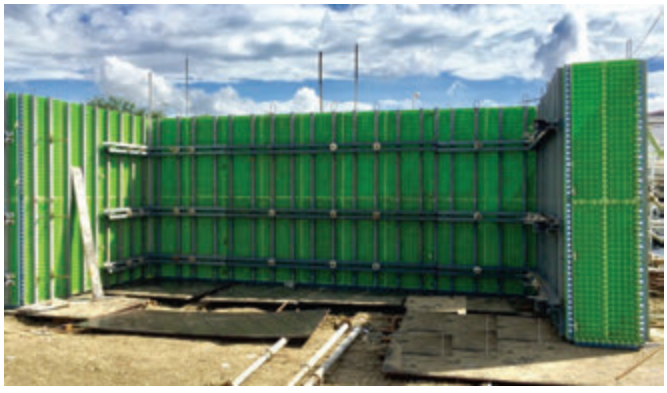
PLASFORM

Do-It-Yourself Formworks

Save Millions by replacing your Plywood with Plasform



Improved Plasform Panel System

Installation Manual

Version 2022

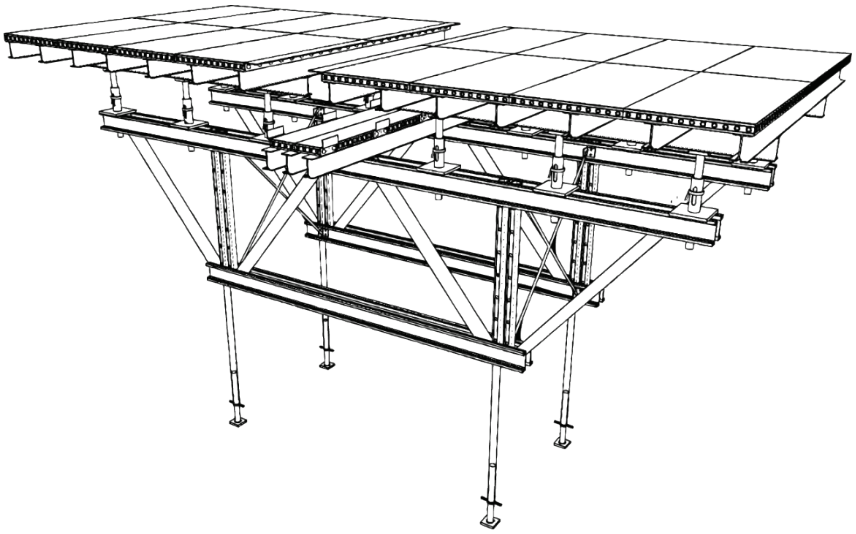
FASI

No skilled workers required
Prefabricated Formworks

GREEN PRODUCT
REUSE | REDUCE | RECYCLE

www.fasiformsystem.com

FASI



Who are we?

The Formworks Authority

FASI Forms Inc. is a private corporation engaged in sales and rental of formwork and scaffolding systems that aid in faster, safer, and more cost-efficient construction. In addition, we manufacture, design, and provide site supervision work. We are composed of highly experienced design engineers, who have worked on several high-rise structures, infrastructure and low-cost housing projects.

Our founder and President, Mr. Frederick V. Erum, has been in this industry since 1979 and continues to pioneer in introducing innovative formwork systems to contractors in the Philippines, such as aluminum formworks and Plasform.

Mission

To continue evolving new products, services, and businesses to help developers and builders create premium structures by providing the best and most cost-efficient solutions & technologies that yield maximum profitability.

Vision

To be the pioneer in providing innovative formwork and scaffolding products, technologies, and methodologies that aid in the growth and development of the country's economy and construction industry.

What is Plasform?

Plasform is a plastic formwork that can be used over 200 times. It is made out of engineered Polypropylene Plastic (PP) and is a replacement for phenolic plywood. It is a prefabricated formwork system that is versatile and compatible with various types of backing support to construct columns, walls, beams, and slabs.

SAFETY ALERT GENERAL NOTES

1. IT IS USER'S RESPONSIBILITY TO ENSURE THAT ALL SCAFFOLDING AND ACCESS TO THE FORMS COMPLIES WITH ALL APPLICABLE LAWS REGULATIONS, AND CODES, INCLUDING THE CURRENT STANDARD SPECIFICATIONS.

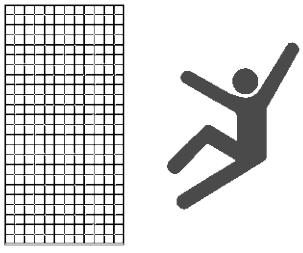
2. SCAFFOLD LOCATIONS SHOWN ON PLASFORM DRAWINGS ARE TYPICAL AND ONLY FOR ILLUSTRATION. ACTUAL LOCATIONS WILL VARY WITH JOB CONDITIONS AND ARE THE RESPONSIBILITY OF THE USER.

3. USER MUST INSPECT ALL SCAFFOLDING FOR DAMAGE. DAMAGED SCAFFOLDING MUST BE DISCARDED AND NOT USED.

4. USERS SHOULD NOT CLIMB FORMS WITHOUT FALL ARREST SYSTEMS CONFORMING TO CURRENT STANDARDS.

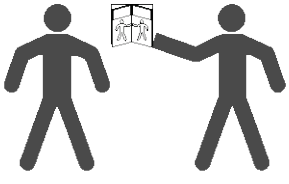
5. ALL PLASFORM PANEL ACCESSORIES SHALL BE USED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURE. ACCESSORIES SHALL NOT BE ALTERED IN THE FIELD. PLASFORM PANEL AND THEIR COMPONENTS, MANUFACTURED BY DIFFERENT COMPANIES SHALL NOT BE INTERMIXED.

WARNING



Improper climbing or handling of forms may result in serious injury or death.

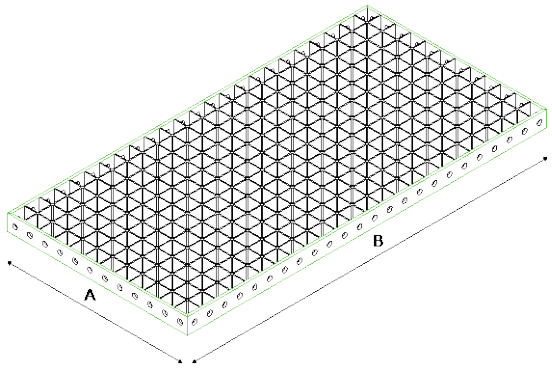
Use appropriate fall restraint & personnel protection equipment.

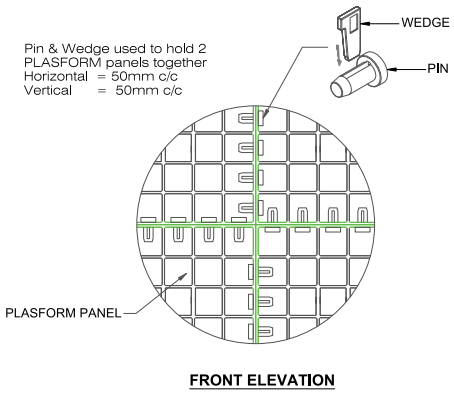


Consult your supervisor for proper form handling, erection, climbing and safety procedures.

Follow current OSHA standards.

