	1.4658
	40.03	0.6086	31.17	0.0249	33.26	0.2733	43.41	0.54	62.16	1.6286
	42.45	0.6335	32.5	0	33.83	0.2981	43.9	0.55	57.32	1.9797
	43.54	0.6707	34.02	0	34.4	0.323	44.26	0.58	7.861	7.6667
	44.5	0.6831	35.16	0	35.16	0.3354	45.11	0.58	7.014	8.2807
	45.47	0.708	35.92	0.0125	35.16	0.3602	46.2	0.59		
	44.87	0.7204	35.35	0.0125	34.4	0.3478	47.28	0.63		
	46.2	0.7577	37.06	0	35.16	0.3478	48.49	0.64		
	47.89	0.7825	38.96	0.0125	36.11	0.3354	49.22	0.67		
	49.34	0.8074	40.48	0.0125	37.63	0.3975	48.62	0.67		
	50.55	0.8695	41.62	0.0125	38.58	0.4099	50.07	0.69		
	51.64	0.9191	42.57	0.0125	39.34	0.4223	51.76	0.7		
	52.48	0.944	43.14	0.0125	40.1	0.4347	53.69	0.73		
	52.48	0.9812	42.38	0.0125	41.24	0.4596	54.78	0.75		
	51.88	0.9936	41.81	0.0125	40.86	0.472	54.9	0.78		
	53.09	1.0056	42.95	0	40.48	0.472	54.18	0.79		
	55.87	1.0556	30.41	0.0125	41.24	0.472	54.78	0.8		
	57.81	1.1306	28.89	0	42.38	0.4844	55.75	0.82		
	58.89	1.2046	28.32	0.0125	43.34	0.5217	56.72	0.83		
	58.29	1.2416	27.75	0.0249	44.1	0.5341	57.56	0.85		
	57.69	1.2666	29.08	0.0125	44.67	0.5341	58.77	0.88		
	58.53	1.2916	29.65	0.0125	45.43	0.5341	59.62	0.9		
	60.95	1.3416	24.52	0.0125	46	0.559	59.74	0.98		
	62.28	1.4036	19.2	0	46.95	0.5714	61.68	1.04		
	62.89	1.4656	16.16	0	46.95	0.5838	63.61	1.09		
	62.28	1.4776	13.3	0.0125	46.38	0.5838	64.94	1.14		
	61.43	1.5276	10.26	0	47.71	0.5714	65.42	1.22		
	60.1	1.6026	7.793	0	48.85	0.6211	64.09	1.29		
	57.93	1.7766	6.082	0.0125	49.8	0.6211	63.73	1.33		
	15.24	4.9556			50.94	0.6459	63.49	1.33		
	6.53	6.2726			51.7	0.6707	64.46	1.39		
	6.047	6.4716			51.89	0.6956	65.06	1.44		
	5.805	6.6206			51.13	0.6956	66.03	1.56		
					52.27	0.6707	66.51	1.69		
					53.41	0.7577	62.4	2.12		
					54.36	0.7577	8.344	10.062		

Panel Type = A#2
Bracket No = 8
Test Type = T,3

General Commemts

Variables

he	= 100mm
w	= 50mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= -200mm
y edge proximity	= N/A



Peak Loads

Designation	A1-8 (T,3)		A2-8 (T,3)		A3-8 (T,3)		A4-8 (T,3)		A5-8 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	58.17	8.461	60.83	7.8	62.34	6.658	53.94	7.7795	50.91	6.874

Test Data

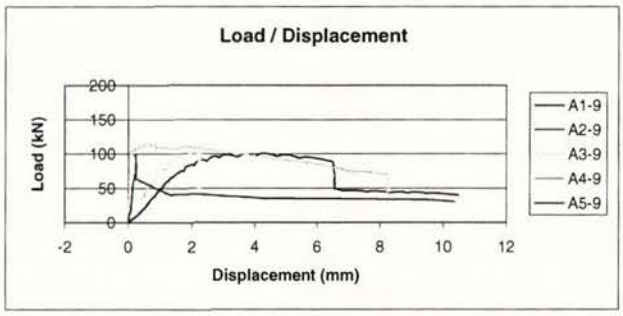
Designation	A1-8 (T,3)		A2-8 (T,3)		A3-8 (T,3)		A4-8 (T,3)		A5-8 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.4837	0	0.9675	0	0	0	0.6047	0	-0.2419	0
	1.451	0	1.935	-0.01	0.5702	0	1.572	0	0.3628	-0.02
	6.168	0	4.475	-0.01	2.471	0.025	8.828	0.0752	1.209	-0.02
	9.554	0.038	6.047	-0.02	4.181	0.037	9.796	0.0877	1.935	-0.02
	14.63	0.174	6.772	-0.01	6.462	0.037	11.49	0.0877	2.902	-0.02
	18.14	0.274	9.433	-0.01	7.983	0.05	12.82	0.1003	3.991	-0.02
	17.78	0.286	11.37	-0.02	10.07	0.037	21.41	0.1128	4.837	-0.02
	17.54	0.298	12.34	-0.01	12.16	0.05	24.91	0.1504	5.805	-0.02
	19.23	0.311	15.72	0.1	13.87	0.087	24.31	0.1629	8.586	-0.02
	20.56	0.361	15.12	0.1	16.35	0.124	25.76	0.1629	10.88	-0.02
	22.49	0.398	17.66	0.14	18.25	0.137	27.33	0.188	12.34	-0.02
	24.43	0.447	19.23	0.24	19.96	0.186	28.42	0.213	13.3	-0.02
	26	0.485	20.32	0.31	22.05	0.249	29.51	0.2381	14.27	-0.02
	27.94	0.522	21.41	0.34	21.48	0.249	34.83	0.3884	15.6	-0.02
	29.99	0.559	22.74	0.38	23.95	0.273	36.04	0.4636	17.05	0
	31.81	0.609	24.43	0.44	26.99	0.336	35.43	0.4761	18.02	0.03
	33.98	0.646	23.82	0.45	29.46	0.385	39.06	0.5387	18.62	0.06
	35.68	0.683	25.52	0.46	30.98	0.422	41.72	0.6765	18.02	0.08
	37.01	0.708	29.99	0.61	32.12	0.447	41.12	0.7266	18.99	0.06
	38.58	0.746	31.56	0.67	33.45	0.485	40.39	0.7392	19.59	0.08
	38.21	0.758	33.14	0.74	34.78	0.497	43.29	0.7642	20.2	0.1
	37.97	0.758	32.53	0.76	36.3	0.522	44.75	0.8644	20.8	0.12
	38.58	0.77	36.88	0.89	35.73	0.547	45.71	0.9396	21.53	0.12
	41.36	0.795	39.06	1	38.77	0.559	46.68	0.9897	22.13	0.15
	43.29	0.857	40.63	1.07	40.86	0.621	46.08	1.0395	22.74	0.17
	44.75	0.907	41.72	1.12	40.29	0.634	45.47	1.0525	23.46	0.2
	44.14	0.944	41.12	1.18	43.72	0.683	47.41	1.0775	24.31	0.21
	43.54	0.957	41.84	1.2	46.19	0.733	48.13	1.1405	25.27	0.22
	44.26	0.969	43.9	1.27	47.9	0.783	49.34	1.2525	26	0.22
	46.68	1.006	44.99	1.39	48.66	0.832	48.62	1.3785	27.33	0.25
	48.62	1.056	45.11	1.53	49.61	0.857	49.22	1.4905	28.06	0.26
	49.82	1.118	44.26	1.56	49.04	0.87	48.49	1.5285	27.45	0.26
	49.58	1.168	46.44	1.62	52.27	0.919	50.31	1.6035	28.06	0.28
	49.1	1.168	47.16	1.73	53.6	0.981	51.4	1.7665	29.02	0.27
	52	1.23	47.77	1.9	54.55	1.019	51.4	1.8795	29.39	0.3
	53.21	1.317	47.16	1.95	55.31	1.043	52	1.9545	29.87	0.31
	52.24	1.354	48.25	1.97	55.5	1.106	51.64	2.0045	30.6	0.31
	51.4	1.379	50.31	2.09	54.74	1.118	51.28	2.0675	31.32	0.33
	52.73	1.441	50.67	2.24	55.88	1.143	50.67	2.0925	32.29	0.35
	54.06	1.528	51.15	2.33	57.97	1.18	52.48	2.1675	33.01	0.36
	54.78	1.64	50.31	2.33	59.11	1.255	53.21	2.3175	33.62	0.39
	53.69	1.764	49.82	2.35	59.87	1.329	53.45	2.4425	33.5	0.4
	53.09	1.789	49.7	2.35	60.25	1.404	53.45	2.5935	33.01	0.4
	55.87	1.839	49.1	2.34	59.3	1.478	52.85	2.7185	34.1	0.41
	57.2	2	50.67	2.47	58.73	1.503	52.36	2.7435	35.07	0.42
	55.99	2.062	52.73	2.51	60.25	1.553	51.64	2.7685	35.68	0.44
	55.27	2.099	52.85	2.59	62.34	1.677	52.97	2.8185	36.52	0.45
	55.02	2.124	53.33	2.69	61.58	1.814	53.94	3.0315	37.13	0.47
	58.17	2.286	53.69	2.76	60.44	2	53.82	3.2945	38.09	0.5
	56.6	2.484	52.73	2.81	56.45	2.261	51.88	3.5325	39.06	0.51
	54.78	2.547	52.12	2.84	8.173	5.938	49.46	3.6585	38.46	0.55
	54.06	2.571	52.85	2.85	7.413	6.038	47.77	3.7335	39.67	0.56
	53.45	2.584	54.66	2.9	7.413	6.048	46.2	3.8205	40.27	0.57
	52.85	2.621	55.63	2.98	6.462	6.658	43.41	3.9465	41.48	0.59
	55.15	2.72	55.99	3.06			38.58	4.1595	42.57	0.61
	54.54	3.105	56.35	3.13			37.13	4.3725	43.17	0.65
	52.36	3.279	55.75	3.17			31.93	5.0365	43.9	0.74
	51.4	3.279	55.15	3.18			27.94	5.4625	43.29	0.81
	50.55	3.267	54.54	3.18			24.43	5.8885	42.93	0.84
	51.4	3.279	56.35	3.26			21.77	6.2635	43.9	0.82
	52	3.453	58.17	3.33			18.38	6.6025	45.23	0.86
	51.52	3.751	58.65	3.48			16.45	6.9405	46.2	0.89
	49.1	3.987	59.02	3.57			13.3	7.7795	47.16	0.94
	48.01	3.987	58.65	3.64					47.77	0.97

Panel Type = A#2
Bracket No = 9
Test Type = T,2

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Shear -x
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	A1-9 (T,2)		A2-9 (T,2)		A3-9 (T,2)		A4-9 (T,2)		A5-9 (T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	100.4	10.48	146.1	0	113.6	2.268	114.4	8.2433	98.56	10.358

Test Data

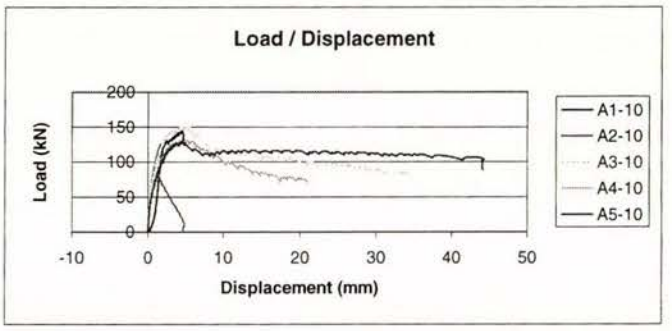
Designation	A1-9 (T,2)		A2-9 (T,2)		A3-9 (T,2)		A4-9 (T,2)		A5-9 (T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.9674	0	0.4837	0	0.2419	0	0.3628	0	0	0
	1.814	0.04	1.572	0	0.9675	0	1.935	0	1.451	0.013
	2.54	0.05	2.54	0	1.572	0.0126	3.144	0	2.419	0.013
	3.265	0.07	3.749	0	2.54	0.0251	4.354	0	3.023	0.013
	3.87	0.1	5.321	0	3.144	0.0251	5.684	0	4.233	0.013
	4.595	0.13	7.014	0	3.749	0.0251	6.772	0	5.563	0
	5.684	0.15	8.344	0	5.563	0.0376	7.861	0	6.288	0.013
	6.288	0.17	9.553	0	6.289	0.0376	8.465	-0.0125	7.014	0.013
	7.014	0.2	10.76	0	7.135	0.0501	9.917	0	8.707	0.025
	8.465	0.23	12.09	0	7.982	0.0501	13.79	0	9.916	0.025
	9.07	0.25	13.79	0	9.312	0.0627	16.21	0	10.64	0.025
	9.795	0.27	15.48	0	10.04	0.0627	15.6	0	12.00	0.038
	11.73	0.32	16.93	0	9.433	0.0752	19.59	0	14.51	0.063
	12.94	0.34	18.5	0	10.16	0.0752	22.49	0	16.08	0.063
	14.51	0.38	20.44	0	9.554	0.0627	24.67	0	17.17	0.063
	13.91	0.38	21.53	0	10.16	0.0752	26.61	0.0125	18.02	0.076
	17.17	0.42	24.07	0	9.554	0.0877	28.06	0	18.99	0.088
	19.47	0.47	26.48	0	10.4	0.0752	29.99	0.0125	19.59	0.076
	21.65	0.52	28.78	0	11	0.1003	32.77	0.0125	20.32	0.088
	22.98	0.54	29.87	0	10.4	0.0877	36.52	0.0251	21.04	0.088
	24.43	0.57	29.27	0	11.37	0.0877	38.58	0.0125	22.25	0.101
	25.52	0.58	30.47	0	15.84	0.1253	37.97	0.0251	23.1	0.088
	26.85	0.61	32.17	0	18.99	0.1879	39.55	0.0125	23.82	0.088
	28.18	0.63	34.1	0	20.32	0.213	42.45	0.0251	24.43	0.076
	30.72	0.67	35.67	0	22.74	0.2506	43.66	0.0251	25.4	0.101
	33.26	0.72	37.61	0	23.7	0.2882	45.23	0.0251	26.48	0.101
	35.55	0.76	39.18	0	23.1	0.2882	46.92	0.0376	27.33	0.101
	38.09	0.82	40.27	0	26.36	0.3007	48.74	0.0376	28.06	0.101
	37.49	0.83	42.08	0	29.27	0.3633	49.82	0.0376	28.66	0.113
	40.39	0.86	42.69	0	31.81	0.3884	50.55	0.0376	30.84	0.113
	42.69	0.89	42.08	0	33.86	0.426	49.95	0.0376	32.17	0.113
	43.9	0.92	44.87	0	36.88	0.451	52.73	0.0251	34.22	0.113
	45.35	0.94	46.8	0	36.64	0.4636	54.9	0.0501	35.8	0.126
	47.65	0.98	48.37	0	36.28	0.4636	56.35	0.0251	36.52	0.113
	50.43	1.03	49.1	0	35.68	0.4636	57.2	0.0251	38.94	0.113
	50.07	1.08	48.49	0	38.7	0.4886	56.48	0.0251	39.67	0.113
	52.36	1.08	47.89	0	39.55	0.4886	57.2	0.0376	39.06	0.126
	57.08	1.16	49.46	0	42.08	0.5137	59.26	0.0251	40.63	0.126
	58.89	1.19	50.07	0	41.48	0.5137	61.43	0.0376	41.84	0.126
	61.92	1.28	49.46	0	42.57	0.5262	62.04	0.0376	42.45	0.126
	64.46	1.32	50.19	0	45.47	0.5512	61.31	0.0376	43.17	0.126
	65.91	1.38	51.64	0	44.87	0.5512	60.71	0.0376	43.9	0.126
	67.6	1.43	52.85	0	45.95	0.5638	62.04	0.0501	44.5	0.126
	71.71	1.55	54.18	0	48.49	0.5888	62.89	0.0376	45.47	0.138
	73.77	1.61	54.9	0	50.79	0.6139	62.28	0.0376	46.8	0.138
	75.7	1.67	55.75	0	51.64	0.6389	65.91	0.0501	47.89	0.126
	75.1	1.75	57.44	0	52.61	0.6515	67.48	0.0376	48.86	0.138
	77.03	1.76	58.89	0	55.15	0.6765	68.93	0.0501	49.58	0.126
	80.42	1.81	60.22	0	54.54	0.689	70.5	0.0501	50.19	0.138
	81.99	1.88	61.43	0	57.32	0.7016	69.9	0.0501	52.73	0.138
	83.08	1.96	62.76	0	58.65	0.7392	69.29	0.0501	53.81	0.151
	83.93	2	63.73	0	62.28	0.7767	69.9	0.0627	54.42	0.151
	83.32	2.03	65.06	0	61.68	0.8143	72.56	0.0501	55.39	0.151
	82.84	2.07	66.87	0	64.46	0.8269	74.01	0.0501	56.72	0.151
	82.72	2.07	68.81	0	66.76	0.8644	73.41	0.0501	57.68	0.163
	86.34	2.13	70.26	0	66.51	0.877	75.22	0.0501	58.41	0.163
	88.88	2.2	71.23	0	66.15	0.877	76.43	0.0501	59.62	0.163
	90.46	2.28	72.07	0	70.38	0.9271	77.03	0.0627	60.95	0.176
	90.94	2.36	73.04	0	71.71	0.965	76.43	0.0627	61.55	0.176
	89.73	2.45	72.44	0	71.35	0.977	77.88	0.0501	62.16	0.188
	89.61	2.46	74.61	0	71.11	0.977	79.69	0.0501	64.21	0.188
	89.13	2.48	76.79	0	70.5	1.002	80.9	0.0501	65.54	0.188
	91.06	2.52	78.48	0	72.32	1.015	82.11	0.0627	66.75	0.201

Panel Type = A#2
Bracket No = 10
Test Type = T,2

General Commemts

Variables

h_e	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Shear y
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	A1-10 (T,2)		A2-10 (T,2)		A3-10 (T,2)		A4-10 (T,2)		A5-10 (T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	144.4	4.96	125.3	4.7856	151.9	34.4767	130.1	21.0132	129.3	44.3323

Test Data

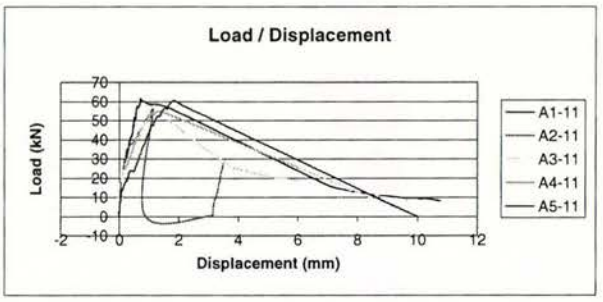
Designation	A1-10 (T,2)		A2-10 (T,2)		A3-10 (T,2)		A4-10 (T,2)		A5-10 (T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.2419	0	1.33	0	0.3628	0	0.4837	0	0.1209	0
	0.8465	-0.01	1.935	0.0125	3.023	0	1.935	0.0125	0.8465	0.0125
	1.451	0.1	2.66	0	5.079	0.0251	3.265	0.025	3.386	0.0251
	0.8465	0.15	3.507	0	6.772	0.0251	4.716	0.0376	4.474	0.0251
	1.693	0.15	4.353	0.0125	7.74	0.0376	5.684	0.0501	5.442	0.0251
	0.8465	0.16	5.079	0.025	8.949	0.0376	6.289	0.0501	6.409	0.0626
	0.2419	0.16	6.409	0.025	10.28	0.0501	7.135	0.0626	7.377	0.0501
	1.088	0.15	7.135	0.025	11.37	0.0627	7.74	0.0626	8.344	0.0501
	1.088	0.2	7.981	0.025	12.21	0.0627	8.465	0.0626	9.312	0.0626
	1.814	0.2	8.707	0.0376	15.12	0.0877	9.191	0.0626	10.64	0.0626
	2.419	0.25	9.312	0.025	17.17	0.0877	9.796	0.0751	11.73	0.0626
	3.144	0.3	10.16	0.0376	18.87	0.1127	11	0.0877	13.06	0.0752
	3.749	0.34	11.13	0.0376	20.32	0.1127	11.97	0.0877	14.39	0.0877
	6.047	0.44	12.09	0.0376	21.65	0.1127	13.42	0.1127	15.72	0.1002
	7.377	0.49	12.94	0.0626	22.74	0.1127	14.75	0.1253	16.93	0.1128
	8.707	0.54	14.27	0.0501	24.31	0.1257	17.66	0.1378	18.14	0.1253
	9.674	0.57	15.36	0.0752	26.61	0.1257	19.11	0.1503	18.87	0.1378
	10.28	0.6	16.69	0.0752	28.66	0.1377	23.94	0.1879	19.71	0.1378
	13.06	0.66	17.78	0.0877	29.75	0.1627	24.91	0.2004	20.32	0.1503
	15.72	0.74	18.99	0.0752	31.2	0.1507	24.55	0.213	21.4	0.1629
	18.14	0.8	19.11	0.1002	32.05	0.1627	27.94	0.2255	22.13	0.1629
	20.32	0.84	20.2	0.0752	33.14	0.1757	31.08	0.2505	22.98	0.1503
	22.13	0.87	22.37	0.1002	34.47	0.1877	34.47	0.2881	23.82	0.1629
	22.98	0.9	24.07	0.1127	35.19	0.1877	38.46	0.3132	24.55	0.1754
	24.19	0.91	25.76	0.1127	37.61	0.2007	37.85	0.3508	25.27	0.1879
	25.27	0.92	27.21	0.1253	39.42	0.2127	38.7	0.3508	25.15	0.2004
	25.88	0.95	28.54	0.1378	40.75	0.2257	41.24	0.3758	26.97	0.1879
	26.48	0.96	30.11	0.1503	41.36	0.2257	40.63	0.4009	28.54	0.2004
	27.09	0.96	30.84	0.1628	44.14	0.2507	40.51	0.4134	29.87	0.2255
	28.3	0.99	32.29	0.1628	46.08	0.2627	40.03	0.4134	30.96	0.213
	28.18	1	33.13	0.1754	45.47	0.2877	41.36	0.4134	30.35	0.2255
	27.69	1	34.34	0.1879	46.32	0.2877	43.66	0.4259	32.17	0.238
	29.75	1.01	35.92	0.1879	50.07	0.3007	45.59	0.4384	34.1	0.2506
	31.08	1.04	35.67	0.2004	51.15	0.3007	46.56	0.451	35.67	0.2756
	32.41	1.06	35.31	0.2004	51.03	0.3257	47.53	0.476	36.64	0.2756
	33.01	1.06	36.4	0.2004	52.97	0.3387	48.37	0.4886	36.28	0.3007
	35.43	1.08	37.97	0.213	54.9	0.3637	48.13	0.5136	38.94	0.3007
	38.21	1.11	39.18	0.213	56.84	0.3637	47.77	0.5136	40.87	0.3257
	39.18	1.14	40.03	0.213	56.23	0.4007	48.74	0.5387	42.2	0.3503
	41.6	1.15	40.75	0.2255	57.56	0.4007	49.95	0.5387	43.17	0.3633
	44.26	1.16	41.48	0.238	59.98	0.4137	51.15	0.5512	44.62	0.4013
	44.99	1.19	42.45	0.2505	61.92	0.4507	52.24	0.5637	46.2	0.4013
	44.38	1.2	43.53	0.2505	62.52	0.4507	52.85	0.5637	47.28	0.4133
	46.32	1.2	44.26	0.2631	61.92	0.4757	54.18	0.6013	48.37	0.4383
	48.25	1.21	44.99	0.2631	63.49	0.4887	54.9	0.6138	49.34	0.4513
	49.46	1.23	45.71	0.2631	65.18	0.5007	55.63	0.6264	50.43	0.4883
	50.79	1.24	46.32	0.2756	66.88	0.5257	56.23	0.6389	51.64	0.5013
	52	1.25	46.92	0.3007	67.84	0.5387	57.44	0.689	52.73	0.5133
	54.3	1.28	47.89	0.3007	68.09	0.5517	59.26	0.7015	54.06	0.5263
	56.11	1.29	49.34	0.3007	67.24	0.5887	60.47	0.7266	55.14	0.5513
	57.32	1.29	50.43	0.3132	67.84	0.6017	61.43	0.7391	55.99	0.5633
	58.77	1.3	51.27	0.3132	70.14	0.6017	62.16	0.7516	55.75	0.6013
	58.65	1.31	51.88	0.3257	71.59	0.6137	62.89	0.7642	55.39	0.6143
	58.17	1.33	52.48	0.3257	72.68	0.6267	63.49	0.7767	56.11	0.6143
	60.59	1.35	53.81	0.3633	73.41	0.6267	64.09	0.8017	57.56	0.6143
	63.13	1.36	54.66	0.3508	73.16	0.6517	64.94	0.8268	58.53	0.6393
	63.97	1.36	55.39	0.3633	72.8	0.6637	65.55	0.8769	59.74	0.6513
	66.87	1.39	56.23	0.3633	73.41	0.6637	66.63	0.8894	60.95	0.6643
	69.53	1.4	56.84	0.3758	76.07	0.6887	68.33	0.8894	61.55	0.6893
	70.14	1.41	57.56	0.3758	77.52	0.6887	69.66	0.902	62.04	0.7013

Panel Type = A#2
Bracket No = 11
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	276mm
y edge proximity	=	N/A



Peak Loads										
Designation	A1-11 (T,3)		A2-11 (T,3)		A3-11 (T,3)		A4-11 (T,3)		A5-11 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	61.55	10.761	55.99	3.5022	53.98	10.048	55.02	10	60.35	10

Test Data

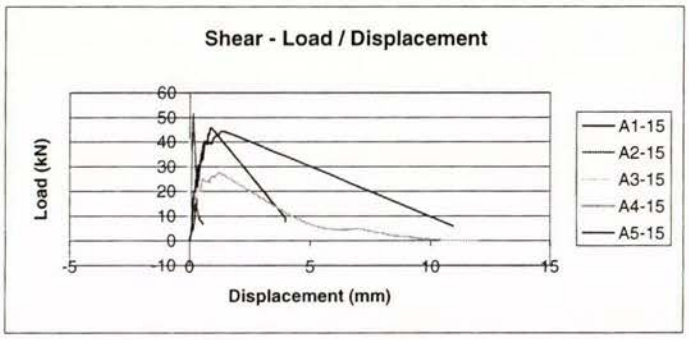
Designation	A1-11 (T,3)		A2-11 (T,3)		A3-11 (T,3)		A4-11 (T,3)		A5-11 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0	0.6047	0	0.1901	0	0	0	0.3628	0
	1.935	-0.025	1.572	0.0124	1.521	0.012	0.6047	-0.01	1.088	0
	2.54	0	2.419	0	2.281	0.024	1.451	-0.01	1.814	0
	3.991	0	5.321	0.0124	3.041	0.037	2.419	0	2.419	0
	5.926	0.012	7.74	0.0249	4.372	0.049	3.628	0	3.023	0.012
	9.433	0.025	9.312	0.0249	5.512	0.049	4.716	0	3.749	0.012
	12.7	0.037	11.49	0.0373	6.462	0.049	5.684	0	5.2	0.025
	14.39	0.05	14.03	0.0373	7.793	0.062	7.135	-0.01	6.409	0.025
	15.84	0.05	15.24	0.0497	10.64	0.087	8.465	0	7.377	0.037
	17.78	0.074	16.21	0.0621	12.73	0.087	9.191	0	8.949	0.05
	19.23	0.099	18.74	0.0745	14.45	0.099	10.04	-0.01	10.4	0.075
	20.07	0.112	21.53	0.0994	16.35	0.099	11.97	-0.01	11.85	0.075
	21.65	0.124	24.67	0.1366	18.06	0.111	15.12	0	13.06	0.087
	23.82	0.149	26.85	0.1491	19.39	0.124	17.29	0.02	14.51	0.125
	25.64	0.161	29.39	0.1863	21.1	0.136	19.11	0.07	15.72	0.15
	26.61	0.199	30.23	0.2112	23	0.161	20.68	0.09	17.05	0.188
	28.18	0.223	31.81	0.2112	23.76	0.174	22.01	0.12	18.02	0.213
	31.81	0.273	35.92	0.2857	25.66	0.198	23.7	0.14	18.74	0.25
	33.86	0.286	38.94	0.4842	27.75	0.223	25.76	0.24	18.14	0.25
	35.31	0.31	39.91	0.5092	29.65	0.273	26.61	0.27	19.71	0.275
	36.76	0.323	39.3	0.5212	31.55	0.36	27.45	0.29	20.92	0.313
	38.58	0.348	40.39	0.5212	33.26	0.41	26.85	0.29	22.01	0.326
	40.75	0.373	42.08	0.6332	35.54	0.459	27.45	0.29	23.94	0.376
	43.54	0.447	43.29	0.6332	38.39	0.509	28.9	0.31	23.46	0.488
	47.77	0.472	44.75	0.7452	37.82	0.521	29.87	0.34	23.34	0.501
	47.16	0.497	45.71	0.7452	40.29	0.534	30.48	0.34	25.15	0.538
	51.28	0.509	45.11	0.7452	41.81	0.583	31.2	0.36	26.73	0.576
	50.67	0.546	47.53	0.8442	42.57	0.583	31.93	0.4	27.69	0.601
	51.64	0.559	48.98	0.8572	42	0.695	32.53	0.4	29.14	0.639
	55.15	0.571	50.19	0.8692	43.14	0.695	33.38	0.41	30.11	0.664
	57.56	0.609	51.28	0.9692	43.72	0.695	34.1	0.45	30.84	0.676
	56.96	0.646	50.67	0.9692	46	0.708	34.95	0.45	31.81	0.689
	59.38	0.708	52	0.9692	46.95	0.857	35.68	0.47	32.41	0.726
	61.55	0.72	52.97	1.0562	46.19	0.857	36.88	0.5	33.01	0.739
	60.59	0.758	52	1.0562	45.62	0.857	38.46	0.54	34.22	0.751
	59.74	0.882	52.97	1.0562	45.05	0.857	39.42	0.56	35.31	0.777
	58.89	0.969	52.36	1.0562	46	0.857	40.51	0.57	36.52	0.814
	58.17	1.081	51.76	1.0562	48.85	0.857	41.84	0.65	37.37	0.839
	58.65	1.192	54.42	1.0562	51.13	1.006	42.57	0.66	38.58	0.877
	56.48	1.702	55.99	1.1432	52.46	1.006	43.78	0.69	40.03	0.902
	16.45	6.991	0.3628	0.8692	53.03	1.006	44.87	0.73	41.12	0.927
	14.03	7.551	0.3628	3.1422	52.27	1.006	45.47	0.75	42.21	0.952
	13.42	7.671	0.9675	3.1552	51.7	1.006	45.23	0.76	42.93	0.977
	12.82	7.791	1.693	3.1552	51.13	1.006	44.87	0.75	42.33	0.989
	12.7	7.951	3.144	3.1552	52.46	1.018	46.44	0.79	44.26	1.015
	10.88	8.691	4.595	3.1552	53.6	1.018	47.65	0.81	45.83	1.052
	10.88	8.811	7.861	3.2042	53.98	1.316	48.62	0.85	47.41	1.09
	10.16	9.341	10.28	3.2662	52.46	1.465	49.7	0.89	47.41	1.152
	9.675	9.461	11.61	3.2792	47.71	1.888	49.1	0.91	48.62	1.165
	9.675	10.001	12.58	3.3162	43.91	2.161	49.7	0.94	50.19	1.215
	9.191	10.081	13.3	3.3042	31.17	3.279	50.55	0.95	51.52	1.253
	9.312	10.311	14.03	3.3292	28.51	3.552	51.52	0.98	52.12	1.29
	8.223	10.761	15.12	3.3412	27.37	3.651	52.24	0.99	52.12	1.3528
			16.21	3.3532	26.8	3.701	53.09	1.04	53.69	1.4029
			17.29	3.3662	26.23	3.726	53.94	1.08	55.02	1.4405
			18.26	3.3912	25.66	3.775	53.69	1.1	55.99	1.4906
			19.11	3.3912	25.28	3.825	53.33	1.11	56.72	1.5407
			22.49	3.4282	25.09	3.838	52.73	1.16	56.48	1.5908
			23.82	3.4532	23.76	4.297	53.69	1.2	56.11	1.6033
			24.67	3.4652	22.05	4.632	54.3	1.24	57.44	1.6534
			25.27	3.4782	20.91	5.104	55.02	1.34	58.41	1.6785
			26.61	3.4902	20.15	5.229	54.54	1.46	59.14	1.7161
			27.57	3.5022	19.96	5.502	0.1209	10	59.86	1.7537
			26.97	3.5022	18.44	6.036			60.35	1.8539
					16.35	6.483			59.5	1.9666
					15.4	6.607			58.65	2.0543

Panel Type = A#2
Bracket No = 15
Test Type = T,4

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Oblique x
x edge proximity	=	276mm
y edge proximity	=	262mm



Peak Loads Shear										
Designation		A1-15 (T,4)		A2-15 (T,4)		A3-15 (T,4)		B415 (T,4)		A5-15(T,4)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		45.83	3.996	51.4	0.5642	41	0	27.45	11.96	44.38	10.9503

Test Data

Designation	A1-15 (T,4)		A2-15 (T,4)		A3-15 (T,4)		B415 (T,4)		A5-15(T,4)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.1209	0	1.209	0	0.2419	0	-0.2419	0	0	0
	0.9674	0.025	2.177	0	1.451	0	0.7256	0.0125	0.9674	0.0125
	2.177	0.063	2.781	0.0125	2.177	0	1.451	0.0501	1.693	0.025
	2.781	0.1	3.507	0.0125	2.902	0	2.056	0.0752	2.54	0.0501
	3.507	0.113	4.353	0.0125	3.749	0	2.66	0.0877	3.628	0.0626
	4.112	0.138	4.958	0.0125	4.353	0	2.902	0.1002	4.837	0.0751
	4.958	0.163	5.563	0.0125	5.079	0	3.628	0.1127	5.684	0.0877
	6.047	0.176	6.167	0.025	6.047	0	4.233	0.1127	6.288	0.1002
	7.377	0.201	6.893	0.025	7.86	0	4.837	0.1253	6.893	0.1002
	8.223	0.213	7.981	0.025	9.191	0	5.805	0.1253	7.498	0.1002
	8.828	0.213	8.586	0.025	10.04	0	6.53	0.1503	8.223	0.1002
	9.674	0.226	9.433	0.0376	10.64	0	7.981	0.1629	8.828	0.1127
	10.4	0.238	10.16	0.0376	11.37	0	9.433	0.1629	9.433	0.1127
	12.58	0.251	9.553	0.0752	12.33	0	10.76	0.1754	10.04	0.1252
	14.63	0.263	9.553	0.1002	13.18	0	10.52	0.2004	10.64	0.1252
	15.96	0.276	10.64	0.0877	13.91	0	12.09	0.1879	11.25	0.1252
	17.78	0.288	13.06	0.0877	14.75	0	13.54	0.1879	11.85	0.1378
	18.5	0.301	14.63	0.0752	15.72	0	14.51	0.1879	12.46	0.1378
	19.23	0.301	15.6	0.0752	16.45	0	15.48	0.1879	13.18	0.1503
	20.32	0.313	16.2	0.0752	17.29	0	14.87	0.2004	13.91	0.1503
	22.25	0.351	17.05	0.0626	18.02	0	15.72	0.238	14.51	0.1503
	24.19	0.363	17.78	0.0626	18.62	0	16.57	0.2506	15.12	0.1503
	25.4	0.388	19.11	0.0626	19.23	0	17.17	0.2631	15.72	0.1503
	28.3	0.414	19.71	0.0626	19.83	0	17.78	0.2756	16.33	0.1628
	31.08	0.451	20.32	0.0626	20.68	0	18.5	0.2881	17.29	0.1754
	32.29	0.476	21.16	0.0501	21.28	0	18.26	0.3007	18.02	0.1879
	34.1	0.489	23.22	0.0752	21.89	0	17.9	0.2881	18.74	0.1879
	33.5	0.501	25.4	0.0752	22.49	0	19.23	0.2881	19.35	0.1879
	33.5	0.514	26.6	0.0752	23.22	0	19.83	0.3007	19.59	0.2004
	32.89	0.551	27.57	0.0752	24.43	0	20.56	0.3132	19.95	0.2255
	33.98	0.576	26.97	0.0752	25.15	0	21.16	0.3382	20.68	0.2255
	36.28	0.589	28.66	0.0752	26.97	0	20.56	0.3508	21.65	0.238
	37.25	0.601	29.63	0.0752	28.42	0	20.32	0.4009	22.37	0.2505
	36.88	0.614	30.23	0.0752	29.39	0	19.83	0.4259	23.46	0.2505
	38.94	0.626	31.08	0.0877	29.99	0	20.56	0.4635	24.43	0.263
	40.27	0.652	32.77	0.0877	30.6	0	21.16	0.4635	26.24	0.3006
	39.67	0.689	34.1	0.0877	29.99	0	21.77	0.476	27.09	0.3257
	39.42	0.727	35.55	0.0877	32.29	0	22.37	0.5011	28.3	0.3382
	39.06	0.752	37.13	0.0877	33.74	0	22.98	0.5011	29.02	0.3507
	40.39	0.752	38.09	0.0877	34.47	0	23.58	0.5136	29.63	0.3633
	42.93	0.777	38.82	0.1002	36.4	0	24.43	0.5262	30.47	0.3758
	43.53	0.802	39.42	0.0877	37.49	0	25.03	0.5637	30.6	0.4134
	42.93	0.814	40.27	0.0877	38.58	0	24.67	0.6139	31.2	0.4259
	42.93	0.827	39.67	0.0877	40.03	0	24.43	0.6264	32.17	0.451
	44.62	0.852	40.87	0.1127	39.3	0	24.07	0.7141	33.38	0.476
	45.83	0.89	41.84	0.1127	40.39	0	23.82	0.8143	34.47	0.476
	45.23	0.952	42.93	0.1127	41	0	25.64	0.8895	35.31	0.5011
	44.26	1.052	43.53	0.1253	40.39	0	26.12	0.9396	35.92	0.5011
	9.433	3.971	45.47	0.1253	37.73	0	26.36	0.9521	36.04	0.5136
	8.465	3.984	46.92	0.1378	36.76	0	25.76	1.0523	36.76	0.5387
	7.619	3.984	47.65	0.1378	35.55	0	26.97	1.1525	37.73	0.5512
	8.707	3.996	47.04	0.1253	34.47	0	27.45	1.2778	38.33	0.5637
			48.73	0.1378	31.8	0	6.772	4.973	39.42	0.6013
			49.82	0.1378	30.11	0	4.716	7.166	39.54	0.6138
			49.22	0.1378	29.14	0	4.233	7.316	40.03	0.6389
			50.67	0.1503	28.42	0	4.112	7.354	39.79	0.7143
			51.4	0.1503	25.88	0	3.991	7.429	39.91	0.8143

Panel Type = B
Bracket No = 1
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
Sx edge proximity	=	-50mm
Sy edge proximity	=	50mm

Data was not graphable

Peak Loads										
Designation		B1-1 (T,3)		B2-1 (T,3)		B3-1 (T,3)		B4-1 (T,3)		B5-1(T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
				36.85	0.126	26.98	1.327	8.78	1.587	33.78	1.895

Test Data

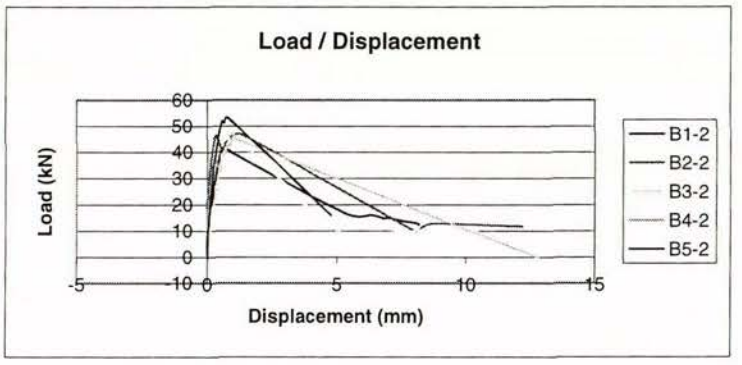
Designation	B1-1 (T,3)		B2-1 (T,3)		B3-1 (T,3)		B4-1 (T,3)		B5-1(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
			20.63	-0.0492	0.0244	0.0119	-0.8537	-0.0006	-1.22	0.0154
			26.73	0.0009	3.683	-0.0006	-0.2439	-0.0006	-1.951	0.0154
			28.56	0.051	6.244	0.062	1.22	0.0997	-0.3659	0.0154
			27.83	-0.0116	11.73	0.0996	2.073	0.3001	-0.9756	0.0154
			32.22	0.0009	21.98	0.2374	3.537	0.5506	4.268	0.0154
			31.61	0.0385	18.44	0.2249	5.854	0.9515	4.878	0.0154
			34.05	0.0135	25.39	0.2374	7.195	1.227	8.537	0.0154
			31.85	0.026	24.29	0.2249	8.78	1.578	16.59	0.0279
			33.2	0.026	26.61	0.3752	7.561	2.793	18.54	0.0154
			34.29	0.0886	23.44	0.5506	5.732	5.098	17.44	0.2785
			33.68	0.1262	25.76	0.538	4.878	6.326	18.41	0.3536
			35.51	0.1387	26.37	0.964	2.927	7.879	18.66	0.4038
			34.41	0.0886	26.98	1.327	2.683	8.907	19.02	0.5416
			36.49	0.1262	25.88	1.327	2.195	9.884	20.37	0.7044
			34.78	0.0886	0.0244	-21.8	2.195	10.05	21.59	0.8923
			36.85	0.1262			2.073	14.77	22.8	1.018
			34.9	0.0886			-0.8537	3.62	22.07	1.13
			35.27	0.1513			-0.8537	7.954	22.8	1.306
			34.29	0.1387			-0.8537	-24.63	24.02	1.506
			35.63	0.1262					25.37	1.619
			34.05	0.1262					24.88	1.732
			35.39	0.1262					26.1	1.945
			33.56	0.1638					27.68	2.082
			34.9	0.1763					28.29	2.12
			33.07	0.2139					28.29	2.208
			32.34	0.1513					29.88	2.245
			33.56	0.2139					28.66	2.258
			32.46	0.2264					29.63	2.333
			33.8	0.239					30.49	2.358
			32.22	0.1888					29.63	2.383
			0.5122	-5.211					30.61	2.471
			0.5122	-19.98					28.9	2.458
			0.3902	-49.77					29.15	2.032
									31.1	1.957
									30.24	1.945
									31.46	1.895
									32.56	1.895
									31.46	1.895
									32.07	1.895
									32.93	1.882
									32.2	1.895
									33.41	1.895
									31.83	1.895
									32.68	1.895
									33.78	1.895
									32.44	1.907
									33.41	1.895
									32.68	1.895
									-1.585	24.21

