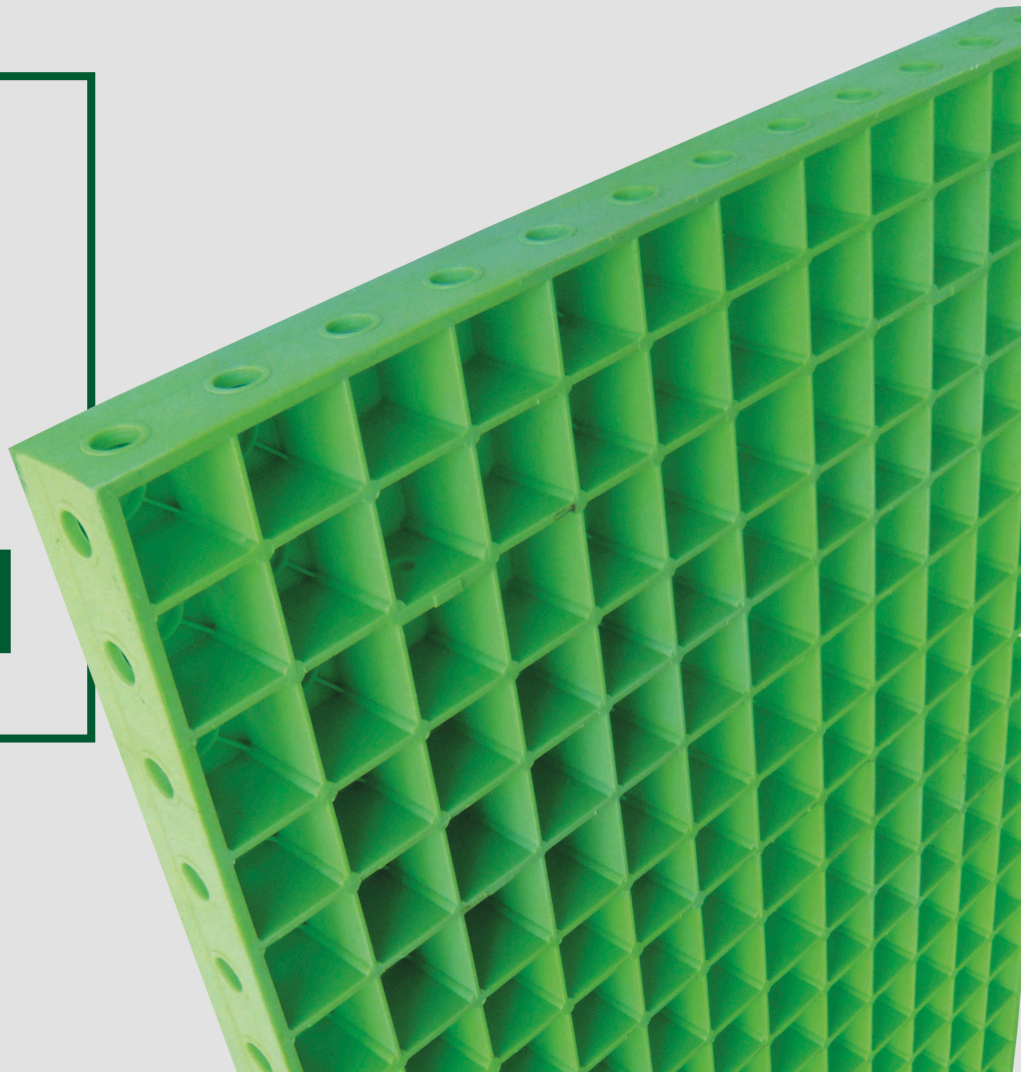


PLASFORM PANEL INSTALLATION MANUAL



**GO
GREEN
WITH
PLASFORM**



Anti-slip



UV
Protection



Weather
Proof



Impact
Resistance

**YOUR ONE-STOP STRUCTURE
FORMING SOLUTION SPECIALIST**



SME 100
Award 2010
FAST MOVING COMPANIES™

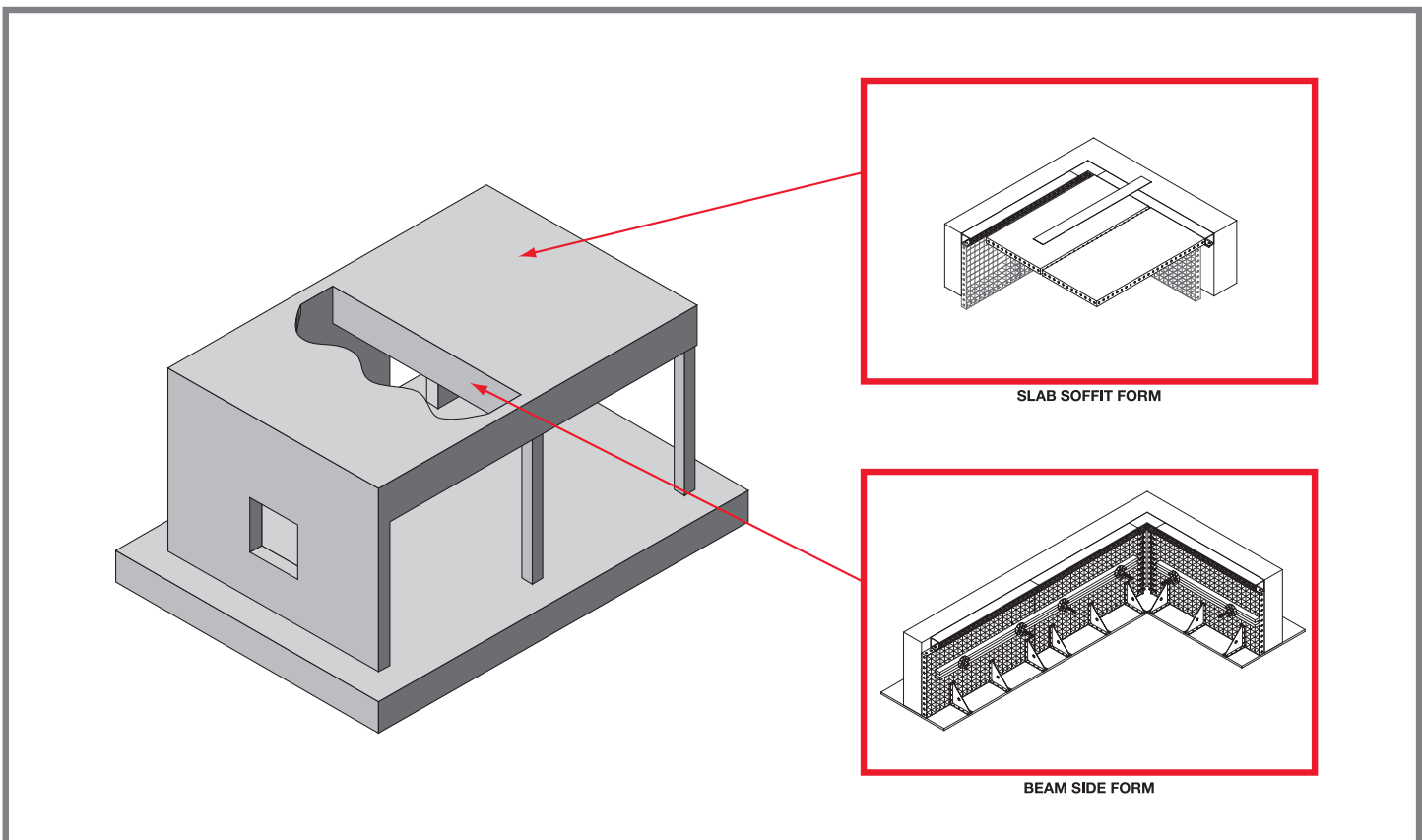
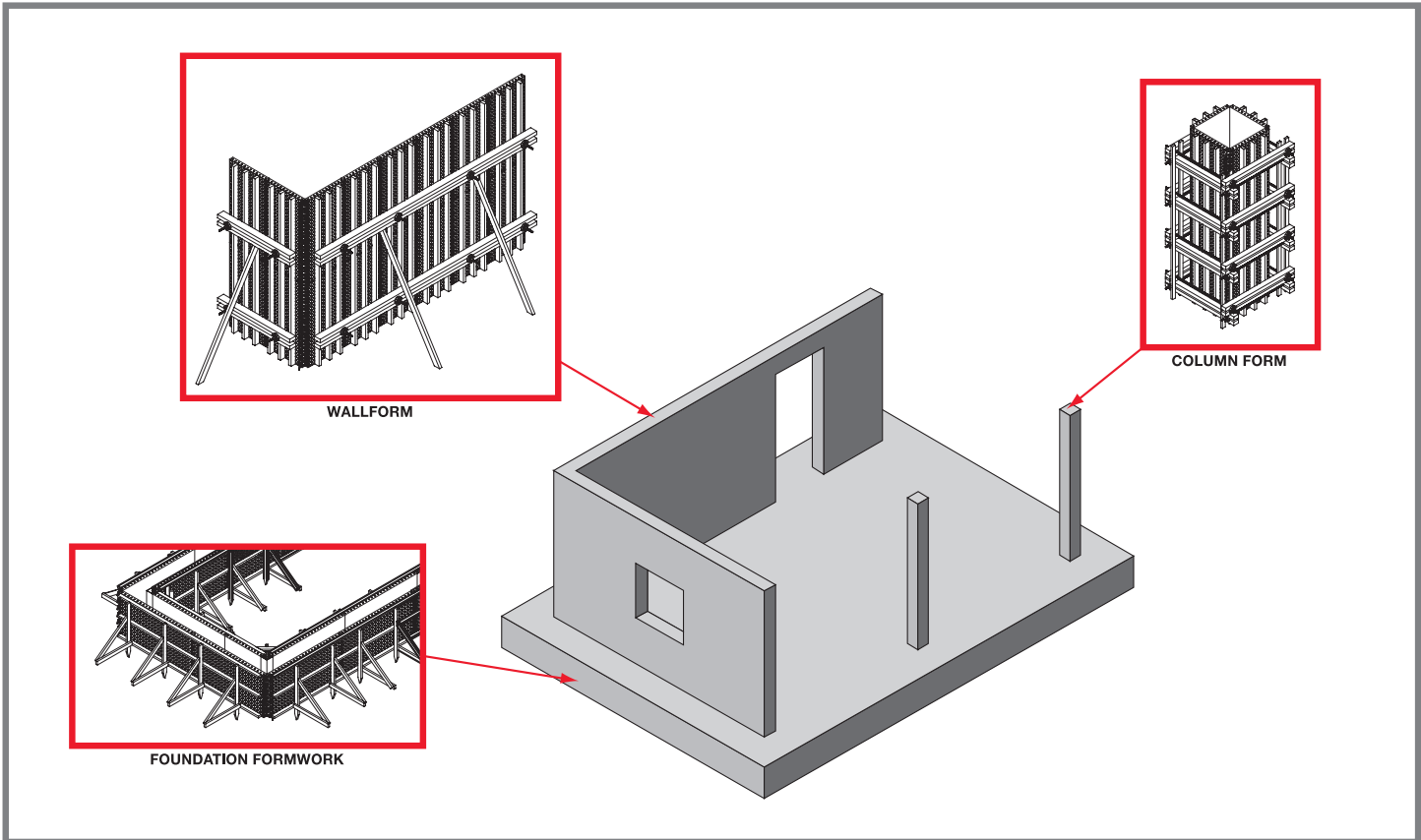




CONTENTS

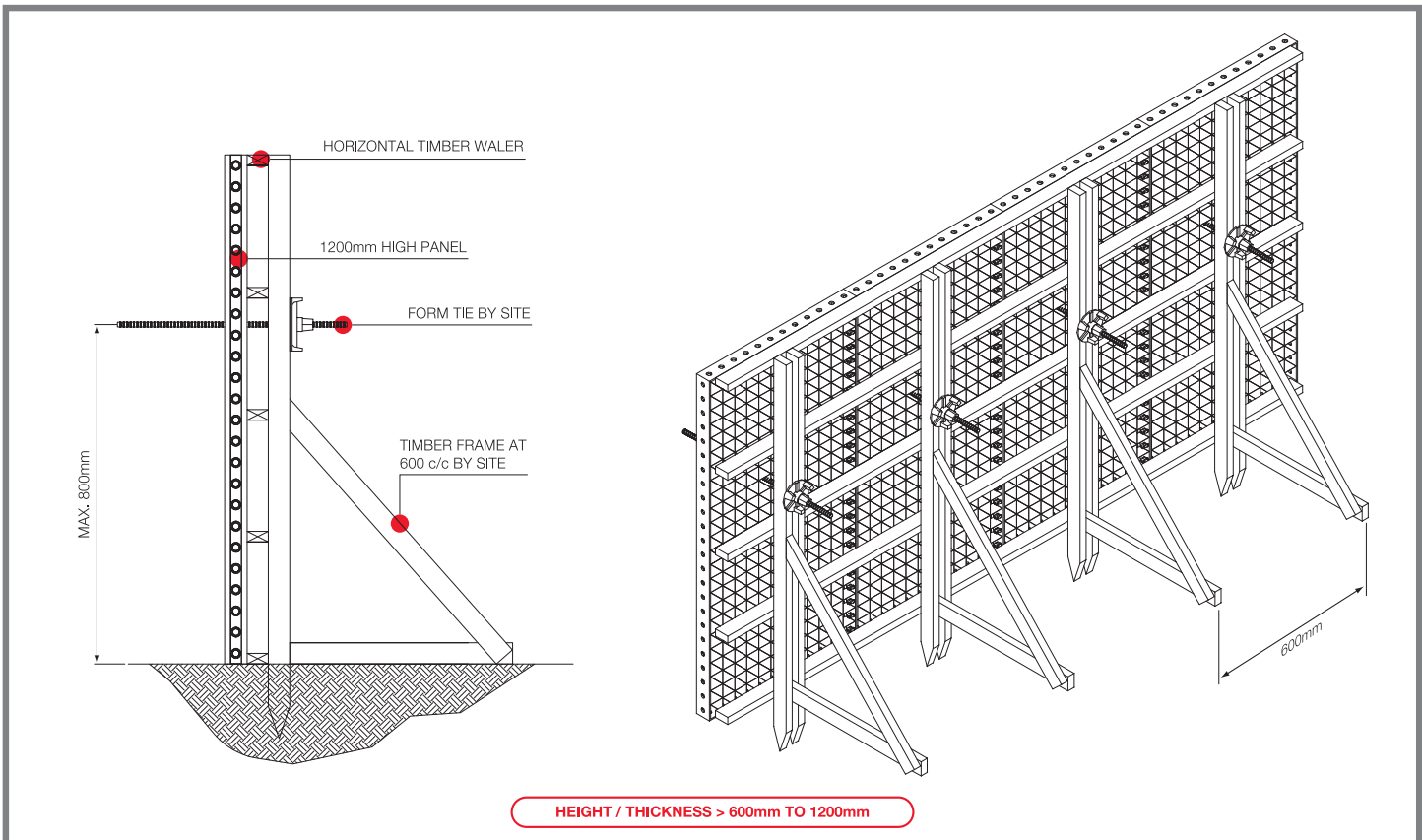
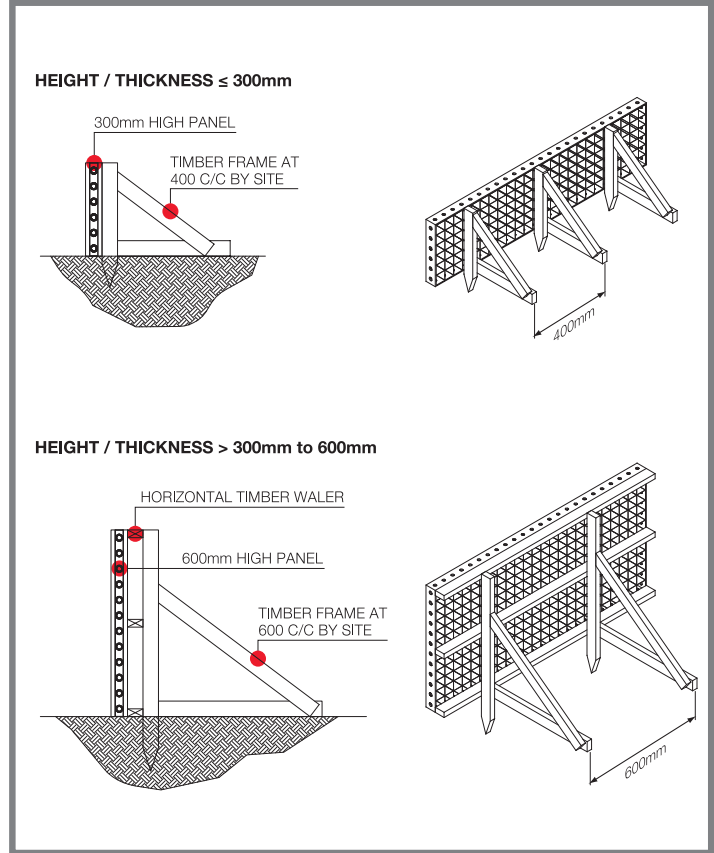
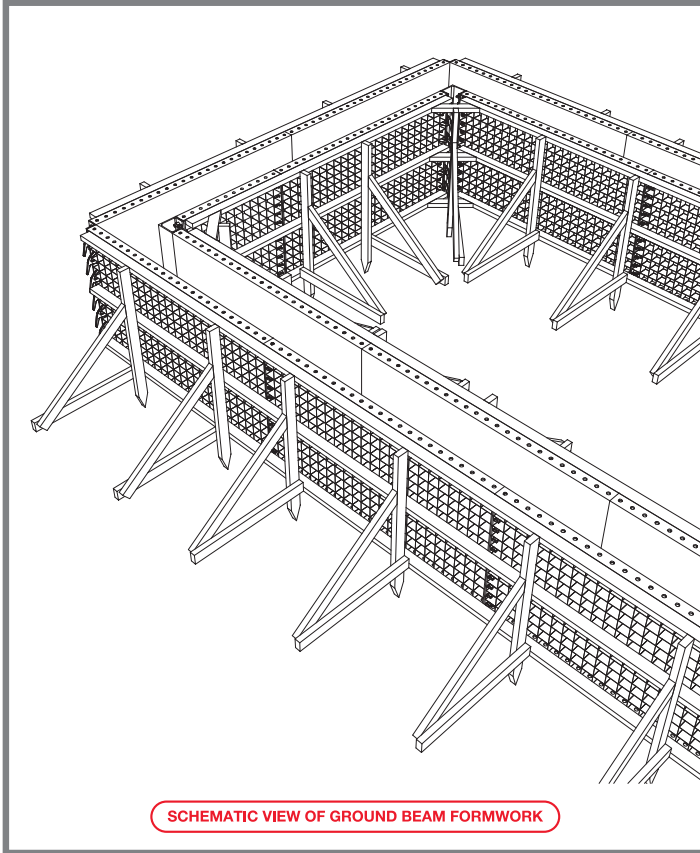
03	TYPICAL STRUCTURE FORMING
	FOUNDATION
04	BASE SLAB / GROUND BEAM
05	FORMWORK ASSEMBLY INSTRUCTION
06	TYPICAL CORNER DETAIL
	VERTICAL FORMWORK
07-08	WALL FORM
09-10	COLUMN FORM
11	WALL FORM & COLUMN FORM - LIFTING ASSEMBLY
12	WALL FORM - APPLICATION WITH PROPRIETARY TIMBER GIRDER
	RC BEAM SIDE FORMWORK
13	BEAM SIDE FORM ARRANGEMENT
	BEAM SIDE-FORM EXAMPLE
00-14	GENERAL COMPONENT
	TYPICAL CONNECTION DETAIL
15	FORMWORK ASSEMBLY INSTRUCTION
	RC SLAB SOFFIT FORMWORK
16	SLAB SOFFIT ARRANGEMENT
	SLAB SOFFIT ASSEMBLY INSTRUCTION
17-18	SLAB SOFFIT COMPONENT INSTALLATION
19	PLASFORM PANEL DISMANTLING INSTRUCTION
	DESIGN EXAMPLE
20	GROUND BEAM FORMWORK
	COLUMN FORMWORK
	WALL FORMWORK
21	PACKING AND STORAGE
22	PLASFORM PANEL CARE AND MAINTENANCE
	STORAGE AND HANDLING
	DISPOSAL OF PLASFORM PANEL AFTER USEFUL LIFE
23	PLASFORM PANEL REPAIR
24-25	PRODUCT DESCRIPTION
	TECHNICAL INFORMATION
26	PHYSICAL PROPERTIES
27	MECHANICAL PROPERTIES
28-29	DESIGN CHART

