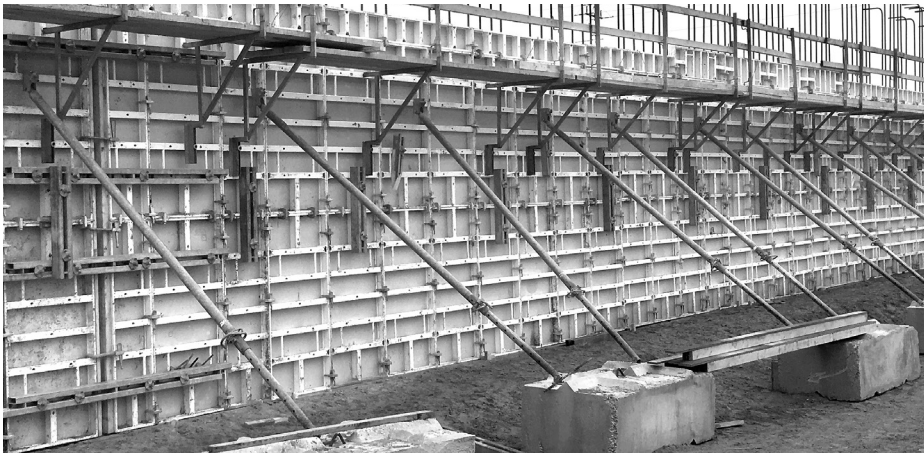


MevaLite

Technical Instruction Manual

June 2022

Introduction

MevaLite is a modular formwork system that can be either handset or gang formed. It is suitable for use on residential, commercial, industrial and highway projects.

The panels are composed of closed profile powder coated aluminum frames and a high grade alkus composite facing that provides an excellent concrete finish. Panels are connected with the MEVA assembly lock which results in fast and efficient assembly with no nuts and bolts.

A complete formwork assembly including accessories weighs about 12 psf. Panels are designed for a maximum lateral concrete pressure of 1350 psf when properly supported.

MevaLite panels are available in 4 different heights (9', 6', 4', and 3') and in 5 different widths (3', 2', 1'-6", 1'-0", and 6"). In addition, 2'-6" wide multi-purpose panels are available in each height. These panels have multi-adjustment profiles for placing ties or column clamps and are ideal for forming 90° corners, columns, pilasters, and connections to existing walls.

Available accessories include aluminum fillers (1", 2", and 3"), inside corners (12"x12"), outside corners, push-pull props, and walkway brackets. Threaded nuts built into the panels allow for easy attachment of accessories.

Please check here for the most up to date manual:
https://www.meva.net/en-us/tools-downloads/downloads

And please check here for the MEVA YouTube channel:
https://www.youtube.com/user/mevalive/featured

Safety Rules & Recommendations:

- This manual contains information and instructions on how to use MEVA equipment in a safe and efficient manner. All construction personnel involved with the use of this equipment ("User") must be familiar with the contents of this manual.
- The user is responsible for identifying and complying with all applicable government regulations, codes, and ordinances in the use of this equipment.
- MEVA equipment must be erected, used, and dismantled in accordance with this manual, safe practices, and all applicable industry standards developed and published by the American Concrete Institute (ACI), the American National Standards Institute (ANSI) and the Occupational Safety and Health Administration (OSHA). Additional workplace safety precautions should be taken where necessary.
- Most examples shown are standard applications that will occur in practice most often. For applications not covered in this manual, please contact your MEVA representative for advice.
- Many of the details in this manual show specific conditions and situations during different stages of assembly and are therefore not always complete. Any equipment or safety accessories not shown in the details must still be used in accordance with all applicable rules and regulations.
- In order to assure proper fit and load capacity, do not combine this equipment with components of other manufacturers unless directed by a MEVA representative.
- The user must inspect all equipment before each use. Never use equipment that is damaged, deformed, or weakened due to wear or corrosion.
- Never oil or wax MEVA assembly locks.
- The user must ensure the stability of all components during all phases of construction.
- For gang formwork, the user should always establish the number and location of lift points to equalize load on lift brackets and ensure that no individual component is overloaded.
- It is the user's responsibility to adjust the pour rate and placement methods in accordance with ACI 347 for the concrete mixture and the specific jobsite conditions at the time of placement so that the specified maximum lateral concrete pressure is never exceeded.
- Certain applications will result in a maximum lateral concrete pressure lower than the system panel capacity. Refer to specific sections of this manual, MEVA application drawings, or consult your MEVA representative.
- When stripping gang formwork, never use the crane to break the concrete bond. Instead, use suitable tools such as pry bars or wood wedges. Secure the lift brackets prior to removal of ties, anchors, and/or bracing.
- Do not nail into aluminum panel frames.

Contents

The MevaLite Panel

Fig. 4.1
MevaLite panel

Fig. 4.2
The aluminum frames are manufactured of closed profiles which are welded in mitered joints. These profiles are provided with a groove and an integrated protection for the forming face.

Fig. 4.3
Large tie pockets allow for easy insertion of any tie system (taper ties, she-bolts, thru-rods).

Fig. 4.4
Pioneering panel connection with MEVA assembly lock.

Fig. 4.5
The ergonomically designed cross stiffeners are also made of closed aluminum profiles. The profiles have the shape of a bone: they are easy to grab, and the risk of injuries is eliminated.

Fig. 4.6
The multi-function profiles have Dywidag threaded nuts inside which allow for fast and safe attachment of accessory parts.

Fig. 4.7
The tie-off bar allows safe working on the formwork. Under no circumstances should panels be lifted or moved using these tie-off bars. Tie-off bars should only be used with suitable positioning device systems as described in OSHA 1926-502(e), supplied by others.
Or, provided the user adhere to the guidance set forth in OSHA 1926.502(d)(15), 1926.502(d)(15)(i), 1926.502(d)(15)(ii), and all associated sections, these tie-off bars may be used with personal fall arrest systems that meet the requirements set forth in OSHA. It is the end user's responsibility to ensure OSHA requirements are met.

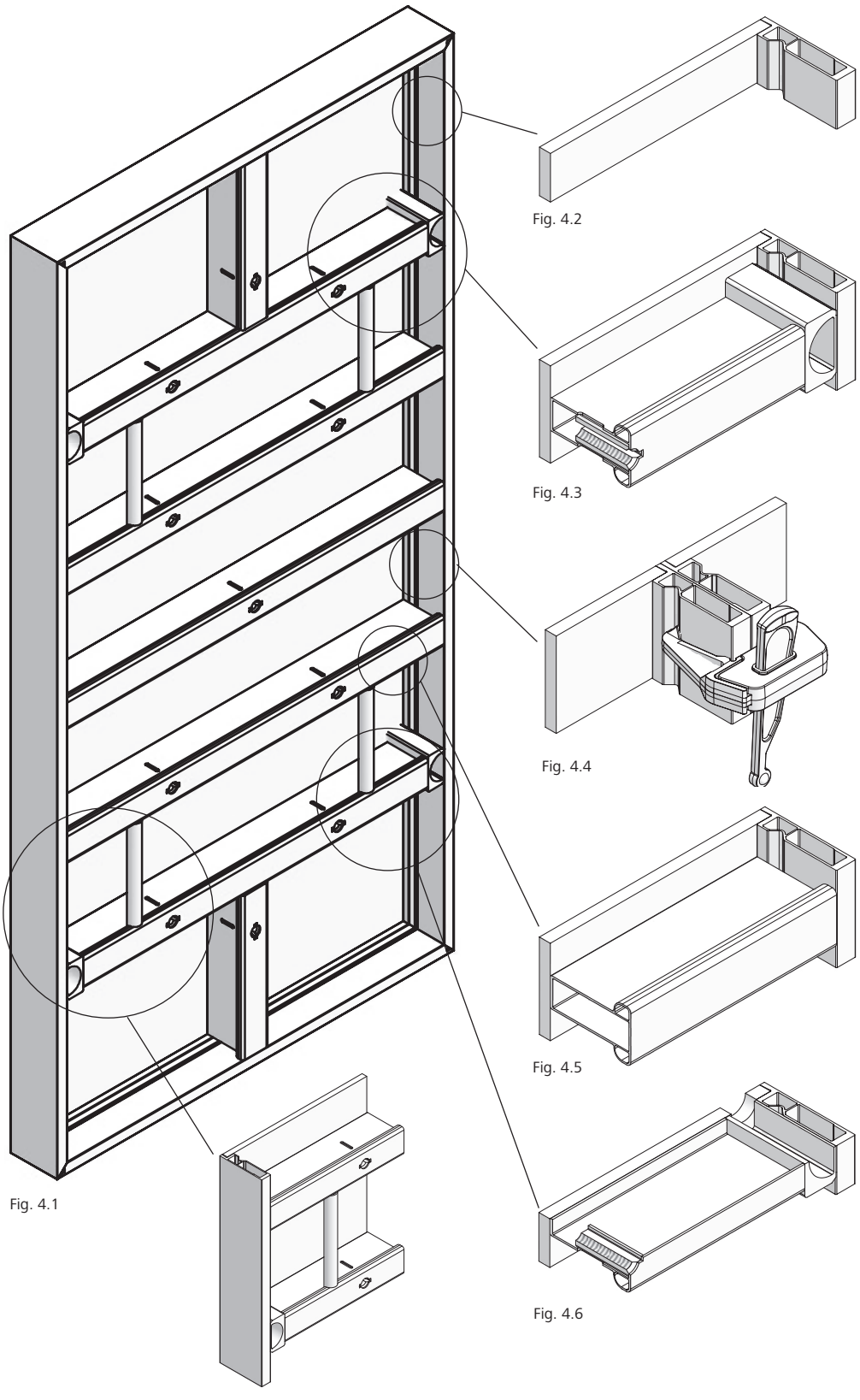


Fig. 4.1

Fig. 4.2

Fig. 4.3

Fig. 4.4

Fig. 4.5

Fig. 4.6

Fig. 4.7

Multi-purpose Panels

The multi-purpose panels are ideal for forming 90° corners, columns, pilasters, bridge abutments and connections to existing walls.
The panels are provided with multi-adjustment profiles where column clamps or ties are mounted.
The panels come with pilot holes on the back side for drilling selected tie holes at exact locations.
Plug the unneeded tie holes with Plug D27/30.
The 9' panels have 3 multi-adjustment profiles, the 6' and 4' panels have 2 multi-adjustment profiles and the 3' panel has 1 multi-adjustment profile.
Threaded sleeves are also provided on the frame sides at each tie hole elevation for tensioning screw connections.

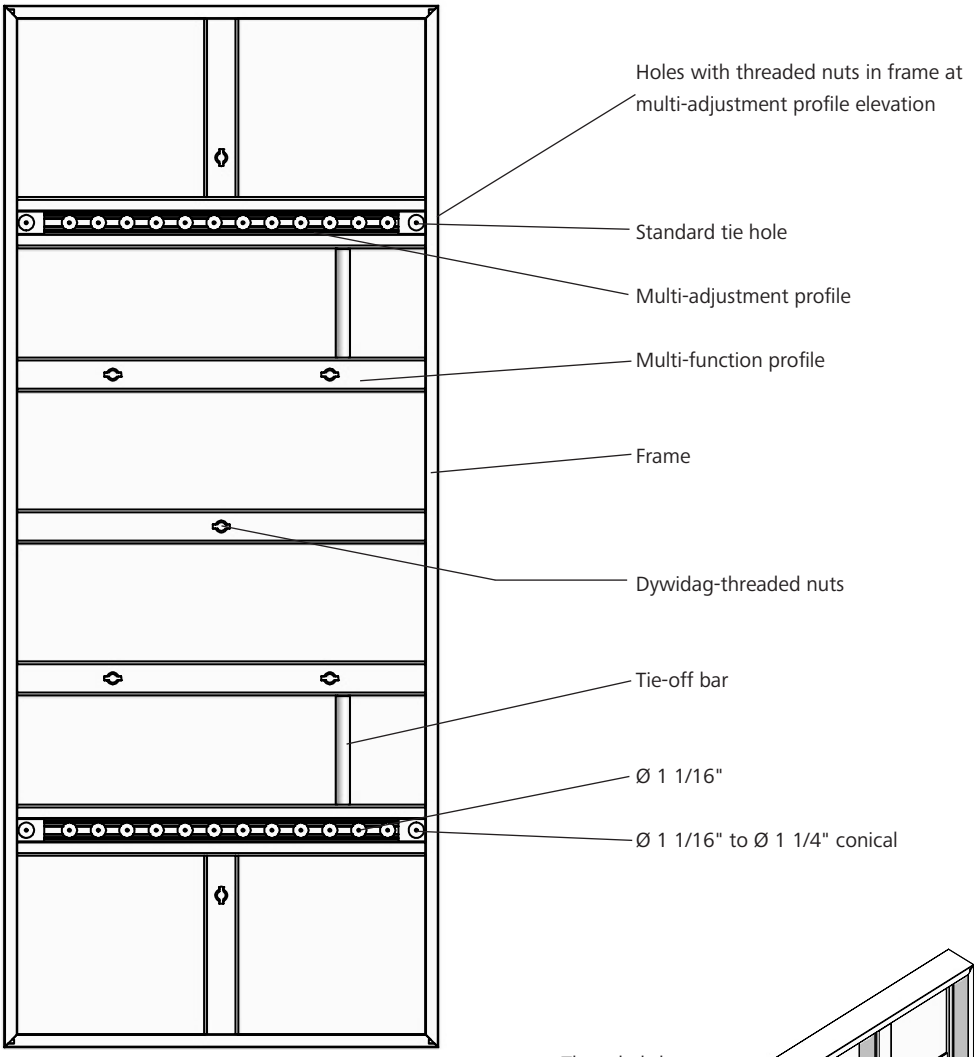


Fig. 5.1

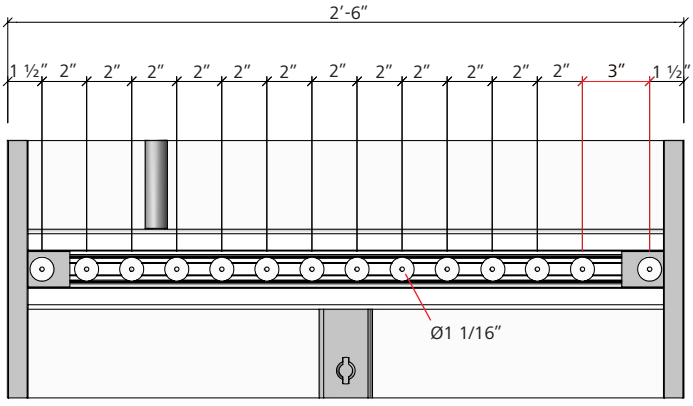


Fig. 5.2

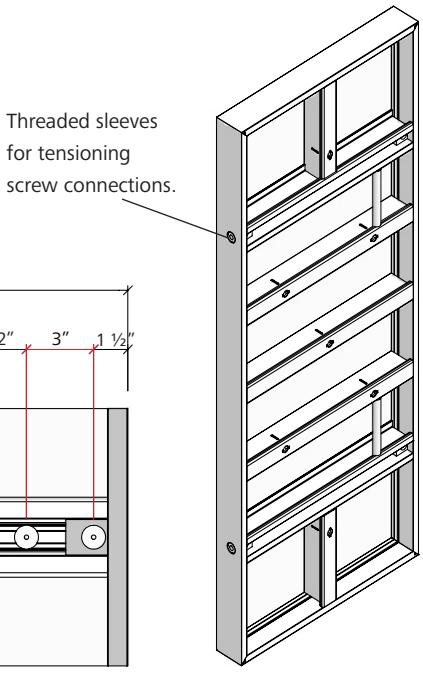


Fig. 5.3

Description	Ref.-No.
ML-multi-purpose panels	
9'x2.5'	**22-500-25**
6'x2.5'	**22-501-25**
4'x2.5'	**22-502-25**
3'x2.5'	**22-503-25**
Plug D27/30	**29-902-61**

The alkus Sheet

The poly-propylene and aluminum composite forming face has all the positive properties of plywood plus important advantages: longer life span, greater load-bearing capacity, better nail-holding ability, fewer and easier repairs, 100 % recyclability.
Besides the obvious advantages, such as considerably reduced cleaning effort, minimum consumption of release agent and an excellent concrete finish, alkus offers substantial ecological benefits. Substituting plastic for wood saves valuable timber resources. Also, the release of highly toxic dioxin is avoided, which is released in the process of burning plywood (that is bonded with phenolic resin). Used or damaged alkus plastic sheets can be recycled into the same product. It is 100% recyclable, and the manufacturer guarantees reacceptance.

Frame profile + plywood face

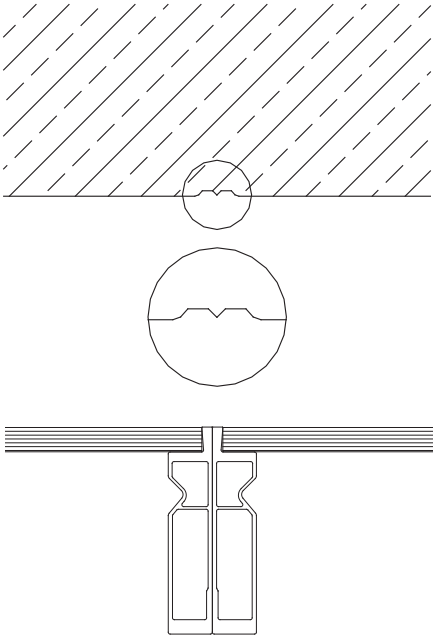


Fig. 6.1: Negative impression in the concrete when using panels with a conventional plywood face

Frame profile + alkus sheet

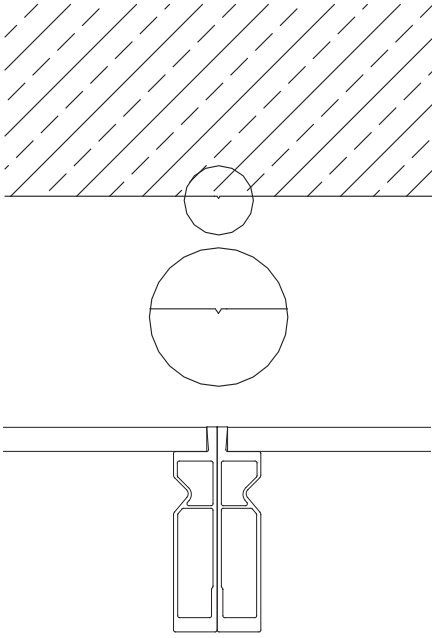


Fig. 6.2: Smooth and even concrete surface as there is no projecting profile of the panel frame

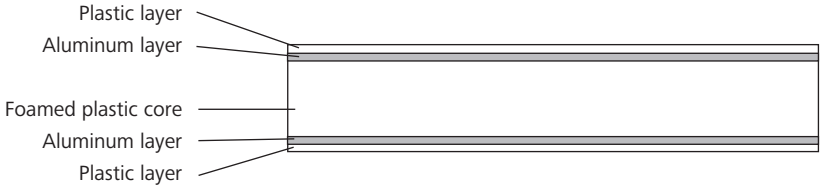


Fig. 6.3: Composite alkus plastic sheet structure

Panel Connection

The panels are connected quickly and efficiently with the EA-assembly lock regardless of their orientation (Fig. 7.1, 7.2). The lock can be attached on the frame at any position, and its 5-point contact not only draws the panels together but aligns them as well. Only a few hammer blows are needed to create a safe connection with perfect alignment. Since the lock weighs only 3.3 lbs. it can be handled easily.

Standard lock requirements are shown in Figure 7.4. Additional locks are required for columns and outside corners (refer to respective sections for details).

Panels with aluminum or wood fillers in between are connected with the Uni-assembly lock 22, which can accommodate a maximum filler width of 6.5" (Fig. 7.5).

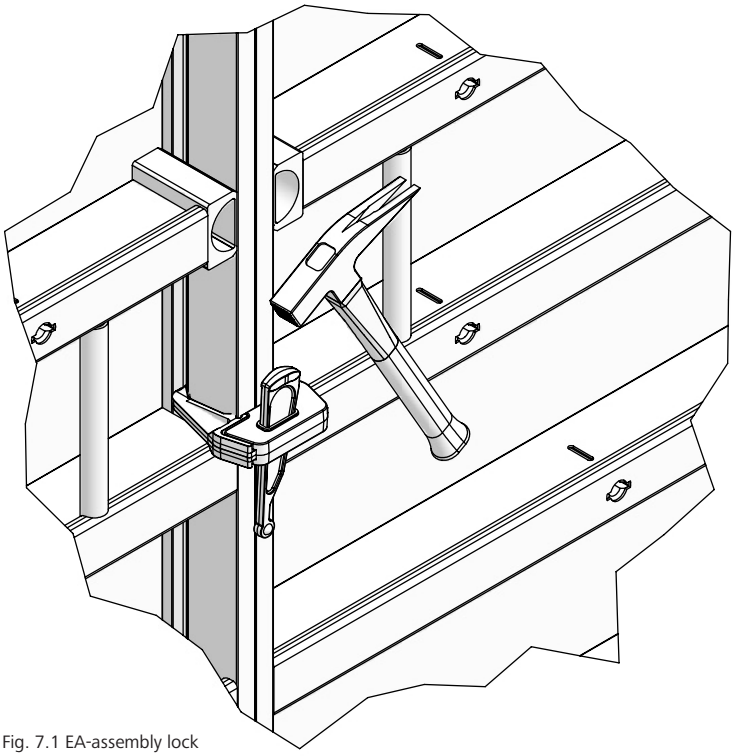


Fig. 7.1 EA-assembly lock

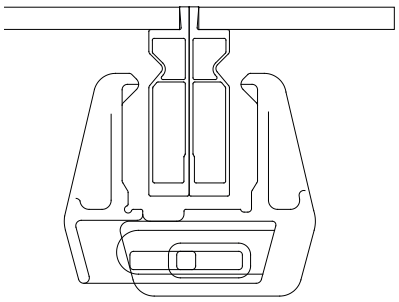


Fig. 7.2 EA-assembly lock

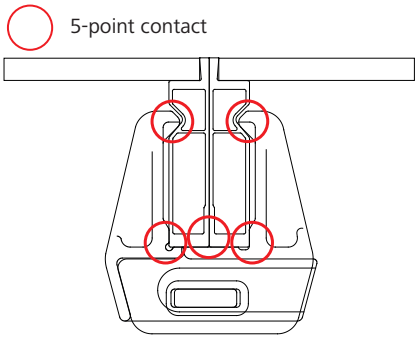


Fig. 7.3 EA-assembly lock

Standard Lock Requirements	
Panel Edge Length	Number of Locks
9'	4
6'	3
4' thru 1'-6"	2
1', 6"	1

Fig. 7.4

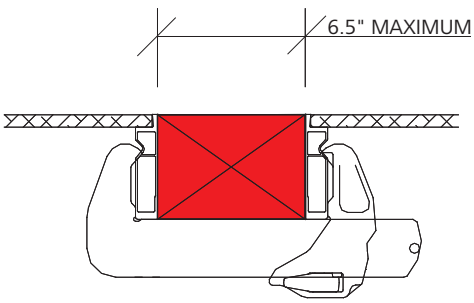


Fig. 7.5 Uni-assembly lock 22

Description	Ref.-No.
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Tie Systems

Description	Ref.-No.
Articuated flange nut 15/120	**29-900-10**
5/8" (15mm) Taper Tie Stock Sizes	
16/41 - 16" Taper length, 41" Overall	**2-500-2990131**
24/49 - 24" Taper length, 49" Overall	**2-500-2990133**
32/57 - 32" Taper length, 57" Overall	**2-500-2990135**

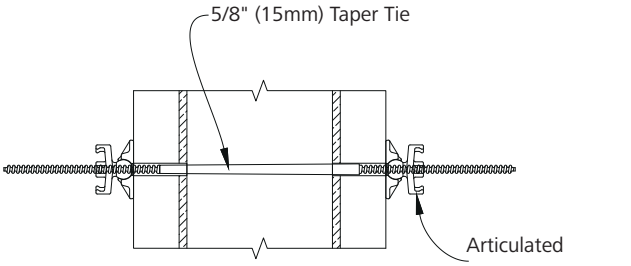


Fig. 8.1 - 5/8" (15mm) Taper Tie, 1" to 3/4"

5/8" (15mm) Taper Tie
SWL = 18.75 KIPS
Factor of Safety = 2:1

Description	Ref.-No.
Rental	
5/8" (15mm) Threadbar 18"	**2-500-2990158**
5/8" (15mm) Threadbar 42"	**2-500-2990156**
5/8" (15mm) Threadbar 54"	**2-500-2990154**
5/8" (15mm) Threadbar 72"	**2-500-2990152**
Articuated flange nut 15/120	**29-900-10**
Purchase	
5/8" (15mm) Plastic Spacer Cone	**2-500-2990252**
1" Stripping Tool for 5/8" Spacer Cone	**2-500-2990233**
3/4" PVC Pipe Sch40 20ft	**2-500-2990244**

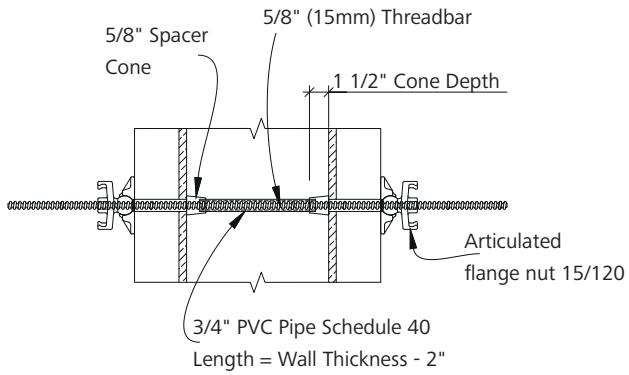


Fig. 8.2 - 5/8" (15mm) Threadbar

5/8" (20mm) Threadbar
SWL = 21.9 KIPS
Factor of Safety = 2:1

Description	Ref.-No.
Rental	
5/8" (15mm) Pass-Thru She-Bolt x 19"	**2-500-2990173**
Articuated flange nut 15/120	**29-900-10**
Purchase	
5/8" (15mm) Threadbar 19'-1"	**2-500-2990140**
5/8" (15mm) Neoprene Waterstop	**2-500-2990237**

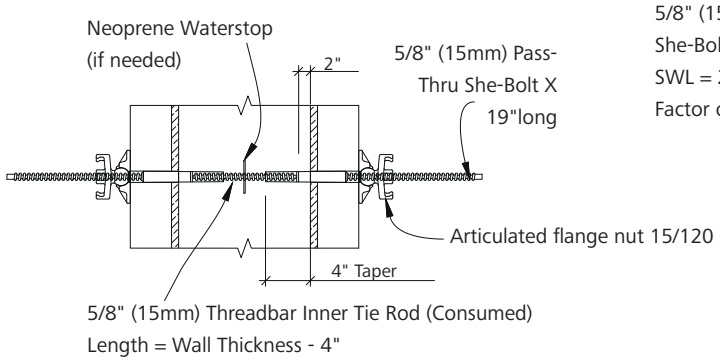


Fig. 8.3 - 5/8" (15mm) Pass-Thru She-Bolt

5/8" (15mm) Pass-Thru
She-Bolt
SWL = 21.9 KIPS
Factor of Safety = 2:1

Description	Ref.-No.
Rental	
5/8" (15mm) Steel Setting Cone	**2-500-2990180**
5/8" (15mm) Threadbar 18"	**2-500-2990158**
Articuated flange nut 15/120	**29-900-10**
Purchase	
5/8" (15mm) Threadbar 19'-1"	**2-500-2990140**
5/8" (15mm) Neoprene Waterstop	**2-500-2990237**

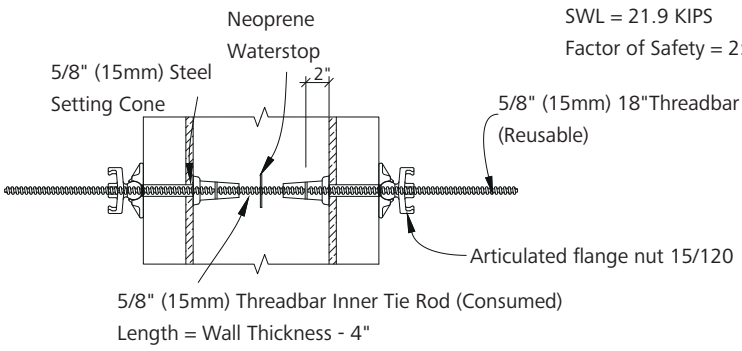


Fig. 8.4 - 5/8" (15mm) She-Bolt Steel Cone

5/8" (15mm) She-Bolt Steel Cone
SWL = 21.9 KIPS
Factor of Safety = 2:1

System Panel Sizes

High degree of flexibility
The formwork is extended in height using panels assembled vertically or horizontally on top of the lower panels. The wide range of panel heights and widths ensures:

→ Economical height extension in 6" increments through combined horizontal and vertical assembly.

→ Uniform joint grid.

Vertical joints:
For 3' high panels, you need just one 5/8" (15 mm) tie.

The 4' and 6' high panels require 2 ties and the 9' high panels require 3 ties.

In general, all tie positions pre-determined by the system must be used.

Panel height: 9'

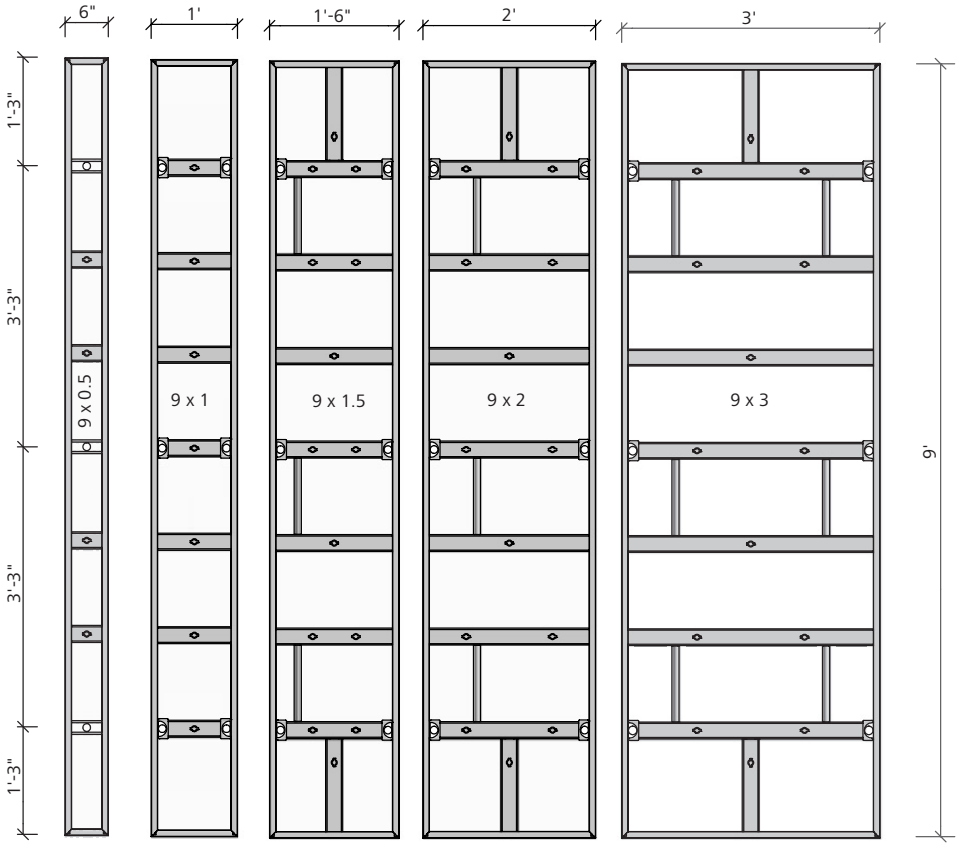


Fig. 9.1 Fig. 9.2 Fig. 9.3 Fig. 9.4 Fig. 9.5

Panel height: 6'

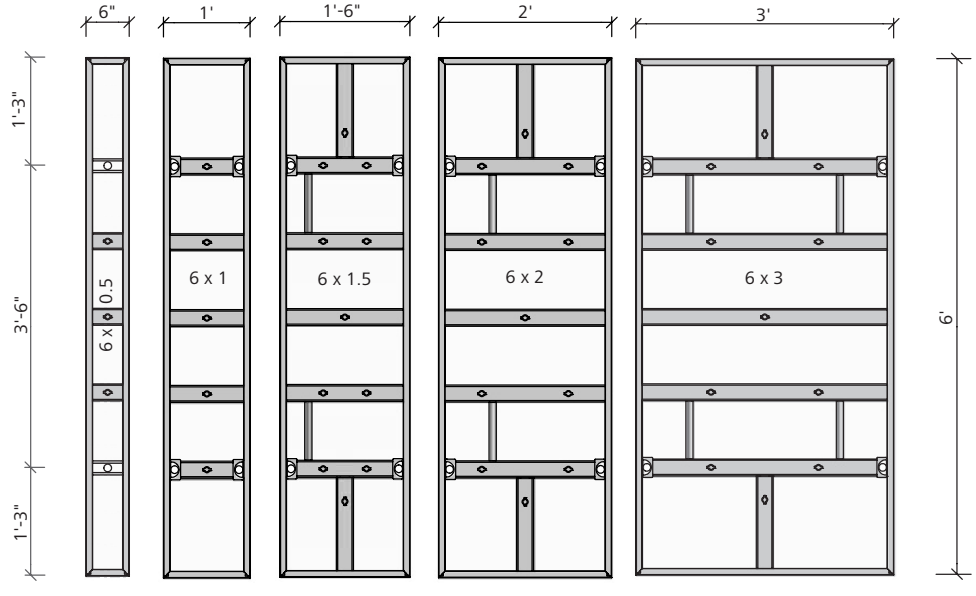


Fig. 9.6 Fig. 9.7 Fig. 9.8 Fig. 9.9 Fig. 9.10

System Panel Sizes

High degree of flexibility
The formwork is extended in height using panels assembled vertically or horizontally on top of the lower panels. The wide range of panel heights and widths ensures:

→ Economical height extension in 6" increments through combined horizontal and vertical assembly.

→ Uniform joint grid.

Vertical joints:
For 3' high panels, you need just one 5/8" (15 mm) tie.

The 4' and 6' high panels require 2 ties and the 9' high panels require 3 ties.

In general, all tie positions pre-determined by the system must be used.