Panel Type = B
Bracket No = 2
Test Type = T,3

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= N/A
l	= N/A
Test direction	= Vertical
Sx edge proximity	= -50mm
Sy edge proximity	= N/A



Peak Loads										
Designation	B1-2 (T,3)		B2-2 (T,3)		B3-2 (T,3)		B4-2 (T,3)		B5-2(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	41.49	8.193	46.73	12.2	47.1	10.8	45.24	12.77	53.29	4.779

Test Data

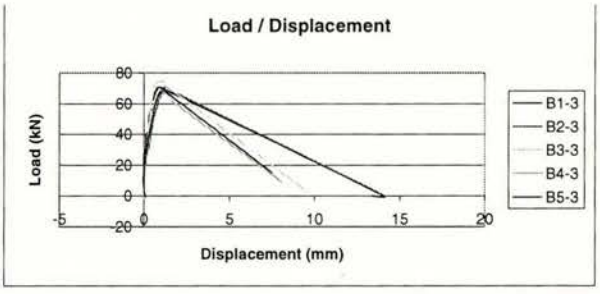
Designation	B1-2 (T,3)		B2-2 (T,3)		B3-2 (T,3)		B4-2 (T,3)		B5-2(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.5122	-0.0004	0.3902	0.001	0.0244	-0.0005	-0.3659	-0.0081	-0.4878	0.0059
	2.098	-0.0129	1.122	0.001	6.854	0.0622	0.4878	-0.0081	0.122	0.0184
	7.585	-0.0129	1.732	0.001	22.1	0.2751	2.439	-0.0081	0.7317	0.0059
	8.439	-0.0004	6.732	0.001	30.51	0.413	5.732	0.0044	1.341	0.0059
	18.32	0.1124	19.54	0.001	37.34	0.5883	8.171	-0.0081	1.951	0.0059
	22.34	0.2251	23.32	0.0386	41.85	0.7136	13.17	0.0169	3.293	0.0059
	26.73	0.2251	36.37	0.1263	44.05	0.8013	19.76	0.042	4.756	0.0059
	29.66	0.3379	37.34	0.1388	43.44	0.8138	21.22	0.0795	6.22	0.0184
	30.88	0.3254	43.8	0.239	42.83	0.8264	26.83	0.1171	7.927	0.031
	35.02	0.4005	46.49	0.3392	47.1	0.9767	32.07	0.1923	11.1	0.0435
	39.17	0.4882	45.63	0.3643	11.37	4.748	36.83	0.28	15.37	0.0811
	41.49	0.5759	40.39	0.5898	11.61	5.574	33.05	0.5055	20.61	0.1187
	40.63	0.839	43.56	0.69	10.88	6.614	37.32	0.5305	23.66	0.1437
	39.54	0.9768	44.29	0.8153	10.02	7.779	39.15	0.5431	26.95	0.1813
	16.24	5.437	46.61	1.003	10.27	8.694	38.9	0.6308	32.32	0.2189
	16	6.351	46.73	1.354	10.27	9.621	41.71	0.7435	34.51	0.2314
	14.78	6.815	9.78	8.069	9.415	10.52	43.05	0.8938	38.9	0.3191
	15.02	6.978	11.49	8.319	9.171	10.8	45.24	1.019	40.98	0.3441
	14.05	7.429	12.83	8.783			-0.122	12.77	45.49	0.4318
	13.2	7.967	11.73	12.2					49.51	0.507
	12.71	8.193							51.95	0.5696
	12.34	8.193							51.22	0.6323
									52.93	0.6824
									53.29	0.7826
									15.98	4.779

Panel Type = B
Bracket No = 3
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
Sx edge proximity	=	-150mm
Sy edge proximity	=	N/A



Peak Loads										
Designation	B1-3 (T,3)		B2-3 (T,3)		B3-3 (T,3)		B4-3 (T,3)		B5-3(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	70.88	14.07	71.61	13.89	74.78	9.545	66.46	8.077	69.88	7.491

Test Data

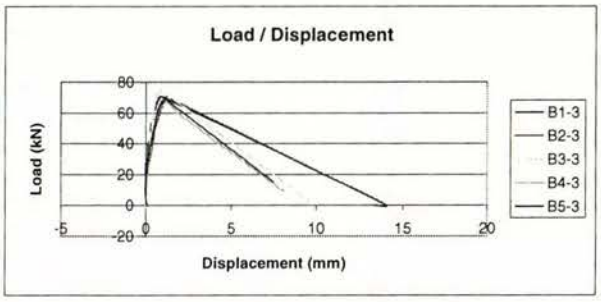
Designation	B1-3 (T,3)		B2-3 (T,3)		B3-3 (T,3)		B4-3 (T,3)		B5-3(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.2683	-0.0008	0.3902	0	0.0244	0.0116	-1.341	0.0089	-0.4878	0.0996
	3.195	-0.0008	4.293	0.0125	3.317	0.0242	-0.6098	0.0089	0.122	0.0996
	5.39	-0.0008	12.83	0.0376	7.098	0.0367	0.9756	0.0089	1.22	0.062
	8.073	-0.0133	15.02	0.0501	9.902	0.0492	3.171	-0.0036	1.829	0.0495
	16.85	-0.0008	27.59	0.2004	26.24	0.1244	7.683	0.0089	2.561	0.0369
	26.49	-0.0008	32.22	0.3132	34.05	0.1996	10.73	0.0339	3.415	0.0244
	32.1	0.137	37.22	0.3884	34.66	0.2121	19.02	0.084	4.146	0.0244
	31.49	0.137	38.8	0.4009	41.61	0.2622	24.39	0.1467	5	0.0119
	37.83	0.137	41	0.4385	46.98	0.3123	30.49	0.2219	5.732	0.0119
	39.66	0.137	45.02	0.5011	46.37	0.3123	36.34	0.3095	6.098	-0.0007
	43.07	0.2999	49.05	0.5512	51.98	0.3624	41.71	0.3597	6.829	0.0119
	47.59	0.2999	51.85	0.6139	57.22	0.4125	48.29	0.4223	7.561	0.0119
	52.59	0.3124	55.39	0.689	56.61	0.4125	52.68	0.51	8.293	-0.0007
	51.73	0.3124	59.17	0.8143	62.34	0.4752	56.1	0.5852	8.902	0.0119
	56.73	0.4377	64.66	0.902	61.61	0.4752	60.73	0.7355	9.878	-0.0007
	55.88	0.4377	63.44	0.927	67.59	0.5378	65	0.9485	10.85	0.0119
	60.39	0.4377	67.59	1.102	66.61	0.5378	66.46	1.349	11.59	0.0119
	59.66	0.4377	71.61	1.315	72.1	0.6004	59.39	1.938	12.8	0.0119
	63.8	0.5629	68.93	1.541	71.85	0.7007	9.024	8.077	13.54	0.0119
	62.71	0.5629	1.366	13.89	73.68	0.7508			15.37	0.0119
	67.59	0.6632			74.78	1.127			16.22	0.0119
	66.12	0.6632			71.73	1.302			17.68	0.0244
	70.27	0.7759			2.707	9.545			19.15	0.0119
	68.44	0.7634							20.24	0.0369
	70.88	0.9262							20.98	0.0745
	0.1463	14.07							24.88	0.1121
	0.1463	13.35							27.56	0.1371
									29.63	0.1622
									31.46	0.1998
									33.78	0.2248
									36.34	0.2624
									38.17	0.2875
									40.73	0.3251
									42.93	0.3626
									44.51	0.4002
									44.88	0.4253
									46.46	0.4378
									47.8	0.4629
									49.02	0.4754
									49.63	0.5004
									50.73	0.513
									51.59	0.5255
									53.17	0.5631
									53.9	0.5631
									55.73	0.5881
									56.83	0.6007
									57.93	0.6257
									58.78	0.6508
									60.73	0.6884
									61.71	0.7009
									62.07	0.7385
									64.15	0.7886
									65.12	0.8262
									65.49	0.8512
									64.51	0.8637
									66.83	0.8888
									67.93	0.9389
									67.8	0.9514
									67.07	0.964
									66.46	0.9765
									65.85	0.9765
									69.88	1.052
									69.88	1.177
									68.29	1.24
									67.56	1.29
									15.24	7.491

Panel Type = B
Bracket No = 3
Test Type = T,3

General Commemts

Variables

h_e	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
Sx edge proximity	=	-150mm
Sy edge proximity	=	N/A



Peak Loads										
Designation	B1-3 (T,3)		B2-3 (T,3)		B3-3 (T,3)		B4-3 (T,3)		B5-3(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	70.88	14.07	71.61	13.89	74.78	9.545	66.46	8.077	69.88	7.491

Test Data

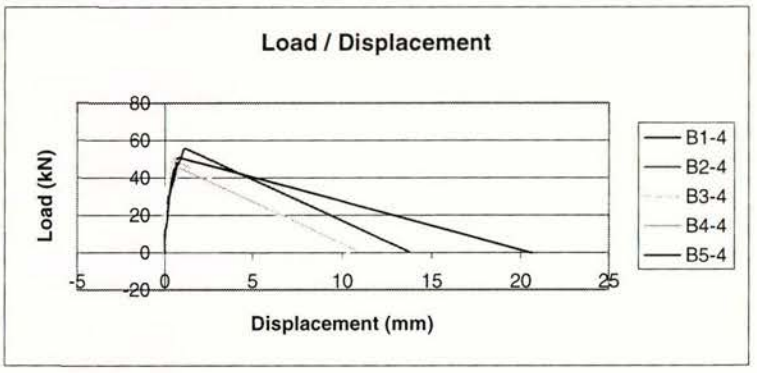
Designation	B1-3 (T,3)		B2-3 (T,3)		B3-3 (T,3)		B4-3 (T,3)		B5-3(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.2683	-0.0008	0.3902	0	0.0244	0.0116	-1.341	0.0089	-0.4878	0.0996
	3.195	-0.0008	4.293	0.0125	3.317	0.0242	-0.6098	0.0089	0.122	0.0996
	5.39	-0.0008	12.83	0.0376	7.098	0.0367	0.9756	0.0089	1.22	0.062
	8.073	-0.0133	15.02	0.0501	9.902	0.0492	3.171	-0.0036	1.829	0.0495
	16.85	-0.0008	27.59	0.2004	26.24	0.1244	7.683	0.0089	2.561	0.0369
	26.49	-0.0008	32.22	0.3132	34.05	0.1996	10.73	0.0339	3.415	0.0244
	32.1	0.137	37.22	0.3884	34.66	0.2121	19.02	0.084	4.146	0.0244
	31.49	0.137	38.8	0.4009	41.61	0.2622	24.39	0.1467	5	0.0119
	37.83	0.137	41	0.4385	46.98	0.3123	30.49	0.2219	5.732	0.0119
	39.66	0.137	45.02	0.5011	46.37	0.3123	36.34	0.3095	6.098	-0.0007
	43.07	0.2999	49.05	0.5512	51.98	0.3624	41.71	0.3597	6.829	0.0119
	47.59	0.2999	51.85	0.6139	57.22	0.4125	48.29	0.4223	7.561	0.0119
	52.59	0.3124	55.39	0.689	56.61	0.4125	52.68	0.51	8.293	-0.0007
	51.73	0.3124	59.17	0.8143	62.34	0.4752	56.1	0.5852	8.902	0.0119
	56.73	0.4377	64.66	0.902	61.61	0.4752	60.73	0.7355	9.878	-0.0007
	55.88	0.4377	63.44	0.927	67.59	0.5378	65	0.9485	10.85	0.0119
	60.39	0.4377	67.59	1.102	66.61	0.5378	66.46	1.349	11.59	0.0119
	59.66	0.4377	71.61	1.315	72.1	0.6004	59.39	1.938	12.8	0.0119
	63.8	0.5629	68.93	1.541	71.85	0.7007	9.024	8.077	13.54	0.0119
	62.71	0.5629	1.366	13.89	73.68	0.7508			15.37	0.0119
	67.59	0.6632			74.78	1.127			16.22	0.0119
	66.12	0.6632			71.73	1.302			17.68	0.0244
	70.27	0.7759			2.707	9.545			19.15	0.0119
	68.44	0.7634							20.24	0.0369
	70.88	0.9262							20.98	0.0745
	0.1463	14.07							24.88	0.1121
	0.1463	13.35							27.56	0.1371
									29.63	0.1622
									31.46	0.1998
									33.78	0.2248
									36.34	0.2624
									38.17	0.2875
									40.73	0.3251
									42.93	0.3626
									44.51	0.4002
									44.88	0.4253
									46.46	0.4378
									47.8	0.4629
									49.02	0.4754
									49.63	0.5004
									50.73	0.513
									51.59	0.5255
									53.17	0.5631
									53.9	0.5631
									55.73	0.5881
									56.83	0.6007
									57.93	0.6257
									58.78	0.6508
									60.73	0.6884
									61.71	0.7009
									62.07	0.7385
									64.15	0.7886
									65.12	0.8262
									65.49	0.8512
									64.51	0.8637
									66.83	0.8888
									67.93	0.9389
									67.8	0.9514
									67.07	0.964
									66.46	0.9765
									65.85	0.9765
									69.88	1.052
									69.88	1.177
									68.29	1.24
									67.56	1.29
									15.24	7.491

Panel Type = B
Bracket No = 4
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	150mm
y edge proximity	=	N/A



Peak Loads										
Designation		B1-4 (T,3)		B2-4 (T,3)		B3-4 (T,3)		B4-4 (T,3)		B5-4(T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		50.63	20.63	0	0	49.78	10.36	44.88	10.84	55.73	13.78

Test Data

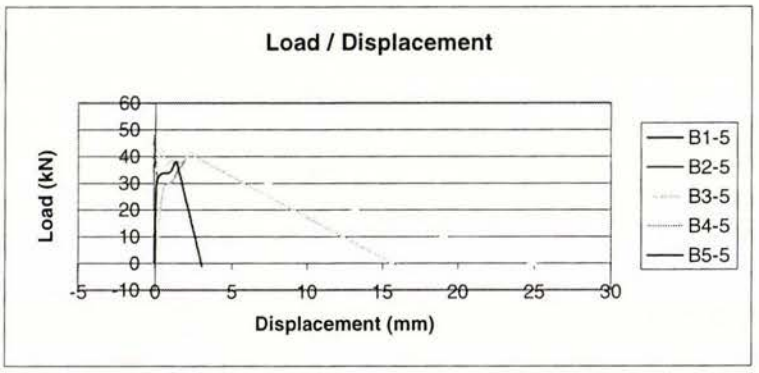
Designation	B1-4 (T,3)		B2-4 (T,3)		B3-4 (T,3)		B4-4 (T,3)		B5-4(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.5122	0.0009			-0.2195	-0.0128	-1.098	-0.0003	-0.4878	0.0248
	4.171	0.0009			0.5122	-0.0002	-1.829	-0.0003	0.4878	0.0123
	9.78	-0.0116			3.927	-0.0002	-1.098	-0.0003	1.585	0.0123
	15.76	0.1262			6.244	-0.0002	1.585	-0.0003	2.927	0.0123
	16.61	0.1262			16	-0.0002	7.439	-0.0128	4.756	0.0123
	30.02	0.1888			25.02	-0.0002	10.61	0.1	6.829	0.0123
	30.39	0.264			27.95	0.0248	29.02	0.2252	8.78	0.0123
	35.88	0.3391			30.02	0.0248	32.68	0.4006	11.22	0.0123
	41.12	0.4519			32.46	0.0499	39.27	0.6387	14.51	0.1
	44.54	0.5396			34.17	0.0624	44.27	0.789	18.78	0.1626
	46.12	0.6649			33.56	0.0624	44.88	0.9518	25.24	0.2253
	50.63	0.8402			41.24	0.1751	0.9756	10.84	31.95	0.2879
	-0.0976	20.63			40.39	0.2002			34.39	0.338
					46.49	0.4006			36.22	0.4132
					49.78	0.5009			40.73	0.5635
					0.1463	10.36			45.61	0.6888
									48.66	0.8391
									53.29	1.027
									55.73	1.165
									0.3659	13.78

Panel Type = B
Bracket No = 5
Test Type = T,3

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= -150mm
y edge proximity	= 50mm



Peak Loads										
Designation	**B1-5 (T,3)**		**B2-5 (T,3)**		**B3-5 (T,3)**		**B4-5 (T,3)**		**B5-5(T,3)**	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	37.46	0.0369	47.83	0.0009	42.34	25.36	41.71	15.93	37.93	3.019

Test Data

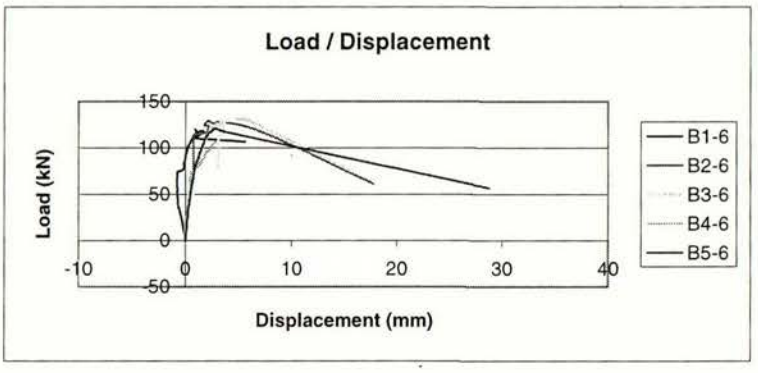
Designation	**B1-5 (T,3)**		**B2-5 (T,3)**		**B3-5 (T,3)**		**B4-5 (T,3)**		**B5-5(T,3)**	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.7561	-0.0007	0.7561	-0.0743	0.0244	-0.0004	-1.098	-0.0004	-1.585	0.0125
	5.146	-0.0007	4.537	0.0009	4.049	0.0122	0.9756	0.0121	-0.4878	0.0125
	7.341	-0.0007	8.561	-0.0116	16.24	0.0122	11.59	0.1499	3.171	0.0125
	15.27	-0.0007	13.32	-0.0116	35.39	0.0122	16.83	0.2626	5.366	0.0125
	20.02	-0.0007	16.73	-0.0241	34.78	0.0247	25.12	0.413	10.24	0.0125
	21.37	-0.0007	20.39	-0.0743	38.93	0.2126	28.78	0.5383	14.15	0.0125
	22.71	-0.0007	24.29	-0.0743	42.34	0.388	30.49	1.052	19.88	0.025
	23.93	-0.0007	27.83	-0.0868	37.1	0.7137	33.78	1.353	25.98	0.0626
	26.49	0.0118	31.49	-0.0241	38.44	1.014	36.46	1.666	30.85	0.1127
	29.78	0.0118	34.41	-0.0743	37.71	1.879	39.27	1.966	33.41	0.3632
	31.49	0.0244	35.76	-0.0743	38.44	2.204	41.46	2.217	34.15	0.927
	33.44	0.0244	36.61	-0.0617	36.24	2.53	41.71	2.392	37.68	1.24
	35.15	0.0244	37.22	-0.0868	37.34	2.981	39.76	2.593	37.93	1.365
	37.46	0.0369	38.44	-0.0241	-0.8293	25.36	-0.9756	15.93	-1.098	3.019
	0.5122	-0.0884	40.02	-0.0743						
			42.59	0.0009						
			41.85	-0.0116						
			43.32	-0.0116						
			45.02	-0.0241						
			46.49	-0.0492						
			44.54	-0.0868						
			46.24	-0.0492						
			47.83	-0.0492						
			0.5122	-0.0868						

Panel Type = B
Bracket No = 6
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Shear x
x edge proximity	=	-100mm
y edge proximity	=	N/A



Peak Loads										
Designation		B1-6 (T,5)		B2-6 (T,5)		B3-6 (T,5)		B4-6 (T,5)		B5-6(T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		119.8	5.616	128.7	17.82	131.7	15.85	128	3.65	120.9	28.78

Test Data

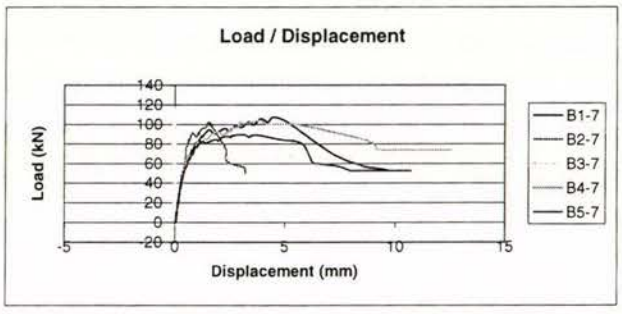
Designation	B1-6 (T,5)		B2-6 (T,5)		B3-6 (T,5)		B4-6 (T,5)		B5-6(T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3902	0.0008	35.27	0.2119	-0.2195	-0.0135	-1.951	0	-0.9756	-0.0002
	10.63	-0.1386	42.95	0.3133	7.341	0.1132	-1.098	-0.0127	9.512	0.1012
	22.46	-0.316	49.9	0.4274	16.98	0.2526	0.3659	-0.038	12.68	0.1393
	35.39	-0.6075	56.85	0.5288	23.2	0.316	3.171	-0.076	17.07	0.1773
	34.66	-0.6202	63.32	0.6048	37.83	0.5315	4.268	-0.076	16.22	0.1646
	40.63	-0.6963	63.32	0.6428	38.93	0.5695	8.293	-0.0634	23.05	0.2153
	46.61	-0.7216	70.02	0.7442	41.61	0.6075	12.56	-0.0253	29.88	0.2787
	53.07	-0.7723	76.85	0.7569	46.12	0.6962	17.56	0.0127	33.41	0.304
	52.46	-0.7596	81.85	0.7696	53.56	0.823	21.59	0.0507	36.71	0.3421
	59.54	-0.785	88.32	0.7696	60.76	0.9371	27.2	0.1141	44.02	0.4181
	64.9	-0.785	89.9	0.7696	65.27	1	34.63	0.2028	43.41	0.4308
	71.37	-0.747	94.17	0.7696	68.32	1.076	41.71	0.2915	50.98	0.5195
	73.68	-0.7343	100.6	0.7696	76.85	1.165	46.22	0.3676	51.59	0.5322
	76.73	-0.1893	102.5	0.7696	76.73	1.191	49.02	0.3802	58.17	0.6209
	83.07	-0.1386	105.8	0.7569	84.29	1.317	56.83	0.3802	65.37	0.7223
	84.17	-0.0879	112.1	0.7696	90.63	1.457	62.07	0.3929	72.44	0.8237
	88.07	-0.0119	113.9	0.7696	94.41	1.507	64.63	0.4436	80.24	0.9377
	94.41	0.0769	116.6	1.961	96.61	1.609	73.54	0.545	79.39	0.9631
	93.68	0.0895	121.7	2.113	101.5	1.685	72.8	0.5703	82.32	1.001
	99.54	0.2163	123.1	2.202	102.3	1.761	80.37	1.293	86.1	1.077
	100.3	0.229	124.5	1.771	108.1	1.85	82.44	1.356	85.37	1.115
	104.2	0.3937	128.7	2.151	107.7	1.926	87.68	1.686	91.22	1.255
	109.2	0.6219	126.1	2.582	113.3	2.04	95.61	1.99	90.61	1.267
	108.1	0.6726	127.7	3.292	112.5	2.103	94.63	2.066	95.73	1.369
	113.2	1.065	122.2	5.903	117.3	2.204	101.6	2.37	94.51	1.394
	112.6	1.154	106.2	9.388	116.4	2.293	102.7	2.471	100.2	1.508
	116.7	1.699	61	17.82	121	2.407	107.3	2.978	99.51	1.533
	118.2	1.572			119.9	2.509	112.1	3.295	104.8	1.66
	116.9	1.142			124	2.623	112.4	3.65	103.9	1.686
	119.8	0.9134			122.8	2.737	115.9	3.625	109.3	1.812
	115.4	1.053			125.6	2.889	117.1	3.587	108.3	1.85
	113.1	0.85			124.3	3.13	118.3	3.574	113.4	1.977
	110.5	0.7359			127.2	3.294	122.3	3.511	112.6	2.04
	106.5	5.616			127.6	3.523	125.7	3.498	117.1	2.231
					126.5	3.637	124.3	3.511	116.2	2.345
					129.5	3.738	126.8	3.511	120.9	2.814
					129.5	3.903	128	3.498	116.8	3.751
					130.8	4.03	124.5	3.207	56.59	28.78
					131.7	4.207	77.44	3.029		
					131	4.308				
					131.5	4.461				
					131.1	4.562				
					130.8	4.714				
					130.4	4.853				
					131.2	4.993				
					131	5.145				
					131	5.335				
					130.6	5.424				
					129.8	5.867				
					73.68	15.85				

Panel Type = B
Bracket No = 7
Test Type = T,2

General Commemts

Variables

he	= 75mm
w	= 50mm
d	= N/A
l	= N/A
Test direction	= Shear y
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation	B1-7 (T,2)		B27 (T,2)		B3-7 (T,2)		B4-7 (T,2)		B5-7(T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	107.5	9.666	102.1	3.221	115.5	0.0125	103.8	12.53	89.51	10.71

Test Data

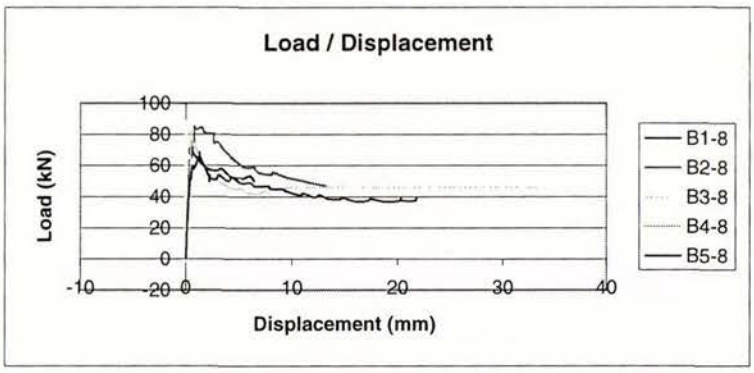
Designation	B1-7 (T,2)		B2-7 (T,2)		B3-7 (T,2)		B4-7 (T,2)		B5-7(T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.0244	-0.0048	1	0.0907	-0.5854	-0.0002	-1.585	-0.0097	-0.4878	0.0001
	5.024	0.0459	14.29	0.1541	6.732	-0.0002	-0.9756	0.0157	-0.3659	0.0127
	7.585	0.0712	40.51	0.3316	16	-0.0002	1.463	0.0284	1.707	0.0254
	26.24	0.1726	39.66	0.3316	25.15	-0.0002	8.659	0.0917	4.268	0.0508
	40.88	0.274	47.83	0.3949	30.39	0.0125	16.22	0.1424	5.976	0.0634
	40.02	0.2867	49.29	0.3949	33.68	-0.0002	22.2	0.1805	8.415	0.0634
	47.59	0.3247	54.41	0.4203	42.95	-0.0002	28.29	0.2058	11.71	0.0888
	56.98	0.4641	62.34	0.471	51.61	-0.0002	32.56	0.2565	15.49	0.1141
	56.24	0.4768	70.51	0.4963	54.54	-0.0002	41.59	0.2945	19.02	0.1268
	65.39	0.5909	75.63	0.509	60.51	-0.0129	50.61	0.3706	18.41	0.1268
	64.54	0.6289	77.59	0.5597	65.39	-0.0002	49.88	0.3832	21.83	0.1522
	73.56	0.7683	84.66	0.6484	68.93	-0.0129	58.9	0.4846	25.24	0.1648
	72.71	0.7937	83.68	0.6738	75.27	-0.0002	68.17	0.6114	27.44	0.1902
	81.24	0.9838	91	0.7878	77.1	-0.0002	67.2	0.6621	31.83	0.2155
	80.27	1.022	86.98	0.9779	86.49	0.0125	74.15	0.9029	37.32	0.2662
	88.07	1.225	91.24	1.067	85.27	-0.0002	82.07	1.03	44.02	0.3169
	87.1	1.263	89.66	1.079	93.68	-0.0002	80.98	1.156	45.24	0.355
	94.41	1.567	93.93	1.181	92.1	-0.0129	86.83	1.549	49.51	0.393
	90.51	1.808	95.39	1.219	96.85	-0.0002	91.95	1.917	50.61	0.431
	95.63	2.289	97.1	1.422	99.41	-0.0129	89.27	2.259	50	0.4183
	92.83	2.454	102.1	1.523	98.44	-0.0129	94.39	2.525	54.15	0.4563
	99.41	2.822	98.32	1.675	97.59	-0.0129	95.73	2.563	57.07	0.5197
	96.61	3.024	100.6	1.688	102.2	-0.0002	97.68	2.855	56.83	0.5451
	102.7	3.379	97.95	1.688	103.2	-0.0002	102.4	2.969	57.93	0.5451
	99.54	3.595	75.39	2.309	102	0.0125	100.9	3.108	62.32	0.6084
	105.8	3.912	62.59	2.359	104.3	-0.0002	103.8	3.881	63.29	0.6591
	102.3	4.241	56.24	3.12	105.9	-0.0129	100.6	4.122	66.71	0.7225
	107.5	4.482	55.39	3.196	103.6	-0.0129	100.4	5.199	69.88	0.7732
	102.5	5.103	54.78	3.209	103	-0.0002	100.7	5.428	69.02	0.8239
	69.9	7.156	54.05	3.209	106.9	-0.0002	93.78	6.834	75	0.9126
	57.34	8.563	52.46	3.196	108.2	-0.0002	82.68	8.799	76.95	1.014
	56.61	8.626	50.88	3.221	106.7	-0.0002	76.46	9.141	76.1	1.027
	53.32	9.666	50.02	3.209	109.3	-0.0002	74.51	9.129	78.54	1.065
					110.5	-0.0129	73.66	9.433	82.2	1.179
					109.5	-0.0129	73.54	12.53	81.83	1.331
					108.8	-0.0129			80.37	1.394
					109.5	-0.0002			81.71	1.546
					108.8	-0.0002			83.78	1.774
					113.1	0.0125			83.66	1.939
					113.8	-0.0002			82.93	1.977
					112.3	-0.0002			86.71	2.167
					111.4	-0.0129			87.56	2.459
					115.5	-0.0129			86.34	2.522
					112.3	-0.0002			88.05	2.598
					111	-0.0129			89.51	3.105
					113.8	-0.0002			87.56	3.359
					108.9	-0.0256			86.83	3.409
					106.5	-0.0382			89.15	3.65
					105.4	-0.0382			84.15	4.816
					108.1	-0.0382			80.24	5.78
					87.1	-0.0382			61.46	6.261
					85.27	-0.0382			59.76	6.502
					85.88	-0.0382			57.07	7.389
					81.49	-0.0382			54.02	7.82
					78.93	-0.0509			53.29	7.883
					78.19	-0.0382			53.05	7.922
					77.22	-0.0509			52.68	7.934
					75.76	-0.0509			52.68	10.71
					76.49	-0.0382				
					74.54	-0.0382				
					73.44	-0.0382				
					72.46	-0.0382				
					71.24	-0.0509				
					70.51	-0.0509				
					69.9	-0.0382				

Panel Type = B
Bracket No = 8
Test Type = T,3

General Commemts

Variables

he	= 75mm
w	= 50mm
d	= N/A
l	= N/A
Test direction	= Shear -x
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation	B1-8 (T,2)		B2-8 (T,2)		B3-8 (T,2)		B4-8 (T,2)		B5-8(T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	70.88	6.489	85.15	13.2	88.32	33.48	82.07	7.937	68.29	21.82

Test Data

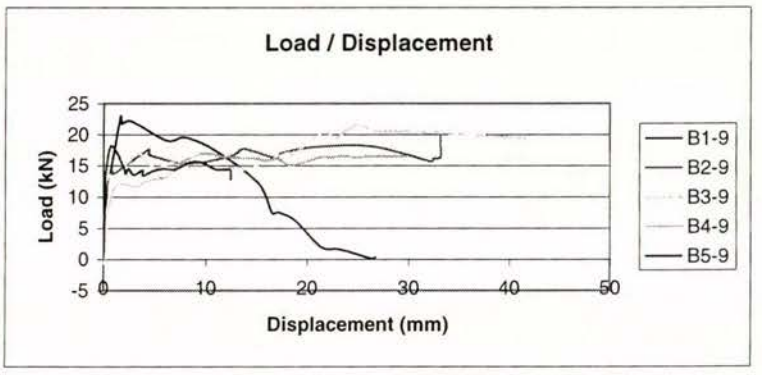
Designation	B1-8 (T,2)		B2-8 (T,2)		B3-8 (T,2)		B4-8 (T,2)		B5-8(T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.0244	0.012	21.24	0.0725	-0.4634	-0.0006	-1.463	0.0159	0.4878	0.0235
	1.976	0.012	27.83	0.0979	10.02	-0.0006	3.293	0.0412	5	0.0488
	13.32	0.0373	29.05	0.1105	30.88	0.0247	11.22	0.1046	11.83	0.0742
	30.39	0.088	31.37	0.1232	46	0.0881	18.9	0.1933	15.85	0.0868
	29.66	0.1007	37.1	0.1612	46.98	0.0881	25.49	0.244	20.24	0.1122
	37.71	0.1641	45.88	0.1992	56.37	0.0881	32.07	0.3074	27.32	0.1502
	45.51	0.2401	44.9	0.2246	64.9	0.0881	38.05	0.3708	28.9	0.1629
	53.2	0.3415	53.32	0.288	63.8	0.0881	45.61	0.4342	35.12	0.2136
	58.56	0.3415	61.24	0.3767	72.1	0.0881	54.27	0.4342	39.39	0.2389
	59.41	0.3415	60.27	0.4274	71.49	0.0754	63.29	0.4468	43.05	0.315
	63.2	0.3415	68.19	0.6175	76.98	0.0754	72.32	0.4468	49.76	0.3657
	66	0.3415	73.68	0.6935	79.29	0.0881	77.68	0.4342	51.59	0.4924
	70.88	0.3415	73.93	0.7949	80.39	0.0881	82.07	0.4468	59.27	0.6572
	68.68	0.3542	80.15	0.8076	85.88	0.0881	77.68	0.4468	58.29	0.7966
	69.29	0.557	78.44	0.7949	83.93	0.0881	72.68	0.6623	65.24	1.189
	64.78	1.013	82.71	0.7949	88.32	0.0881	74.39	0.789	63.41	1.278
	58.93	1.736	85.15	0.7949	84.66	0.0754	58.29	1.803	68.29	1.316
	56.61	2.889	83.07	0.947	87.34	0.0754	51.46	2.944	65.61	1.342
	57.83	3.383	84.41	1.53	75.51	0.0754	49.88	3.045	52.2	2.241
	53.07	4.194	81.24	1.733	73.8	0.0881	45.37	4.198	53.66	2.241
	51.49	5.335	80.39	2.645	71.49	0.0754	44.88	5.39	49.76	2.229
	53.2	6.083	79.05	2.633	68.07	0.0881	43.17	5.529	51.71	2.241
	50.02	6.489	74.29	2.645	67.46	0.0881	41.71	6.771	50.73	2.85
			74.78	3.051	61.37	0.7598	43.78	7.532	53.78	3.091
			68.93	3.723	62.83	0.9626	41.1	7.937	50	3.927
			59.05	5.484	53.8	2.179			52.2	4.447
			58.93	6.435	55.39	2.445			48.78	5.195
			55.51	6.879	51.49	3.345			48.9	6.145
			54.17	8.095	53.07	3.827			46.59	6.576
			55.63	8.222	49.41	4.448			46.83	7.831
			52.22	9.54	50.88	5.132			44.88	7.996
			50.63	10.69	47.71	5.525			44.76	9.25
			48.44	12	47.1	5.551			43.66	9.364
			46.73	13.2	46.37	5.538			40.85	10.92
					45.63	5.551			42.2	11.02
					46	17.96			39.51	12.13
					45.88	33.48			40.98	12.65
									38.66	13.32
									38.05	14.51
									39.39	14.69
									36.83	16.08
									37.56	17.26
									38.78	17.4
									36.71	18.82
									37.32	20.16
									39.27	20.32
									37.44	20.33
									37.32	21.62
									39.15	21.82

Panel Type = B
Bracket No = 9
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Shear -x
x edge proximity	=	-50mm
y edge proximity	=	N/A



Peak Loads										
Designation		B1-9 (T,5)		B2-9 (T,5)		B3-9 (T,5)		B4-9 (T,5)		B5-9(T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		22.95	26.77	19.9	33.09	21.49	41.46	16.95	29.76	18.17	12.48

Test Data

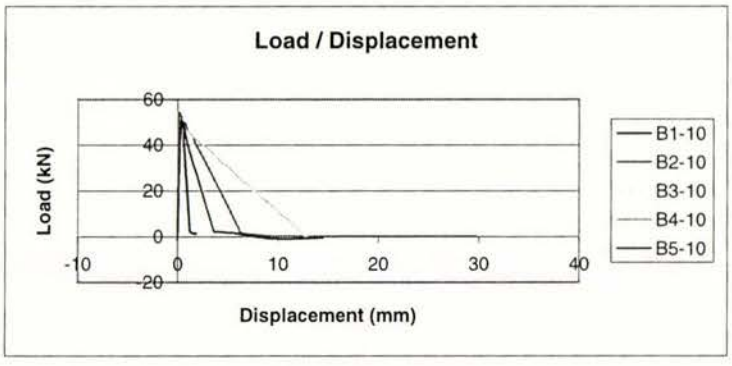
Designation	B1-9 (T,5)		B2-9 (T,5)		B3-9 (T,5)		B4-9 (T,5)		B5-9(T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.0976	0.0118	0.3902	0.0006	-0.3415	0.0126	-0.7317	0.0108	0.3659	0.0087
	3.805	0.0751	9.902	0.1654	13.44	0.6843	2.195	0.0742	7.317	0.11
	8.195	0.1638	14.17	0.8371	12.59	0.735	5.732	0.1629	13.05	0.1861
	22.95	1.647	13.56	0.8498	11.85	0.7477	8.537	0.5431	18.17	0.7438
	21.73	1.761	17.59	4.411	16.85	3.27	11.59	1.088	14.39	2.049
	22.22	2.648	16.73	4.449	14.66	5.019	12.07	1.988	13.66	2.1
	19.05	6.121	15.39	8.315	15.76	7.161	11.59	3.065	13.78	2.201
	19.54	8.009	16.61	12.6	14.17	9.265	12.32	3.902	14.51	2.467
	17.34	11.03	17.71	13.79	14.78	13.11	12.68	4.688	13.54	2.962
	12.22	15.21	16.24	16.92	14.41	14.07	12.93	5.359	14.27	3.786
	7.463	16.53	17.1	17.52	17.1	17.98	13.17	6.069	13.41	3.849
	7.585	17.11	18.07	21.24	16.85	18.61	13.78	6.525	14.15	4.787
	6.244	18.78	18.07	26.52	20.27	21.57	14.27	7.07	14.51	5.788
	1.976	21.39	15.63	32.28	19.41	22.83	15.73	7.78	14.39	6.853
	1.61	23.24	16.12	32.38	21.49	24.7	16.34	8.629	15.12	7.892
	0.1463	26.48	16.37	33.09	20.51	26.88	16.95	9.542	15.73	8.881
	0.3902	26.77	18.2	33.08	20.51	29.21	16.95	10.56	15.24	10.01
			18.93	33.08	19.41	41.46	16.46	11.63	14.39	11.04
			19.9	33.09	18.8	41.46	16.34	12.7	14.39	12.01
							16.22	13.74	14.27	12.44
							16.22	14.83	12.8	12.48
							15.85	16.01		
							16.1	17.11		
							15.12	18.16		
							15.61	19.8		
							16.34	21.23		
							16.34	22.37		
							16.46	22.94		
							16.59	23.56		
							16.34	24.66		
							16.46	26.35		
							16.46	27.98		
							16.46	29.76		