MECHANICAL PROPERTIES



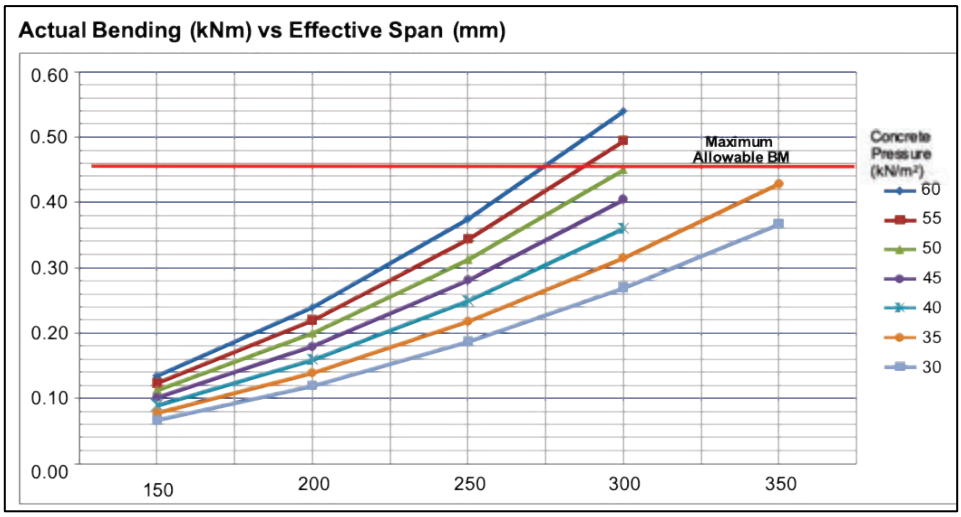


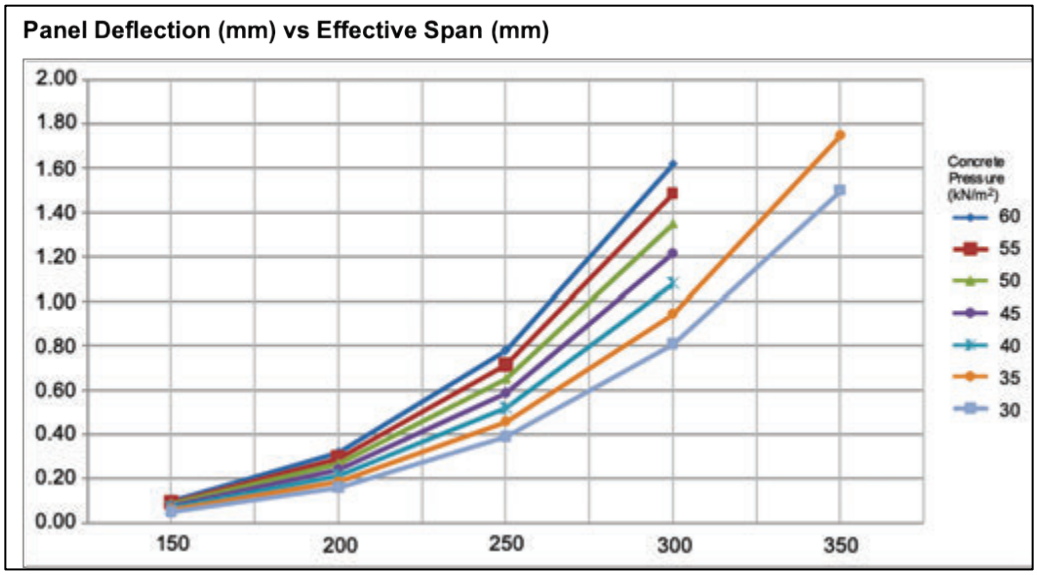
FRONT ELEVATION

Plasform Material Properties	
Elongation at Yield =	10 %
Heat Deflection Temperature =	85 °C
Rockwell Hardness =	82 R Scale
Water Absorption =	0.02 %
Plasform Panel Design Data	
Allowable Bending (1) =	0.45 kNm/m
Allowable Shear (1) =	13.6 kN/m
Flexural Rigidity, EI =	2.10 kNm^2/m
Allowable Bearing Load on Panel (1) =	500 kN/m^2
Allowable Shear in Pin (1) =	0.68 kN