Panel height: 4'

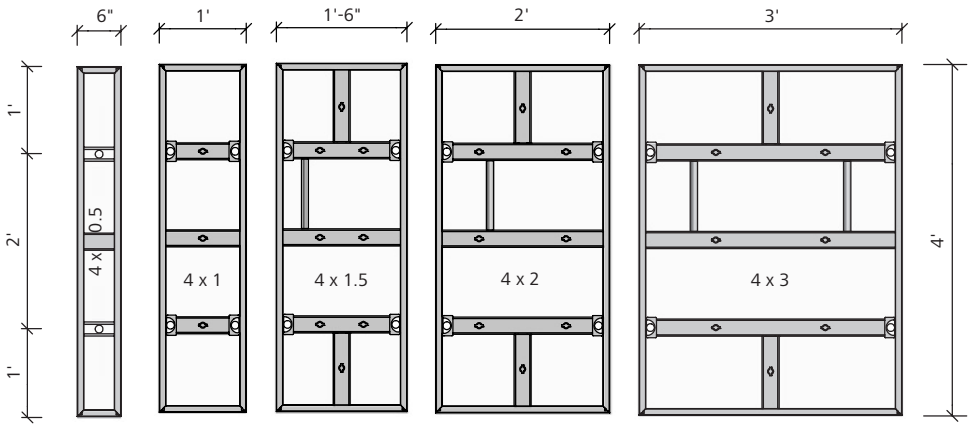


Fig. 10.1 Fig. 10.2 Fig. 10.3 Fig. 10.4 Fig. 10.5

Panel height: 3'

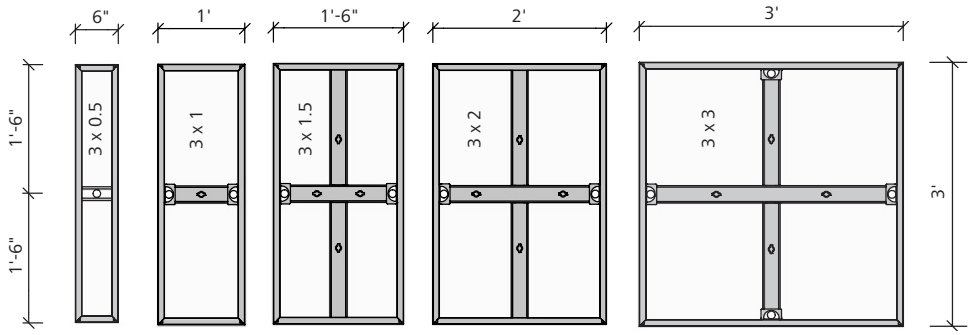


Fig. 10.6 Fig. 10.7 Fig. 10.8 Fig. 10.9 Fig. 10.10

System Panel Sizes

Multi-purpose panels

The multi-purpose panels are ideal for forming 90° corners, columns, pilasters, bridge abutments and connections to existing walls.

The panels are provided with multi-adjustment profiles where column clamps or ties are mounted.

The panels come with pilot holes on the back side for drilling selected tie holes at exact locations.

Plug the unneeded tie holes with Plug D27/30.

The 9' panels have 3 multi-adjustment profiles, the 6' and 4' panels have 2 multi-adjustment profiles and the 3' panel has 1 multi-adjustment profile.

Threaded sleeves are also provided on the frame sides at each tie hole elevation for tensioning screw connections.

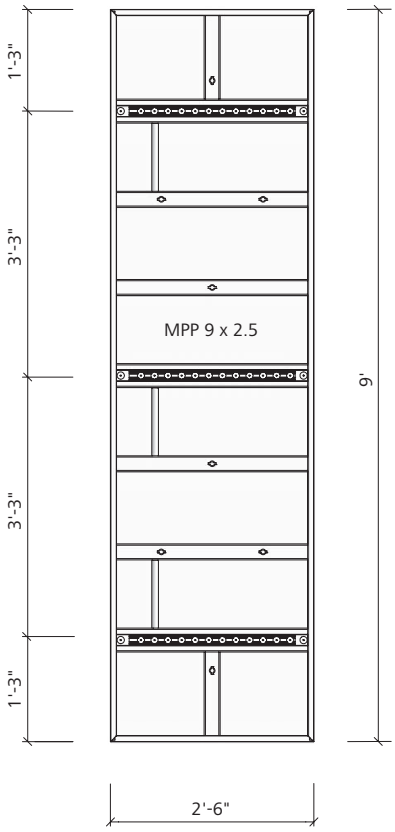


Fig. 11.1

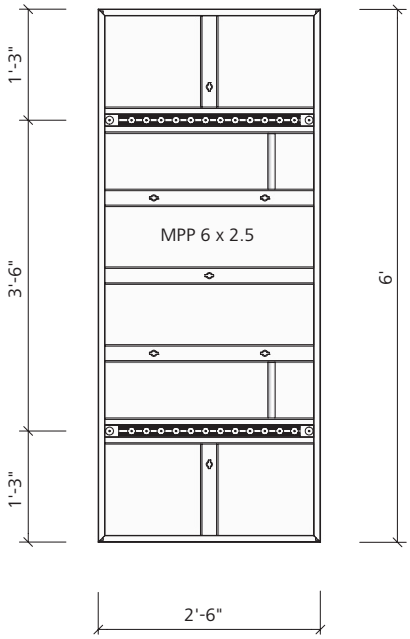


Fig. 11.2

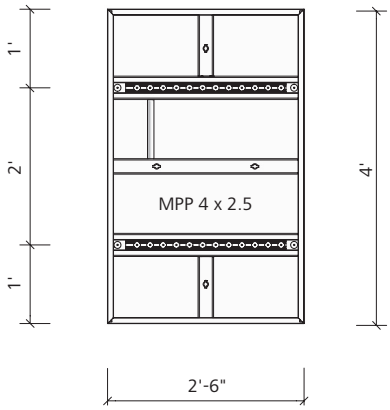


Fig. 11.3

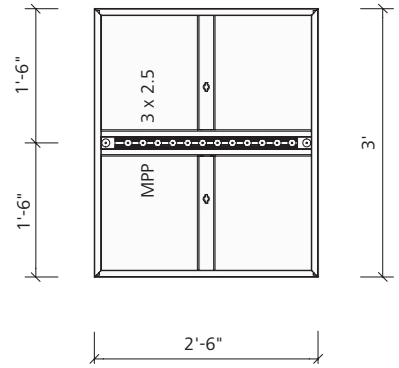


Fig. 11.4

Tie Placement

The tie pockets, where the ties can be inserted, are located adjacent to the panel frame. The size of the pockets (Fig. 12.4) allow one or both sides of the wall to be inclined. On sloping formwork the articulated flange nuts 15/120 have to be used. These flange nuts can be easily installed by using a hammer or a spanner. In order to secure the formwork against uplift it has to be anchored to the ground using shoe plates or other means.

Please note:
If two panels of different widths are assembled side by side, the ties should be placed through the panel with the larger width (Fig. 12.5), unless otherwise indicated on MEVA layout drawings.
When using tie claws, the ties can be placed at the outside edge of the panels. For example; when forming bulkheads, or directly above the panels when forming foundations.

Do not use ties as a means of supporting bulkheads, or in any other applications where shear load is applied.

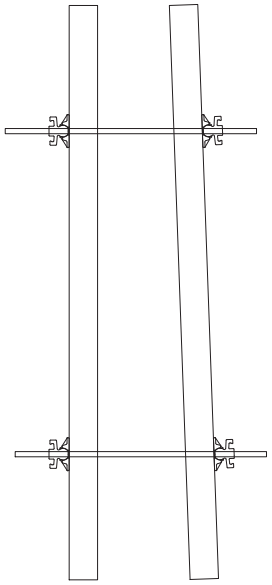


Fig. 12.1

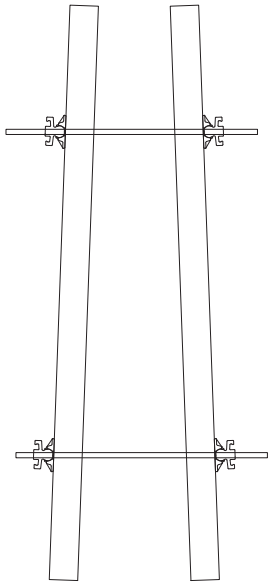


Fig. 12.2

Maximum Incline		
Tie System	Angle [α]	Ratio [x:12]
Taper Tie 1" to 3/4"	2°	3/8 : 12
5/8" Threadbar	6°	1 1/4 : 12

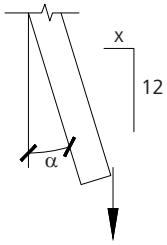


Fig. 12.3

Attention:
The diameter of the hole in the alkus sheet is 1 1/16".

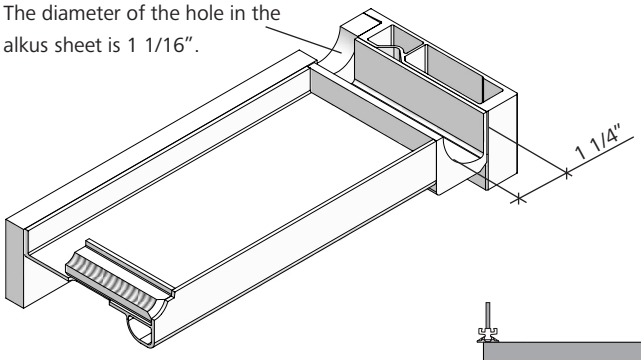


Fig. 12.4

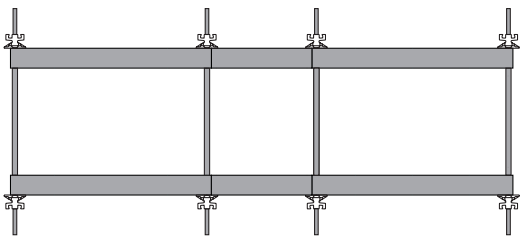


Fig. 12.5

Description	Ref.-No.
Plug D27/30	**29-902-61**
Spanner SW 27	**29-800-10**

Stacking Panels

For stacked panel conditions where the top of concrete is ≤ 1' above the panel below it is not necessary to install ties in the top panel (Fig. 13.1), unless a walkway bracket is attached or the panel below is 3' high. If a walkway bracket is attached to the top panel, install ties in the upper tie holes.

For stacked panel conditions where the top of concrete is > 1' above the panel below (Fig. 13.2), and for all conditions where the panel below is 3' high, ties must be installed in all tie holes.

Vertical steel rails must be installed across stacked panel joints for lifting gang forms. See the "Gang forming" section for additional information.

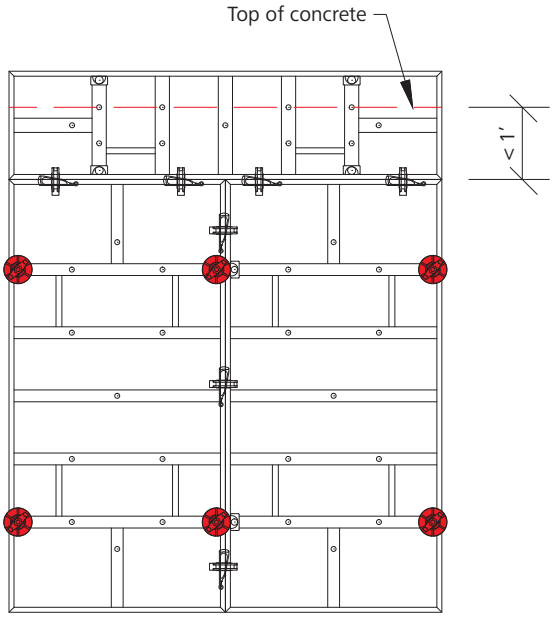


Fig. 13.1

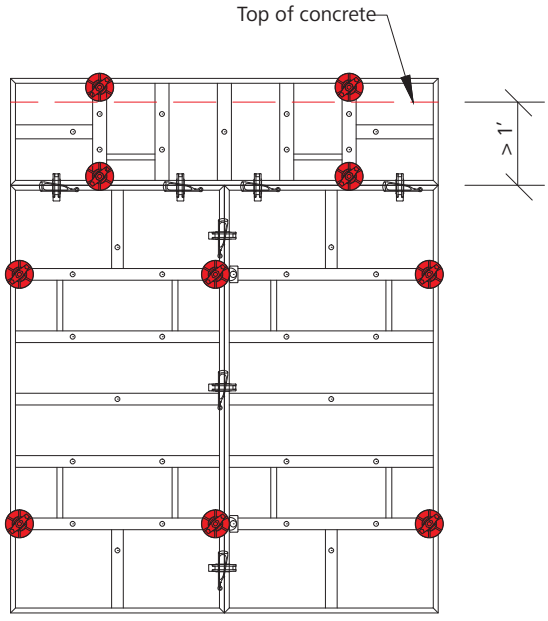


Fig. 13.2

90° Corners

The **MevaLite inside corner rigid** is provided with tie holes, and consists of a aluminum frame with a replaceable alkus face (Fig. 14.1). The length of each side is 1' (Fig. 14.2).

The **MevaLite inside corner elastic** is designed to flex to allow for easier stripping, and the alkus face is replaceable (Fig. 14.3). The length of each side is 1' (Fig. 14.4). Steel rails or corner angles are recommended to stiffen the corner for concrete placement.

ML-alu fillers (1", 2", & 3") are used to make adjustments for different wall thicknesses. Steel rails may be required depending on the filler/tie configuration (see the "Fillers" section) and the wall thickness.

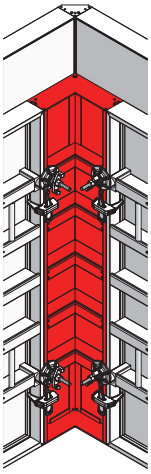


Fig. 14.1

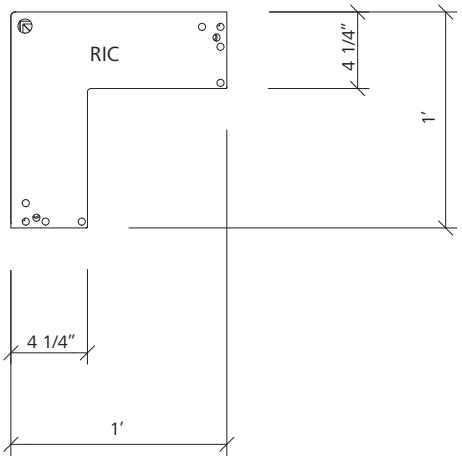


Fig. 14.2

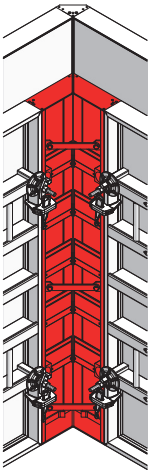


Fig. 14.3

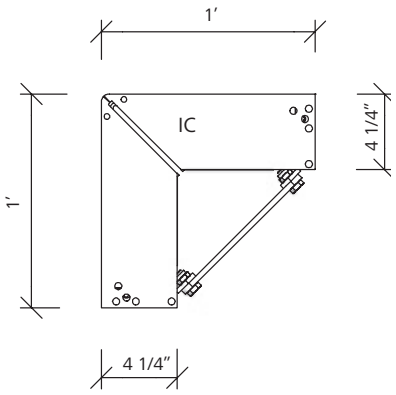


Fig. 14.4

MevaLite Outside Corners
The outside corners (Fig. 14.5, 14.6) are connected to adjacent panels with assembly locks, but require more assembly locks than the standard panel connections. Steel rails may also be required. See the "Standard Panels and Outside Corners" section for specific requirements.

There are two ways to form 90° outside corners: with standard panels and outside corners, or with multi-purpose panels.

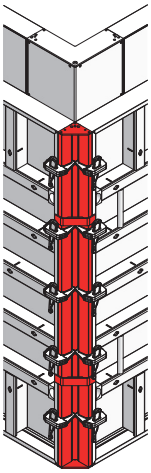


Fig. 14.5

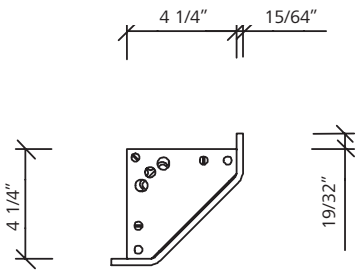


Fig. 14.6

90° Corners

Standard Panels and Outside Corners

The connection and rail support requirements for outside corner assemblies depend on the wall thickness.

For wall thicknesses ≤ 12", additional locks are only required at the outside corner connections (Fig. 15.1).

For wall thicknesses > 12" but ≤ 18", more locks are required at the outside corner connections. Additional locks are also required on the adjacent panel joints near the corner (Fig. 15.2).

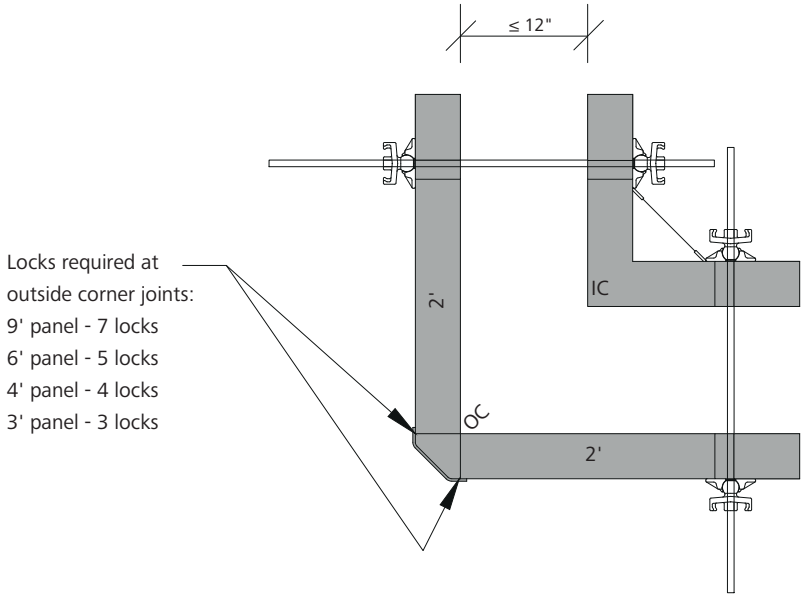


Fig. 15.1 Walls up to 12" thick

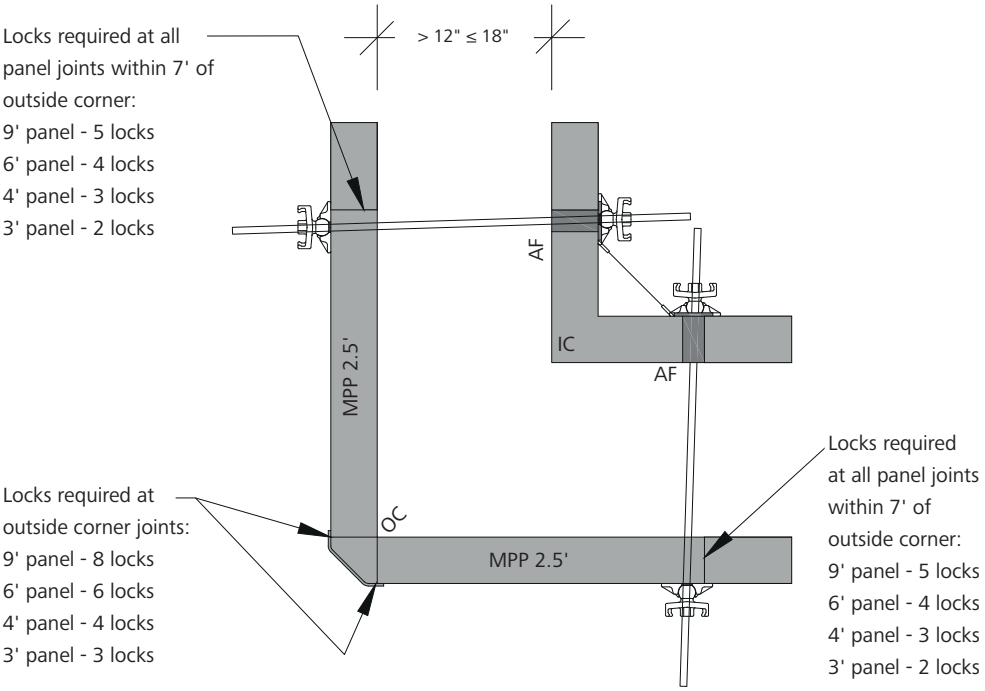


Fig. 15.2 Walls > 12" but ≤ 18" thick

Description	Ref.-No.
ML-inside corners rigid	
9'x1'	**22-505-55**
6'x1'	**22-505-65**
4'x1'	**22-505-75**
3'x1'	**22-505-85**
ML-inside corners elastic	
9'x1'	**22-505-60**
6'x1'	**22-505-70**
4'x1'	**22-505-80**
3'x1'	**22-505-90**
ML-outside corners	
9'	**22-505-10**
6'	**22-505-20**
4'	**22-505-30**
3'	**22-505-40**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

90° Corners

For wall thicknesses > 18" but ≤ 24", in addition to extra locks steel rails must also be mounted at all tie elevations except the top two, with at least one flange screw each, and bolted together at the corner with a flange screw 18 and flange nut 100 (Fig. 16.1). There must be at least one panel (1' or wider) adjacent to the corner panels and inside corner.
Flange screws securing rails to panels shall be tightened by turning with a hammer claw or bar until snug, followed by a few hammer blows (minimum 110 ft-lbs torque).
An example corner elevation for walls > 18" but ≤ 24" thick is shown in Fig. 16.2.

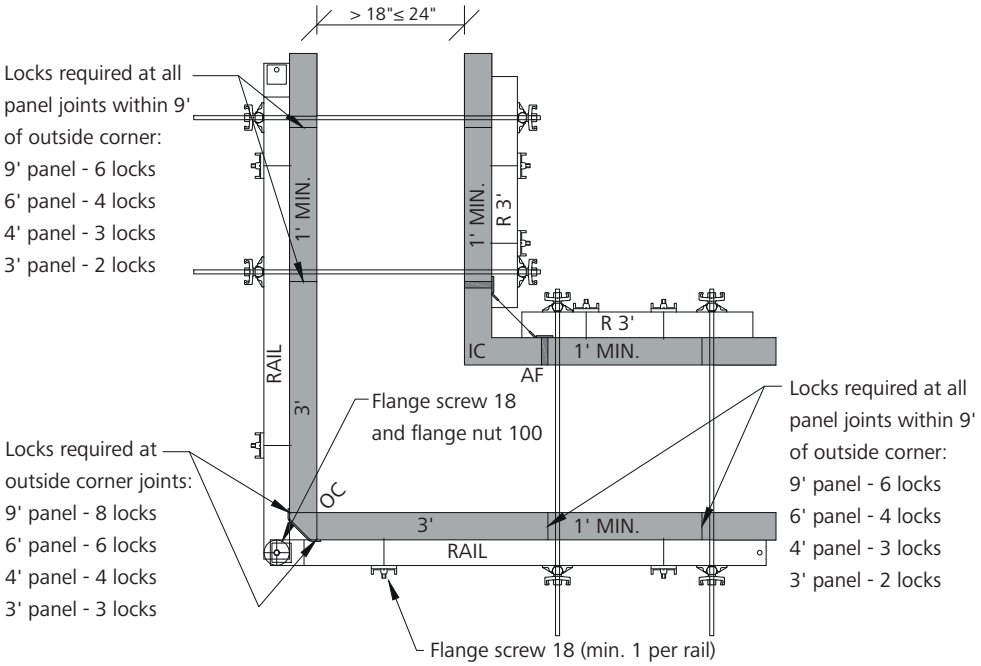


Fig. 16.1 Walls > 18" but ≤ 24" thick

Outside Corners Without Reinforcing Rails

When it is not possible or practical to install corner rail reinforcing for walls over 18" thick, the lock configuration shown in Fig. 16.1 can be used at a reduced maximum allowable concrete pressure of 1100 psf.

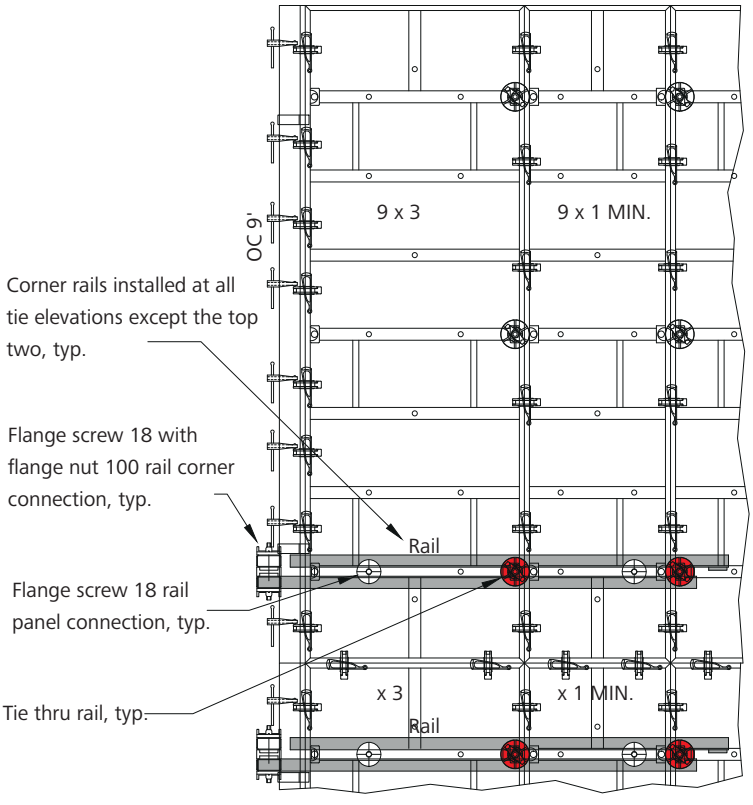


Fig. 16.2 Walls > 18" but ≤ 24" thick - example corner elevation

Description	Ref.-No.
ML-inside corners rigid	
9'x1'	**22-505-55**
6'x1'	**22-505-65**
4'x1'	**22-505-75**
3'x1'	**22-505-85**
ML-inside corners elastic	
9'x1'	**22-505-60**
6'x1'	**22-505-70**
4'x1'	**22-505-80**
3'x1'	**22-505-90**
ML-outside corners	
9'	**22-505-10**
6'	**22-505-20**
4'	**22-505-30**
3'	**22-505-40**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

90° Corners

Multi-Purpose Panels

A multi-purpose panel (MPP) can be used to form 90° outside corners by connecting a standard panel with column clamps. The column clamp is secured with a flange nut 100 or an articulated flange nut 15/120. This method can be used for wall thicknesses from 6" to 13".
The offset hole pattern in the MPP allows for wall thickness changes in 1" increments. Switching between odd and even inch increments is accomplished by simply rotating the MPP 180 degrees.

For wall thicknesses ≤ 9", the maximum allowable concrete pressure is 1350 psf (Fig. 17.1).

For wall thicknesses > 9" but ≤ 13", the maximum allowable concrete pressure is 1100 psf (Fig. 17.2).

Two multi-purpose panels connected with tensioning screws may also be used to form 90° outside corners for walls from 12" to 15" thick (Fig. 17.3 & 17.4). The maximum allowable concrete pressure is 1350 psf. Additional locks are required at the panel joints within 7' of the corner.

Both methods create a tight, rigid connection.

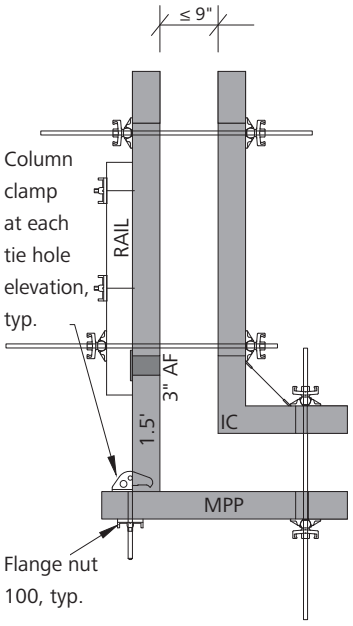


Fig. 17.1

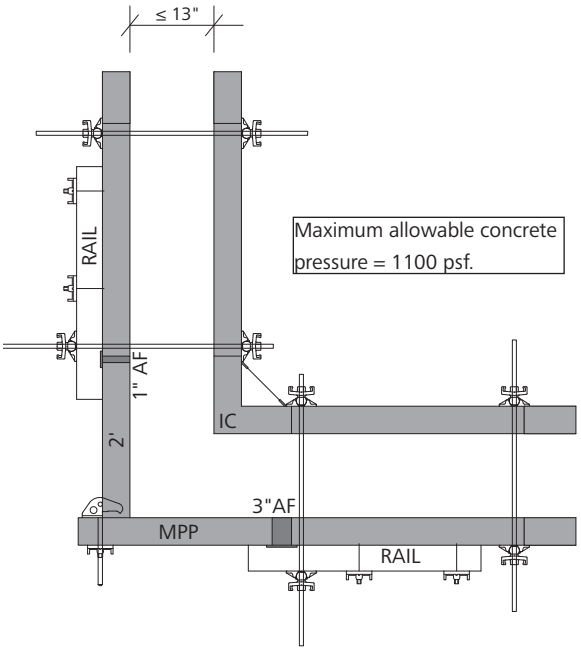


Fig. 17.2

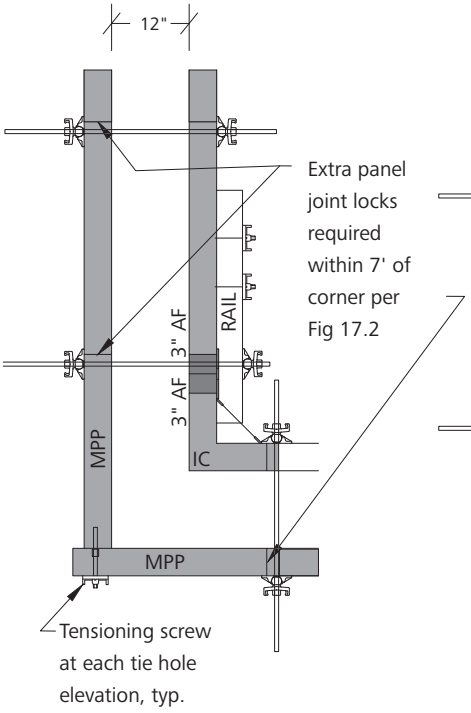


Fig. 17.3

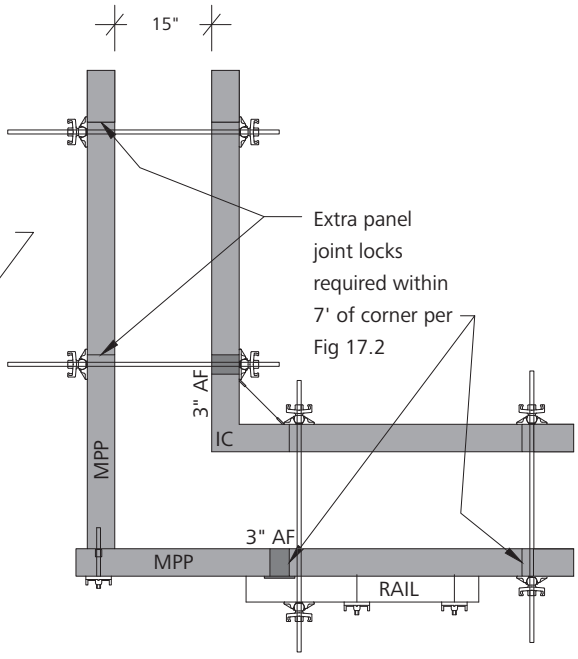


Fig. 17.4

Description	Ref.-No.
ML-inside corners rigid	
9'x1'	**22-505-55**
6'x1'	**22-505-65**
4'x1'	**22-505-75**
3'x1'	**22-505-85**
ML-inside corners elastic	
9'x1'	**22-505-60**
6'x1'	**22-505-70**
4'x1'	**22-505-80**
3'x1'	**22-505-90**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Articulated Corners

Acute and obtuse angled corners are formed using MevaLite articulated inside and outside corners. Steel rails are attached to the multi-function profile with flange screws at each tie hole elevation (Fig. 18.1 & 18.2). The rails at the outside corner must be attached to the panels with at least two flange screws each, one in the panel next to the AOC and one in the adjacent panel. These rails must also be bolted together at their intersection with a flange screw 18 and flange nut 100. Flange screws shall be tightened by turning with a hammer claw or bar until snug, followed by a few hammer blows.

If wood fillers are needed, the panel profiles are connected using Uni-assembly locks.

Side length of articulated outside corner: 5”

Side length of articulated inside corner: 1’

Adjustment range: 70° to 220° (Fig. 18.1-18.3).

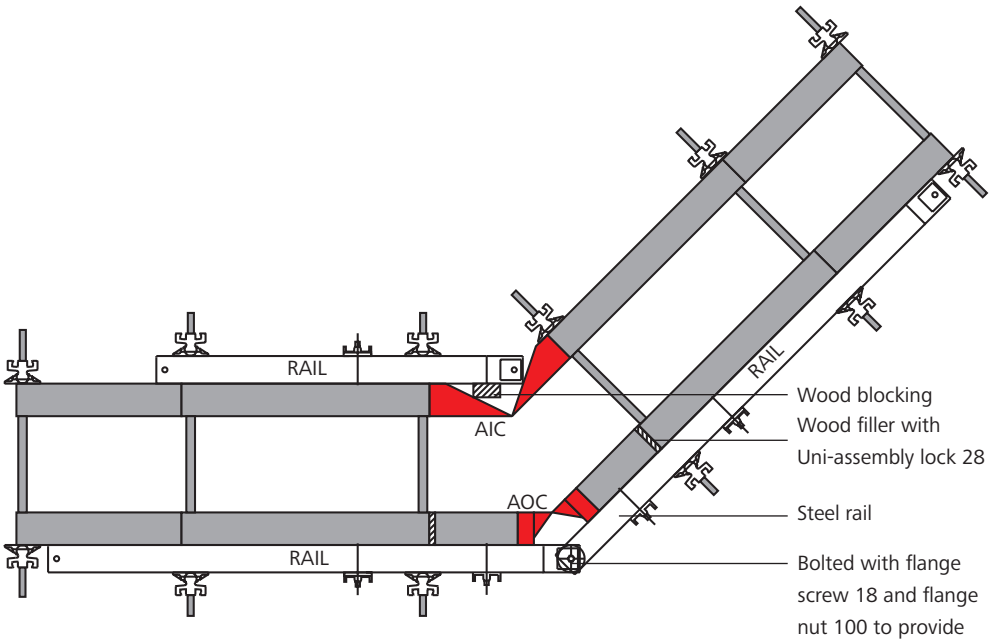


Fig. 18.1

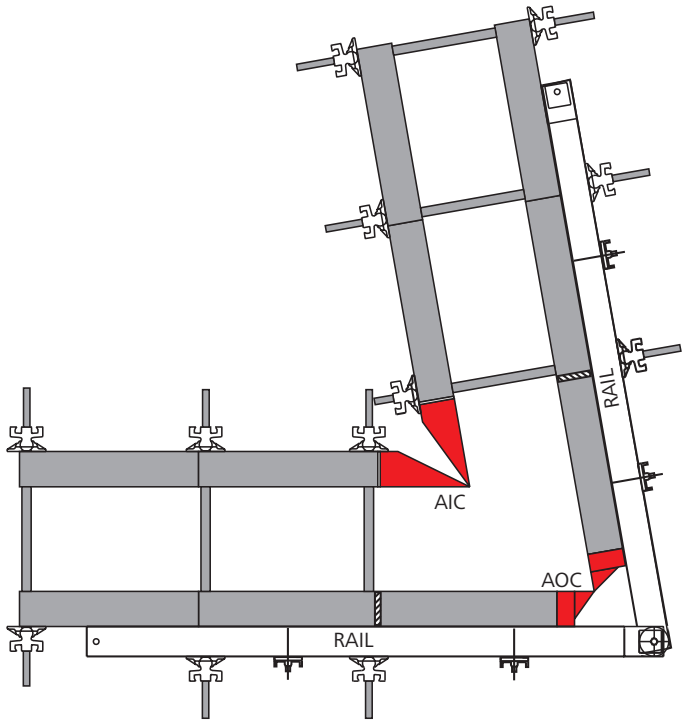


Fig. 18.2

Note:
See the "90° Corners" section for lock requirements at outside corners

Description	Ref.-No.
ML-articulated inside corners	
9’	**22-506-10**
6’	**22-506-20**
4’	**22-506-30**
3’	**22-506-40**
ML-articulated outside corners	
9’	**22-506-60**
6’	**22-506-70**
4’	**22-506-80**
3’	**22-506-90**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Articulated Corners

If the inside angle is >100°, steel rails and wood blocking have to be used on the inside (Fig. 19.1).
To determine the fill distance (y) between the MevaLite articulated outside corner and the first panel where a tie can be used, see the tables on pages 19 and 20.