TYPICAL STRUCTURE FORMING



FOUNDATION

BASE SLAB / GROUND BEAM

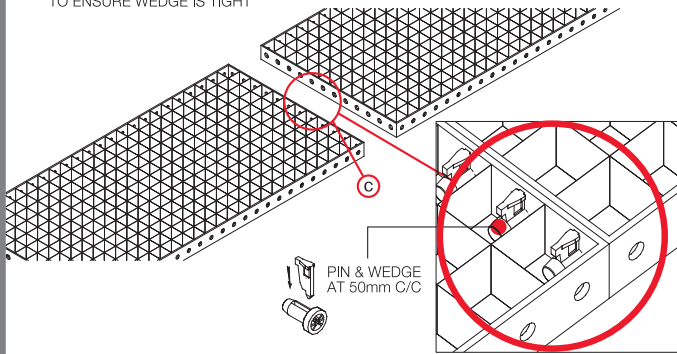


FOUNDATION

FORMWORK ASSEMBLY INSTRUCTION

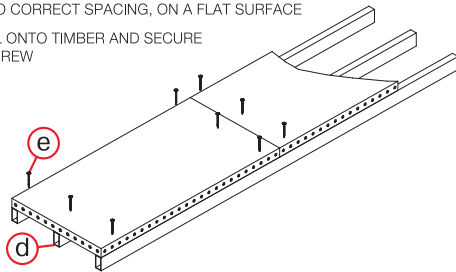
STEP 1 - PANEL TO PANEL CONNECTION

- LAY PANEL ON FLAT SURFACE
- ALIGN PANEL
- SECURE WITH PIN & WEDGE AS BELOW HAMMER TO ENSURE WEDGE IS TIGHT



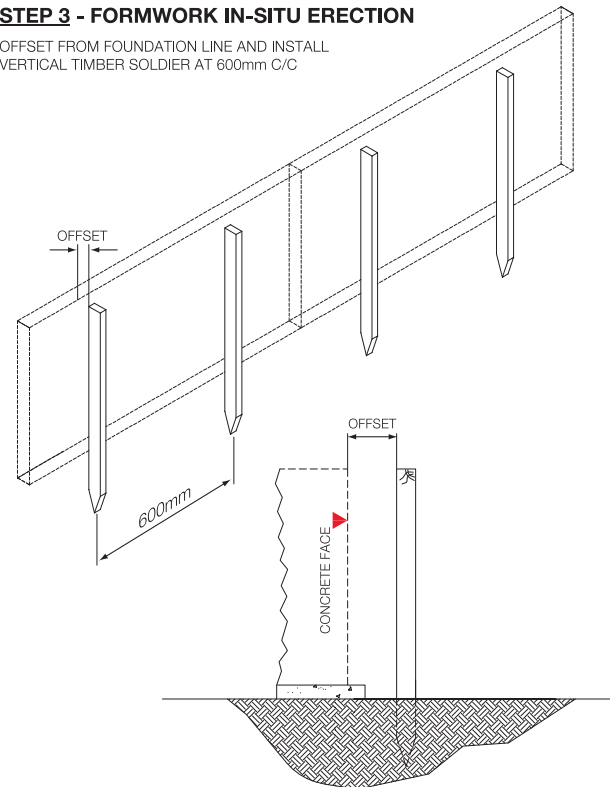
STEP 2 - PANEL TO TIMBER WALER

- LAY TIMBER WALER TO CORRECT SPACING, ON A FLAT SURFACE
- LAY PLATFORM PANEL ONTO TIMBER AND SECURE WITH SELF-TAPPING SCREW



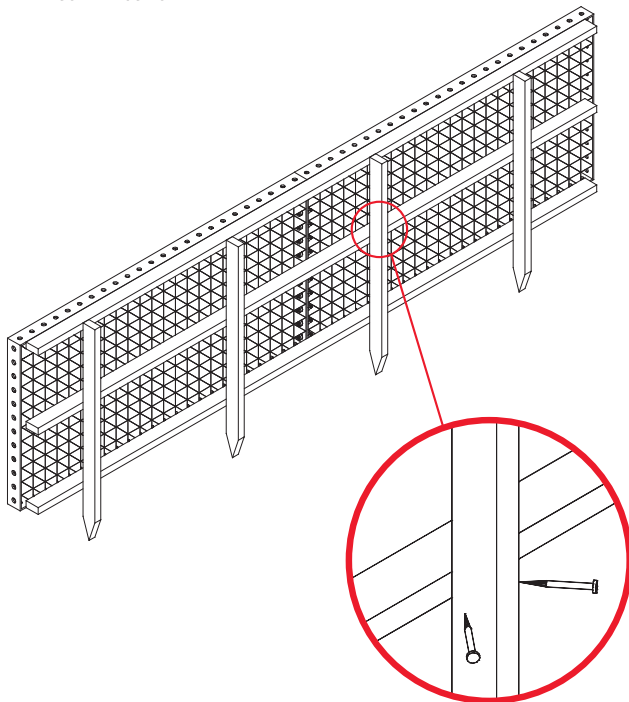
STEP 3 - FORMWORK IN-SITU ERECTION

- OFFSET FROM FOUNDATION LINE AND INSTALL VERTICAL TIMBER SOLDIER AT 600mm C/C



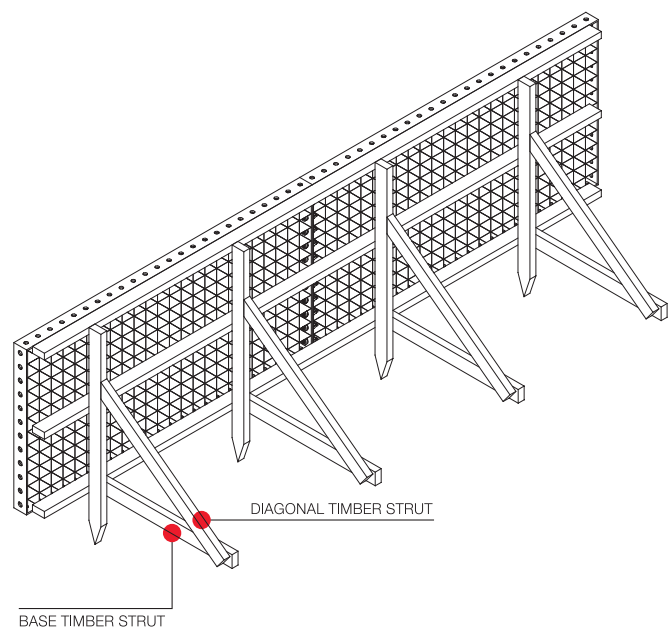
STEP 4

- BRING IN ASSEMBLED PANEL AND SECURE TO VERTICAL TIMBER SOLDIER USING NAIL



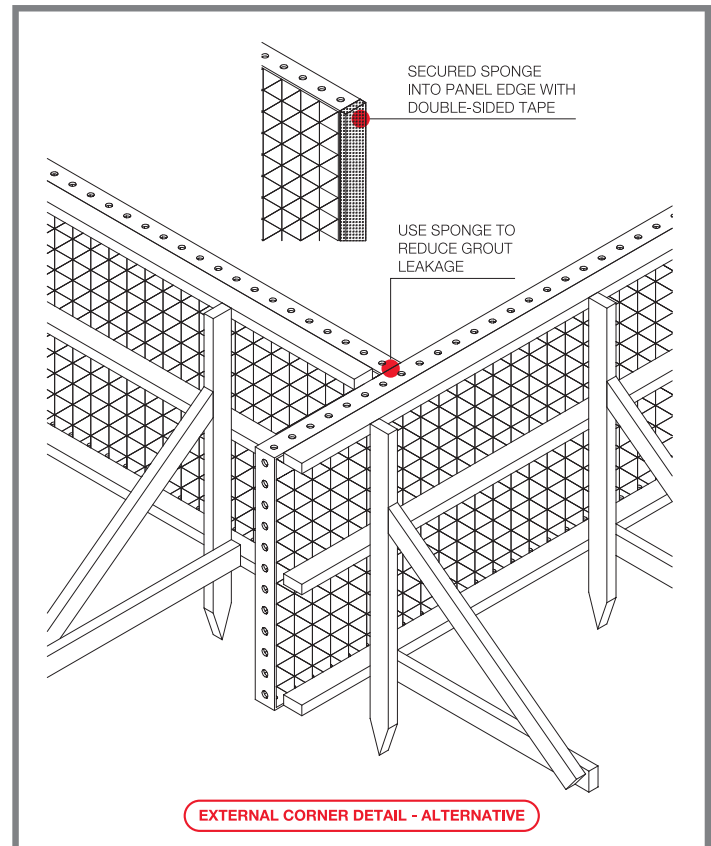
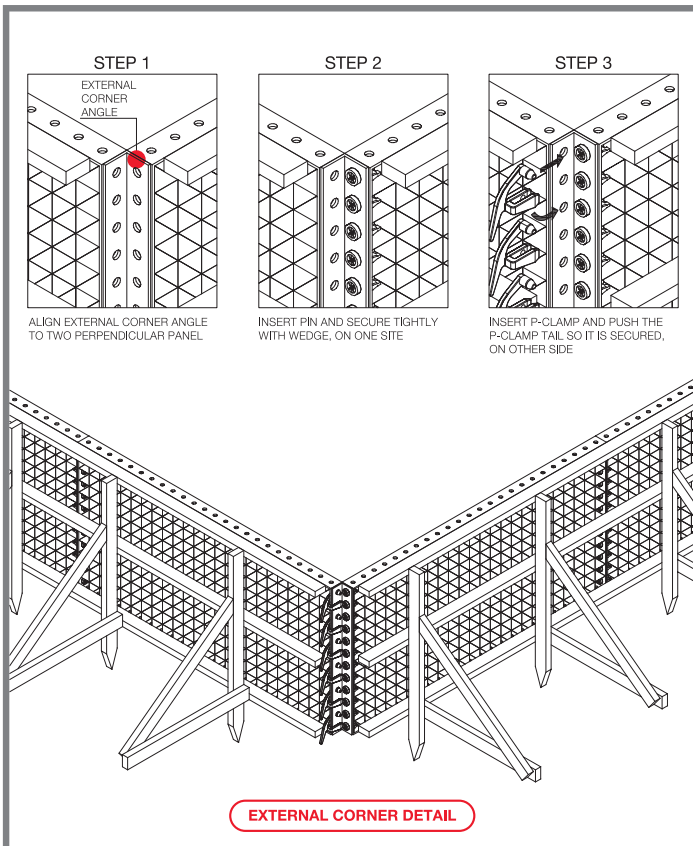
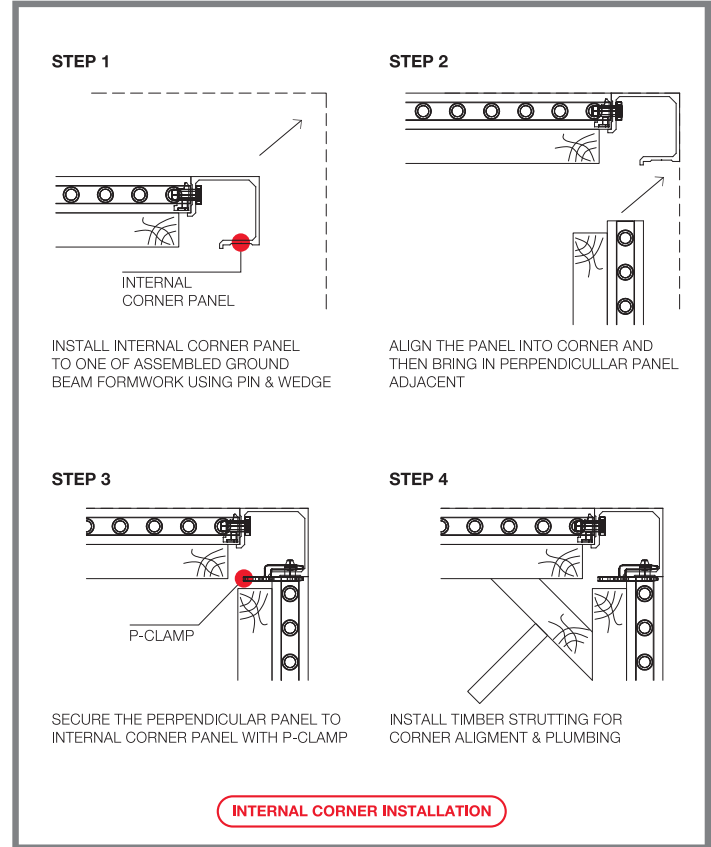
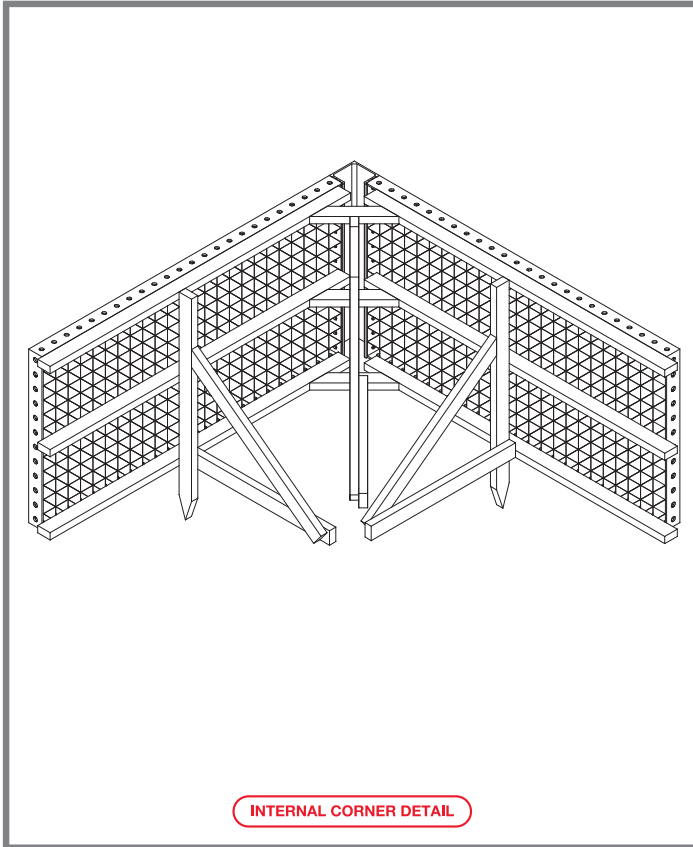
STEP 5