Panel Type = B
Bracket No = 10
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Shear x
x edge proximity	=	150mm
y edge proximity	=	N/A



Peak Loads										
Designation		B1-10 (T,5)		B2-10 (T,5)		B3-10 (T,5)		B4-10 (T,5)		B5-10 (T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		50.88	1.863	54.05	29.81	51.61	2.991	49.02	13.23	50.85	14.46

Test Data

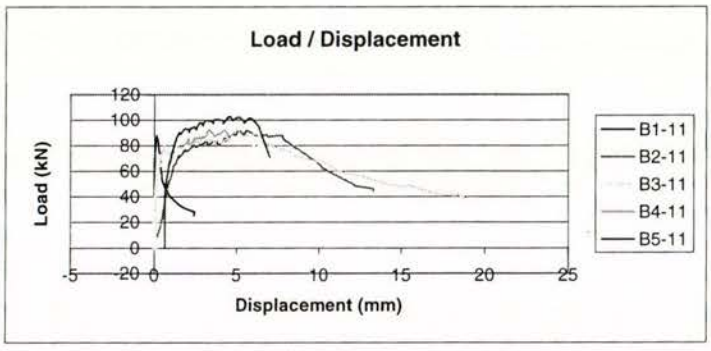
Designation	B1-10 (T,5)		B2-10 (T,5)		B3-10 (T,5)		B4-10 (T,5)		B5-10 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.5122	-0.0004	0.6341	-0.0006	0.0244	0.0126	-1.341	-0.0004	-1.707	-0.0041
	8.073	0.0376	13.56	0.0248	2.463	0.0126	3.537	0.0376	7.927	0.0339
	10.76	0.0376	30.76	0.0501	16.24	0.0887	8.78	0.063	10.37	0.0339
	35.15	0.1517	40.15	0.0501	22.59	0.114	15.73	0.1137	20.73	0.0846
	36.24	0.1771	46.61	0.0628	23.68	0.1267	23.9	0.1644	32.2	0.148
	43.8	0.2658	51.85	0.0755	31.85	0.1774	34.27	0.2277	39.02	0.186
	50.88	0.4432	54.05	0.1389	33.2	0.1901	39.76	0.3545	42.68	0.2113
	2.463	1.216	1.854	6.337	39.54	0.2534	49.02	0.5066	43.66	0.2367
	1.488	1.546	1.732	6.185	47.71	0.3295	47.56	0.5573	42.93	0.2367
	1.366	1.863	0.2683	9.518	47.1	0.3548	-1.463	13.23	50.85	0.3634
			0.2683	9.784	51.61	0.5703			43.41	0.8451
			0.1463	14.23	51	0.9378			37.93	1.137
			0.1463	14.36	9.049	2.991			2.439	3.621
			0.1463	14.51	6	2.991			2.195	3.976
			0.1463	29.81	4.537	2.978			1.951	4.609
					3.195	2.978			1.707	5.306
					0.7561	2.978			1.829	5.446
									-0.8537	9.59
									-0.3659	14.46

Panel Type = B
Bracket No = 11
Test Type = T,1

General Commemts

Variables

he	=	150mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	B1-11 (T,1)		B2-11 (T,1)		B3-11 (T,1)		B4-11 (T,1)		B5-11 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	87.71	2.443	91.85	13.31	86.73	9.021	92.56	19.28	102.9	7.071

Test Data

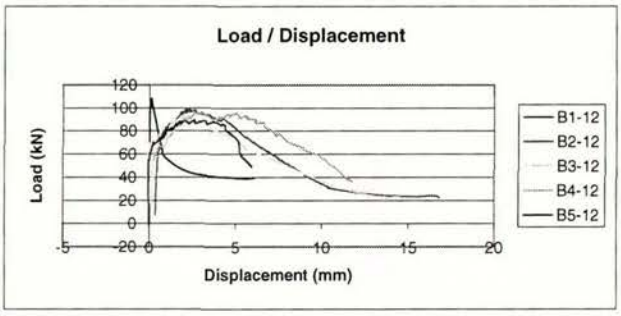
Designation	B1-11 (T,1)		B2-11 (T,1)		B3-11 (T,1)		B4-11 (T,1)		B5-11 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.6341	0	0.5122	0.0097	0.2683	0.0008	-1.22	0.1127	-0.122	0.6323
	7.829	0	1.61	0.0222	3.927	0.0133	0.122	0.1002	1.098	0.6323
	16.73	0	6.61	0.135	7.22	0.0008	5.488	0.1127	1.951	0.6323
	27.59	0	11.49	0.2477	28.93	0.0133	10.85	0.1002	7.195	0.6323
	26.98	0	15.27	0.3229	37.83	0.0133	16.71	0.1002	10.73	0.6323
	36.12	0.0126	16.73	0.3855	50.02	0.0759	25.24	0.1002	13.41	0.6323
	37.59	0.0126	22.59	0.4356	56.49	0.1386	31.1	0.1002	16.22	0.6323
	43.68	0.0126	22.22	0.4857	55.76	0.1386	34.63	0.1002	18.05	0.6323
	50.88	0.0126	27.95	0.5484	63.2	0.2012	44.15	0.1503	23.29	0.6448
	51.73	0.0126	35.02	0.6361	65.02	0.2513	51.83	0.2004	31.46	0.6323
	56.37	0.0126	37.95	0.6486	72.59	0.3265	53.17	0.2129	30.85	0.6323
	63.93	0.0251	41.24	0.7238	64.17	0.4016	58.54	0.2756	36.34	0.6323
	62.83	0.0126	48.32	0.7989	71.98	0.7775	67.93	0.3758	39.02	0.6448
	69.78	0	47.71	0.7989	69.17	0.8276	70.73	0.4008	48.9	0.6949
	68.68	0.0126	53.68	0.9493	74.66	1.216	75.12	0.5011	48.05	0.6949
	64.9	0.0376	53.07	0.9618	73.19	1.216	80	0.7015	50.37	0.7074
	70.88	0.0376	59.41	1.087	77.34	1.579	75.12	0.714	58.17	0.8077
	69.66	0.0376	63.68	1.15	80.51	2.043	73.78	1.127	58.9	0.8327
	75.15	0.0501	65.27	1.275	79.29	2.055	79.27	1.29	67.68	0.9204
	73.56	0.0501	72.22	1.475	83.44	2.581	78.41	1.729	66.59	0.958
	77.22	0.0627	70.76	1.5	81.85	2.644	84.88	2.08	67.32	0.958
	82.46	0.0627	76.61	1.889	86.61	3.02	80	2.08	76.46	1.121
	80.02	0.0752	75.27	1.939	83.93	3.108	86.22	2.468	75.24	1.133
	82.71	0.0877	80.15	2.453	84.29	3.534	85.37	2.468	77.68	1.158
	86.24	0.1003	78.93	2.528	81.61	3.684	87.32	3.044	83.78	1.296
	84.29	0.1003	82.83	3.192	83.93	3.759	92.56	3.357	90.24	1.509
	85.88	0.1128	80.76	3.254	83.07	4.072	87.56	3.658	88.78	1.572
	87.71	0.1378	83.68	3.768	82.34	4.072	91.71	4.284	92.93	1.835
	87.1	0.1378	80.51	3.906	85.63	4.498	87.56	4.547	91.95	2.098
	85.51	0.1629	85.88	4.307	83.68	4.498	92.2	5.036	90.37	2.111
	85.51	0.2005	83.68	4.307	86.73	4.949	87.68	5.437	92.44	2.148
	84.41	0.213	89.66	4.795	82.59	5.212	88.54	6.326	94.51	2.411
	75.51	0.2882	86.98	4.883	83.68	5.563	81.22	6.878	93.54	2.511
	70.39	0.3633	91.49	5.159	79.29	6.102	74.88	8.281	92.56	2.524
	54.17	0.4636	88.68	5.422	78.32	6.114	72.32	8.469	97.68	2.749
	50.15	0.5512	91.85	5.685	77.59	6.315	67.32	9.872	97.07	2.937
	45.27	0.7141	88.07	6.161	76.98	6.315	67.68	10.24	95.73	2.95
	46.98	0.7141	88.32	6.875	80.39	6.528	59.51	11.32	99.76	3.113
	41.49	0.877	86.85	6.963	76	7.204	55.85	12.57	98.9	3.526
	38.93	1.065	87.59	7.789	77.71	7.555	50.12	13.93	97.56	3.564
	35.63	1.328	84.29	7.965	64.9	9.021	47.8	15.16	100.4	3.664
	31.85	1.704	64.9	10.06			49.02	15.36	99.88	4.14
	29.29	2.205	61.61	10.32			43.9	16.59	98.29	4.178
	28.44	2.443	49.41	12.16			40.98	17.79	97.44	4.19
	26.85	2.443	48.32	12.21			41.83	18.23	102.9	4.541
	26.12	2.418	46	13.26			36.83	19.28	100.5	4.741
	25.51	2.418	44.66	13.31					99.88	4.779
									102.4	5.167
									99.27	5.43
									97.8	5.468
									101.6	5.856
									96.83	6.257
									94.27	6.395
									70.49	7.071

Panel Type = B
Bracket No = 12
Test Type = T,1

General Commemts

Variables

he	= 150mm
w	= 100mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation	B1-12 (T,1)		B2-12 (T,1)		B3-12 (T,1)		B4-12 (T,1)		B5-12 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	108.4	6.114	99.63	12.16	92.83	3.608	96.59	9.734	89.02	5.97

Test Data

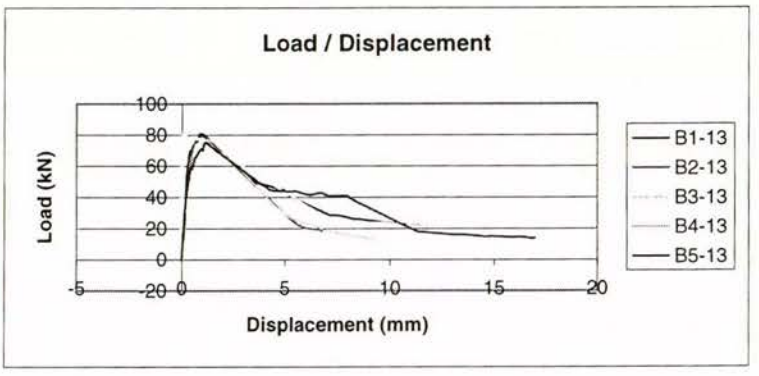
Designation	B1-12 (T,31)		B2-12 (T,1)		B3-12 (T,1)		B4-12 (T,1)		B5-12 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	66.98	0.0126	7.675	0.3635	0.0244	0	-1.098	-0.0003	-1.585	0.0071
	72.46	0.0126	11.82	0.3761	0.6341	0	4.024	0.0874	-0.4878	-0.0054
	78.32	0.0126	16.21	0.3761	6.854	0.0125	4.634	0.0748	1.585	-0.0054
	80.51	0.0251	21.82	0.3761	10.02	0	17.32	0.1124	6.22	-0.0054
	82.34	0.0126	23.89	0.3761	30.02	-0.0501	25.37	0.1375	10.85	-0.0179
	88.56	0.0126	26.58	0.3886	29.17	-0.0376	33.66	0.1375	16.1	-0.0179
	89.41	0.0251	29.75	0.3886	31.85	-0.0376	39.88	0.1625	18.78	-0.0304
	91.49	0.0126	33.41	0.4137	38.07	-0.0501	43.29	0.1625	21.95	-0.0304
	96.85	0.0126	35.85	0.4137	39.66	-0.0626	53.78	0.2252	28.9	-0.043
	95.27	0.0251	39.99	0.4387	42.34	-0.0626	52.93	0.2377	36.59	-0.043
	97.34	0.0251	44.5	0.4512	47.22	-0.0626	60.73	0.4131	39.27	-0.043
	101.4	0.0376	47.92	0.4763	51	-0.0626	66.46	0.5634	41.83	-0.0555
	100.1	0.0376	52.8	0.4763	57.22	-0.0626	65.85	0.8515	49.39	-0.043
	102	0.0502	52.19	0.4763	56.12	-0.0626	74.15	1.027	54.27	-0.0179
	105.8	0.0752	56.94	0.5139	63.2	-0.0251	74.63	1.127	55.85	0.0322
	103.1	0.0752	59.14	0.5139	62.22	-0.0251	79.51	1.365	63.9	0.0948
	104.3	0.0877	61.09	0.5139	69.17	0.0125	86.71	1.591	62.68	0.1074
	108.4	0.1128	66.46	0.589	68.56	0.0376	84.63	1.754	70	0.2076
	103.4	0.1128	65.6	0.589	69.05	0.3132	90.24	2.054	68.41	0.2326
	105.1	0.1629	70.72	0.6266	67.83	0.3257	88.9	2.054	70.12	0.4206
	106.2	0.1629	73.89	0.6642	75.39	0.4886	93.17	2.53	74.02	0.5959
	100.9	0.2005	74.63	0.7143	74.78	0.5011	94.27	2.53	72.56	0.6085
	80.88	0.4636	80.36	0.8145	81	0.689	95.37	2.994	76.22	0.7463
	61.98	0.7392	77.8	0.8521	80.39	0.7015	96.59	3.006	73.41	0.7964
	60.15	0.7893	83.28	0.9649	85.63	0.902	89.88	3.633	79.02	0.8966
	54.54	1.14	80.48	0.9899	84.66	0.9771	88.66	3.645	77.07	0.9342
	46.49	1.954	86.7	1.115	88.8	1.178	92.2	4.096	80.98	0.9843
	41.73	3.107	85.24	1.103	87.22	1.24	90.73	4.109	80.12	1.122
	38.93	5.575	89.26	1.19	86.24	1.24	94.39	4.597	81.22	1.172
	39.29	6.114	84.75	1.291	85.63	1.24	92.32	4.672	82.68	1.297
			89.63	1.504	84.66	1.24	95.12	4.961	81.34	1.335
			92.31	1.691	84.41	1.328	93.41	5.161	86.1	1.536
			96.46	1.879	84.05	1.315	92.07	5.211	84.02	1.561
			94.14	1.892	83.44	1.315	91.1	5.211	88.05	1.736
			99.02	2.117	82.83	1.315	93.17	5.637	85.98	1.811
			95.48	2.117	82.22	1.315	90.61	5.7	88.41	1.949
			99.63	2.368	83.68	1.315	89.51	6.138	87.68	2.199
			96.7	2.355	89.29	1.503	86.95	6.201	85.98	2.237
			97.92	2.669	84.66	1.591	86.71	6.627	89.02	2.588
			95.36	2.719	90.39	1.804	83.17	6.689	86.46	2.65
			93.65	3.32	87.95	1.854	79.15	7.203	88.66	3.202
			93.77	3.433	92.34	1.979	76.22	7.291	85.61	3.327
			88.77	4.122	89.78	2.117	75.24	7.316	87.8	3.778
			90.48	4.322	92.83	2.167	77.2	7.491	84.76	4.141
			71.09	5.926	90.63	2.38	70.24	8.08	85.98	4.204
			38.04	9.521	89.29	2.769	69.51	8.168	84.76	4.392
			32.31	10.31	86.98	2.881	65.49	8.869	84.15	4.404
			30.72	10.44	84.41	3.508	63.66	8.957	81.34	4.404
			26.33	12.16	81.49	3.608	59.51	9.734	71.1	5.118
			24.5	13.27	72.83	5.061	58.41	9.834	60.85	5.244
			23.65	14.32	64.78	5.625	50.12	10.64	53.66	5.682
			23.28	15.53	53.07	7.529	48.9	10.7	53.05	5.72
			24.14	16.5	52.71	7.654	38.29	11.54	49.02	5.97
			22.68	16.81	52.34	7.642	36.46	11.78		
					36.37	10.06				
					31.98	10.94				
					26.37	12.2				
					22.95	13.49				
					22.83	14.38				
					22.46	14.76				
					21.49	15.61				

Panel Type = B
Bracket No = 13
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Shear -x
x edge proximity	=	N/A
y edge proximity	=	-150mm



Peak Loads										
Designation	B1-13 (T,5)		B2-13 (T,5)		B3-13 (T,5)		B4-13 (T,5)		B5-13 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	80.63	10.73	78.8	6.793	81.24	11.94	76.95	9.217	75	16.98

Test Data

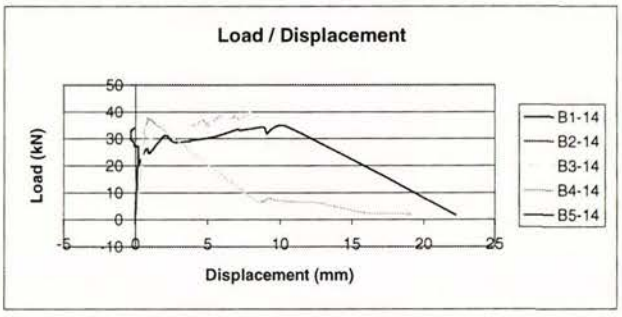
Designation	B1-13 (T,5)		B2-13 (T,5)		B3-13 (T,5)		B4-13 (T,5)		B5-13 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0	-0.0004	0.6341	-0.0001	-0.2195	-0.0008	-0.7317	-0.0225	-0.2439	-0.0046
	6.854	0.0376	1.976	-0.0001	10.63	0.0118	0.7317	-0.0098	5.488	0.0081
	15.27	0.1137	12.22	0.0759	20.15	0.0118	6.098	0.0282	15.61	0.0588
	14.29	0.101	13.07	0.0886	40.63	0.0245	14.39	0.0535	21.83	0.0968
	24.41	0.139	20.15	0.1393	48.8	0.0245	23.41	0.1169	27.93	0.1221
	41.73	0.2024	40.02	0.2153	51.12	0.0118	32.93	0.1803	28.66	0.1348
	40.76	0.2024	38.93	0.228	58.56	0.0245	43.05	0.2563	36.22	0.1728
	47.46	0.2151	48.44	0.2787	64.41	0.0118	54.15	0.3704	43.54	0.2489
	50.88	0.2277	57.95	0.3421	66.85	0.0245	65	0.4591	42.93	0.2489
	53.68	0.2277	66.85	0.4562	74.78	0.0118	64.27	0.5478	51.34	0.3249
	60.27	0.2911	75.27	0.6336	81.24	0.0752	71.71	0.9281	50.61	0.3376
	69.66	0.4052	78.8	0.8871	79.41	0.1132	76.95	1.258	59.51	0.4517
	68.8	0.4686	77.46	1.255	76.98	0.8103	72.93	1.79	58.29	0.4897
	72.1	0.5066	24.17	5.45	27.22	6.995	30.12	4.92	65.24	0.6671
	76.49	0.6967	19.29	6.654	25.88	7.147	21.83	6.492	70.85	0.9586
	75.39	0.7474	18.44	6.743	23.32	8.453	20.12	6.72	69.88	1.022
	80.63	1.001	18.2	6.793	23.56	9.657	19.51	6.771	75	1.161
	52.34	3.358			21.85	10.87	18.9	6.834	70.98	1.58
	50.39	3.485			22.22	11.13	16.46	7.823	63.17	2.378
	49.78	3.536			21.49	11.94	13.05	9.217	45	4.254
	44.78	4.917							44.39	4.368
	41.98	5.171							43.78	5.369
	41.12	5.221							43.9	5.534
	28.93	7.123							41.71	6.206
	28.32	7.199							42.8	6.738
	28.32	7.553							40.85	7.156
	26	8.365							40.85	7.968
	26.24	8.479							38.54	8.221
	24.05	9.619							18.41	11.22
	22.71	10.73							17.93	11.44
									15.98	13.13
									15.98	13.56
									14.76	14.65
									15	14.89
									14.39	15.83
									14.63	16.37
									13.66	16.78
									13.9	16.98

Panel Type = B
Bracket No = 14
Test Type = T,3

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= -50mm
y edge proximity	= 187mm



Peak Loads										
Designation	B1-14 (T,3)		B2-14 (T,3)		B3-14 (T,3)		B4-14 (T,3)		B5-14 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	34.66	22.27	0	0	37.22	5.048	37.68	19.07	34.02	0.1903

Test Data

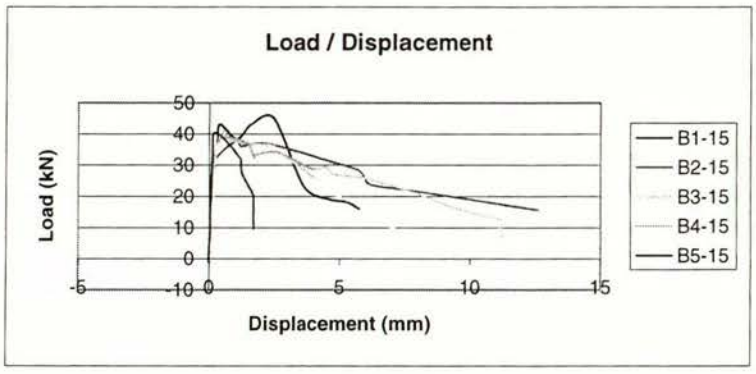
Designation	B1-14 (T,3)		B2-14 (T,3)		B3-14 (T,3)		B4-14 (T,3)		B5-14 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.7561	0.0125			-0.2195	-0.0004	0	0	-1.463	0.0024
	5.146	0.0125			3.317	0.0122	28.41	0.5879	-0.7317	-0.0102
	13.68	0.0752			7.098	0.0497	31.71	0.6004	0.8537	-0.0102
	19.05	0.1503			12.46	0.0873	34.27	0.6004	2.317	-0.0102
	26.49	0.7892			18.56	0.175	36.22	0.8384	3.902	0.0149
	24.54	0.9646			25.88	0.2752	37.68	0.851	5.976	0.0274
	28.8	1.641			25.39	0.3755	6.829	8.368	8.78	0.0525
	31.24	2.117			22.83	0.413	7.805	9.207	11.46	0.0901
	28.68	2.643			23.8	0.4506	6.951	9.946	15	0.1151
	29.05	3.808			23.93	0.4882	6.585	11.12	18.41	0.1527
	29.41	3.921			26	0.5383	6.463	12.34	19.27	0.1652
	30.51	5.374			26.98	0.5634	5.366	13.33	20.73	0.1778
	33.56	7.078			28.8	0.5634	3.659	14.86	23.05	0.1903
	33.07	7.228			27.83	0.5759	2.439	15.93	23.9	0.1778
	34.17	8.857			27.1	0.8264	2.195	16.92	26.1	0.1778
	33.07	8.982			28.56	0.8766	2.195	18.53	27.32	0.1778
	32.46	9.02			28.8	0.9517	2.073	19.07	27.2	-0.0477
	31.98	9.083			29.9	1.064	1.829	19.07	28.9	-0.148
	31.73	9.083			30.63	1.202	1.951	18.77	29.27	-0.2607
	34.66	10.36			31.98	1.24			29.76	-0.3108
	1.732	22.27			32.1	1.34			31.22	-0.3233
					33.68	1.44			32.2	-0.3108
					32.46	1.44			32.8	-0.3233
					33.44	1.503			34.02	-0.0477
					34.66	1.553				
					33.8	1.591				
					34.66	1.728				
					33.8	1.753				
					34.17	1.904				
					34.9	2.004				
					33.8	2.167				
					34.66	2.342				
					33.8	2.342				
					33.93	2.58				
					35.27	2.793				
					33.56	2.931				
					34.05	3.257				
					34.66	3.633				
					36.73	3.908				
					35.02	4.034				
					36	4.409				
					37.22	4.597				
					36.24	4.873				
					35.63	4.936				
					35.02	4.948				
					34.41	4.936				
					34.9	5.048				
					33.56	5.036				
					34.17	5.036				
					37.59	5.236				
					36.49	5.336				
					37.71	5.712				
					38.44	5.825				
					37.71	6.063				
					36.98	6.451				
					38.56	6.765				
					37.83	6.877				
					37.22	7.153				
					38.2	7.428				
					38.8	7.704				
					40.02	7.917				
					38.2	8.092				
					38.32	8.493				

Panel Type = B
Bracket No = 15
Test Type = T,5

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= N/A
l	= N/A
Test direction	= Shear y
x edge proximity	= -100mm
y edge proximity	= 137mm



Peak Loads										
Designation	B1-15 (T,5)		B2-15 (T,5)		B3-15 (T,5)		B4-15 (T,5)		B5-15 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	45.15	5.754	37.95	12.62	41.12	8.15	38.78	11.27	40.24	1.711

Test Data

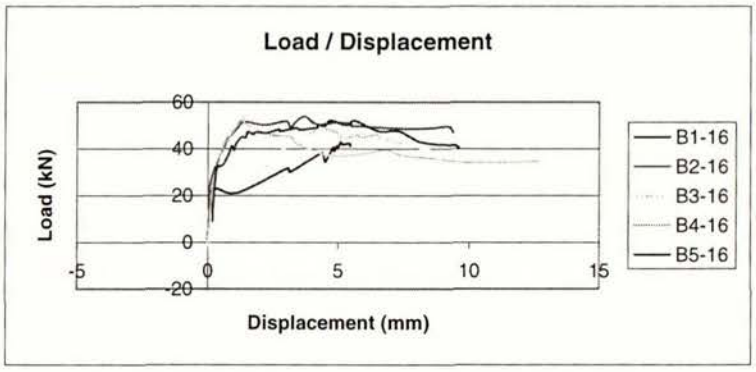
Designation	B1-15 (T,5)		B2-15 (T,5)		B3-15 (T,5)		B4-15 (T,5)		B5-15 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.2683	0.0121	14.41	0.0831	-0.7073	0	-0.3659	-0.0124	-1.463	0.0248
	3.317	0.0248	30.27	0.1591	0.1463	0.0126	0.9756	0.0003	-0.6098	-0.0005
	5.39	0.0248	37.95	1.072	0.878	0.0126	10.37	0.0383	3.537	0.0122
	30.15	0.2276	36	1.224	4.049	0.0253	17.07	0.0636	8.902	0.0375
	38.07	0.3416	36.73	2.288	7.707	0.038	33.29	0.1904	15.37	0.0502
	37.22	0.3416	28.56	5.685	12.1	0.0887	32.68	0.203	20.49	0.0882
	43.07	0.405	27.59	5.837	15.63	0.114	38.78	0.4946	26.1	0.1009
	38.32	1.064	26.37	5.939	22.1	0.1647	36.95	1.458	34.51	0.1389
	43.07	1.622	23.68	6.192	29.29	0.2154	34.27	1.635	40.24	0.1896
	45.15	2.458	21.24	8.22	30.76	0.2281	33.41	1.673	38.17	0.5952
	23.44	3.624	15.63	12.62	35.76	0.3168	32.68	1.711	32.07	1.204
	19.05	4.626			41.12	0.5069	32.44	1.737	30.85	1.229
	18.2	5.285			38.32	0.7351	31.95	1.749	27.32	1.267
	16	5.754			36.61	1.698	33.17	1.749	22.56	1.571
					36.24	2.471	34.02	2.637	20.24	1.698
					33.8	2.738	28.9	3.929	18.17	1.698
					24.41	4.322	29.27	4.5	15.61	1.711
					20.39	4.867	27.07	4.791	15	1.711
					16.61	6.071	26.22	5.678	12.68	1.698
					15.51	7.022	24.39	6.642	11.22	1.711
					14.66	7.022	21.1	7.833	10.37	1.711
					13.32	7.034	17.32	9.037	9.512	1.711
					11.12	7.009	14.27	10.24	10.12	1.711
					10.02	7.009	12.56	11.19		
					4.902	8.15	10.61	11.22		
					3.683	8.15	8.902	11.22		
							6.585	11.2		
							7.927	11.24		
							8.537	11.24		
							7.927	11.26		
							7.195	11.27		

Panel Typ = B
Bracket N = 16
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test directi	=	Shear -x
x edge pro:	=	-100mm
y edge pro:	=	137mm



Peak Loads										
Designation		B1-16 (T,5)		B2-16 (T,5))		B3-16 (T,5)		B4-16 (T,5)		B5-16 (T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		42.83	5.462	53.93	9.379	51.24	13.54	53.66	12.69	52.07	9.619

Test Data

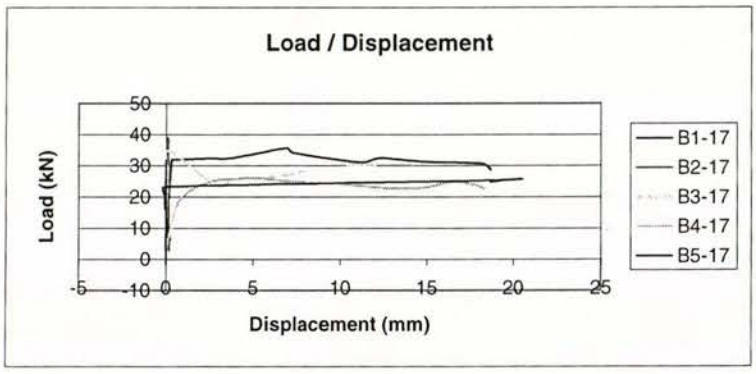
Designation	B1-16 (T,5)		B2-16 (T,5)		B3-16 (T,5)		B4-16 (T,5)		B5-16 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	1.244	-0.0131	1	0.0124	-0.2195	0.0125	-1.463	0.0066	8.902	0.1898
	13.56	0.0757	9.659	0.0251	0.5122	0.0125	-0.6098	0.0193	16.46	0.2151
	22.83	0.2404	11.37	0.0377	3.561	0.0379	0.3659	0.0066	22.93	0.2658
	21.12	1.14	10.76	0.0377	4.171	0.0506	3.171	0.0193	29.51	0.3165
	31.73	3.067	11.37	0.0377	6.854	0.0632	8.415	0.0827	32.2	0.3672
	30.02	3.156	13.32	0.0377	10.39	0.0886	13.78	0.1207	33.05	0.5954
	38.2	4.36	12.71	0.0504	14.78	0.1139	19.76	0.1714	37.32	0.8108
	36.12	4.448	24.05	0.0758	18.44	0.1266	25.73	0.2348	41.22	0.9503
	35.51	4.461	32.34	0.2912	20.15	0.1393	30.73	0.3869	39.27	1.026
	34.9	4.486	31.61	0.3166	21.85	0.1773	35.73	0.4883	42.2	1.102
	34.29	4.512	37.1	0.4813	25.39	0.2407	41.1	0.615	45	1.318
	40.51	4.803	41.85	0.6841	28.93	0.4308	42.44	0.653	44.88	1.47
	38.93	4.854	44.66	0.7728	25.27	0.9504	43.78	0.7924	47.2	1.546
	41.24	4.955	45.39	0.8996	25.76	1.508	46.83	0.9572	46.22	1.774
	40.15	4.981	48.32	1.102	29.78	1.952	50.73	1.198	47.07	1.85
	42.83	5.095	51.49	1.407	33.8	2.408	53.66	1.375	46.71	2.256
	41.85	5.158	50.15	2.192	38.2	2.826	50.61	1.451	48.29	2.712
	42.22	5.424	51.73	3.004	42.71	3.067	49.15	1.756	47.44	2.801
	41.12	5.462	49.17	3.168	41.85	3.257	45.73	2.503	48.9	3.396
			52.1	3.434	46.12	3.637	45.12	3.175	48.17	3.523
			53.93	3.713	45.15	3.688	41.95	3.467	49.15	4.208
			50.76	4.094	47.71	4.106	37.07	4.671	50.24	4.208
			50.63	4.499	46.98	4.132	37.32	5.609	49.88	4.512
			51.37	5.031	51.24	4.284	38.78	6.42	52.07	4.702
			50.51	5.488	49.41	4.36	39.39	6.838	50.12	5.323
			49.66	5.488	46.49	5.044	36.95	7.522	51.95	5.64
			49.66	5.805	44.29	5.184	35.85	8.587	47.44	6.565
			49.05	6.641	46	5.767	34.27	9.728	47.56	7.325
			48.68	7.237	44.78	5.843	34.02	10.75	42.8	8.187
			48.56	7.959	46.12	6.502	34.15	11.77	41.34	9.493
			48.8	8.631	44.66	6.603	34.76	12.69	40	9.619
			49.54	9.214	28.44	12.55				
			47.1	9.379	27.22	12.55				
					26.61	12.56				
					27.34	13.14				
					26.73	13.16				
					26	13.17				
					25.39	13.17				
					25.39	13.54				

Panel Type = B
Bracket No = 17
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	150mm
y edge proximity	=	87mm



Peak Loads										
Designation	B1-17 (T,3)		B2-17 (T,3)		B3-17 (T,3)		B4-17 (T,3)		B5-17 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	35.63	18.7	38.68	0.251	34.66	14.18	26.1	18.33	31.71	20.54

Test Data

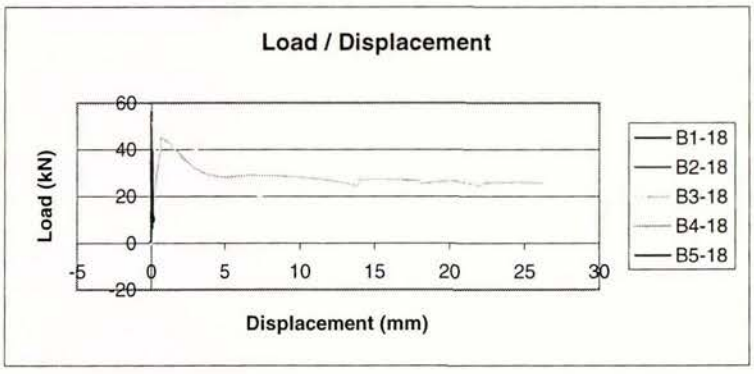
Designation	B1-17 (T,3)		B2-17 (T,3)		B3-17 (T,3)		B4-17 (T,3)		B5-17 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.6341	-0.0002	0.5122	0.0129	-0.0976	0.0125	-1.098	-0.0014	-1.707	-0.0019
	4.049	0.0123	3.927	-0.0121	3.927	0.0125	-0.4878	-0.014	0.122	-0.0019
	10.76	0.0499	12.1	0.0004	10.63	0	1.585	0.0236	1.951	-0.0019
	13.2	0.0875	27.71	0.0255	14.54	0.0375	4.39	0.0737	6.707	-0.0144
	30.02	0.2754	30.02	0.0255	24.54	0.0751	7.561	0.1865	10	-0.0019
	31.98	0.3506	35.15	0.0505	28.2	0.1127	14.15	0.437	14.02	-0.0019
	31.85	0.3881	34.29	0.0756	34.66	0.1879	18.29	0.6876	19.27	-0.0019
	32.34	2.555	38.68	0.1006	23.2	2.869	21.34	1.201	23.78	-0.0019
	32.46	3.771	37.34	0.1382	23.56	3.257	24.02	2.116	28.05	-0.0019
	35.63	6.877	37.95	0.1132	22.83	3.37	25.49	3.068	30.49	-0.0019
	34.17	7.266	2.707	0.1883	25.27	3.683	25.73	3.895	31.71	-0.0019
	31.12	11.14	3.439	0.1758	26.85	6.677	26.1	4.797	30.37	-0.0019
	32.46	12.31	7.829	0.2134	29.41	8.832	25.49	6.074	16.34	-0.0395
	31.24	14.82	6.488	0.251	28.2	10.22	25	7.24	18.54	-0.0645
	30.63	18.15			30.02	10.5	24.88	8.555	20.61	-0.0645
	28.56	18.7			30.39	14.02	24.27	9.745	23.17	-0.0896
					30.39	14.18	23.66	10.82	25.24	18.73
							23.17	11.81	25.73	20.54
							22.8	12.69	25.49	19.75
							22.8	13.63	24.76	18.69
							22.8	14.46		
							23.29	15.23		
							24.88	16.53		
							23.9	17.67		
							22.56	18.33		

Panel Type = B
Bracket No = 18
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	150mm
y edge proximity	=	187mm



Peak Loads										
Designation	B1-18 (T,3)		B2-18 (T,3)		B3-18 (T,3)		B4-18 (T,3)		B5-18 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0	0	56.37	0.1142	51.85	11.58	45	26.25	39.88	0.2006

Test Data

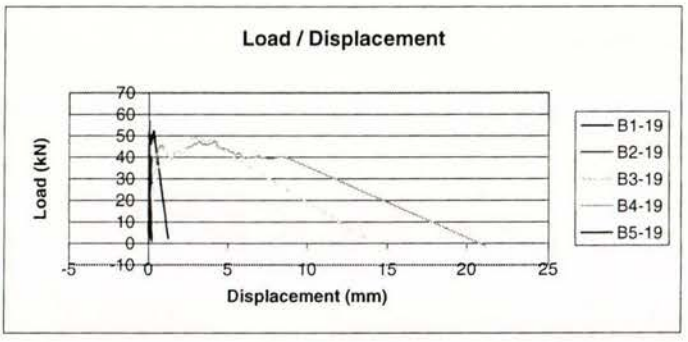
Designation	B1-18 (T,3)		B2-18 (T,3)		B3-18 (T,3)		B4-18 (T,3)		B5-18 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
			0.5122	-0.0487	-0.0976	-0.0004	0.4878	0.0044	0.6098	0.0002
			5.268	-0.0236	1.976	-0.0004	12.68	0.042	1.22	0.0002
			9.171	-0.0361	9.78	-0.0004	14.02	0.067	4.39	0.0002
			26.73	-0.0236	12.46	-0.0004	37.8	0.5556	8.902	0.0127
			26.12	-0.0487	23.2	-0.0004	36.71	0.5932	11.46	0.0002
			32.1	-0.0361	36.12	0.175	40.85	0.6433	15.61	0.0127
			37.59	-0.0236	41.85	0.2376	45	0.7936	24.51	0.0002
			44.41	-0.0236	45.15	0.2752	32.32	2.911	31.59	0.0127
			49.9	-0.0111	46.37	0.3128	28.29	4.665	35.98	0.0252
			56.37	0.014	51	0.4005	29.02	6.832	39.88	0.0377
			55.15	0.0015	48.07	0.5884	28.41	9.4	39.02	0.0628
			51.49	-0.0236	51.85	0.651	26.46	12.31	14.27	0.1004
			53.68	-0.0236	50.63	0.7011	24.51	13.92	12.2	0.138
			55.63	0.0015	0.6341	11.58	27.07	14.01	11.22	0.163
			52.83	-0.0236			26.71	17.84	10.24	0.2006
			51.98	-0.0111			25.49	17.99	9.268	0.2006
			53.8	-0.0111			26.46	20.21		
			51.73	-0.0111			24.39	22.15		
			53.56	0.0015			25.73	22.33		
			52.59	0.0015			25.73	25.85		
			53.93	-0.0236			25.49	26.25		
			56.37	0.0015						
			54.41	-0.0111						
			7.098	0.1142						
			9.415	0.1142						

Panel Type = B
Bracket No = 19
Test Type = T,3

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= -150mm
y edge proximity	= 187mm



Peak Loads										
Designation	B1-19 (T,3)		B2-19 (T,3)		B3-19 (T,3)		B4-19 (T,3)		B5-19 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	52.1	1.265	40.63	0.2511	49.05	13.63	47.44	21.15	56.59	0.2004