Form the fill distance with the widest MevaLite panel possible and a wood filler ≤ 6" wide (if needed). Always locate wood fillers next to a tied MevaLite panel.

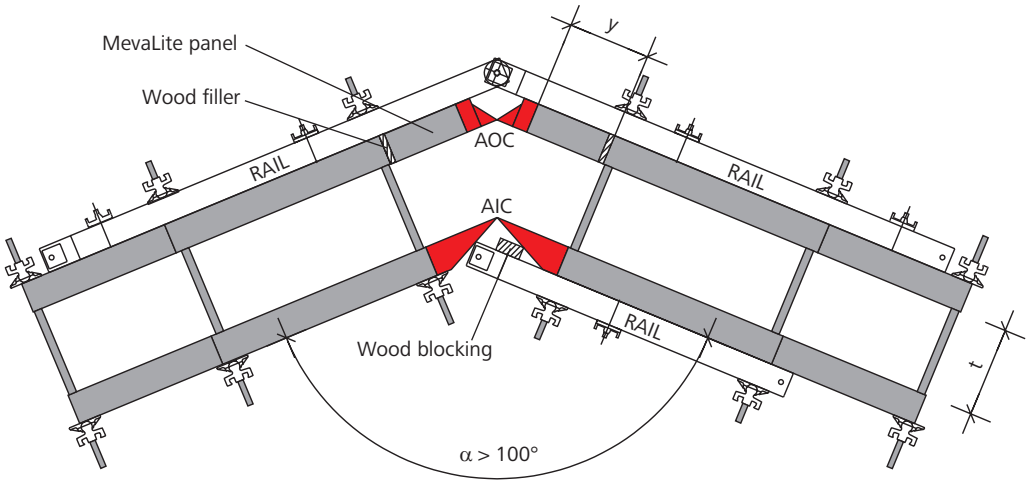


Fig. 19.1

Note:
See the "90° Corners" section for lock requirements at outside corners

Fill Distance, y (inches) for 8" - 15" Wall Thicknesses								
Angle, α	Wall Thickness, t (inches)							
(degrees)	8	9	10	11	12	13	14	15
70	18.4	19.9	21.3	22.7	24.1	25.6	27.0	28.4
75	17.4	18.7	20.0	21.3	22.6	23.9	25.2	26.5
80	16.5	17.7	18.9	20.1	21.3	22.5	23.7	24.9
85	15.7	16.8	17.9	19.0	20.1	21.2	22.3	23.4
90	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0
95	14.3	15.2	16.2	17.1	18.0	18.9	19.8	20.7
100	13.7	14.6	15.4	16.2	17.1	17.9	18.7	19.6
105	13.1	13.9	14.7	15.4	16.2	17.0	17.7	18.5
110	12.6	13.3	14.0	14.7	15.4	16.1	16.8	17.5
115	12.1	12.7	13.4	14.0	14.6	15.3	15.9	16.6
120	11.6	12.2	12.8	13.4	13.9	14.5	15.1	15.7
125	11.2	11.7	12.2	12.7	13.2	13.8	14.3	14.8
130	10.7	11.2	11.7	12.1	12.6	13.1	13.5	14.0
135	10.3	10.7	11.1	11.6	12.0	12.4	12.8	13.2
140	9.9	10.3	10.6	11.0	11.4	11.7	12.1	12.5
145	9.5	9.8	10.2	10.5	10.8	11.1	11.4	11.7
150	9.1	9.4	9.7	9.9	10.2	10.5	10.8	11.0
155	8.8	9.0	9.2	9.4	9.7	9.9	10.1	10.3
160	8.4	8.6	8.8	8.9	9.1	9.3	9.5	9.6
165	8.1	8.2	8.3	8.4	8.6	8.7	8.8	9.0
170	7.7	7.8	7.9	8.0	8.0	8.1	8.2	8.3
175	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7
180	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0

Description	Ref.-No.
ML-articulated inside corners	
9′	**22-506-10**
6′	**22-506-20**
4′	**22-506-30**
3′	**22-506-40**
ML-articulated outside corners	
9′	**22-506-60**
6′	**22-506-70**
4′	**22-506-80**
3′	**22-506-90**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Articulated Corners

If the inside angle is ≤ 100°, steel rails and wood blocking are not required on the inside (Fig. 20.1). To determine the fill distance (y) between the MevaLite articulated outside corner and the first panel where a tie can be used, see tables on pages 19 and 20.

Form the fill distance with the widest MevaLite panel possible and a wood filler ≤ 6" wide (if needed). Always locate wood fillers next to a tied MevaLite panel.

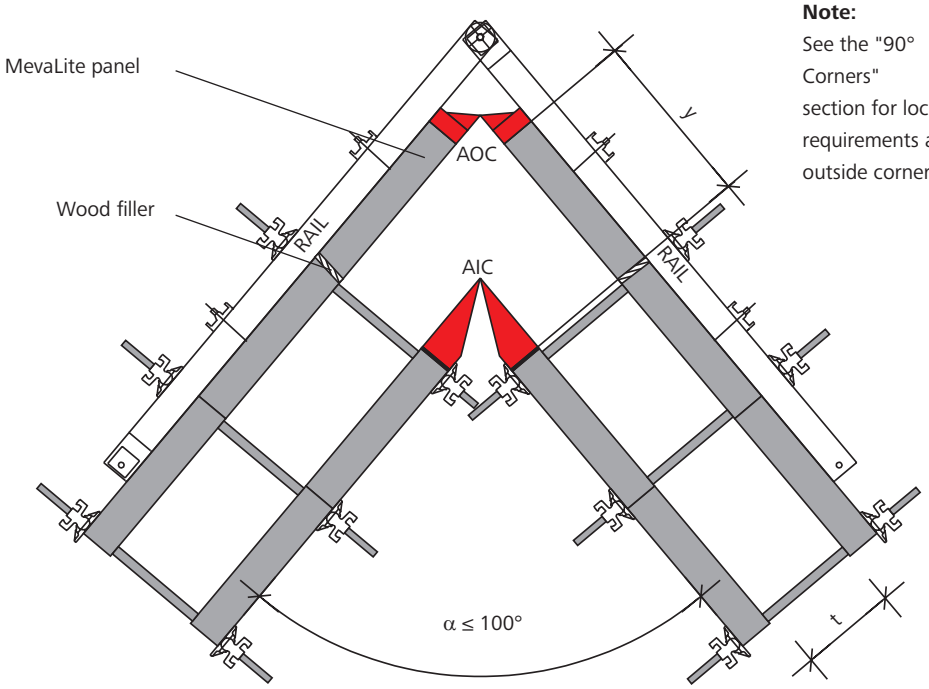


Fig. 20.1

Note:
See the "90° Corners" section for lock requirements at outside corners

Fill Distance, y (inches) for 16" - 24" Wall Thicknesses									
Angle, α	Wall Thickness, t (inches)								
(degrees)	16	17	18	19	20	21	22	23	24
70	29.9	31.3	32.7	34.1	35.6	37.0	38.4	39.8	41.3
75	27.9	29.2	30.5	31.8	33.1	34.4	35.7	37.0	38.3
80	26.1	27.3	28.5	29.6	30.8	32.0	33.2	34.4	35.6
85	24.5	25.6	26.6	27.7	28.8	29.9	31.0	32.1	33.2
90	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0
95	21.7	22.6	23.5	24.4	25.3	26.2	27.2	28.1	29.0
100	20.4	21.3	22.1	22.9	23.8	24.6	25.5	26.3	27.1
105	19.3	20.0	20.8	21.6	22.3	23.1	23.9	24.6	25.4
110	18.2	18.9	19.6	20.3	21.0	21.7	22.4	23.1	23.8
115	17.2	17.8	18.5	19.1	19.7	20.4	21.0	21.7	22.3
120	16.2	16.8	17.4	18.0	18.5	19.1	19.7	20.3	20.9
125	15.3	15.8	16.4	16.9	17.4	17.9	18.5	19.0	19.5
130	14.5	14.9	15.4	15.9	16.3	16.8	17.3	17.7	18.2
135	13.6	14.0	14.5	14.9	15.3	15.7	16.1	16.5	16.9
140	12.8	13.2	13.6	13.9	14.3	14.6	15.0	15.4	15.7
145	12.0	12.4	12.7	13.0	13.3	13.6	13.9	14.3	14.6
150	11.3	11.6	11.8	12.1	12.4	12.6	12.9	13.2	13.4
155	10.5	10.8	11.0	11.2	11.4	11.7	11.9	12.1	12.3
160	9.8	10.0	10.2	10.4	10.5	10.7	10.9	11.1	11.2
165	9.1	9.2	9.4	9.5	9.6	9.8	9.9	10.0	10.2
170	8.4	8.5	8.6	8.7	8.7	8.8	8.9	9.0	9.1
175	7.7	7.7	7.8	7.8	7.9	7.9	8.0	8.0	8.0
180	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0

Description	Ref.-No.
ML-articulated inside corners	
9′	**22-506-10**
6′	**22-506-20**
4′	**22-506-30**
3′	**22-506-40**
ML-articulated outside corners	
9′	**22-506-60**
6′	**22-506-70**
4′	**22-506-80**
3′	**22-506-90**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Stripping Corners

Stripping corners are designed specifically for use when forming shafts (Fig. 21.1 - 21.3), stairwell cores and in confined working conditions.
The corner is designed to allow the corner to retract inward for stripping, while still keeping the can intact so that no disassembly or re-assembly of the inner formwork between floors is required (Fig. 21.3).
The corner is designed in three pieces to permit inward movement when the lever is pushed upwards. This contraction allows for the bond between the formwork facing and the concrete to be broken more easily than with traditional core forming.
After stripping and cycling is complete, the corner can be reset with a few simple steps and the formwork is ready for the next pour (for details please see next pages).
Be sure to tape all seams on each corner and plug all unused tie holes prior to oiling the face to keep concrete from filling the inner channel.

Please note:
When lifting, care should be taken not to overload the crane hooks!

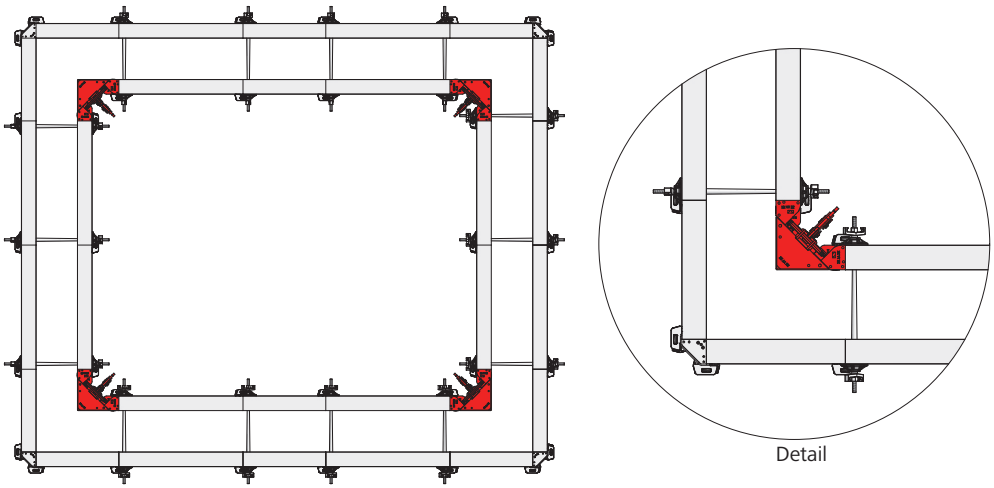


Fig. 21.1

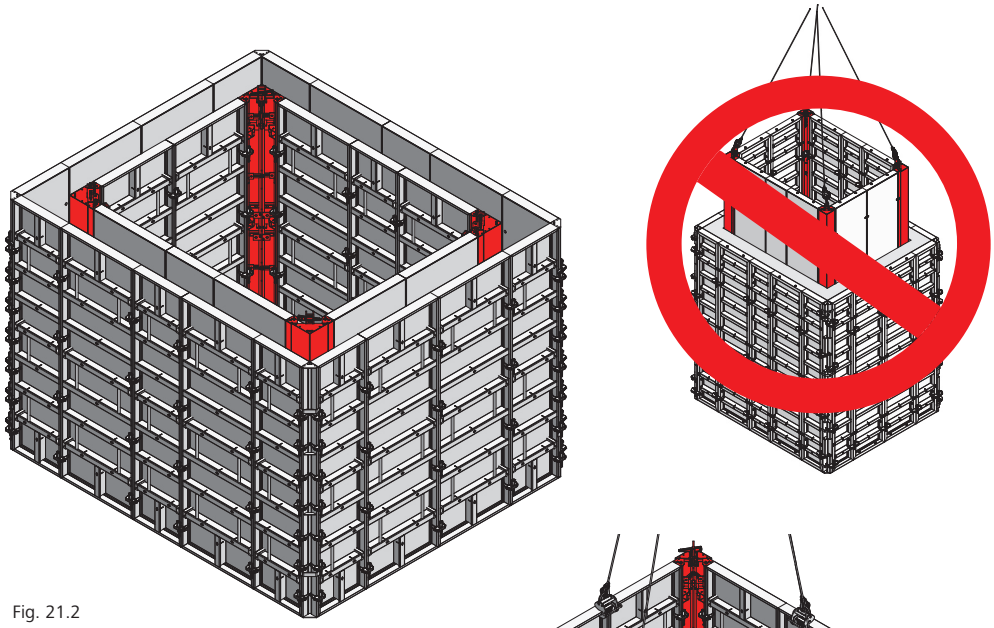


Fig. 21.2

Attention:
Lifting eyes on Stripping corners are not designed to be used when lifting large formwork assemblies and platforms. They are included for handling of stripping corners only, or assemblies weighing less than 4400 lbs, shared equally between 4 lifting eyes. When formwork is used in conjunction with flipper platforms, lifting is done using the high capacity lifting points provided on the flipper platform.

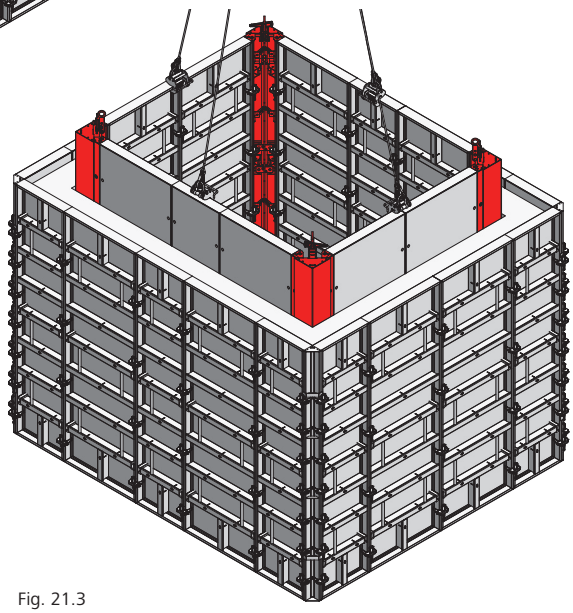


Fig. 21.3

Description	Ref.-No.
ML-stripping corners	
9'	**22-508-00**
6'	**22-508-10**
4'	**22-508-20**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Stripping Corners - Lever Tool

Stripping the corner:

To strip the corners, remove the wedge from the top corner (Fig. 22.1 and 22.2).

Apply the lever tool to the top of the corner and place the pin of the tool into the corner plate. With the pin attached to the plate, push up the bar to slide the mechanism up the corner so that it pulls the corners' side profiles inward (Fig. 22.3, and 22.4).

Once the inner mechanism of the corner is pulled all the way to the top, the stripping corner is retracted and is in its stripped position (Fig. 22.5).

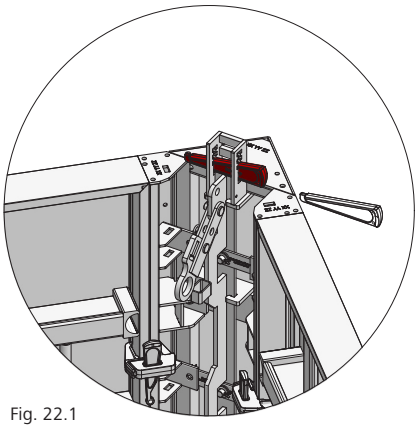


Fig. 22.1

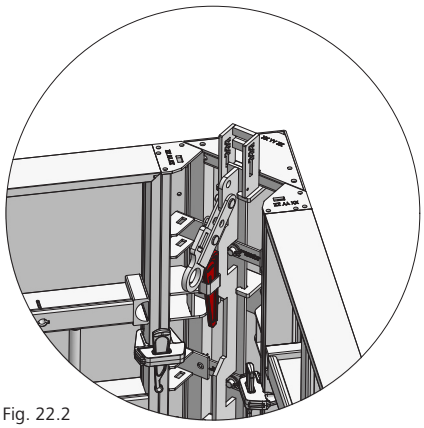


Fig. 22.2

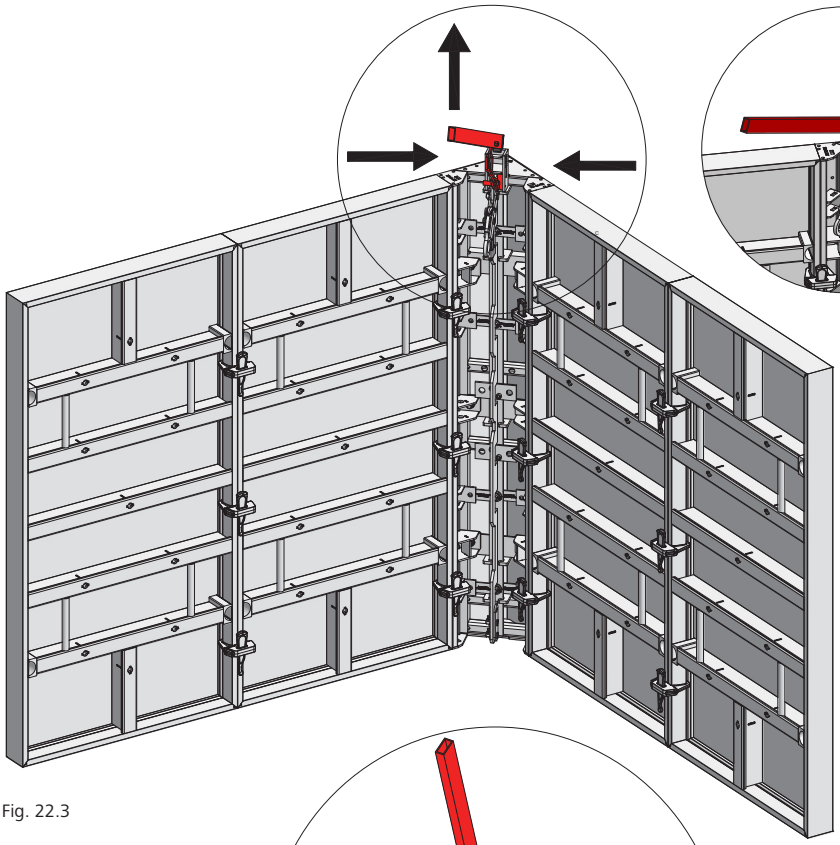


Fig. 22.3

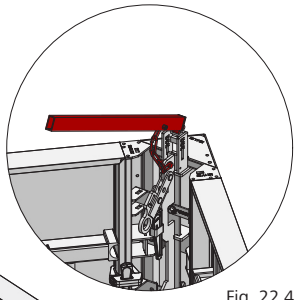


Fig. 22.4

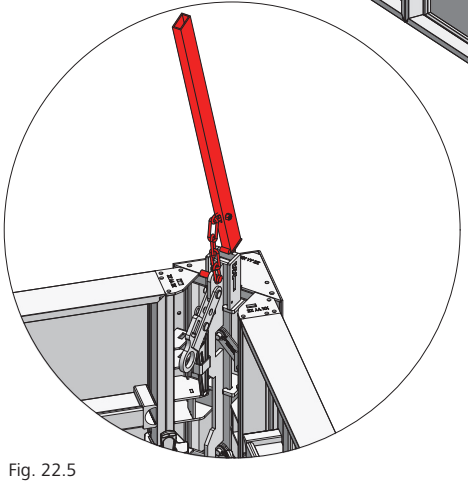


Fig. 22.5

Description	Ref.-No.
ML-stripping corners	
9'	**22-508-00**
6'	**22-508-10**
4'	**22-508-20**
Stripping corner lever tool	**2-500-2250980**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Stripping Corners - Lever Tool

Resetting the corner:

Remove the pin to the connecting plate that is at the bottom of the corner.

Place the pin to the lever tool in the plate of the corner (Fig. 23.1).

Push the bar down and away from the corner to slide the inner mechanism down, so that it pushes the corners' side profiles outward (Fig. 23.2).

Once the inner mechanism is pushed all the way down, the corner is reset to the expanded pouring position.

The wedge can be driven in at the top of the stripping corner with a few hammer blows for assistence in resetting the corner to expanded position.

Be sure to replace the wedge at the top of the corner to lock the corner into position (Fig. 23.3).

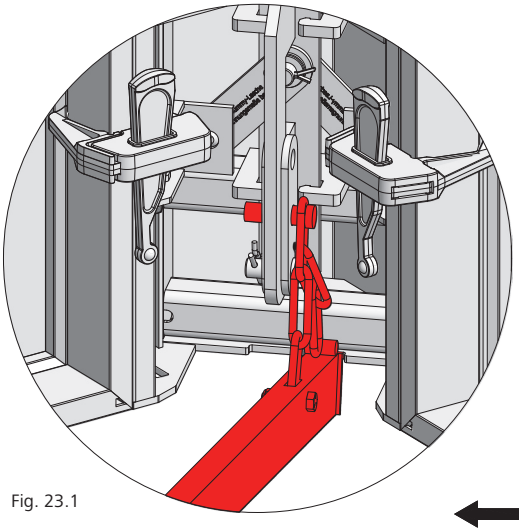


Fig. 23.1

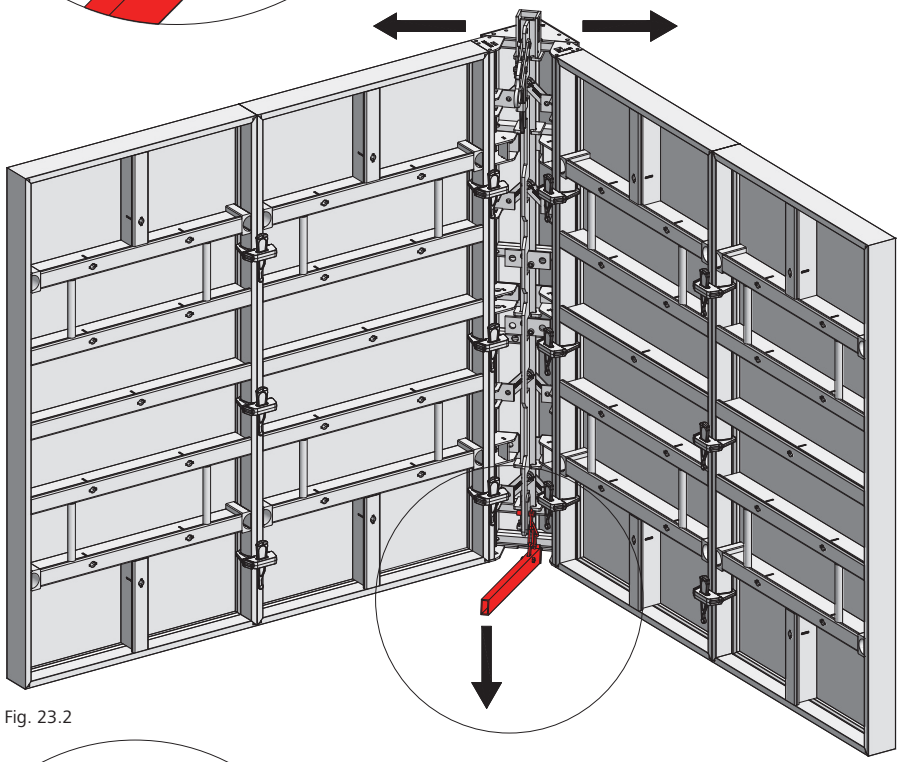


Fig. 23.2

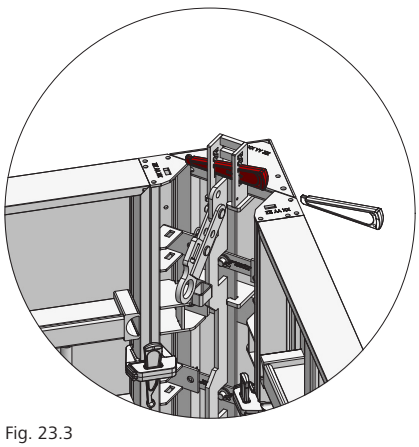


Fig. 23.3

Description	Ref.-No.
ML-stripping corners	
9'	**22-508-00**
6'	**22-508-10**
4'	**22-508-20**
Stripping corner lever tool	**2-500-2250980**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Stripping Corners - Retract and Reset Tool

Stripping Corner - Retract and Reset Tool

The retract and reset tool (Fig. 24.1) is used to easily activate the stripping corner from above with an impact wrench, a ratchet or a wrench.
The retract and reset tool has a hexagonal nut that is operated with tools with a width across flats of 36 mm (1 17/16").

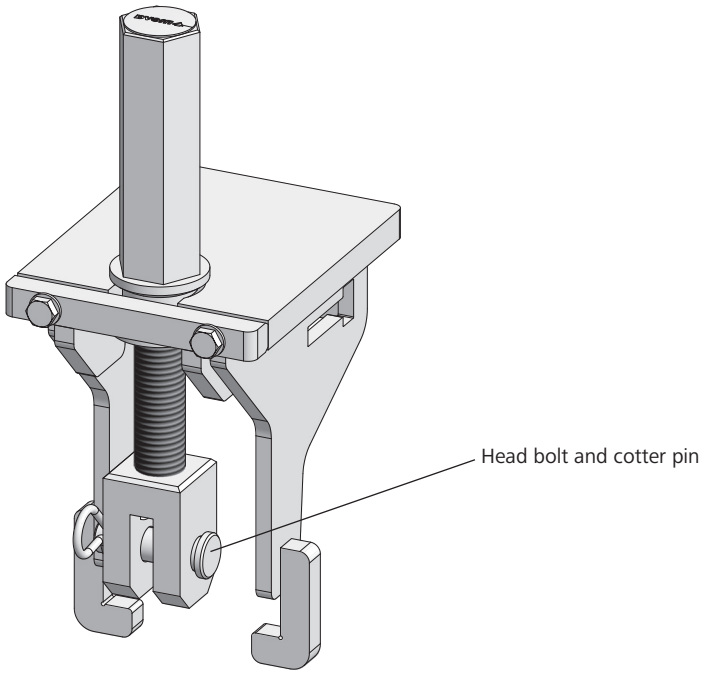


Fig. 24.1

Assembly

Temporarily remove wedge from top of stripping corner, then place the retract and reset tool onto the connecting device at the top of the stripping corner.

Connect the retract and reset tool to the stripping corner with the head bolt and cotter pin that are both integrated into the tensioning screw of the retract and reset tool (Fig. 24.2).

Lock the retract and reset tool to the stripping corner by driving the stripping corner's wedge with a few hammer blows into the opening of the retract and reset tool (Fig. 24.2).

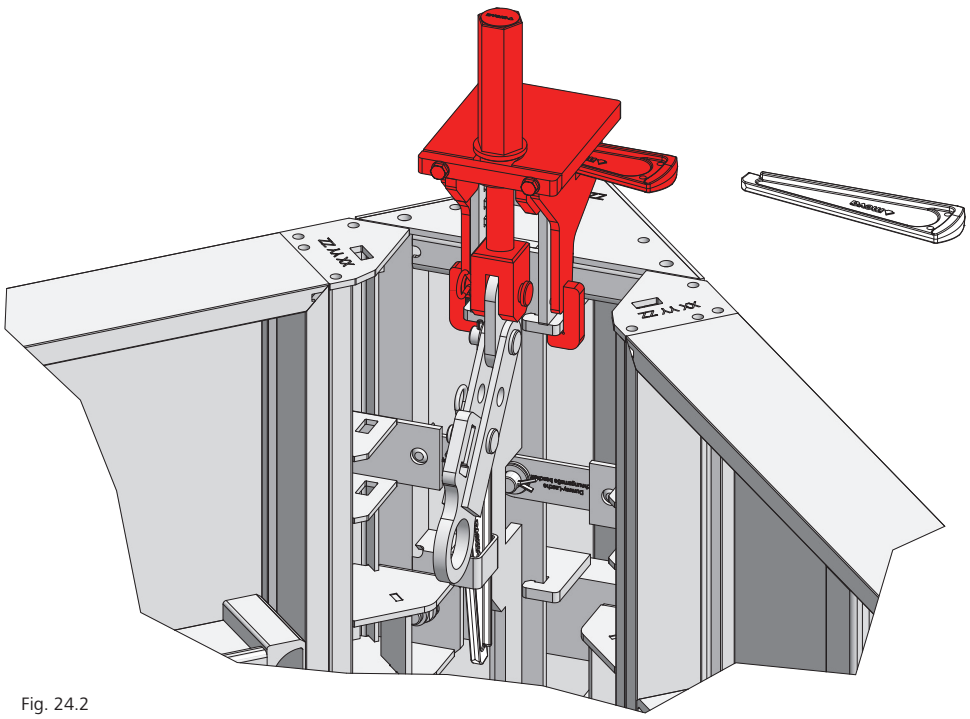


Fig. 24.2

Description	Ref.-No.
ML-stripping corners	
9'	**22-508-00**
6'	**22-508-10**
4'	**22-508-20**
Stripping corner retract and reset tool	**29-306-32**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Stripping Corners - Retract and Reset Tool

Stripping:

Turning the hexagonal nut with an impact wrench (Fig. 25.1), a ratchet (Fig. 25.2) or a wrench moves the stripping mechanism upwards.

This activates the stripping corner and separates the shaft formwork from the concrete walls (Fig. 25.3 and Fig. 25.4).

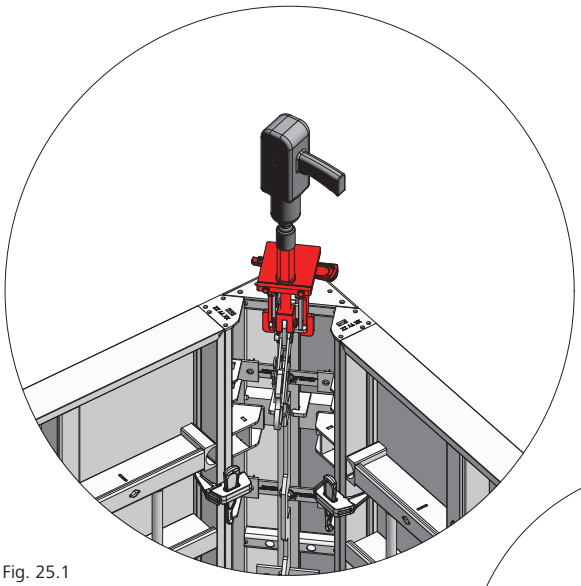


Fig. 25.1

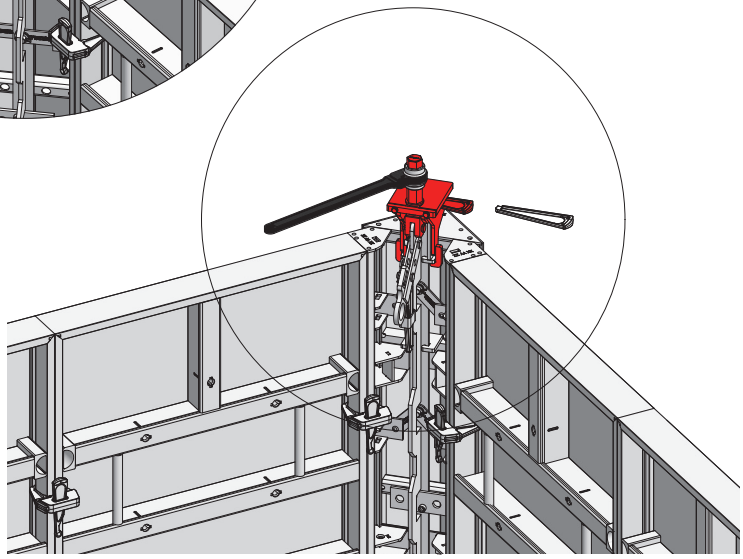


Fig. 25.2

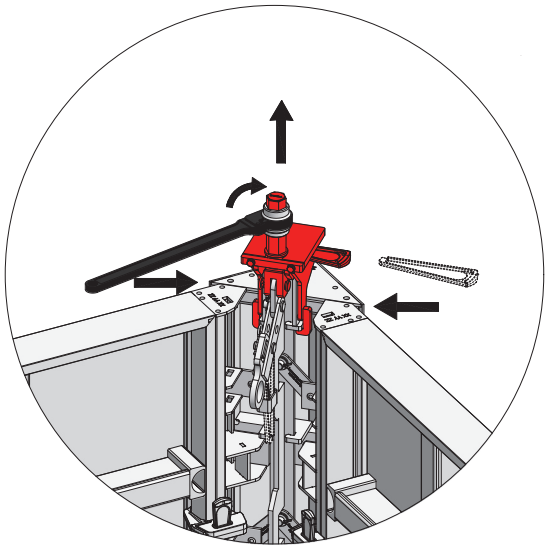


Fig. 25.3

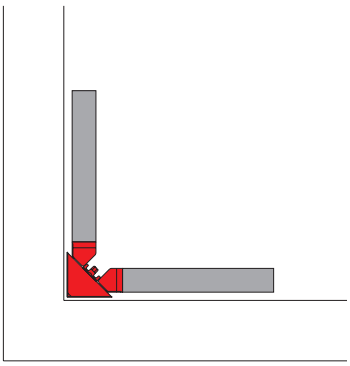


Fig. 25.4 Retracted (stripping) position

Description	Ref.-No.
ML-stripping corners	
9'	**22-508-00**
6'	**22-508-10**
4'	**22-508-20**
Stripping corner retract and reset tool	**29-306-32**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Stripping Corners - Retract and Reset Tool

Re-setting:

To reset the corner again, just push the stripping mechanism downwards by using the same tools (Fig. 26.1 - Fig. 26.4).

Once the inner channel is pushed all the way down, the corner is reset into place.
Remove the tool and reinstall the wedge.