- PLUMB AND ALIGN FORMWORK USING DIAGONAL AND BASE TIMBER STRUTTING



FOUNDATION

TYPICAL CORNER DETAIL



VERTICAL FORMWORK - WALL FORM

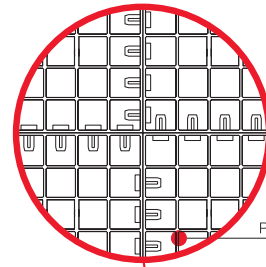
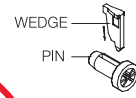
FORMWORK ASSEMBLY INSTRUCTION



SCHEMATIC VIEW OF WALL FORMWORK

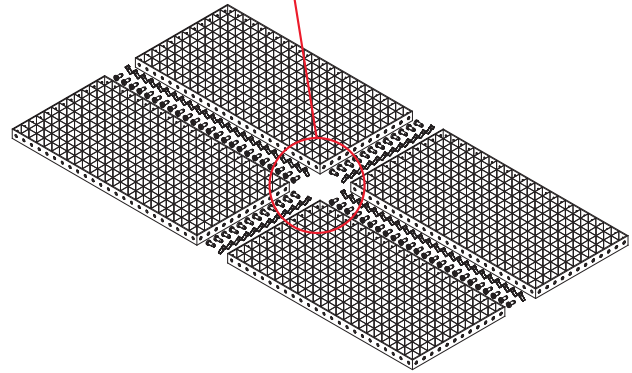
STEP 1

- LAY PLASFORM PANEL ON CLEAN AND FLAT SURFACE

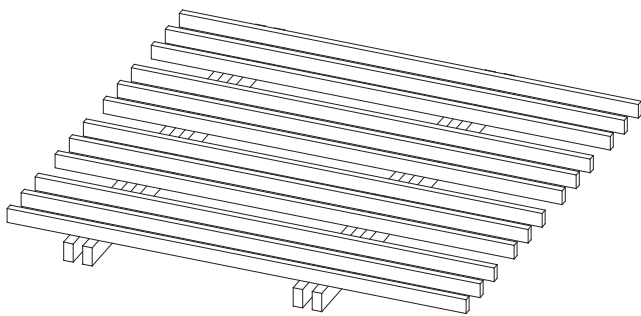


FRONT ELEVATION
Pin is used to hold two parallel PLASFORM panels together
horizontal = 50mm c/c
vertical = 50mm c/c

PLASFORM PANEL

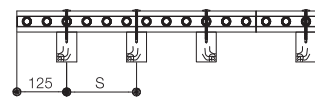
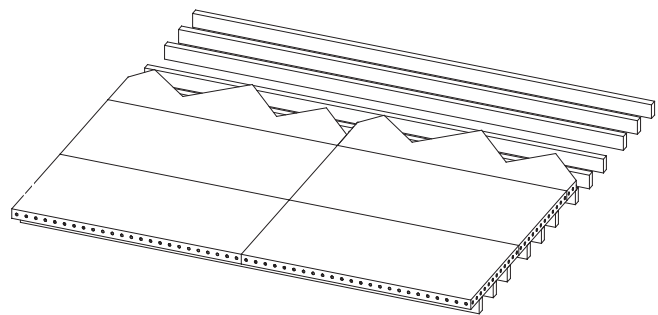


PLASFORM PANEL CONNECTION DETAIL



STEP 2

- SET SUPPORTING FRAME (TIMBER OR STEEL) ON A FLAT SURFACE
- ENSURE ALL PRIMARY AND SECONDARY SUPPORTS ARE AT CORRECT SPACING
- SECURE MEMBERS SO THAT ARE PERPENDICULAR TO EACH OTHER. MEASURE DIAGONAL DISTANCE TO ENSURE SQUARENESS



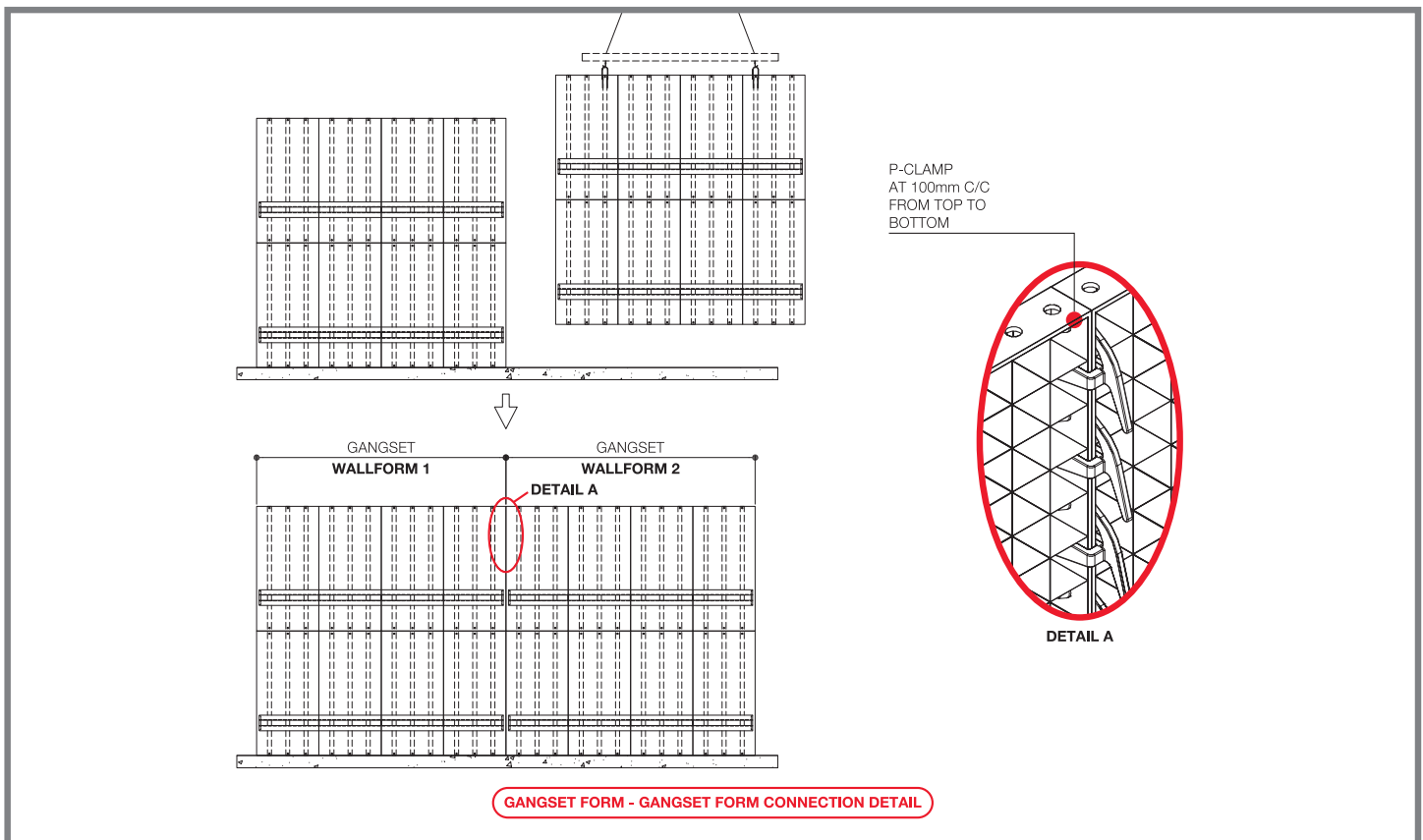
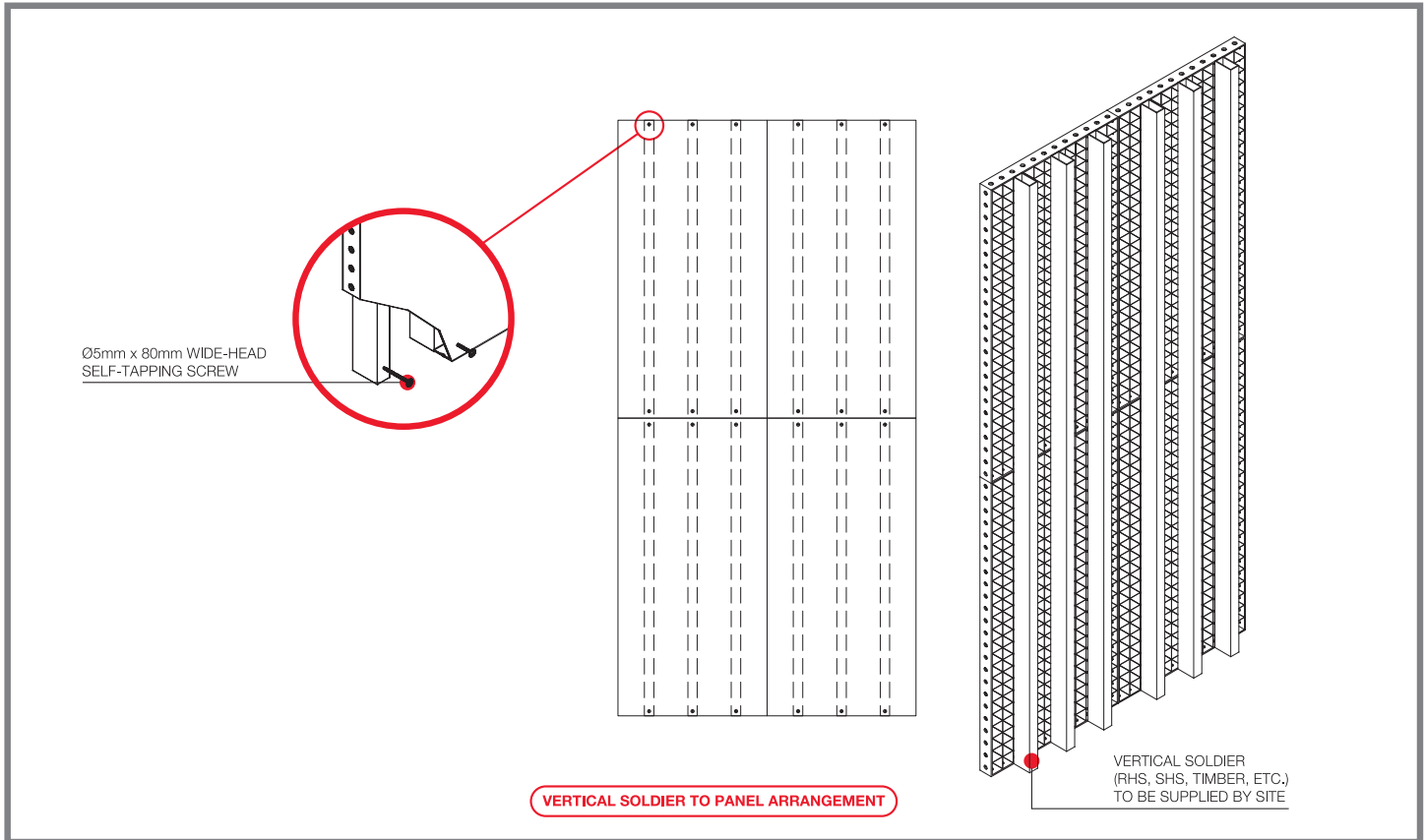
S = TYPICAL SPACING. SEE TECHNICAL INFORMATION FOR WALL DESIGN DATA

STEP 3

- LAY THE JOINTED PLASFORM PANEL ON TOP OF SUPPORTING FRAME
- CHECK FOR SQUARENESS AND ALIGNMENT
- INSTALL Ø5mm X 80mm WIDEHEAD SELF-TAPPING SCREW. SEE DETAIL NEXT PAGE

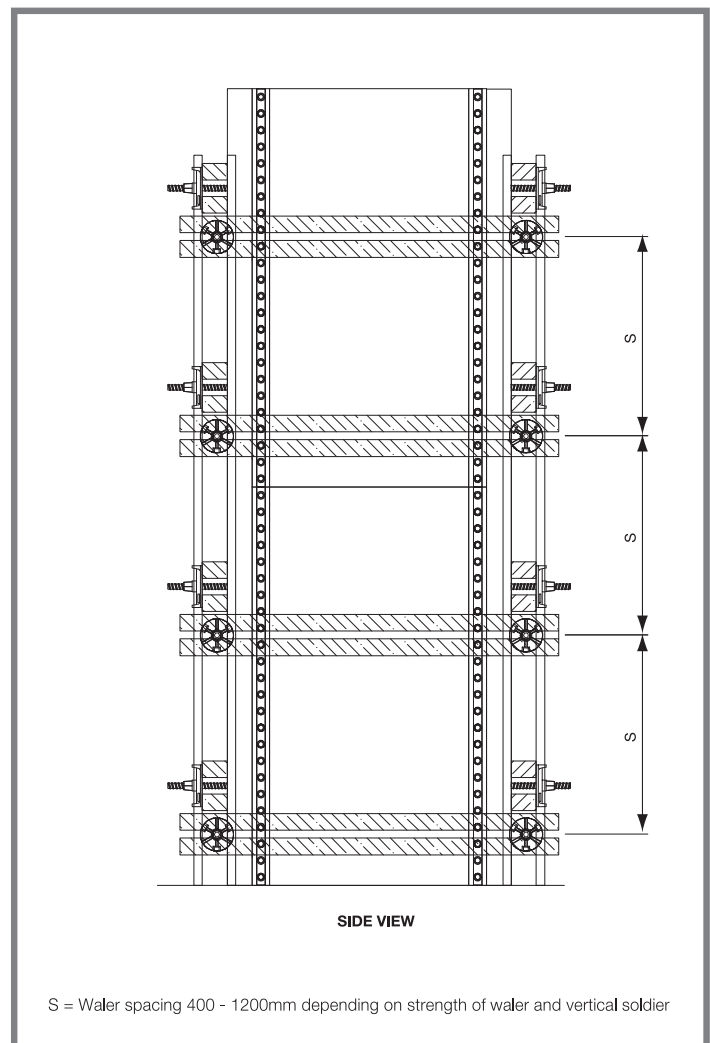
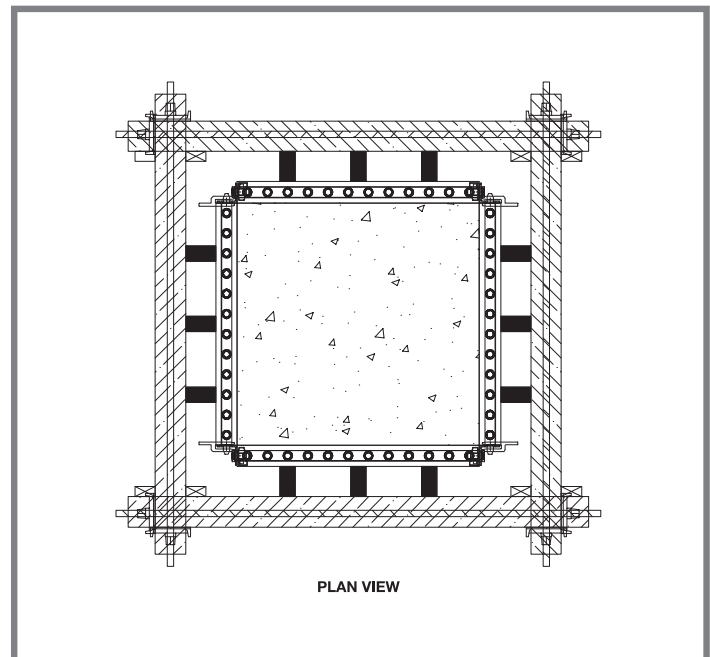
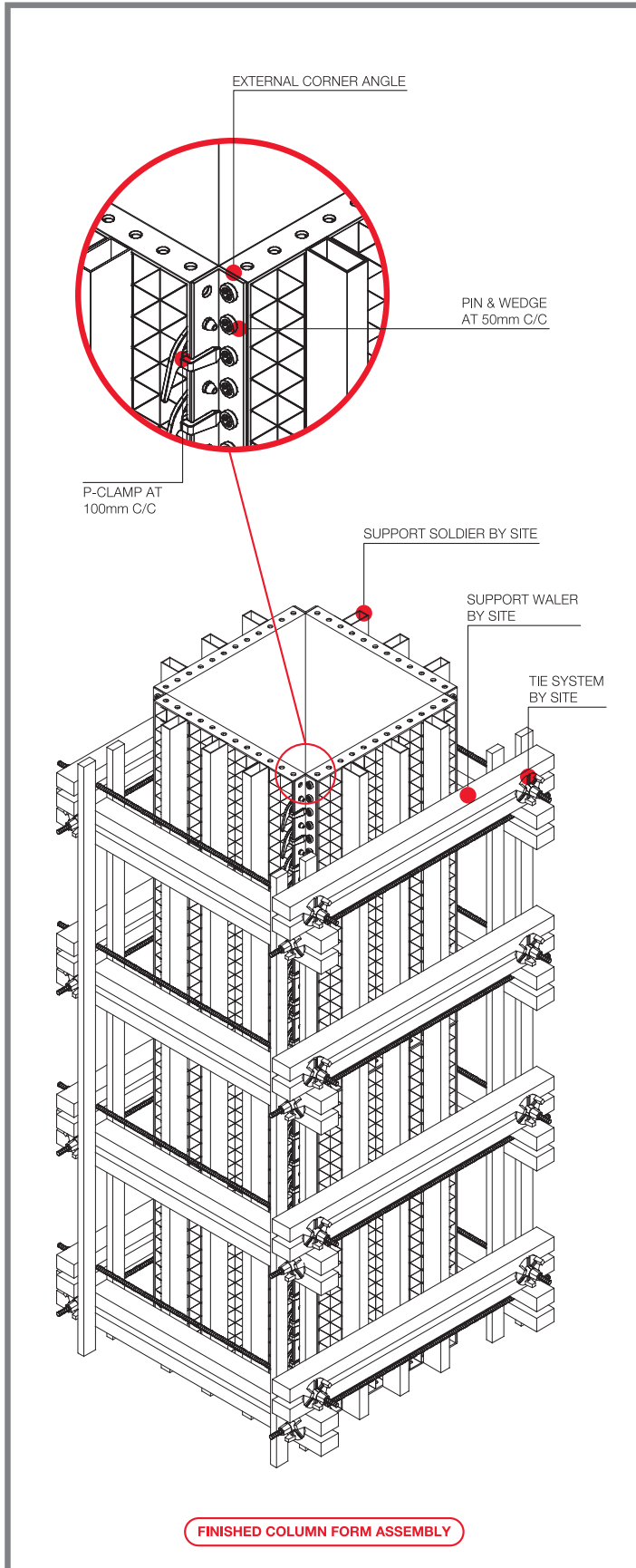
VERTICAL FORMWORK - WALL FORM