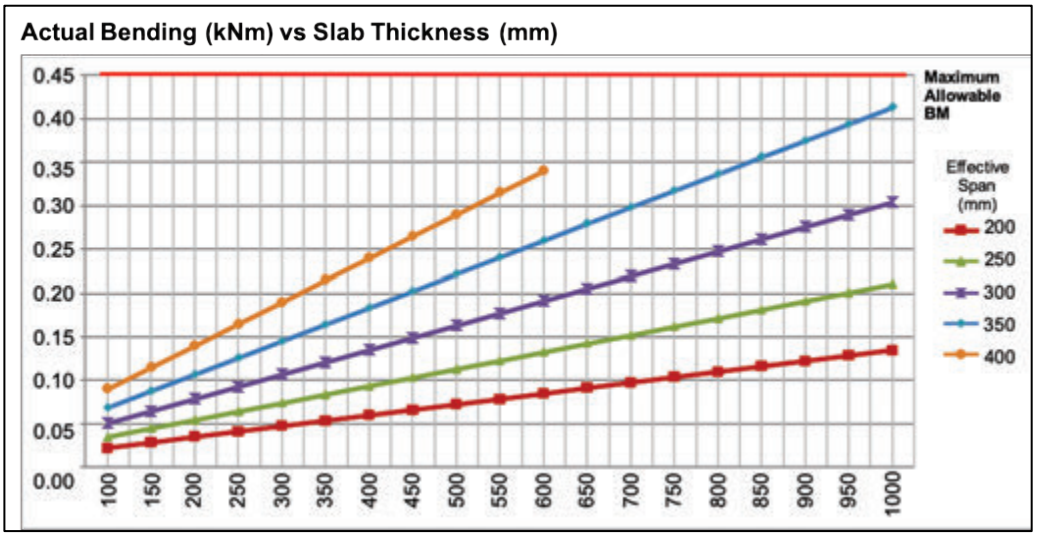
(1) Factor of Safety (FoS) = 2.5

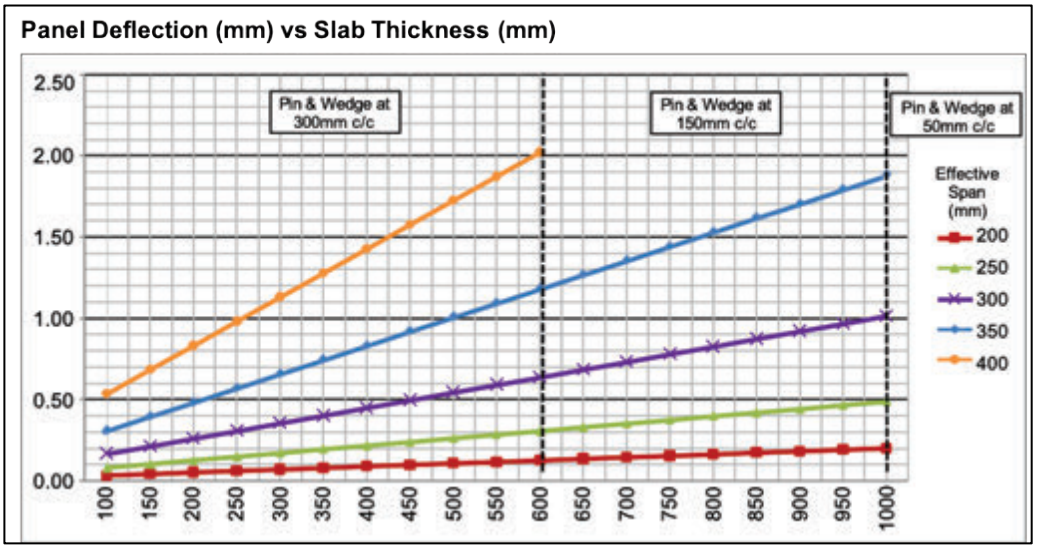
Wall Design Data



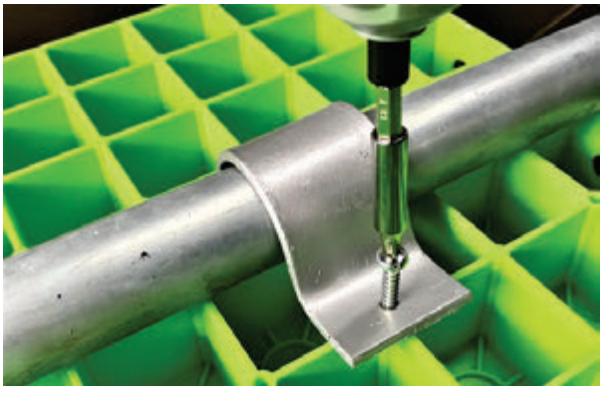


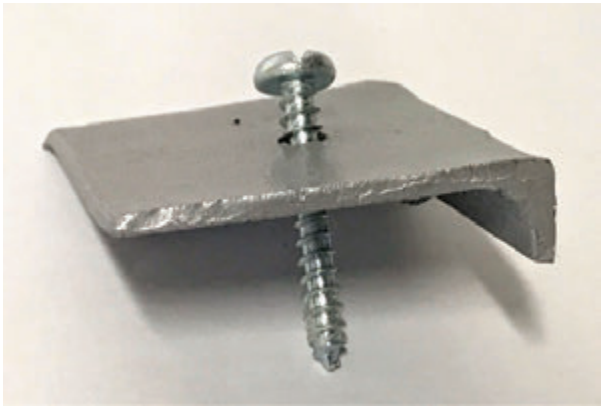
Soffit Design Data

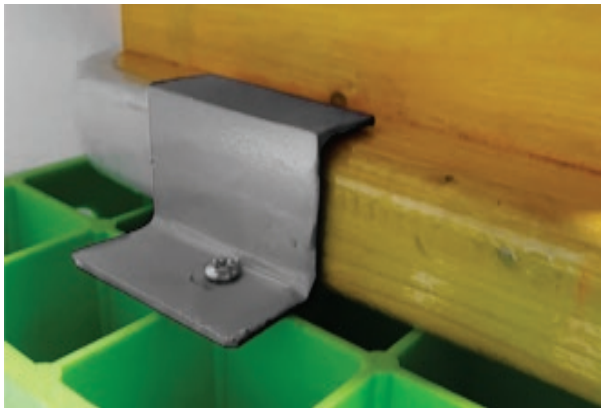


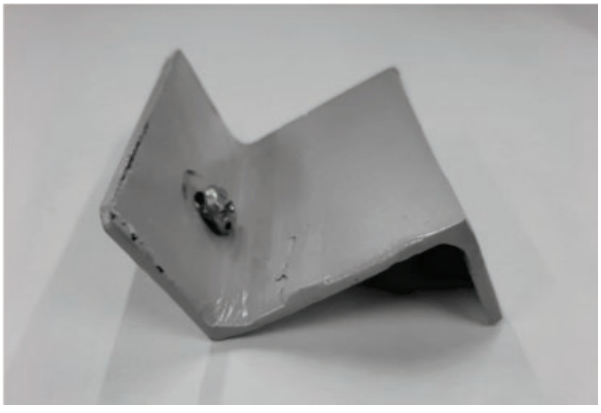


Clamping Single Wailing Clamp using Tapping Screw on Screw Hole of Plasform



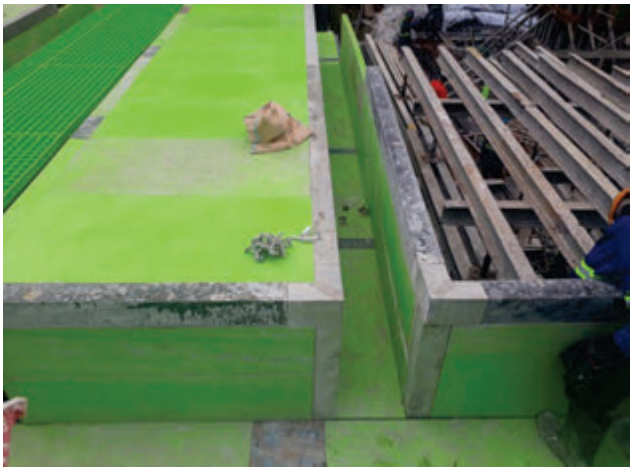


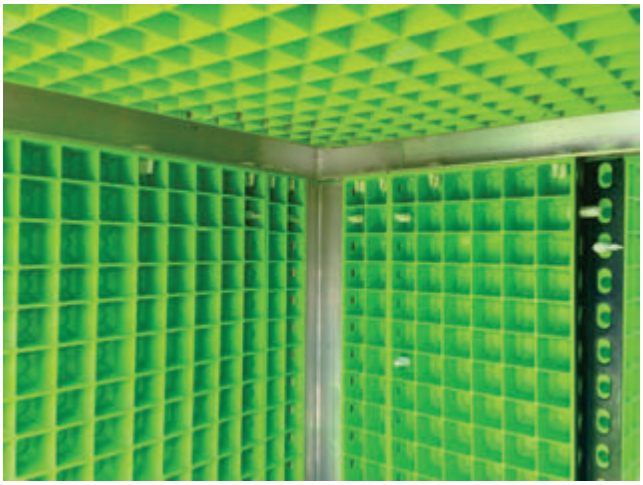




Slab Assembly with Internal Corner – Standard Scheme

(see alternative solution on page 17)





Clamping Single Wailing Clamp using J-Bolt



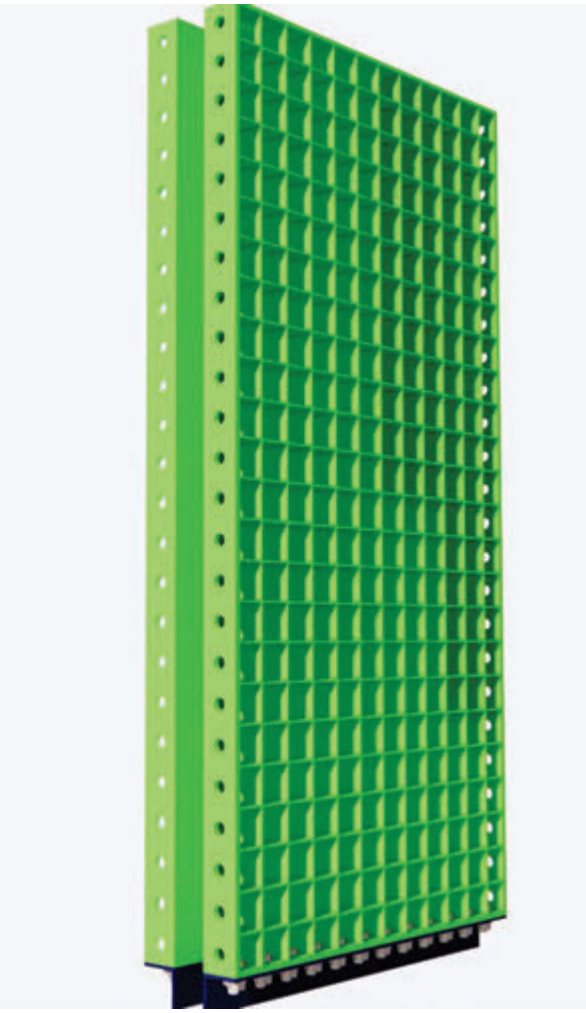


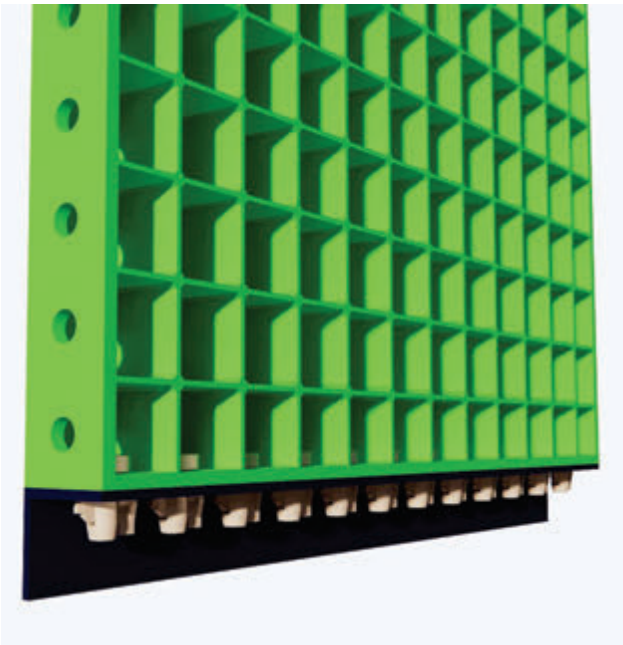

Available sizes:

Width (mm)	Length (mm)	Weight (kg)
600	1200	7.60
300	1200	3.90
250	1200	3.20
200	1200	2.60
150	1200	1.50
100	1200	1.50

Bottom Cover

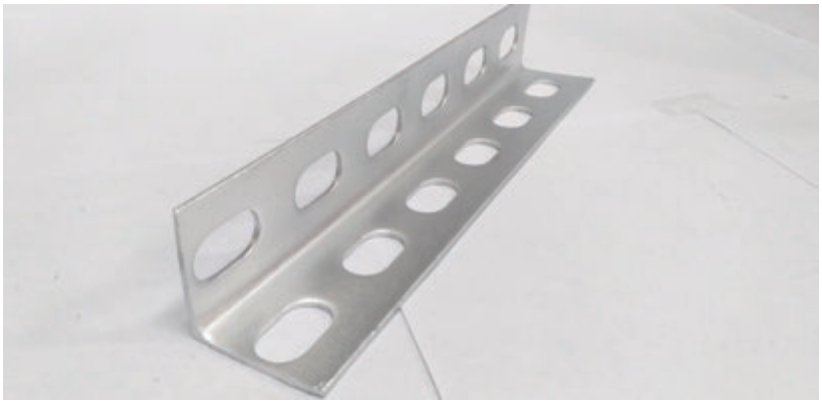
For protection of Plasform and easy stripping for column and wall.