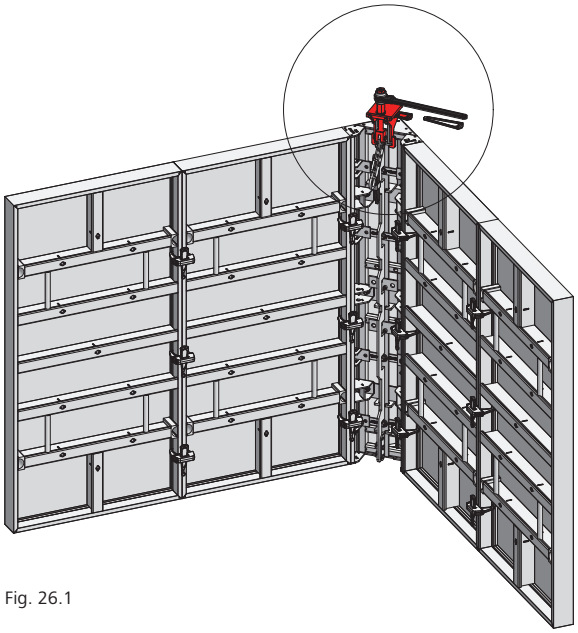


Fig. 26.1

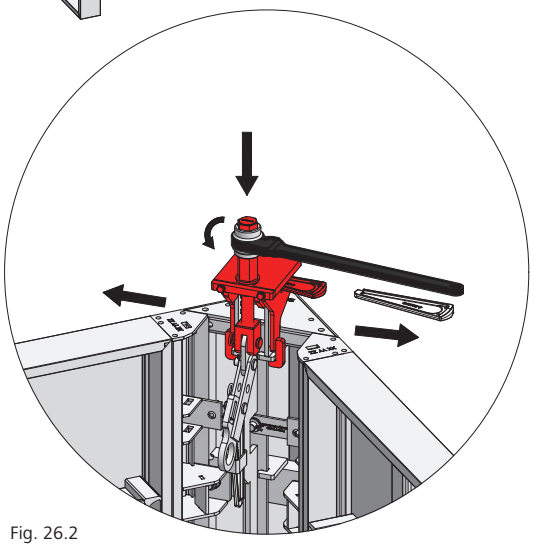


Fig. 26.2

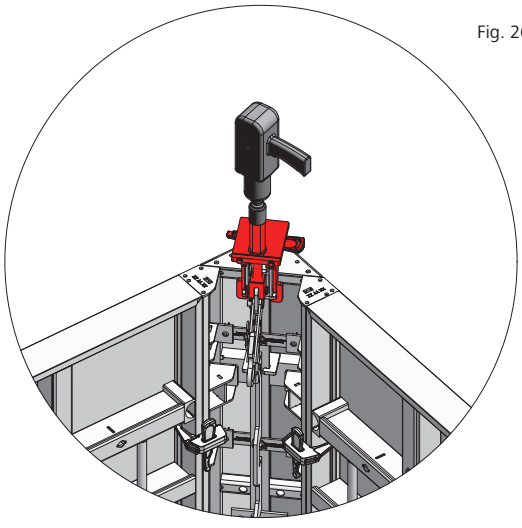


Fig. 26.3

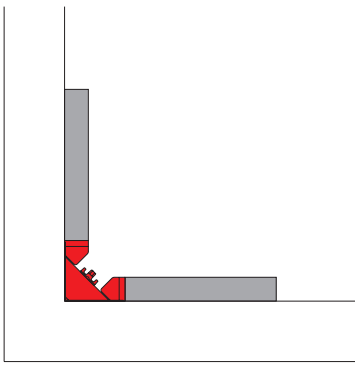


Fig. 26.4 Expanded (reset/pouring) position

Description	Ref.-No.
ML-stripping corners	
9'	**22-508-00**
6'	**22-508-10**
4'	**22-508-20**
Stripping corner retract and reset tool	**29-306-32**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**

Stripping Corners

Stacking/Connecting stripping corners:

To stack corners, make sure that you have a level surface and both corners are in the expanded (ready to pour) position.
Slide the top of one corner under the mechanism of the other corner.
Once both mechanisms are lined up, the corners can be connected with the connecting plate and head bolt with cotter pin (Fig. 27.1).
Then attach the corners to the intended formwork gang using the provided formwork locks (clamps) to keep the corners from separating.

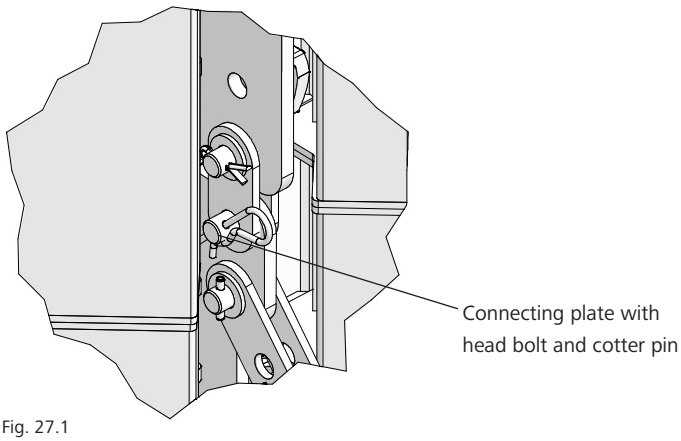


Fig. 27.1

The ML stripping corner can also be used for stripping of panels between corners inside a structure. In this case, the stripping corner is used to reduce the compression between the panels, so they can easily be removed from the poured wall between the corners.

Steps:

1. Remove the assembly locks connecting the stripping corners to the panels (Fig. 27.2).

2. Activate the ML stripping corner (Fig. 27.3).

3. Lift the stripping corners off, then strip the panels (Fig. 27.4).

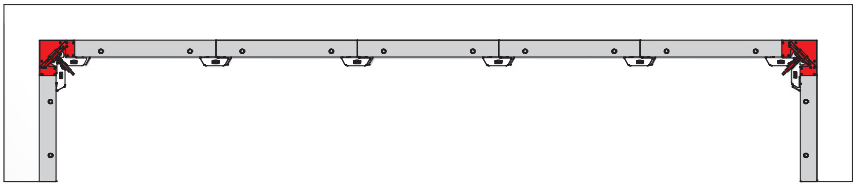


Fig. 27.2

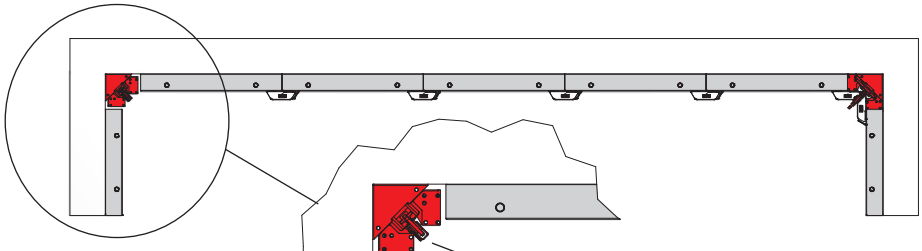


Fig. 27.3

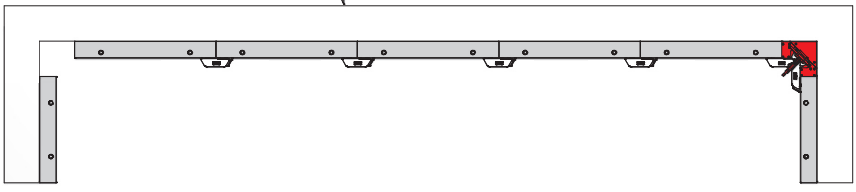


Fig. 27.4

Columns

Columns with Multi-Purpose-Panels:

Multi-purpose panels can be used to form columns of varying sizes up to 24″ in 1″ increments. The multi-adjustment profiles allow for either even inch or odd inch sizes depending on the orientation of the panels.

When using tensioning screws, the sizes can range from 1″ to 24″ (Fig. 28.1 and 28.2). The screw is passed through the multi-adjustment profile, and screwed into the threaded sleeve in the side of the connecting panel. The maximum allowable concrete pressure is 1350 psf.

When using column clamps, the sizes can range from 1″ to 22″ (Fig. 28.3 and 28.4). The column clamp is secured with a flange nut 100 (an articulated flange nut 15/120 may also be used). The maximum allowable concrete pressure is 1350 psf for column sizes ≤ 19″, and 1200 psf for column sizes over 19″ (with rectangular columns the longer side controls).

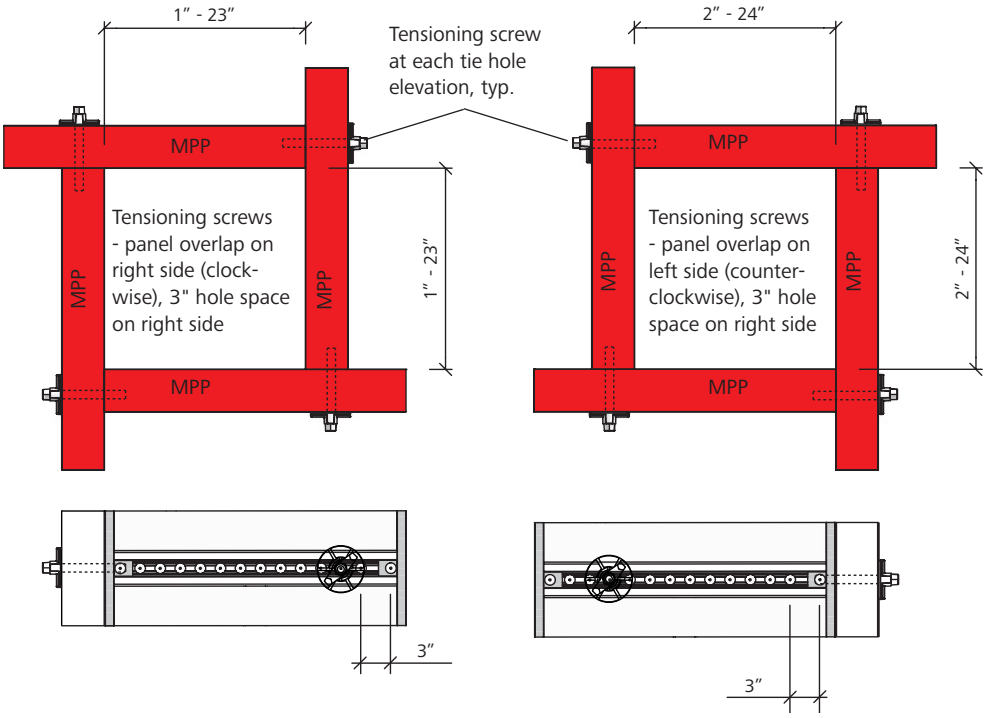


Fig. 28.1

Fig. 28.2

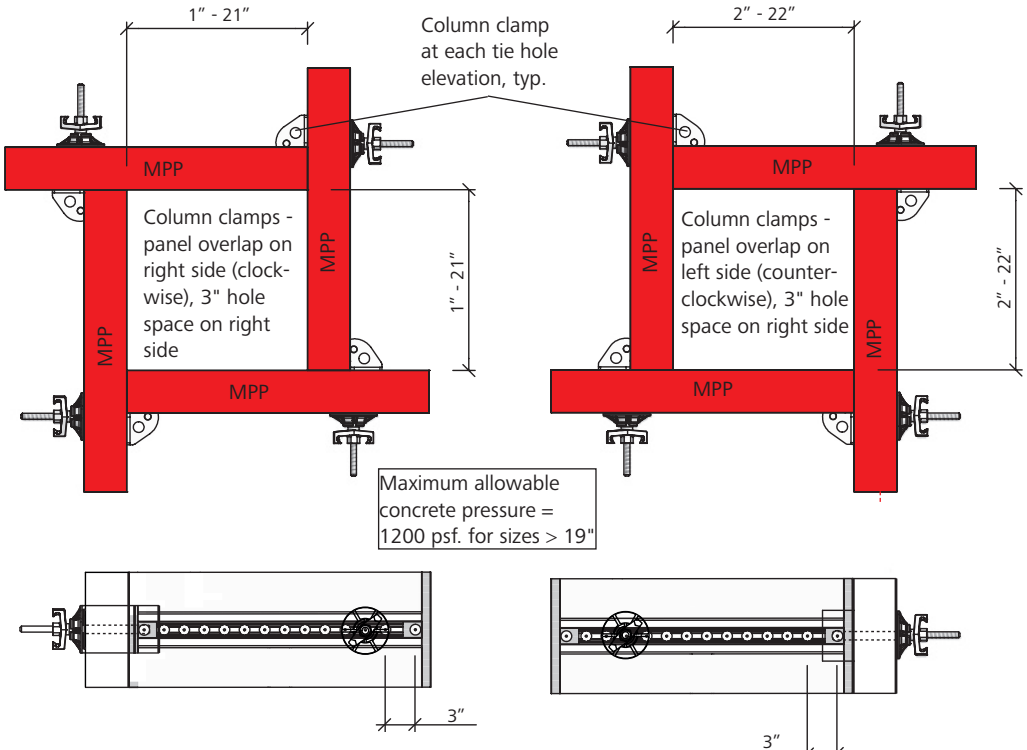


Fig. 28.3

Fig. 28.4

Description	Ref.-No.
ML-multi-purpose panels	
9'x2.5'	**22-500-25**
6'x2.5'	**22-501-25**
4'x2.5'	**22-502-25**
3'x2.5'	**22-503-25**
EA-assembly lock	**29-205-50**
Uni-assembly lock 22	**29-400-85**
ML-column clamp	**29-210-70**
ML-tensioning screw	**29-210-80**
Articulated flange nut 15/120	**29-900-10**

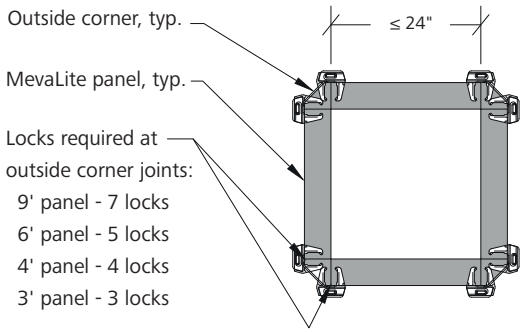
Columns

Columns with Standard Panels and Outside Corners:

Columns can also be formed using standard panels and outside corners. To form columns with sizes in between the MevaLite panel widths, the next largest panel size is used and the forms are furred out on the inside.

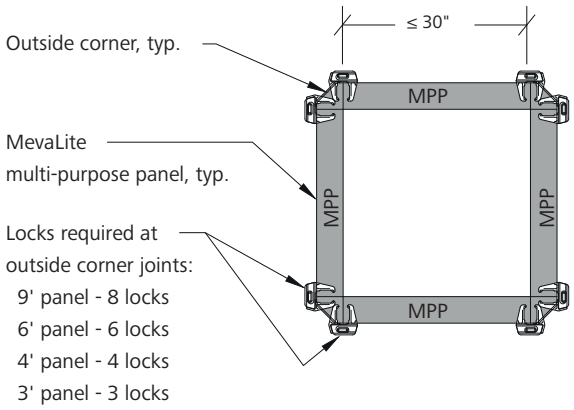
Columns can only be formed with panels oriented vertically (panel cross members horizontal).
The outside corner connections require more assembly locks than standard panel connections. The connection requirements and maximum allowable concrete pressure depend on the column size (with rectangular columns the longer side controls) - see Figures 29.1 - 29.3.

*For columns > 30" to ≤ 36" 1350 psf may be achieved with the addition of reinforcing rails. Refer to MEVA engineering for guidance.



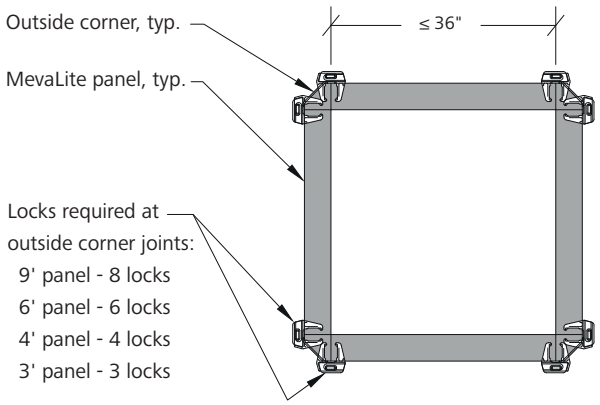
Maximum allowable concrete pressure = 1350 psf.

Fig. 29.1 Column sizes up to 24"



Maximum allowable concrete pressure = 1350 psf.

Fig. 29.2 Column sizes up to 30"



Maximum allowable concrete pressure = 1100 psf. *

Fig. 29.3 Column sizes up to 36"

Fillers

MevaLite Fillers

Fillers that are 2"or 3" wide can be formed using MevaLite aluminum fillers without additional steel rails (Fig. 30.1).

1" MevaLite aluminum fillers require steel rail supports (see "Job-Built Fillers" below).

Job-Built Fillers

Fillers up to 6.5" wide can be formed using 4 1/4" deep lumber and MevaLite panels. Uni-assembly locks are used to connect the adjacent panels with the filler in between. Fillers wider than 6.5" can be formed using 3/4" plywood with 3 1/2" deep lumber. Refer to the remainder of this section for additional filler information and requirements.

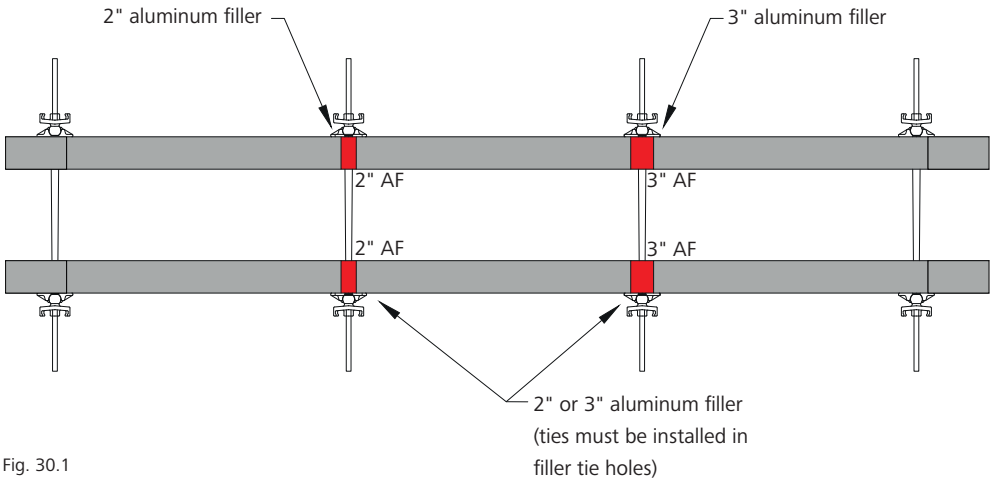


Fig. 30.1

Fillers Up to 6.5" Wide

Steel rails are required at each tie hole elevation. They are installed either between two ties (Fig. 30.2), or cantilevered over one tie to support the filler and adjacent MevaLite panel (Fig. 30.3). The rail supported panel next to the filler can be up to 3' wide.

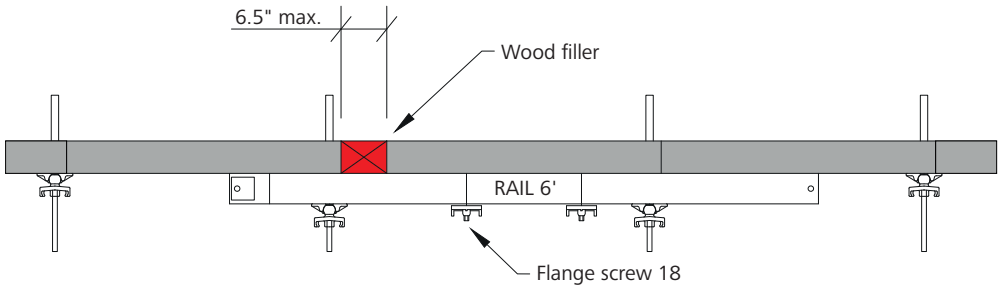


Fig. 30.2 Fillers up to 6.5" wide, rails between two ties

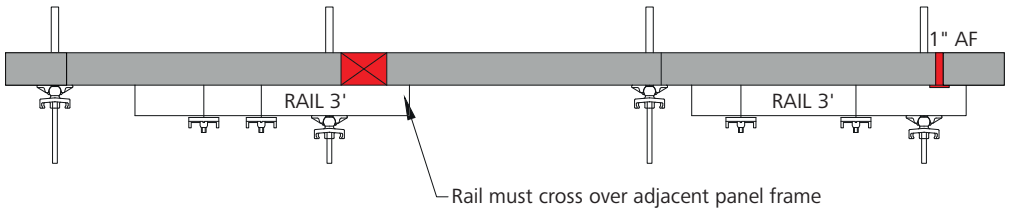
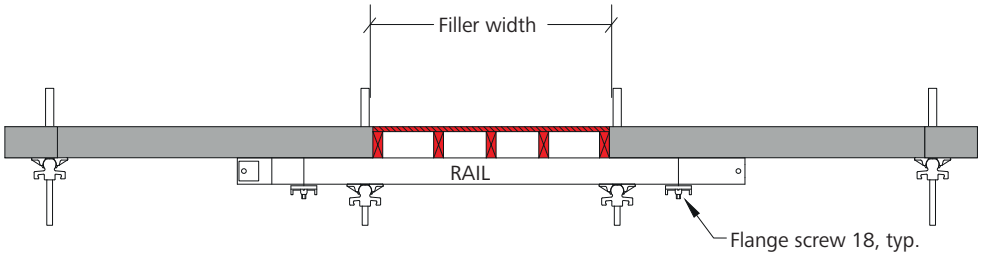


Fig. 30.3 Fillers up to 6.5" wide, cantilevered rails

Fillers

Fillers over 6.5" wide
Job-built fillers over 6.5" wide require steel rails at each tie hole elevation to support the filler. The maximum filler width is determined using the table in Fig. 31.1.

The job-built filler must be designed and constructed to resist the intended loads. Tensile load transfer must be considered when fillers are located near bulkheads or outside corners. Additional fasteners, bracing, or struts may be required.



Steel Rail Maximum Filler Width	
Concrete Pressure	Maximum Filler Width
1350 psf	40"
1100 psf	44"
850 psf	48"

Steel Rails ≤ 8' long: Maximum allowable bending moment = 7.62 kip-ft, Ix = 5.3 In^4

Fig. 31.1 Rails supporting fillers over 6.5" wide

Intersections

Intersecting walls are formed using inside corners and standard panels (Fig. 32.1 - Fig. 32.4). Fillers are used to make adjustments for different wall thicknesses.
Steel rails may be required depending on the filler configuration (see the "Fillers" section for additional information and requirements).
It may be necessary to utilize threadbar ties in some corner locations when other tie systems are used so they can be shifted far enough to eliminate interferences.
In some cases the need for steel rails can be avoided by utilizing rigid inside corners, which can be tied through the corners (Fig. 32.5).

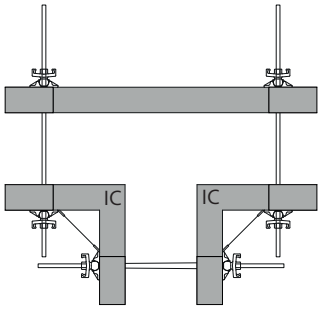


Fig. 32.1

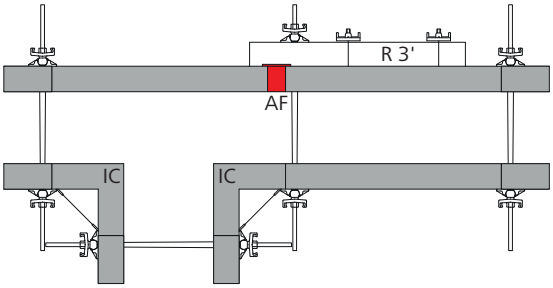


Fig. 32.2

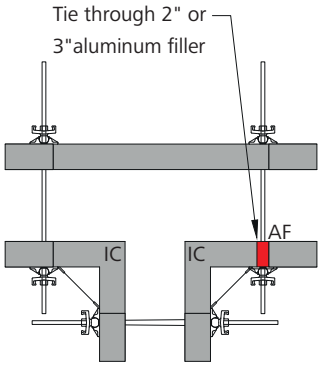


Fig. 32.3

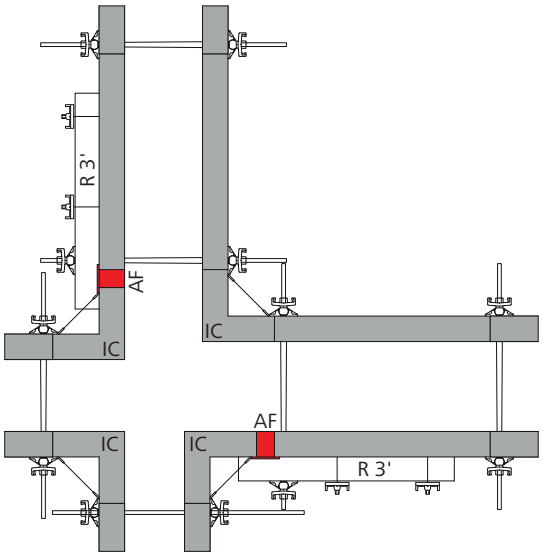


Fig. 32.4

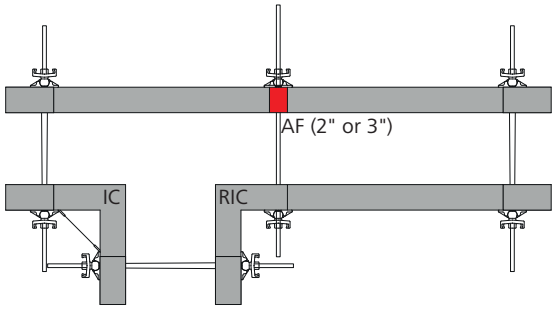


Fig. 32.5

Bulkheads

Bulkheads can be formed using either bulkhead brackets (Fig. 33.1), or steel rails with column clamps and ties.

Bulkhead Brackets

Bulkhead brackets support loads from the bulkhead pressure and also contain integrated ties. Bulkhead brackets 60/23 can be used for walls up to 30" thick. The bulkhead bracket safe working load limits are as follows:

Shear/End Reaction = 2666 lb.

Tension = 2666 lb.

Bending Moment = 5091 ft-lb.

Brackets may not be spaced closer together than the panel cross members.

The bulkhead brackets are installed as shown in Fig. 33.2 - Fig. 33.4 for vertical panels, and as shown in Fig. 33.6 for horizontal panels. The maximum wall thicknesses and vertical end panel widths are determined from the table in Fig. 33.5. The table is based on a concrete pressure of 1350 psf. Since horizontal panels are tied internally the maximum end panel width applies to vertical panels only. Horizontal panels when not used at top of gang may need additional bulkhead brackets, other than shown in Fig 33.6. In these cases, the user should verify the applied loads based on formwork pressure, wall width, and bulkhead bracket spacing.

The job-built bulkhead must be designed and constructed to resist the intended loads.

Description	Ref.-No.
Bulkhead bracket 60/23	29-105-60

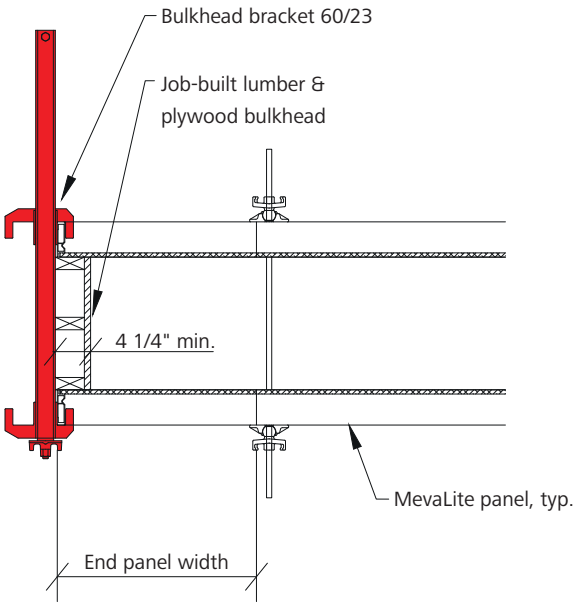


Fig. 33.1

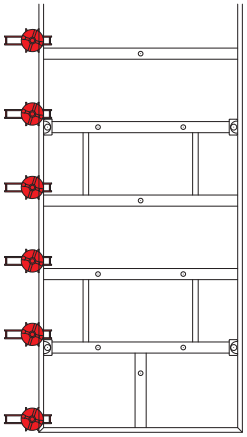


Fig. 33.2 Arrangement A

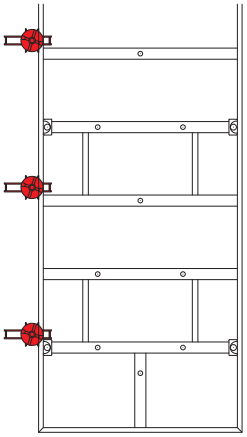


Fig. 33.3 Arrangement B

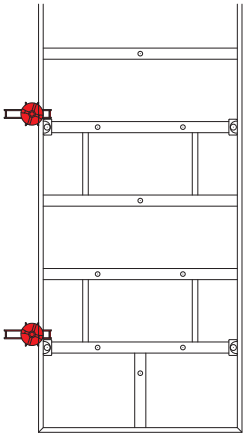


Fig. 33.4 Arrangement C

	End Panel Width				
Wall Thickness	3.0'	2.5'	2.0'	1.5'	1.0'
30"	A	A	A	A	A
28"	A	A	A	A	A
26"	A	A	A	A	A
24"	A	A	A	A	A
22"	A	A	A	A	A
20"	A	A	B	B	B
18"	A	A	B	B	B
16"	A	A	B	B	B
14"	A	A	B	C	C
12"	A	A	B	C	C
10"	A	A	B	C	C
8"	A	A	B	C	C

Fig. 33.5

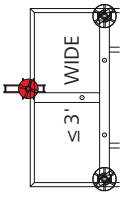


Fig. 33.6

Bulkheads

Rails, Column Clamps, & Ties

Rails are secured to the panels using column clamps and flange nuts (Fig. 34.1). For steel rails up to 8' long the allowable bending moment is 7.62 kip-ft, and Ix = 5.3 in⁴.

The column clamp's safe working load in tension is 4750 lb on MevaLite panels. Column clamps must be installed so that they straddle the panel cross members.

The ends of the vertical bulkhead panels are tied by installing taper ties or threadbars using tie claws so that the ties clear the bulkhead (Fig. 34.2).

Caution:

Never use taper ties or threadbars as a means of supporting bulkheads where shear loads would be applied.

Ties with tie claws are not required on horizontal panels since they are tied internally.

Steel rails and ties are to be installed as shown in Figure 34.3.

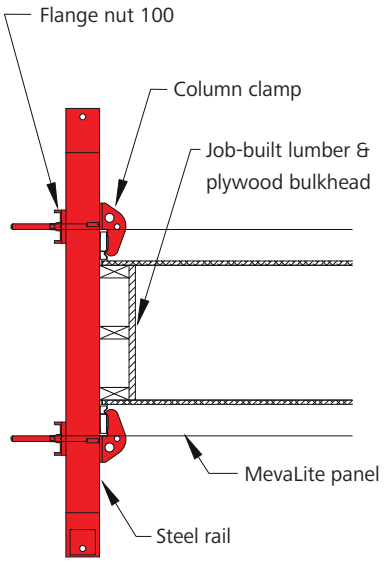


Fig. 34.1 Rails & column clamps

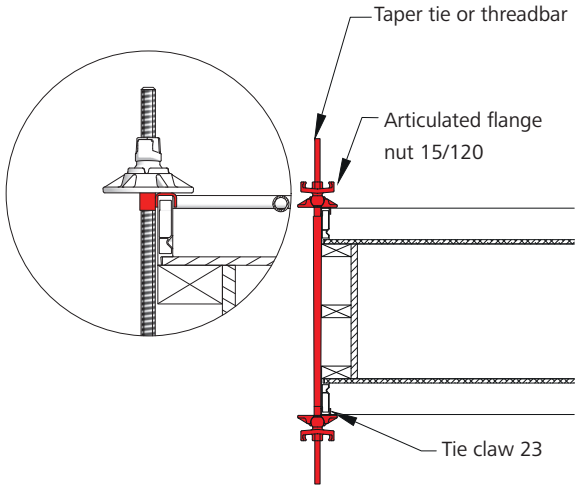
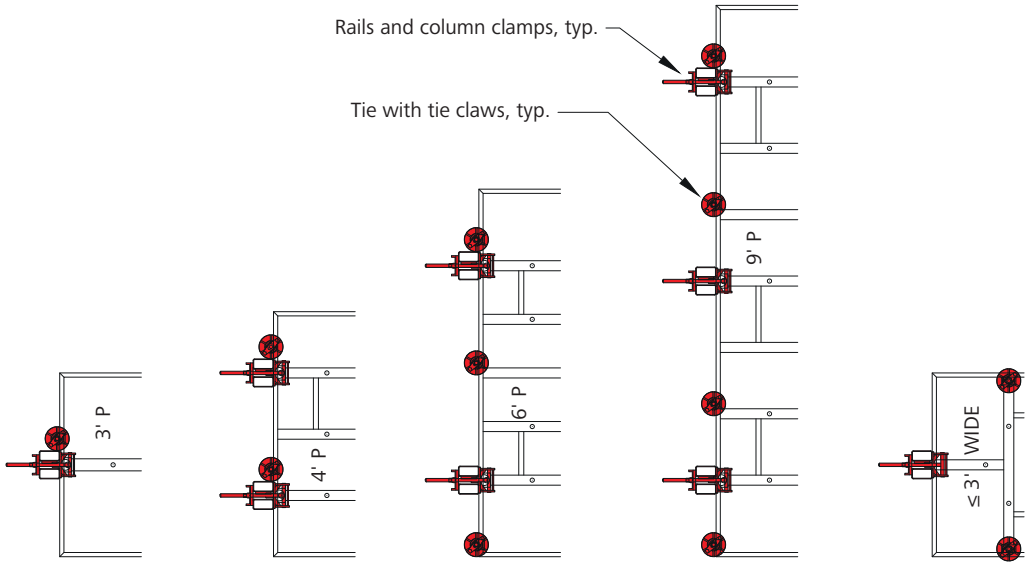


Fig. 34.2 End ties



Maximum wall thickness = 24" @ 1350 psf concrete pressure

Fig. 34.3 Steel rail bulkhead support

Description	Ref.-No.
ML-column clamp	**29-210-70**
Flange nut 100	**29-900-20**
Steel rail 4'	**2-500-2331020**
Steel rail 6'	**2-500-2331030**
Steel rail 8'	**2-500-2331035**
Tie claw 23	**29-901-44**
Articulated flange nut 15/120	**29-900-10**

Adjoining Walls

These figures show example formwork details at adjoining walls. Details for lap conditions at a previous pour are shown in Figures 35.1 and 35.2.

The detail for formwork perpendicular to an existing wall is shown in Fig. 35.3. Three foot rails are used so that both tubes of the rail section support the filler.

Unbalanced forces on the formwork system must be considered when these conditions occur near a corner or bulkhead. Ties or anchors to the existing structure may be required. The existing structure may also need to be evaluated for imposed loads by the engineer of record.