FORMWORK ASSEMBLY INSTRUCTION



VERTICAL FORMWORK

COLUMN FORM



VERTICAL FORMWORK - COLUMN

FORMWORK ASSEMBLY INSTRUCTION

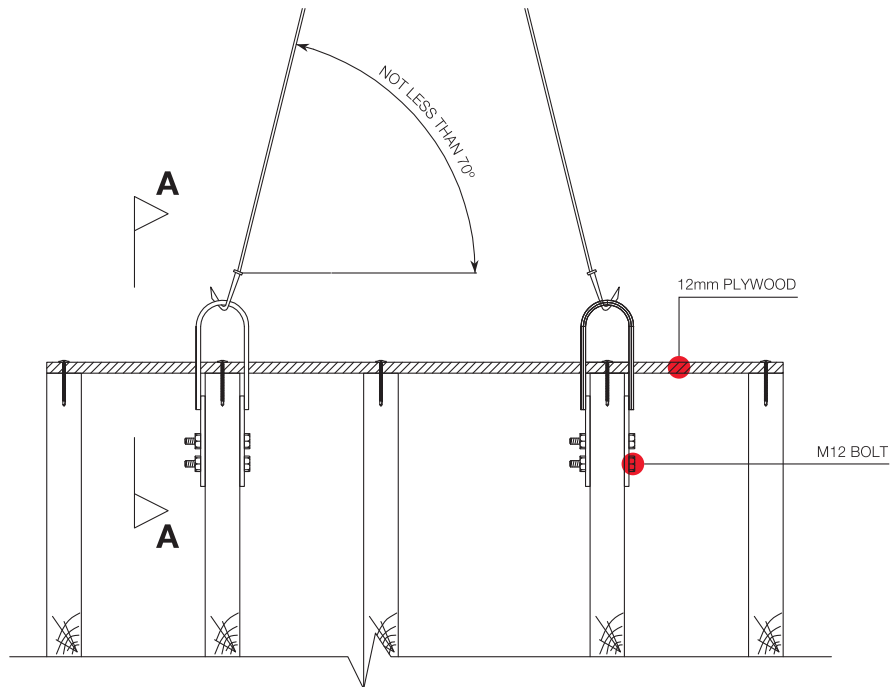
STEP 1
a. ASSEMBLE TWO HALVES (L-SHAPE) FORM ON FLAT SURFACE

STEP 2
b. LIFT FORM INTO VERTICAL POSITION AND INSTALL REMAINING PRIMARY WALER

STEP 3
c. BRING TWO HALVES COLUMN FORM TOGETHER AND SECURED BOTH DIAGONAL EDGES WITH P-CLAMP
d. INSTALL TIE SYSTEM ONTO PRIMARY WALER

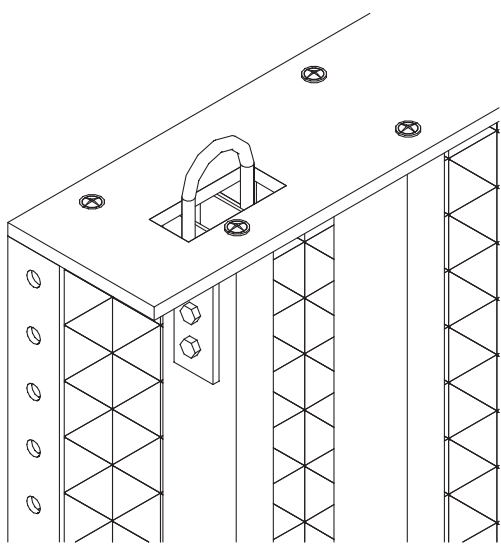
VERTICAL FORMWORK - WALL & COLUMN FORM

LIFTING ASSEMBLY

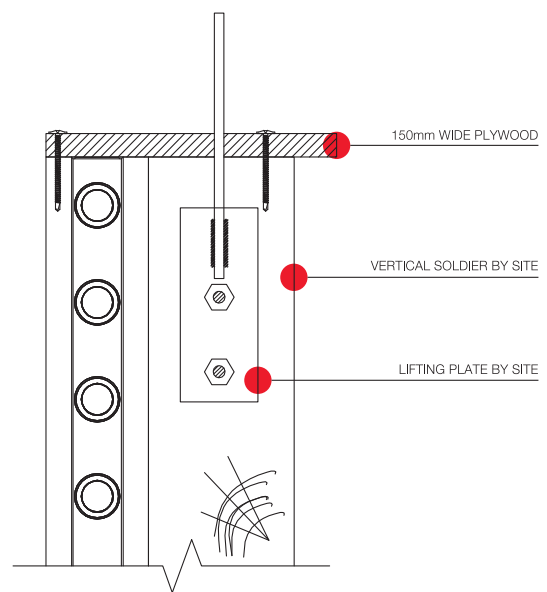


REAR ELEVATION

LIFTING DETAIL



ISOMETRIC VIEW

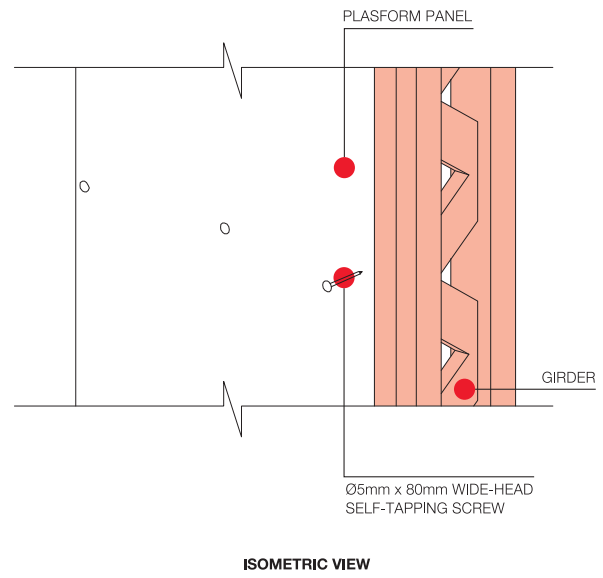
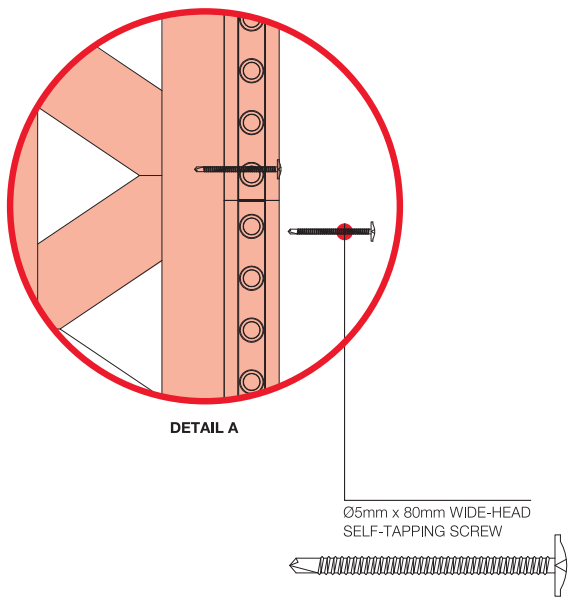
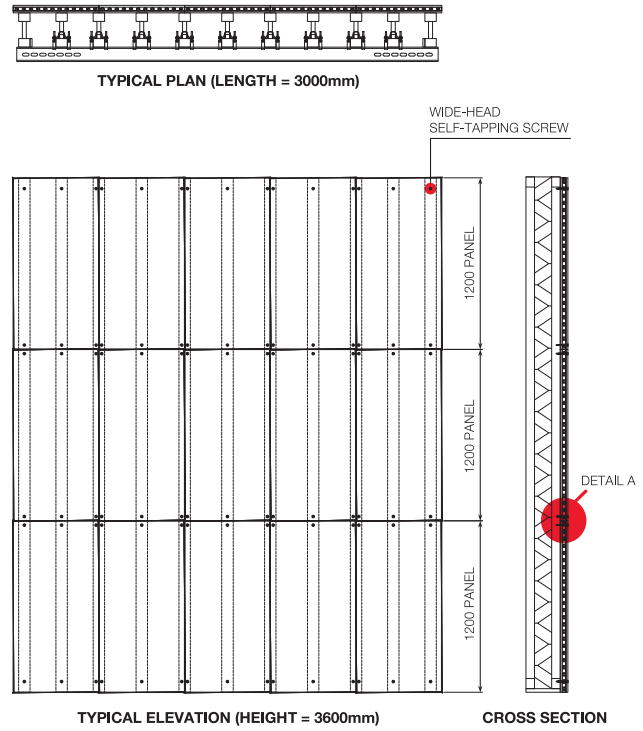
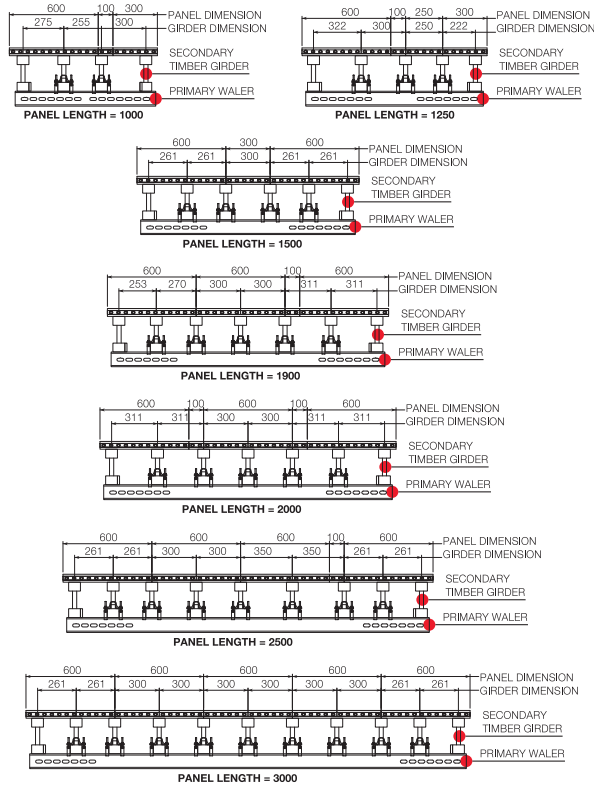