Test Data

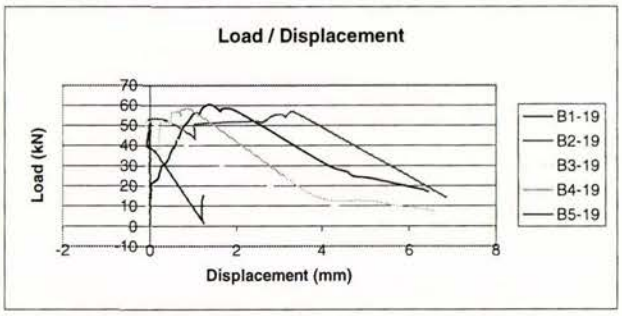
Designation	B1-19 (T,3)		B2-19 (T,3)		B3-19 (T,3)		B4-19 (T,3)		B5-19 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3902	0	0.3902	0.013	0.0244	-0.0004	-0.6098	0.0271	0	0
	2.098	0	3.439	0.013	2.463	-0.0004	1.098	0.0145	0.7317	0
	8.805	-0.0126	12.95	0.013	12.34	0.0748	2.195	0.0271	3.293	0
	10.27	0	14.66	0.013	11.73	0.0873	5.61	0.0772	4.634	0
	24.41	0	26.61	0.0882	26.37	0.2753	7.805	0.1022	8.293	0.0125
	29.41	0	28.44	0.0256	27.46	0.3504	10.37	0.1148	11.95	0
	28.8	0.0125	29.29	0.0256	31.12	0.4005	14.88	0.1398	13.66	0
	34.29	0.0125	32.1	0.0506	35.51	0.5133	19.63	0.2275	15.98	0
	39.17	0.0125	35.63	0.0256	35.39	0.8014	25.24	0.3403	21.46	0.0125
	39.9	0.0125	36.98	0.0632	38.56	1.027	31.1	0.3403	25.61	0.0125
	42.95	0.0125	37.95	0.1007	37.1	1.102	35.37	0.4781	30.37	0.0125
	46.73	0.0125	39.41	0.0632	39.66	1.29	36.46	0.4781	34.27	0.025
	46.12	0.0125	40.63	0.0632	42.59	1.49	41.95	0.5658	38.9	0.0125
	42.59	0.025	38.32	0.0757	41.61	1.553	45.37	0.8163	44.63	0.025
	46.37	0.025	38.07	0.1133	44.17	1.754	39.88	1.317	50.12	0.0125
	45.27	0.025	37.34	0.1133	47.1	1.904	39.39	1.468	51.59	0.0125
	49.05	0.0375	38.44	0.0757	46	1.979	42.68	1.768	48.78	0.025
	48.07	0.0375	36.49	0.1007	48.2	2.192	41.46	2.132	53.17	0.0375
	46.61	0.0751	38.2	0.1759	48.2	2.555	43.78	2.307	56.59	0.0501
	47.22	0.0751	36.98	0.1508	49.05	2.931	45.24	2.758	5.854	0.1503
	46	0.0751	36	0.1383	48.44	3.031	46.71	3.059	5.244	0.1503
	48.93	0.1002	37.46	0.1007	47.46	3.708	47.07	3.159	3.049	0.1753
	46.12	0.1127	36.61	0.1258	48.44	4.221	45.98	3.422	1.341	0.2004
	46.73	0.1127	35.76	0.1133	44.05	4.535	46.1	3.835		
	47.71	0.1378	37.59	0.1759	2.707	13.63	47.44	4.186		
	46.73	0.1503	36.61	0.1383			44.51	4.387		
	46.12	0.1628	35.51	0.1508			43.66	4.913		
	48.07	0.1753	36.37	0.201			41.34	5.477		
	48.68	0.1879	35.51	0.1383			42.2	5.74		
	47.71	0.2004	36.73	0.1884			39.76	5.953		
	48.56	0.2129	37.46	0.226			39.88	6.504		
	49.17	0.2129	36.49	0.1383			40.61	6.955		
	50.76	0.2505	37.1	0.1634			40	6.967		
	49.05	0.2756	38.44	0.201			39.39	7.443		
	50.88	0.2756	37.71	0.1634			39.39	7.945		
	49.66	0.2881	39.54	0.1508			40.37	8.408		
	52.1	0.3131	38.2	0.1759			38.9	9.009		
	50.02	0.3131	39.66	0.1634			-1.098	21.15		
	51.49	0.3382	37.95	0.1634						
	50.51	0.3382	38.8	0.2511						
	51.85	0.3633	39.9	0.1759						
	46.61	0.3758	38.44	0.1884						
	49.66	0.4008	39.41	0.2135						
	47.34	0.4259	38.44	0.201						
	2.463	1.265	37.83	0.2135						
			40.39	0.201						
			39.54	0.1884						
			29.05	0.201						
			28.44	0.201						
			27.34	0.226						
			26.61	0.2135						
			27.22	0.201						
			28.56	0.2135						
			27.59	0.2135						
			1.366	0.2385						

Panel Type = B#2
Bracket No = 1
Test Type = T,3

General Commemts

Variables

h_e	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Shear
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		B1-19 (T,3)		B2-19 (T,3)		B3-19 (T,3)		B4-19 (T,3)		B5-19 (T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		6.651	14.921	0	0	37.97	25.509	0	0	31.44	10.27

Test Data

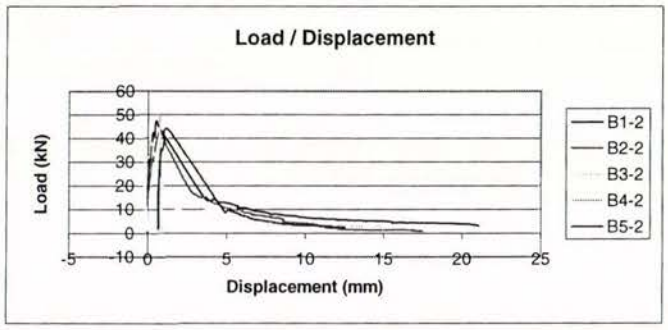
Designation	B1-19 (T,3)		B2-19 (T,3)		B3-19 (T,3)		B4-19 (T,3)		B5-19 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.6047	0			1.209	0			0.9675	0.3541
	1.451	0.013			4.475	0.025			2.781	0.379
	3.386	0.174			6.168	0.025			5.442	0.4287
	4.716	0.422			7.498	0.038			6.772	0.4411
	5.321	0.534			8.828	0.05			7.861	0.4535
	6.53	0.783			9.796	0.038			8.586	0.4535
	6.651	1.106			10.88	0.05			9.312	0.4783
	6.289	1.428			11.49	0.05			10.76	0.4908
	6.047	1.565			12.21	0.062			11.73	0.4908
	5.926	1.727			13.06	0.075			12.7	0.5156
	5.563	2.174			14.39	0.075			13.54	0.528
	5.079	2.671			15	0.075			14.27	0.528
	4.716	2.907			15.6	0.075			15	0.528
	4.716	3.155			16.21	0.075			15.84	0.5404
	4.475	3.453			17.05	0.075			16.81	0.5404
	4.354	3.813			17.9	0.075			17.54	0.5529
	3.991	4.161			18.99	0.087			19.59	0.5777
	3.749	4.509			19.71	0.087			22.13	0.5777
	3.265	4.881			20.56	0.087			24.19	0.5777
	2.902	5.329			21.28	0.087			23.7	0.5901
	2.54	5.614			24.43	0.125			23.46	0.5901
	2.419	5.726			25.76	0.125			22.74	0.5777
	1.814	5.738			25.15	0.137			21.65	0.5901
	1.814	6.012			24.55	0.162			20.8	0.5901
	1.814	6.744			26.97	0.261			20.07	0.5777
	1.814	7.631			27.57	0.323			19.23	0.5529
	1.088	8.181			26.97	0.336			20.56	0.5032
	1.088	8.411			27.94	0.361			20.8	0.4535
	0.9675	8.841			29.75	0.41			21.65	0.4162
	0.9675	9.951			31.32	0.46			22.37	0.379
	0.8465	10.841			32.89	0.534			22.01	0.3417
	0.7256	11.561			34.83	0.584			21.77	0.3541
	0.7256	12.321			36.88	0.696			21.16	0.3541
	0.8465	13.281			37.97	0.77			22.98	0.3169
	0.7256	14.101			37.25	0.882			24.67	0.3169
	0.7256	14.681			35.68	1.006			25.4	0.2796
	0.8465	14.921			34.71	1.081			26	0.2548
					35.55	1.168			26.73	0.2548
					37.13	1.391			25.76	0.2548
					-0.3628	25.509			25.15	0.2548
									26.48	0.2548
									27.09	0.2672
									25.76	0.2672
									26.85	0.2672
									27.81	0.2672
									28.54	0.2548
									29.51	0.2548
									30.11	0.2548
									29.39	0.2548
									30.6	0.2672
									31.44	0.2548
									30.84	0.2672
									15.72	1.36
									0.1209	10.27
									0.1209	9.384
									0	8.415
									0.1209	-23.41
									0	-23.63
									0.1209	-22.65
									0.1209	-23.64
									0.1209	-13.25
									0.1209	-4.304

Panel Type = B#2
Bracket No = 2
Test Type = T,3

General Commemts

Variables

he = 100mm
w =
d = N/A
l = N/A
Test direction = Vertical
Sx edge proximity = N/A
Sy edge proximity = N/A



Peak Loads										
Designation	B1-2 (T,3)		B2-2 (T,3)		B3-2 (T,3)		B4-2 (T,3)		B5-2(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	47.41	21.043	43.66	17.528	42.45	14.778	49.99	0.9776	44.14	20.23

Test Data

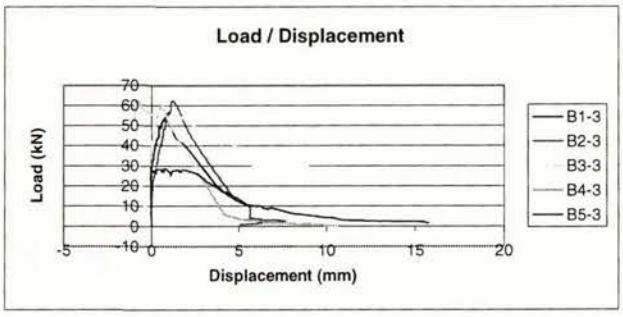
Designation	B1-2 (T,3)		B2-2 (T,3)		B3-2 (T,3)		B4-2 (T,3)		B5-2(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.6047	0	0	0	1.451	0	-0.5702	0.7541	1.935	0.6528
	1.572	0	1.693	-0.012	2.056	-0.012	0.3801	0.7541	2.661	0.6528
	2.177	0	3.507	-0.012	4.595	-0.012	2.851	0.7416	3.507	0.6528
	3.507	-0.012	4.233	-0.012	6.289	-0.037	3.991	0.7416	4.354	0.6528
	6.772	0	4.837	0	7.861	-0.049	6.462	0.7541	5.442	0.6528
	7.74	-0.012	5.805	-0.012	8.949	-0.062	8.173	0.7541	6.772	0.6528
	11.85	0	6.651	0	10.04	-0.074	9.503	0.7541	7.619	0.6652
	14.03	-0.012	7.619	0	11.25	-0.086	11.02	0.7541	8.465	0.6652
	15.84	0	8.828	0	12.58	-0.111	13.3	0.7416	9.191	0.6528
	16.57	0	10.16	0	13.42	-0.124	15.21	0.7541	9.796	0.6652
	17.41	0.013	12.46	0.013	14.39	-0.124	17.11	0.7541	11	0.6528
	21.77	0.025	15.36	0.025	15.12	-0.136	19.01	0.7665	11.85	0.6652
	27.81	0.063	18.14	0.062	15.96	-0.149	21.86	0.7416	12.94	0.6652
	32.77	0.174	19.71	0.099	17.17	-0.161	22.43	0.7541	14.03	0.6652
	36.4	0.187	21.89	0.124	18.38	-0.161	23.19	0.7541	15	0.6652
	38.34	0.274	23.46	0.162	19.47	-0.161	27.75	0.7541	15.6	0.6528
	40.63	0.286	26.61	0.211	20.2	-0.161	30.79	0.7541	16.21	0.6652
	42.33	0.348	28.42	0.236	19.59	-0.161	33.07	0.7541	16.81	0.6777
	41.72	0.361	31.44	0.311	21.04	-0.173	33.83	0.7541	17.78	0.6777
	41.12	0.361	31.68	0.36	23.1	-0.161	33.07	0.7541	18.38	0.6777
	41.12	0.448	30.84	0.373	25.52	-0.161	35.73	0.7541	19.47	0.6901
	42.81	0.448	34.34	0.435	27.45	-0.161	38.96	0.7416	20.07	0.6901
	45.59	0.448	37.49	0.522	29.27	-0.149	39.72	0.7541	22.13	0.7025
	47.41	0.547	41.12	0.634	30.35	-0.161	39.15	0.7541	23.22	0.7149
	44.99	0.684	43.66	0.77	31.32	-0.161	40.67	0.7416	24.07	0.7273
	14.27	3.652	42.81	0.845	31.81	0.063	43.91	0.7541	24.67	0.7273
	14.27	4.211	42.21	0.882	33.62	0.137	45.24	0.7541	25.27	0.7398
	13.06	4.497	41.24	0.932	35.92	0.125	44.67	0.7541	26.12	0.7398
	13.06	4.623	40.27	0.981	36.88	0.15	44.1	0.7665	26.85	0.7522
	12.7	5.023	39.91	1.006	37.85	0.15	44.67	0.7541	27.45	0.7522
	11.37	5.693	39.42	1.019	37.25	0.137	47.71	0.7541	28.54	0.7646
	10.76	5.673	38.7	1.068	39.42	0.15	48.85	0.7665	29.51	0.7646
	10.52	6.223	38.09	1.093	41.36	0.137	49.99	0.7665	30.11	0.777
	9.433	6.703	37.61	1.143	42.45	0.15	49.23	0.7541	29.51	0.777
	9.07	7.093	37.13	1.168	41.72	0.137	48.66	0.7665	31.93	0.8019
	8.344	7.693	36.04	1.23	40.51	0.15	47.71	0.7541	33.86	0.8391
	7.861	7.813	18.26	2.67	12.46	1.317	48.47	0.7665	35.43	0.8516
	8.103	8.103	15.12	3.366	11.13	2.696	3.611	0.841	35.43	0.9012
	7.498	8.693	15.24	3.627	11.13	3.093	3.041	0.841	34.83	0.9261
	7.256	9.333	12.7	4.149	10.52	3.342	4.181	0.8286	35.92	0.9633
	6.772	9.653	12.21	4.434	10.16	4.025	3.611	0.841	37.37	1.001
	6.651	9.963	11	4.807	9.796	4.025	3.231	0.8658	38.58	1.025
	6.168	10.523	10.28	5.258	9.191	4.037	2.851	0.8658	39.55	1.025
	6.168	10.893	9.675	5.468	10.04	4.025	2.091	0.8783	41.48	1.025
	5.926	11.403	9.191	6.008	10.04	4.658	1.521	0.8907	43.17	1.025
	5.926	11.853	8.707	6.128	9.917	4.968	0.9503	0.9404	44.14	1.162
	5.684	12.083	8.344	6.518	9.191	5.318	1.14	0.9776	43.05	1.361
	5.563	12.083	7.74	6.678	9.07	5.848	0	0.9652	8.707	4.913
	5.684	12.483	7.498	7.158	8.465	5.838			9.675	5.025
	5.563	12.743	7.014	7.438	7.861	5.838			9.07	5.348
	5.442	12.913	6.772	7.758	7.256	5.838			7.982	5.782
	5.442	13.193	6.409	8.028	6.409	6.438			7.377	5.969
	5.2	13.863	6.53	8.198	5.563	6.418			7.135	6.168
	4.958	13.863	5.926	8.498	5.321	7.518			6.53	6.441
	5.2	13.983	5.563	8.628	4.958	7.498			5.684	6.826
	5.079	14.683	4.837	8.628	4.354	7.488			5.442	7.161
	5.079	14.823	4.595	8.818	3.023	8.618			4.958	7.509
	4.958	15.293	4.354	9.708	2.661	8.858			4.958	7.67
	4.837	15.423	4.233	9.728	2.661	8.978			4.716	7.906
	4.716	15.603	4.112	10.008	2.419	9.578			4.354	8.204

Panel Type = B#2
Bracket No = 3
Test Type = T,3

General Commemts

Variables

h_e	=	100mm
w	=	
d	=	N/A
l	=	N/A
Test direction	=	Vertical
Sx edge proximity	=	N/A
Sy edge proximity	=	N/A



Peak Loads

Designation	B1-3 (T,3)		B2-3 (T,3)		B3-3 (T,3)		B4-3 (T,3)		B5-3(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	54.06	5.728	62.4	7.652	62.52	11.9936	60.25	10.657	29.63	15.72

Test Data

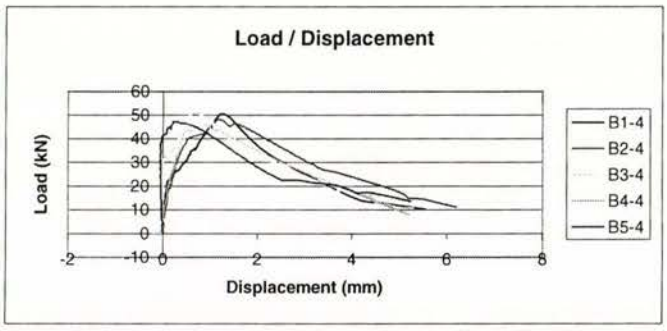
Designation	B1-3 (T,3)		B2-3 (T,3)		B3-3 (T,3)		B4-3 (T,3)		B5-3(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.9675	0	0	0	0.1209	0	-0.3801	0	0	0
	2.419	-0.012	1.935	0	0.8465	-0.0621	1.14	0.012	0.8465	0.013
	3.507	-0.025	4.837	0	1.814	-0.0745	0.5702	-0.013	1.814	0
	4.233	-0.037	7.256	0	2.54	-0.0745	1.711	0	2.54	0
	4.837	-0.037	9.191	0.012	3.628	-0.0869	2.281	-0.013	3.265	0
	5.684	-0.025	11.73	0.012	4.354	-0.0993	3.041	-0.013	4.595	-0.025
	6.53	-0.037	12.82	0.012	5.079	-0.1118	3.991	-0.013	5.563	-0.025
	8.828	-0.037	18.99	0.062	6.53	-0.2111	5.702	-0.025	6.168	-0.025
	10.04	-0.037	23.34	0.099	7.74	-0.2608	7.032	-0.025	6.893	-0.025
	11	-0.037	26.12	0.174	8.828	-0.3229	9.503	-0.037	7.619	-0.037
	12.7	-0.037	28.54	0.248	9.796	-0.3602	10.64	-0.037	8.223	-0.025
	15	-0.037	30.84	0.302	10.4	-0.385	11.78	-0.037	8.828	-0.025
	16.69	-0.037	33.01	0.352	11.49	-0.4223	12.54	-0.037	9.554	-0.025
	18.5	-0.037	35.19	0.382	12.46	-0.4347	13.49	-0.037	10.28	-0.025
	20.32	-0.037	37.01	0.432	13.42	-0.4595	14.83	-0.05	11	-0.025
	22.61	-0.037	38.82	0.472	14.15	-0.4968	15.97	-0.037	11.97	-0.012
	24.67	-0.062	40.88	0.522	15.24	-0.5216	16.54	-0.05	12.58	-0.025
	26.48	-0.037	41.12	0.542	15.84	-0.5341	17.87	-0.05	13.3	-0.025
	28.54	-0.025	40.27	0.562	16.81	-0.5465	18.82	-0.05	14.27	-0.025
	31.32	0.038	39.67	0.562	17.54	-0.5713	20.91	-0.05	14.87	-0.037
	32.17	0.038	41.48	0.582	18.74	-0.5962	23.95	-0.037	15.96	-0.037
	33.26	0.1	45.11	0.642	19.59	-0.6086	26.04	-0.05	16.81	-0.012
	34.71	0.1	48.01	0.692	20.2	-0.6334	25.47	-0.05	17.41	-0.037
	35.8	0.125	48.62	0.762	21.04	-0.6707	26.04	-0.037	18.26	-0.037
	36.64	0.137	48.01	0.772	21.65	-0.6955	27.18	-0.05	19.23	-0.025
	37.61	0.162	50.31	0.792	22.61	-0.7079	28.32	-0.05	20.56	-0.037
	39.18	0.187	54.3	0.832	22.86	-0.7328	30.22	-0.05	21.89	-0.037
	40.15	0.187	56.48	0.972	23.22	-0.7204	30.79	-0.062	22.74	-0.037
	40.63	0.249	55.87	0.982	24.07	-0.7328	30.22	-0.05	24.19	-0.037
	40.75	0.274	55.15	0.972	24.79	-0.7576	30.79	-0.05	25.88	-0.037
	41.6	0.261	57.69	1.092	25.4	-0.7576	33.83	-0.037	26.85	-0.025
	42.21	0.261	60.71	1.092	26.12	-0.77	35.35	-0.025	26.24	-0.037
	43.05	0.261	62.4	1.232	26.97	-0.7825	36.68	-0.013	25.64	-0.05
	42.45	0.274	61.07	1.362	27.69	-0.7949	38.01	-0.013	26.85	-0.037
	44.14	0.398	59.74	1.462	28.54	-0.8197	39.91	0.012	27.94	-0.037
	46.68	0.41	58.05	1.562	29.14	-0.8197	41.81	0.012	29.02	-0.037
	48.25	0.41	44.26	2.302	29.75	-0.8321	42.57	0.049	29.63	-0.037
	49.22	0.41	15.96	4.582	30.48	-0.8321	43.72	0.062	29.02	-0.025
	49.46	0.547	9.191	5.622	31.08	-0.8321	44.29	0.062	26.73	-0.025
	48.62	0.547	8.465	5.622	30.48	-0.8197	45.24	0.099	26.12	-0.025
	49.95	0.547	7.74	5.642	31.08	-0.8197	45.81	0.112	25.52	-0.025
	52.48	0.668	6.289	5.642	32.05	-0.8321	46.38	0.124	24.91	-0.025
	53.57	0.748	5.563	5.622	32.77	-0.8197	45.62	0.136	26.73	-0.025
	54.06	0.828	4.475	5.612	33.5	-0.8321	47.52	0.149	27.57	-0.025
	52.24	0.918	3.991	5.762	34.47	-0.8321	48.47	0.161	27.45	0.112
	50.79	0.998	3.628	5.962	34.83	-0.8446	49.61	0.186	26.85	0.112
	49.22	1.118	3.507	6.252	35.8	-0.8446	50.75	0.211	26.48	0.261
	47.28	1.208	3.023	6.312	36.4	-0.857	51.51	0.223	26.24	0.249
	45.83	1.288	3.023	7.182	37.01	-0.857	52.08	0.248	27.45	0.249
	44.87	1.318	2.902	7.292	37.73	-0.8818	52.84	0.261	28.06	0.249
	43.9	1.388	2.781	7.402	38.7	-0.8818	53.6	0.285	28.18	0.435
	43.41	1.428	2.298	7.652	39.42	-0.8942	54.17	0.298	27.94	0.571
	38.21	2.088	2.056	7.462	40.03	-0.9067	53.41	0.323	27.21	0.571
	20.44	3.698	1.935	7.282	40.88	-0.9067	53.41	0.335	26.97	0.708
	18.5	3.958	1.693	7.202	42.08	-0.9315	53.98	0.348	28.3	0.696
	17.66	4.028	1.935	7.142	42.93	-0.9315	55.69	0.348	28.42	0.82
	17.17	4.078	1.814	7.002	43.54	-0.9315	56.83	0.397	27.69	0.919
	16.93	4.098	1.935	6.792	44.14	-0.9315	57.78	0.422	27.33	0.957
	16.45	4.408	1.935	6.642	44.99	-0.9439	57.97	0.459	27.09	0.969
	11.73	5.258	1.935	6.412	44.5	-0.9563	58.73	0.484	26.48	1.043
	10.16	5.578	1.33	6.162	44.38	-0.9439	59.68	0.509	26.24	1.068
	9.917	5.728	0.7256	5.072	45.95	-0.9439	60.25	0.546	25.88	1.068
					46.92	-0.9688	60.25	0.608	25.27	1.106

Panel Type = B#2
Bracket No = 4
Test Type = T,3

General Commemts

Variables

h_e	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	B1-4 (T,3)		B2-4 (T,3)		B3-4 (T,3)		B4-4 (T,3)		B5-4(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	50.55	5.549	48.01	6.21	50.79	5.291	46	5.201	47.16	5.2415

Test Data

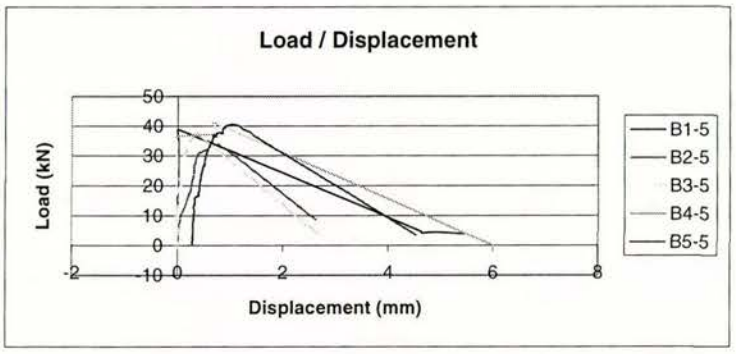
Designation	B1-4 (T,3)		B2-4 (T,3)		B3-4 (T,3)		B4-4 (T,3)		B5-4(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.6047	0	0.4837	0	0.1209	0	-0.3801	0	-0.1209	0
	1.935	0.012	2.056	0	0.8465	0.012	-0.3801	-0.173	0.4837	0.0125
	3.265	0.012	4.837	0	3.991	0	0.3801	-0.062	1.088	0
	4.233	0.012	8.344	0.037	5.2	0	3.231	-0.012	1.693	-0.0124
	5.563	0	11.25	0.062	6.047	0	8.173	0.013	2.419	-0.0124
	6.409	0.012	13.79	0.087	7.135	0	10.64	0.025	3.265	-0.0248
	7.377	0.012	14.87	0.1	7.74	0	14.64	0.075	3.991	-0.0124
	9.796	0.025	16.33	0.1	11.25	0	18.25	0.087	4.837	-0.0124
	11.13	0.037	17.41	0.1	14.15	-0.013	21.29	0.125	5.563	-0.0248
	12.34	0.025	18.38	0.112	16.81	0	24.14	0.162	6.651	-0.0372
	13.42	0.037	19.11	0.149	17.41	0	26.23	0.199	7.377	-0.0372
	14.51	0.05	20.07	0.149	19.35	0	28.51	0.236	7.982	-0.0372
	15.6	0.05	20.8	0.174	22.61	0	27.94	0.236	9.07	-0.0372
	16.45	0.05	21.89	0.186	24.67	0	31.55	0.274	9.796	-0.0248
	17.29	0.062	22.61	0.186	28.54	-0.013	32.88	0.311	10.64	-0.0372
	18.14	0.075	23.94	0.211	32.17	0.037	36.3	0.336	11.73	-0.0372
	19.23	0.075	24.79	0.224	31.56	0.112	35.73	0.348	13.79	-0.0372
	20.56	0.087	25.76	0.224	30.96	0.124	37.82	0.361	15.36	-0.0496
	21.65	0.087	26.85	0.249	32.89	0.136	40.1	0.398	16.81	-0.0496
	22.74	0.137	28.54	0.261	36.16	0.223	39.53	0.41	17.66	-0.0372
	23.82	0.174	30.48	0.298	37.49	0.285	39.34	0.423	18.38	-0.0496
	24.67	0.199	32.17	0.323	39.42	0.323	42.19	0.435	19.23	-0.0496
	25.52	0.224	33.01	0.348	42.33	0.397	43.53	0.559	19.83	-0.0496
	25.88	0.248	34.1	0.373	44.38	0.434	42.95	0.621	20.68	-0.0496
	26.48	0.311	35.07	0.385	45.83	0.484	44.86	0.684	21.28	-0.0496
	27.33	0.36	35.92	0.41	45.23	0.509	46	0.808	22.01	-0.0496
	27.94	0.373	36.76	0.435	44.62	0.509	45.43	0.944	22.61	-0.0496
	28.78	0.398	37.49	0.46	46.68	0.534	44.67	0.994	23.34	-0.0496
	29.63	0.435	38.34	0.485	49.7	0.559	43.91	1.019	23.94	-0.0621
	30.35	0.472	39.18	0.509	50.79	0.708	43.53	1.093	24.67	-0.0496
	31.68	0.522	39.91	0.534	47.89	1.006	43.14	1.106	25.64	-0.0496
	32.65	0.534	40.51	0.571	44.02	1.118	43.72	1.168	26.36	-0.0496
	33.62	0.571	41.12	0.658	40.63	1.366	31.74	2.335	27.33	-0.0621
	34.34	0.571	42.08	0.857	37.25	1.565	7.983	5.201	28.06	-0.0496
	35.19	0.634	41.48	0.894	35.68	1.664			28.78	-0.0496
	35.92	0.671	43.41	0.919	34.71	1.751			29.39	-0.0621
	35.31	0.683	44.99	0.981	34.1	1.801			29.99	-0.0496
	38.82	0.77	44.38	1.019	34.22	1.888			30.72	-0.0496
	41.72	0.869	47.65	1.118	27.33	2.645			31.32	-0.0621
	43.41	0.932	48.01	1.23	21.65	3.341			30.72	-0.0496
	46.44	1.056	46.8	1.317	19.95	3.602			30.11	-0.0496
	48.25	1.105	46.32	1.342	19.23	3.689			29.51	-0.0496
	49.34	1.155	45.71	1.379	18.62	3.713			31.2	-0.0621
	50.55	1.23	45.11	1.404	18.02	3.713			33.5	-0.0621
	49.46	1.379	46.2	1.578	18.26	3.863			34.1	-0.0496
	33.98	2.211	36.76	2.472	16.81	4.223			35.31	-0.0496
	17.41	3.788	31.81	2.919	14.75	4.484			36.4	-0.0621
	14.63	4.111	30.48	3.043	13.67	4.496			37.25	-0.0621
	13.79	4.223	29.75	3.105	13.06	4.508			38.09	-0.0496
	13.42	4.347	29.14	3.192	12.21	4.782			39.42	-0.0248
	12.09	4.906	28.42	3.242	11.25	4.918			41.12	-0.0248
	10.28	5.549	27.69	3.304	10.64	4.918			42.08	0.0621
			26.73	3.416	11	5.291			42.81	0.0746
			25.52	3.726					43.78	0.087
			18.26	4.894					44.5	0.0994
			15.72	5.155					44.75	0.1739
			14.87	5.204					43.9	0.1615
			14.39	5.527					44.87	0.1615
			11.13	6.21					46.32	0.1988
									47.16	0.2112

Panel Type = B#2
Bracket No = 5
Test Type = T,3

General Commemts

Variables

he	= 100mm
w	= 100mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation	B1-5 (T,3)		B2-5 (T,3)		B3-5 (T,3)		B4-5 (T,3)		B5-5(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	38.82	5.439	33.5	2.633	37.61	2.658	41.05	6	40.39	4.534

Test Data

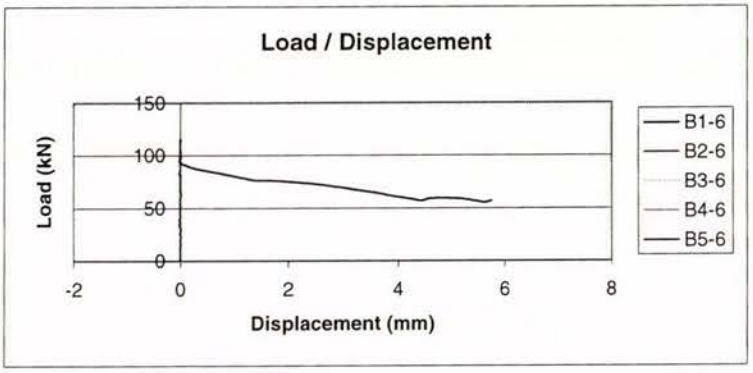
Designation	B1-5 (T,3)		B2-5 (T,3)		B3-5 (T,3)		B4-5 (T,3)		B5-5(T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.9675	0	1.33	0	1.693	0	-0.5702	0	0.3628	0.2866
	1.814	0.012	3.386	0	3.628	0	2.091	0	0.9675	0.2866
	3.144	0.012	6.168	0.037	5.563	0.012	4.562	0	1.572	0.2866
	3.87	0	7.135	0.037	6.409	0	5.892	-0.0124	2.177	0.299
	4.837	0	8.344	0.062	8.344	0.012	8.553	-0.0124	2.781	0.2866
	5.805	0	9.07	0.062	9.675	0.025	11.02	-0.0124	3.386	0.299
	6.53	0.012	10.04	0.074	10.76	0.025	13.87	-0.0124	4.475	0.299
	7.256	0.012	13.67	0.161	11.97	0.025	16.35	-0.0248	5.805	0.299
	8.223	0.012	17.05	0.211	13.18	0.037	17.87	0	6.651	0.299
	9.07	0	18.38	0.248	14.27	0.049	19.01	0	7.498	0.299
	10.04	0.012	20.07	0.261	15.48	0.037	20.34	-0.0124	8.586	0.3114
	11.13	0.012	22.98	0.298	16.81	0.062	22.43	0	9.191	0.3114
	12.09	0.012	24.79	0.31	18.26	0.062	23	-0.0124	10.04	0.3114
	13.18	0.012	26.61	0.31	19.59	0.062	24.9	-0.0124	10.64	0.3238
	14.27	0.012	27.45	0.335	21.04	0.074	26.23	0	11.37	0.3238
	15.12	0	30.48	0.385	22.86	0.074	27.75	0	11.97	0.3238
	15.96	0.012	32.05	0.559	24.19	0.087	28.7	-0.0124	12.82	0.3114
	16.69	0	33.5	0.795	25.52	0.099	29.46	0	13.42	0.3238
	17.54	0	8.586	2.633	26.48	0.099	30.22	0	14.03	0.3363
	19.23	0			27.69	0.111	29.65	-0.0124	14.75	0.3363
	21.16	0.012			28.9	0.124	31.93	-0.0124	15.48	0.3363
	20.07	0			29.75	0.124	26.23	0	16.08	0.3363
	24.31	0.012			30.72	0.149	24.9	-0.0124	16.69	0.3984
	27.57	0.012			32.05	0.161	26.8	0	17.29	0.3859
	30.48	0.012			31.44	0.211	27.75	-0.0124	18.5	0.4108
	33.14	0.012			31.44	0.223	28.89	0	19.83	0.4108
	35.07	0.012			33.26	0.223	28.32	-0.0124	21.28	0.4232
	37.49	0			35.07	0.248	30.03	0	23.7	0.448
	38.82	0.012			36.76	0.298	30.98	-0.0124	26.97	0.4977
	4.716	4.629			37.61	0.36	31.93	-0.0124	26.61	0.5101
	4.112	4.649			3.87	2.658	31.36	-0.0124	27.81	0.5101
	4.475	4.849					32.69	-0.0124	29.87	0.535
	4.354	5.029					33.64	0	31.81	0.5722
	4.112	5.219					34.4	-0.0124	33.14	0.5971
	3.87	5.439					34.97	-0.0124	34.1	0.6219
							34.4	0	35.19	0.6592
							35.92	-0.0248	36.16	0.6716
							36.49	-0.0124	37.01	0.684
							37.06	0.5716	36.4	0.7089
							37.25	0.7076	36.64	0.7337
							36.3	0.7076	37.25	0.7337
							37.82	0.7076	37.85	0.7834
							38.77	0.6956	37.49	0.8455
							39.34	0.7076	38.58	0.8455
							39.91	0.6956	39.55	0.8952
							39.34	0.7076	40.27	0.9573
							41.05	0.6836	40.39	1.094
							0	6	38.94	1.231
									38.34	1.317
									37.97	1.355
									37.73	1.392
									36.52	1.467
									3.507	4.534

Panel Type = B#2
Bracket No = 6
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Shear
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads

Designation		B1-6 (T,5)		B2-6 (T,5)		B3-6 (T,5)		B4-6 (T,5)		B5-6(T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		115.5	5.75	0	0	0	0	0	0	0	0

Test Data

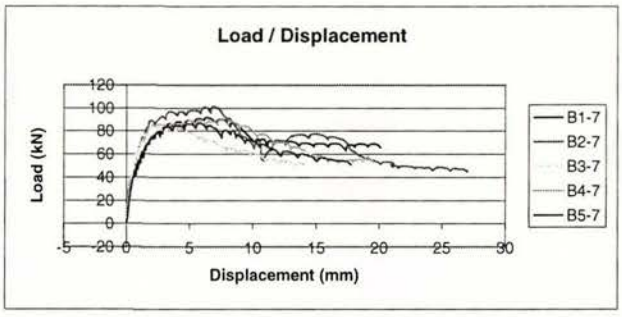
Designation	B1-6 (T,5)		B2-6 (T,5)		B3-6 (T,5)		B4-6 (T,5)		B5-6(T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0								
	0.9674	0								
	2.298	0								
	4.595	0								
	7.014	0								
	9.674	0								
	11.85	0								
	13.18	0								
	14.75	0								
	15.6	0.01								
	17.29	0								
	19.23	0								
	20.8	0								
	22.61	0.01								
	24.31	0								
	25.64	0								
	26.73	0								
	27.93	0								
	28.9	0.01								
	29.51	0.01								
	30.23	0.01								
	31.08	0								
	31.93	0								
	33.98	-0.02								
	35.8	0								
	38.09	0								
	37.49	0								
	38.21	-0.02								
	41.12	0								
	43.66	0								
	45.35	0								
	47.65	0								
	49.34	0								
	51.76	0								
	54.3	0								
	55.75	0								
	58.65	0								
	60.22	0								
	59.62	0								
	61.67	0.01								
	63.73	0								
	65.06	0.01								
	65.66	0								
	65.06	0								
	66.15	0								
	69.17	0								
	70.99	0								
	73.04	0								
	75.46	0								

Panel Type = B#2
Bracket No = 7
Test Type = T,2

General Commemts

Variables

h_e	= 100mm
w	= 100mm
d	= N/A
l	= N/A
Test direction	= Shear
Sx edge proximity	= N/A
Sy edge proximity	= N/A



Peak Loads										
Designation	B1-7 (T,2)		B27 (T,2)		B3-7 (T,2)		B4-7 (T,2)		B5-7(T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	91.79	20.0988	101.7	27.032	82.96	15.1609	89.61	19.5297	86.95	17.7472

Test Data

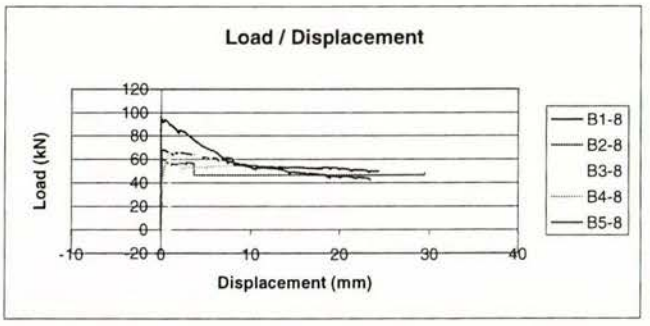
Designation	B1-7 (T,2)		B2-7 (T,2)		B3-7 (T,2)		B4-7 (T,2)		B5-7(T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	1.451	0	7.619	0	-0.2419	0	0.2419	0	0.4837	0
	2.419	0	8.586	0	0.3628	0.0126	1.209	0	1.33	0.0126
	3.991	0.0248	10.04	0.013	1.088	0.0126	2.177	0	2.056	0.0251
	4.958	0.0248	10.64	0.013	1.693	0.0126	5.079	0.0125	3.265	0.0502
	6.167	0.0378	10.04	0.025	2.419	0.0501	7.377	0.0501	4.354	0.0627
	6.772	0.0498	11	0.038	3.023	0.0376	9.554	0.0501	5.2	0.0877
	7.377	0.0498	11.61	0.025	3.628	0.0501	10.76	0.0626	6.168	0.1003
	8.465	0.0628	12.94	0.038	4.233	0.0627	10.04	0.0626	7.256	0.1128
	9.07	0.0498	13.67	0.05	5.079	0.0627	10.88	0.0751	9.191	0.1253
	9.674	0.0628	14.27	0.05	5.684	0.0752	11.49	0.0751	10.76	0.1378
	10.28	0.0748	15.24	0.063	6.288	0.0877	12.46	0.0626	12.58	0.1504
	11	0.0748	15.84	0.063	7.256	0.0877	11.97	0.1002	13.79	0.1754
	12.46	0.0748	16.45	0.075	7.981	0.0877	11.85	0.0751	14.87	0.1754
	13.06	0.0878	16.08	0.1	8.465	0.1002	12.46	0.0751	15.72	0.188
	14.03	0.0748	15.84	0.088	8.949	0.1002	11.85	0.0877	16.69	0.2005
	15	0.0878	16.93	0.088	9.553	0.1128	13.42	0.0751	17.41	0.188
	15.84	0.0998	17.53	0.088	10.16	0.1128	12.09	0.0877	18.26	0.213
	16.93	0.0998	18.14	0.1	10.76	0.1378	11.37	0.0877	18.87	0.213
	18.26	0.1128	17.53	0.1	11.37	0.1128	13.3	0.0751	19.47	0.213
	18.87	0.1128	18.74	0.088	12.33	0.1378	11.97	0.0877	20.56	0.2381
	19.95	0.1128	19.59	0.1	12.94	0.1378	14.75	0.0877	21.16	0.2381
	21.04	0.1248	20.32	0.113	14.27	0.1378	17.78	0.1127	24.07	0.2631
	21.65	0.1378	21.77	0.138	15.48	0.1504	19.95	0.1252	24.07	0.3007
	22.37	0.1248	23.34	0.15	16.2	0.1754	23.34	0.1503	26.12	0.3007
	21.77	0.1378	24.19	0.15	15.6	0.1754	24.07	0.1754	28.3	0.3258
	23.58	0.1378	25.15	0.163	16.93	0.1754	24.91	0.1754	29.87	0.3512
	24.79	0.1508	26.36	0.175	17.53	0.1879	26.12	0.1879	30.6	0.3632
	25.64	0.1508	28.3	0.188	18.26	0.2005	27.33	0.2004	31.32	0.3762
	26.36	0.1508	29.02	0.213	18.87	0.2005	29.14	0.2255	30.96	0.4012
	28.78	0.1878	30.11	0.238	19.95	0.213	30.96	0.2255	33.14	0.4132
	29.87	0.2008	31.56	0.251	20.8	0.2255	33.86	0.263	35.43	0.4382
	30.6	0.2128	32.17	0.276	21.53	0.2255	37.37	0.3006	37.85	0.4882
	31.2	0.2258	33.13	0.288	22.25	0.2506	39.79	0.3382	38.7	0.5132
	30.47	0.2258	34.1	0.301	22.86	0.2506	42.33	0.3758	41.36	0.5892
	31.8	0.2258	34.34	0.313	23.7	0.2506	44.02	0.4259	43.66	0.6142
	33.74	0.2508	34.71	0.313	23.1	0.2756	43.29	0.4635	44.75	0.6642
	34.59	0.2628	35.55	0.313	22.98	0.2631	42.69	0.476	45.83	0.7142
	35.55	0.2758	36.52	0.338	23.7	0.2756	44.99	0.4635	46.56	0.7512
	36.16	0.2878	37.37	0.351	24.67	0.2756	49.1	0.5136	45.83	0.7772
	36.04	0.3008	36.76	0.363	25.64	0.2756	48.74	0.5261	46.92	0.7892
	37.13	0.3008	36.16	0.376	26.24	0.2882	48.49	0.5512	49.58	0.8142
	38.82	0.3258	37.61	0.376	26.97	0.3132	53.21	0.6013	51.52	0.8642
	39.79	0.3378	40.27	0.401	27.57	0.3132	54.06	0.6639	52.73	0.9272
	40.75	0.3508	40.75	0.414	28.3	0.3257	53.33	0.689	53.69	0.9642
	41.48	0.3758	41.6	0.439	27.69	0.3383	55.02	0.7015	54.3	1.0152
	41.72	0.7638	43.9	0.464	28.42	0.3383	59.5	0.7767	54.18	1.0402
	43.78	0.7888	45.23	0.489	29.27	0.3508	58.77	0.8393	53.69	1.0522
	45.11	0.8148	46.2	0.514	29.99	0.3383	58.17	0.8518	54.42	1.0772
	46.07	0.8398	45.59	0.539	30.35	0.3633	61.92	0.8894	57.32	1.1152
	46.68	0.8768	48.25	0.564	30.72	0.3633	64.46	0.9517	59.62	1.1772
	47.4	0.9018	49.46	0.576	31.32	0.3759	65.3	1.0147	61.19	1.2532
	46.8	0.9398	50.79	0.614	31.93	0.3884	64.7	1.0277	61.92	1.3152
	49.34	0.9648	50.19	0.652	32.53	0.3884	64.09	1.0527	61.19	1.4032
	50.91	1.0148	52.24	0.664	33.26	0.4134	64.82	1.0777	60.95	1.4152
	52	1.0268	54.06	0.689	34.47	0.426	67	1.1027	62.28	1.4282
	52.97	1.0648	54.9	0.714	35.43	0.426	69.05	1.1527	64.94	1.4532
	52.24	1.1278	55.51	0.752	36.28	0.451	71.23	1.2407	66.51	1.5412
	54.78	1.1528	54.9	0.789	36.64	0.4636	70.62	1.2777	67.84	1.6032
	56.72	1.1778	55.51	0.789	37.13	0.4636	70.02	1.3027	68.45	1.6532
	58.17	1.2278	57.93	0.814	39.18	0.5137	71.59	1.3277	68.93	1.7542
	58.77	1.2778	59.38	0.839	40.27	0.5262	73.89	1.3777	67.84	1.8162
	58.17	1.3278	60.22	0.864	41.24	0.5387	76.07	1.4527	69.66	1.8412
	57.56	1.3408	61.07	0.877	42.08	0.5512	76.43	1.5407	71.47	1.8792
	56.96	1.3528	60.47	0.902	42.57	0.5763	75.46	1.5907	72.92	1.9542