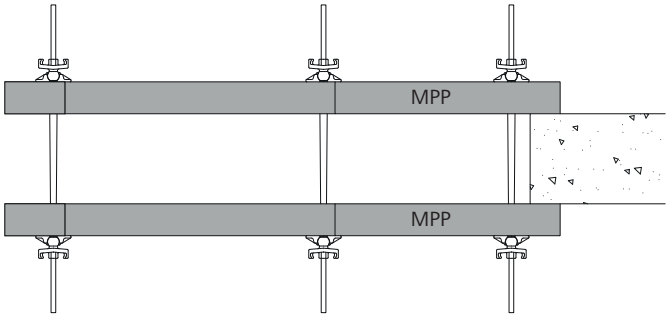


Fig. 35.1

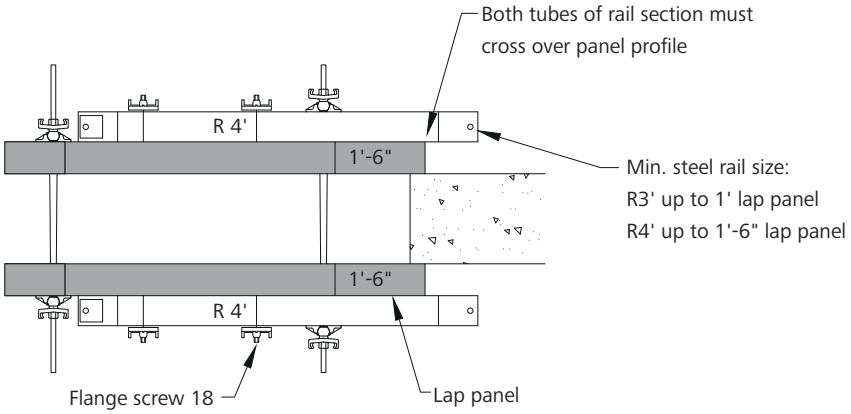


Fig. 35.2

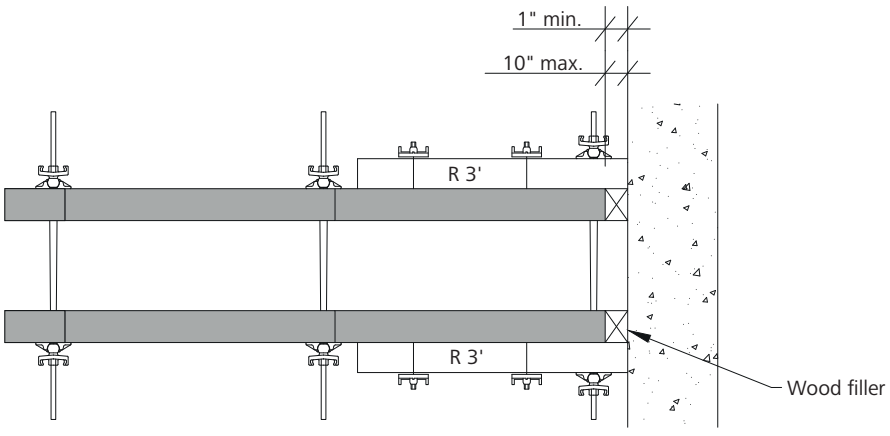


Fig. 35.3

Pilasters

Pilasters are easily formed using panels and inside corners.
The pilaster face panel can be supported with either bulkhead brackets (Fig. 36.1 and 36.2) or steel rails (Fig. 36.3). In both cases hardwood blocking must be installed between the panel frame and the bulkhead bracket or rail at the face of each inside corner.

Pilasters more than 12" deep can be formed with additional panels and ties (Fig. 36.4). Either of the methods above can also be used to form the pilaster face.

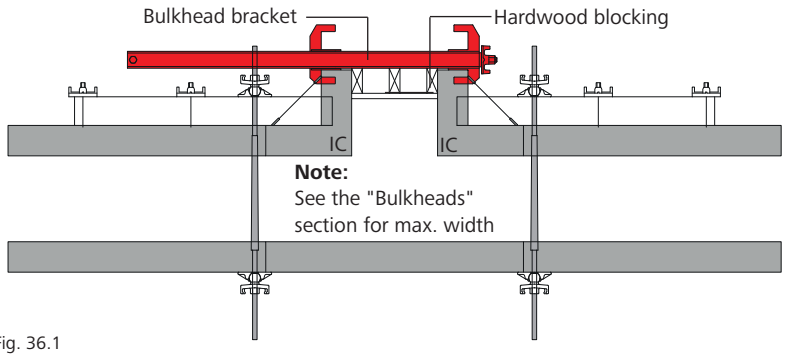


Fig. 36.1

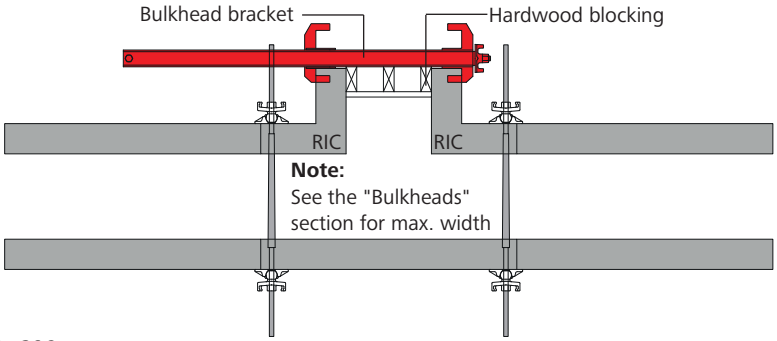


Fig. 36.2

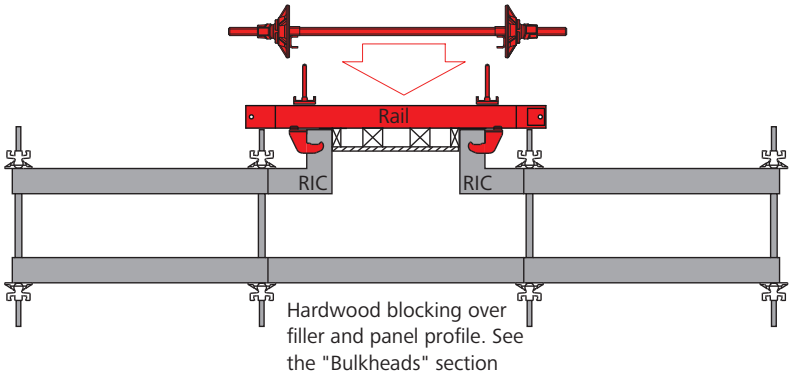
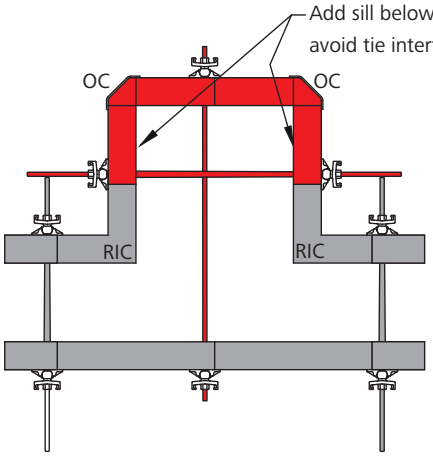


Fig. 36.3



Note:
See the "90° Corners" section for lock requirements at outside corners

Fig. 36.4

Pilasters at Corners

Example formwork solutions for wall corners with pilasters are shown in Fig. 37.1 - Fig. 37.3. Different pilaster sizes and wall thicknesses can be accomodated by using combinations of fillers and boxouts.

Refer to the "90° Corners" section for lock requirements at outside corners.

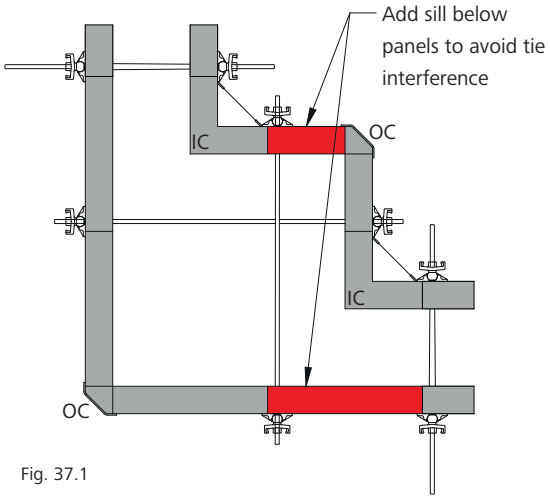


Fig. 37.1

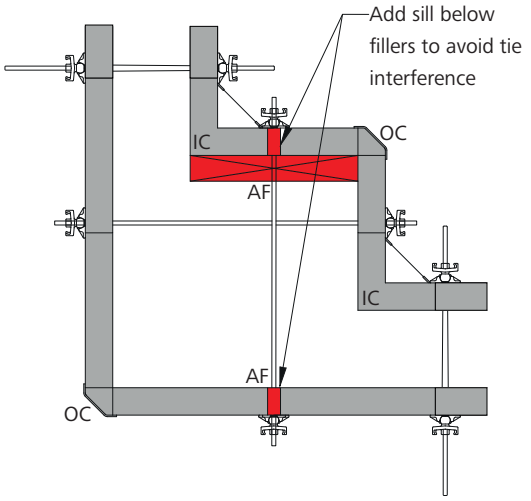


Fig. 37.2

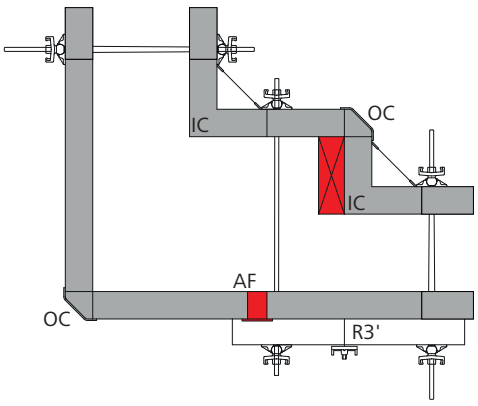


Fig. 37.3

Wall Offsets

Wall offsets up to 2" can be formed by offsetting the corresponding panels, and adding rails and wood blocking (Fig. 38.1).

Offsets between 2" and 7 3/4" can be formed using inside corners (Fig. 38.2). The back of the offset panels are set in line with the end of the inside corner. A boxout is needed if the offset is less than 7 3/4".

Tensile load transfer must be considered when these details are used near bulkheads or outside corners. Additional bracing, struts, or thru ties may be necessary.

Offsets up to 34" can be formed using multi-purpose panels with corner brackets (Fig. 38.3). Refer to the "90 Degree Corners" section for maximum concrete pressure based on outside corner conditions.

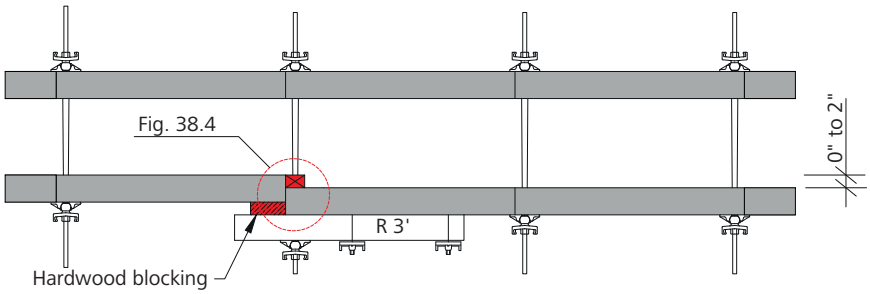


Fig. 38.1

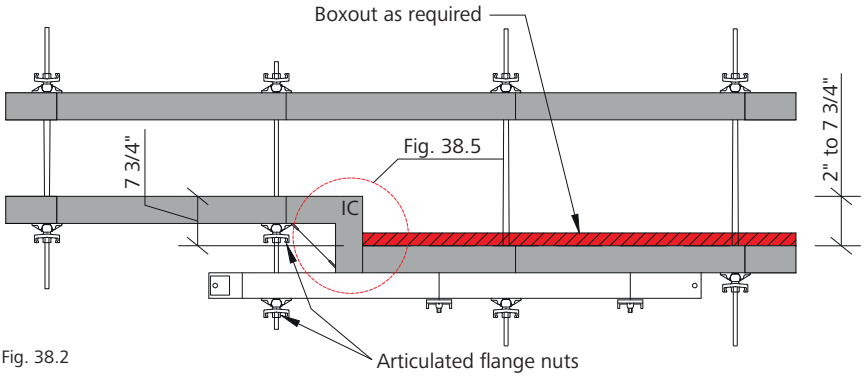


Fig. 38.2

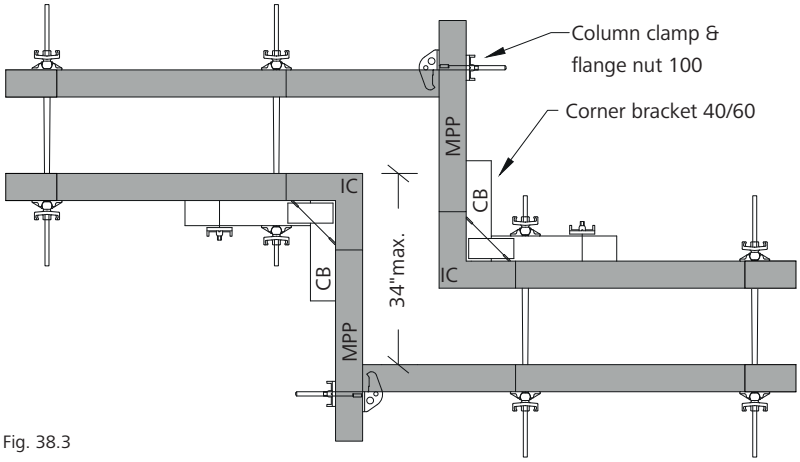


Fig. 38.3

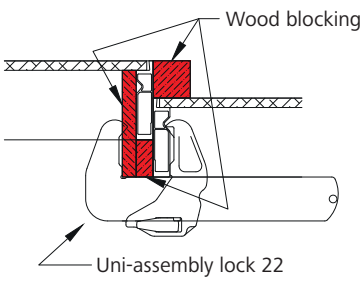


Fig. 38.4

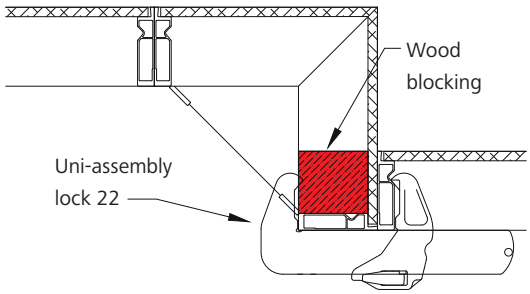


Fig. 38.5

Vertical Offsets

The assembly lock can be attached at any position on the frame profile, so all panels can be safely connected even when offset from each other vertically (Fig. 39.1).

Job built fillers are used to transition between vertical and inclined panels (see the "Fillers" section for additional information and requirements). They must be designed and constructed to resist the intended loads.

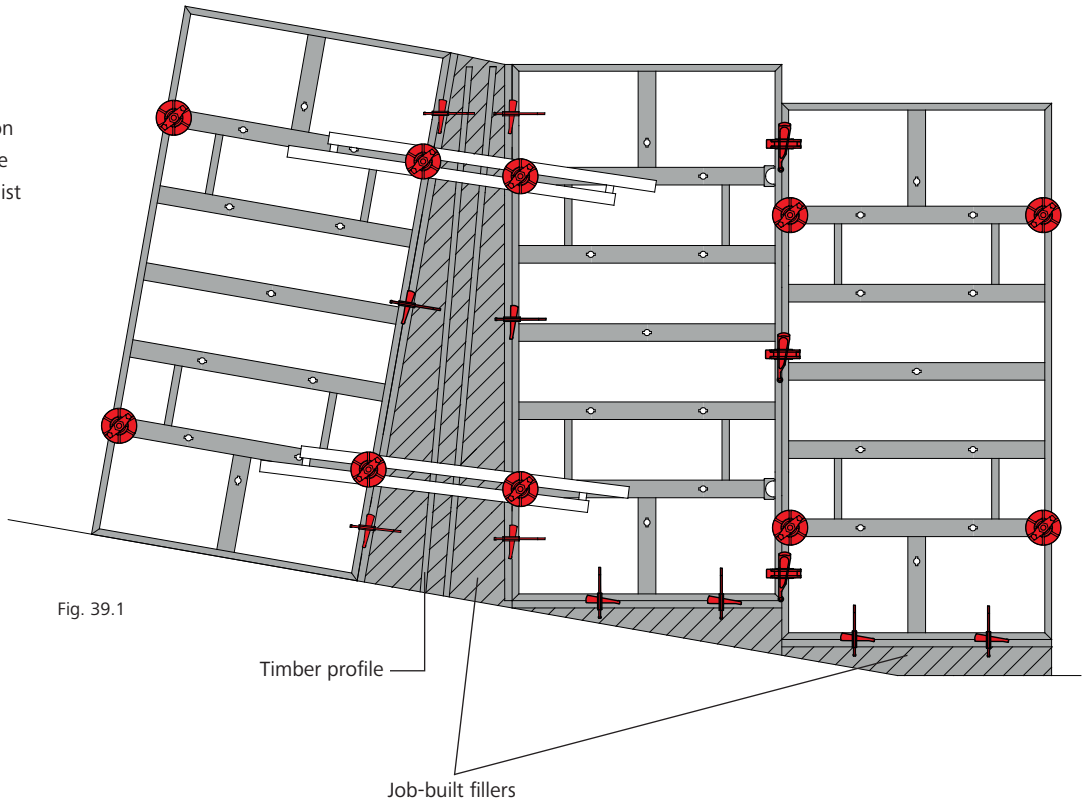


Fig. 39.1

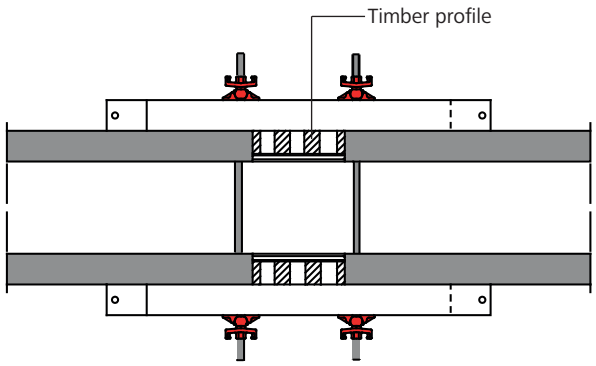


Fig. 39.2

Horizontal Panels

A horizontal panel configuration is well suited for some applications such as foundations and one-sided formwork (Fig 40.1 - Fig. 40.8). The bottom of the formwork can be tied using 5/8" ties with drive nuts . This method may only be used at a single panel edge, and is not permitted at panel joints and fillers.

Foundation spanners and foundation tape may be substituted for the bottom ties in single panels (Fig. 40.5 - 40.8). For pour heights up to 4', the maximum spacing of the foundation spanners is 2'-3". For pour heights up to 3', the maximum spacing of the foundation spanners is 4'-3".

At the top of the formwork, ties can be located above the panels by using tie-claws with threadbars or taper ties (Fig. 40.5, 40.6, 40.7 and 40.9).

Multi-purpose panels are well suited for forming walls with starter walls or waterstop at the base (Fig. 40.10).

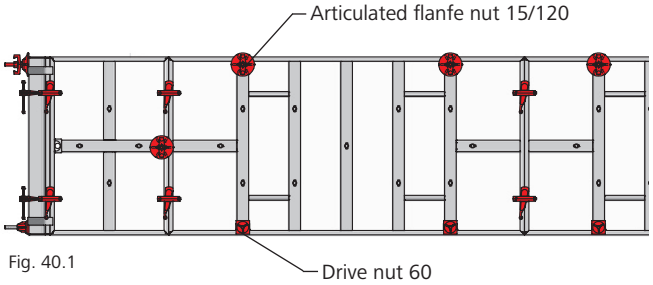


Fig. 40.1

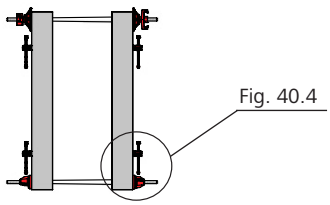


Fig. 40.2

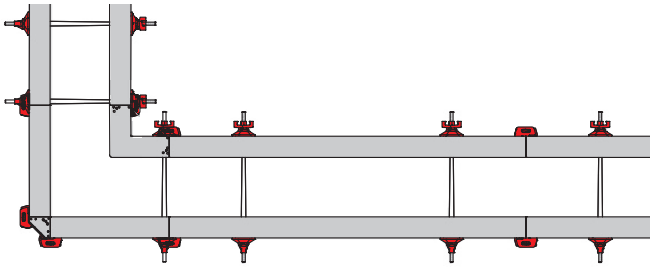


Fig. 40.3

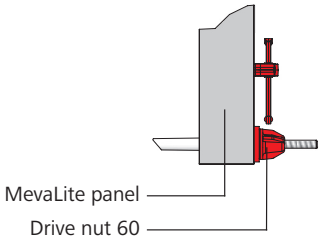


Fig. 40.4

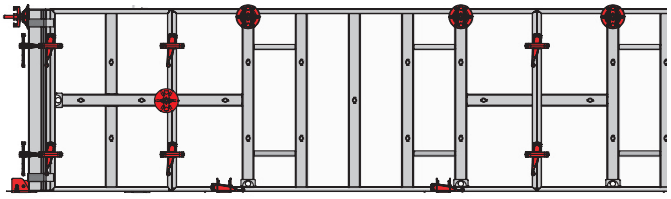


Fig. 40.5

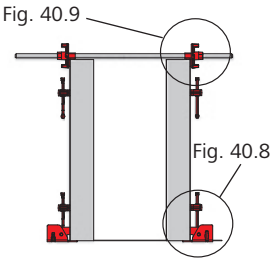


Fig. 40.6

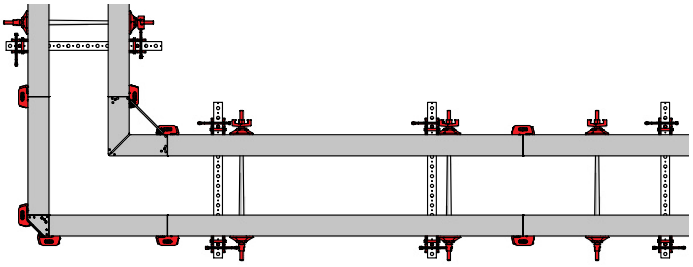


Fig. 40.7

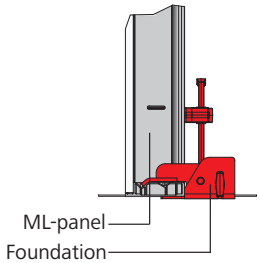


Fig. 40.8

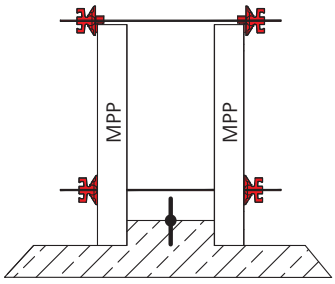


Fig. 40.10

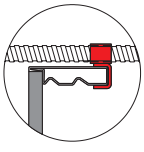


Fig. 40.9 I

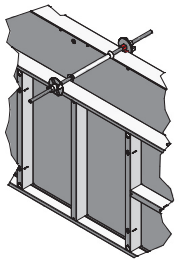


Fig. 40.9 II

Description	Ref.-No.
Foundation tape	29-307-50
Foundation spanner	29-307-85
Trolley for foundation tape	29-307-55
EA-assembly lock	29-205-50
Uni-assembly lock 22	29-400-85
Tie claw 23	29-901-44
Drive nut 60	29-900-23
Articulated flange nut 15/120	29-900-10

Wall Braces

Wall braces and accessories are available for plumbing and aligning the formwork (Fig. 41.1). If braces are used to resist wind or other loads, the bracing system and anchorages must be designed by a competent person in accordance with all applicable governmental regulations, codes, and ordinances.

Wall braces are attached to the panels at the multi-function profiles using formwork prop connectors and flange screws (Fig. 41.2). Shoe plates must be installed and anchored at the bottom of the formwork (Fig. 41.4). The allowable uplift on the shoe plate is 2000 lb when properly anchored. The base of the brace is anchored using the articulated foot plate (Fig. 41.5). If adequate foundations are not present to resist the required loads, temporary footings or deadmen will be needed.

Formwork must be kept stable at all times. Each individual wall form section must be supported by at least two braces.

Note:
When installing R160 and/or R250 make sure the inner tube is attached at the formwork prop connector.

Always ensure G-hook is properly engaged on props prior to releasing gangs from crane (Fig. 41.3).

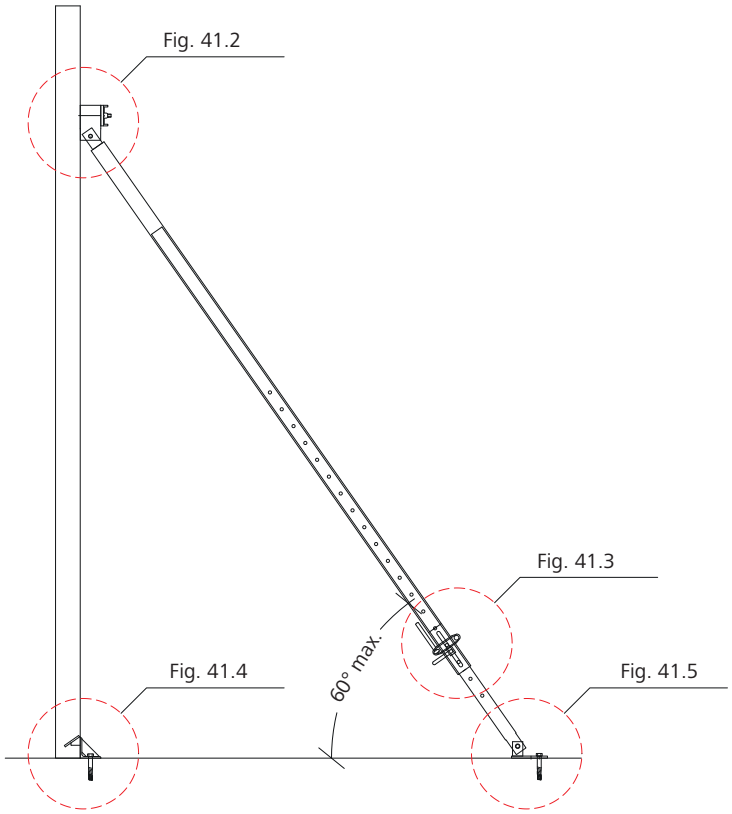


Fig. 41.1

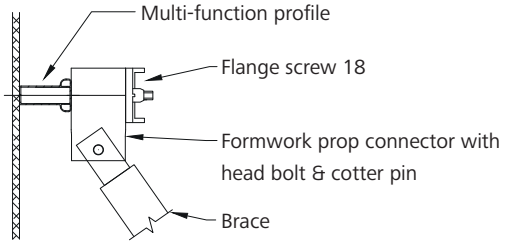


Fig. 41.2

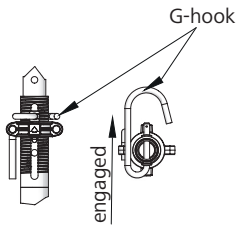


Fig. 41.3

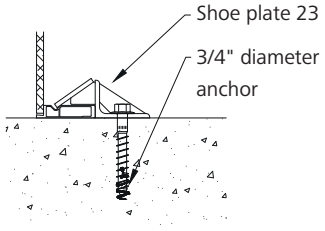


Fig. 41.4

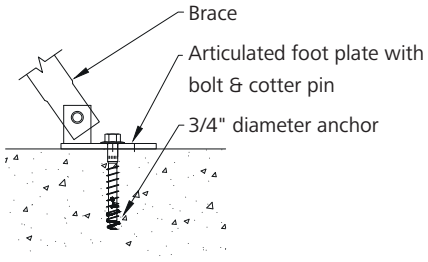


Fig. 41.5

Wall Braces

Information for the push-pull prop R brace type including load capacity and adjustment range is shown in Table 42.1.

Push-pull prop R				
Description	Adjustment range	Compression		Tension Safe working load [1,2] (lb)
		Length	Safe working load [1] (lb)	
R 160	4'-6" to 6'-6"	6'-6"	1819 [5620]	1819 (3682) [5620]
R 250	6'-3" to 10'-5"	6'-3"	1819 [5845]	1819 (3682) [5845]
		7'-1"	1819 [5845]	
		8'-9"	1819 [5620]	
		10'-5"	1819 [3372]	
R 460	11'-2" to 17'-0"	11'-2"	1819 [5620]	1819 (3682) [5620]
		12'-4"	1819 [5620]	
		14'-1"	1819 [4721]	
		14'-8"	1819 [4047]	
		15'-10"	1819 [3372]	
		17'-0"	1819 [2698]	
R 630	16'-9" to 24'-11"	16'-9"	1819 [6519]	1819 (3682) [7419]
		18'-4"	1819 [5395]	
		19'-6"	1819 [4721]	
		20'-8"	1819 [4047]	
		21'-8"	1819 [3597]	
		23'-3"	1819 [2923]	
		24'-11"	1819 [2473]	

[1] Primary value listed is based on application as brace installed at 60° to horizontal and accounts for MevaLite panel connection with multi-function profile transverse working load limit of 1576 lb. Value in [brackets] is safe working load of brace alone.

[2] Tension value in (parentheses) is MevaLite multi function profile pullout working load limit.

Table 42.1

Wall Braces

Information for the SRL and RSK brace types including load capacity and adjustment range is shown in Tables 43.1 and 43.2.

Brace SRL				
Description	Adjustment range	Compression		Tension Safe working load [1,2] (lb)
		Length	Safe working load [1] (lb)	
SRL 120	3'-0" to 4'-11"	3'-0"	1819 [6744]	1819 (3682) [6744]
		4'-11"	1819 [6744]	
SRL 170	3'-11" to 7'-3"	3'-11"	1819 [6744]	1819 (3682) [6744]
		5'-11"	1819 [6744]	
		7'-3"	1819 [4496]	

[1] Primary value listed is based on application as brace installed at 60° to horizontal and accounts for MevaLite panel connection with multi-function profile transverse working load limit of 1576 lb. Value in [brackets] is safe working load of brace alone.
[2] Tension value in (parentheses) is MevaLite multi function profile pullout working load limit.

Table 43.1

Brace RSK				
Description	Adjustment range	Compression		Tension Safe working load [1,2] (lb)
		Length	Safe working load [1] (lb)	
RSK 1	3'-0" to 4'-11"	3'-0"	1819 [8992]	1819 (3682) [8992]
		4'-11"	1819 [8992]	
RSK 4	8'-6" to 13'-1"	8'-6"	1819 [8543]	1819 (3682) [8992]
		9'-5"	1819 [7194]	
		10'-10"	1819 [5171]	
		11'-3"	1819 [4721]	
		13'-1"	1819 [2698]	

[1] Primary value listed is based on application as brace installed at 60° to horizontal and accounts for Imperial panel connection with multi-function profile transverse working load limit of 1576 lb. Value in [brackets] is safe working load of brace alone.
[2] Tension value in (parentheses) is Imperial multi function profile pullout working load limit.

Table 43.2

Form Walkways

Walkway Bracket
The walkway bracket contains an integral self-locking pin, and is mounted to a multi-function profile (Fig. 44.1).
To mount the bracket:
Rotate it 45°, insert the pin into the profile hole, then turn it back to the vertical position. The bottom of the bracket can then be secured to the panel with a flange screw, if required.

After bracket installation the walkway planking, guard-railing posts, and guardrails may be installed. Holes are provided in the walkway brackets and guardrail posts for fasteners. The guard-railing post 100 can accomodate guardrail sections up to 2 3/8" thick.

The walkway bracket 90 is capable of supporting a 25 psf applied uniform load at a 4:1 factor of safety against failure when spaced up to 8' on center (assuming adequate planking is utilized).

Walkway brackets may only be occupied when attached to adequately braced panels (or panels tied to braced panels) after guardrails and all other safety components and anchors are installed.

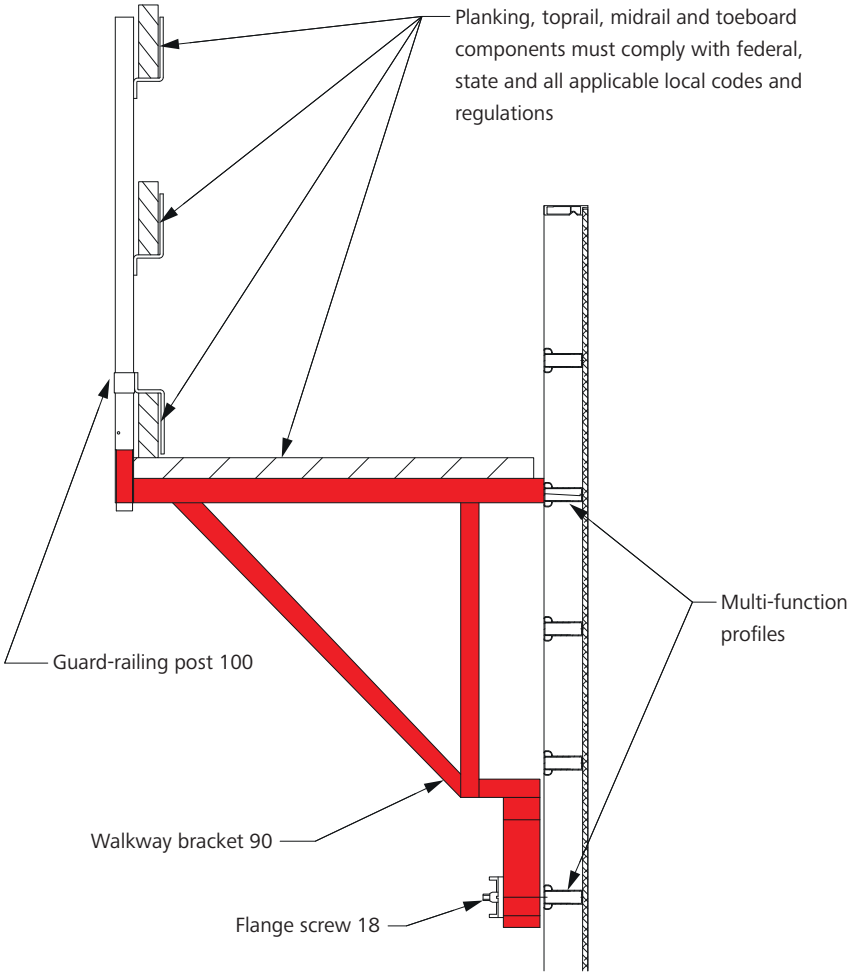


Fig. 44.1

Crane Hook

The safe working load of a crane hook (Fig. 45.1) is 1,300 lbs (Safety factor: 5:1 against failure)

The handling is very simple:
Open the safety lever as far as possible (Fig. 45.2), then move the crane hook onto the panel profile until the claw engages completely in the groove. Push the safety lever down and toward the panel to lock the crane hook (Fig. 45.3). When moving gangs (Fig. 45.4), make sure that each crane hook is attached at a panel joint or above a stiffener (when horizontally stacked). This prevents the crane hook from sliding. Exeption: single vertical panels up to 3' wide (Fig. 45.5).

Safety tips
Always check the crane hook before each use.
Do not overload the crane hook.
Do not use the crane hook to break concrete bond when stripping.

Attention
If the reference dimension shown in Fig. 45.2 exceeds 0.95" the crane hook must be replaced immediately. Replace it even if only one side of the hook exceeds this dimension.

Safety regulations
When using our products the federal, state, local codes and regulations must be observed.