SECTION A-A



VERTICAL FORMWORK

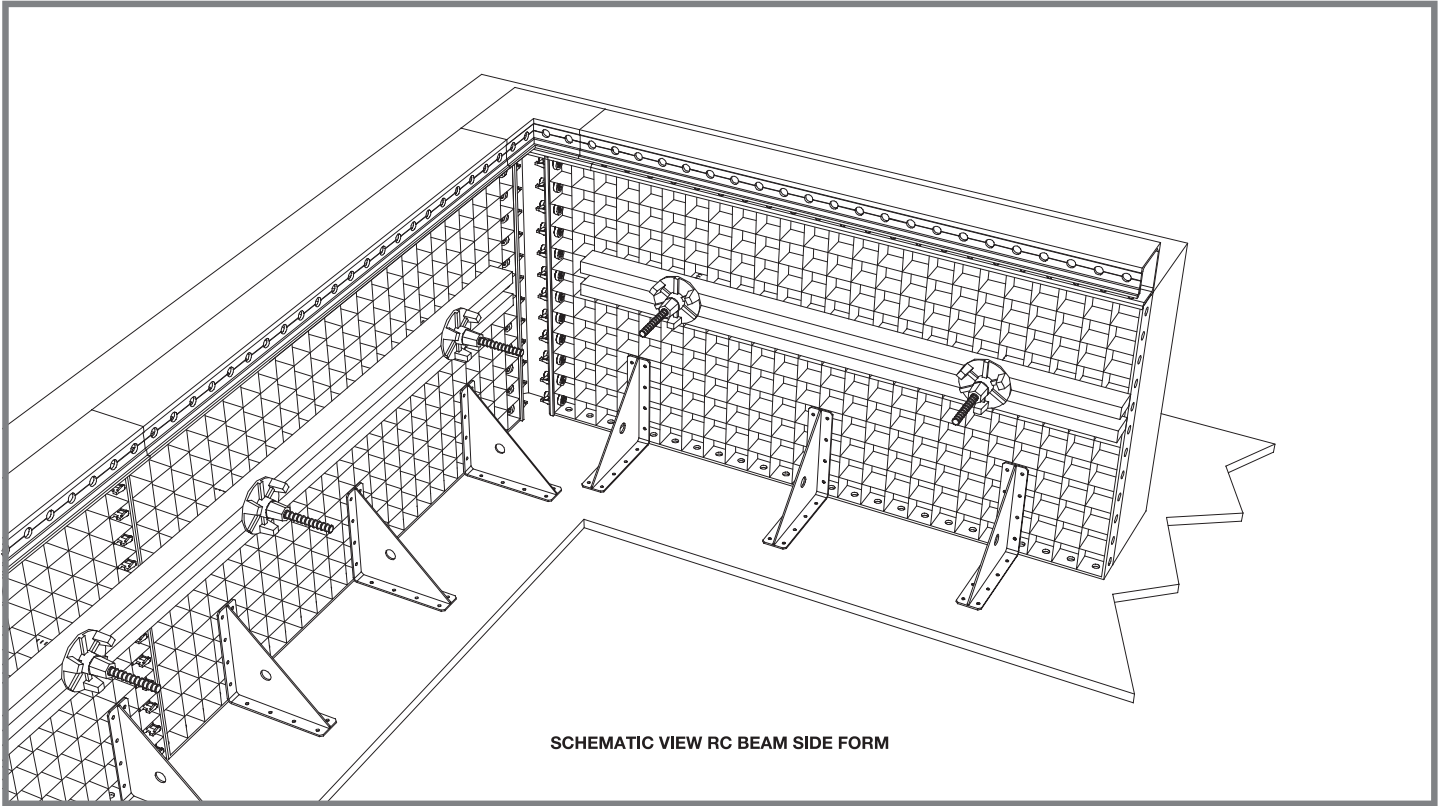
WALL FORM - APPLICATION WITH PROPRIETARY TIMBER GIRDER





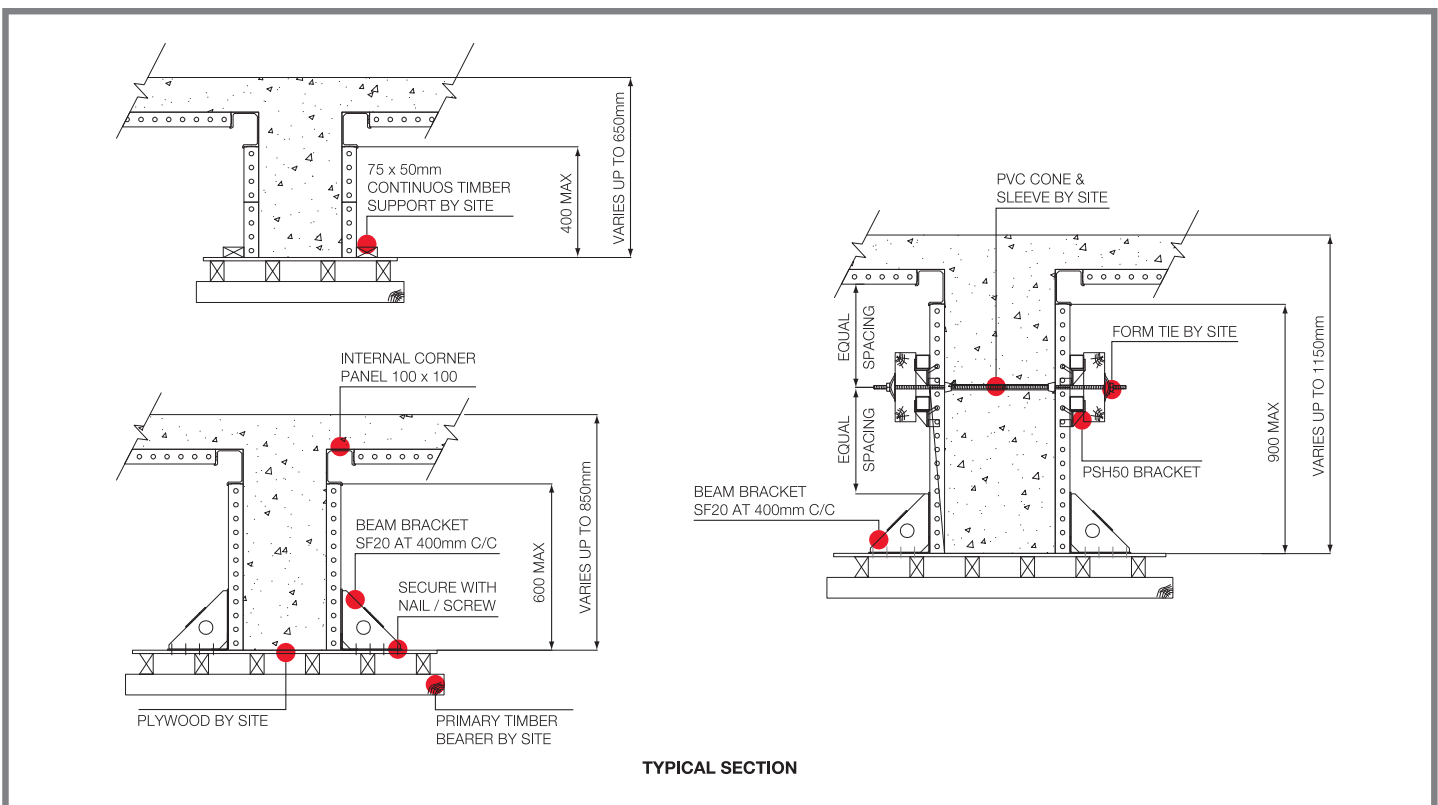
RC BEAM SIDE FORMWORK

BEAM SIDE FORM ARRANGEMENT



RC BEAM SIDE FORMWORK

BEAM SIDE-FORM EXAMPLE

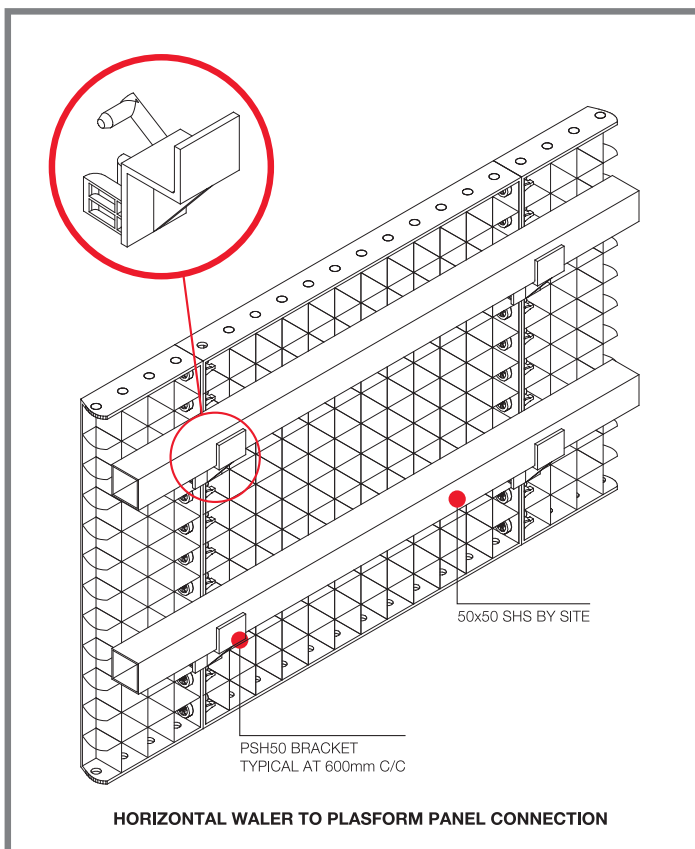
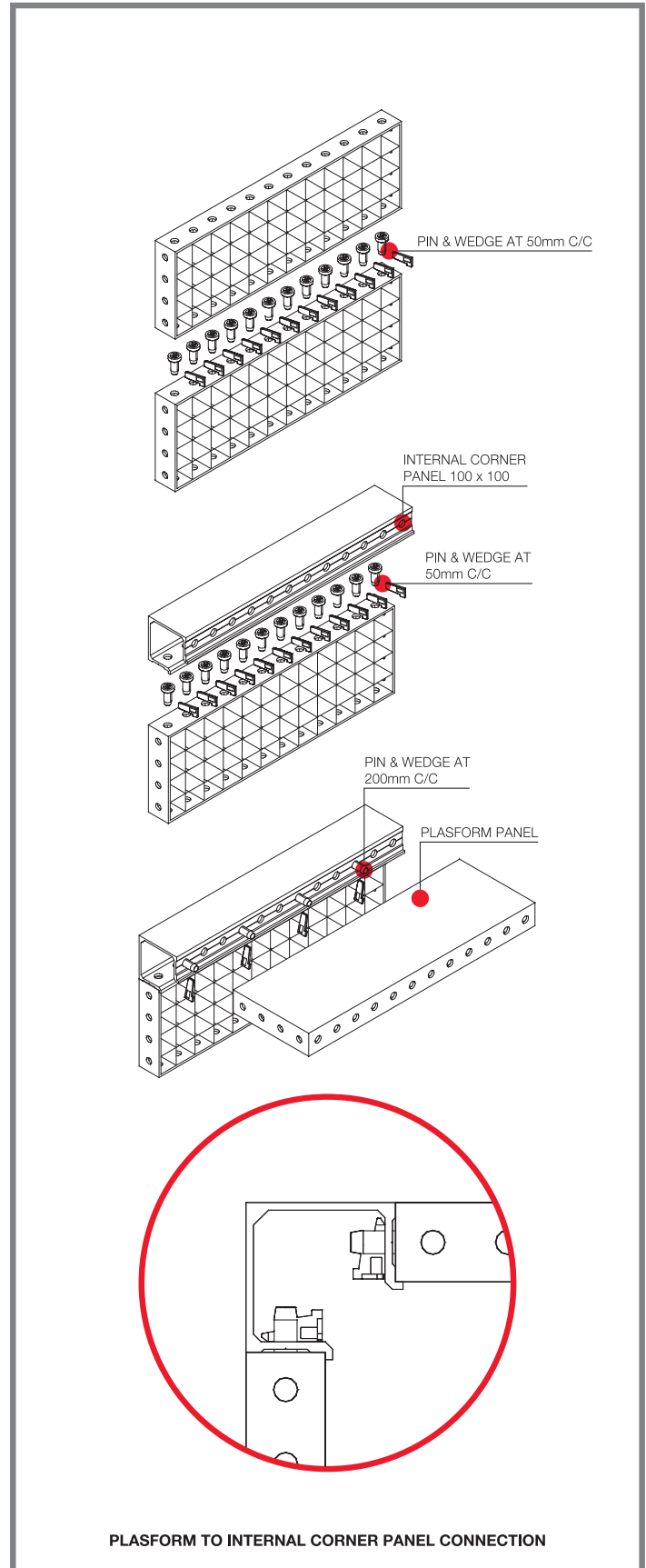
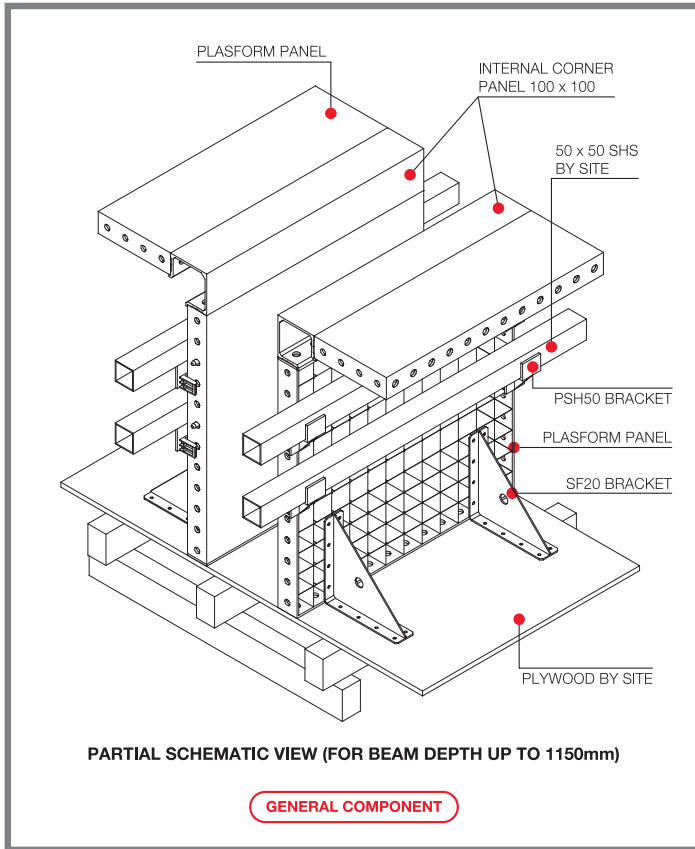




INSTALLATION MANUAL PLASFORM PANEL

RC BEAM SIDE FORMWORK

TYPICAL CONNECTION DETAIL



RC BEAM SIDE FORMWORK

FORMWORK ASSEMBLY INSTRUCTION

STEP 1

- a. SECURE SF20 BRACKET AT OFFSET DISTANCE FROM RC BEAM FACE, USING NAIL OR SCREW ONTO PLYWOOD
- b. INSTALL AND ALIGN INTERNAL CORNER PANEL. SECURE IN LOCATION WITH NAIL

STEP 2

- c. INSTALL ASSEMBLED SIDE-FORM COMPLETE WITH HORIZONTAL WALER
- d. SECURE TO INTERNAL CORNER PANEL WITH PIN & WEDGE
- e. SECURE TO SF20 BRACKET USING WIRE TIE
- f. INSTALL TIE SYSTEM

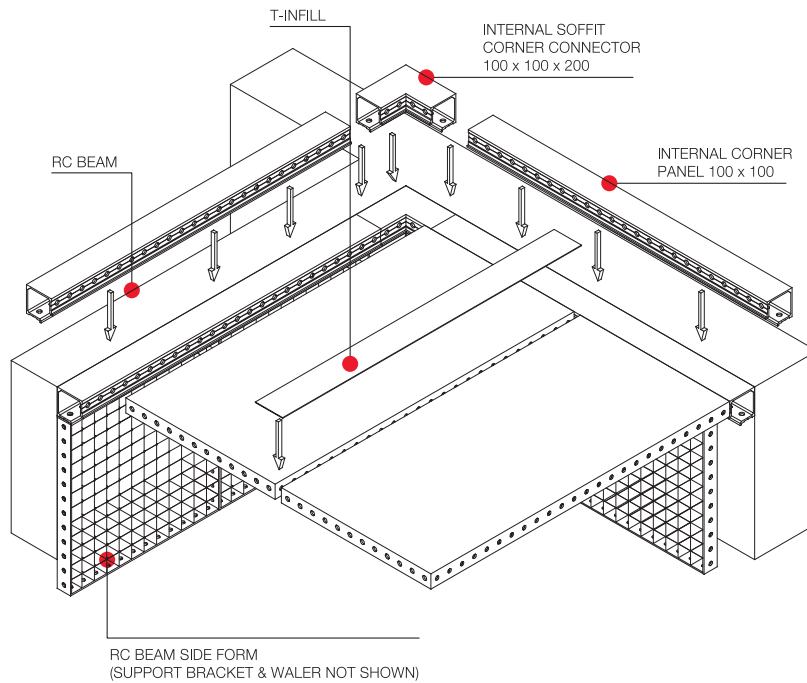
STEP 2

- g. POSITION INTERNAL SOFFIT CORNER AT RC BEAM CORNER
- h. SECURE TO SIDE-FORM USING PIN & WEDGE
- i. POSITION REMAINING INTERNAL CORNER PANEL (VARIOUS LENGTH) AND SECURE USING PIN & WEDGE

INTERNAL SOFFIT CORNER
100 x 100 x 200

RC SLAB SOFFIT FORMWORK

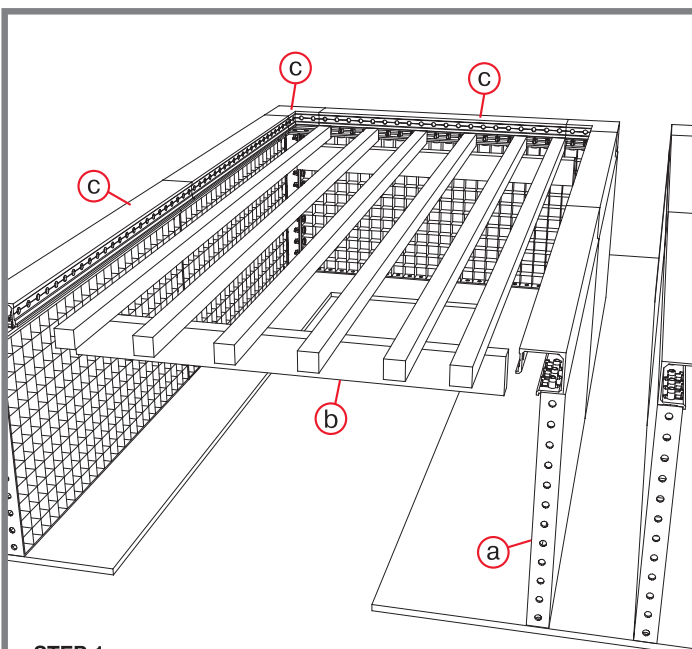
SLAB SOFFIT ARRANGEMENT



OVERVIEW SLAB SOFFIT COMPONENTS

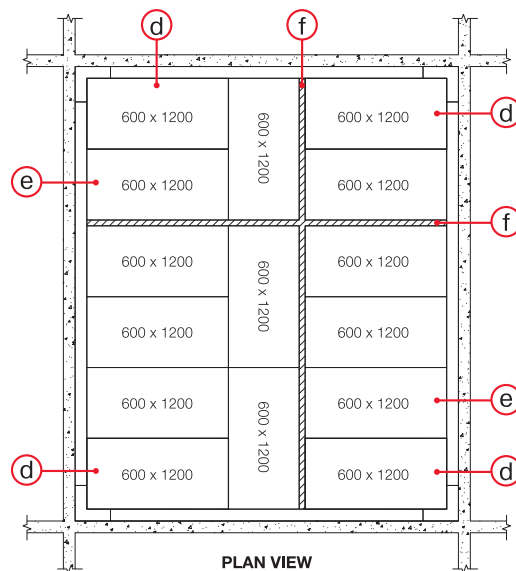
RC SLAB SOFFIT FORMWORK

SLAB SOFFIT ASSEMBLY INSTRUCTION



STEP 1

- a. SIDE FORM COMPLETED (SF20 BRACKET AND HORIZONTAL WALER NOT SHOWN FOR CLARITY)
- b. SECONDARY & PRIMARY BEARER COMPLETED. ENSURE SPACING IS CORRECT. SEE TECHNICAL INFORMATION FOR SLAB DESIGN DATA
- c. INTERNAL CORNER PANEL & SOFFIT CORNER IS COMPLETED



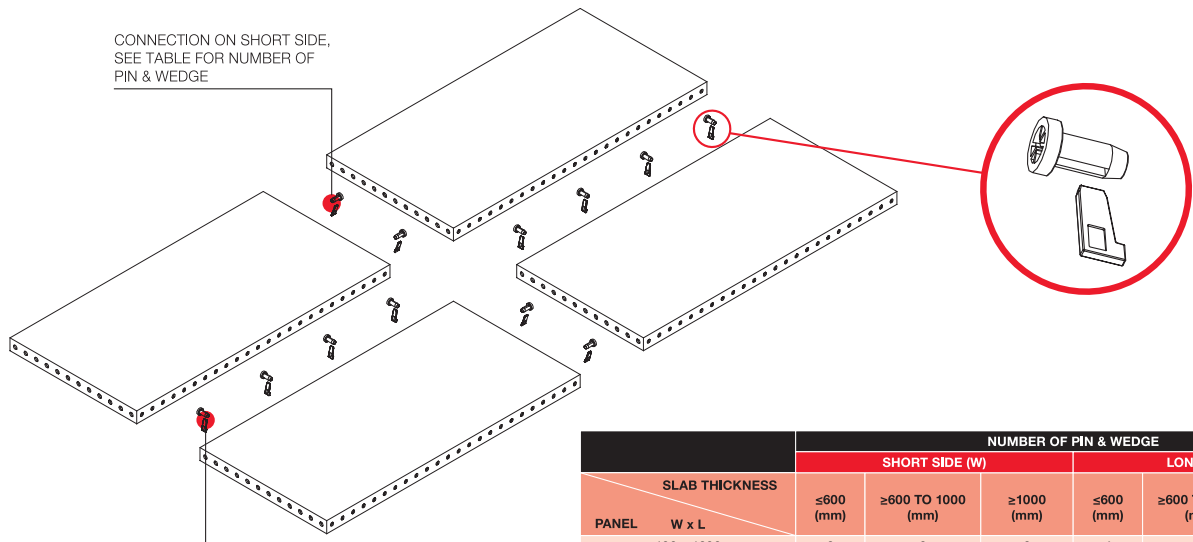
PLAN VIEW

STEP 2

- d. START INSTALLING PANEL AT CORNER OF EACH BAY
- e. INSTALL REMAINING INTERMEDIATE PANEL. CONNECT PANEL-TO-PANEL USING PIN & WEDGE, FROM UNDERSIDE OR PANEL (SEE PANEL-TO-PANEL CONNECTION ON NEXT PAGE)
- f. INSTALL T-INFILL (SEE T-INFILL APPLICATION). ALTERNATIVE USE TIMBER INFILL
- g. READY FOR RE-BAR INSTALLATION