Panel Type = B#2
Bracket No = 8
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Shear
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		B1-8 (T,2)		B2-8 (T,2)		B3-8 (T,2)		B4-8 (T,2)		B5-8(T,2)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		69.53	24.3133	67.84	29.469	73.53	6.6753	65.91	10.563	96.5	23.41

Test Data

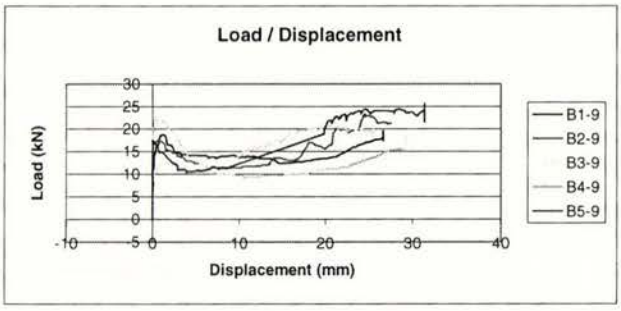
Designation	B1-8 (T,2)		B2-8 (T,2)		B3-8 (T,2)		B4-8 (T,2)		B5-8(T,2)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0	1.33	0	-0.3628	0	0.3628	0	-0.2419	0
	0.3628	-0.0125	1.935	0	-0.2419	1	2.177	0	0.7256	0
	1.693	-0.0125	6.047	0.025	0.6047	0.9875	5.442	0.013	1.814	-0.013
	2.902	0	8.223	0.038	1.572	1	6.53	0.013	2.902	0
	4.353	-0.0125	9.674	0.038	2.298	1	5.926	0.013	4.716	0
	6.047	-0.0125	10.4	0.038	3.023	1	6.893	0.013	5.926	0
	6.651	0	13.79	0.063	3.87	1	10.88	0.025	6.651	0
	7.256	0	15	0.075	4.837	1	13.3	0.025	7.377	0
	8.586	-0.0125	18.38	0.1	5.684	1	15	0.038	7.982	0
	9.312	0	19.83	0.1	6.288	1	16.93	0.038	8.707	0
	10.52	-0.0125	20.68	0.113	6.893	1	18.26	0.038	9.433	0
	11.13	0	22.61	0.138	8.223	1	19.83	0.038	10.16	0
	11.73	0	23.22	0.126	9.07	1	20.44	0.05	10.76	0
	12.7	-0.0125	24.19	0.126	9.916	1	23.94	0.063	11.49	-0.013
	14.15	-0.0125	26.36	0.126	10.64	1	28.3	0.075	12.09	0
	15.48	-0.0125	25.76	0.126	11.49	1	31.56	0.088	12.7	0
	16.57	0	28.42	0.126	12.33	1	35.07	0.113	15	0
	18.14	0	30.72	0.126	13.3	1	37.25	0.138	16.81	0
	19.35	0	31.93	0.138	14.03	1	40.39	0.151	17.9	0
	20.68	0	34.34	0.126	15.12	1.0125	41.24	0.176	19.11	-0.013
	22.49	0	37.37	0.113	15.84	1.0125	40.63	0.188	20.68	0
	24.31	-0.0125	38.21	0.126	16.93	0.9875	40.03	0.201	22.01	-0.013
	25.64	0.0125	41.12	0.113	17.78	1	41	0.213	23.58	0
	27.69	0	43.05	0.126	18.87	1	43.41	0.226	24.67	0
	28.78	-0.0125	44.38	0.126	19.59	1.0125	45.47	0.251	25.64	-0.013
	30.72	0	43.78	0.113	18.99	1.0125	44.87	0.251	28.54	-0.013
	32.41	0	45.35	0.126	21.65	1	47.28	0.276	27.94	0
	33.13	0	46.8	0.113	22.98	1	49.7	0.326	29.75	0
	34.95	0	47.65	0.113	24.07	0.9875	52.36	0.414	32.89	0
	36.4	0	48.37	0.113	24.79	1	54.42	0.464	35.31	0
	37.85	0	51.03	0.126	25.4	1	53.69	0.489	36.64	0
	38.58	-0.0125	51.76	0.126	26.97	1	54.42	0.514	38.7	-0.013
	37.97	0	53.09	0.113	27.81	1.0125	56.35	0.539	40.75	-0.013
	38.58	-0.0125	53.69	0.126	28.66	1	58.41	0.602	41.36	0
	39.18	0	53.09	0.126	29.75	1	57.81	0.627	42.93	0
	40.63	0	54.54	0.126	30.96	0.9875	59.5	0.677	42.33	0
	41.72	0	55.87	0.126	31.93	1	61.68	0.739	41.72	0
	42.33	0	56.6	0.113	31.32	1.0125	64.58	0.877	41.12	0
	42.93	0	57.2	0.126	32.05	1	65.91	0.952	43.29	-0.013
	43.78	0	58.53	0.126	34.22	1	65.3	1.015	45.23	0
	44.74	-0.0125	57.93	0.126	34.95	1	64.58	1.065	46.44	-0.013
	46.32	0	58.53	0.126	35.8	1	65.91	1.115	47.41	-0.013
	47.4	0	59.86	0.113	37	1	64.82	1.591	48.62	-0.013
	48.37	0	60.83	0.126	37.85	1	62.04	2.005	49.58	0
	49.34	0	61.55	0.126	38.7	1	59.98	2.005	50.55	0
	50.43	0	62.28	0.126	39.42	1	59.02	1.992	51.28	0
	52.24	0	63	0.126	41.12	1	58.41	2.005	51.88	0
	53.93	-0.0125	63.85	0.126	42.45	1	54.3	2.055	52.48	0
	55.27	-0.0125	64.7	0.113	43.53	1	53.21	2.253	53.69	0
	55.87	0	65.3	0.126	44.62	1	52.12	2.343	55.51	0
	55.27	0	65.91	0.126	45.59	1	51.88	2.353	56.48	-0.013
	56.72	0.0125	66.63	0.126	46.2	1	51.52	2.363	57.56	0
	58.05	0	67.24	0.126	45.59	1	50.91	2.393	56.96	-0.013
	58.89	-0.0125	66.63	0.126	46.44	1	51.52	2.423	56.35	0
	59.74	0	66.03	0.126	48.25	0.9875	52.61	2.553	57.08	0
	61.07	-0.0125	67	0.126	48.86	1	52.85	2.753	58.89	0
	60.47	0	67.84	0.126	49.82	1.0125	52.24	2.883	59.98	0
	62.04	-0.0125	67	0.113	49.22	0.9875	52	2.893	60.59	0
	63.97	0	65.91	0.126	50.19	1.0125	53.09	2.973	59.98	0
	65.54	-0.0125	63.97	0.126	51.4	1	53.21	3.293	61.31	-0.013
	66.39	0.0125	62.88	0.126	52.24	1	52.61	3.583	63.01	-0.013

Panel Type = B
Bracket No = 9
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test directi	=	Shear
x edge pro:	=	N/A
y edge pro:	=	N/A



Peak Loads

Designation		B1-9 (T,5)		B2-9 (T,5)		B3-9 (T,5)		B4-9 (T,5)		B5-9(T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		19.59	26.6298	23.34	27.535	20.8	25.4938	22.86	29.14	25.64	31.341

Test Data

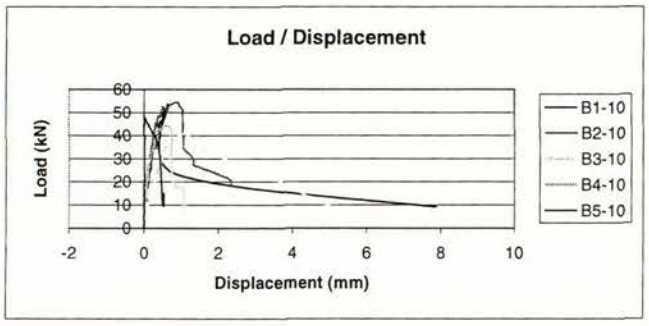
Designation	B1-9 (T,5)		B2-9 (T,5)		B3-9 (T,5)		B4-9 (T,5)		B5-9(T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	1.088	0	0.9674	0	0	0	0.3628	0	-0.1209	0
	1.935	0	2.54	-0.013	1.33	-0.0125	2.419	0	0.4837	0.012
	4.353	0.0251	3.507	-0.013	2.54	0.0126	3.749	0	1.088	0
	6.772	0.0498	4.112	-0.013	3.265	0	5.321	0	1.814	0.012
	8.102	0.0998	4.837	-0.013	3.87	0.0126	6.651	0	2.419	0
	8.828	0.0998	5.684	-0.013	4.474	0	6.047	0	3.023	0
	9.433	0.1378	6.53	-0.013	5.079	0.0251	5.442	0	3.87	0
	10.16	0.1378	7.377	-0.013	5.805	0.0126	6.651	0	4.958	0.012
	10.88	0.1378	8.223	0	6.651	0	9.191	-0.01	5.684	0.012
	11.49	0.1508	9.191	-0.013	7.619	0.0126	11.37	0	6.651	0
	12.21	0.1628	10.04	-0.013	8.223	0.0501	12.09	0	6.047	0.012
	12.82	0.1878	10.64	-0.013	8.949	0.0877	11.49	0	7.256	0
	13.79	0.2128	11.37	-0.013	9.312	0.1003	12.21	0	7.982	0.012
	14.39	0.2758	12.09	-0.013	9.553	0.1378	13.42	0	8.586	0.012
	15	0.3258	13.06	-0.013	10.28	0.213	15.12	0.01	9.554	0
	15.84	0.4258	14.03	-0.013	10.88	0.3633	16.57	0	10.76	0.012
	16.57	0.5758	15	-0.013	10.64	0.4636	17.9	0.01	11.61	0
	15.96	0.6138	14.39	0	11.97	0.5888	18.5	0.04	12.21	0
	16.93	0.7018	15.12	0	12.21	0.7141	19.71	0.06	12.94	0.012
	17.53	0.7518	16.33	0.088	12.58	0.8143	20.44	0.11	13.54	0
	17.9	0.8268	16.81	0.225	12.46	0.9268	19.71	0.16	14.27	0.012
	18.38	0.8768	17.17	0.351	12.58	1.0398	21.53	0.2	15.12	0
	18.5	0.9398	17.29	0.489	12.46	1.1528	22.37	0.27	15.84	0
	18.62	1.1028	17.41	0.626	12.46	1.3028	22.86	0.39	15.24	0.012
	18.74	1.2648	17.53	0.752	12.58	1.5288	21.77	0.47	14.63	0.012
	18.5	1.4658	17.17	1.04	12.33	1.8538	21.41	0.49	15.48	0
	17.9	1.5908	16.69	1.353	12.09	2.1678	21.16	0.5	16.69	0
	17.41	1.6408	15.96	1.528	11.97	2.4678	21.89	0.58	17.41	0.012
	16.93	1.6908	15.36	1.591	11.49	2.7808	21.89	1.14	16.33	0.489
	16.69	1.7158	15.36	1.691	11.37	3.0318	18.87	2.46	15.36	0.727
	16.45	1.8038	15.24	1.942	11.37	3.2448	14.87	3.89	14.75	0.777
	16.33	2.2178	15	2.217	11.49	3.4198	13.91	4.11	15	0.914
	15.24	2.5178	14.75	2.242	11.25	3.5958	13.67	4.22	14.75	1.165
	14.63	2.5808	14.75	2.38	11.37	3.7458	13.42	4.71	14.39	1.428
	14.63	2.6808	14.51	2.781	11.37	3.9088	11	6.49	13.67	1.691
	14.63	3.0068	14.15	2.819	11.37	4.0588	10.16	7.42	13.18	1.904
	14.51	3.2948	13.91	2.881	11.37	4.1588	9.796	7.52	12.94	2.08
	14.03	3.3328	13.91	3.082	11.37	4.2598	10.04	7.91	12.7	2.205
	14.39	3.4828	13.79	3.195	11.37	4.3598	9.917	8.93	12.58	2.33
	14.27	3.8708	13.67	3.37	11.37	4.5848	9.675	9.96	12.46	2.48
	14.15	4.0718	13.54	3.545	11.49	4.7358	9.554	10.44	12.21	2.668
	14.15	4.1838	13.42	3.696	11.37	4.8988	9.07	10.54	11.97	2.844
	14.15	4.5848	13.18	3.808	11.13	5.0108	9.312	10.81	11.73	2.944
	14.15	4.8228	12.94	3.821	11.13	5.1108	9.433	11.69	11.49	2.944
	14.15	4.9238	12.94	3.909	11.25	5.3238	9.433	12.44	10.88	2.956
	14.15	5.3118	12.94	4.197	11.25	5.5618	9.554	12.92	11	3.311
	14.03	5.5748	12.94	4.397	11.37	5.8508	9.675	13.47	11	3.591
	14.15	5.8878	12.82	4.535	11.25	6.0258	9.554	13.87	11	3.811
	14.03	6.3518	12.82	4.648	11.49	6.2518	9.554	14	10.52	3.911
	13.54	6.4518	12.58	4.798	11.49	6.5768	9.554	14.12	10.28	3.911
	13.79	6.7898	12.33	4.823	11.73	6.8898	9.675	14.63	10.64	4.011
	13.79	7.2158	12.33	5.099	11.49	7.0528	9.675	14.73	10.64	4.271
	13.42	7.3158	12.33	5.449	11.61	7.1528	9.675	14.99	10.52	4.551
	13.91	7.8548	12.09	5.7	11.85	7.4788	9.917	15.51	10.64	4.651
	13.91	8.1058	11.85	5.863	11.97	7.8298	9.917	15.89	10.64	4.821
	13.91	8.3938	11.61	5.888	11.97	8.0808	10.04	16.55	10.64	4.931
	14.03	8.8948	11.49	6.001	12.21	8.2308	9.796	16.65	10.88	5.151
	14.15	9.4198	11.61	6.339	12.82	8.6818	10.04	17.08	10.64	5.351
	13.67	9.8598	11.61	6.777	13.06	9.0578	10.16	17.93	10.76	5.501
	13.79	10.4898	11.37	6.94	13.06	9.2078	10.64	18.76	10.64	5.661
	13.67	10.6698	11.37	7.291	13.42	9.6338	10.76	19.62	10.76	5.771
	13.91	10.8998	11.37	7.83	14.03	10.0238	11.13	20.32	10.76	5.911
	13.79	11.3998	11.25	8.043	14.87	10.5138	11.13	21.16	10.88	6.111
	13.91	11.5898	11.25	8.657	15.24	10.8638	11.25	21.6	11	6.341
	13.67	12.1898	11.37	9.045	15	10.9838	11.49	21.96	11	6.441

Panel Typ = B
Bracket N = 10
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direct	=	Shear
x edge pro	=	N/A
y edge pro	=	N/A



Peak Loads										
Designation		B1-10 (T,5)		B2-10 (T,5)		B3-10 (T,5)		B4-10 (T,5)		B5-10 (T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		53.33	7.8797	54.42	2.3553	40.63	5.149	44.02	1.0771	48.86	0.53

Test Data

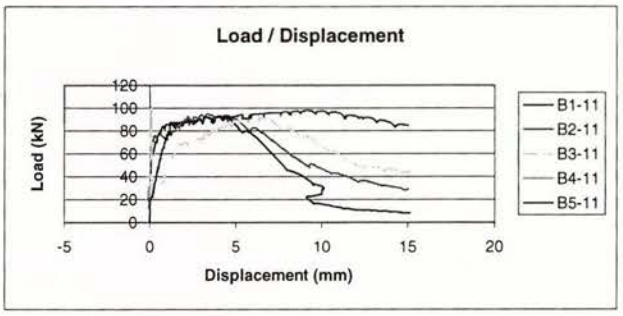
Designation	B1-10 (T,5)		B2-10 (T,5)		B3-10 (T,5)		B4-10 (T,5)		B5-10 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	1.693	0	1.33	0	0.2419	0	0.1209	0	0.2419	0
	3.507	0.0125	3.991	0.025	1.209	0.0125	0.8465	-0.0125	1.451	0
	5.684	0.0251	9.191	0.0376	2.056	0.0125	1.814	-0.0125	2.781	0
	7.74	0.0376	11.61	0.0501	3.023	0.025	3.023	0.0125	4.716	-0.01
	10.4	0.0501	13.42	0.0501	3.991	0.0376	3.991	0.0125	6.047	0
	12.33	0.0501	14.15	0.0501	5.563	0.0501	5.079	0.0125	6.893	0
	13.79	0.0626	13.54	0.0626	7.377	0.0501	5.926	0.0125	7.74	0
	14.63	0.0626	12.94	0.0501	8.707	0.0752	6.651	0.0251	8.707	0
	15.24	0.0752	11.13	0.1503	10.16	0.1002	7.619	0.0251	9.554	0
	15.84	0.0752	12.82	0.0626	11	0.1253	8.949	0.0376	10.52	-0.01
	16.93	0.0877	12.82	0.0501	12.21	0.1378	9.554	0.0376	11.25	0
	17.66	0.1002	14.03	0.0501	13.3	0.1503	10.16	0.0376	10.64	0
	18.38	0.1002	17.05	0.0626	15	0.1754	10.88	0.0376	13.06	0
	19.11	0.1127	19.71	0.0752	14.39	0.188	11.73	0.0376	14.15	0
	20.2	0.1253	20.44	0.0877	16.08	0.188	14.39	0.0627	13.42	0
	20.92	0.1127	21.04	0.0877	17.41	0.2	15.96	0.0752	14.51	-0.01
	21.65	0.1378	20.44	0.0877	18.62	0.225	17.17	0.0752	15.36	0
	22.61	0.1378	19.83	0.1002	19.23	0.251	18.02	0.0752	16.45	0
	23.46	0.1378	20.56	0.0877	20.32	0.288	18.99	0.0877	17.05	0
	25.4	0.1754	21.4	0.0877	21.28	0.301	19.83	0.0877	17.78	-0.01
	27.93	0.1879	22.61	0.0877	22.49	0.326	20.56	0.1002	18.38	0
	29.51	0.2004	26.12	0.1002	23.1	0.338	21.28	0.1002	18.99	0
	31.68	0.213	27.69	0.1127	23.7	0.338	22.25	0.1128	19.59	0
	33.86	0.238	27.09	0.1253	24.43	0.363	23.22	0.1002	20.2	0
	35.19	0.2631	28.42	0.1503	25.27	0.376	22.61	0.1128	20.8	0.02
	34.59	0.3007	31.32	0.1503	25.88	0.388	23.46	0.1128	21.41	0.02
	36.52	0.3007	32.29	0.1754	26.48	0.401	25.76	0.1253	20.8	0
	38.21	0.3132	33.86	0.1754	27.21	0.413	27.33	0.1378	20.2	0
	39.67	0.3508	36.52	0.213	27.81	0.426	28.06	0.1253	21.16	0.02
	40.63	0.3637	35.8	0.2255	28.42	0.464	29.27	0.1629	24.55	0
	39.3	0.3637	37.61	0.2255	29.27	0.476	30.48	0.1754	26	0
	39.91	0.3757	40.63	0.2631	31.68	0.514	31.44	0.1879	25.4	0
	42.81	0.4007	39.91	0.2756	34.47	0.564	32.05	0.1879	27.57	0
	44.26	0.4137	41.6	0.2881	35.67	0.614	33.01	0.213	29.87	0
	45.47	0.4387	45.23	0.3132	35.07	0.626	34.34	0.2255	32.29	0
	46.07	0.4507	44.38	0.3382	37	0.664	33.74	0.238	34.95	0
	45.47	0.4757	44.14	0.3633	38.09	0.727	35.55	0.2506	37.97	0
	46.8	0.4887	47.04	0.3633	38.7	0.789	34.95	0.2756	39.18	0.02
	49.46	0.5137	48.73	0.4134	38.58	0.827	38.21	0.3132	38.58	0.02
	50.67	0.5387	48.01	0.4259	37.85	0.864	39.18	0.3508	40.39	0
	51.64	0.5637	52.36	0.5013	38.82	0.877	42.69	0.4134	41.6	0
	51.03	0.6017	51.52	0.5633	39.91	0.94	41.96	0.4635	42.21	0
	50.79	0.6137	50.91	0.5883	40.63	1.04	44.02	0.5262	42.93	0
	53.33	0.6387	50.55	0.6013	39.91	1.19	43.54	0.7011	43.54	0
	23.58	0.8267	50.31	0.6263	38.09	1.228	40.75	0.7271	44.26	0
	9.191	7.8297	52.73	0.6643	37	1.228	35.92	0.7271	44.99	0
	9.795	7.8797	54.42	0.8773	36.04	1.24	27.45	0.7141	44.38	0.02
			52.6	0.9643	37.49	1.29	19.47	0.8141	45.71	0.02
			51.76	1.0023	36.4	1.391	18.26	0.8391	47.16	0
			50.55	1.0393	34.59	1.466	17.54	0.8521	48.13	0
			51.15	1.0273	33.86	1.491	17.9	0.9141	48.86	0
			42.93	1.0393	33.26	1.503	16.33	1.0521	47.77	0.02
			37.49	1.0393	34.1	1.591	15.72	1.0651	34.71	0.38
			36.16	1.0393	32.65	1.867	13.91	1.0651	10.16	0.5
			35.43	1.0393	29.14	2.242	12.46	1.0521	9.554	0.52
			34.34	1.0393	28.06	2.33	11.85	1.0651	10.4	0.5
			32.41	1.1773	27.57	2.38	11.25	1.0651	11.13	0.5
			30.72	1.2783	27.45	2.418	10.4	1.0651	11.85	0.52
			29.51	1.3153	26.12	2.906	9.796	1.0651	12.46	0.52
			28.54	1.3153	14.03	4.385	9.191	1.0651	13.06	0.52
			27.93	1.3153	8.949	5.149	8.586	1.0651	13.91	0.52

Panel Type = B
Bracket No = 11
Test Type = T,1

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test directi	=	Shear
x edge pro	=	N/A
y edge pro	=	N/A



Peak Loads										
Designation		B1-11 (T,1)		B2-11 (T,1)		B3-11 (T,1)		B4-11 (T,1)		B5-11 (T,1)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		91.91	15.118	94.81	15.032	91.79	15.152	100.7	0.1987	97.96	15.0372

Test Data

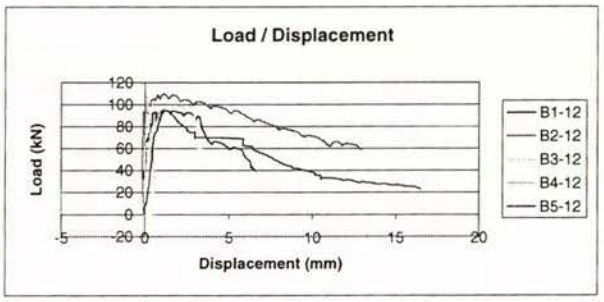
Designation	B1-11 (T,1)		B2-11 (T,1)		B3-11 (T,1)		B4-11 (T,1)		B5-11 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	1.209	0	0	0	0.1209	0	0	0	0.1209	0
	1.814	0	1.209	0.012	1.088	0.012	3.041	-0.0124	1.209	0
	2.661	0.012	3.507	0.012	2.056	0.025	7.413	-0.0124	2.056	0
	3.628	0	5.805	0.012	2.902	0	10.64	-0.0249	3.023	0
	4.716	0	7.014	0.012	3.87	0.025	11.59	-0.0124	3.628	0.0124
	6.047	-0.013	8.103	0.012	4.837	0.025	15.59	-0.0124	4.354	0.0124
	8.223	-0.025	8.949	0.012	5.926	0.012	20.34	-0.0124	5.321	0.0124
	10.52	-0.025	9.675	0.025	6.53	0.025	23.38	-0.0124	6.53	0.0248
	12.21	-0.038	10.76	0.012	7.498	0.012	25.85	-0.0249	7.74	0.0248
	14.51	-0.05	14.51	0.012	8.707	0.012	26.61	-0.0124	9.554	0.0248
	16.08	-0.05	18.14	0.025	9.554	0.025	28.51	-0.0249	11	0.0248
	17.66	-0.05	20.2	0.025	10.64	0.037	29.65	-0.0124	12.09	0.0124
	19.35	-0.05	22.25	0.012	11.49	0.012	31.55	-0.0249	13.3	0.0124
	21.41	-0.062	25.4	0.012	12.21	0.025	32.69	-0.0124	14.15	0.0248
	22.86	-0.05	26.85	0.012	13.06	0.025	34.4	-0.0124	15.36	0.0248
	23.94	-0.062	28.42	0.012	13.67	0.037	35.16	-0.0124	18.38	0.0373
	25.76	-0.062	30.6	0.012	14.39	0.037	34.59	-0.0249	21.41	0.0745
	27.21	-0.062	32.65	0.012	15	0.037	38.2	-0.0124	22.37	0.1366
	28.42	-0.05	34.83	0.012	15.6	0.025	42.57	-0.0124	23.34	0.1739
	29.39	-0.05	36.64	0.012	16.21	0.037	42	-0.0124	24.67	0.1863
	30.35	-0.062	37.61	0.012	16.81	0.025	44.29	-0.0249	25.27	0.1987
	31.32	-0.038	40.63	0.012	21.16	0.037	48.66	0	26.24	0.2236
	32.05	-0.038	43.78	0.012	24.43	0.198	49.42	-0.0249	26.97	0.236
	32.77	-0.038	46.68	0.012	25.4	0.323	53.03	-0.0124	27.33	0.2484
	33.86	-0.038	48.74	0.012	26.73	0.596	54.36	-0.0249	28.3	0.2484
	34.47	-0.025	50.19	0.012	29.51	0.583	53.79	-0.0124	29.39	0.2608
	35.07	-0.038	50.91	0.012	32.17	0.733	55.12	0	28.78	0.2733
	36.76	-0.013	50.31	0.012	34.47	0.733	56.64	-0.0249	31.08	0.2857
	36.16	0	51.03	0	37.25	0.882	58.92	-0.0249	33.62	0.3102
	38.21	-0.013	55.02	0.012	39.42	0.882	59.87	-0.0249	35.55	0.3482
	37.61	0.012	54.3	0.012	42.08	0.894	60.44	-0.0124	37.61	0.3722
	38.21	0.012	55.27	0	43.29	1.043	61.39	-0.0249	38.58	0.3852
	40.03	0.012	58.17	0.012	42.69	1.043	61.96	0	41.84	0.4222
	41.72	0.025	60.47	0.012	42.08	1.043	62.53	-0.0124	44.38	0.4472
	43.05	0.037	59.86	0.012	43.17	1.043	61.96	-0.0124	46.44	0.4722
	44.38	0.037	60.47	0.025	44.62	1.055	61.39	0	47.65	0.4842
	45.59	0.062	62.89	0.037	46.08	1.043	62.72	-0.0249	47.04	0.4972
	46.44	0.062	64.58	0.049	47.16	1.043	64.24	-0.0124	48.01	0.5092
	45.83	0.087	65.91	0.087	48.37	1.043	65.19	-0.0124	49.7	0.5342
	46.56	0.087	65.18	0.099	49.46	1.055	67.09	-0.0249	50.91	0.5342
	48.98	0.087	64.7	0.112	50.31	1.055	68.61	-0.0249	52.24	0.5462
	50.79	0.099	64.58	0.112	50.91	1.055	68.04	-0.0124	53.09	0.5712
	52.61	0.099	66.27	0.099	51.52	1.043	69.94	-0.0124	53.94	0.5712
	53.82	0.136	68.69	0.124	51.64	1.267	70.89	-0.0249	54.78	0.5842
	54.42	0.136	70.26	0.149	50.91	1.254	70.13	-0.0124	55.15	0.6082
	53.82	0.149	70.99	0.161	52.36	1.267	71.27	-0.0124	55.63	0.6212
	55.39	0.149	71.96	0.198	54.54	1.267	72.99	-0.0124	56.6	0.6332
	58.05	0.174	71.23	0.211	56.11	1.254	73.56	-0.0124	55.99	0.6462
	59.5	0.186	70.99	0.223	57.2	1.267	74.51	-0.0124	56.6	0.6332
	60.59	0.198	70.62	0.236	58.29	1.44	75.27	-0.0124	58.29	0.6582
	61.55	0.211	73.16	0.248	59.26	1.428	74.51	-0.0124	59.62	0.6712
	62.28	0.223	75.22	0.273	59.98	1.44	73.94	-0.0124	60.83	0.6832
	63.01	0.248	76.07	0.298	59.38	1.44	75.46	-0.0249	61.68	0.7082
	62.4	0.248	75.58	0.36	58.77	1.428	77.17	0	62.4	0.7202
	61.68	0.248	74.86	0.372	58.17	1.44	78.5	-0.0124	63.13	0.7332
	63.49	0.273	73.89	0.397	59.26	1.44	79.07	-0.0124	64.34	0.7572
	66.39	0.298	73.16	0.41	60.95	1.428	78.31	-0.0124	65.3	0.7822
	67.6	0.31	74.74	0.422	62.16	1.577	77.17	0	64.7	0.8202
	68.69	0.335	76.43	0.484	63.13	1.565	76.41	-0.0124	66.39	0.8322
	69.66	0.36	76.19	0.67	63.73	1.565	75.65	-0.0124	67.96	0.8442
	70.38	0.372	74.74	0.819	64.34	1.577	75.08	0	69.17	0.8692
	69.78	0.422	73.65	0.857	64.94	1.714	74.51	-0.0124	70.14	0.8822

Panel Typ = B
Bracket N = 12
Test Type = T,1

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test directi	=	Shear
x edge pro	=	N/A
y edge pro	=	N/A



Peak Loads										
Designation		B1-12 (T,1)		B2-12 (T,1)		B3-12 (T,1)		B4-12 (T,1)		B5-12 (T,1)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		95.42	6.583	109.8	12.99	98.56	3.316	106.1	0.6458	94.21	16.461

Test Data

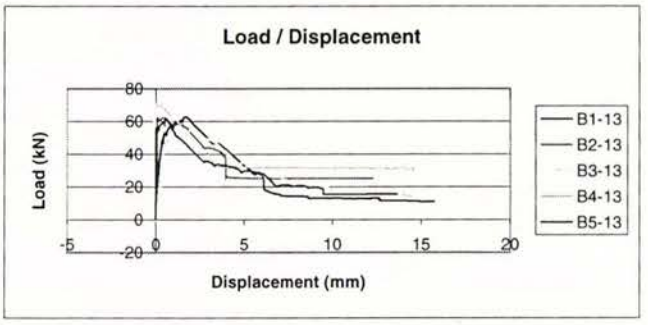
Designation	B1-12 (T,31)		B2-12 (T,1)		B3-12 (T,1)		B4-12 (T,1)		B5-12 (T,1)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	2.056	0	0.8465	0	-0.2419	0	-0.1901	0	0.2419	0
	2.902	0	1.451	-0.013	0.7256	0.596	0.7603	0.0248	1.693	0
	5.2	-0.037	5.805	-0.05	3.628	0.572	2.281	0	3.749	0
	7.135	-0.037	8.344	-0.05	5.805	0.547	3.801	0.0124	5.684	0.012
	7.861	-0.05	11	-0.062	7.256	0.522	4.942	0	7.256	0.025
	9.312	-0.05	13.67	-0.087	8.707	0.509	5.892	0.0124	9.796	0.112
	11.49	-0.075	17.54	-0.087	9.433	0.509	6.842	0.0124	11.97	0.137
	12.7	-0.075	19.83	-0.1	10.4	0.497	7.983	0.0124	14.27	0.137
	14.75	-0.075	21.28	-0.112	11.97	0.485	9.123	0.0124	17.9	0.174
	16.93	-0.087	23.34	-0.112	12.94	0.472	10.45	0.0124	21.77	0.211
	18.38	-0.1	23.94	-0.112	14.27	0.485	11.78	0	25.03	0.248
	20.2	-0.1	25.76	-0.112	15.6	0.472	13.3	0.0124	27.57	0.273
	19.47	-0.112	30.6	-0.112	16.69	0.472	15.4	0.0124	29.99	0.298
	20.32	-0.112	35.68	-0.125	17.78	0.472	17.49	0	32.05	0.323
	23.22	-0.112	39.18	-0.112	21.65	0.485	19.01	0	33.5	0.31
	24.07	-0.112	40.51	-0.125	24.19	0.485	20.34	0.0124	35.55	0.335
	25.03	-0.112	39.91	-0.125	26	0.485	24.52	0.0124	36.4	0.335
	26.85	-0.112	43.05	-0.125	27.33	0.472	26.23	0.0124	37.97	0.335
	28.06	-0.112	47.28	-0.125	28.78	0.485	28.13	0.0248	40.03	0.36
	29.14	-0.1	47.89	-0.112	30.35	0.472	30.03	0.0124	41.96	0.36
	31.44	-0.1	50.07	-0.125	31.81	0.472	31.93	0.0248	42.81	0.385
	33.86	-0.013	55.15	-0.112	33.26	0.485	33.26	0.0372	42.21	0.385
	35.8	-0.013	56.72	-0.125	34.83	0.472	34.97	0.0372	45.59	0.385
	37.61	-0.013	56.11	-0.112	37.73	0.485	36.68	0.0248	49.82	0.447
	38.94	-0.013	59.74	-0.112	39.55	0.485	38.2	0.0372	50.07	0.472
	41.24	0.074	65.06	-0.112	41.48	0.472	40.67	0.0372	53.21	0.472
	41.84	0.074	64.46	-0.112	42.69	0.485	40.1	0.0372	57.69	0.459
	41.24	0.074	68.21	-0.125	44.26	0.485	44.86	0.0372	61.43	0.484
	40.63	0.074	72.56	-0.062	46.2	0.472	48.28	0.0496	65.06	0.522
	42.45	0.074	73.89	-0.075	47.28	0.485	49.99	0.0496	64.46	0.534
	45.11	0.074	73.29	-0.075	48.13	0.485	49.42	0.0496	67.48	0.534
	47.04	0.074	72.68	-0.087	49.46	0.472	49.99	0.0372	71.47	0.559
	48.74	0.087	75.95	-0.087	50.91	0.472	54.93	0.0496	71.83	0.596
	49.95	0.074	80.54	-0.075	52.48	0.472	58.73	0.0496	73.29	0.609
	50.79	0.074	82.11	-0.075	54.54	0.485	61.01	0.0248	75.7	0.708
	51.52	0.074	81.39	-0.075	58.17	0.485	60.44	0.0496	77.64	0.745
	50.79	0.087	80.66	-0.075	60.95	0.485	63.48	0.0621	77.03	0.77
	51.76	0.074	79.94	-0.075	63.01	0.485	67.66	0.0621	76.43	0.77
	54.3	0.087	81.03	-0.075	63.61	0.485	70.13	0.0621	77.16	0.782
	56.35	0.087	85.02	-0.075	63.01	0.472	72.23	0.0621	79.69	0.795
	57.81	0.074	87.31	-0.087	66.63	0.485	71.65	0.0621	82.36	0.82
	59.5	0.074	86.35	-0.075	69.66	0.485	71.08	0.0621	83.2	0.857
	60.59	0.074	85.74	-0.075	71.35	0.596	75.65	0.0621	82.48	0.857
	59.98	0.087	86.47	-0.075	72.56	0.596	80.4	0.0745	81.87	0.869
	60.83	0.074	88.64	-0.075	71.96	0.596	82.49	0.0745	82.84	0.869
	62.76	0.087	89.49	-0.075	74.49	0.596	81.73	0.0745	85.02	0.882
	64.7	0.074	88.64	-0.075	76.79	0.584	80.97	0.0869	87.07	0.882
	66.63	0.161	88.04	-0.087	78.73	0.596	86.48	0.0869	86.23	0.931
	68.21	0.174	90.94	-0.075	80.18	0.584	91.04	0.0869	85.62	0.944
	69.05	0.186	93.36	-0.075	79.57	0.584	90.47	0.0993	87.19	0.944
	68.45	0.223	92.76	0.161	80.54	0.609	89.9	0.0993	89.37	0.944
	67.84	0.236	92.15	0.174	83.32	0.758	89.33	0.0993	91.06	0.994
	69.66	0.248	91.55	0.161	84.77	0.758	92.37	0.0993	90.46	1.006
	71.23	0.248	93.72	0.161	86.23	0.758	96.74	0.0993	89.85	0.994
	72.8	0.261	96.14	0.174	87.19	0.758	97.88	0.1117	89.13	0.994
	73.65	0.273	96.75	0.174	86.47	0.758	96.74	0.1117	91.91	1.006
	74.86	0.285	97.83	0.161	85.86	0.745	95.98	0.1117	94.21	0.994
	75.22	0.298	99.04	0.174	88.89	0.82	98.45	0.0993	93.84	1.08
	75.46	0.323	97.71	0.161	90.58	0.808	101.3	0.0993	93	1.08
	74.86	0.335	96.02	0.174	91.91	0.894	103.4	0.1117	92.39	1.08
	74.25	0.348	95.05	0.149	92.76	0.907	102.3	0.1242	91.55	1.08
	76.07	0.335	94.21	0.174	92.15	0.994	101.7	0.1117	93.12	1.08
	76.79	0.348	96.26	0.174	91.43	0.981	101.1	0.1242	94.09	1.08
	76.19	0.348	100.4	0.161	90.82	0.994	104.2	0.1366	93.24	1.453
	77.4	0.348	100.3	0.372	92.15	0.994	106.1	0.1366	84.17	2
	78.61	0.348	99.53	0.36	93.72	1.044	104.9	0.1366	77.76	2.509
	79.33	0.335	98.68	0.372	94.93	1.081	103.4	0.149	75.95	2.521

Panel Typ = B
Bracket N = 13
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direct	=	Shear
x edge pro	=	N/A
y edge pro	=	N/A



Peak Loads

Designation		B1-13 (T,5)		B2-13 (T,5)		B3-13 (T,5)		B4-13 (T,5)		B5-13 (T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		62.64	15.736	62.28	12.2786	54.18	14.5195	71.23	14.571	61.19	13.617