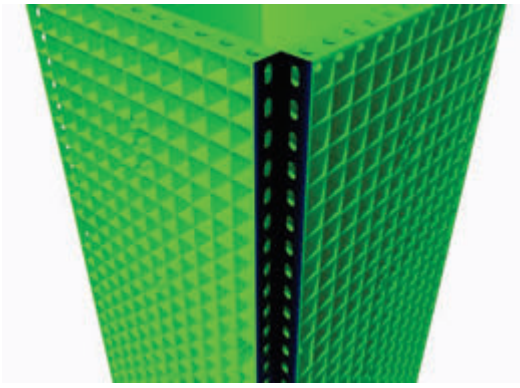


Available sizes
600mm
300mm
250mm
150mm
100mm

External Corner

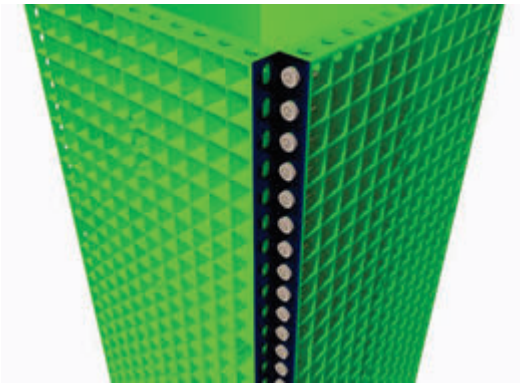


STEP 1



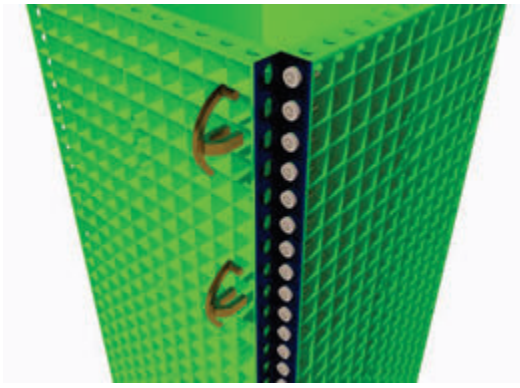
Align external corner angle to two perpendicular panel

STEP 2



Insert pin and secure tightly with wedge, on one site

STEP 3



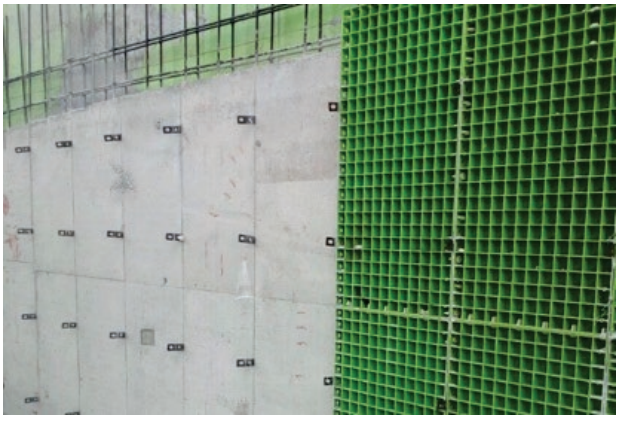
Insert P-clamp and push the P-clamp tail so it is secured on the other side

Jointing of Plasform Panels

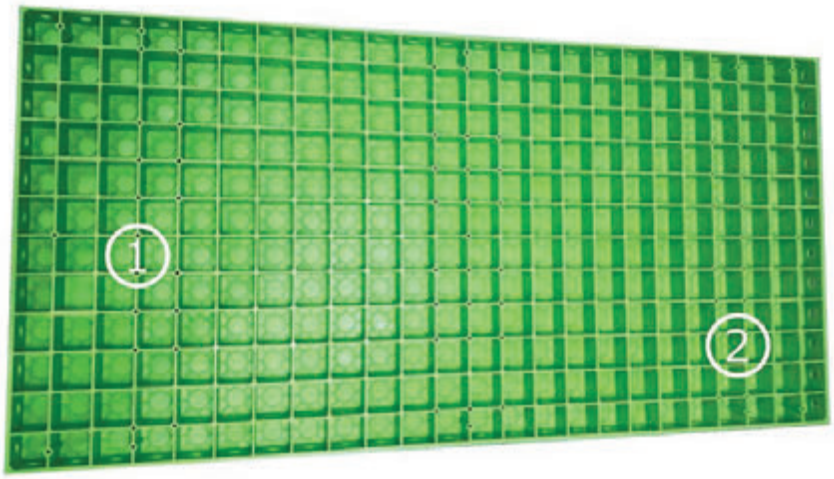
1. Connect the short edge of Plasform panel with pin and wedge at 50C/C.

2. Connect the long edge of Plasform panel with p-clamp at 200C/C.

Manual Handling Wall Form Set

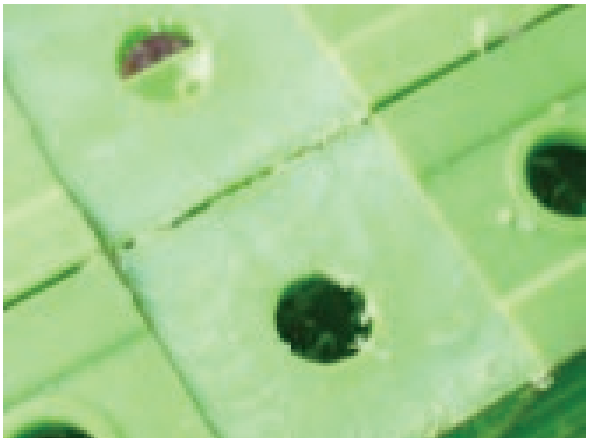


Fabrication of Notching for Flat Ties



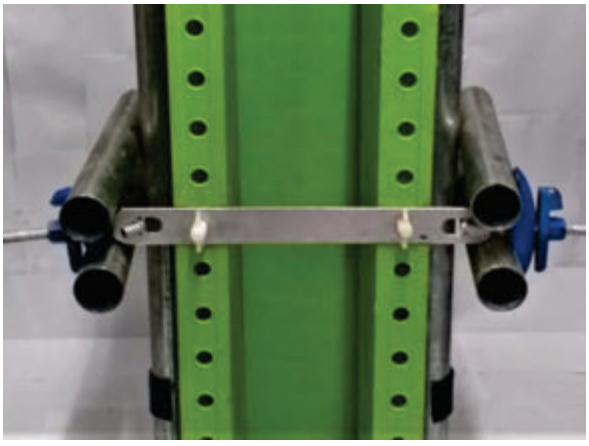
Version 3 Panel

Use rotor for notching of Plasform



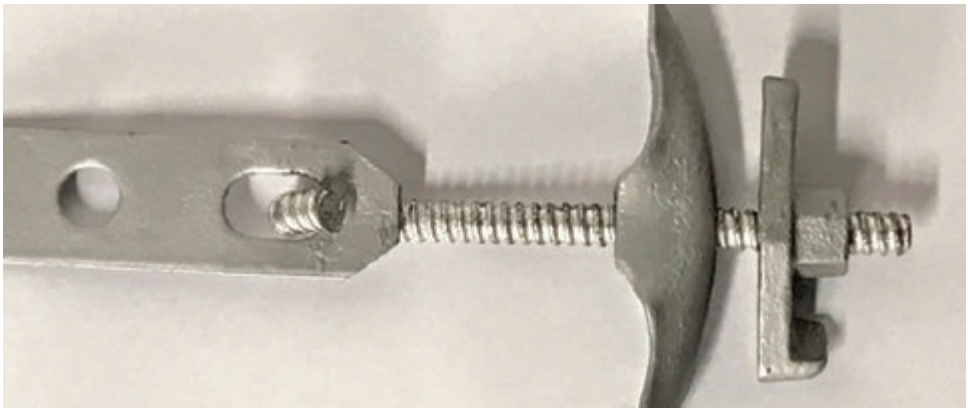
Notching of 53mm length and depth of 2mm

Plasform with flat ties



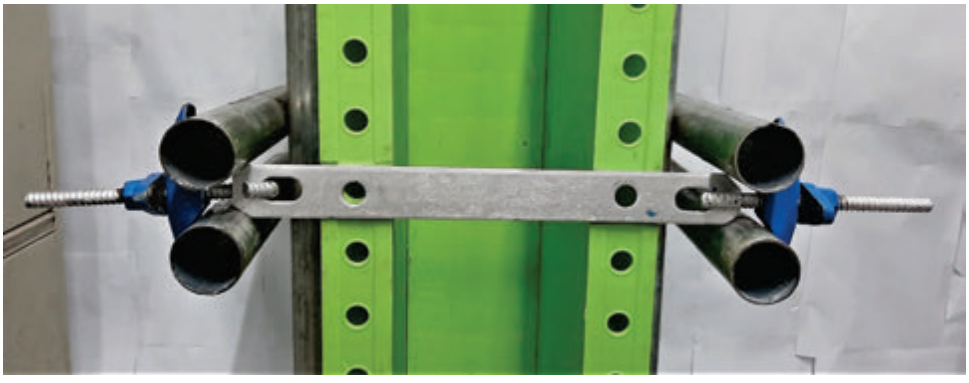
Full assembly using flat ties

Manual Handling Wallform Set for Housing - Exterior Wall/Shearwall/Corewall/ Partition Wall/Beamsides Using Flat Ties