RC SLAB SOFFIT FORMWORK

SLAB SOFFIT COMPONENT INSTALLATION

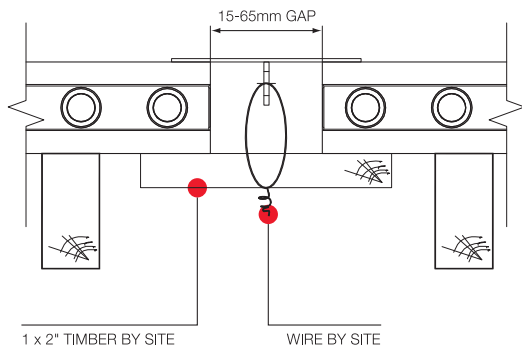


CONNECTION ON SHORT SIDE,
SEE TABLE FOR NUMBER OF
PIN & WEDGE

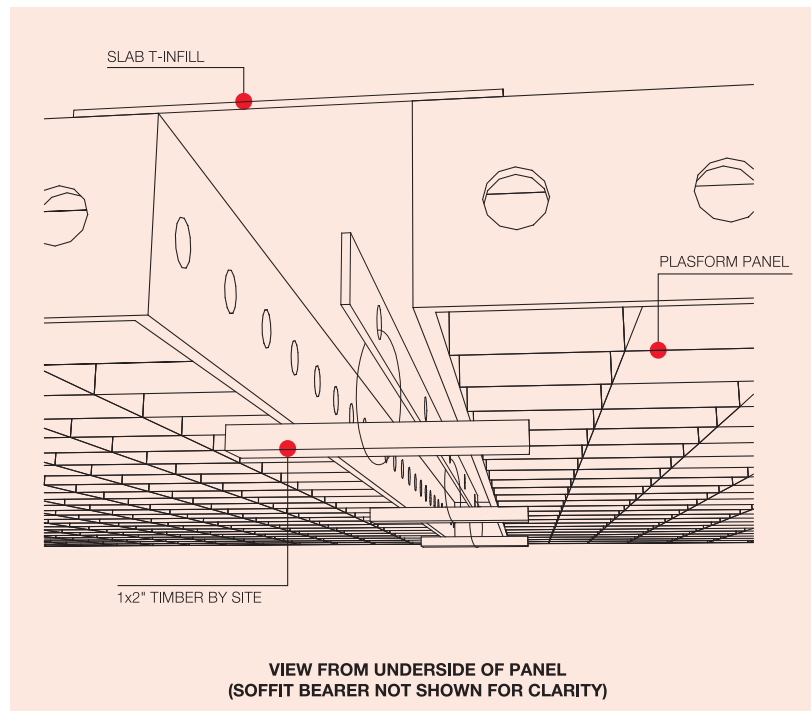
CONNECTION ON LONG SIDE,
SEE TABLE FOR NUMBER OF
PIN & WEDGE

SLAB THICKNESS		NUMBER OF PIN & WEDGE					
		SHORT SIDE (W)			LONG SIDE (L)		
PANEL	W x L	≤600 (mm)	≥600 TO 1000 (mm)	≥1000 (mm)	≤600 (mm)	≥600 TO 1000 (mm)	≥1000 (mm)
	100 x 1200	2	2	2	4	8	24
	150 x 1200	2	2	3	4	8	24
	200 x 1200	2	2	4	4	8	24
	250 x 1200	2	2	5	4	8	24
	300 x 1200	2	3	6	4	8	24
	600 x 1200	2	4	12	4	8	24
	900 x 1200	3	6	18	4	8	24
	1200 x 1200	4	8	24	4	8	24
	1800 x 1200	4	8	24	6	12	36

PLASFORM PANEL INSTALLATION



TYPICAL X-SECTION

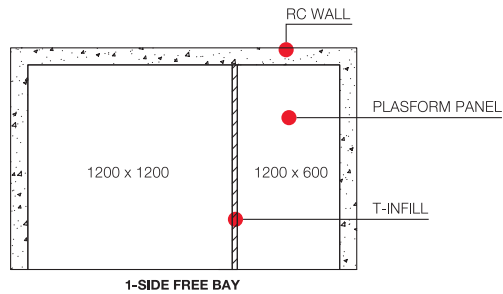
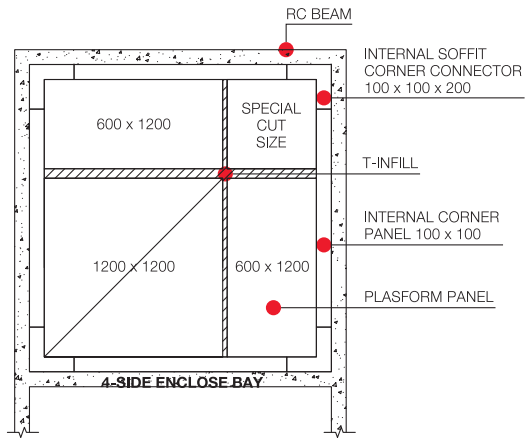


VIEW FROM UNDERSIDE OF PANEL
(SOFFIT BEARER NOT SHOWN FOR CLARITY)

T-INFILL APPLICATION - DETAIL ARRANGEMENT

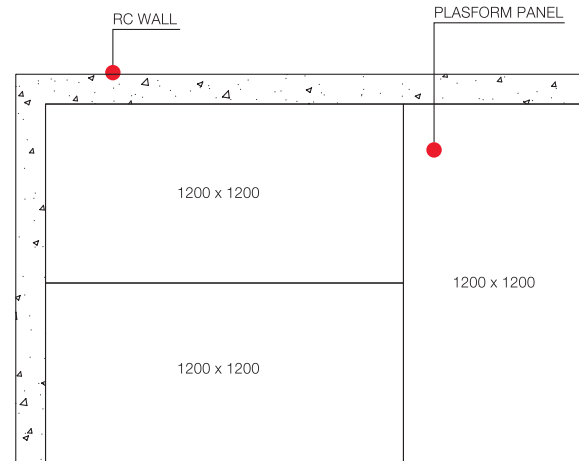
RC SLAB SOFFIT FORMWORK

SLAB SOFFIT COMPONENT INSTALLATION



PLAN VIEW

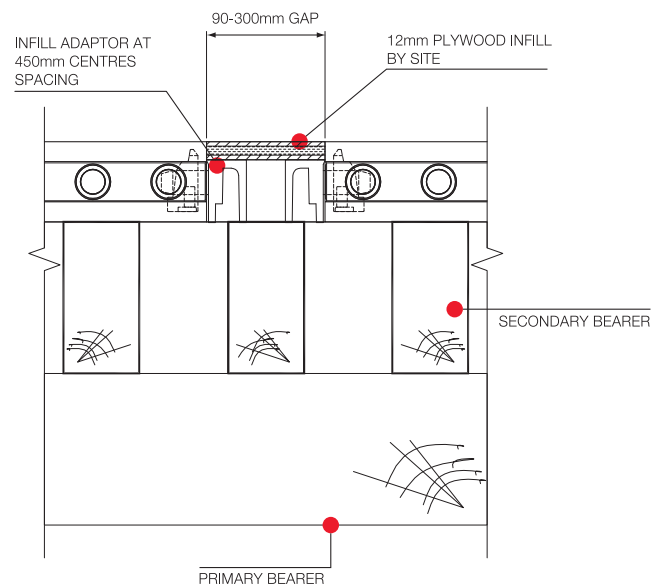
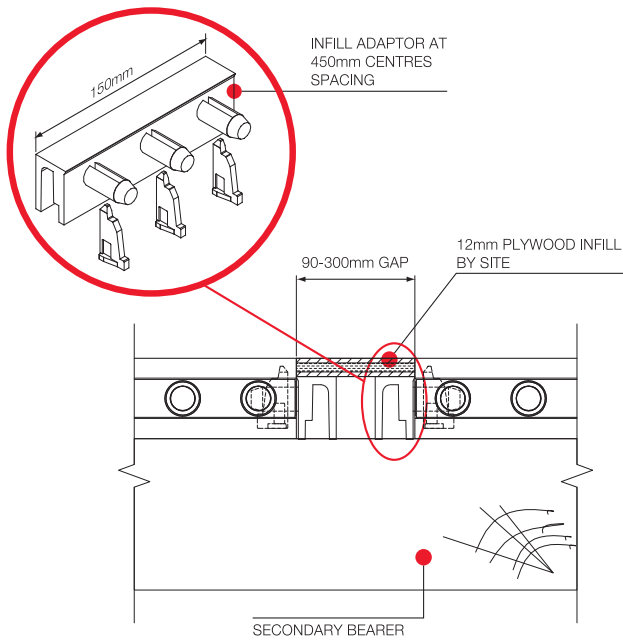
T-INFILL APPLICATION



2-SIDE FREE BAY
(NO T-INFILL REQUIRED)

PLAN VIEW

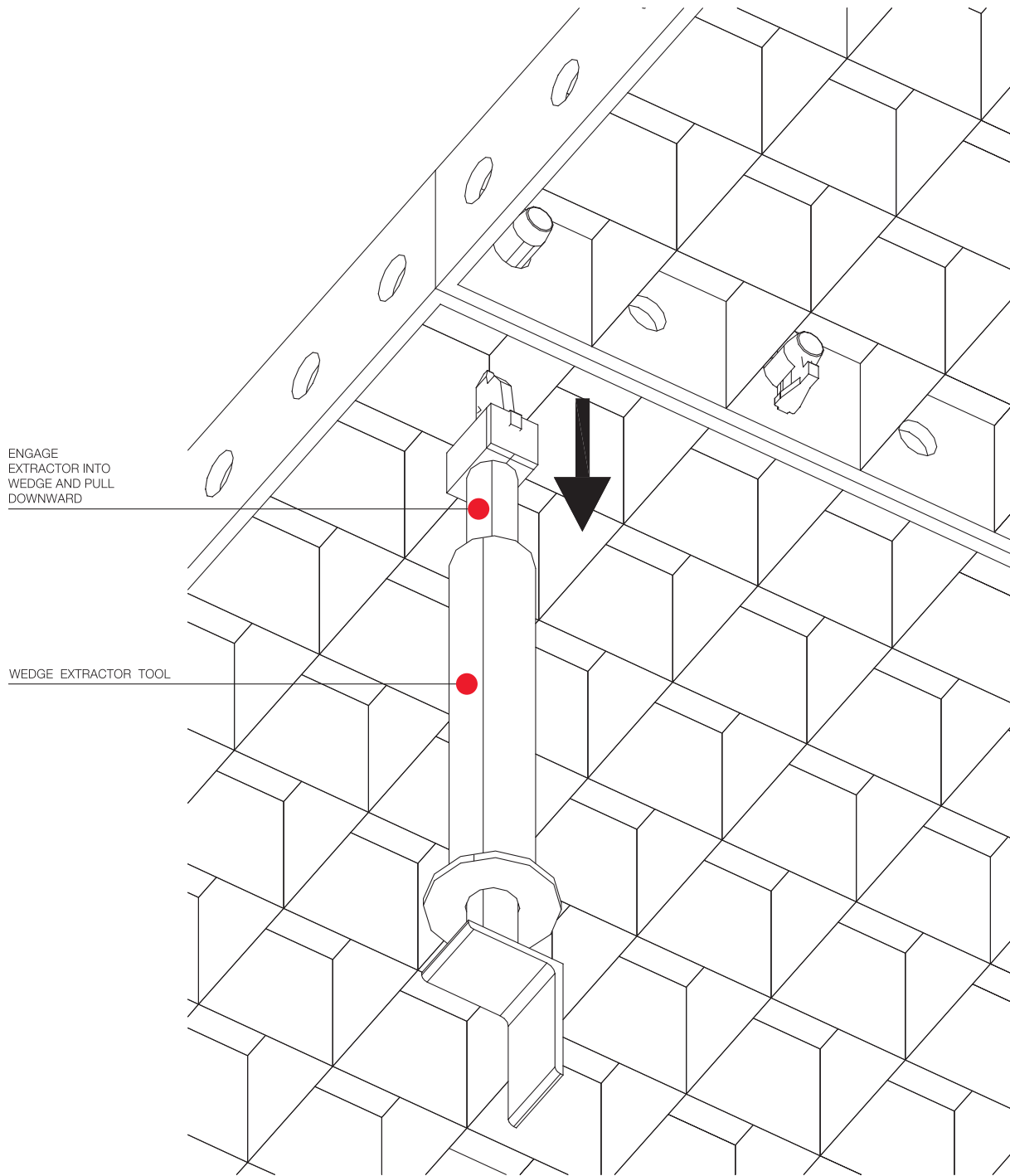
T-INFILL APPLICATION



ALTERNATIVE TIMBER INFILL

RC SLAB SOFFIT FORMWORK

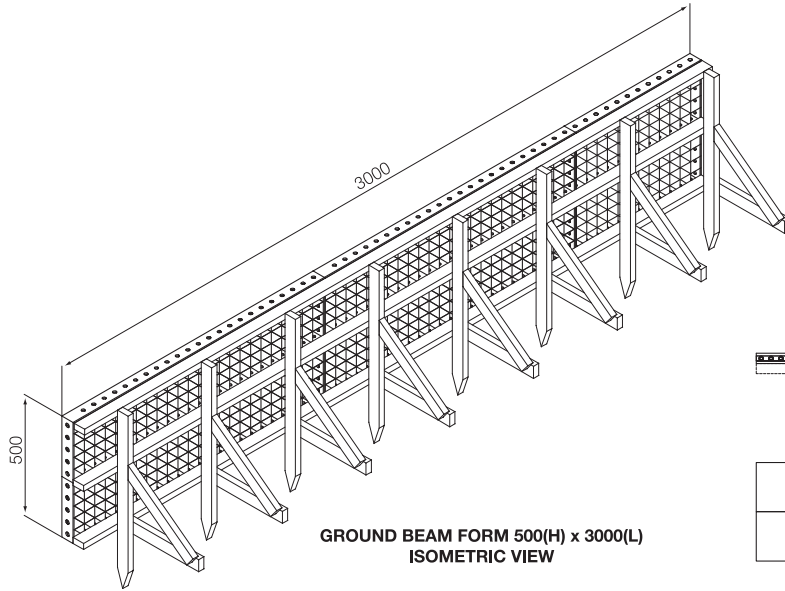
PLASFORM PANEL DISMANTLING INSTRUCTION



PLASFORM PANEL DISMANTLING PROCESS



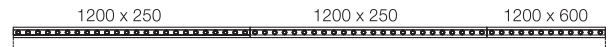
DESIGN EXAMPLE



GROUND BEAM FORM 500(H) x 3000(L)
ISOMETRIC VIEW

MATERIAL TAKE-OFF LIST

DESCRIPTION	QUANTITY
PANEL 1200 x 600	1
PANEL 1200 x 250	4
PIN & WEDGE	68
WIDE HEAD SELF-TAPPING SCREW	24

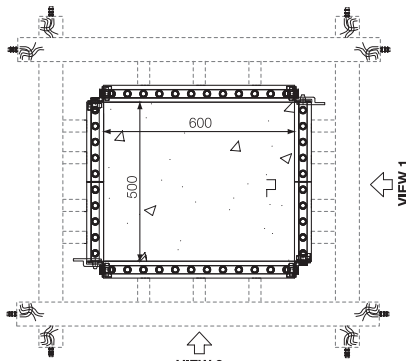


PLAN VIEW

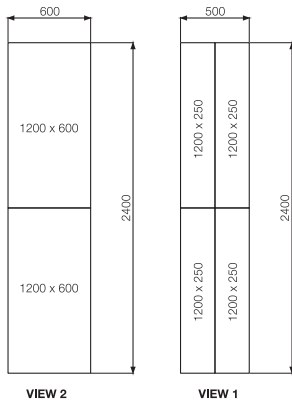
1200 x 250	1200 x 250	1200 x 600 (EXCESS TRIMMED)
1200 x 250	1200 x 250	

ELEVATION

GROUND BEAM FORMWORK



COLUMN FORM 500 x 600 x 2400 (H)



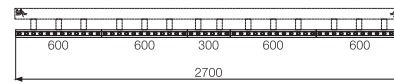
VIEW 2

VIEW 1

MATERIAL TAKE-OFF LIST

DESCRIPTION	QUANTITY
PANEL 1200 x 600	4
PANEL 1200 x 250	8
PIN & WEDGE	428
P-CLAMP	48
EXTERNAL CORNER ANGLE (50 x 50 x 1200)	8
WIDE HEAD SELF-TAPPING SCREW	56

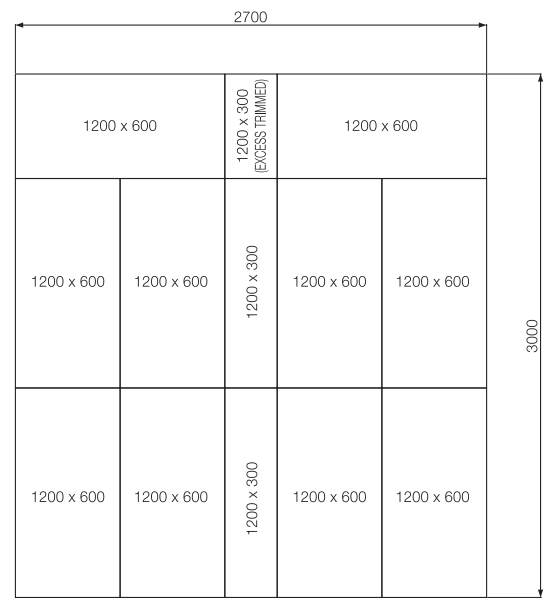
COLUMN FORMWORK



WALLFORM 2700 (L) x 3000 (H)
PLAN VIEW

MATERIAL TAKE-OFF LIST

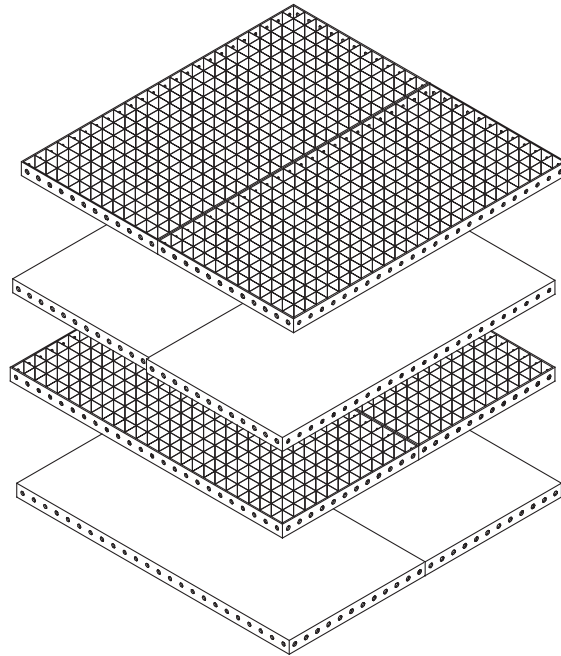
DESCRIPTION	QUANTITY
PANEL 1200 x 600	10
PANEL 1200 x 300	3
PIN & WEDGE	324
WIDE HEAD SELF-TAPPING SCREW	84