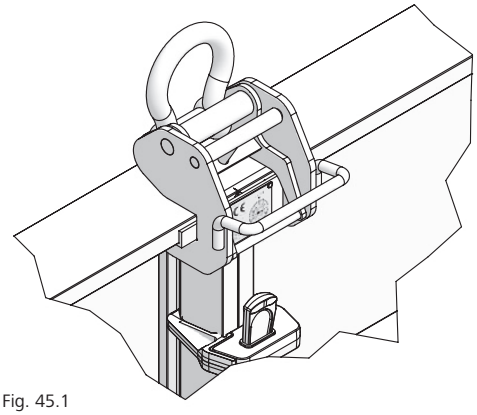


Fig. 45.1

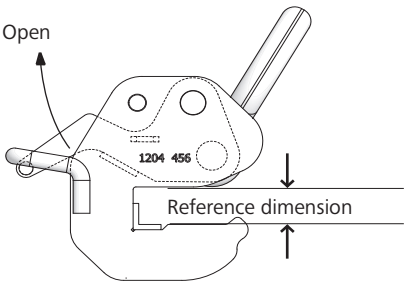


Fig. 45.2

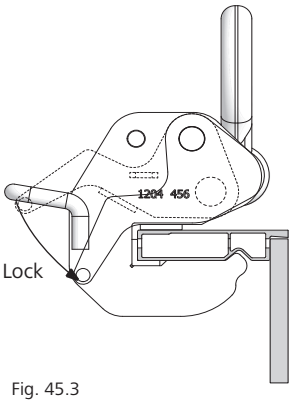


Fig. 45.3

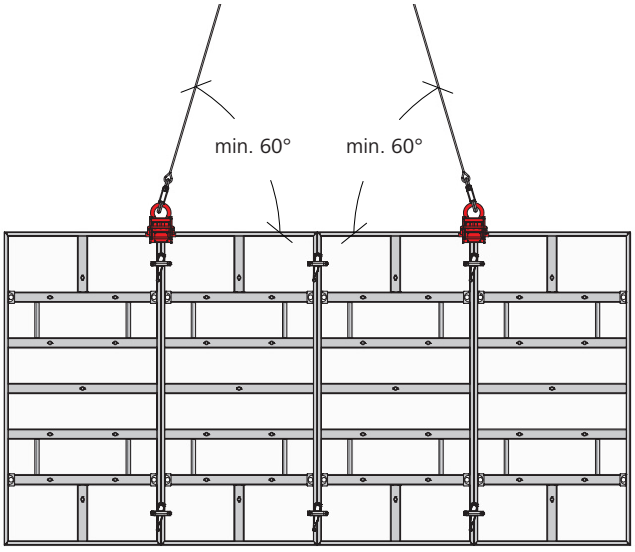


Fig. 45.4

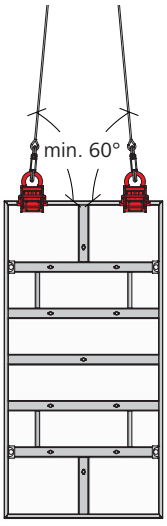


Fig. 45.5

Description	Ref.-No.
ML-crane hook	**29-103-10**

Gang Forming

Each crane hook must be attached at a panel joint (Fig. 46.1) or above a stiffener or panel joint when the top panels are horizontal. The number and location of crane hooks and the rigging arrangement must be established by the user so that no individual component is overloaded. Spreader beams with load equalizers are recommended for all but simple two-point lifts.

Vertical steel rails must be installed across stacked panel joints for lifting gang forms. The following rules must be observed:

1. Maximum average rail spacing is 6'. Rails should be installed on panels at both ends of each gang.

2. Gangs up to 13' high may use 3' long rails on vertical panels with (1) flange screw on each side of the panel joint connected to the threaded hole in the vertical end cross member of the panel (Fig. 46.1).

3. Gangs with horizontal panels require rails that extend to the next cross member beyond the flange screw connection of the vertical panel (Fig. 46.2).

4. Gangs over 13' high require 6' rails or longer. Flange screw connections must be at least 10 1/2" away from the panel joint, and rails must extend to the next cross member beyond the flange screw connection (Fig. 47.1). Horizontal panels < 3' wide may only be located at the top or bottom of the gang.

5. Maximum gang height for single lift is 18'. Higher walls must be set in multiple lifts, unless special analysis and design are performed.

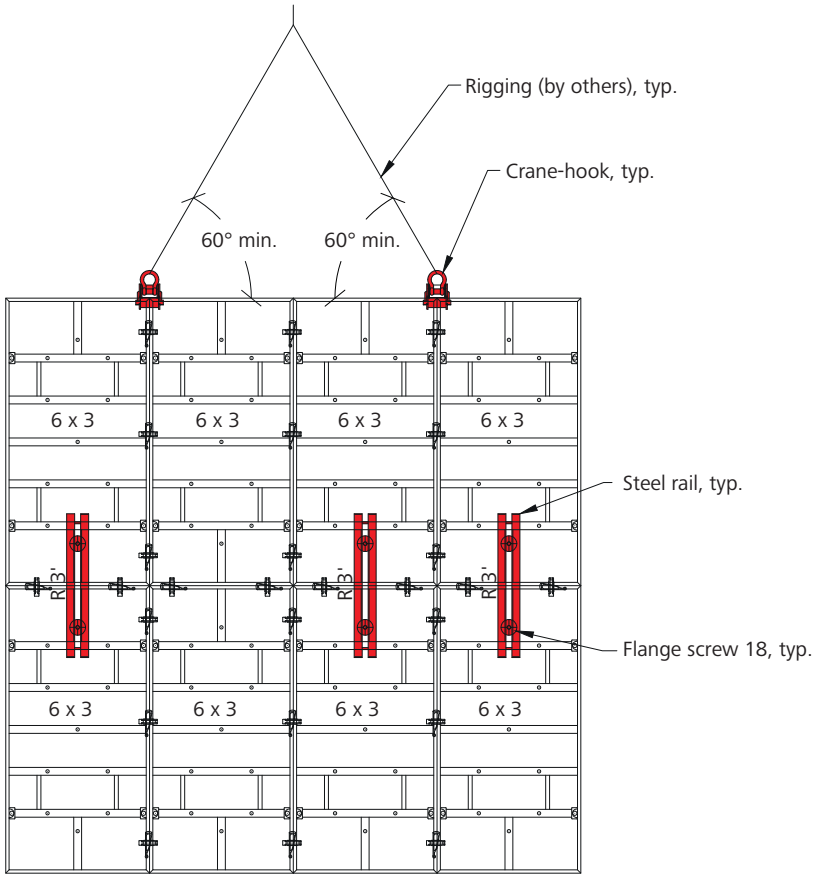


Fig. 46.1 Typical gang form

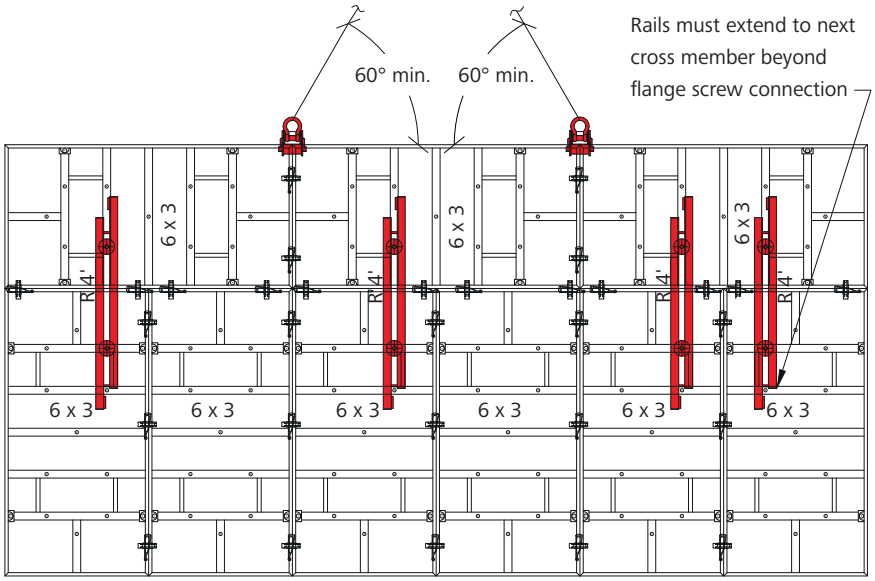


Fig. 46.2 Gang form with horizontal top panels

Gang Forming

If rails required for lifting interfere with those needed for concrete placement, reconfigure/remove lifting rails after setting gangs, then reset to lifting configuration prior to stripping.

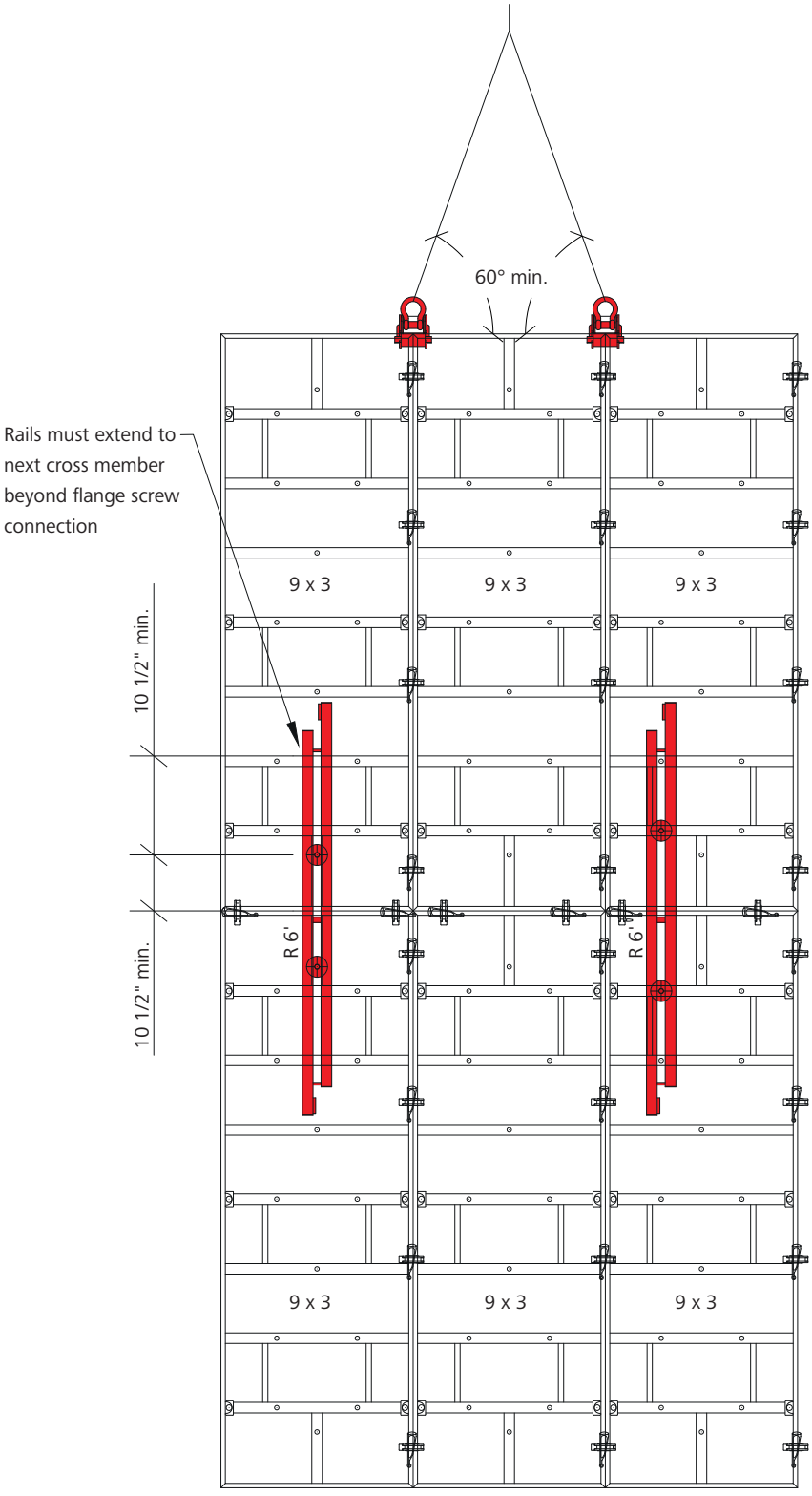


Fig. 47.1 Typical gang form

Adjustable Shearwall Bracket

Adjustable shearwall brackets are used to support formwork from the vertical face of previously cast concrete. The brackets are made with Imperial profiles welded to the top so that assembly locks can be used to connect the formwork to the brackets. With MevaLite panels wood blocking is required to make the connection between the different profiles (Fig. 48.1 and 48.2).

The brackets are bolted to the concrete using anchor bolts with climbing cone inserts located at the desired elevation. Climbing cones with conical sleeves and anchor plates are set in the previous lift formwork with the positioning disk M24 (nailed to the form face) or a setting bolt (through the form face). After the forms are stripped the shearwall brackets are bolted to the climbing cones. The formwork may be set and connected to the brackets once the concrete has reached a minimum compressive strength of 2200 psi.

Brackets are designed for vertical load only. Formwork must be securely braced to prevent any lateral force on the bracket.

The safe working load of the shearwall bracket assembly is 3300 lb., which is limited by the anchor bolt shear combined with bending due to the climbing cone recess. Higher capacities are possible with other anchor configurations. The ultimate capacity of the bracket itself is 36,500 lb.

If post-installed anchors are to be used, they must be 1" diameter and designed to resist the intended loads. The anchor length must account for the required concrete embedment plus the bracket and washer thickness.

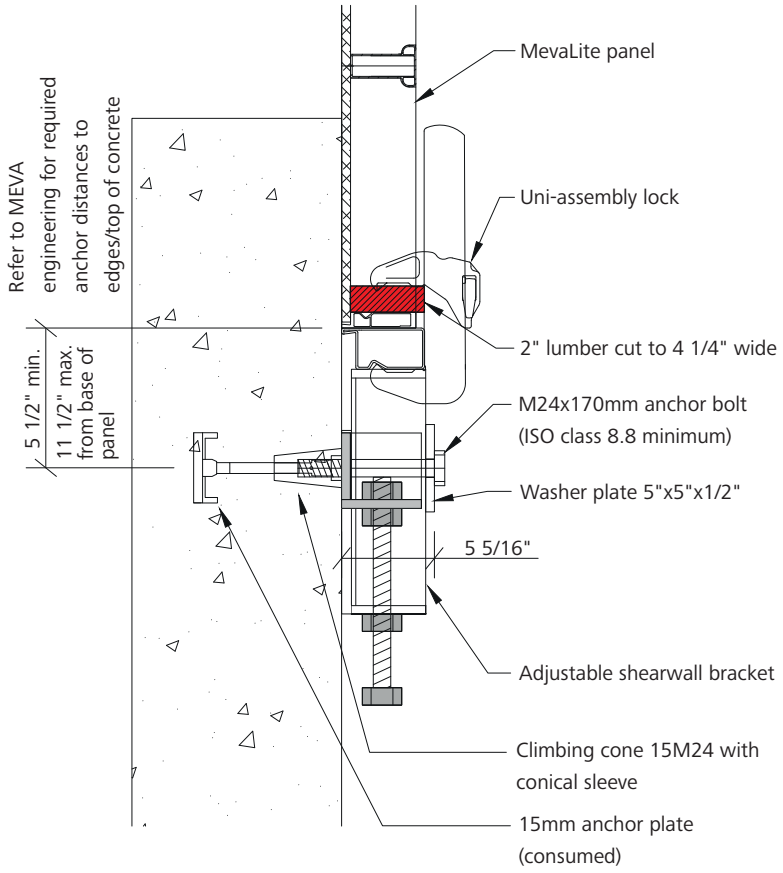


Fig. 48.1 Section view

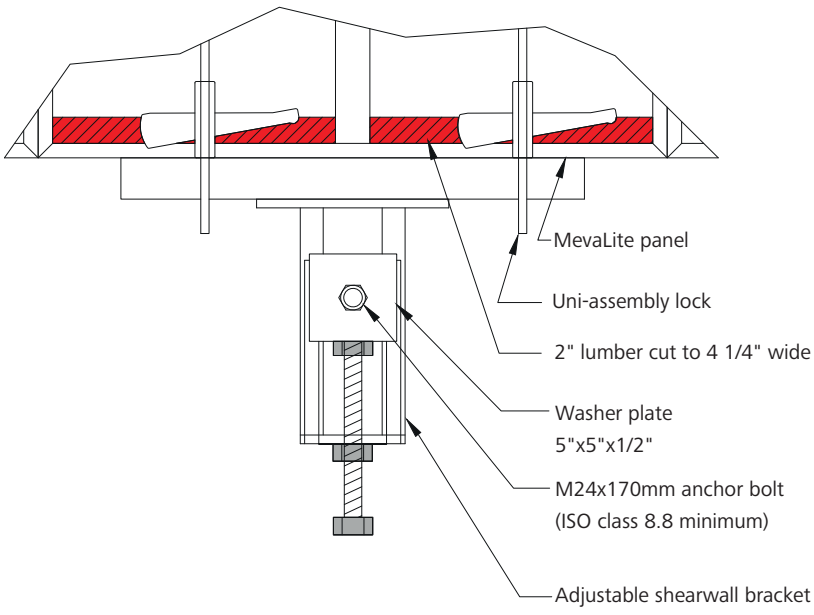


Fig. 48.2 Elevation view

Assembly, Erection and Stripping

Planning Stage
Planning and preparation are the keys to a successful application of any formwork system.

To determine the amount of formwork material that will be needed, a number of influencing factors should be taken into account such as:

- movement of formwork on the site, including weight to be handled and capacity of lifting equipment
- project schedule
- construction joints (if specified) that define concrete placements
- pour plan & sequence, taking into account the number of corners, pilasters, etc. in each pour
- stripping requirements
- concrete placement method
- reinforcing steel placement method
- site conditions and accessibility
- coordination with other trades

Once all these aspects have been considered, the quantity of formwork can be determined.

During the planning stage some general aspects of the forming details should also be considered, such as incorporating stripping relief. Continuous formwork between two structural elements such as walls or pilasters should utilize stripping corners, pilaster panels, or job built fillers to facilitate stripping.

A safety plan should be developed to address all aspects of the formwork operation including assembly, erection, concrete placement, and stripping. Adequate fall protection must be provided as required by all applicable regulations & codes.

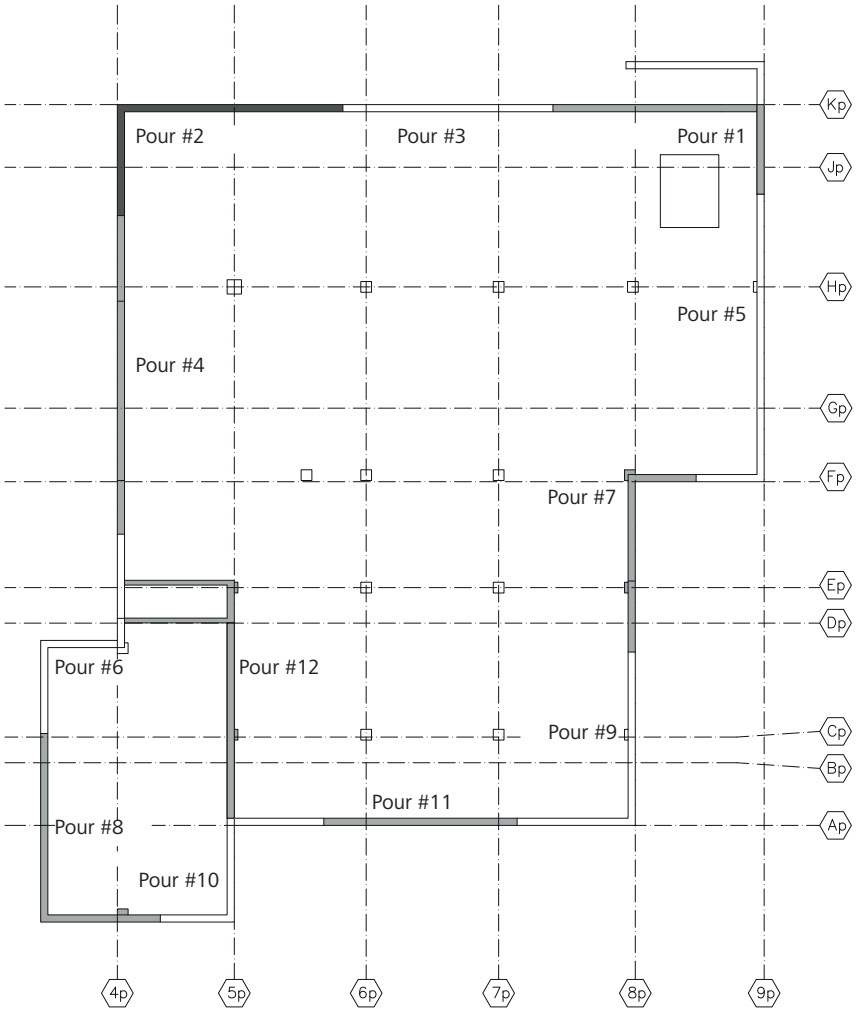


Fig. 49.1 Example wall pour plan

Assembly, Erection and Stripping

General

The following assembly, erection, and stripping information is provided as a guide, and is not intended to be all-inclusive. The contractor is responsible for the safe usage of the formwork equipment in accordance with all applicable government regulations, codes, and ordinances. Refer to the appropriate sections of this manual for more detailed information on the components described.

Unloading and Assembly

When unloading panels from the truck or moving them on the jobsite, appropriate crane slings and lifting equipment should be used.

For gang forming:

1. The assembly area should be clean, level, and capable of supporting the expected load.

2. Arrange panels face down as needed for the gang (Fig. 50.1).

3. Install the assembly locks, steel rails, bracing, and walkway brackets (Fig. 50.2).

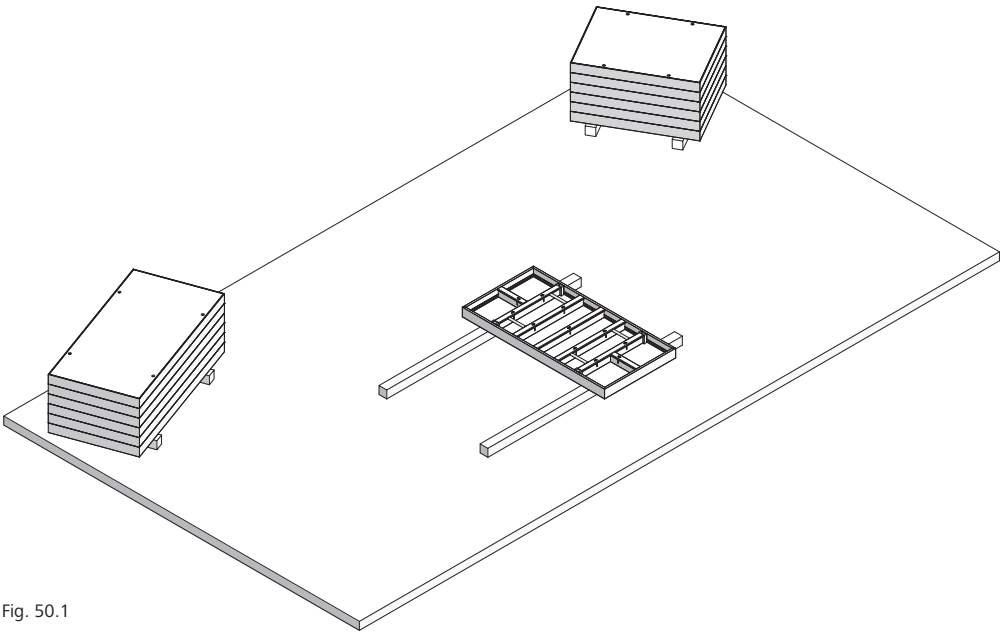


Fig. 50.1

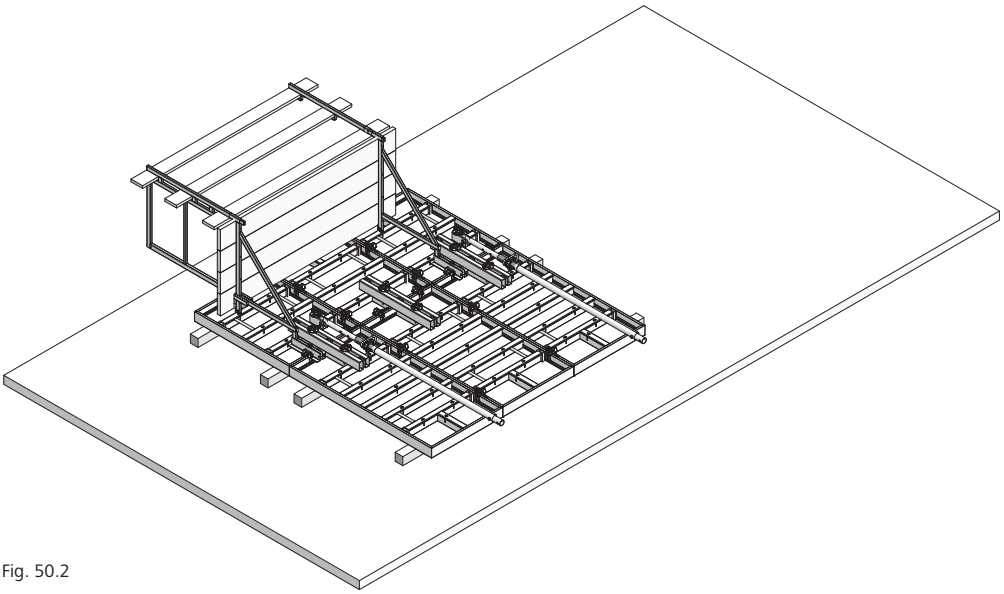


Fig. 50.2

Assembly, Erection and Stripping

Erecting the First Side

For handset erection:

1. Erect the first panel and immediately attach a brace, anchor the foot plate, and install and anchor a shoe plate (Fig. 51.1).

2. Continue erecting panels, connecting them with assembly locks and adding bracing and shoe plates at the required intervals.

3. Install the walkway brackets (Fig. 51.2).

4. After all of the first side panels for the planned pour are set, the reinforcing steel, blockouts, and other items to be embedded may be installed.

For gang forming:

1. Determine the number and locations of crane hooks and the rigging arrangement based on the weight and configuration of the gang, ensuring that none of the components will be overloaded. Always use at least two crane hooks.

2. Lift the gang into the upright position and apply form release agent. Do not allow any personnel on or directly under any formwork while it is being moved or suspended.

3. Set the gang into position and immediately anchor the bracing foot plates and install and anchor the shoe plates.

Caution:
Do not release crane support until the gang is secured. Unsecured formwork can fall over causing severe injury or death.

4. Remove the crane hooks.

5. Proceed with setting the other gangs along the first side.

6. After all of the first side gangs for the planned pour are set, the reinforcing steel, blockouts, and other items to be embedded may be installed.for the planned pour are set, the reinforcing steel, blockouts, and other items to be embedded may be installed.

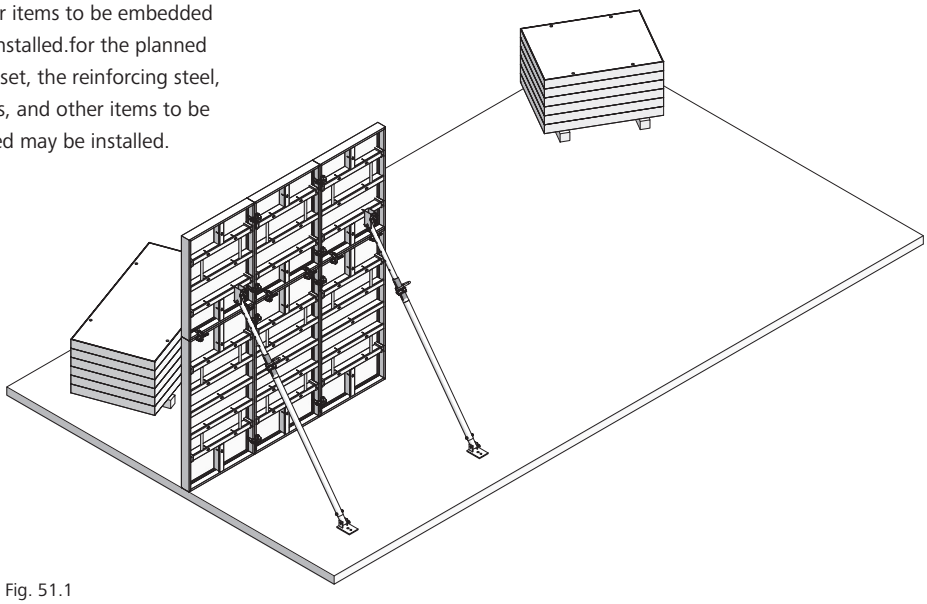


Fig. 51.1

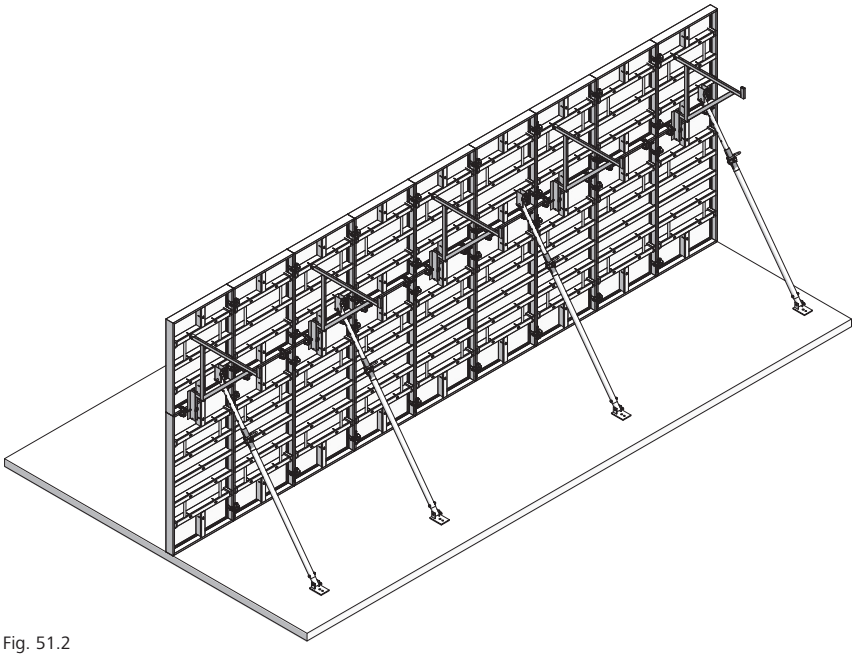


Fig. 51.2

Assembly, Erection and Stripping

Erecting the Second Side (Closing)

For handset erection:

1. Depending on the tie system, some tie components may need to be installed on the first (set) side prior to erecting any second side panels:

1.1. For threadbar ties, insert the threadbar through the set side formwork extending to the required wall thickness. Install PVC sleeves and spacer cones over the threadbar.
1.2. For pass-through shebolts, install the set side shebolts with inner units.
1.3. For steel cone shebolts, install steel cones, inner units, and set side threadbar.
1.4. If taper ties or pass-through shebolts are used, spacers are recommended to maintain wall thickness and facilitate plumbing forms.

2. Apply form release agent to the second side panels and set the first one into place (Fig. 52.1). Anchor braces and install and anchor shoe plates if being used on second side. Otherwise, install taper ties or remaining components of other tie systems and secure with flange nuts.

Caution:
If braces are used on the first side only, second side panel must be held in place until ties are installed and the formwork is secured on both sides.

3. Continue erecting the second side panels in the same manner, connecting them with assembly locks (Fig. 52.2).

4. Install the walkway brackets if used on second side.

For gang forming:

The second side is erected in the same manner as for handset, except pre-assembled gangs are set instead of individual panels (see "Erecting the First Side, For gang forming").

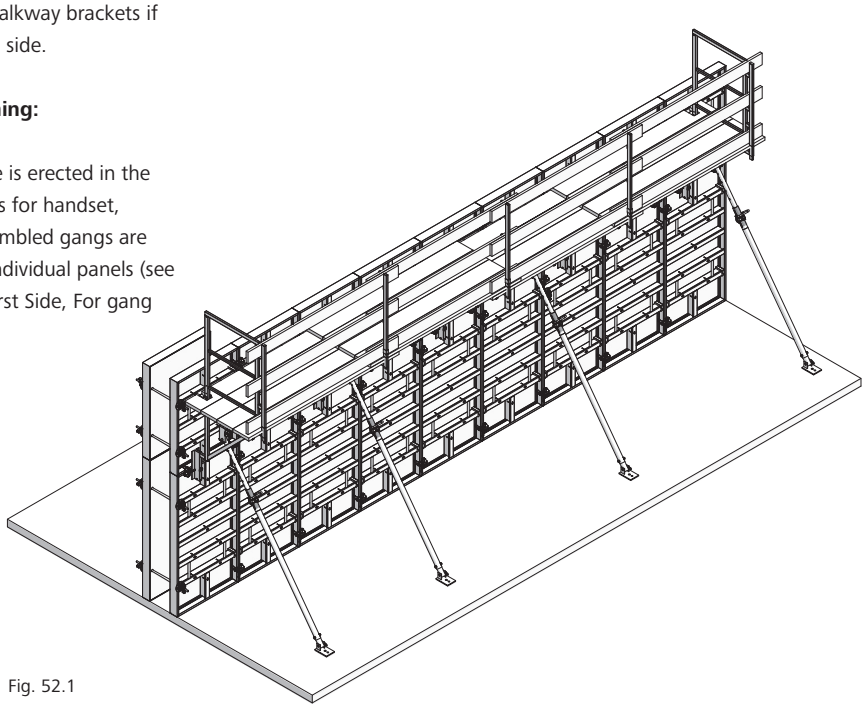


Fig. 52.1

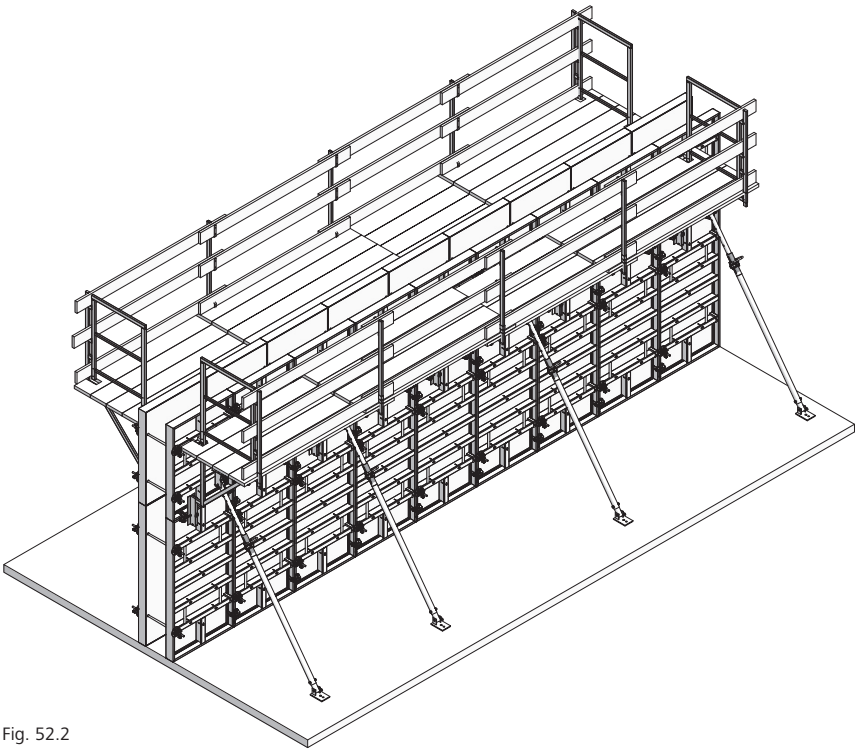


Fig. 52.2

Assembly, Erection and Stripping

Concrete Placement
Before placing concrete, the user should inspect all formwork to ensure proper placement and secure connections of ties and hardware. The maximum lateral concrete pressure shall be as indicated in this manual (or on MEVA formwork drawings if provided), taking into account all limiting factors and details of the formwork layout. Job built components incorporated into the layout may limit the pressure further.