Double Wailing Clamp hooked on each end of flat tie

Plasform panel with notching

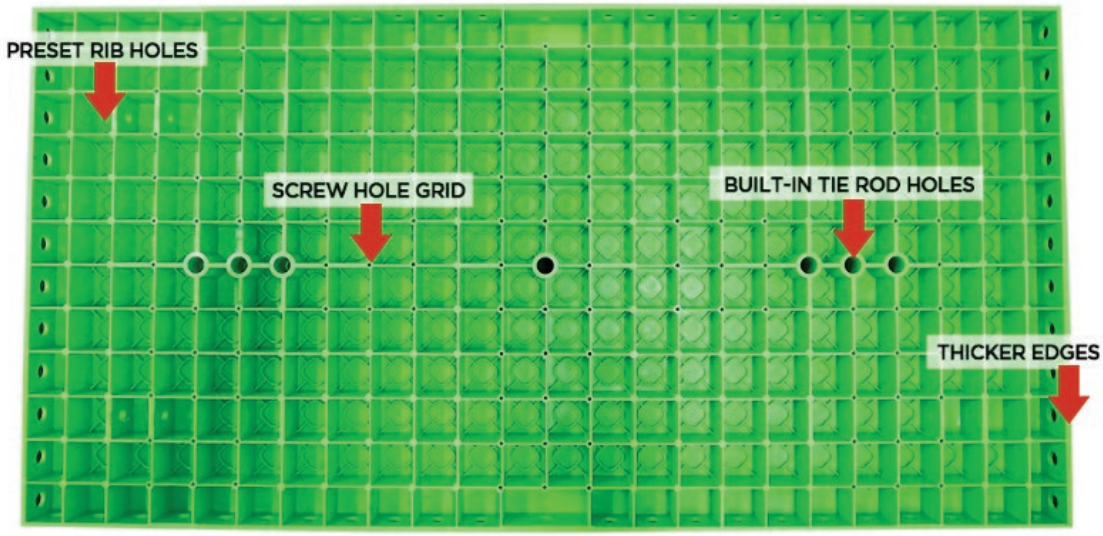


Full Assembly of manual handling wall form using flat tie

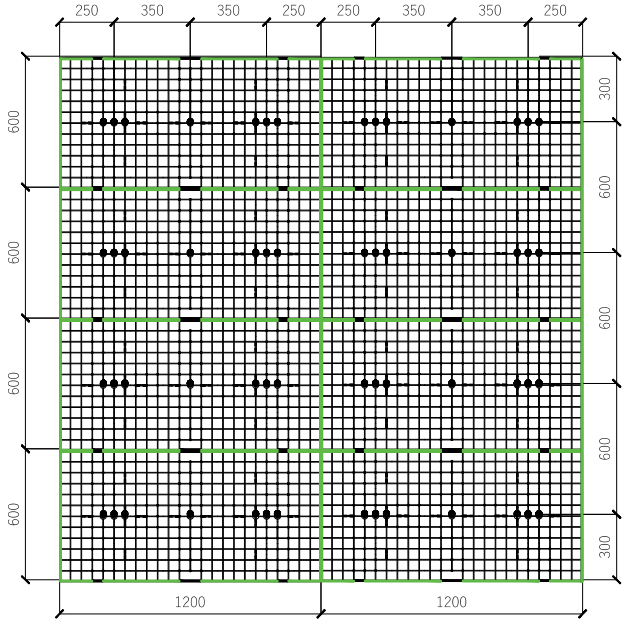
Manual Handling Wall Form Set using Flat Ties

Flat ties can either be a recoverable or consumable item.

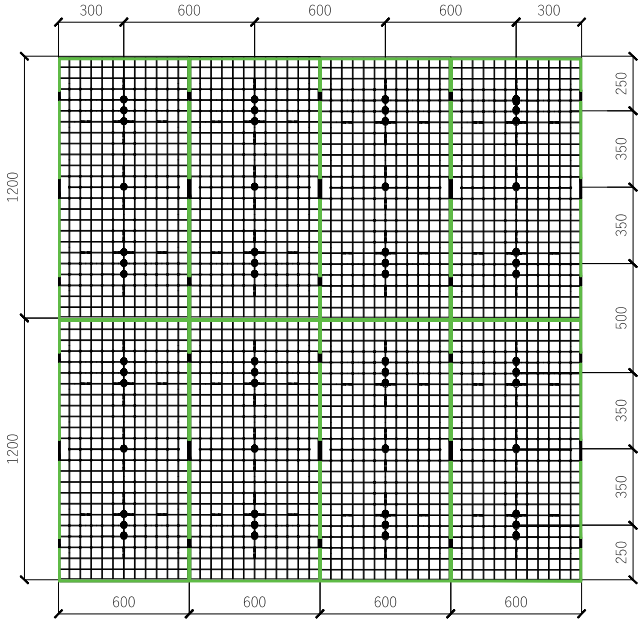
Wall Panel Assembly using Tie Rod Hole of 600x1200 Panel Version 4



Version 4 Panel

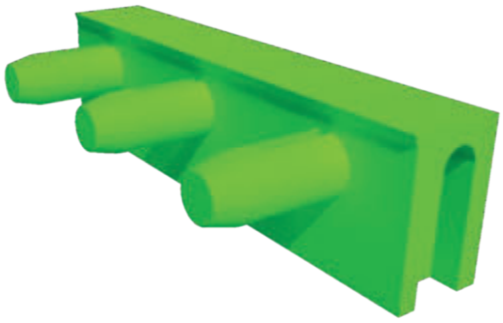


HORIZONTAL LAYOUT

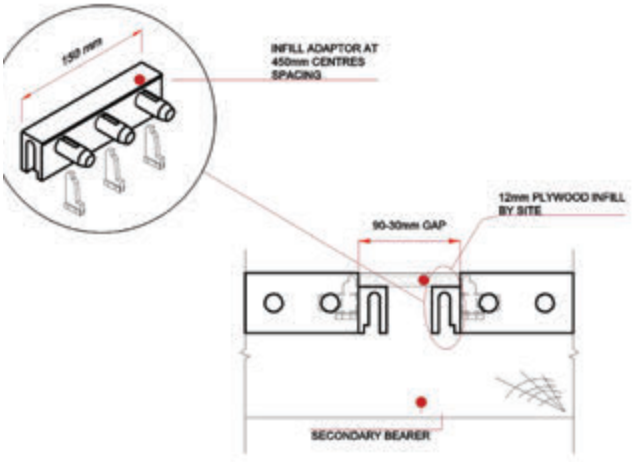


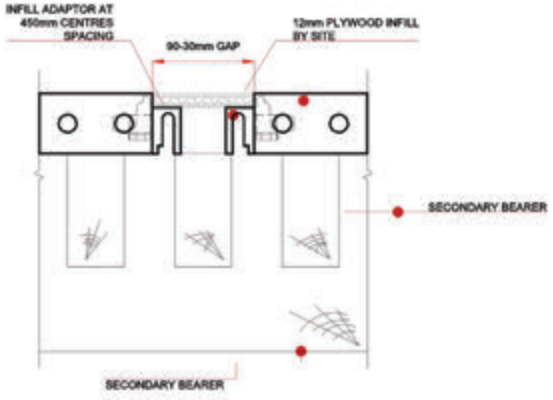
VERTICAL LAYOUT

Infill Adaptor for Connection of Plywood to fill the gaps



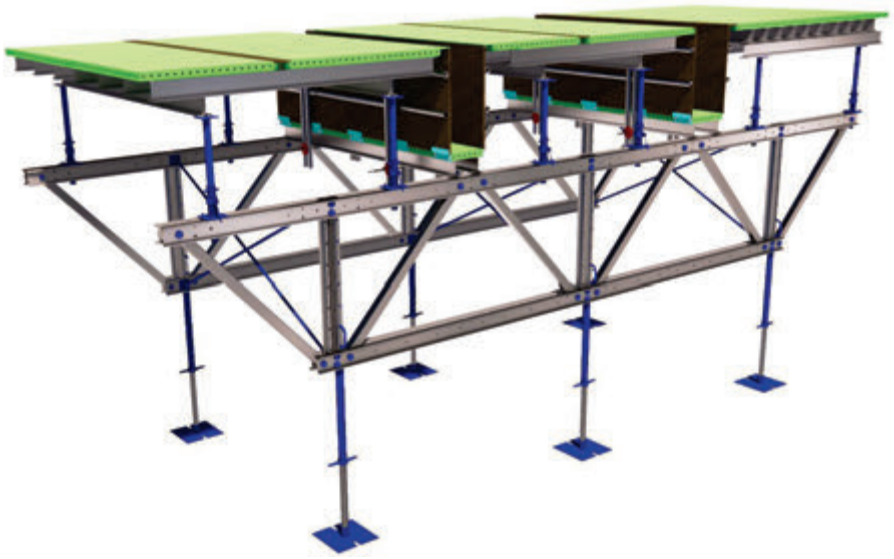
Ply-Infill Adaptor



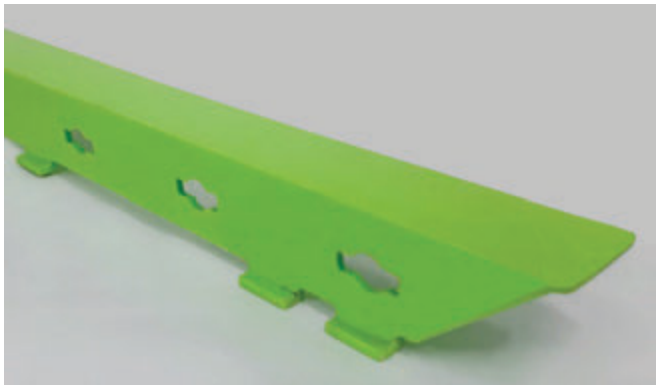


Alternative Solution : Beam and Slab Corner

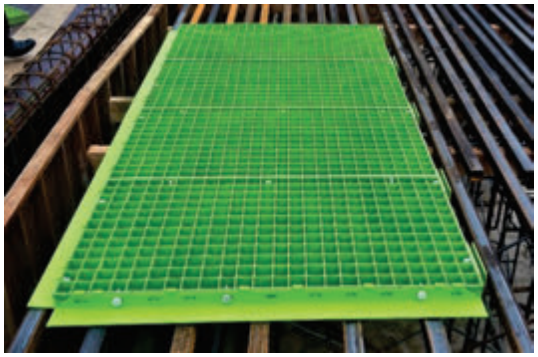
Slab connector, beam latch and in-fill adaptor
for beam and slab formwork