ELEVATION

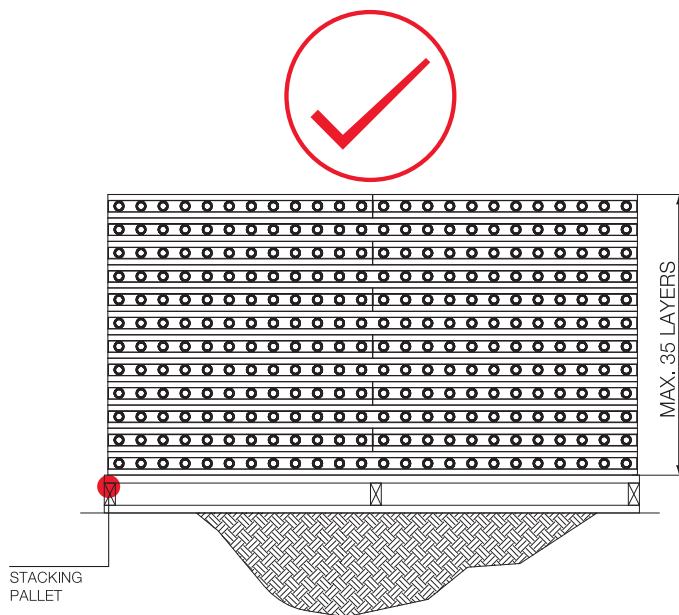
WALL FORMWORK

PACKING AND STORAGE

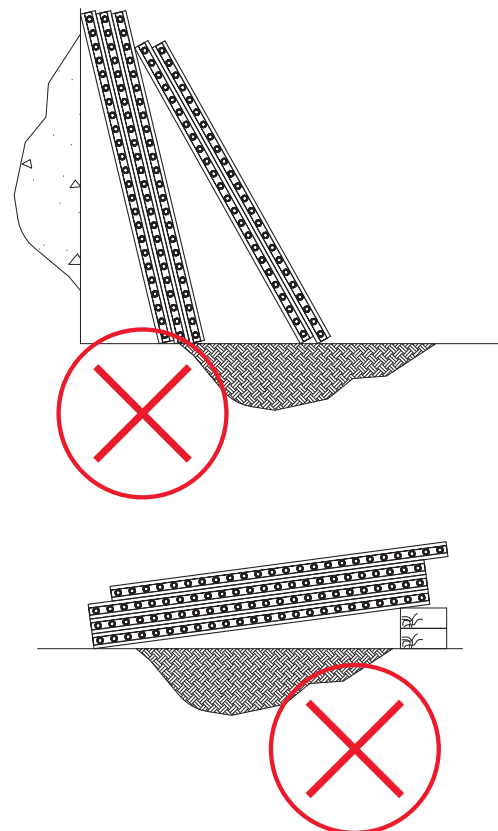


- ↑ REPEAT 1ST LAYER
- ↓ FACE DOWN 4TH LAYER
- ↑ FACE UP 3RD LAYER
- ↓ FACE DOWN 2ND LAYER
- ↑ FACE UP 1ST LAYER

STACKING CONFIGURATION



STACKING HEIGHT





PLASFORM PANEL CARE AND MAINTENANCE

1. Spray new Plasform® Panel with suitable release agent before 1st use. Oil and hydrocarbon based release agent is NOT recommended!!
2. Spray reverse side Plasform® Panel with water immediately after concreting to reduce slurry and concrete waste built-up
3. After striking, immediately clean Plasform® Panel surface with suitable tool e.g. plastic brush and water to remove concrete residues. **DO NOT USE STEEL SCRAPER!**
4. Spray Plasform® Panel surface with suitable release agent before subsequent use
5. Remove Plasform® Panel with care when striking. Do not allow Plasform® Panel to be dropped freely from heights
6. Do not throw or drop Plasform® Panel and accessories. Use suitable containers to store all accessories when not use, to prevent loss
7. Do not use un-necessary force during assembly and striking
8. Do not cut Plasform® Panel without proper planning

STORAGE AND HANDLING

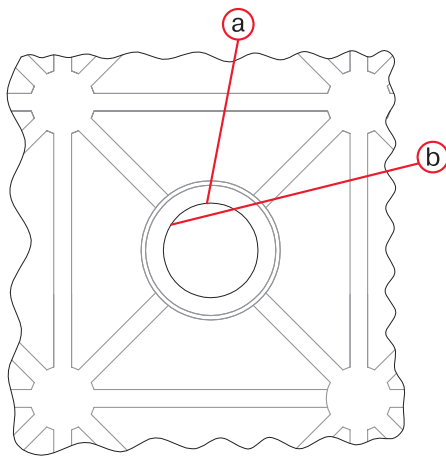
1. Stack Plasform® Panel onto suitable pallets. Adopt proper stacking arrangement
2. Do not lean Plasform® Panel against wall when not use
3. Do not lay Plasform® Panel on un-even surface when not use
4. Use proper edge protector when strapping Plasform® Panel
5. Use suitable transport and lifting equipment when shifting packed Plasform® Panel. Use proper edge protector when using steel sling

DISPOSAL OF PLASFORM PANEL AFTER USEFUL LIFE

1. Un-usable Plasform® Panel should be properly packed for disposal
2. Do not burn un-usable Plasform® Panel
3. Un-usable Plasform® Panel can be shredded before disposal
4. Please contact our Jet representatives for collection of un-usable Plasform® Panel for recycling purposes

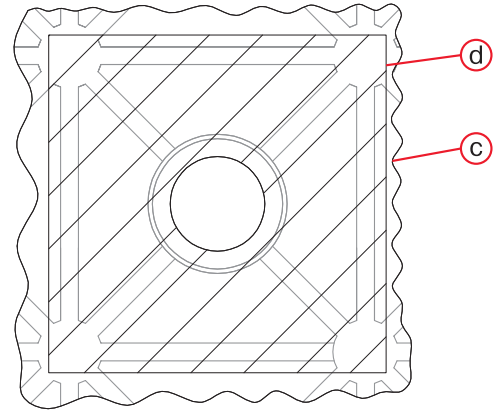
PLASFORM PANEL REPAIR

TIE HOLE & PANEL SURFACE PATCHING



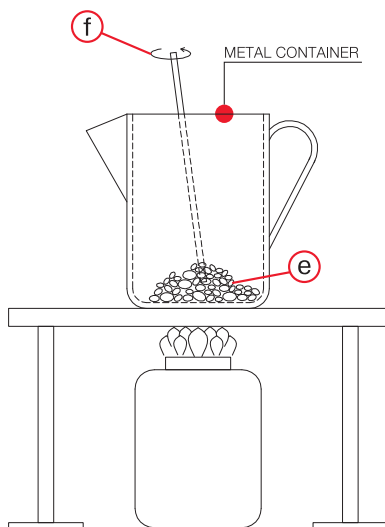
STEP 1

- a. AT LOCATION OF REPAIR, CUT THE DAMAGE SURFACE INTO A REASONABLE ROUND HOLE.
- b. ROUGHEN THE INSIDE EDGE OF HOLE WITH SAND PAPER.



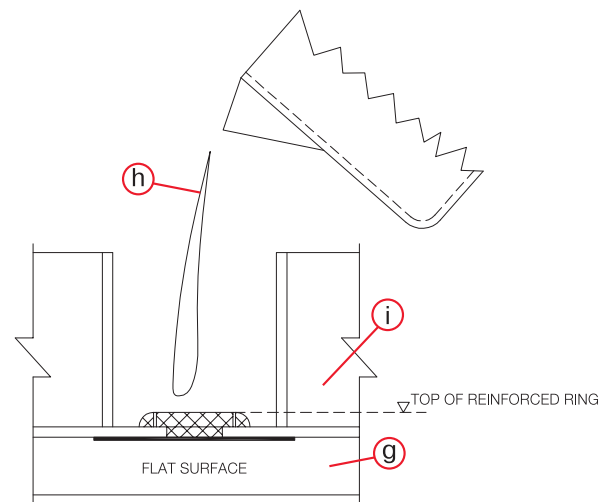
STEP 2

- c. APPLY PLASBOND PRIMER ADJACENT AND AROUND THE REPAIR LOCATION.
- d. ADHERE A PIECE OF PLASBOND SHEET ON TOP OF REPAIR LOCATION.



STEP 3

- e. HEAT THE PLASBOND GLUE TO 200°C (USE 100g FOR EVERY 10nos HOLES TO BE PATCHED).
- f. STIR WITH STEEL ROD TO ENSURE ALL SOLID PALLETS ARE MELTED DOWN.



STEP 4

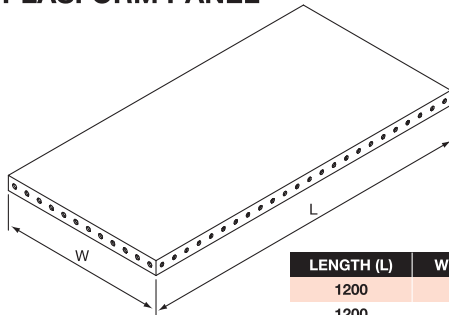
- g. TURN OVER PLATFORM PANEL ONTO A FLAT SURFACE.
- h. CAREFULLY POUR THE MOLTEN PLASBOND GLUE ONTO REPAIR LOCATION.
- i. STOP POURING WHEN PLASBOND GLUE OVERFLOW THE TOP OF REINFORCED RING.
- j. LEAVE TO SET FOR 3 MINUTES BEFORE MOVING THE PANEL.

STEP 5

- k. LEAVE REPAIRED PLASFORM PANEL AT LEAST 24 HOURS BEFORE USE FOR CONCRETING WORKS

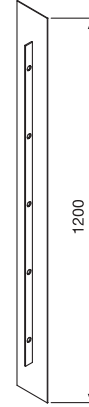
PRODUCT DESCRIPTION

PLASFORM PANEL



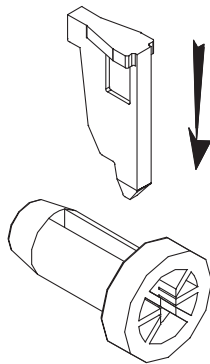
LENGTH (L)	WIDTH (W)	WEIGHT (kg)
1200	1800	22.80
1200	1200	15.20
1200	900	11.50
1200	600	7.60
1200	300	3.90
1200	250	3.20
1200	200	2.60
1200	150	2.00
1200	100	1.50

SLAB T-INFILL
100 (W) x 1200 (L)



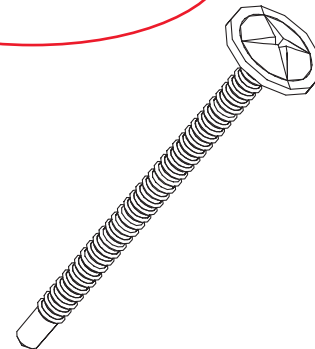
LENGTH (L)	WIDTH (W)	WEIGHT (kg)
1200	110	2.73

PIN & WEDGE



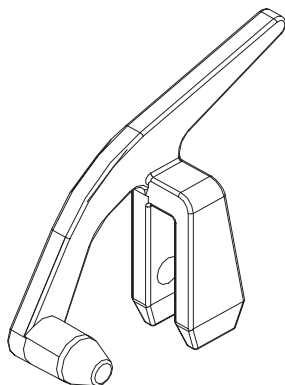
LENGTH (L)	WIDTH (W)	WEIGHT (kg)
-	-	0.01

Ø5 x 80mm WIDE-HEAD
SELF-TAPPING SCREW



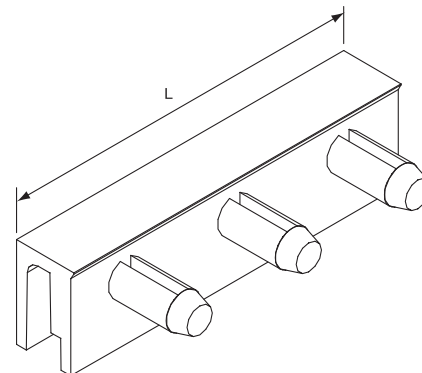
LENGTH (L)	WIDTH (W)	WEIGHT (kg)
-	-	0.02

P-CLAMP



LENGTH (L)	WIDTH (W)	WEIGHT (kg)
-	-	0.36

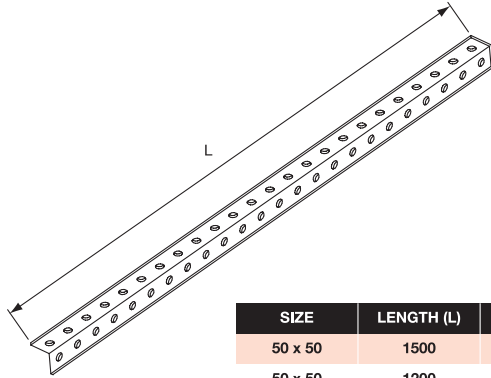
INFILL ADAPTOR



LENGTH (L)	WIDTH (W)	WEIGHT (kg)
150	-	0.11

PRODUCT DESCRIPTION

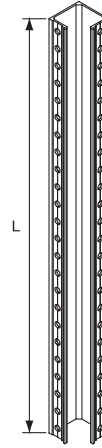
EXTERNAL CORNER ANGLE



SIZE	LENGTH (L)	WEIGHT (kg)
50 x 50	1500	5.66
50 x 50	1200	4.70
50 x 50	900	3.40
50 x 50	300	1.13

* LONGER LENGTH AVAILABLE UPON REQUEST

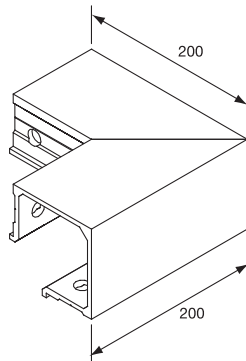
INTERNAL CORNER PANEL



SIZE	LENGTH (L)	WEIGHT (kg)
100 x 100	1800	6.98
100 x 100	1500	5.81
100 x 100	1200	4.65
100 x 100	1100	4.26
100 x 100	1000	3.88
100 x 100	900	3.49
100 x 100	800	3.10
100 x 100	700	2.71
100 x 100	600	2.33
100 x 100	550	2.13
100 x 100	500	1.94
100 x 100	450	1.74
100 x 100	400	1.55
100 x 100	350	1.36
100 x 100	300	1.16

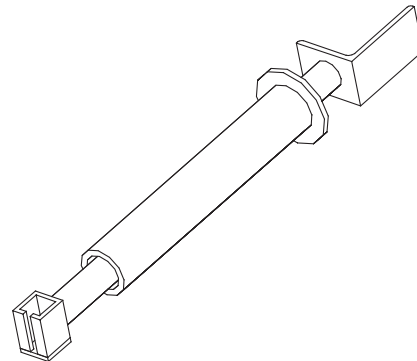
* OTHER LENGTH IN MULTIPLE OF 50mm AVAILABLE UPON REQUEST

INTERNAL SOFFIT CORNER 100 x 100 x 200mm



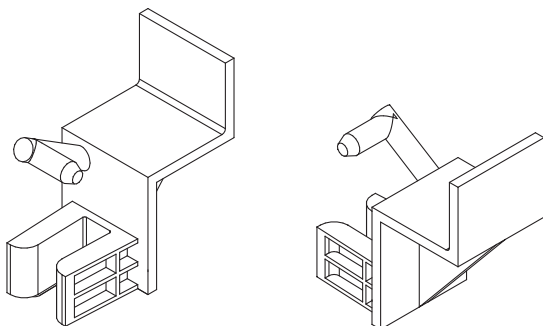
LENGTH (L)	WIDTH (W)	WEIGHT (kg)
-	-	1.36

PIN EXTRACTOR TOOL



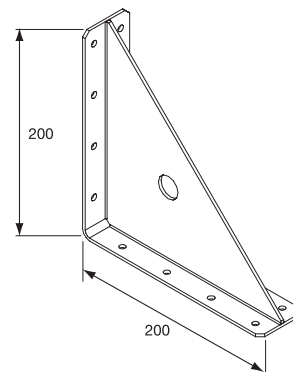
LENGTH (L)	WIDTH (W)	WEIGHT (kg)
-	-	0.30