Test Data

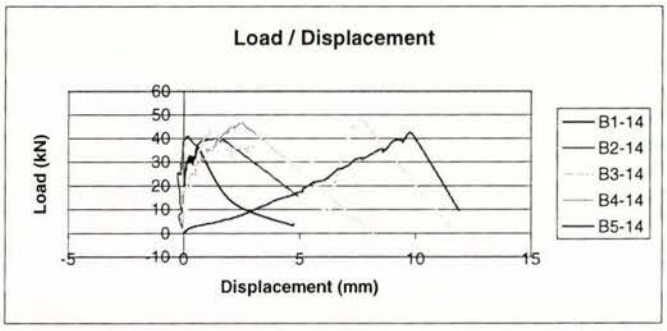
Designation	B1-13 (T,5)		B2-13 (T,5)		B3-13 (T,5)		B4-13 (T,5)		B5-13 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	1.33	0	0.8465	0	-0.1209	0	0.3628	0	0.3628	0
	2.902	0	2.419	-0.0125	0.4837	0.0251	1.33	0	1.088	0.013
	4.474	0	3.265	0	1.209	0.0752	2.781	0	2.056	0
	5.684	0.012	4.112	-0.0125	1.935	0.0877	4.595	0.0126	2.661	0
	7.135	0	4.958	0	2.419	0.1002	5.684	0	3.265	0
	8.344	0.012	5.684	0	2.781	0.1128	4.716	-0.025	3.991	0
	8.949	0.025	6.288	0	3.991	0.1503	5.442	-0.025	4.837	0.013
	9.795	0.025	7.014	-0.0125	5.079	0.1754	6.047	-0.0125	5.563	0
	11	0.012	7.619	0	6.167	0.1754	6.651	-0.025	6.168	0.013
	12.58	0.05	8.341	0	7.498	0.2004	7.256	-0.0125	6.893	0
	14.51	0.05	8.949	0.0126	8.102	0.2004	8.344	-0.025	7.74	0.013
	15.96	0.062	9.674	0.0126	8.707	0.2004	9.312	-0.025	9.191	0
	16.93	0.075	10.28	0.0251	9.674	0.2004	11.13	-0.025	10.88	0
	18.74	0.075	10.88	0.0126	10.28	0.213	12.34	-0.025	13.06	0
	19.59	0.087	11.49	0.0376	11.73	0.213	13.18	-0.0125	14.63	0.013
	21.28	0.1	12.46	0.0251	12.7	0.213	14.63	-0.025	15.72	0.013
	21.89	0.1	13.42	0.0376	13.3	0.2255	15.96	-0.025	17.05	0
	21.28	0.112	14.51	0.0376	13.91	0.2255	17.78	-0.0125	18.02	0
	23.1	0.112	15.84	0.0501	14.87	0.238	18.74	-0.025	18.99	0.013
	24.19	0.125	17.05	0.0627	16.69	0.2506	19.71	-0.025	20.07	0.013
	23.58	0.125	18.5	0.0627	17.9	0.2506	21.04	-0.025	21.28	0.013
	26.6	0.137	20.2	0.0627	18.62	0.2506	24.19	-0.025	22.49	0.013
	27.93	0.162	21.53	0.0752	19.23	0.2506	26.48	-0.025	23.58	0
	29.02	0.15	22.73	0.0877	19.83	0.2631	29.27	-0.025	24.67	0.013
	28.42	0.162	23.94	0.1128	21.16	0.2631	32.41	-0.0125	26	0.013
	30.35	0.175	25.03	0.1003	22.61	0.2631	35.31	-0.025	27.21	0.013
	32.77	0.2	26.24	0.1003	23.58	0.2756	37.49	-0.025	26.61	0
	33.98	0.213	25.64	0.1003	24.67	0.2756	39.55	-0.0125	26	0
	33.26	0.213	27.81	0.1003	26.24	0.2881	38.94	-0.0125	27.57	0
	35.55	0.225	30.47	0.1003	27.09	0.2881	41.6	-0.025	29.75	0.013
	38.7	0.25	33.62	0.1003	28.18	0.3007	43.66	-0.025	33.38	0.013
	37.97	0.25	34.59	0.1003	29.02	0.3007	43.05	-0.025	36.28	0
	40.27	0.275	33.98	0.1128	30.23	0.3255	44.5	-0.025	37.13	0
	42.93	0.3	35.55	0.1003	31.32	0.3385	46.8	-0.025	36.52	0.013
	42.33	0.313	37.25	0.1003	32.05	0.3385	49.7	-0.025	39.06	0
	44.87	0.325	38.58	0.1003	33.01	0.3505	51.76	-0.025	40.39	0.013
	47.28	0.35	37.97	0.1003	33.74	0.3505	53.69	-0.025	39.79	0.013
	48.37	0.375	40.51	0.1003	34.34	0.3635	55.75	-0.025	39.18	0.013
	47.77	0.388	41.72	0.1003	35.07	0.3755	55.15	-0.0125	41.36	0.013
	47.53	0.4	41.12	0.1003	35.8	0.3885	55.75	-0.0125	43.54	0.013
	47.16	0.4	44.02	0.1003	35.43	0.4005	57.93	-0.025	44.5	0.013
	46.56	0.413	45.35	0.1003	35.19	0.4005	59.86	-0.0125	45.47	0
	47.4	0.413	44.5	0.0877	35.8	0.4005	59.26	-0.025	46.08	0
	48.98	0.426	47.4	0.1003	37.37	0.4135	60.1	-0.025	45.47	0
	51.03	0.463	48.37	0.1003	38.58	0.4135	61.68	-0.0125	44.87	0.013
	52.6	0.501	47.65	0.1003	39.42	0.4255	62.64	-0.025	45.71	0
	52	0.576	48.61	0.1003	40.51	0.4255	62.04	-0.025	47.53	0
	51.52	0.601	51.64	0.1003	41.24	0.4505	61.43	-0.025	49.22	0
	51.4	0.601	50.79	0.1003	41.84	0.4765	63.85	-0.025	50.19	0
	53.45	0.639	51.64	0.1003	41.24	0.4885	65.42	-0.025	51.03	0
	55.02	0.701	54.42	0.1128	41.12	0.5015	64.82	-0.0125	51.64	0.013
	56.47	0.801	53.69	0.1003	42.69	0.5015	64.22	-0.0376	51.03	0.013
	55.99	0.914	54.54	0.1128	44.99	0.5265	67.36	-0.0376	50.43	0.013
	55.75	0.914	57.56	0.1003	46.32	0.5635	68.09	-0.025	52.48	0.013
	55.14	0.939	56.84	0.1003	47.53	0.5885	67.36	-0.025	53.69	0.013
	54.54	0.952	58.65	0.0877	48.13	0.6135	66.76	-0.025	54.9	0
	56.35	0.989	61.43	0.1003	47.53	0.6635	66.15	-0.025	55.87	0.063
	58.05	1.039	60.1	0.0877	46.92	0.6895	67.96	-0.0125	55.99	0.101
	59.38	1.115	59.38	0.1003	47.89	0.7145	70.5	-0.0125	55.15	0.138

Panel Type = B
Bracket N = 14
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test directi	=	Shear
x edge pro:	=	N/A
y edge pro:	=	N/A



Peak Loads										
Designation		B1-14 (T,3)		B2-14 (T,3)		B3-14 (T,3)		B4-14 (T,3)		B5-14 (T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		36.28	4.73	41	4.918	48.49	11.5392	46.38	8.2097	42.21	11.9

Test Data

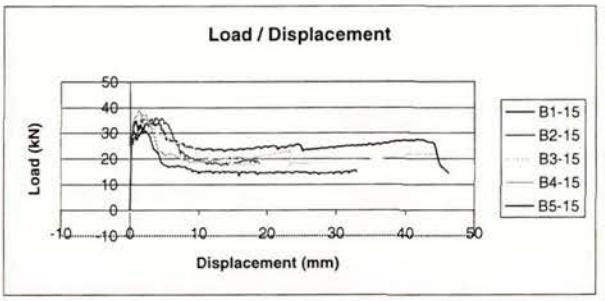
Designation	B1-14 (T,3)		B2-14 (T,3)		B3-14 (T,3)		B4-14 (T,3)		B5-14 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	1.209	0	1.209	0	0.3628	0	-0.7603	0	-0.1209	0
	1.814	0	1.935	-0.037	1.935	0.0125	-0.1901	0.0248	0.4837	0.07
	2.419	-0.013	3.628	-0.1	2.54	0.0125	0.3801	0.0124	1.693	0.17
	3.265	-0.013	4.958	-0.149	3.386	0.0125	1.14	0.0124	2.902	0.5
	3.87	-0.013	5.563	-0.162	5.079	0.0249	1.711	0.0248	3.144	0.63
	4.837	-0.013	6.409	-0.186	6.409	0.0249	2.281	0.0124	3.507	0.84
	5.805	-0.013	7.619	-0.186	7.74	0.0249	2.851	0	3.87	0.98
	6.409	0	9.312	-0.075	8.949	0.0125	3.611	0.0124	4.112	1.12
	7.135	-0.013	10.04	-0.087	10.04	0.1243	4.181	0.0124	4.354	1.28
	8.103	0	10.76	-0.1	11	0.1367	4.752	0.0124	4.837	1.46
	9.675	-0.013	11.97	-0.124	11.85	0.1367	6.272	0	5.2	1.66
	11.13	0	12.7	-0.149	12.82	0.1491	8.553	0.0124	5.684	1.76
	12.34	0	13.54	-0.162	13.67	0.1615	10.07	0.0124	6.047	2
	14.27	-0.013	15.12	-0.162	14.75	0.1864	11.02	0.0124	6.53	2.12
	16.69	0.012	15.96	-0.162	16.33	0.2236	12.16	0.0248	7.014	2.33
	18.14	0.037	17.05	-0.162	17.66	0.2485	15.59	0.0248	7.498	2.42
	17.54	0.037	18.62	-0.174	19.11	0.2857	19.39	0.0621	7.861	2.57
	18.14	0.037	19.59	-0.199	19.83	0.2981	20.72	0.236	8.344	2.67
	19.83	0.037	20.2	-0.211	20.92	0.3106	21.29	0.2484	8.586	2.78
	21.04	0.037	22.74	-0.236	22.01	0.3478	21.86	0.2608	9.07	2.83
	22.49	0.037	22.13	-0.236	23.1	0.3602	21.29	0.2484	9.433	2.9
	24.07	0.037	21.53	-0.236	23.82	0.3727	24.14	0.2484	9.796	3.02
	25.52	0.025	24.79	-0.249	24.67	0.3975	25.28	0.4844	10.28	3.14
	24.91	0.05	25.4	-0.261	25.52	0.4099	24.71	0.5216	10.76	3.22
	24.31	0.037	25.03	-0.124	27.33	0.4348	25.66	0.5216	11.37	3.39
	23.7	0.05	24.79	-0.112	28.66	0.4596	28.32	0.5216	11.61	3.5
	24.31	0.05	27.45	-0.137	29.87	0.4844	27.75	0.5216	13.91	3.97
	27.57	0.099	29.27	-0.137	30.72	0.5093	28.32	0.5092	15.48	4.51
	27.81	0.124	27.94	-0.112	30.11	0.5341	30.6	0.7697	16.57	4.79
	26.85	0.124	26.85	-0.075	29.51	0.5465	32.12	0.7827	17.17	4.95
	28.78	0.124	28.42	-0.075	30.35	0.559	31.55	0.7827	17.54	5.14
	30.48	0.149	31.08	-0.075	32.65	0.5962	30.98	0.7827	17.78	5.14
	29.63	0.186	31.68	-0.075	34.22	0.6211	31.36	0.9317	17.17	5.14
	30.96	0.186	31.08	-0.075	35.07	0.6832	32.88	0.9687	18.62	5.14
	31.93	0.211	31.68	-0.05	36.04	0.7204	35.16	0.9567	20.2	5.41
	31.08	0.211	34.83	-0.05	35.43	0.7577	34.97	1.0927	21.41	5.62
	30.48	0.211	34.22	-0.025	37.13	0.7825	34.59	1.0927	22.37	6.08
	32.77	0.273	34.83	-0.025	39.18	0.8442	35.54	1.0807	24.79	6.36
	31.81	0.31	38.09	-0.037	41	0.9312	34.78	1.2417	26.85	6.62
	31.08	0.298	37.49	0	41.6	0.9812	35.92	1.2417	27.21	6.79
	30.48	0.286	36.88	0.012	41	1.0062	35.35	1.2547	29.02	7.16
	29.87	0.298	38.82	0.012	40.39	1.0312	34.78	1.2547	30.96	7.36
	30.48	0.298	41	0.161	41.48	1.0802	35.54	1.2547	31.81	7.69
	31.56	0.335	40.03	0.248	43.78	1.1802	37.44	1.3787	31.08	7.69
	32.17	0.335	39.3	0.31	35.07	1.9132	38.39	1.3907	32.77	8
	31.32	0.323	37.01	0.571	34.47	2.0622	39.34	1.5027	34.71	8.34
	30.48	0.335	38.7	0.782	33.86	2.0492	38.96	1.6267	35.43	8.47
	31.44	0.385	40.15	1.515	33.26	2.0492	38.77	1.6147	35.19	8.61
	30.72	0.385	39.42	1.552	32.65	2.0622	40.29	1.6147	34.83	8.59
	30.11	0.385	38.82	1.59	32.05	2.0622	42.19	1.7267	34.22	8.59
	29.51	0.385	39.91	1.652	34.1	2.0492	42.57	1.8627	36.16	8.8
	30.6	0.385	15.72	4.918	35.43	2.0492	44.48	2.0247	38.21	8.94
	29.27	0.41			35.8	2.7202	45.05	2.2107	39.42	9.25
	28.66	0.422			34.71	2.7202	44.48	2.2107	38.82	9.46
	30.6	0.422			36.16	2.7202	45.81	2.3477	38.21	9.46
	29.87	0.422			36.4	2.9932	46.38	2.5337	40.15	9.56
	29.27	0.422			35.92	3.2172	44.29	2.7817	42.21	9.84
	30.35	0.422			35.07	3.2172	-0.3801	8.2097	9.675	11.9
	31.32	0.422			34.34	3.2172				
	32.17	0.422			35.19	3.7142				

Panel Typ = B
Bracket N = 15
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test directi	=	Shear
x edge pro:	=	N/A
y edge pro:	=	N/A



Peak Loads										
Designation		B1-15 (T,5)		B2-15 (T,5)		B3-15 (T,5)		B4-15 (T,5)		B5-15 (T,5)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		33.98	46.26	35.92	18.952	35.19	44.2339	38.7	26.51	34.83	32.9616

Test Data

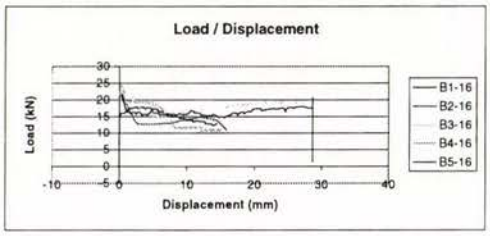
Designation	B1-15 (T,5)		B2-15 (T,5)		B3-15 (T,5)		B4-15 (T,5)		B5-15 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3628	0	1.209	0	-0.4837	0	1.088	0	0.1209	0
	1.451	0.01	3.144	0.01	1.088	0	2.661	0	2.661	0.0376
	2.902	0.04	6.53	0.03	3.386	0.0125	5.2	0.025	4.595	0.0626
	4.112	0.04	7.86	0.03	4.233	0.0125	7.861	0.05	5.2	0.0626
	5.321	0.04	8.465	0.06	9.312	0.0501	9.917	0.075	5.926	0.0626
	6.651	0.04	10.04	0.06	13.18	0.0626	11.13	0.088	6.893	0.0752
	7.619	0.06	11.37	0.07	18.99	0.1002	12.82	0.113	8.949	0.0877
	8.344	0.05	11.25	0.1	27.21	0.1879	14.15	0.125	10.64	0.1127
	9.191	0.05	12.82	0.07	29.63	0.2129	15.6	0.151	12.09	0.1127
	9.916	0.06	14.27	0.08	33.38	0.238	16.81	0.163	13.3	0.1253
	11	0.06	16.33	0.11	34.47	0.7266	18.26	0.163	15.24	0.1503
	11.73	0.06	19.59	0.14	34.22	1.2649	17.66	0.176	15.84	0.1503
	13.06	0.07	20.2	0.16	33.98	1.5909	19.11	0.188	16.81	0.1628
	15	0.09	22.25	0.19	33.38	1.6539	22.80	0.201	17.41	0.1754
	17.17	0.1	23.34	0.2	32.65	1.6789	27.21	0.251	18.14	0.1754
	19.35	0.11	24.31	0.2	35.19	2.2799	31.08	0.301	17.54	0.1754
	21.77	0.14	23.7	0.22	34.47	2.3549	33.74	0.351	19.59	0.1879
	24.55	0.16	23.1	0.22	32.29	3.4079	35.55	0.602	21.04	0.2004
	23.94	0.17	24.07	0.24	30.72	3.5699	36.76	0.84	23.1	0.2255
	25.52	0.17	26.85	0.25	29.14	4.5229	37.73	1.05	25.03	0.2505
	26.73	0.19	28.18	0.31	28.66	5.3119	38.7	1.3	26.12	0.2631
	28.3	0.21	27.21	0.4	26.6	5.6369	37.49	1.53	30.23	0.3257
	27.69	0.25	26.48	0.47	25.88	6.5769	36.76	1.57	32.77	0.5011
	31.56	0.29	25.76	0.52	26.24	7.2659	36.04	1.6	34.83	0.7516
	28.06	0.87	26.36	0.56	24.79	7.6169	35.55	1.63	33.01	0.9646
	27.57	1	28.66	0.66	23.94	8.6069	35.43	1.63	31.81	1.0526
	27.33	1	30.11	0.94	23.46	9.5209	37.01	1.74	31.08	1.1026
	27.93	1.09	29.14	0.99	22.49	9.5339	37.25	2.23	33.14	1.4786
	29.39	1.28	28.54	1.01	21.89	9.5339	35.19	2.47	31.2	1.6416
	29.51	1.4	29.51	1.02	21.4	9.9239	34.22	2.57	30.11	1.7286
	30.6	1.56	31.56	1.12	21.04	10.6239	34.22	2.68	29.75	1.7536
	32.05	1.8	32.89	1.28	21.04	11.0839	27.81	3.6	30.96	2.1426
	31.68	1.9	32.17	1.31	20.07	11.4739	23.22	4.12	28.54	2.8316
	31.44	1.91	31.56	1.33	19.47	12.3939	22.49	4.18	25.64	3.2576
	33.26	2.13	32.77	1.38	18.87	13.4039	22.86	4.25	24.07	3.3826
	33.98	2.4	34.95	1.488	18.99	14.1439	22.25	4.71	23.82	3.4956
	33.38	2.49	35.43	1.651	18.38	14.4439	21.53	5.06	22.13	4.0586
	33.13	2.53	34.22	1.726	18.02	15.2939	20.92	5.1	20.32	4.3346
	32.77	2.55	33.74	1.764	17.9	16.1439	21.77	5.29	19.71	4.3976
	33.62	2.7	35.43	1.864	17.53	17.1239	21.65	5.76	19.35	4.4346
	33.74	2.97	34.34	2.465	17.78	17.9039	21.89	5.9	18.99	4.4726
	33.98	3.34	33.26	2.553	17.41	18.1639	21.04	6.72	18.5	4.5346
	33.5	3.52	32.77	2.59	16.81	18.2039	20.32	6.79	18.38	4.5476
	33.01	3.57	32.53	2.603	17.05	19.1039	20.56	6.89	17.54	5.0986
	32.89	3.62	33.13	2.666	17.53	19.9739	19.83	7.68	17.05	5.5246
	33.38	3.79	34.83	2.816	17.41	20.6239	19.35	7.74	16.57	5.5746
	33.5	4.12	35.55	3.117	17.05	21.7139	19.47	7.98	16.81	5.6876
	33.26	4.33	34.59	3.242	16.81	22.4539	18.87	8.72	17.17	6.1256
	32.17	4.42	33.98	3.279	16.81	23.1239	18.62	8.77	16.93	6.4896
	31.68	4.44	33.38	3.33	17.05	23.8539	18.87	9.27	16.57	6.5266
	31.44	4.46	33.13	3.342	17.78	25.1539	18.62	9.76	17.05	6.6396
	31.32	4.61	34.34	3.38	17.29	25.5539	18.99	10.39	17.29	6.9026
	29.75	5.02	35.92	3.655	18.14	26.0839	18.62	10.84	17.29	7.2036
	28.3	5.15	35.43	3.968	17.9	26.5839	18.99	11.21	16.69	7.3916
	27.45	5.18	34.47	4.056	18.14	27.6739	18.99	11.84	16.81	7.6916
	27.69	5.36	33.98	4.069	18.5	28.7639	19.35	12.38	16.69	8.1056
	27.45	5.75	33.86	4.094	18.99	29.2939	19.35	12.84	16.08	8.2306
	26.73	5.84	35.43	4.332	18.74	30.0439	19.95	13.32	16.21	8.4566
	26.48	5.86	35.67	4.695	18.74	31.3439	19.83	13.56	15.96	8.7696
	26.85	6	34.34	4.87	19.11	32.7739	20.07	13.87	15.6	8.9826
	26.97	6.52	33.62	4.921	19.47	34.5039	19.95	14.19	15	9.0446
	26.48	6.72	34.1	5.008	19.95	36.0539	20.32	14.66	15.36	9.3326
	26	6.79	33.86	5.284	20.32	37.0039	20.07	15.08	15.12	9.7336
	25.76	6.83	31.08	5.823	20.68	37.9539	20.68	15.9	14.75	9.9816
	25.4	6.85	28.3	6.186	21.28	38.7739	20.2	16.12	14.39	10.0116
	25.88	7.34	27.57	6.249	21.16	39.4739	19.95	16.14	15	10.3216
	25.64	7.81	27.09	6.286	21.53	40.2739	20.32	16.29	15	10.6316

Panel Type = B
Bracket No = 16
Test Type = T,5

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test directi	=	Shear
x edge pro:	=	N/A
y edge pro:	=	N/A



Peak Loads

Designation	B1-16 (T,5)		B2-16 (T,5))		B3-16 (T,5)		B4-16 (T,5)		B5-16 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	21.89	14.442	22.01	15.9116	22.98	27.27	24.43	15.045	21.16	28.673

Test Data

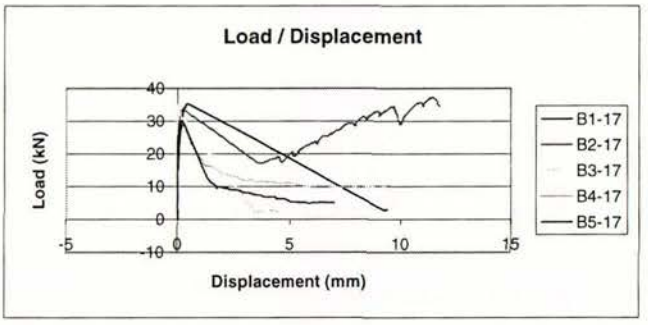
Designation	B1-16 (T,5)		B2-16 (T,5)		B3-16 (T,5)		B4-16 (T,5)		B5-16 (T,5)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.7256	0	2.66	0	-0.1209	0	0.2419	0	-0.3628	0
	1.693	0	3.507	0	0.6047	0.025	1.693	0.013	0.2419	0.013
	2.298	0	4.353	0	2.056	0.0501	2.902	0.013	1.935	0
	3.023	0.013	5.684	0	3.144	0.0375	3.749	0.013	2.54	0.013
	3.749	0.013	6.893	0.0125	3.87	0.0375	4.595	0.013	3.749	0
	4.353	0.013	8.102	0	4.474	0.0501	5.321	0.026	4.837	0
	5.079	0.025	9.07	0	5.684	0.0626	5.926	0.026	6.167	0.013
	5.684	0.025	10.04	0	6.288	0.0626	6.53	0.013	7.014	0
	6.53	0.025	10.64	0	6.893	0.0751	7.256	0.038	7.86	0
	7.135	0.038	11.37	0	7.619	0.0751	7.861	0.026	9.674	0.013
	7.74	0.038	11.97	0	8.586	0.0751	8.949	0.038	10.4	0.013
	8.344	0.038	12.58	0	9.312	0.0751	9.675	0.038	11.37	0
	9.07	0.05	13.3	0	10.16	0.1002	10.28	0.038	12.46	0
	10.4	0.05	14.15	0	10.76	0.0876	10.88	0.038	13.54	0.013
	11.25	0.063	14.75	0.0125	11.49	0.1002	11.49	0.051	14.51	0
	12.33	0.05	15.48	0	13.18	0.1002	10.88	0.051	15.36	0
	12.94	0.063	16.2	0	14.51	0.1127	10.28	0.051	16.08	0.013
	13.79	0.063	17.05	0	15.48	0.1252	11.61	0.051	16.81	0.013
	13.18	0.063	17.66	0	16.33	0.1252	12.21	0.051	17.53	0.025
	12.58	0.063	18.26	0	17.05	0.1252	12.82	0.063	18.14	0
	13.79	0.075	18.99	0.0125	17.9	0.1378	13.79	0.063	17.53	0.013
	14.39	0.075	19.71	0	18.62	0.1503	14.51	0.063	19.23	0.013
	15	0.075	20.44	0	19.35	0.1503	15.48	0.063	19.95	0
	15.6	0.088	21.04	0	18.74	0.1503	16.33	0.076	20.56	0
	16.45	0.1	20.92	0.1002	20.2	0.1503	17.17	0.076	21.16	0.013
	17.05	0.088	22.01	0.1376	20.8	0.1628	18.62	0.088	20.56	0.013
	17.9	0.1	21.77	0.3256	21.4	0.1628	18.99	0.101	21.16	0.013
	18.74	0.1	13.3	2.4306	21.89	0.2004	19.35	0.101	20.07	0.013
	20.2	0.113	13.06	2.5556	22.25	0.2505	20.44	0.101	18.99	0.013
	20.8	0.125	12.82	2.6806	22.98	0.3006	21.16	0.113	18.38	0.013
	21.77	0.125	12.7	2.7686	22.37	0.3507	22.01	0.113	19.23	0
	21.89	0.301	12.7	2.7936	22.01	0.4008	22.74	0.138	17.9	0
	20.8	0.451	12.7	3.2576	22.73	0.576	23.46	0.151	17.29	0.013
	17.41	0.94	12.58	3.6456	21.89	1.065	24.19	0.188	18.26	0.013
	16.81	1.04	12.7	3.7706	21.4	1.253	24.07	0.213	17.66	0.013
	16.33	1.14	12.7	4.0966	20.68	1.315	24.43	0.326	18.62	0.013
	16.2	1.153	12.58	4.4226	21.77	1.453	22.49	0.652	18.02	0
	17.17	1.365	12.7	4.7226	21.89	1.666	21.65	0.727	18.62	0.013
	17.53	1.666	12.7	5.1486	20.92	1.904	21.28	0.765	17.29	0.013
	17.41	1.854	12.7	5.3246	20.2	1.967	20.92	0.802	16.69	0.013
	17.41	1.992	12.7	5.7256	19.95	2.004	20.32	0.877	16.08	0.013
	17.78	2.255	12.7	5.9126	19.59	2.029	19.71	0.953	15.48	0.075
	17.78	2.518	12.82	6.2516	20.2	2.142	19.47	0.99	15.36	0.1
	17.78	2.744	12.94	6.5896	18.74	2.643	19.11	1.04	14.87	0.113
	17.41	2.844	13.06	6.9906	17.9	2.982	19.59	1.09	15.96	0.276
	17.78	3.082	12.94	7.3166	17.05	3.107	19.71	1.228	15.96	0.489
	17.78	3.458	12.94	7.4536	17.29	3.357	19.47	1.341	16.08	0.639
	17.78	3.696	13.06	7.9296	17.05	3.708	19.35	1.454	15.96	0.764
	17.29	3.796	13.06	8.0306	16.93	3.959	19.11	1.529	16.2	0.902
	17.17	3.808	13.54	8.5686	16.33	4.034	18.99	1.554	16.45	1.253
	17.66	4.147	13.42	8.6816	16.33	4.071	19.47	1.729	16.33	1.543
	17.66	4.56	13.91	9.2316	15.84	4.172	19.59	1.917	15.84	1.643
	17.41	4.735	13.79	9.4216	15.72	4.172	19.47	2.065	16.33	2.093
	17.29	4.986	14.15	9.8516	15.96	4.522	19.35	2.185	16.08	2.393
	17.29	5.412	14.15	10.1516	15.72	4.886	19.23	2.295	15.6	2.493
	17.05	5.702	14.27	10.6116	14.87	5.149	19.23	2.445	16.45	2.773
	16.45	5.762	14.27	10.9216	14.39	5.262	19.23	2.615	15.96	3.253
	16.57	5.822	14.51	11.3116	14.27	5.324	19.35	2.795	15.36	3.303
	16.45	6.252	14.63	11.6916	14.51	5.387	19.35	2.955	15.72	3.813
	16.33	6.662	14.75	11.8916	14.87	5.662	19.35	3.195	15.72	4.093
	15.96	6.762	14.63	12.3816	14.75	5.963	19.35	3.425	15.48	4.193
	15.84	6.792	14.63	12.4916	14.63	6.101	19.23	3.635	15.84	4.443
	15.84	7.092	14.39	13.0416	14.27	6.164	19.23	4.075	16.93	4.833
	15.72	7.632	14.27	13.1616	14.63	6.214	18.99	4.325	16.08	5.053
	15.24	7.822	14.27	13.7716	15.24	6.502	18.99	4.545	16.08	5.363
	14.87	7.922	14.15	13.8416	15.36	6.777	19.11	4.945	15.84	5.853
	15.12	8.252	14.03	13.9316	15.36	7.053	18.5	5.035	15.48	5.943
	14.87	8.672	13.91	14.5716	15.6	7.354	18.5	5.045	15.6	5.963
	14.87	8.872	13.54	14.6716	15.48	7.542	18.5	5.445	15.6	6.343
	14.63	8.892	11	15.9116	16.08	7.855	18.26	5.755	15.6	6.693
	14.51	9.332			15.96	8.268	17.9	5.785	15.48	6.853
	14.39	9.722			16.2	8.456	17.54	6.255	15.48	6.983
	14.27	9.842			16.33	8.882	16.69	6.625	15.48	7.383
	14.03	9.882			15.96	9.007	16.21	6.725	15.72	7.693
	13.79	9.942			16.33	9.521	16.08	6.745	15.72	8.053
	13.91	10.112			16.08	9.77	15.72	6.825	15.48	8.443
	13.91	10.512			16.45	10.31	15.48	6.855	15.48	8.593
	13.79	10.812			16.45	10.56	15.12	6.925	15.84	8.803
	13.54	10.912			16.69	10.97	14.87	6.975	15.72	9.193
	13.42	10.912			16.57	11.4	15.24	7.165	15.48	9.463
	13.54	11.202			16.69	11.6	15.36	7.345	15.48	9.593
	13.67	11.512			16.93	12	12.46	8.055	15.84	10.123
	13.67	11.742			16.81	12.21	11.61	8.415	15.84	10.323
	13.54	11.862			17.05	12.52	11.37	8.535	16.81	10.683
	13.54	12.062			17.29	13.02	11.61	8.635	16.45	11.113
	13.54	12.302			16.81	13.12	11.73	8.895	16.08	11.153
	13.54	12.492			16.69	13.13	11.61	9.155	16.08	11.593
	13.42	12.652			17.29	13.6	11.61	9.255	15.84	12.023
	12.82	12.742			17.17	13.96	11.73	9.645	15.48	12.093
	12.82	13.082			17.17	14.16	11.61	9.895	15.48	12.203
	12.82	13.432			17.29	14.69	11.73	10.235	15.48	12.653
	12.7	13.622			17.05	14.86	11.61	10.635	15.12	12.933
	12.46	13.742			17.41	15.41	11.73	10.895	14.87	12.953
	12.33	14.082			17.41	15.68	11.73	11.255	15.36	13.303
	12.94	14.442			18.14	16.27	11.61	11.455	15.24	13.753
					17.9	16.47	11.73	11.935	15.6	13.993

Panel Typ = B
Bracket N = 17
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direct	=	Shear
x edge pro	=	N/A
y edge pro	=	N/A



Peak Loads										
Designation		B1-17 (T,3)		B2-17 (T,3)		B3-17 (T,3)		B4-17 (T,3)		B5-17 (T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		35.31	9.399	37.25	11.774	33.01	4.4837	34.78	9.4994	29.87	7.026

Test Data

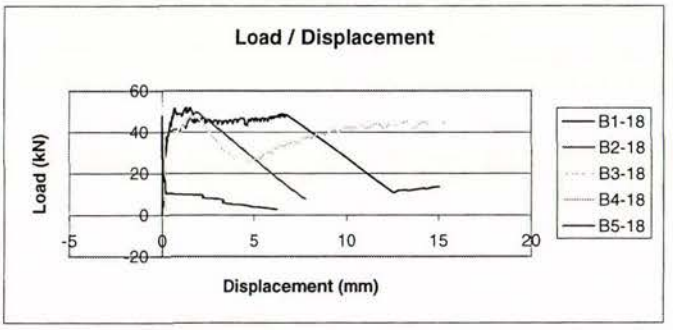
Designation	B1-17 (T,3)		B2-17 (T,3)		B3-17 (T,3)		B4-17 (T,3)		B5-17 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.8465	0	0.7256	0	0.9675	0	-0.3801	0	0	0
	2.177	0.012	1.33	0	3.87	0	4.372	-0.0124	1.209	0.013
	2.902	0	3.87	0	6.772	-0.0124	9.313	-0.0124	2.056	0
	4.233	-0.025	7.014	0.025	10.52	-0.0124	12.92	-0.0124	2.661	0
	6.168	-0.013	9.07	0	11.97	-0.0124	16.16	0	3.265	0
	8.223	-0.025	11.25	-0.012	11.37	-0.0124	15.59	-0.0124	4.112	-0.012
	9.191	0	13.06	0	11.97	-0.0124	16.16	-0.0124	4.716	0
	10.28	0	13.91	0	12.82	-0.0124	19.77	0	5.442	-0.012
	11.25	0.012	15.84	0	13.79	0	22.81	-0.0124	6.047	-0.012
	11.85	0	18.87	0	14.51	0	24.52	0	6.651	0
	12.46	0	19.71	0.012	15.24	-0.0124	26.04	-0.0124	7.377	-0.012
	13.67	0.012	21.41	0.012	16.08	-0.0124	27.75	0	8.465	0
	15.12	0.025	23.94	0.037	16.69	-0.0248	27.18	-0.0124	9.312	-0.012
	15.96	0.037	25.76	0.062	17.54	0	30.6	-0.0124	10.28	-0.012
	16.93	0.037	25.15	0.062	18.5	-0.0124	33.83	0	11.37	-0.012
	17.66	0.037	27.33	0.074	17.9	-0.0124	34.78	0.0621	13.06	-0.012
	18.87	0.049	30.23	0.099	18.5	-0.0124	31.93	0.1614	14.03	-0.012
	19.59	0.049	33.38	0.248	19.23	-0.0124	30.41	0.1984	15.84	-0.012
	20.2	0.062	17.41	3.515	20.44	-0.0124	29.27	0.2364	16.69	-0.012
	21.28	0.049	17.29	3.825	21.04	-0.0124	28.13	0.2984	17.66	-0.012
	22.61	0.087	18.02	4.037	22.37	-0.0124	26.99	0.3604	18.74	-0.012
	24.31	0.099	18.38	4.223	23.58	-0.0124	24.71	0.4844	19.47	0
	24.31	0.111	18.62	4.372	24.55	0	18.25	1.0554	20.07	-0.024
	25.64	0.124	19.11	4.496	25.27	-0.0124	17.3	1.1424	20.92	-0.012
	27.45	0.149	18.02	4.583	25.88	-0.0248	16.73	1.1924	21.77	-0.012
	28.66	0.198	17.41	4.596	26.61	0	16.16	1.2544	22.37	-0.012
	31.08	0.223	17.9	4.744	27.33	-0.0124	16.35	1.3784	23.22	0
	33.98	0.273	19.35	4.904	28.78	-0.0248	14.64	1.8634	24.07	0.013
	33.98	0.335	20.56	5.144	29.87	-0.0248	13.87	1.9374	24.91	0.013
	35.31	0.472	19.95	5.144	31.2	-0.0124	13.68	2.2234	25.64	0.025
	2.902	9.229	19.35	5.154	32.29	-0.0124	13.3	2.2604	25.03	0.05
	3.023	9.399	19.47	5.274	33.01	-0.0124	13.3	2.5094	26	0.05
			20.92	5.454	2.298	3.4407	11.78	2.9564	26.85	0.05
			21.89	5.634	2.298	3.5527	12.16	3.2544	27.81	0.062
			22.61	5.834	2.54	3.7387	11.4	3.4034	28.9	0.1
			23.7	6.184	2.54	3.8997	11.59	3.8874	29.63	0.125
			22.98	6.244	2.661	4.1237	11.21	3.9494	29.87	0.236
			25.27	6.484	2.781	4.3717	11.59	4.1604	12.46	1.329
			25.4	6.744	2.419	4.4837	11.02	4.3724	10.64	1.627
			26.97	7.084			11.02	4.7944	10.04	1.69
			27.45	7.314			10.45	4.8934	9.433	1.727
			29.02	7.564			11.21	4.9554	9.917	1.752
			29.27	7.854			10.83	5.2294	9.796	1.938
			28.42	7.964			10.64	5.2294	9.554	2.062
			29.99	8.084			10.26	5.7254	9.554	2.199
			31.32	8.354			9.883	5.8754	9.07	2.323
			30.72	8.474			9.693	6.3094	9.07	2.534
			30.11	8.474			9.693	6.6944	8.828	2.72
			31.44	8.604			9.883	7.0424	8.223	2.894
			33.01	8.954			9.883	7.1664	8.103	3.155
			32.29	9.054			9.503	7.6134	7.619	3.366
			32.05	9.064			9.313	7.6884	7.377	3.565
			31.68	9.054			9.883	7.9864	7.256	3.727
			33.01	9.294			9.503	8.1104	6.893	3.813
			34.47	9.654			9.883	8.4704	6.893	3.838
			33.5	9.724			10.26	8.7684	6.893	4.087
			33.14	9.764			10.45	8.9674	6.772	4.348
			32.89	9.774			10.26	9.2294	6.289	4.385
			32.29	9.814			10.45	9.4994	6.289	4.497

Panel Typ = B
Bracket N = 18
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test directi	=	Shear
x edge pro:	=	N/A
y edge pro:	=	N/A



Peak Loads										
Designation		B1-18 (T,3)		B2-18 (T,3)		B3-18 (T,3)		B4-18 (T,3)		B5-18 (T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		51.88	15.038	49.58	7.784	48.13	15.4023	56.83	0.1987	47.89	6.294