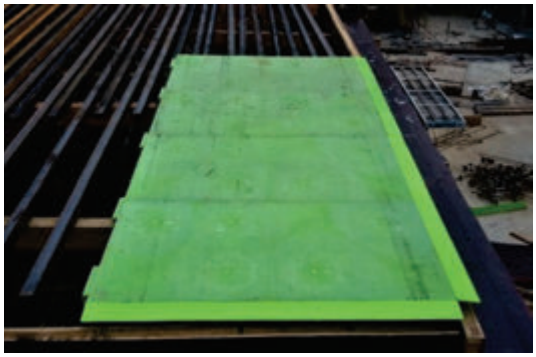


No internal corner (aluminum)
beamsides to 18mm plywood
use beam latch



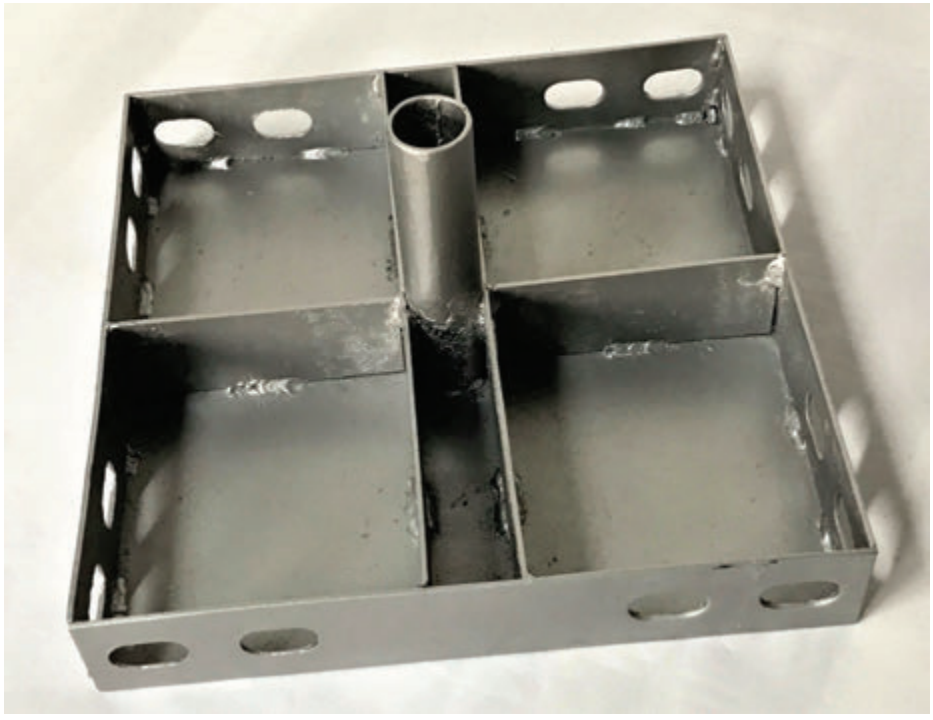
Slab connector



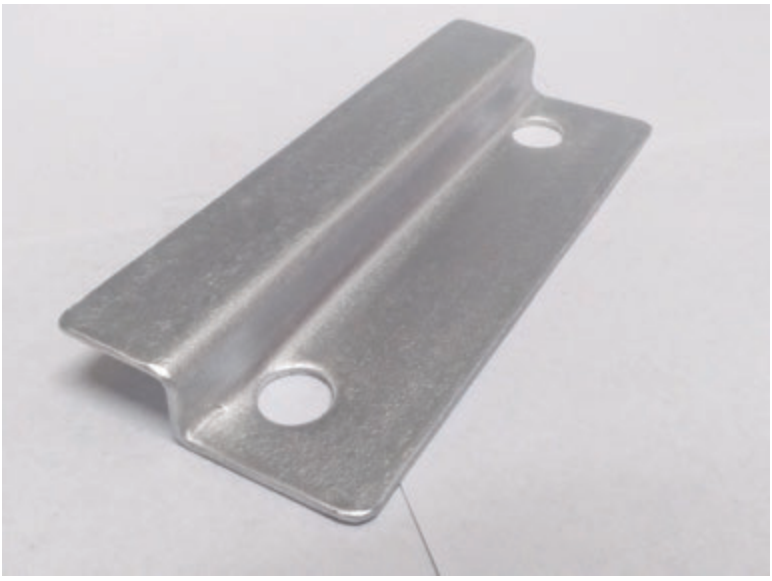


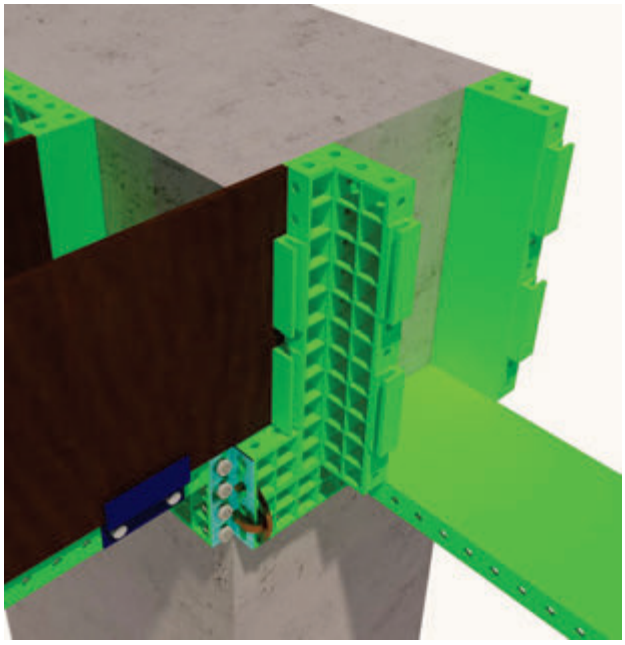
Post Head

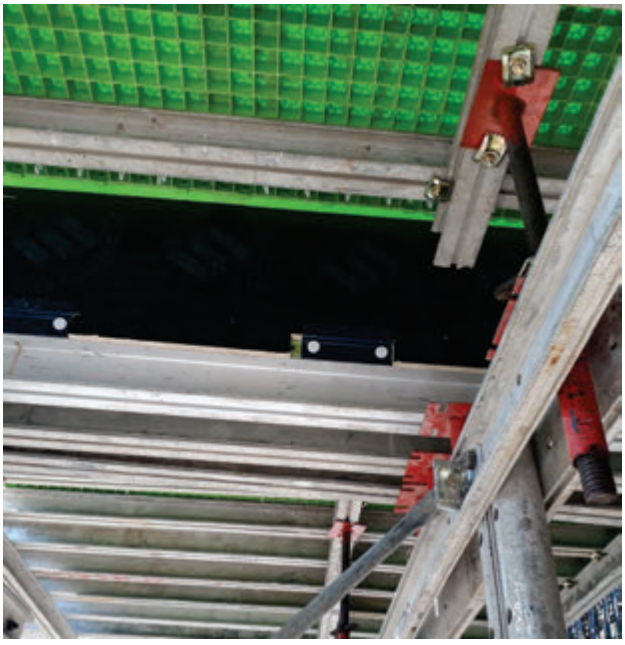
as permanent shoring for concentrate curing - 14 to 21 days before stripping