PSH50 BRACKET



LENGTH (L)	WIDTH (W)	WEIGHT (kg)
-	-	0.06

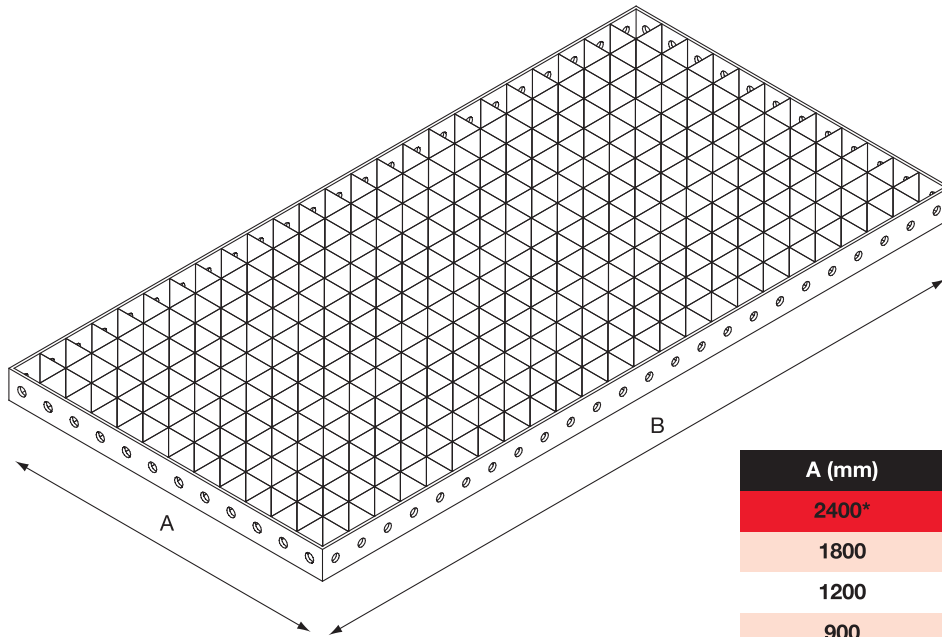
BEAM BRACKET SF20



LENGTH (L)	WIDTH (W)	WEIGHT (kg)
-	-	1.00



PHYSICAL PROPERTIES



A (mm)	B (mm)	Weight (kg)
2400*	1200	30.4
1800	1200	22.8
1200	1200	15.2
900	1200	11.5
600	1200	7.6
300	1200	3.9
250	1200	3.2
200	1200	2.6
150	1200	2.0
100	1200	1.5

* UPON SPECIAL REQUEST ONLY

Typical Physical Properties:

1. UV resistant
2. Impervious to water
3. Non-swelling or shrinking
4. Non-degradable
5. Resistant to typical on-site chemical
6. Consistent flexural rigidity
7. Non-stick to concrete surface (*)
8. Self-weight = 10.6kg/m²

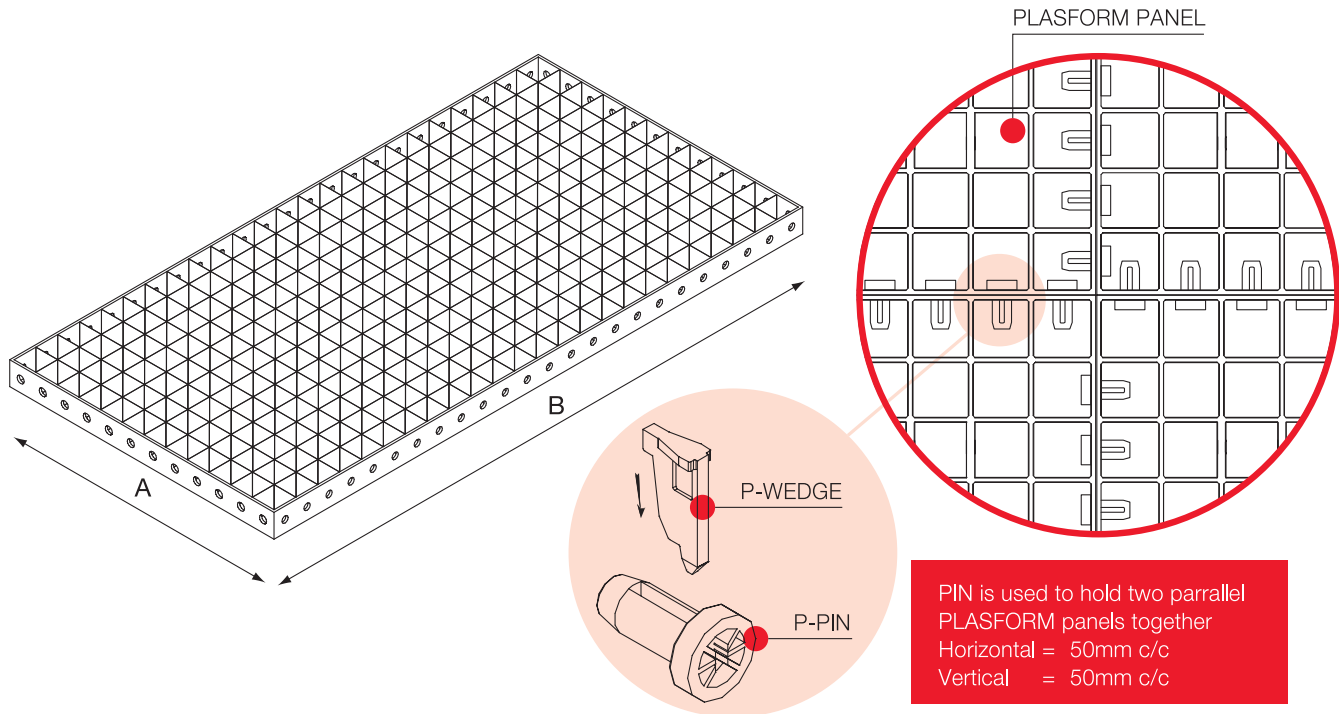
Manufactured using engineered Polypropylene (PP) material. The impervious form face gives a uniform concrete surface finishes and reduces the probability of surface discolouration.

Smooth and impervious PP surface greatly reduces panel adhesion to concrete after casting, hence eliminate the need of applying form release agent (*).

(*) Panel face is recommended to be hosed down with water or cleared with plastic brush after each casting operation, to remove excess laitance, prior to use for subsequent casting. However, where it is desired to have special quality finishes(e.g. F3 and above), form release agent may be required.

(**) Care shall be taken to avoid deep scratches on panel face which may affect the finished concrete surfaces, and may result in adhesion of excessive laitance to panel.

MECHANICAL PROPERTIES



Plasform Material Properties

Elongation at Yield =	10%
Softening Temperature Up To =	≥150°C
Rockwell Hardness =	82 R Scale
Water Absorption =	0.02%

Plasform Panel Design Data

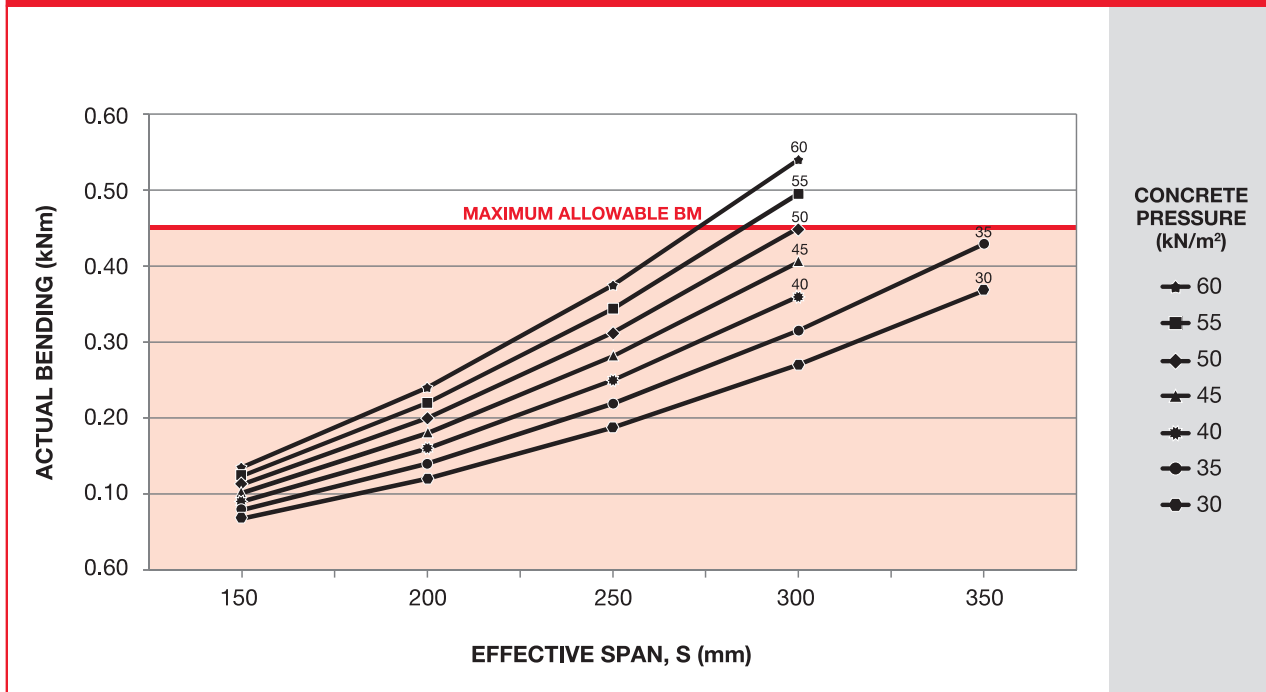
Allowable Bending ⁽¹⁾ =	0.45kNm/m
Allowable Shear ⁽¹⁾ =	13.6kN/m
Flexural Rigidity, EI =	2.10kNm ² /m
Allowable Bearing Load on Panel ⁽¹⁾ =	500kN/m ²
Allowable Shear in Pin ⁽¹⁾ =	0.68kN

(1) Factor of Safety (FoS) = 2.5



CHART - WALL DESIGN DATA

ACTUAL BENDING (kNm) vs EFFECTIVE SPAN (mm)



PANEL DEFLECTION (mm) vs EFFECTIVE SPAN (mm)

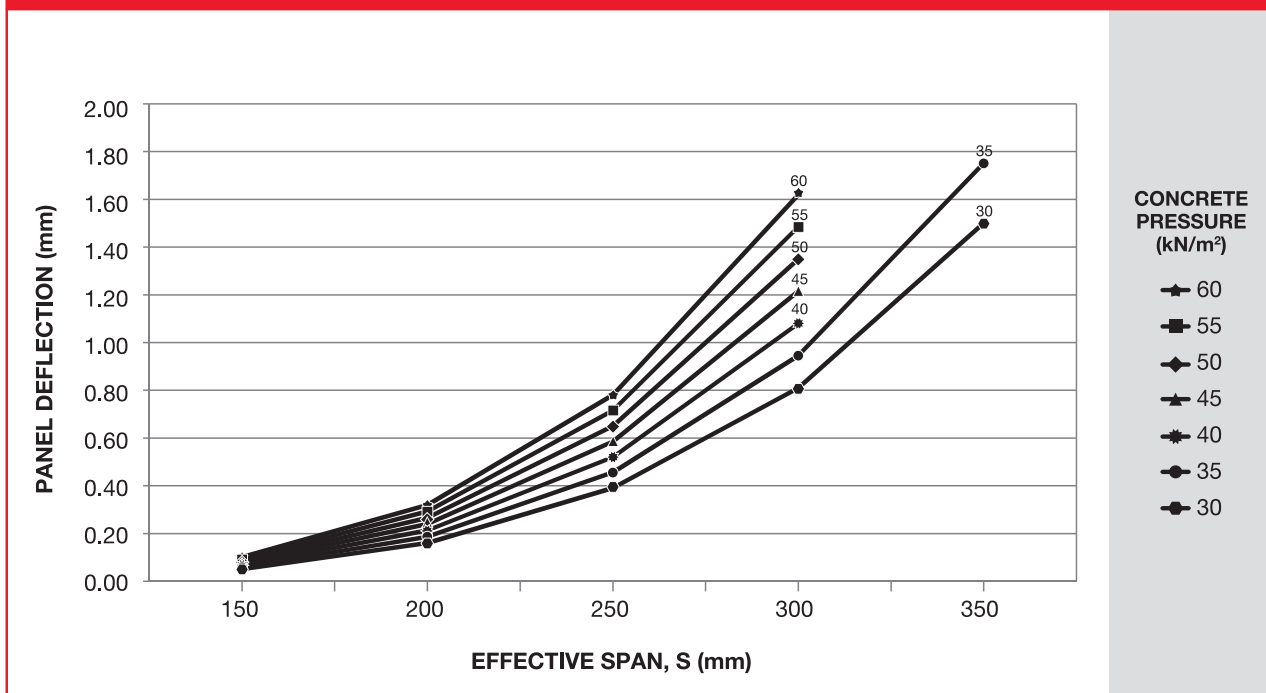
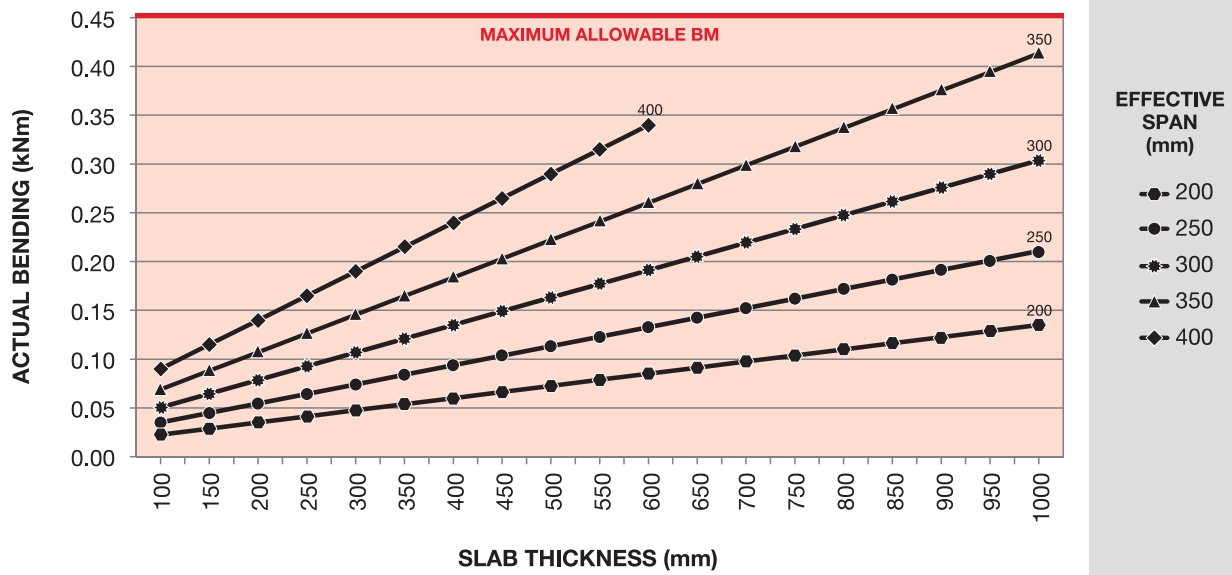
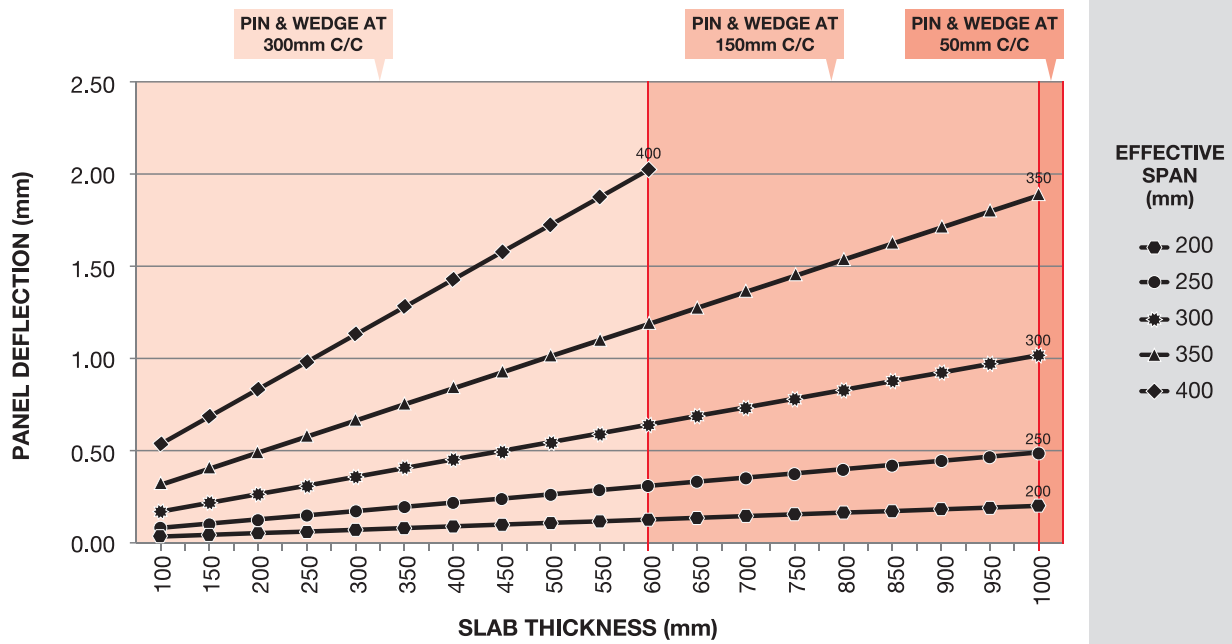


CHART - SOFFIT DESIGN DATA

ACTUAL BENDING (kNm) vs SLAB THICKNESS (mm)



PANEL DEFLECTION (mm) vs SLAB THICKNESS (mm)





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