Test Data

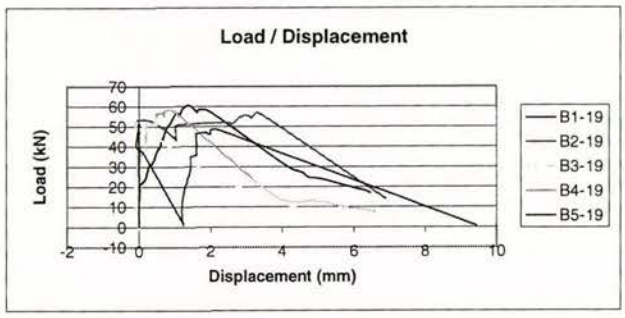
Designation	B1-18 (T,3)		B2-18 (T,3)		B3-18 (T,3)		B4-18 (T,3)		B5-18 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.7256	0	0	0	0.2419	0	-0.3801	0	0	0
	2.056	0.025	3.749	0	2.298	0.0249	0.5702	0	2.54	-0.013
	3.628	0.038	7.014	0.037	5.805	0.0373	4.181	0	3.507	-0.013
	5.2	0.062	8.828	0.025	7.74	0.0497	5.702	0	4.958	-0.013
	7.014	0.075	10.64	0.037	9.07	0.0621	6.272	-0.0124	6.409	0
	8.344	0.087	11.97	0.049	11	0.0746	7.793	0	7.619	0
	8.949	0.087	13.06	0.062	13.42	0.087	10.64	0.0124	8.949	-0.013
	11.13	0.1	14.15	0.074	15.6	0.0994	13.3	-0.0124	10.04	-0.013
	14.03	0.124	15.24	0.074	17.66	0.1118	15.78	0	11.49	0
	17.66	0.149	15.96	0.074	19.23	0.1242	18.06	-0.0124	13.54	0
	21.41	0.174	19.23	0.087	20.56	0.1367	20.72	-0.0124	15.24	-0.013
	24.43	0.187	21.65	0.099	21.65	0.1367	22.24	0	15.84	-0.013
	26.48	0.199	22.86	0.099	22.37	0.1615	24.71	0	17.05	0
	27.81	0.211	24.43	0.099	23.82	0.1863	26.8	0	20.32	0
	27.21	0.211	26.97	0.099	26.36	0.2484	27.56	0	22.37	0
	30.35	0.236	28.9	0.099	27.33	0.2733	26.8	0	24.43	-0.013
	32.65	0.249	29.99	0.099	28.3	0.2981	30.6	0.0124	25.52	-0.013
	34.83	0.286	30.96	0.112	29.87	0.3354	34.02	0	26.85	0
	36.64	0.311	28.9	0.112	30.84	0.3727	34.59	0	28.3	-0.013
	39.79	0.36	27.69	0.112	31.56	0.4348	38.58	0	29.51	0
	39.06	0.373	27.09	0.087	33.26	0.472	39.72	0	30.96	0
	41.96	0.398	26.48	0.112	35.68	0.5843	39.15	0.0124	31.93	-0.013
	44.75	0.447	27.45	0.112	37.01	0.6833	41.62	0	33.74	-0.013
	44.02	0.46	29.14	0.112	36.52	0.7083	45.43	-0.0124	33.14	0
	43.78	0.472	30.11	0.112	36.28	0.7083	46.95	0.0124	36.64	-0.013
	43.41	0.472	29.51	0.099	38.21	0.7453	50.75	0	39.79	-0.013
	42.81	0.485	30.72	0.112	40.51	0.8443	52.08	0.0124	41.48	-0.013
	46.08	0.522	32.29	0.112	42.08	0.9063	51.51	0	43.54	-0.013
	47.65	0.547	33.62	0.136	43.17	0.9813	50.94	0	45.95	-0.013
	46.8	0.572	34.47	0.149	42.33	1.0933	51.51	0	46.8	-0.013
	49.1	0.596	35.31	0.186	44.99	1.2173	54.36	0.0124	47.65	0
	51.4	0.659	34.71	0.174	46.2	1.3163	56.83	0	46.92	0
	50.67	0.683	35.55	0.186	46.92	1.3783	55.5	0.0124	47.89	-0.013
	50.07	0.683	36.76	0.223	47.53	1.4533	54.93	0.0124	36.28	0
	49.58	0.733	37.61	0.261	48.13	1.5403	54.36	0.0124	34.59	-0.013
	48.49	0.783	37.01	0.273	47.41	1.5653	47.33	0.0248	33.62	0
	48.86	0.857	36.4	0.285	46.8	1.6023	23.95	0.0745	33.01	-0.013
	48.86	1.006	37.49	0.31	47.16	1.6643	23.38	0.0621	32.41	0
	47.65	1.056	39.18	0.335	48.13	1.8013	22.81	0.0621	33.98	0
	50.07	1.131	38.58	0.397	31.32	3.2793	23.57	0.0621	33.38	0
	51.88	1.28	40.15	0.397	29.99	3.5643	24.14	0.0621	32.77	-0.013
	50.79	1.28	41.48	0.72	28.18	3.7513	24.9	0.0621	33.62	0.012
	50.07	1.28	40.63	0.807	27.09	3.8253	25.47	0.0745	34.59	0
	49.46	1.28	39.91	0.857	26.73	3.8633	24.9	0.0745	35.31	0
	50.19	1.391	41.96	0.993	26.36	3.8753	27.18	0.0745	34.71	-0.013
	51.88	1.458	43.17	1.105	26.61	4.1483	28.32	0.0869	36.28	0
	47.77	1.678	42.57	1.217	26.61	4.4093	29.65	0.0869	37.01	-0.013
	45.83	1.688	41.96	1.279	26.24	4.6333	30.79	0.0869	35.8	-0.013
	45.23	1.678	43.41	1.304	25.64	4.6953	30.22	0.0993	35.19	0
	44.62	1.688	45.23	1.366	25.03	4.7203	31.36	0.0993	34.47	-0.013
	44.99	1.798	46.56	1.503	25.52	4.7693	32.69	0.0993	35.8	0
	46.44	1.868	45.83	1.565	26.36	4.9433	32.12	0.1118	36.64	0
	46.56	1.948	45.23	1.565	27.21	5.1293	33.07	0.0993	37.25	-0.013
	45.71	1.948	46.56	1.627	27.81	5.2913	34.21	0.1118	36.52	0
	44.99	1.948	48.62	1.689	27.21	5.4033	33.64	0.1118	35.92	-0.013
	45.95	2.048	49.58	1.838	28.18	5.5143	34.59	0.1118	36.76	-0.013
	47.04	2.128	8.344	7.634	29.51	5.7133	35.73	0.1118	37.73	0
	46.44	2.258	7.861	7.774	30.48	5.8993	34.97	0.1242	38.58	0
	45.59	2.258	7.74	7.784	30.23	6.0113	36.3	0.1242	39.18	0
	44.87	2.258			29.87	6.0113	37.06	0.1118	38.34	0

Panel Typ = B
Bracket N = 19
Test Type = T,3

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test directi	=	Shear
x edge pro	=	N/A
y edge pro	=	N/A



Peak Loads										
Designation		B1-19 (T,3)		B2-19 (T,3)		B3-19 (T,3)		B4-19 (T,3)		B5-19 (T,3)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		60.59	6.45	56.84	6.856	52.12	6.8441	58.16	6.596	51.4	9.45

Test Data

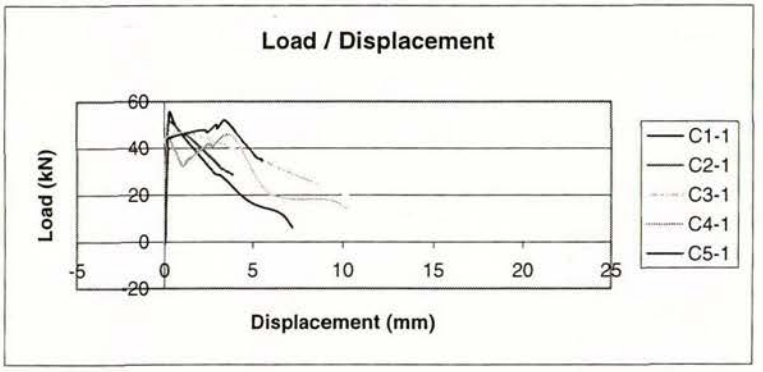
Designation	B1-19 (T,3)		B2-19 (T,3)		B3-19 (T,3)		B4-19 (T,3)		B5-19 (T,3)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	1.572	0	0.7256	0	1.33	0	-0.1901	0	0.3628	0
	3.628	-0.013	1.33	0	9.554	-0.0621	0.3801	0	1.088	0
	6.289	-0.013	2.661	-0.012	19.47	-0.0621	2.091	0	1.693	0.012
	7.982	0	4.112	0	24.43	-0.0621	3.991	0	2.54	0
	9.191	0	6.893	0	25.88	-0.0497	5.892	0	3.144	0
	11.61	0	8.707	0	26.61	-0.0497	7.603	0	4.595	0.012
	13.79	0.024	9.312	0	31.08	-0.0497	9.883	-0.012	6.168	0
	15.72	0.024	10.88	0	36.52	-0.0497	12.16	0	7.74	0
	17.41	0.024	12.7	0	42.45	-0.0497	14.45	-0.012	8.707	0.012
	18.02	0.037	13.91	0	48.49	-0.0373	17.49	0	9.796	0.012
	20.68	0.024	15.48	0	47.41	-0.0497	18.63	0	11.13	0
	23.34	0.173	16.69	0	52.12	-0.0497	20.15	0	11.85	0
	26.48	0.223	17.29	0	25.76	2.0491	22.62	0	12.46	0
	28.42	0.26	18.62	0	7.014	4.8071	23.95	0	13.79	0.012
	29.27	0.26	19.59	0	7.014	5.0301	23.38	0	14.39	0
	30.35	0.298	20.44	0	5.2	5.7511	25.09	0	15.12	0.012
	30.96	0.347	21.28	0	3.87	6.8441	27.75	0	15.96	0
	31.93	0.385	22.13	0			29.27	-0.024	16.57	0.012
	33.5	0.434	22.86	0			32.31	-0.012	17.41	0.012
	34.59	0.447	23.58	0			33.07	0	20.07	0
	37.13	0.496	24.55	0			35.35	0.013	22.49	0
	39.3	0.558	25.88	0			38.58	0.212	23.94	0.012
	38.7	0.558	26.48	0			39.34	0.212	24.91	0.012
	40.39	0.596	27.81	-0.012			40.29	0.212	26.73	0
	42.93	0.621	28.42	0			43.34	0.199	28.06	0
	44.02	0.658	30.48	0			45.43	0.212	29.02	0
	43.54	0.67	33.86	0			44.67	0.199	30.48	0
	46.92	0.72	36.28	0			46.95	0.212	31.44	0
	49.46	0.782	37.49	0			49.23	0.212	32.65	0.012
	51.76	0.881	39.18	0			50.94	0.212	33.86	0.012
	54.3	0.956	40.27	0			51.89	0.485	33.26	0
	56.48	1.043	41.12	0			51.32	0.497	33.86	0
	55.99	1.093	40.51	-0.012			50.75	0.497	34.83	0
	55.63	1.105	43.66	0			51.7	0.485	35.68	0
	55.02	1.13	44.38	0			53.98	0.485	36.52	0
	56.84	1.167	47.41	0			55.69	0.485	37.25	0
	58.41	1.204	48.98	-0.012			56.26	0.497	38.21	0
	59.74	1.279	48.37	0			57.02	0.696	38.82	0.012
	60.59	1.353	51.4	-0.012			56.26	0.696	39.91	0
	59.86	1.465	53.21	-0.025			55.69	0.708	41	0
	59.26	1.502	52.24	0.41			55.12	0.708	41.6	0
	58.65	1.54	43.9	1.031			55.88	0.696	42.57	0
	58.17	1.577	43.29	1.031			57.4	0.708	43.17	0
	57.93	1.577	45.35	1.031			58.16	0.932	45.35	0
	57.08	1.627	47.16	1.031			15.4	3.801	46.56	0
	57.81	1.639	48.25	1.018			12.92	4.894	47.16	0.012
	58.65	1.701	47.53	1.031			12.35	4.931	48.86	-0.013
	57.81	1.937	48.13	1.031			12.54	5.118	49.82	0
	30.11	4.15	50.55	1.031			9.883	5.751	50.79	0
	27.33	4.51	52	2.484			7.793	6.509	51.4	0.012
	26.73	4.6	51.28	2.596			7.223	6.596	50.43	0.012
	25.88	4.64	53.33	2.732					40.39	-0.075
	25.27	4.69	54.54	2.832					38.46	0.037
	24.67	4.74	55.39	2.931					37.73	0.074
	24.43	4.77	55.27	3.068					37.25	0.112
	23.58	5.17	54.78	3.105					37.13	0.112
	19.35	6.02	54.18	3.142					36.52	0.136
	18.02	6.32	55.39	3.192					1.33	1.242
	17.29	6.4	56.84	3.341					2.419	1.217
	17.17	6.45	14.15	6.856					3.265	1.217
									3.87	1.192
									4.475	1.205

Panel Type = C1
Bracket No = 1
Test Type = T,9

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	75mm(y)
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		C1-1 (T,9)		C2-1 (T,9)		C3-1 (T,9)		C4-1 (T,9)		C5-1 (T,9)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		55.76	7.205	51.23	3.872	46.22	22.18	45.12	10.2	51.95	5.5

Test Data

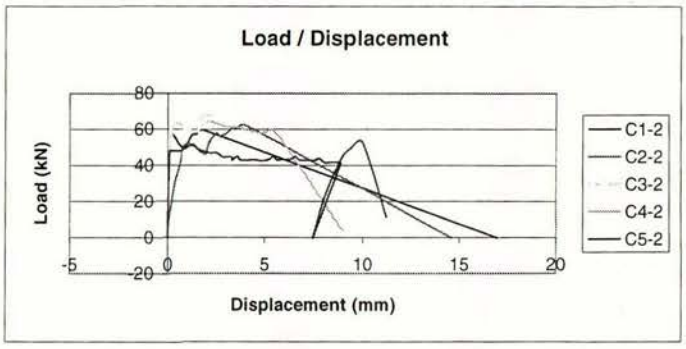
Designation	C1-1 (T,9)		C2-1 (T,9)		C3-1 (T,9)		C4-1 (T,9)		C5-1 (T,9)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	3.195	0.0056	-0.7195	0.0315	3.66	0.0035	0.1239	0.0114	0.1202	0.0503
	6	0.0182	0.5	0.0442	6.343	0.0035	0.9776	0.0114	5.608	0.063
	8.805	0.0182	1.354	0.0315	27.56	0.0542	0.7337	0.0114	8.047	0.063
	13.8	0.0436	3.183	0.0442	41.1	0.1303	12.08	0.0241	19.27	0.0756
	18.8	0.0563	5.744	0.0442	40.49	0.1176	23.66	0.0621	18.66	0.0756
	23.2	0.0563	8.061	0.0569	45	0.1429	30.12	0.0748	40.61	0.1897
	28.44	0.0816	9.646	0.0442	46.22	1.613	31.22	0.0621	44.14	0.2404
	33.44	0.0943	16.72	0.0822	37.32	4.642	30.61	0.0368	47.07	1.597
	37.95	0.1196	24.16	0.1076	12.68	12.96	30	0.1001	47.68	2.344
	38.68	0.1323	32.09	0.1203	0.8556	22.02	29.39	0.0874	46.58	2.408
	44.29	0.1703	41.96	0.171	0.9776	22.18	28.78	0.1001	49.88	2.915
	50.39	0.2337	51.23	0.2724			29.39	0.0368	48.29	3.003
	55.76	0.2971	46.72	0.9568			33.17	0.0621	51.95	3.358
	48.44	0.7407	43.67	1.565			32.81	0.1128	49.51	3.751
	29.17	2.832	32.33	3.073			33.9	0.0748	36.22	5.183
	28.32	3.174	31.6	3.124			38.42	0.0874	35.12	5.5
	17.22	4.809	28.55	3.872			42.08	0.1255	34.51	5.5
	12.1	6.52					44.76	0.2522		
	6	7.205					32.81	0.9493		
							33.29	1.152		
							34.76	1.266		
							42.2	2.597		
							40.49	2.686		
							45.12	3.89		
							20.86	5.905		
							17.93	9.226		
							14.15	10.2		

Panel Type = C1
Bracket No = 2
Test Type = T,8

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= 150mm(y)
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation		C1-2 (T,8)		C2-2 (T,8)		C3-2 (T,8)		C4-2 (T,8)		C5-2 (T,8)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		59.67	16.9	62.29	14.64	67.78	2.36	64.2	9.008	52.98	11.24

Test Data

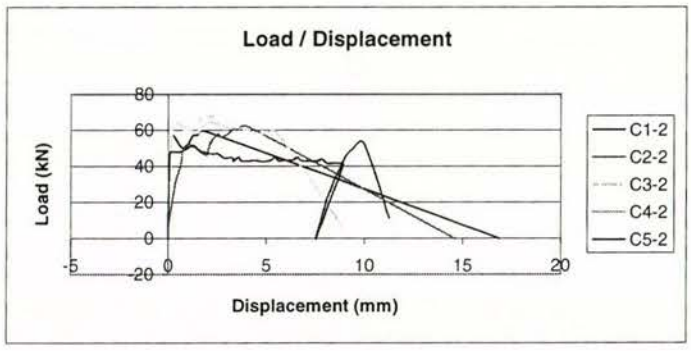
Designation	C1-2 (T,8)		C2-2 (T,8)		C3-2 (T,8)		C4-2 (T,8)		C5-2 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.0003	0.0135	0.0009	0	0.24	0.0049	0.0006	0.0002	-0.1187	0.0132
	1.074	0.0009	1.91	0	0.3593	0.0049	10.74	0.0253	3.939	0.0132
	8.712	0.0135	5.371	0.0125	0.3593	0.0049	29.95	0.0629	8.354	0.0132
	10.98	0.026	9.428	0.0752	0.3593	0.0049	29	0.0629	26.85	0.0383
	19.45	0.0385	13.49	0.1253	31.74	0.0676	40.57	0.0754	26.25	0.0383
	30.07	0.0636	18.74	0.2005	31.39	0.0676	41.77	0.0754	33.29	0.0508
	35.56	0.0761	24.7	0.2882	31.15	0.055	49.28	0.113	36.28	0.0634
	46.42	0.1262	30.91	0.3884	31.15	0.0676	55.13	0.1506	40.57	0.0759
	45.82	0.1262	37.11	0.5387	31.03	0.0676	57.52	0.1882	47.38	0.1135
	56.56	0.1763	42.84	0.689	31.03	0.0676	56.92	0.1882	47.85	0.5895
	57.04	0.2515	48.81	0.7642	30.79	0.0676	56.33	0.2132	50	1.015
	55.37	0.3768	51.91	1.102	30.79	0.0676	61.58	0.2508	51.55	1.329
	51.79	0.5772	46.18	1.904	43.56	0.1052	63.49	0.4638	48.45	1.642
	49.64	0.8278	48.69	2.042	56.56	0.1803	58.35	1.453	46.78	2.256
	51.07	0.9781	52.98	2.155	64.68	0.2179	62.17	1.804	47.02	2.519
	55.25	1.179	52.39	2.167	59.55	1.082	64.2	2.205	44.51	2.832
	57.04	1.291	55.13	2.293	66.71	1.771	61.34	3.007	44.75	3.258
	57.28	1.504	57.76	2.556	67.78	2.36	60.86	3.658	43.32	3.308
	59.67	1.805	56.09	2.719			59.07	4.247	42.72	3.333
	-0.119	16.9	58.47	3.132			57.88	4.911	44.87	3.609
			61.22	3.395			58.59	5.55	42.96	3.721
			60.14	3.558			4.416	9.008	42.72	4.097
			62.29	3.996					43.2	4.448
			-0.2377	14.64					42.48	4.811
									43.2	5.212
									44.75	5.463
									42.96	5.638
									43.08	6.001
									43.56	6.402
									44.87	6.603
									42.96	6.803
									42.72	7.217
									42.84	7.63
									43.91	7.818
									41.53	8.081
									41.65	8.482
									41.77	8.87
									40.57	8.92
									-0.3574	7.517
									0.3586	7.517
									3.461	7.592
									8.593	7.743
									13.72	7.856
									20.88	8.056
									26.25	8.256
									31.98	8.457
									38.54	8.745
									45.35	9.033
									49.52	9.434
									52.98	9.973
									13.72	11.18
									12.05	11.23
									11.34	11.24

Panel Type = C1
Bracket No = 2
Test Type = T,8

General Commemts

Variables

he	= 100mm
w	= 75mm
d	= 150mm(y)
l	= N/A
Test direction	= Vertical
x edge proximity	= N/A
y edge proximity	= N/A



Peak Loads										
Designation	C1-2 (T,8)		C2-2 (T,8)		C3-2 (T,8)		C4-2 (T,8)		C5-2 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	59.67	16.9	62.29	14.64	67.78	2.36	64.2	9.008	52.98	11.24

Test Data

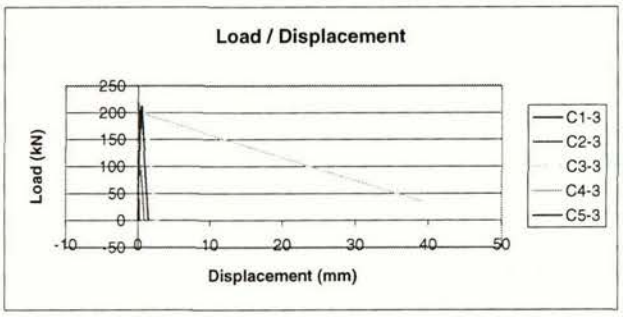
Designation	C1-2 (T,8)		C2-2 (T,8)		C3-2 (T,8)		C4-2 (T,8)		C5-2 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.0003	0.0135	0.0009	0	0.24	0.0049	0.0006	0.0002	-0.1187	0.0132
	1.074	0.0009	1.91	0	0.3593	0.0049	10.74	0.0253	3.939	0.0132
	8.712	0.0135	5.371	0.0125	0.3593	0.0049	29.95	0.0629	8.354	0.0132
	10.98	0.026	9.428	0.0752	0.3593	0.0049	29	0.0629	26.85	0.0383
	19.45	0.0385	13.49	0.1253	31.74	0.0676	40.57	0.0754	26.25	0.0383
	30.07	0.0636	18.74	0.2005	31.39	0.0676	41.77	0.0754	33.29	0.0508
	35.56	0.0761	24.7	0.2882	31.15	0.055	49.28	0.113	36.28	0.0634
	46.42	0.1262	30.91	0.3884	31.15	0.0676	55.13	0.1506	40.57	0.0759
	45.82	0.1262	37.11	0.5387	31.03	0.0676	57.52	0.1882	47.38	0.1135
	56.56	0.1763	42.84	0.689	31.03	0.0676	56.92	0.1882	47.85	0.5895
	57.04	0.2515	48.81	0.7642	30.79	0.0676	56.33	0.2132	50	1.015
	55.37	0.3768	51.91	1.102	30.79	0.0676	61.58	0.2508	51.55	1.329
	51.79	0.5772	46.18	1.904	43.56	0.1052	63.49	0.4638	48.45	1.642
	49.64	0.8278	48.69	2.042	56.56	0.1803	58.35	1.453	46.78	2.256
	51.07	0.9781	52.98	2.155	64.68	0.2179	62.17	1.804	47.02	2.519
	55.25	1.179	52.39	2.167	59.55	1.082	64.2	2.205	44.51	2.832
	57.04	1.291	55.13	2.293	66.71	1.771	61.34	3.007	44.75	3.258
	57.28	1.504	57.76	2.556	67.78	2.36	60.86	3.658	43.32	3.308
	59.67	1.805	56.09	2.719			59.07	4.247	42.72	3.333
	-0.119	16.9	58.47	3.132			57.88	4.911	44.87	3.609
			61.22	3.395			58.59	5.55	42.96	3.721
			60.14	3.558			4.416	9.008	42.72	4.097
			62.29	3.996					43.2	4.448
			-0.2377	14.64					42.48	4.811
									43.2	5.212
									44.75	5.463
									42.96	5.638
									43.08	6.001
									43.56	6.402
									44.87	6.603
									42.96	6.803
									42.72	7.217
									42.84	7.63
									43.91	7.818
									41.53	8.081
									41.65	8.482
									41.77	8.87
									40.57	8.92
									-0.3574	7.517
									0.3586	7.517
									3.461	7.592
									8.593	7.743
									13.72	7.856
									20.88	8.056
									26.25	8.256
									31.98	8.457
									38.54	8.745
									45.35	9.033
									49.52	9.434
									52.98	9.973
									13.72	11.18
									12.05	11.23
									11.34	11.24

Panel Type = C1
Bracket No = 3
Test Type = T,9

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	25mm(y)
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	C1-3 (T,9)		C2-3 (T,9)		C3-3 (T,9)		C4-3 (T,9)		C5-3 (T,9)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	217.9	0.1899	223.1	0.8758	219	2.636	209.1	39.37	211.5	1.47

Test Data

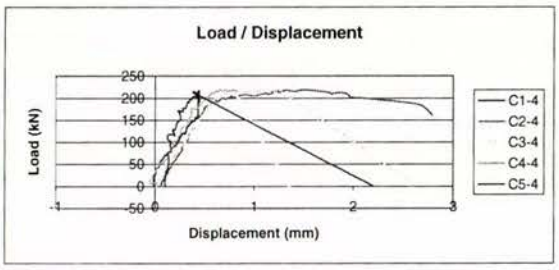
Designation	C1-3 (T,9)		C2-3 (T,9)		C3-3 (T,9)		C4-3 (T,9)		C5-3 (T,9)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.0122	-0.0002	-0.2317	-0.0114	0.1239	0.0124	0.002	0.0027	0.9739	0.0001
	10.74	-0.0002	0.8659	0.0013	6.221	0.0124	7.319	0.0154	5.73	0.0128
	30.38	-0.0002	6.72	0.0013	5.612	0.0124	22.68	0.0154	18.78	0.0128
	46.23	-0.0002	33.06	0.0013	36.1	0.0631	30.12	0.0154	20.24	0.0255
	45.62	-0.0002	32.45	0.0013	34.88	0.0631	58.9	0.0534	33.05	0.0255
	57.57	-0.0002	31.72	0.014	65.25	0.1645	67.44	0.0661	49.02	0.0508
	66.72	-0.0002	31.11	-0.0367	64.64	0.1645	72.07	0.0154	58.41	0.0762
	76.48	-0.0002	43.79	-0.0367	75.86	0.2025	77.68	0.0787	57.56	0.0762
	77.09	-0.0002	56.6	-0.0367	85.25	0.2278	89.27	0.0914	63.9	0.0888
	85.13	-0.0002	67.09	-0.0367	95.37	0.2532	88.42	0.0914	72.44	0.1015
	94.77	-0.0002	67.82	-0.0241	100.6	0.2785	87.81	0.0787	83.41	0.1142
	94.16	-0.0002	78.18	-0.0367	102.9	0.2912	99.03	0.0534	94.27	0.1269
	103.3	-0.0002	88.55	-0.0367	111.8	0.3039	98.29	0.0534	103.4	0.1395
	105.6	-0.0002	94.89	-0.0367	122.1	0.3419	106.8	0.0914	108.5	0.1522
	109.5	-0.0002	98.43	-0.0367	133.4	0.3672	111.7	0.1168	114.4	0.1776
	117	-0.0002	108.1	-0.0367	140.9	0.3926	114.9	0.0914	123.8	0.1776
	116	-0.0002	116.1	-0.0367	144.4	0.4053	123.5	0.0914	130.7	0.1902
	122.2	-0.0002	117.8	-0.0367	155.9	0.4433	122.9	0.1041	131.7	0.1902
	131.7	-0.0002	127.2	-0.0241	165.7	0.4686	131.5	0.1041	138.3	0.2029
	130.3	-0.0002	136.6	-0.0367	165.1	0.4686	139.6	0.1421	148.2	0.2156
	133.8	-0.0002	141.5	-0.0367	174.3	0.5067	148.3	0.1675	147.4	0.2283
	138.8	-0.0002	146.1	-0.0367	183.5	0.5193	147.2	0.1675	155.7	0.2409
	144.3	-0.0002	153.3	-0.0367	182.2	0.5193	153.5	0.1675	164.4	0.2663
	147	-0.0002	160.7	-0.0367	189.6	0.5574	154.1	0.1675	163.4	0.2663
	155.1	-0.0002	160	-0.0241	196.3	0.5827	157.4	0.1801	171.1	0.2663
	159.4	-0.0002	169.6	-0.0367	195	0.6081	160.1	0.1801	170.4	0.2916
	162.1	-0.0002	168.3	-0.0241	201.7	0.6207	161.5	0.1928	178.4	0.279
	169.4	-0.0002	176.2	-0.0367	199.9	0.6334	170.1	0.2182	177.3	0.2916
	175.7	-0.0002	184.5	-0.0241	205.2	0.6461	169	0.2182	185.1	0.3043
	176.5	-0.0002	183.9	-0.0241	209.9	0.6841	177.6	0.2308	184	0.3043
	175.6	-0.0002	190.9	-0.0241	207.9	0.7094	176.7	0.2308	190.6	0.3043
	183.8	-0.0002	189.9	-0.0367	212	0.7348	176.1	0.2435	189.6	0.317
	182.1	-0.0002	196.4	-0.0241	214.6	0.7601	180.6	0.2435	196.5	0.317
	183.3	-0.0002	194.3	-0.0494	217.8	0.7982	186.3	0.2689	194.8	0.3297
	187.7	-0.0002	200.5	-0.0367	219	0.8108	185.2	0.2689	199.6	0.3297
	187	-0.0002	199.2	-0.0241	217.1	0.8235	190.6	0.2815	198.5	0.3423
	192.8	-0.0002	203.5	-0.0367	216.3	0.8489	191.6	0.2689	197.7	0.3423
	191.5	-0.0002	204.2	-0.0367	0.002	2.636	198.9	0.3196	203.3	0.355
	195.1	-0.0002	208.1	-0.0367			198.1	0.3196	201.7	0.3677
	196.7	-0.0002	207.2	-0.0367			204.1	0.3449	205.4	0.3677
	201.4	-0.0002	212.2	-0.0367			202.7	0.3449	204.8	0.355
	200.3	-0.0002	210.7	-0.0367			209.1	0.3702	204	0.3677
	206.4	-0.0002	215.4	-0.0367			207.3	0.3829	206.8	0.3804
	205.5	-0.0002	213.4	-0.0367			202.1	0.9026	205.4	0.393
	204.4	-0.0002	216.5	-0.0241			196.5	1.055	209.4	0.393
	208.7	-0.0002	215.7	-0.0367			34.39	39.37	207.2	0.4057
	207.3	-0.0002	219.6	-0.0241					211.5	0.4564
	212.5	-0.0002	217.5	-0.0241					208.8	0.4817
	210.4	-0.0002	218.1	-0.0367					210.9	0.5071
	209.5	-0.0002	219.5	-0.0367					209	0.5324
	213.4	-0.0002	218.3	-0.0367					207.1	0.5451
	212.3	-0.0002	219.8	-0.0241					0.2422	1.47
	216.1	-0.0002	221.2	-0.0241						
	214.5	-0.0002	219	-0.0367						
	213.2	-0.0002	220.9	-0.0367						
	217.9	-0.0002	220	-0.0367						
	215.1	-0.0002	223.1	-0.0367						
	216.8	-0.0002	220	-0.0367						
	214.4	-0.0002	218.3	-0.0367						
	216	-0.0002	219	-0.0367						
	0.2317	0.1899	0.2561	0.8758						

Panel Type = C1
Bracket No = 4
Test Type = T,9

General Commemts

Variables

h_e	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	276mm
y edge proximity	=	-237.5mm



Peak Loads										
Designation	C1-4 (T,9)		C2-4 (T,9)		C3-4 (T,9)		C4-4 (T,9)		C5-4 (T,9)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	216.2	0.4445	218.5	2.789	217.3	1.365	218.9	2.615	214.6	2.204

Test Data

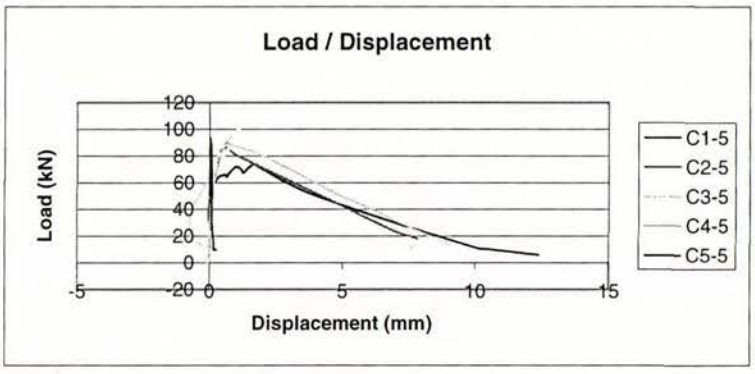
Designation	C1-4 (T,9)		C2-4 (T,9)		C3-4 (T,9)		C4-4 (T,9)		C5-4 (T,9)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.878	-0.0117	0.378	0.064	0.6117	0.0219	0.2341	0.0039	-0.0017	0.1131
	1.61	-0.0117	4.524	0.064	11.22	0.0345	1.576	0.0039	5.974	0.1004
	12.46	-0.0117	23.67	0.102	18.78	0.0472	7.673	0.0166	34.51	0.1131
	13.32	-0.0117	22.94	0.102	18.05	0.0472	7.063	-0.0468	33.53	0.1131
	15.27	-0.0117	22.33	0.102	35.61	0.0599	15.48	-0.0468	35.85	0.1258
	34.54	0.0136	30.62	0.1274	44.88	0.0979	20.97	-0.0214	56.34	0.1384
	33.93	0.0136	37.82	0.14	55.37	0.1359	24.75	-0.0214	55.73	0.1384
	40.15	0.0136	46.48	0.1654	54.64	0.1359	52.67	0.0546	66.83	0.1384
	43.07	0.039	53.91	0.1781	63.17	0.1613	52.06	0.0546	75.73	0.1258
	52.59	0.0516	56.48	0.1907	71.83	0.212	60.48	0.118	78.9	0.1638
	58.68	0.0643	64.28	0.2161	80.73	0.2373	71.21	0.1307	93.29	0.1511
	60.88	0.077	73.91	0.2541	90	0.2627	81.45	0.1433	100.5	0.1638
	70.39	0.1023	85.26	0.2795	97.07	0.288	91.7	0.1814	107.3	0.1258
	69.66	0.115	84.28	0.2668	98.9	0.3007	101.7	0.194	117.4	0.1384
	79.17	0.1404	95.87	0.2921	107.9	0.326	101.3	0.2194	116.5	0.1891
	79.78	0.1404	105.9	0.3302	116.6	0.3514	110.6	0.2321	115.9	0.1891
	90.88	0.1911	114.4	0.3428	125.2	0.3767	120.4	0.2574	115.1	0.2018
	90.30	0.2037	116.4	0.3428	135	0.4021	119.5	0.2574	127.1	0.1765
	99.29	0.2291	122.2	0.3682	142.8	0.4148	130.1	0.2701	128.4	0.2018
	100.4	0.2291	131.2	0.3809	150.9	0.4274	139.3	0.3208	138.7	0.2145
	110.4	0.2544	130.0	0.3935	150.2	0.4401	149.9	0.3335	146.3	0.2272
	120.1	0.2798	138.8	0.4062	157.1	0.4655	152.1	0.3461	149.8	0.2525
	119.4	0.2924	139.8	0.4062	162.2	0.4781	159.4	0.3588	161	0.2525
	118.9	0.3051	146.5	0.4189	167.3	0.4908	164.4	0.3715	171.7	0.2272
	131.1	0.3178	154.3	0.4315	171.5	0.5035	169	0.3588	169.1	0.2778
	138.7	0.3431	162.5	0.4696	172.6	0.5288	176.6	0.3715	177.3	0.2778
	149	0.3812	170.6	0.4949	178.9	0.5288	176.7	0.4222	176.3	0.3032
	148.4	0.3812	177.8	0.4949	183.7	0.5415	185.2	0.4475	184.3	0.3159
	147.7	0.3938	178.5	0.5076	186	0.5542	183.8	0.4475	183.2	0.3159
	156.6	0.4065	187.3	0.5583	185.1	0.5669	191.6	0.4729	190.6	0.3285
	155.1	0.4065	186.2	0.571	194.1	0.5922	190.4	0.4729	189.4	0.3412
	154.4	0.4192	194.3	0.609	193.2	0.5922	197.6	0.4982	197.7	0.3539
	163.4	0.4319	192.6	0.6343	200.5	0.6049	195.8	0.4982	195.9	0.3666
	162.6	0.4319	199.4	0.6724	199.9	0.6556	201.5	0.5109	203.4	0.3792
	170.1	0.4319	197.9	0.7231	207.8	0.6682	199.9	0.5236	201.1	0.3792
	169.2	0.4319	205	0.7738	205.7	0.6936	205.2	0.5363	205.4	0.4046
	177.7	0.4319	202.7	0.7991	209.3	0.6936	203.4	0.5363	204.3	0.4046
	176.6	0.4319	207.3	0.9005	210.7	0.7316	209.4	0.5616	209	0.4173
	183.4	0.4319	204.9	1.002	209.9	0.7189	207.1	0.5616	207.2	0.4173
	182.8	0.4319	207.6	1.053	215	0.7443	212.3	0.5743	211.6	0.4426
	188.6	0.4319	209.6	1.116	213.3	0.757	210.4	0.5869	209.9	0.4299
	187.8	0.4319	208.2	1.154	212.3	0.7696	214.5	0.6123	208.8	0.4299
	187.2	0.4319	215	1.217	216.3	0.7823	212.8	0.6123	212.7	0.4173
	192.6	0.4319	212.5	1.255	215	0.8077	216.8	0.625	211.1	0.3792
	191.2	0.4445	217.7	1.319	214.1	0.8077	214.9	0.6376	214.6	0.3919
	196.6	0.4319	215	1.42	217.3	0.8203	218.3	0.6503	211	0.4046
	195.8	0.4319	218.5	1.509	214.8	0.8077	215.5	0.663	212.3	0.3919
	194.8	0.4319	212.7	1.762	213.2	0.8203	218.9	0.6503	0.1202	2.204
	197.6	0.4319	209.3	1.775	213.8	0.833	216.3	0.6757		
	199	0.4319	212.9	1.876	205.7	0.8203	218	0.701		
	197.5	0.4445	209.4	1.94	-1.096	1.365	216.7	0.7517		
	196.7	0.4445	205.3	1.965			217.6	0.7897		
	202.3	0.4319	202.8	1.965			216.1	0.8658		
	200.5	0.4319	186	2.65			214.5	0.9165		
	204.4	0.4319	162.7	2.789			216	1.069		
	202	0.4319	161.1	2.789			214.4	1.132		
	205.4	0.4445	160.4	2.789			216.8	1.17		
	204	0.4319					215.4	1.221		
	203.3	0.4319					216.8	1.271		
	208.4	0.4319					0.9659	2.615		
	206.5	0.4445								
	205.8	0.4319								
	209.9	0.4319								
	208.8	0.4319								
	211.1	0.4445								
	209.5	0.4319								
	212.7	0.4319								
	211	0.4319								
	213.4	0.4319								
	211.5	0.4319								
	216.2	0.4445								
	212.1	0.4319								
	211.2	0.4319								
	215.6	0.4319								
	199.4	0.4192								
	0.1463	0.3558								

Panel Type = C1
Bracket No = 5
Test Type = T,8

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	150mm(x)
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	C1-5 (T,8)		C2-5 (T,8)		C3-5 (T,8)		C4-5 (T,8)		C5-5 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	73.99	12.37	86.75	7.869	99.4	9.482	90.34	9.125	92.84	0.2758

Test Data

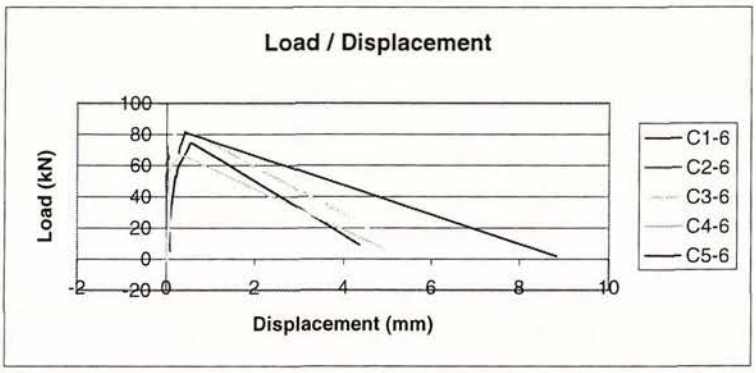
Designation	C1-5 (T,8)		C2-5 (T,8)		C3-5 (T,8)		C4-5 (T,8)		C5-5 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.477	0.0003	-0.1187	0.0269	0.24	-0.0019	-0.3567	-0.0328	50.96	0.1004
	5.251	0.0129	1.433	0.0144	13.01	-0.0019	11.1	-0.0203	50.48	0.0002
	21.12	0.0129	16.11	0.0269	34.97	0.0232	24.46	-0.0078	56.69	0.0127
	20.53	0.0003	18.74	0.0269	34.25	0.0232	45.47	0.0549	64.08	0.0127
	28.16	0.0003	39.02	0.052	58.95	0.0983	47.85	0.0799	71.13	0.0252
	34.61	-0.0122	38.31	0.052	58.12	0.0983	47.26	0.105	77.33	0.0252
	43.68	0.0129	43.08	0.052	64.32	0.1359	46.54	0.0925	76.38	0.0378
	43.08	0.0129	47.49	0.0771	71.12	0.186	53.94	0.1175	81.51	0.0127
	45.59	0.0254	52.15	0.0771	79	0.2988	63.13	0.2177	88.07	0.0252
	55.61	0.0755	57.52	0.1021	82.1	0.4366	64.08	0.2428	92.84	0.0378
	54.89	0.0755	63.01	0.1522	85.68	0.4992	68.26	0.2678	91.89	0.0252
	59.31	0.1131	67.54	0.2023	88.66	0.5869	69.57	0.3054	90.1	0.0503
	58.35	0.1382	71.6	0.2524	91.17	0.6746	72.56	0.3179	86.76	0.0753
	61.81	0.2384	75.66	0.3026	93.44	0.7623	75.18	0.3555	66.11	0.0879
	64.2	0.3511	79.95	0.3652	94.87	0.8124	80.43	0.4307	36.28	0.1129
	65.51	0.4889	84.13	0.4404	96.18	0.8876	83.53	0.4432	25.78	0.1255
	65.99	0.6142	86.75	0.5656	98.21	0.9502	84.61	0.5184	20.41	0.138
	64.2	0.6518	84.13	0.7786	99.4	1.126	90.34	0.6562	16.83	0.1505
	67.3	0.752	80.07	1.042	13.72	-0.3526	88.43	0.7188	14.32	0.163
	70.05	0.8898	23.99	6.967	13.37	9.419	81.62	1.834	13.49	0.163
	71.96	1.003	20.17	7.619	13.01	9.482	50.36	4.891	10.03	0.1756
	70.29	1.178	17.9	7.869			45.47	5.492	9.908	0.2758
	69.57	1.203					13.13	9.125		
	68.74	1.228								
	67.9	1.241								
	67.3	1.266								
	67.42	1.278								
	71.24	1.479								
	73.99	1.717								
	70.64	1.93								
	49.28	4.097								
	10.74	10.15								
	10.62	10.3								
	6.444	12.11								
	6.325	12.24								
	6.086	12.37								