Beamside Latch



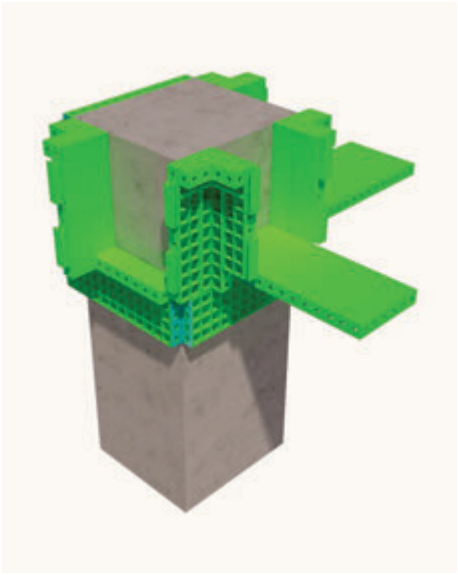


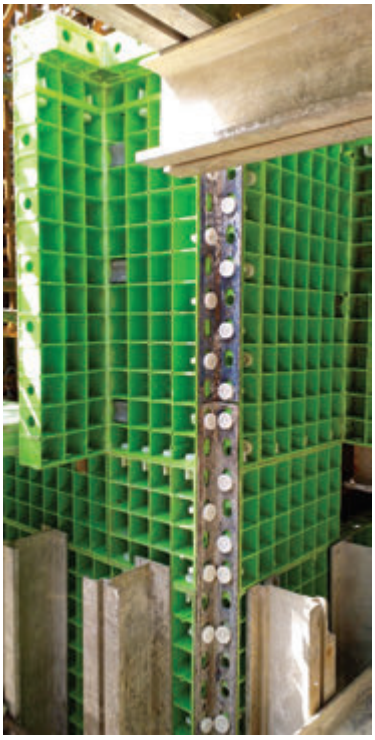


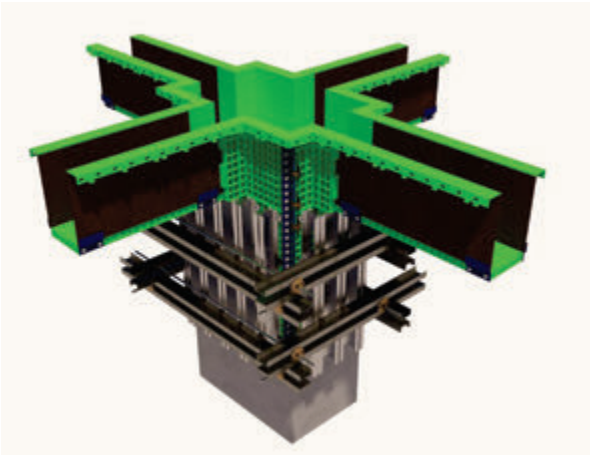
3D Pre-Assembled Corner

Designed to replace consumable plywood
around the corners in columns, beams and slabs.

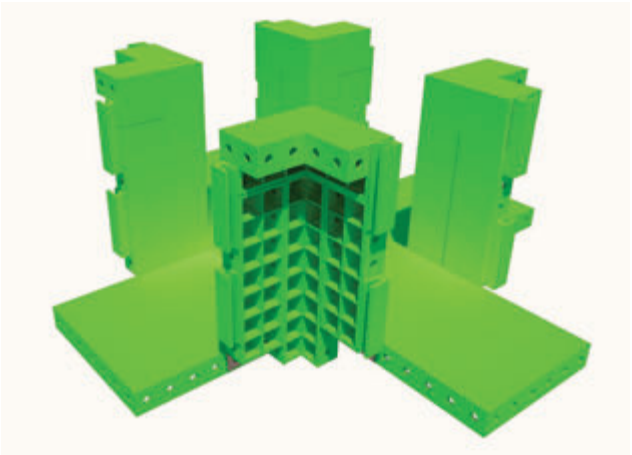
The only 3D Corner in the world.





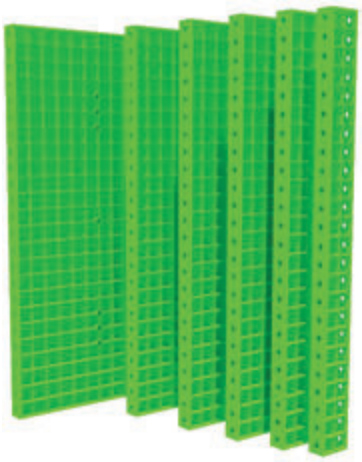


Column, Girder and
Intermediate
Beam Intersection



Girder and Intermediate
Beam Intersection

Plasform Individual Product Parts



Plasform Panel

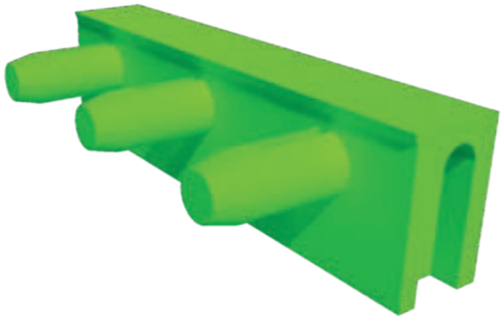
Width (mm)	Length (mm)	Weight (kg)
600	1200	7.60
300	1200	3.90
250	1200	3.20
200	1200	2.60
150	1200	1.50
100	1200	1.50

Pin and Wedge

Width (mm)	Length (mm)	Weight (kg)
-	-	0.01

P-Clamp

Width (mm)	Length (mm)	Weight (kg)
-	-	0.36



Infill Adaptor

Width (mm)	Length (mm)	Weight (kg)
-	150	.11

External Corner

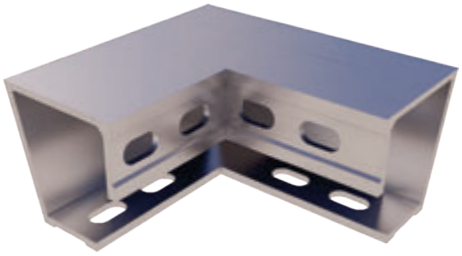
Size (mm)	Length (mm)	Weight (kg)
53 x 53	1200	2.35
53 x 78	1200	3.45
53 x 83	1200	3.68
53 x 93	1200	4.12
53 x 128	1200	5.68

Post Head

Size (mm)	Length (mm)	Weight (kg)
400	100	2.78
300	100	2.50
250	100	2.08
200	100	1.66
150	100	1.25

Internal Corner

Size (mm)	Length (mm)	Weight (kg)
100 x 125	1200	3.10
100 x 125	2400	6.20
100 x 125	3000	7.75



Internal Soffit Corner

Size (mm)	Length (mm)	Weight (kg)
100 x 125	400	1.03

Slab Connector

Size (mm)	Length (mm)	Weight (kg)
75 x 50	1200	0.56
95 x 50	1200	0.70

Double Wailing Clamp

Width (mm)	Length (mm)	Weight (kg)
-	-	0.42

Single Wailing Clamp

Width (mm)	Length (mm)	Weight (kg)
-	-	0.20

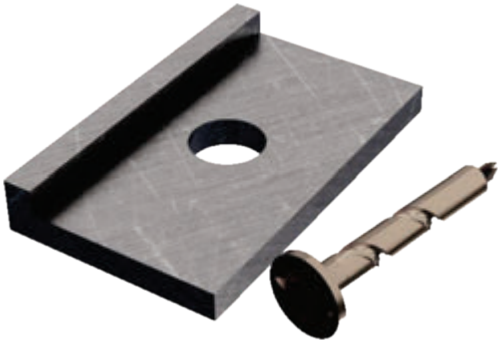


Plate Clamp

Width (mm)	Length (mm)	Weight (kg)
-	-	0.10

Tappered Cone

Size (mm)	Length (mm)	Weight (kg)
	150	0.14
	125	0.12
-	100	0.10

Flat Ties

Thick (mm)	Length (mm)	Weight (kg)
3	400	0.01
3	500	0.01

PSH50 Bracket

Width (mm)	Length (mm)	Weight (kg)
-	-	0.06

Wide Head Self Tapping Screw

Diameter (mm)	Length (mm)	Weight (kg)
5	800	0.02

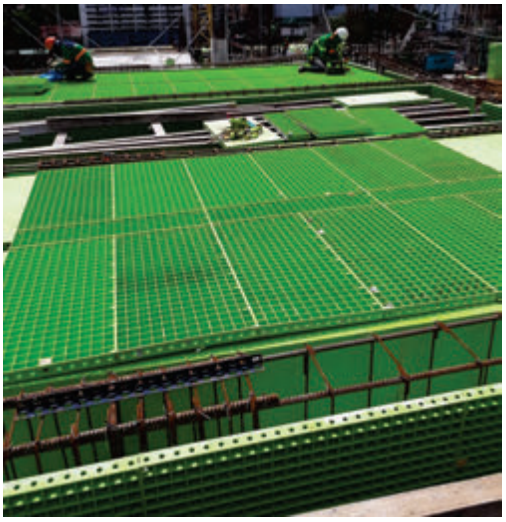
J-bolt with nut and washer

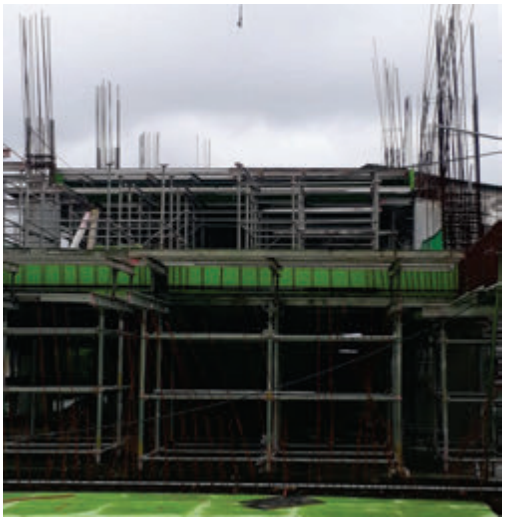
Diameter (mm)	Length (mm)	Weight (kg)
6	100	0.01