It is the user's responsibility to adjust the pour rate and placement methods in accordance with ACI 347 for the concrete mixture and specific jobsite conditions at the time of placement so that the maximum lateral concrete pressure is not exceeded.

Stripping and Disassembly
Formwork shall not be stripped until the requirements of the project specifications have been met. If braces were installed on the first side only, strip the second side formwork first. Remove all loose objects such as tools from the formwork.

For handset:

1. Remove planking and walkway brackets.

2. Remove ties and assembly locks for panel being stripped **(caution: panel will be loose once ties and hardware are removed),** and immediately remove panel (Fig. 53.1).

3. Proceed with stripping the remaining panels (Fig. 53.2).

4. Clean formwork as required and apply form release agent before next use.

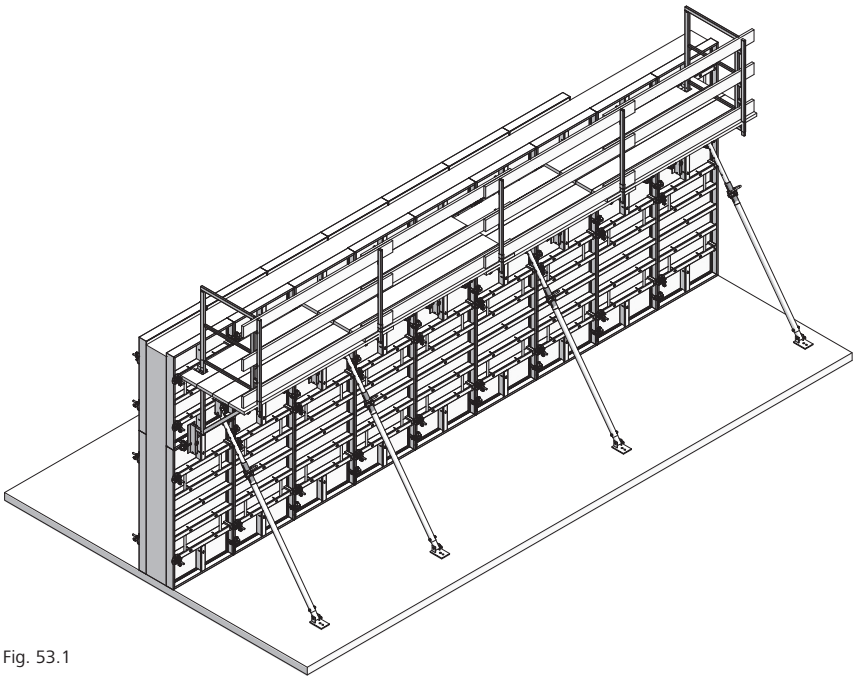


Fig. 53.1

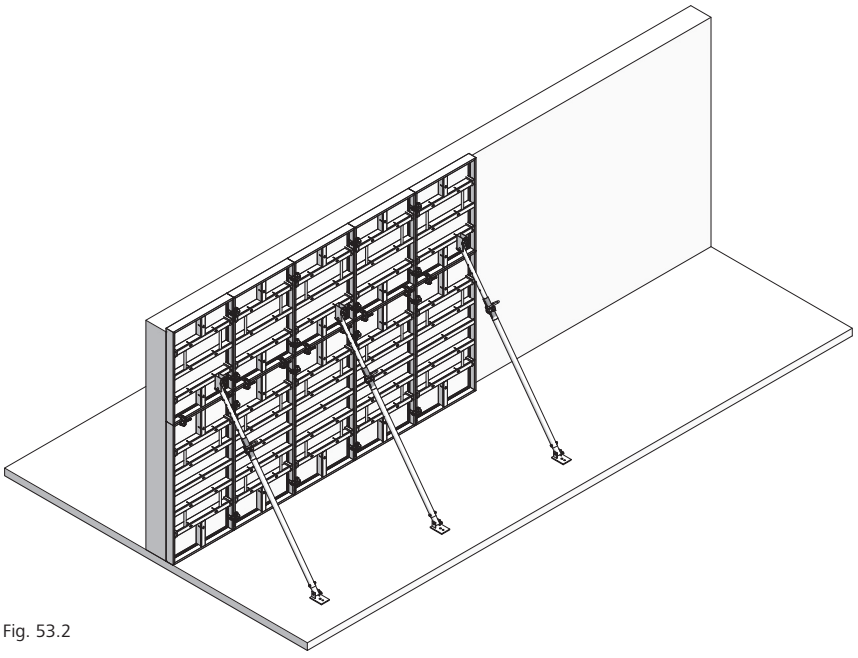


Fig. 53.2

Assembly, Erection and Stripping

For gang forming:

Formwork shall not be stripped until the requirements of the project specifications have been met. If braces were installed on the first side only, strip the second side formwork first.

1. Remove all loose objects such as tools from the formwork.

2. Mount crane hooks to the gang to be stripped and remove slack from lift lines.

3. Remove ties only from gang being stripped and the assembly locks connecting it to the adjacent gang(s).

4. Break bond to cast concrete using prybars and wedges or other stripping aids as required.

Caution: never use crane to break bond.

5. Lift gang and move to next pour (bracing required), temporary storage, or disassembly area (Fig. 54.1).

6. Proceed with stripping the remaining gangs (Fig. 54.2).

7. Clean formwork as required and apply form release agent before next use.

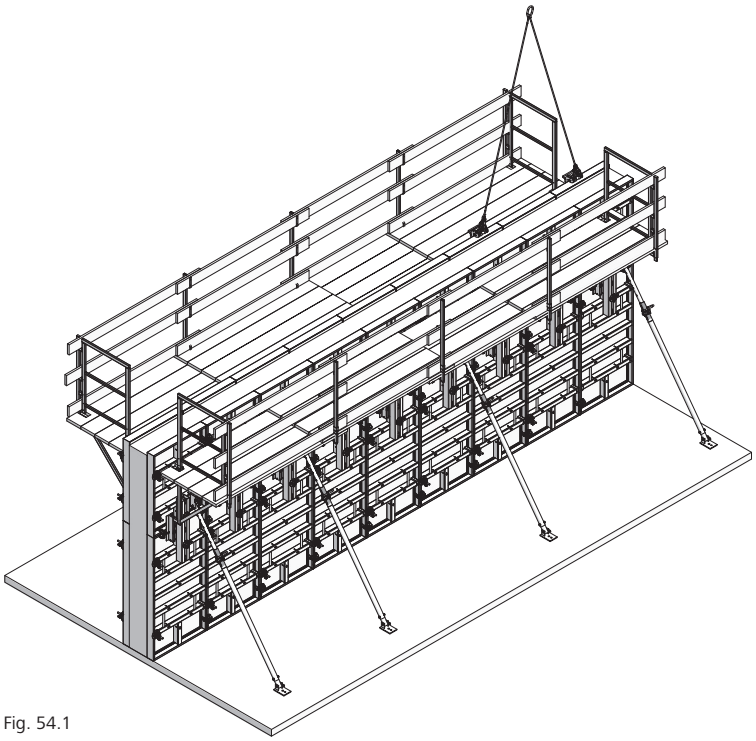


Fig. 54.1

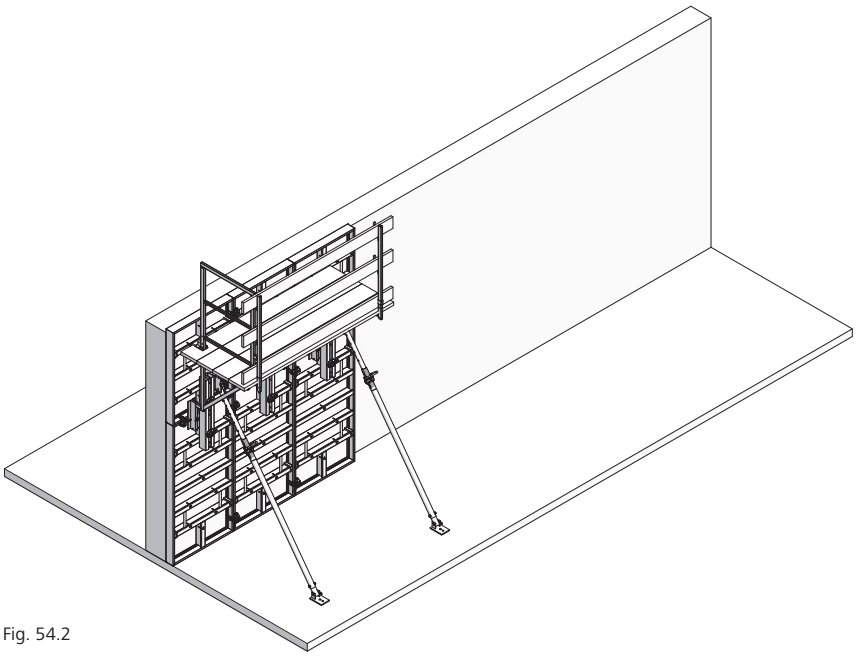


Fig. 54.2

Transport

Transport units

Fig. 55.1
Panel stacks should not exceed 15 panels. Make sure that panels are secured before flying the stack.

Fig. 55.2
Corners can be stored in stacking racks.

Fig. 55.3 & Fig. 55.4
Fillers and walkway brackets can also be stored in stacking racks.

Fig. 55.5
Accessories such as assembly locks, flange screws, articulated flange nuts, ties, crane hooks, etc. can be stored in the MEVA storage boxes.

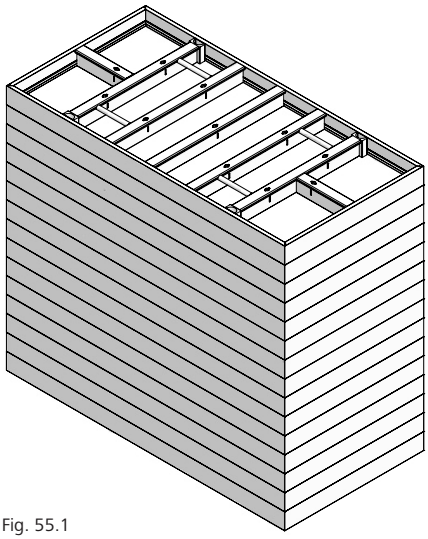


Fig. 55.1

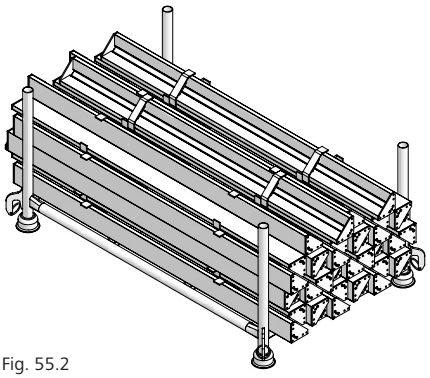


Fig. 55.2

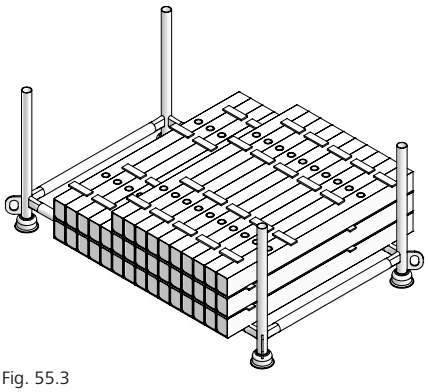


Fig. 55.3

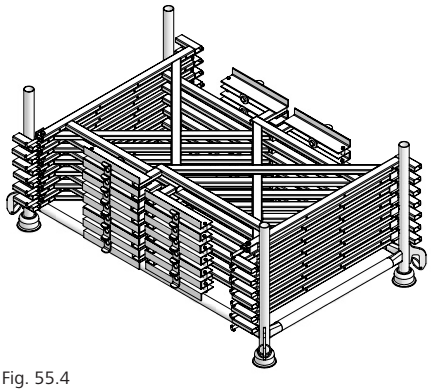


Fig. 55.4

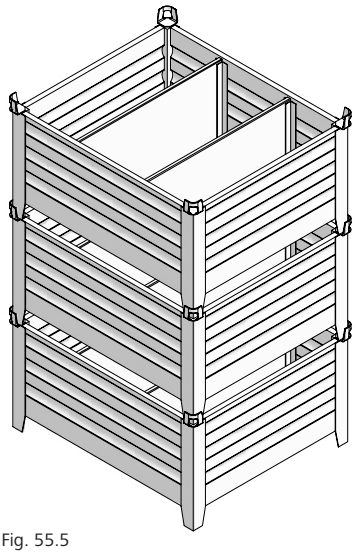


Fig. 55.5

Description	Ref.-No.
Storage box	27-000-10
Stacking rack	27-000-20

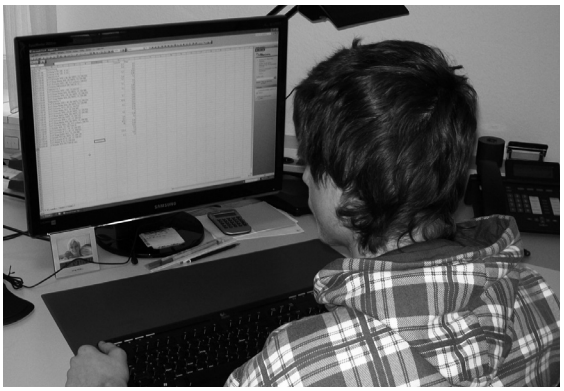
Service

Rentals
We offer our customers the option of renting supplementary material during peak times. We also give prospective customers the chance to test MEVA formwork so they can see its benefits for themselves in actual use.

RentalPlus
Since MEVA started the flat rate for cleaning and repair of rented formwork systems in early 2000 more and more contractors experience the outstanding advantages. Ask our representatives about the details!

Formwork drawings
Of course, all offices in our technical department have CAD facilities. You get expert, clearly represented plans and work cycle drawings.

Special solutions
We can help with special parts, custom designed for your project, as a supplement to our formwork systems.



Notes

Notes

Product list

Please note:
This product list includes all parts necessary for most applications, along with the corresponding dimensions. For parts required for a special application of MevaLite, please refer to our MEVA pricelist.

Content

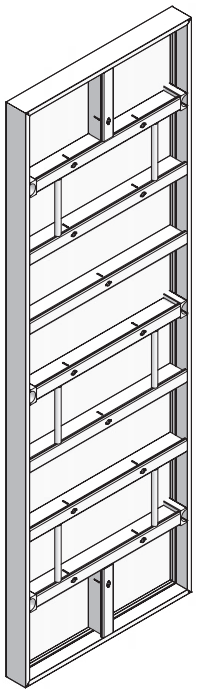
ML-panels

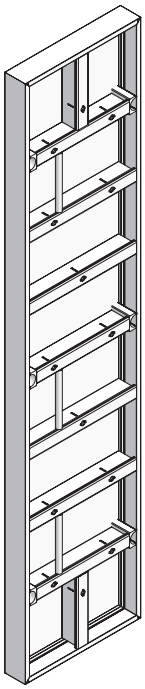
All panels available are listed on the right. For description and dimensions refer to the following pages.

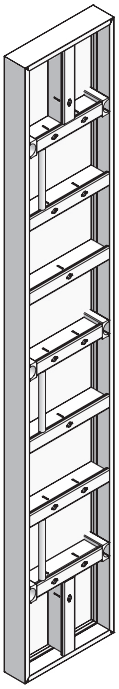
Panel height 9'
For panel height 9': 7 cross stiffeners, of which 7 are multi- function profiles with welded DW-threaded nuts. 3 symmetrically arranged tie holes per panel height.

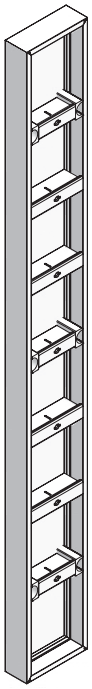
Attention
Unused tie holes need to be closed with plugs D 27/30.

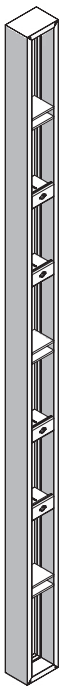
Ref.-No.	Description / Application	sq. ft.	lb
22-500-20	ML-panel 9' x 3'	27.0	136.2
22-500-30	ML-panel 9' x 2'	18.0	96.6
22-500-40	ML-panel 9' x 1'-6"	13.5	79.6
22-500-50	ML-panel 9' x 1'	9.0	57.5
22-500-60	ML-panel 9' x 0'-6"	4.5	38.1









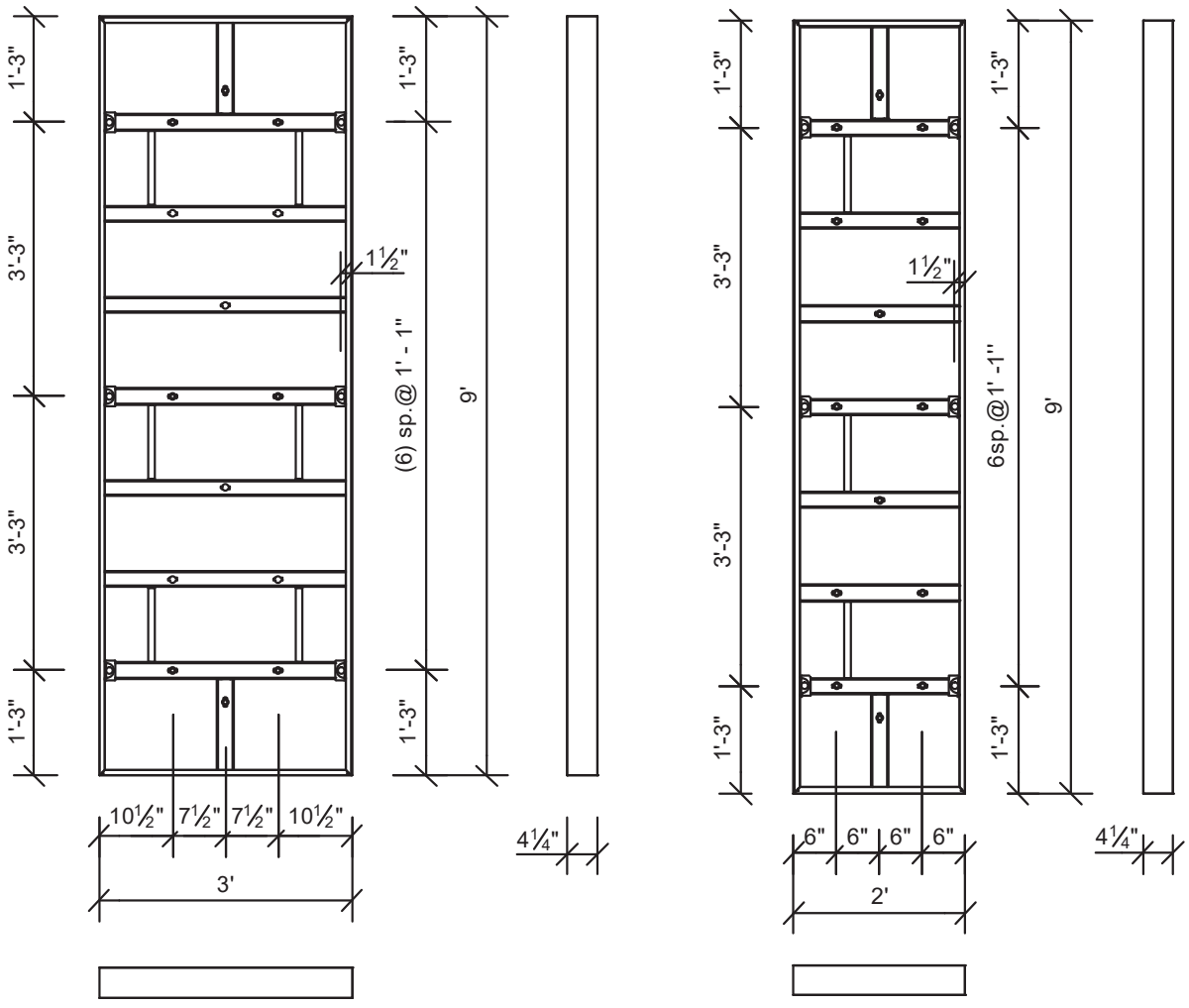


ML-panels

Panel height 9'
For panel height 9': 7 cross stiffeners, of which 7 are multi- function profiles with welded DW-threaded nuts. 3 symmetrically arranged tie holes per panel height.

Attention
Unused tie holes need to be closed with plugs D 27/30.

Ref.-No.	Description / Application	sq. ft.	lb
22-500-20	ML-panel 9' x 3'	27.0	136.2
22-500-30	ML-panel 9' x 2'	18.0	96.6

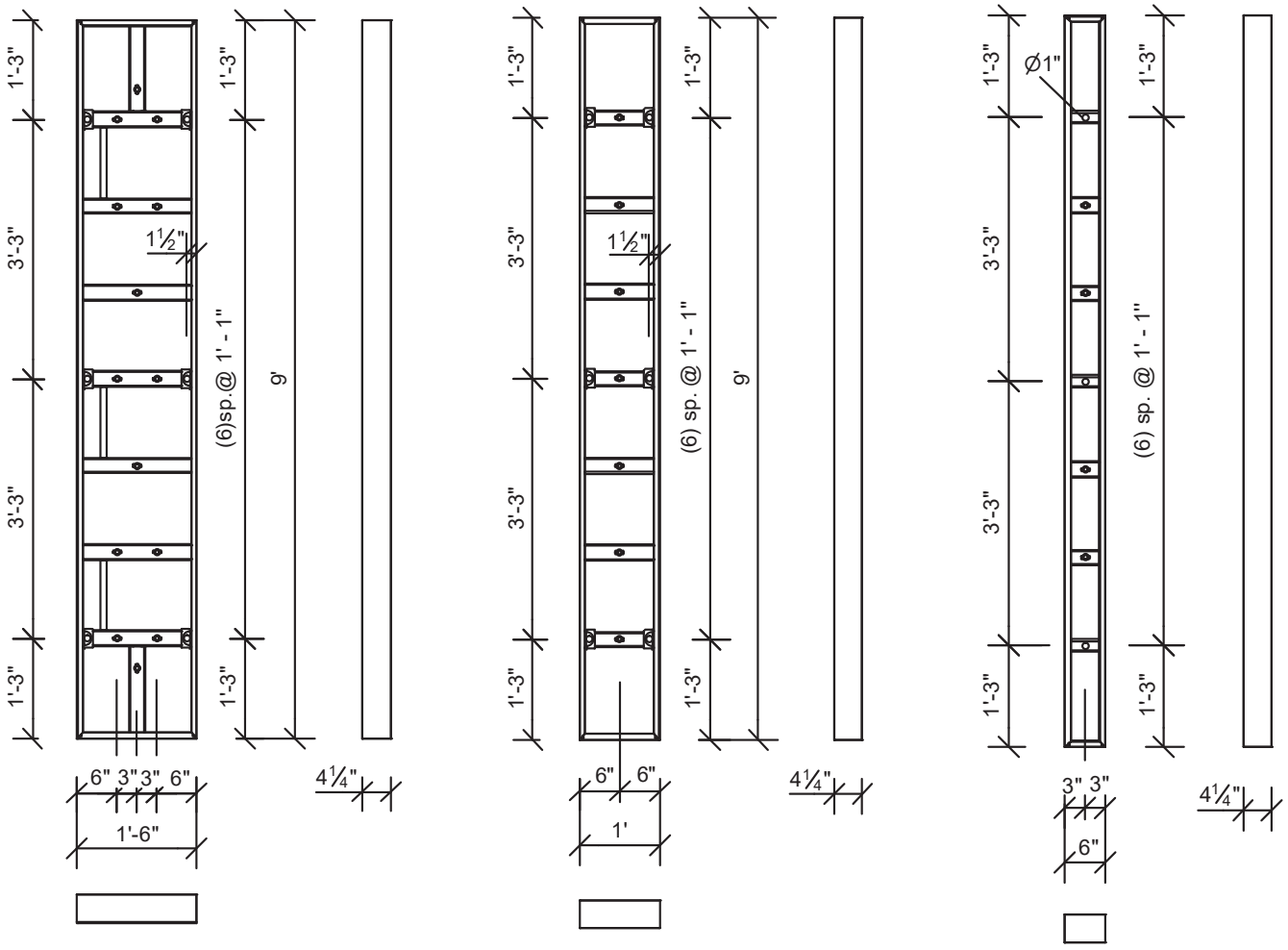


ML-panels

Panel height 9'
For panel height 9': 7 cross stiffeners, of which 7 are multi- function profiles with welded DW-threaded nuts. 3 symmetrically arranged tie holes per panel height.

Attention
Unused tie holes need to be closed with plugs D 27/30.

Ref.-No.	Description / Application	sq. ft.	lb
22-500-40	ML-panel 9' x 1'-6"	13.5	79.6
22-500-50	ML-panel 9' x 1'	9.0	57.5
22-500-60	ML-panel 9' x 0'-6"	4.5	38.1

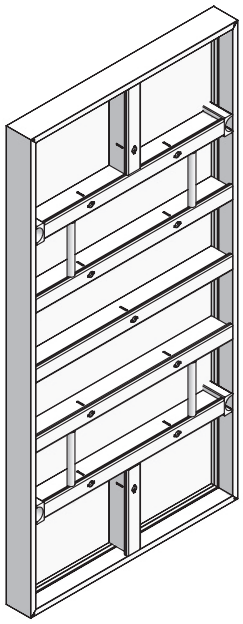


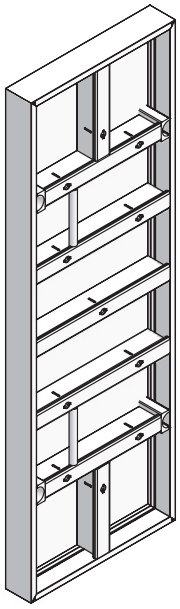
ML-panels

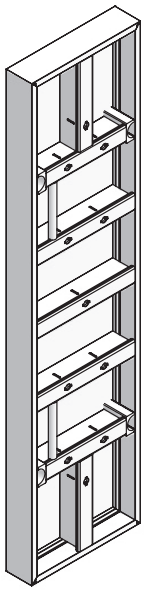
Panel height 6'
For panel height 6': 5 cross stiffeners, of which 5 are multi- function profiles with welded DW-threaded nuts. 2 symmetrically arranged tie holes per panel height.

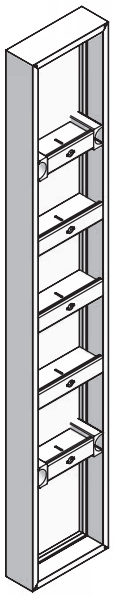
Ref.-No.	Description / Application	sq. ft.	lb
22-501-20	ML-panel 6' x 3'	18.0	85.8
22-501-30	ML-panel 6' x 2'	12.0	67.7
22-501-40	ML-panel 6' x 1'-6"	9.0	55.6
22-501-50	ML-panel 6' x 1'	6.0	39.5
22-501-60	ML-panel 6' x 0'-6"	3.0	26.0

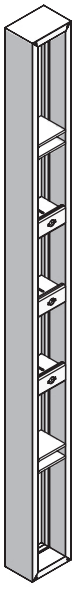
Attention
Unused tie holes need to be closed with plugs D 27/30.











ML-panels

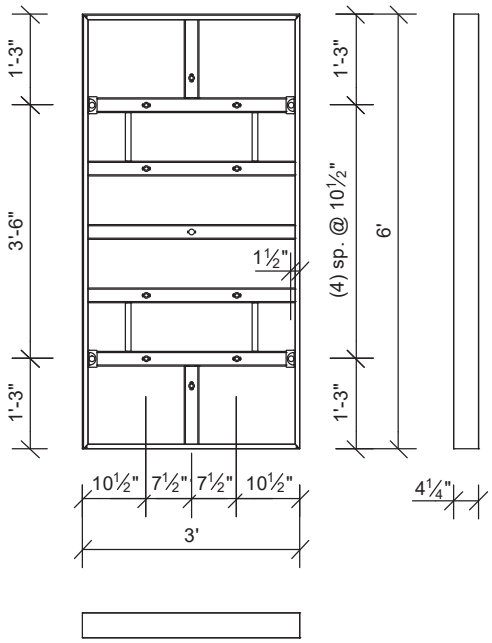
Panel height 6'

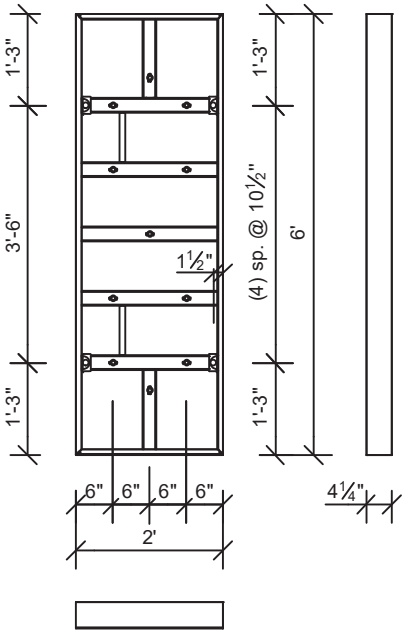
For panel height 6': 5 cross stiffeners, of which 5 are multi- function profiles with welded DW-threaded nuts. 2 symmetrically arranged tie holes per panel height.

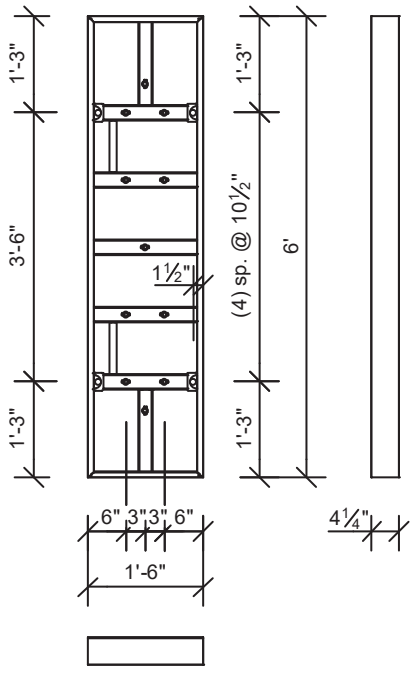
Ref.-No.	Description / Application	sq. ft.	lb
22-501-20	ML-panel 6' x 3'	18.0	85.8
22-501-30	ML-panel 6' x 2'	12.0	67.7
22-501-40	ML-panel 6' x 1'-6"	9.0	55.6
22-501-50	ML-panel 6' x 1'	6.0	39.5
22-501-60	ML-panel 6' x 0'-6"	3.0	26.0

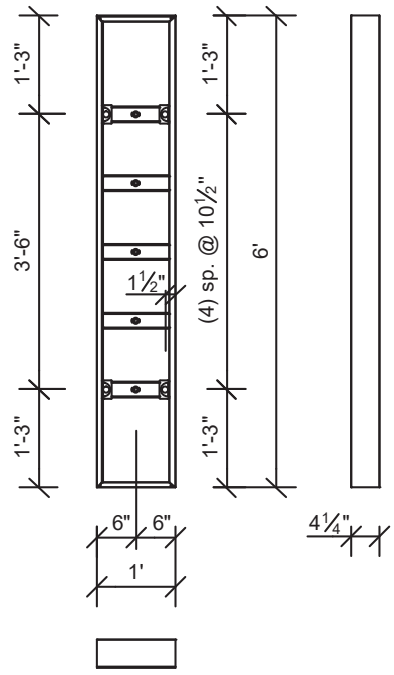
Attention

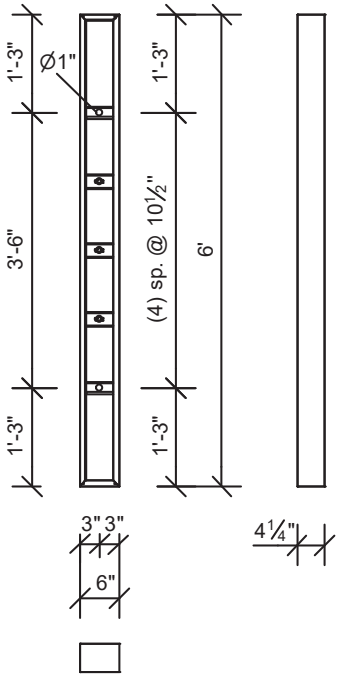
Unused tie holes need to be closed with plugs D 27/30.











ML-panels

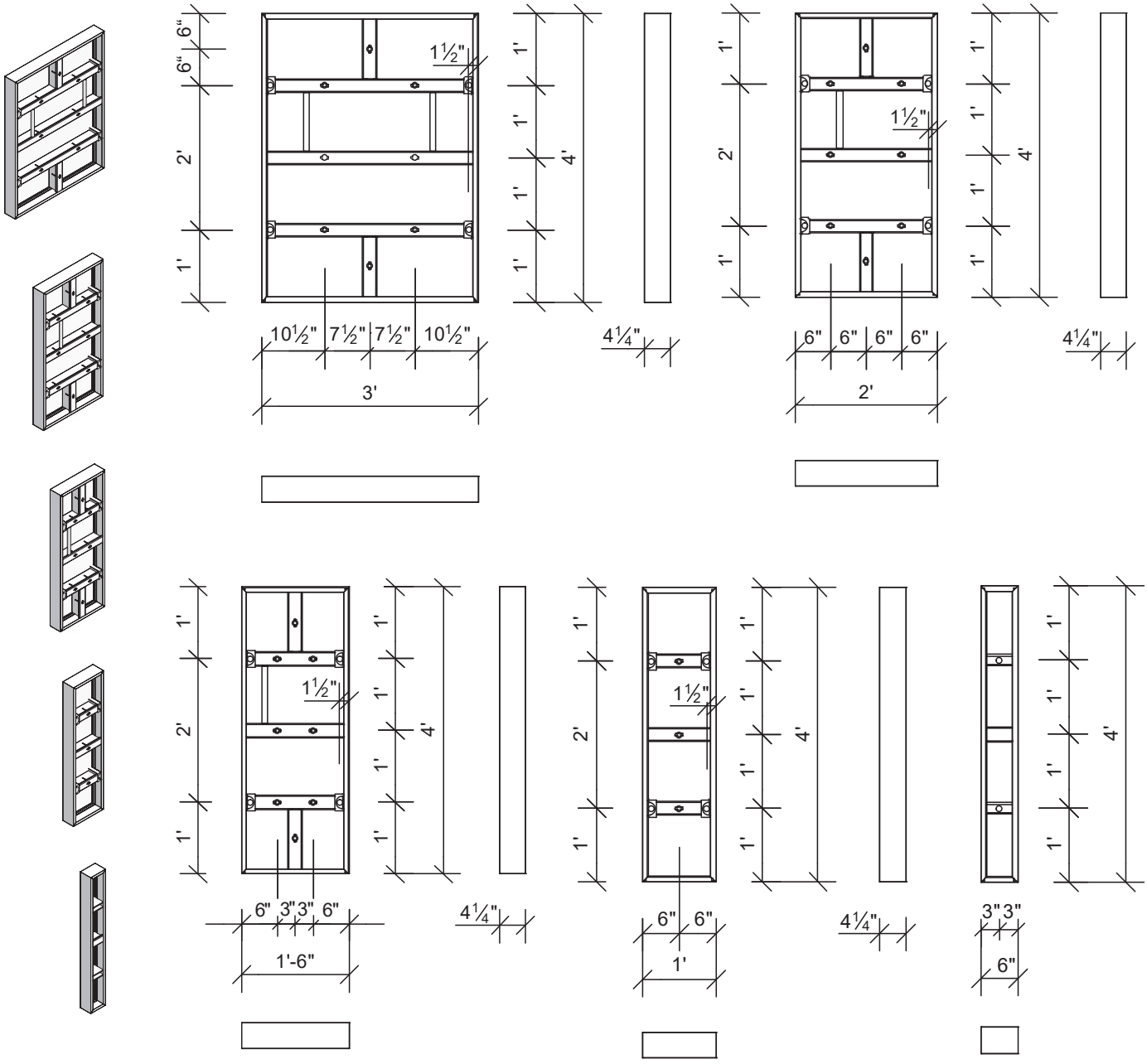
Panel height 4'

For panel height 4': 3 cross stiffeners, of which 3 are multi- function profiles with welded DW-threaded nuts. The only exception is the 6" wide panel, which has no multi-function profile. 2 symmetrically arranged tie holes per panel height.