Panel Type = C1
Bracket No = 6
Test Type = T,8

General Commemts

Variables

he	=	75mm
w	=	50mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		C1-6 (T,8)		C2-6 (T,8)		C3-6 (T,8)		C4-6 (T,8)		C5-6 (T,8)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		74.22	4.373	71.96	0.0893	84.49	5.397	70.65	4.882	81.74	8.835

Test Data

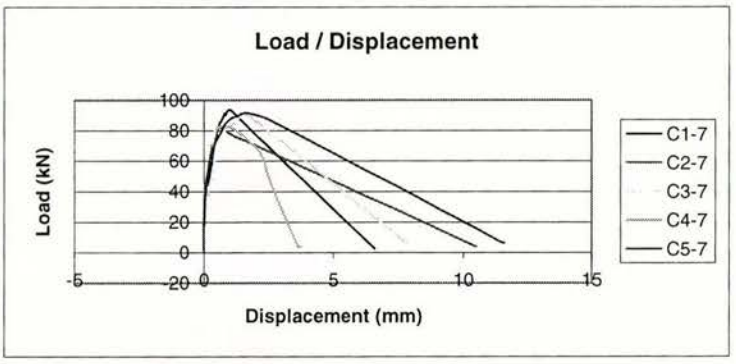
Designation	C1-6 (T,8)		C2-6 (T,8)		C3-6 (T,8)		C4-6 (T,8)		C5-6 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.3577	0.0009	0.0006	0.0016	-0.2374	0.0228	-0.7154	0.0085	68.02	0.2782
	0.4776	0.0009	1.313	0.0016	-0.2374	0.0103	2.984	0.0085	72.08	0.3032
	10.38	0.0134	10.86	0.0016	-0.3567	0.0228	10.62	0.0085	74.23	0.3283
	18.97	0.051	33.29	0.0016	-0.3567	0.0228	23.27	0.0336	78.04	0.3784
	31.03	0.1011	35.56	0.0016	3.104	0.0103	46.18	0.0586	81.74	0.416
	53.22	0.2013	40.93	0.0016	18.86	0.0604	52.03	0.0837	80.67	0.4535
	52.39	0.2139	48.81	-0.011	49.05	0.073	51.31	0.0711	2.029	8.835
	58	0.2515	55.37	0.0016	74.94	0.1732	58	0.0962		
	61.34	0.3016	58.83	0.0141	84.49	0.2985	62.65	0.1964		
	63.01	0.3392	62.65	0.0016	6.923	5.397	64.08	0.2215		
	66.83	0.4143	65.16	0.0642			63.37	0.2215		
	70.76	0.4895	68.38	0.0141			62.77	0.2089		
	74.22	0.5772	71.96	0.0141			67.07	0.2841		
	8.95	4.373	5.132	0.0893			70.65	0.2966		
							67.54	0.2966		
							7.161	4.882		

Panel Type = C1
Bracket No = 7
Test Type = T,8

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		C1-7 (T,8)		C2-7 (T,8)		C3-7 (T,8)		C4-7 (T,8)		C5-7 (T,8)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		93.56	6.591	82.58	10.5	90.69	7.841	82.46	3.766	91.53	11.62

Test Data

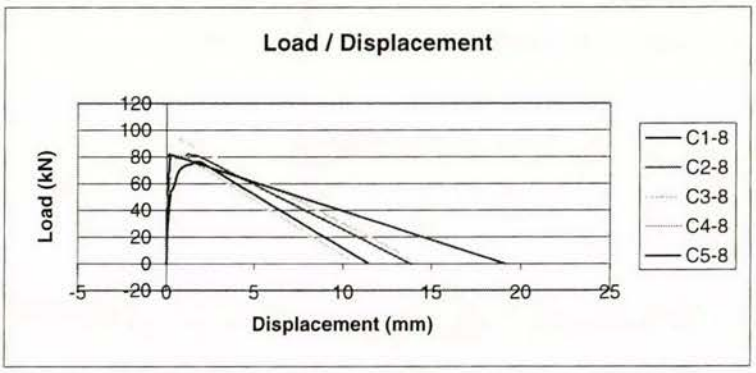
Designation	C1-7 (T,8)		C2-7 (T,8)		C3-7 (T,8)		C4-7 (T,8)		C5-7 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.119	0.0011	-0.1187	-0.0002	0.1206	-0.0013	25.9	-0.0046	-0.2354	0.0043
	7.757	0.0011	1.433	-0.0002	21.6	0.0363	39.38	0.0956	11.34	0.0043
	11.34	0.0011	14.8	-0.0002	38.9	0.1866	44.03	0.1207	33.06	0.0419
	26.97	0.0262	27.69	0.0124	45.71	0.2492	49.4	0.1457	50.24	0.1421
	39.74	0.0638	35.44	0.0124	45.11	0.2492	54.89	0.1833	49.41	0.1672
	47.02	0.2016	38.54	0.0249	68.62	0.5248	60.38	0.2585	53.34	0.1672
	51.55	0.2392	42.72	0.0374	67.54	0.5749	65.99	0.3211	64.08	0.2924
	57.16	0.3018	46.06	0.075	80.31	0.8255	72.32	0.3712	71.6	0.4553
	62.65	0.3394	47.26	0.1001	82.82	1.038	78.28	0.4338	77.69	0.6307
	67.42	0.3895	53.94	0.1627	85.92	1.289	81.62	0.5215	83.66	0.8061
	71.24	0.4145	58.35	0.1878	90.69	1.652	82.46	0.6468	87.71	1.044
	72.08	0.4521	60.02	0.2253	5.729	7.841	80.79	1.16	89.86	1.32
	77.21	0.5148	66.35	0.288			65.28	2.175	91.53	1.658
	77.8	0.5148	71	0.3381			44.15	2.614	86.64	2.572
	81.5	0.5774	76.85	0.4884			4.059	3.641	6.686	11.52
	85.32	0.6275	82.58	0.5886			3.82	3.766	6.447	11.62
	85.92	0.6776	81.62	0.6889						
	91.29	0.8029	76.37	1.177						
	89.98	0.8279	75.54	1.278						
	93.56	1.028	72.67	1.679						
	81.15	1.768	3.939	10.5						
	2.506	6.591								

Panel Type = C1
Bracket No = 8
Test Type = T,8

General Commemts

Variables

he	=	100mm
w	=	50mm
d	=	N/A
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	-200mm
y edge proximity	=	N/A



Peak Loads										
Designation		C1-8 (T,8)		C2-8 (T,8)		C3-8 (T,8)		C4-8 (T,8)		C5-8 (T,8)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		76.25	11.44	82.22	13.89	93.44	14.08	81.27	10.27	81.86	19.14

Test Data

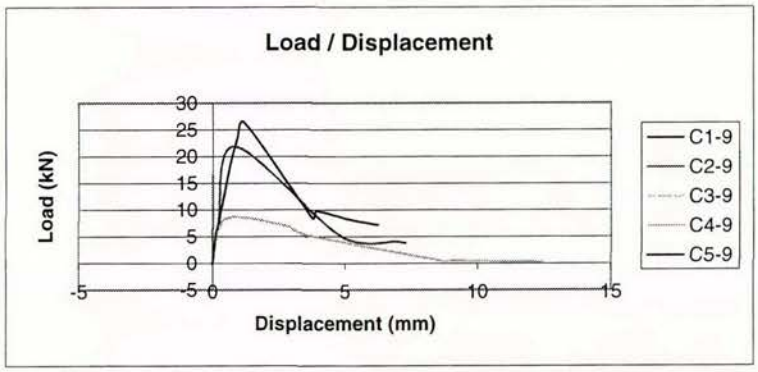
Designation	C1-8 (T,8)		C2-8 (T,8)		C3-8 (T,8)		C4-8 (T,8)		C5-8 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.3577	0.0001	-0.3571	0.0047	-0.2374	-0.0049	55.01	0.1066	-0.7154	0.0069
	0.5969	-0.0124	-0.3571	0.0047	55.85	0.0828	64.68	0.1818	4.535	0.0194
	2.745	0.0001	4.178	-0.0078	83.3	0.4461	63.6	0.2193	19.93	0.0445
	5.012	0.0001	12.17	-0.0078	93.44	0.6591	68.5	0.307	40.57	0.0194
	9.666	0.0127	13.72	-0.0203	2.149	14.08	73.51	0.4198	42.01	0.0946
	13.25	0.0252	26.85	-0.0078			78.64	0.5701	45.7	0.1071
	22.91	0.0503	39.26	0.0047			81.27	0.8582	49.4	0.1071
	27.8	0.0753	38.66	0.0173			3.7	10.27	53.34	0.0445
	31.27	0.0878	53.22	0.0423					57.04	0.1196
	34.73	0.1129	59.91	0.0799					63.6	0.1322
	38.31	0.1379	63.72	0.0924					67.07	0.1071
	41.29	0.1505	65.87	0.1175					69.69	0.1697
	45.94	0.1881	65.16	0.1175					74.46	0.1697
	50.96	0.2256	69.09	0.1425					79.36	0.1948
	53.94	0.2382	72.32	0.1676					81.86	0.1572
	55.01	0.3259	73.75	0.1801					0.0006	19.14
	58.35	0.4261	75.06	0.2177						
	62.53	0.5263	78.04	0.2678						
	66.47	0.614	79.12	0.4432						
	70.41	0.7769	79.24	0.7188						
	73.15	1.052	80.67	1.045						
	74.46	1.403	82.22	1.27						
	76.25	1.679	81.03	1.483						
	75.66	2.017	80.55	1.809						
	0.3583	11.44	-0.3571	13.89						

Panel Type = C1
Bracket No = 9
Test Type = T,6

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Shear -x
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads

Designation	C1-9 (T,6)		C2-9 (T,6)		C3-9 (T,6)		C4-9 (T,6)		C5-9 (T,6)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	26.37	6.226	16.59	-0.0005	0	0	8.474	12.48	21.84	7.283

Test Data

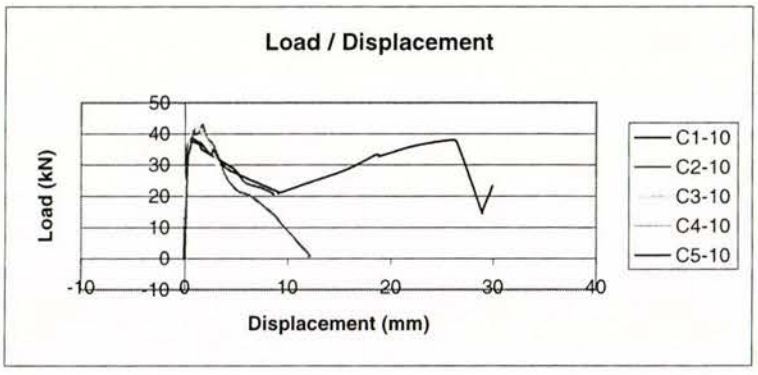
Designation	C1-9 (T,6)		C2-9 (T,6)		C3-9 (T,6)		C4-9 (T,6)		C5-9 (T,6)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.119	-0.0251	-0.2377	-0.0005			-0.118	0.012	-0.2354	0.0046
	2.029	0.0501	4.058	-0.0005			1.553	0.0746	7.521	0.205
	4.774	0.1503	9.07	-0.0005			8.474	0.5381	21.84	0.8565
	7.638	0.238	16.59	-0.0005			6.923	2.806	5.254	4.79
	9.666	0.3007	6.564	-0.0005			5.491	3.382	4.061	6.932
	13.37	0.451					0.4786	8.631	3.822	7.283
	18.74	0.689					0.4786	9.094		
	23.51	0.9521					0.24	12.48		
	26.37	1.203								
	8.473	3.758								
	9.786	3.884								
	8.115	5.224								
	7.16	6.226								

Panel Type = C1
Bracket No = 10
Test Type = T,9

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	N/A
l	=	N/A
Test direction	=	Shear y
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		C1-10 (T,9)		C2-10 (T,9)		C3-10 (T,9)		C4-10 (T,9)		C5-10 (T,9)	
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		37.95	29.92	42.94	12.21	42.68	3.077	38.53	8.664	38.53	8.664

Test Data

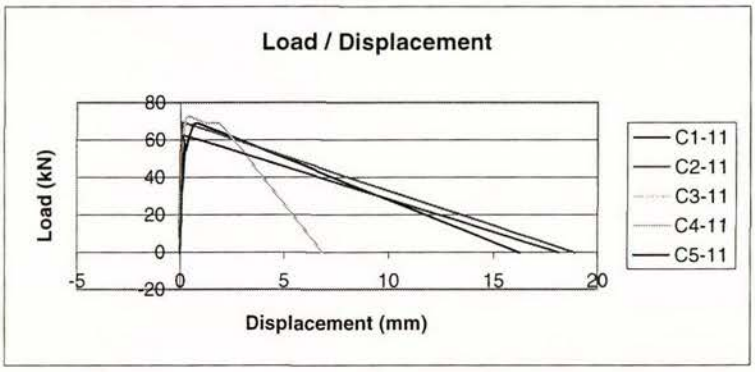
Designation	C1-10 (T,9)		C2-10 (T,9)		C3-10 (T,9)		C4-10 (T,9)		C5-10 (T,9)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.0976	-0.1268	-0.7195	-0.0216	-0.12	0.0097	0.1161	0.0703	0.1161	0.0703
	1.488	-0.1014	0.1341	-0.0089	3.295	0.035	1.092	0.045	1.092	0.045
	15.27	0	2.695	-0.0089	22.08	0.0984	7.433	0.083	7.433	0.083
	20.15	0.1267	11.48	0.0418	42.68	0.8715	15.6	0.1337	15.6	0.1337
	27.83	0.2028	16.23	0.0925	31.83	3.077	18.04	0.1464	18.04	0.1464
	36.73	0.3422	30.01	0.2065	26.47	3.077	28.9	0.2478	28.9	0.2478
	36.49	1.521	41.35	0.9036	24.27	3.077	32.31	0.2858	32.31	0.2858
	35.15	1.61	39.65	0.9543			36.21	0.6027	36.21	0.6027
	28.68	4.842	40.99	1.487			38.53	0.6787	38.53	0.6787
	27.46	4.943	42.94	1.727			37.31	1.388	37.31	1.388
	21.49	9.037	38.91	2.12			37.19	1.515	37.19	1.515
	20.88	9.075	36.23	2.817			33.53	2.516	33.53	2.516
	24.78	12.46	26.72	3.958			34.75	2.846	34.75	2.846
	28.68	15.8	21.84	5.099			30.12	3.67	30.12	3.67
	33.32	18.58	20.13	6.392			27.8	4.671	27.8	4.671
	32.95	18.8	14.4	8.546			28.04	5.064	28.04	5.064
	32.71	18.8	9.524	9.839			24.63	5.786	24.63	5.786
	36.12	22.31	0.9878	12.21			23.29	6.762	23.29	6.762
	37.95	26.05	0.622	12.1			22.43	7.7	22.43	7.7
	37.22	26.44					20.73	8.625	20.73	8.625
	14.41	28.94					20.12	8.664	20.12	8.664
	15.15	28.95								
	21.49	29.7								
	23.32	29.92								

Panel Type = C1
Bracket No = 11
Test Type = T,8

General Commemts

Variables

h_e	= 100mm
w	= 75mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= 276mm
y edge proximity	= N/A



Peak Loads										
Designation	C1-11 (T,8)		C2-11 (T,8)		C3-11 (T,8)		C4-11 (T,8)		C5-11 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	68.97	16.27	69.45	18.93	0	0	72.67	6.835	62.29	18.14

Test Data

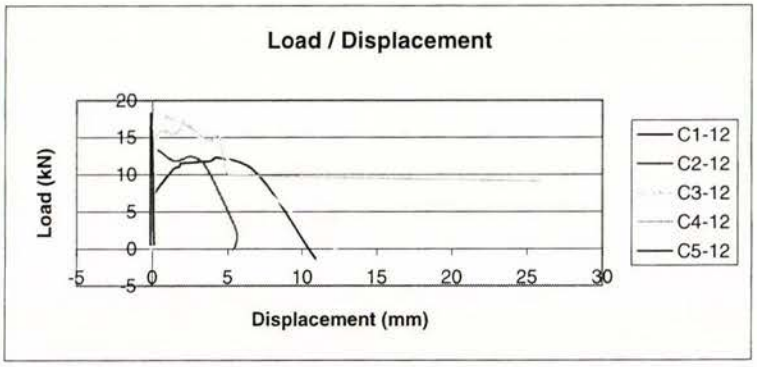
Designation	C1-11 (T,8)		C2-11 (T,8)		C3-11 (T,8)		C4-11 (T,8)		C5-11 (T,8)	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.119	-0.001	-0.3571	-0.0241			0.0013	-0.0076	0.0033	0.0095
	4.535	0.0241	2.626	-0.0367			3.223	-0.0076	3.106	0.0095
	21.96	0.0867	8.712	-0.0367			12.53	0.005	4.299	0.0346
	30.07	0.0992	25.54	-0.0241			29.24	0.0426	6.805	0.0346
	37.47	0.1494	27.21	-0.0116			45.35	0.0927	12.41	0.0471
	39.38	0.1744	45.47	0.0134			48.09	0.0927	15.16	0.0596
	43.44	0.1869	49.29	0.0134			62.53	0.1553	18.02	0.0722
	48.45	0.212	48.81	0.0134			65.28	0.1804	22.32	0.0847
	53.34	0.2496	48.57	0.0134			64.68	0.1929	28.05	0.0972
	58	0.3373	54.18	0.026			69.45	0.243	33.3	0.1097
	60.98	0.3999	60.14	0.0385			72.67	0.3808	40.7	0.1348
	61.69	0.4375	64.44	0.0635			68.74	1.295	40.1	0.1348
	65.87	0.5502	65.63	0.0635			67.66	1.984	43.32	0.1473
	68.97	0.8008	65.04	0.0761			0.0013	6.835	46.9	0.1473
	-0.3577	16.27	69.09	0.0886					50.72	0.1598
			69.45	0.1011					54.78	0.1849
			-0.3571	18.93					58.6	0.1974
									62.29	0.21
									-0.1161	18.14

Panel Type = C1
Bracket No = 12
Test Type = T,6

General Commemts

Variables

he	=	100mm
w	=	100mm
d	=	N/A
l	=	N/A
Test direction	=	Shear x
x edge proximity	=	-200mm
y edge proximity	=	N/A



Peak Loads										
Designation	**C1-12 (T,6)**		**C2-12 (T,6)**		**C3-12 (T,6)**		**C4-12 (T,6)**		**C5-12 (T,6)**	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	12.32	10.9	13.3	5.536	17.32	12.2	17.12	25.78	18.24	0.1339

Test Data

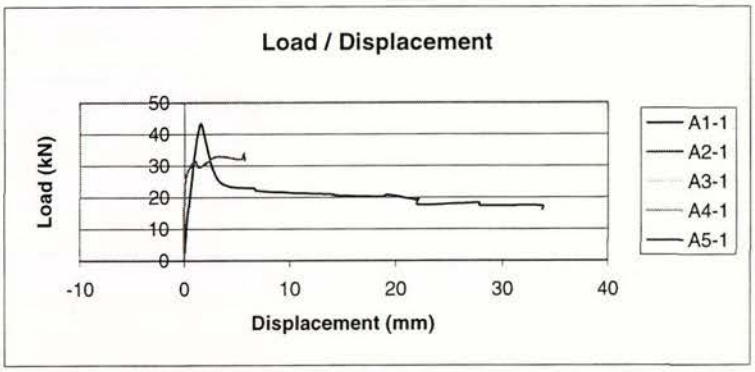
Designation	**C1-12 (T,6)**		**C2-12 (T,6)**		**C3-12 (T,6)**		**C4-12 (T,6)**		**C5-12 (T,6)**	
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.0003	-0.0132	13.18	0.2128	0.002	-0.0039	-0.0756	0.0125	0.5561	-0.145
	4.391	0.0502	13.3	0.3649	17.32	0.5157	0.6561	0.0125	1.532	-0.1323
	6.708	0.0882	11.84	1.48	15.73	2.658	1.266	0.0125	3.117	-0.145
	7.317	0.0755	12.45	2.596	0.002	12.2	1.876	-0.0002	4.58	-0.1323
	10.73	1.394	10.99	3.559			4.802	-0.0002	6.776	-0.1323
	11.1	1.812	2.573	5.536			8.827	0.0378	13.36	-0.1323
	11.46	1.863	0.622	5.523			14.19	0.1139	18.24	-0.1196
	11.83	3.852	-0.1098	5.346			15.9	0.6335	14.34	-0.107
	12.32	4.296					15.41	1.343	16.17	-0.0309
	10.12	6.932					16.51	1.939	15.68	-0.0056
	-1.341	10.9					17.12	2.015	1.166	0.1085
							14.8	3.473	0.5561	0.1339
							14.56	3.903		
							15.41	4.233		
							14.92	4.474		
							14.68	4.474		
							10.66	4.841		
							9.924	5.209		
							9.071	25.78		

Panel Type = D
Bracket No = 1
Test Type = T,6

General Commemts

Variables

he	=	75mm
w	=	80mm
d	=	N/A
l	=	200mm
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	200mm



Peak Loads

Designation		D1-1 (T,6)		D2-1 (T,6)							
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		43.18	33.72	33.9	5.756	0	0	0	0	0	0

Test Data

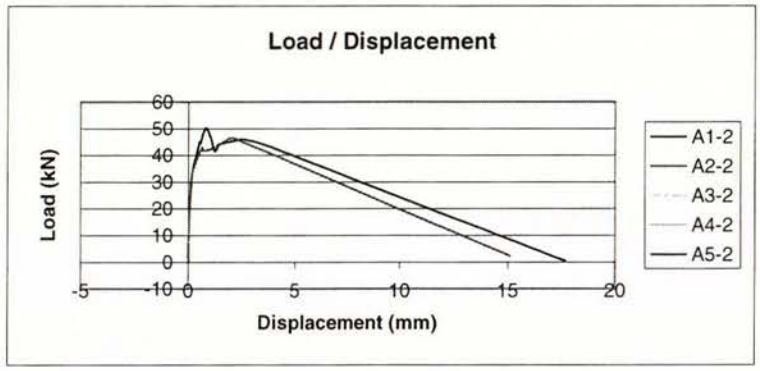
Designation	D1-1 (T,6)		D2-1 (T,6)							
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.1196	0.0049	0.2348	0.0046						
	3.349	0.0542	6.991	-0.0202						
	6.579	0.1282	25.39	0.079						
	13.4	0.3009	31.34	0.9714						
	23.8	0.6216	29.47	1.467						
	25.12	0.6956	32.85	3.078						
	34.09	0.9916	32.03	5.384						
	40.79	1.312	33.67	5.657						
	43.18	1.633	33.9	5.706						
	25.36	3.212	32.15	5.756						
	22.85	6.69	31.8	5.731						
	22.13	6.764								
	21.41	10.12								
	20.93	14.16								
	20.57	14.21								
	20.22	18.75								
	20.81	19.15								
	19.14	22.03								
	19.74	22.08								
	17.7	22.03								
	18.3	27.73								
	17.34	27.76								
	17.34	33.72								
	16.03	33.72								

Panel Type = D
Bracket No = 2
Test Type = T,3

General Commemts

Variables

he	= 100mm
w	= 80mm
d	= N/A
l	= N/A
Test direction	= Vertical
x edge proximity	= 200mm
y edge proximity	= 225mm



Peak Loads										
Designation	D1-2 (T,3)		D2-2 (T,3)							
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	50.24	17.69	46.41	15.14	0	0	0	0	0	0

Test Data

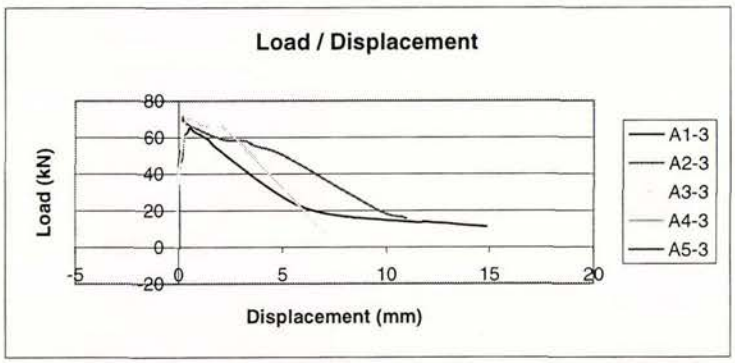
Designation	D1-2 (T,3)		D2-2 (T,3)							
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0	0.0262	-0.1203	0.0164						
	2.033	0.0016	3.707	-0.0082						
	11.6	0.0262	8.851	0.0164						
	30.86	0.1496	14.71	0.0411						
	42.46	0.4456	33.73	0.1891						
	44.98	0.5196	35.05	0.2384						
	44.14	0.5442	42.82	0.6331						
	50.24	0.7909	41.63	0.6824						
	47.01	1.013	42.7	1.299						
	42.46	1.161	42.1	1.324						
	41.87	1.21	43.42	1.398						
	41.39	1.235	45.69	1.768						
	43.66	1.358	46.41	2.113						
	44.38	1.605	2.272	15.14						
	45.22	2.098								
	45.93	2.616								
	43.66	3.652								
	0.4785	17.69								
	0.7177	17.69								

Panel Type = D
Bracket No = 3,4
Test Type = T,8

General Commemts

Variables

he	=	100mm
w	=	75mm
d	=	80mm(x)
l	=	125mm
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		D1-3(T,8)		D1-4(T,8)		D2-3(T,8)		D2-4(T,8)		
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		65.55	14.87	71.41	10.98	70.57	7.173	0	0	0	0

Test Data

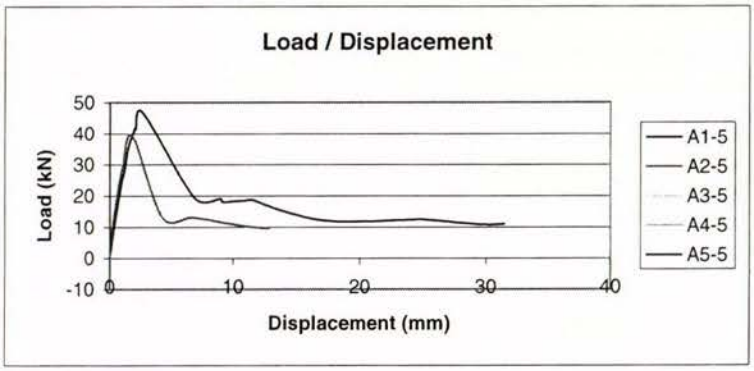
Designation	D1-3(T,8)		D1-4(T,8)		D2-3(T,8)		D2-4(T,8)			
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.2392	0.0664	-0.5981	-0.0003	-0.0007	-0.0049				
	5.144	0.0664	2.871	-0.0003	3.707	-0.0049				
	16.15	0.0664	13.28	-0.0003	22.37	-0.0049				
	23.21	0.0664	22.73	-0.0003	43.9	0.0197				
	35.77	0.0171	32.54	-0.0003	43.06	0.0197				
	40.19	-0.0076	37.08	-0.0003	47.61	0.0691				
	39.47	-0.0076	35.29	-0.0003	52.99	0.1431				
	43.06	-0.0076	40.19	-0.0003	60.05	0.1924				
	47.97	0.0171	44.02	0.0244	67.1	0.2417				
	49.4	0.0417	43.42	0.0491	70.57	0.5131				
	48.56	0.0417	47.13	0.0984	66.51	1.154				
	48.21	0.0417	46.41	0.1231	64.35	2.264				
	52.75	0.0664	50.48	0.1971	7.176	7.074				
	51.55	0.1157	55.38	0.2217	6.937	7.173				
	56.22	0.1404	57.3	0.2217	6.937	7.173				
	55.38	0.1651	59.09	0.2464						
	59.81	0.2391	64.11	0.2464						
	61.24	0.2637	68.18	0.2464						
	62.44	0.4117	65.67	0.2217						
	65.55	0.5351	65.07	0.2464						
	63.4	0.7077	71.41	0.2217						
	58.85	1.398	68.3	0.2464						
	55.14	1.694	58.97	2.022						
	37.56	3.692	58.01	3.157						
	24.64	5.419	55.26	3.675						
	19.38	6.677	50.72	4.908						
	17.46	7.541	19.62	9.694						
	16.27	8.33	16.39	10.78						
	16.15	8.404	15.79	10.9						
	13.52	11.64	15.67	10.95						
	13.88	11.86	15.67	10.98						
	11.12	14.87								

Panel Type = D
Bracket No = 5
Test Type = T,6

General Commemts

Variables

he	=	55mm
w	=	80mm
d	=	N/A
l	=	200mm
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation		D1-5 (T,6)		D2-5 (T,6)						
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		47.25	31.48	39.23	12.8	0	0	0	0	0	0

Test Data

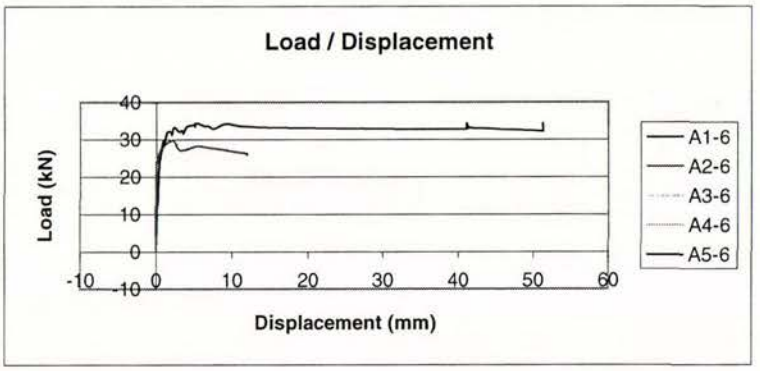
Designation	D1-5 (T,6)		D2-5 (T,6)							
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.3589	0.0096	-0.0007	0.0191						
	0.3589	0.0096	6.1	0.0931						
	0.3589	0.0096	17.1	0.4631						
	2.392	0.0836	29.07	1.006						
	11.36	0.4042	39.23	1.746						
	25.24	0.9716	13.16	4.163						
	27.39	1.12	13.04	6.778						
	35.41	1.44	10.53	10.63						
	41.75	1.958	9.569	12.77						
	41.27	2.008	9.449	12.8						
	47.25	2.476								
	19.38	6.842								
	19.02	9.013								
	18.06	9.235								
	18.78	11.48								
	18.78	11.5								
	14.59	14.37								
	11.84	18.07								
	12.44	24.85								
	12.32	25.39								
	10.77	29.78								
	11	31.48								

Panel Type = D
Bracket No = 6
Test Type = T,6

General Commemts

Variables

he	=	55mm
w	=	80mm
d	=	N/A
l	=	200mm
Test direction	=	Shear
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	D1-6 (T,6)		D2-6 (T,6)							
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	34.36	51.31	29.82	12	0	0	0	0	0	0

Test Data

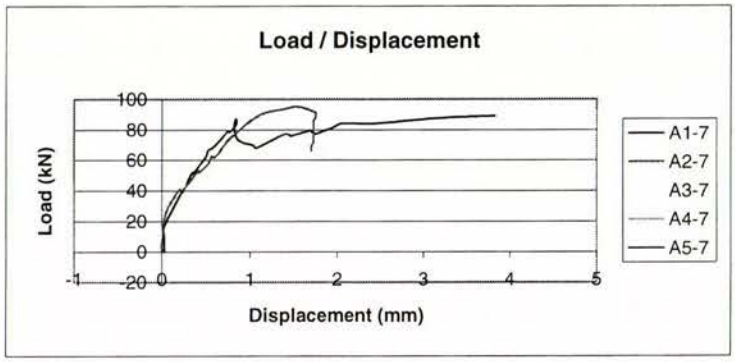
Designation	D1-6 (T,6)		D2-6 (T,6)							
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.1165	-0.0083	0.0019	0.0233						
	0	-0.0083	0.3513	-0.0015						
	0.1165	-0.0083	9.32	-0.0263						
	7.688	0.0661	15.73	-0.0263						
	7.222	0.0661	24.11	-0.0015						
	18.64	0.2644	23.65	0.0233						
	18.4	0.2892	23.53	-0.0015						
	18.17	0.2892	27.26	0.643						
	20.15	0.314	29.82	2.155						
	23.65	0.3883	27.03	3.122						
	24.34	0.4131	28.19	5.303						
	24	0.4379	27.72	7.088						
	28.42	0.8098	26.21	11.97						
	29.7	0.9337	25.98	12						
	29	0.9833	25.86	12						
	28.65	0.9833								
	28.54	1.008								
	31.92	1.38								
	32.03	1.777								
	31.8	1.975								
	31.33	2.024								
	33.31	2.322								
	32.03	3.016								
	32.38	3.363								
	31.92	3.512								
	31.57	3.512								
	33.43	3.983								
	33.78	4.454								
	33.9	4.801								
	34.01	5.049								
	33.43	5.074								
	34.36	5.197								
	33.55	6.511								
	33.66	6.858								
	32.85	7.552								
	34.25	9.114								
	33.55	11.52								
	33.2	16.01								
	32.73	41.12								
	34.36	41.12								
	33.66	41.12								
	33.43	41.14								
	33.2	41.12								
	32.27	51.28								
	32.15	51.31								
	34.36	51.28								

Panel Type = D
Bracket No = 7
Test Type = T,1

General Commemts

Variables

he	=	100mm
w	=	80mm
d	=	N/A
l	=	125mm
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads										
Designation	D1-7 (T,1)		D2-7 (T,1)							
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	89	3.828	95.21	1.75	0	0	0	0	0	0

Test Data

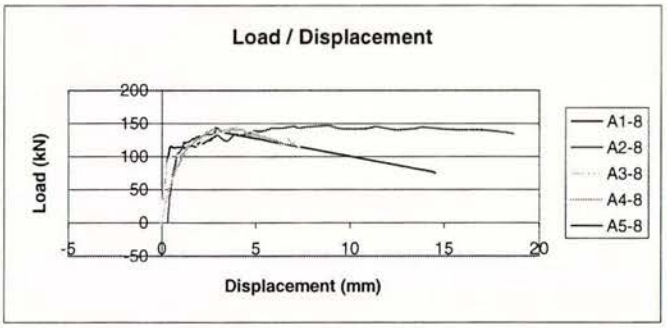
Designation	D1-7 (T,1)		D2-7 (T,1)							
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	-0.1196	0.0289	-0.0007	-0.0009						
	0.5981	0.0289	5.262	-0.0009						
	9.33	0.0289	25.36	0.0485						
	16.75	0.0289	40.91	0.1965						
	39.47	0.2263	39.71	0.2211						
	38.76	0.2263	53.11	0.4185						
	43.3	0.2756	51.91	0.4185						
	43.3	0.2756	57.06	0.5171						
	47.37	0.3003	62.32	0.5665						
	52.15	0.3496	61.72	0.5911						
	51.08	0.3496	66.51	0.6651						
	56.58	0.4236	72.25	0.7391						
	62.2	0.4976	77.51	0.8378						
	66.39	0.5223	82.54	0.9365						
	67.82	0.5716	87.2	1.035						
	73.56	0.6703	91.39	1.183						
	78.95	0.7443	93.54	1.38						
	78.35	0.7689	95.21	1.553						
	83.37	0.8429	91.39	1.75						
	87.2	0.8429	89.59	1.75						
	81.82	0.8183	87.92	1.75						
	73.21	0.8676	88.16	1.75						
	69.5	1.04	86	1.726						
	67.82	1.065	86.72	1.726						
	72.61	1.238	79.07	1.726						
	77.03	1.386	74.76	1.726						
	76.32	1.46	72.01	1.726						
	75.72	1.46	68.78	1.701						
	79.43	1.682	67.94	1.701						
	78.83	1.706	67.1	1.701						
	78.47	1.706	66.51	1.701						
	78.11	1.731	65.91	1.701						
	77.87	1.731								
	77.39	1.731								
	77.15	1.731								
	77.15	1.731								
	77.03	1.731								
	76.91	1.731								
	76.79	1.731								
	81.58	1.953								
	84.09	2.052								
	83.85	2.397								
	86	2.841								
	87.92	3.285								
	89	3.828								

Panel Type = D
Bracket No = 8,9
Test Type = T,9

General Commemts

Variables

he	=	100mm
w	=	80mm
d	=	150mm
l	=	N/A
Test direction	=	Vertical
x edge proximity	=	N/A
y edge proximity	=	N/A



Peak Loads											
Designation		D1-8 (T,9)		D1-9 (T,9)		D2-8 (T,9)		D2-9 (T,9)			
		kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
		143.2	14.54	146.7	18.61	142.8	7.325	141.5	7.014	0	0

Test Data

Designation	D1-8 (T,9)		D1-9 (T,9)		D2-8 (T,9)		D2-9 (T,9)			
	kN	mm	kN	mm	kN	mm	kN	mm	kN	mm
	0.056	-0.0093	0.2889	0.313	1.188	-0.0129	-0.0935	-0.0013		
	11.82	0.0155	0.4054	0.313	5.148	-0.0129	-0.21	-0.0261		
	12.29	0.0155	2.735	0.313	17.38	0.0119	-0.0935	-0.0013		
	11.94	0.0155	19.51	0.3625	20.64	0.0119	-0.21	-0.0013		
	27.2	0.0403	19.04	0.3625	20.29	0.0119	-0.0935	-0.0013		
	35	0.0403	29.18	0.3873	42.31	0.0615	5.847	0.0235		
	34.42	0.0651	42.11	0.4121	45.8	0.0863	10.51	0.0483		
	34.19	0.0651	41.52	0.4369	53.6	0.0863	34.15	0.2218		
	38.03	0.0651	56.9	0.4865	63.62	0.1358	53.95	0.3953		
	43.04	0.0651	56.2	0.4617	64.44	0.1358	53.02	0.4201		
	52.47	0.0899	55.85	0.4865	71.89	0.1606	62.34	0.4945		
	61.33	0.1394	55.73	0.4865	81.79	0.235	61.87	0.5193		
	71.34	0.1642	64.94	0.5361	91.34	0.3094	65.72	0.5441		
	72.16	0.1642	64.35	0.5361	99.15	0.4333	74.11	0.6432		
	80.43	0.2386	73.91	0.5856	103.1	0.7556	85.75	0.792		
	90.56	0.2634	82.41	0.6352	100.5	0.8795	87.38	0.8663		
	99.65	0.313	81.59	0.66	107.3	1.127	87.04	0.8663		
	99.42	0.3377	89.4	0.7096	113.6	1.375	95.31	0.9903		
	99.07	0.3377	98.95	0.784	119.1	1.524	103.8	1.089		
	108.6	0.3873	105.7	0.8583	116.2	1.896	102.6	1.139		
	108.3	0.3873	105.6	0.9079	122	2.169	110.1	1.288		
	112.5	0.4121	113.6	1.057	128.2	2.516	114.9	1.337		
	115.3	0.4865	121.3	1.156	134.6	2.887	117	1.486		
	113.5	0.6104	120.3	1.255	136.9	3.036	117.3	1.511		
	114.1	1.106	124.9	1.577	137	3.334	122.3	1.684		
	111.2	1.28	130.4	1.924	141.7	3.606	122.4	1.759		
	115.6	1.428	129.5	2.023	142.7	3.705	127	1.932		
	116.2	1.652	133.3	2.395	142.8	4.003	126.6	1.982		
	114.9	1.751	131.9	2.941	137.9	4.573	132.3	2.205		
	120.7	1.999	123.3	3.412	138.2	4.821	131.4	2.255		
	119.8	2.172	129.1	3.734	127	5.54	136.9	2.403		
	121.4	2.247	134	3.907	123	6.209	135.8	2.453		
	125.5	2.494	132.6	4.205	126.4	6.606	140.8	2.626		
	123.9	2.544	136	4.75	115.7	7.226	138.8	2.726		
	129.5	2.742	138.8	4.924	114.1	7.325	140.6	2.874		
	129.4	2.817	137.7	5.271			140.2	3.073		
	134.9	2.817	141.2	5.717			140.3	3.147		
	132.8	2.792	142.7	5.866			140.2	3.494		
	135.9	2.792	142.4	6.386			138.1	3.593		
	134.7	2.817	145.3	7.031			141.5	3.717		
	136	2.817	142.9	7.229			140.3	3.891		
	138.2	2.817	144.8	8.072			139.2	3.915		
	136.6	2.817	146.7	8.89			139.6	4.312		
	140	2.817	142.2	9.411			132	4.659		
	139.6	2.817	141.6	10.82			132.9	4.932		
	138.3	2.817	144.8	11.42			129.8	5.279		
	142.3	2.817	140.1	12.39			130.1	5.403		
	140.2	2.817	141.9	13.55			121.7	6.196		
	143.2	2.841	144	13.8			119.2	6.32		
	141.7	2.891	140.6	15.16			118.4	6.94		
	142.7	2.916	140	16.75			116.7	7.014		
	140.4	3.065	139.5	17.1						
	136.7	3.189	135.1	18.46						
	77.17	14.37	133.7	18.61						
	75.65	14.49								
	75.19	14.52								
	74.95	14.54								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