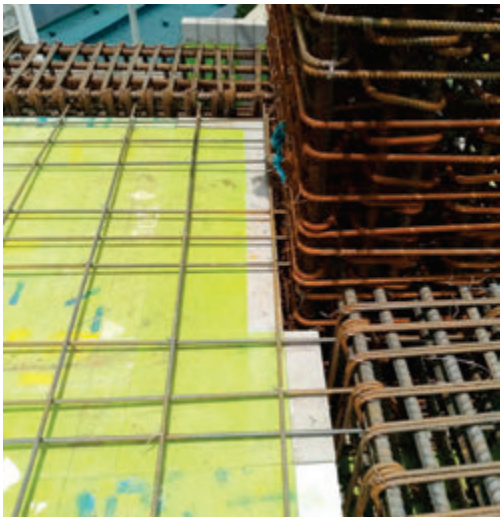
Cap for Tie Rod Hole

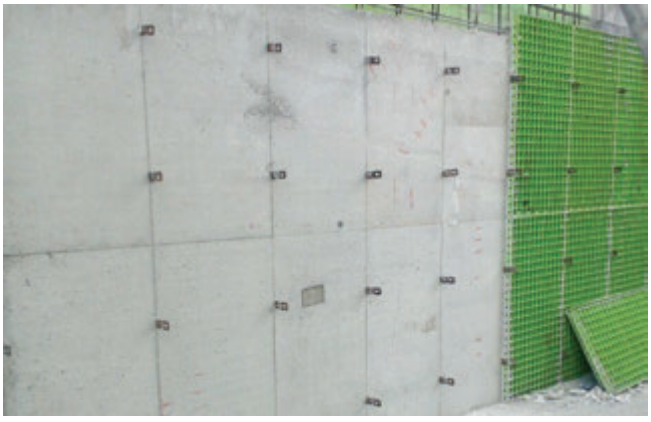
Diameter (mm)	Length (mm)	Weight (kg)
18	15	0.001

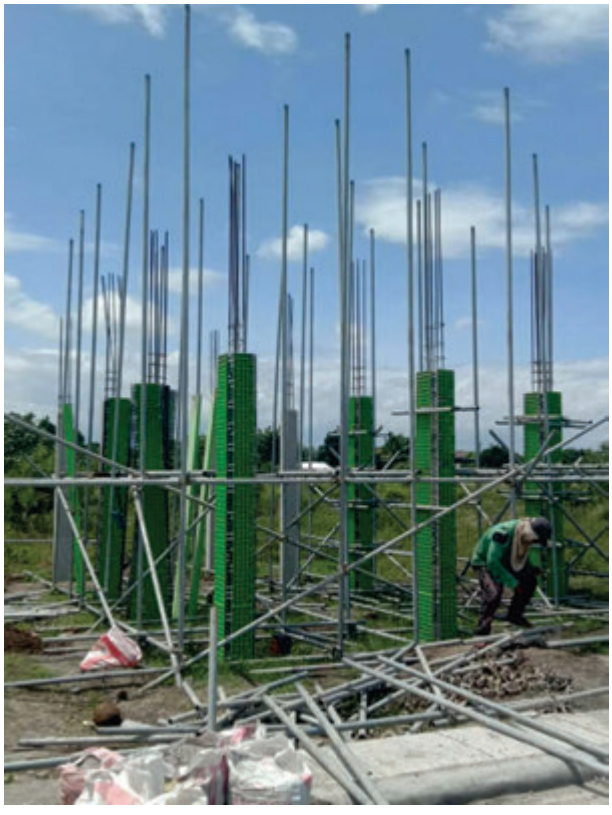
Various Projects and Repeated Orders from Clients

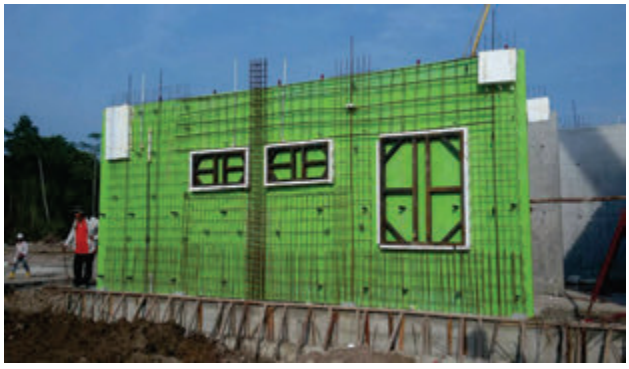






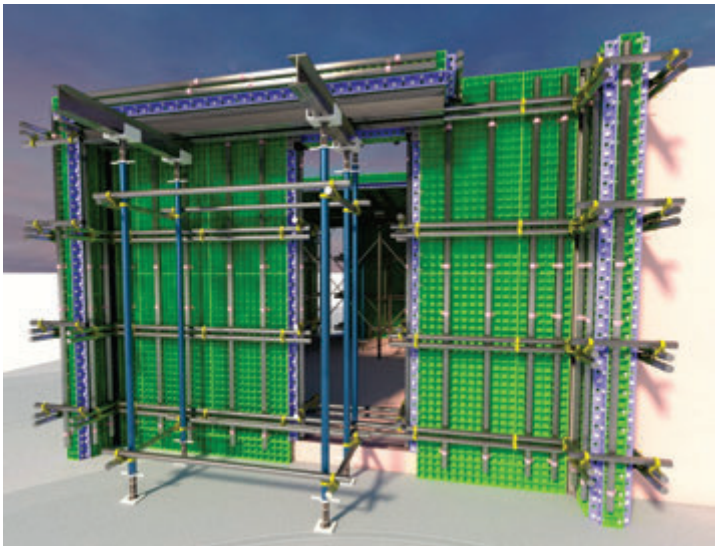






Ongoing Housing Project Using Plasform

Monolithic Construction of Millie Case Project by Servequest Inc., Muntinlupa City



Foundation Works

Erection of wall on ground slab

Installation of flat ties to hold the forms on both sides

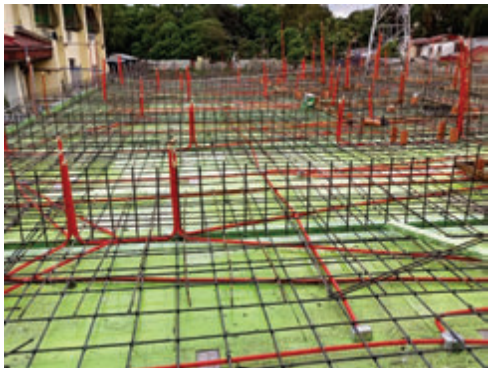
Continuation of installation of steel mat for Wall

MEPFS are Installed. Foam is wrapped around the flat ties for easy pull out & reuse

Two-sided wall fully installed and aligned

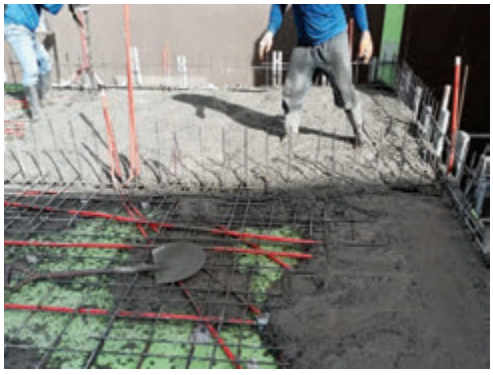
122 Aluminum Beam used for joist for Slab Forms installation

Support of wall and slab with door openings



Rebar of wall and slab and MEPFS ready for concrete pouring

Schedule of concrete pouring for monolithic construction



Monolithic concrete pouring of wall and slab

Starter panel is in place for the next floor's wall panels installation. Smooth concrete finish is achieved upon pouring of exterior walls.

MEPFS, windows, doors, and ACU openings are all achieved in one-time pouring.

Concrete finish is achieved and Flat Ties can be easily removed with help of Foam Wrap.

Smooth concrete finish is achieved and can be finished with skim coating.

Post Heads remain in place undisturbed for 14 days to allow concrete to cure as per 28 day concrete specifications.

Wall and slab formworks with MEPFS

Blockouts for openings

Finishing with skim coating

FASI

4722 Imus St., Barangay Olympia, Makati City, Metro Manila, Philippines 1207

info@fasiformsystem.com

+(632)-8519-9901

www.fasiformsystem.com

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