Attention

Unused tie holes need to be closed with plugs D 27/30.

Ref.-No.	Description / Application		sq. ft.	lb
22-502-20	ML-panel	4' x 3'	12.0	62.5
22-502-30	ML-panel	4' x 2'	8.0	46.5
22-502-40	ML-panel	4' x 1'-6"	6.0	38.6
22-502-50	ML-panel	4' x 1'	4.0	27.3
22-502-60	ML-panel	4' x 0'-6"	2.0	17.4

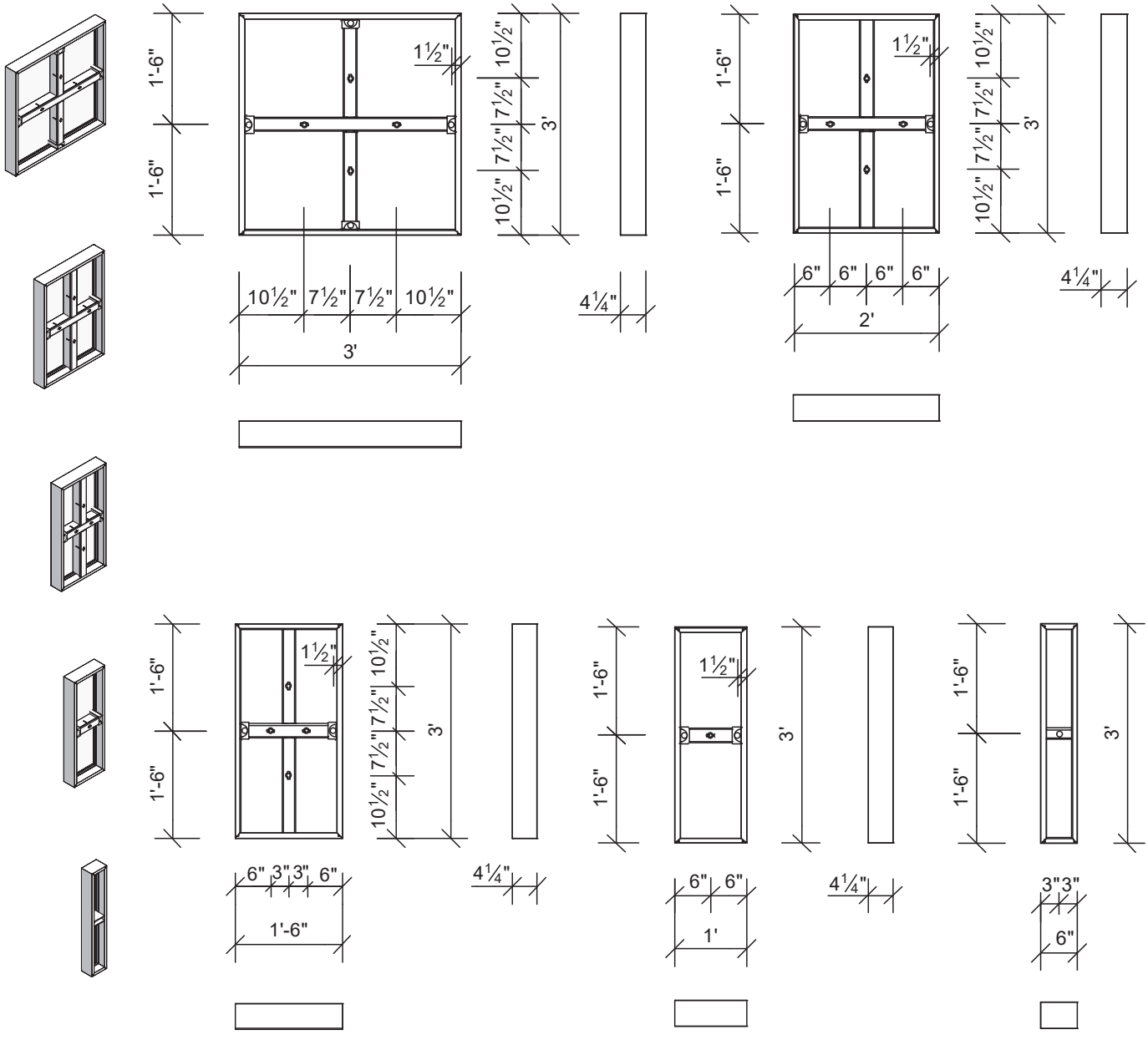


ML-panels

Panel height 3'
For panel height 3': 1 cross stiffener, of which 1 is a multi- function profile with welded DW-threaded nuts. The only exception is the 6" wide panel, which has no multi-function profile. 1 symmetrically arranged tie hole per panel height.

Attention
Unused tie holes need to be closed with plugs D 27/30.

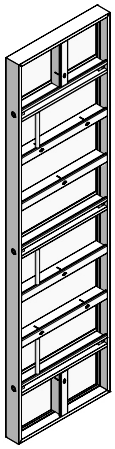
Ref.-No.	Description / Application	sq. ft.	lb
22-503-20	ML-panel 3' x 3'	9.0	47.6
22-503-30	ML-panel 3' x 2'	6.0	34.2
22-503-40	ML-panel 3' x 1'-6"	4.5	28.2
22-503-50	ML-panel 3' x 1'	3.0	19.0
22-503-60	ML-panel 3' x 0'-6"	1.5	12.3

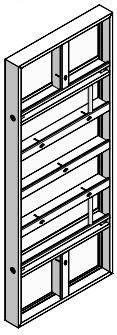


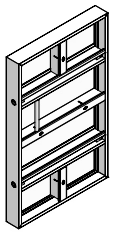
ML-multi-purpose panels

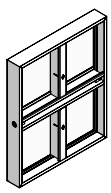
The multi-purpose panel can be used to form pilasters, corners, columns, bridge abutments and connections to existing walls. The panels have multi-adjustment profiles for mounting column clamps or ties.
The multi-purpose panel can be used as a standard 2'-6" panel as the tie holes are not yet drilled. However, the panel comes with pilot holes predrilled on the backside of the panel for exact position of selected tie holes. For drilling this hole a 1" size bit is required.
Another possibility to connect two multi-purpose panels with each other is to use the ML-tensioning screw.

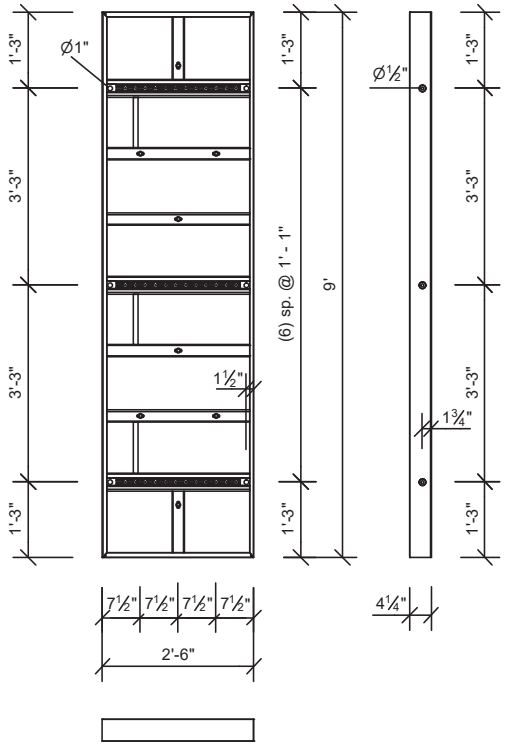
Ref.-No.	Description / Application	sq. ft.	lb
22-500-25	ML-multi-purpose panel	9' x 2'-6"	22.5	128.3
22-501-25	ML-multi-purpose panel	6' x 2'-6"	15.0	90.4
22-502-25	ML-multi-purpose panel	4' x 2'-6"	10.0	62.0
22-503-25	ML-multi-purpose panel	3' x 2'-6"	7.5	43.2

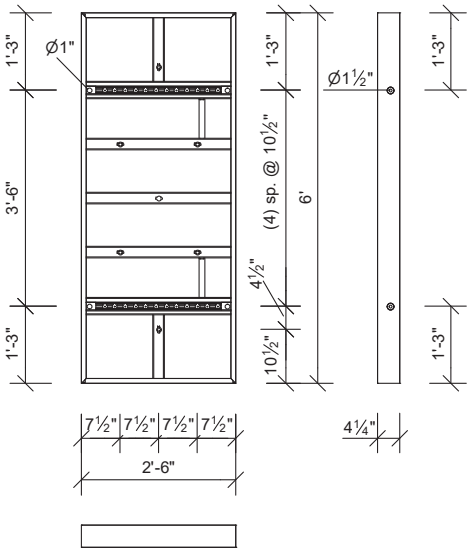


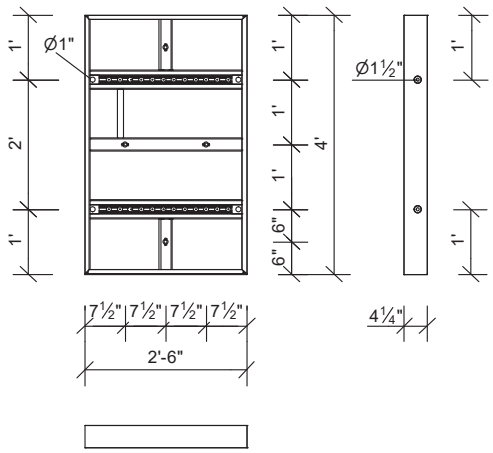


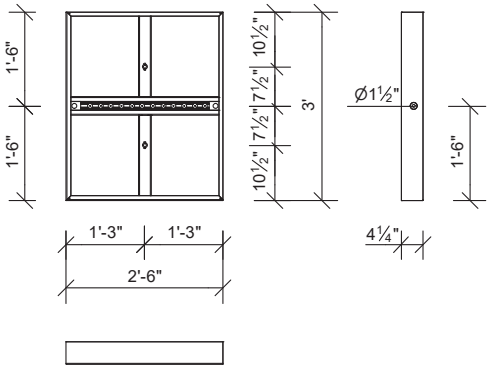








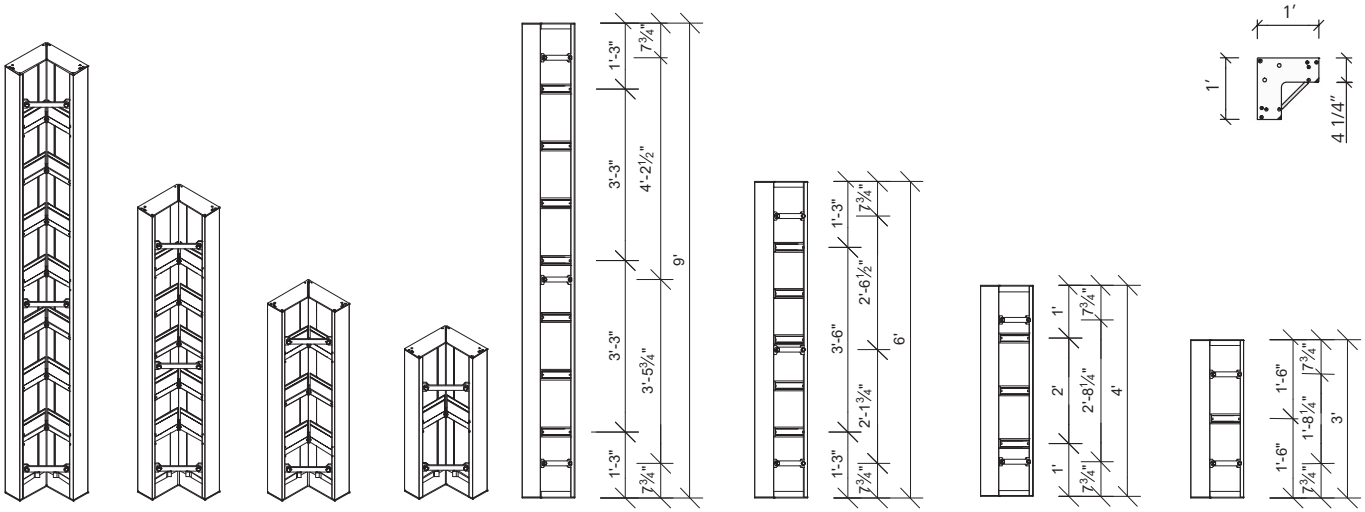




ML-inside corner elastic

consists of an aluminum frame and a replaceable alkus-sheet; for 90°angles.

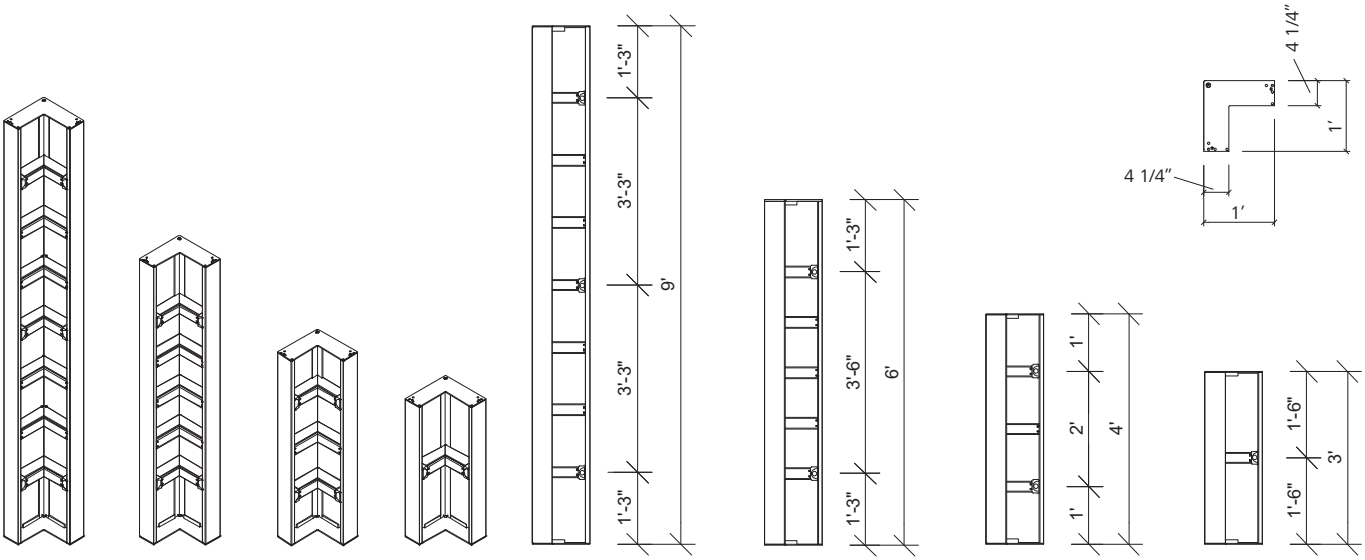
Ref.-No.	Description / Application	sq. ft.	lb
22-505-60	ML-inside corner elastic .. 9' x 1'	18	91.5
22-505-70	ML-inside corner elastic .. 6' x 1'	12	64.2
22-505-80	ML-inside corner elastic .. 4' x 1'	8	44.1
22-505-90	ML-inside corner elastic .. 3' x 1'	6	33.1



ML-inside corner rigid

consists of an aluminum frame and a replaceable alkus-sheet with tie hole; for 90°angles.

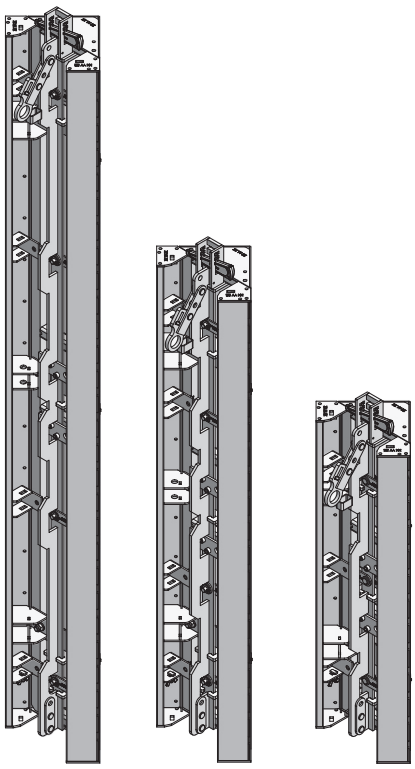
Ref.-No.	Description / Application	sq. ft.	lb
22-505-55	ML-inside corner rigid ..... 9' x 1'	18	80.0
22-505-65	ML-inside corner rigid ..... 6' x 1'	12	56.0
22-505-75	ML-inside corner rigid ..... 4' x 1'	8	37.5
22-505-85	ML-inside corner rigid ..... 3' x 1'	6	28.7

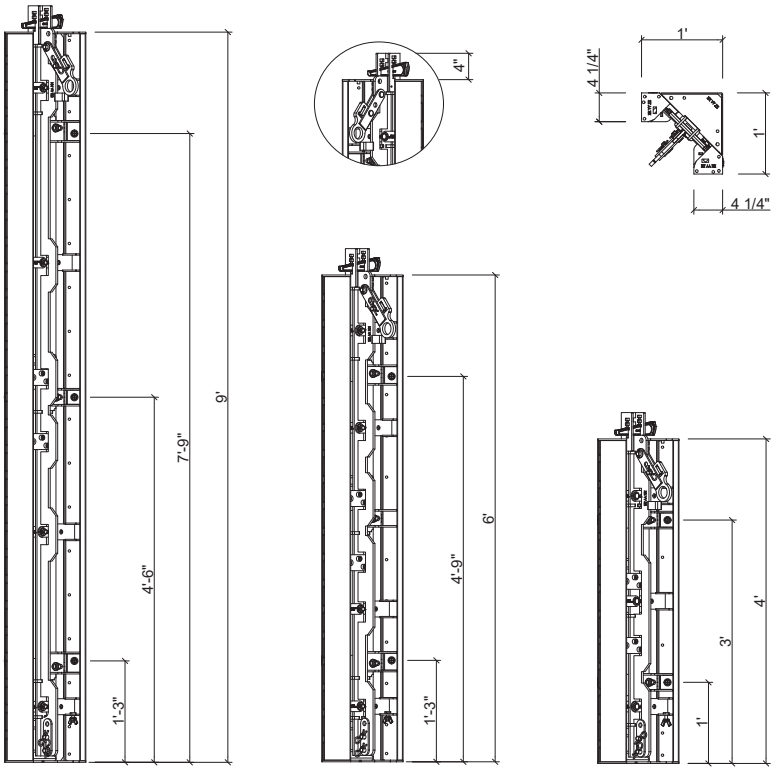


ML-stripping corner

steel; side length = 1', designed with 3 pieces to permit inward movement to facilitate stripping and resetting of formwork e.g. in a shaft.

Ref.-No.	Description / Application	sq. ft.	lb
22-508-00	ML-stripping corner 9'	18	364.3
22-508-10	ML-stripping corner 6'	12	269.5
22-508-20	ML-stripping corner 4'	8	193.7

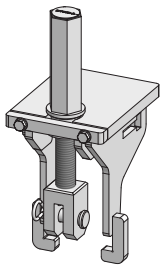


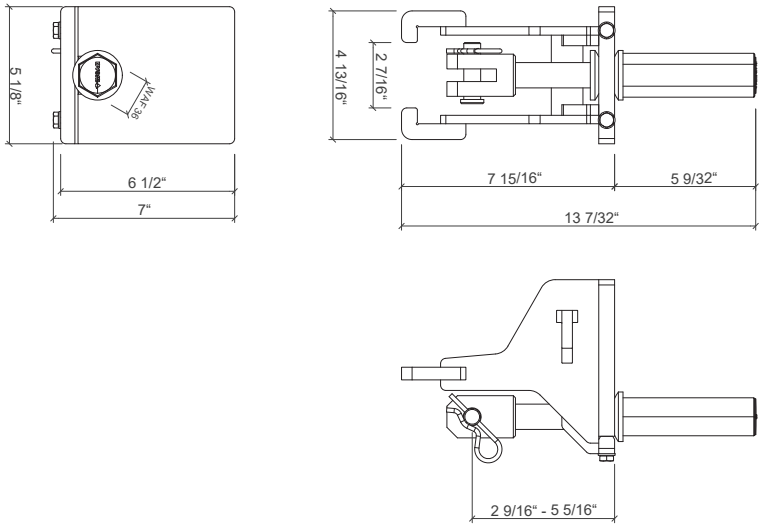


Stripping corner retract & reset tool

The retract and reset tool is used to easily activate the stripping corner from above with an impact wrench, a ratchet or a wrench.
The retract and reset tool has a hexagonal nut that is operated with tools with a width across flats of 36 mm (1 17/16").
An additional possibility is the use of the Stripping Corner Lever Tool (see page 78).

Ref.-No.	Description / Application	lb
29-306-32	Stripping corner retract & reset tool	14.6

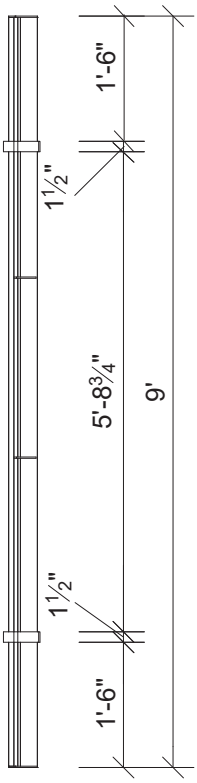


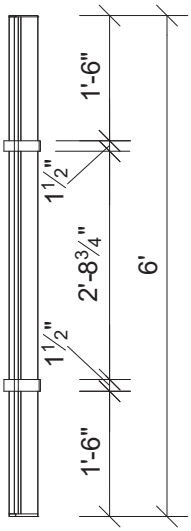


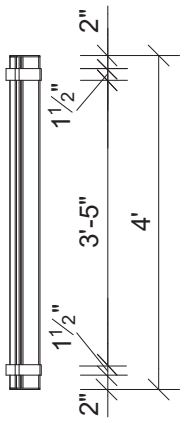
ML-outside corner

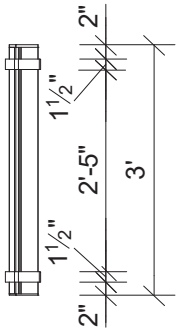
aluminum, together with MevaLite-panels and EA-assembly locks it provides a solid outside corner assembly for 90° angles with high resistance to tensile force.

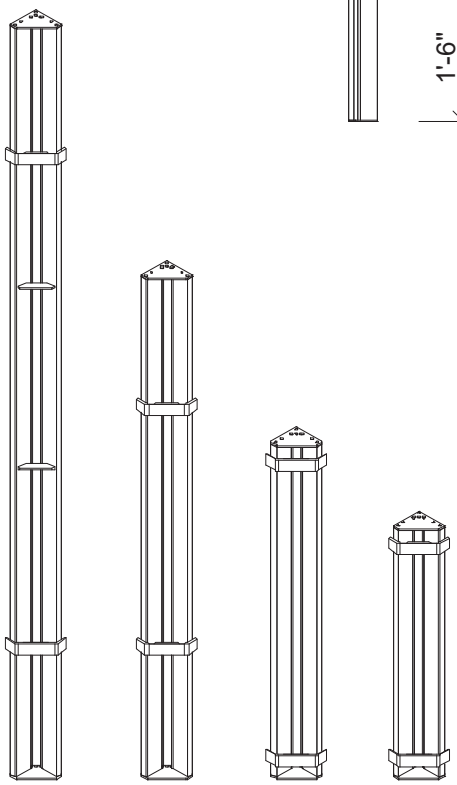
Ref.-No.	Description / Application	lb
22-505-10	ML-outside corner 9’	20.5
23-505-20	ML-outside corner 6’	13.7
23-505-30	ML-outside corner 4’	9.5
23-505-40	ML-outside corner 3’	7.5

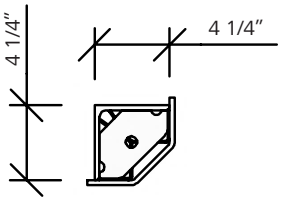








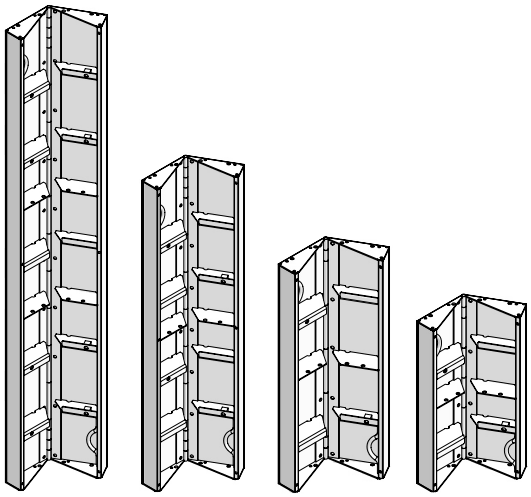


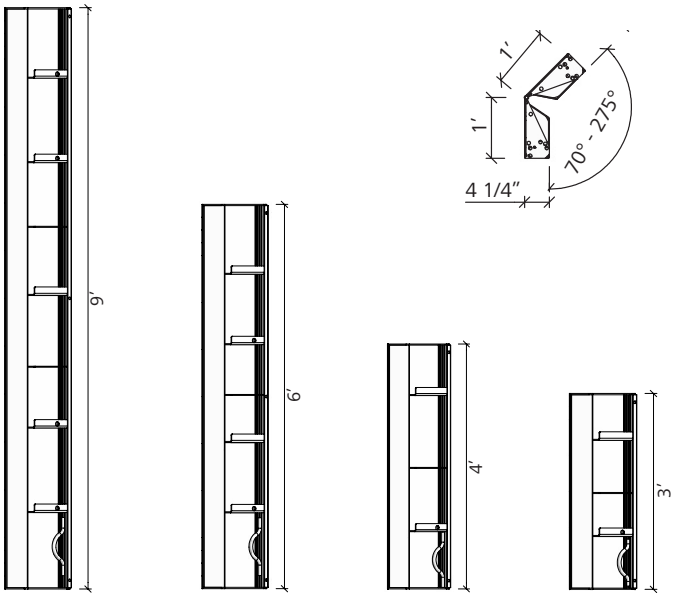


ML-articulated inside corner

steel; side length = 1'; adjustable from 70° to 275°; stop points at 70°, 90° and 135°; plugs D 27/30 (Ref.-No. 29-902-64) are used to close the tie holes.

Ref.-No.	Description / Application	sq. ft.	lb
22-506-10	ML-articulated inside corner 9'	18	192.5
22-506-20	ML-articulated inside corner 6'	12	132.7
22-506-30	ML-articulated inside corner 4'	8	89.5
22-506-40	ML-articulated inside corner 3'	6	72.5

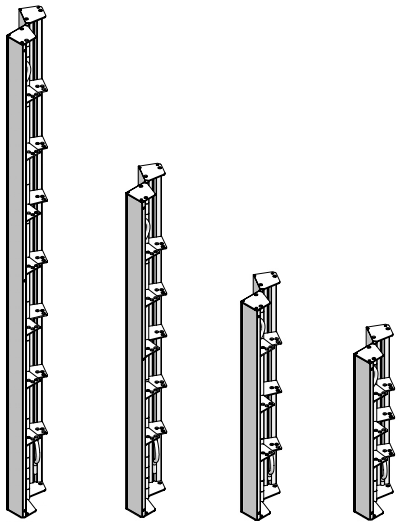


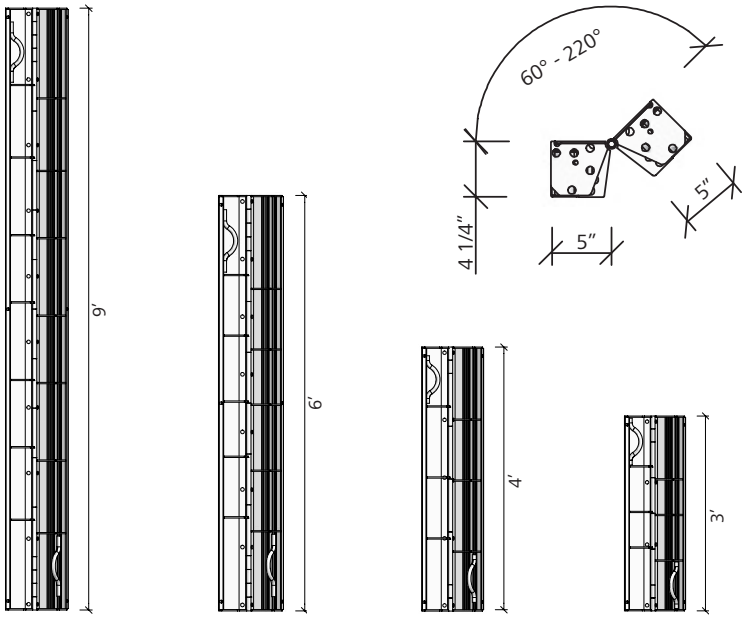


ML-articulated outside corner

steel, side length = 5"; stop points at 90°, 120° and 135°; adjustable from 60° to 220°, plugs D 27/30 (Ref.-No. 29-902-64) are used to close the tie holes.

Ref.-No.	Description / Application	sq. ft.	lb
22-506-60	ML-articulated outside corner 9'	7.5	124.6
22-506-70	ML-articulated outside corner 6'	5.0	85.5
22-506-80	ML-articulated outside corner 4'	3.3	58.2
22-506-90	ML-articulated outside corner 3'	2.5	47.0

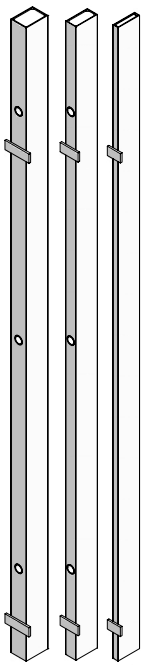


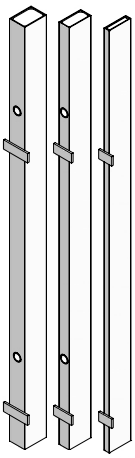


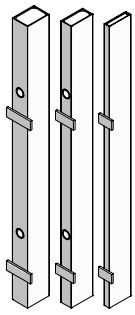
ML-filler

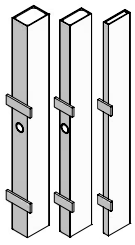
for length adjustments of 1" to 3".

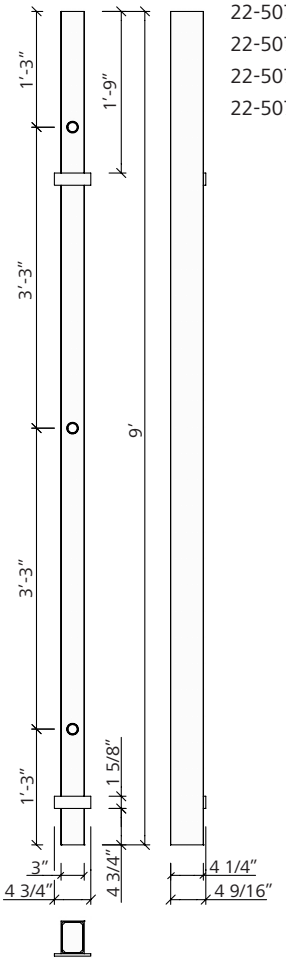
Ref.-No.	Description / Application		sq. ft.	lb
22-507-10	ML-filler	9' x 3"	2.30	22.7
22-507-15	ML-filler	9' x 2"	1.50	16.5
22-507-20	ML-filler	9' x 1"	0.75	13.0
22-507-30	ML-filler	6' x 3"	1.50	15.2
22-507-35	ML-filler	6' x 2"	1.00	11.0
22-507-40	ML-filler	6' x 1"	0.50	8.6
22-507-50	ML-filler	4' x 3"	1.00	10.4
22-507-55	ML-filler	4' x 2"	0.67	7.7
22-507-60	ML-filler	4' x 1"	0.33	6.0
22-507-70	ML-filler	3' x 3"	0.75	7.9
22-507-75	ML-filler	3' x 2"	0.50	5.7
22-507-80	ML-filler	3' x 1"	0.25	4.4

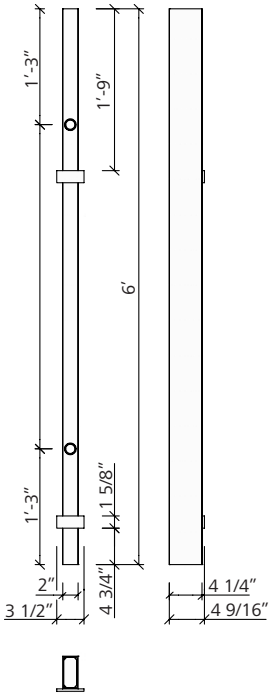


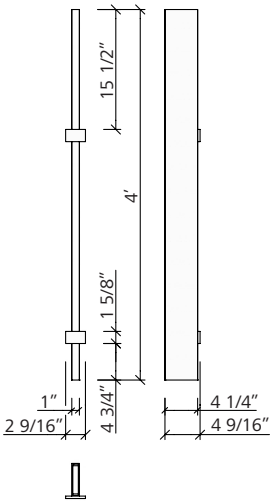


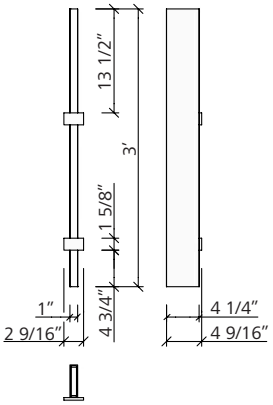






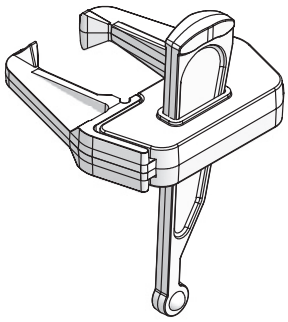




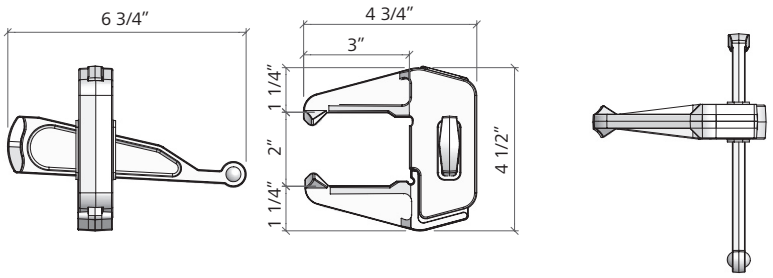


EA-assembly lock

galvanized; to tightly connect and align ML-panels; clamping length: 2“

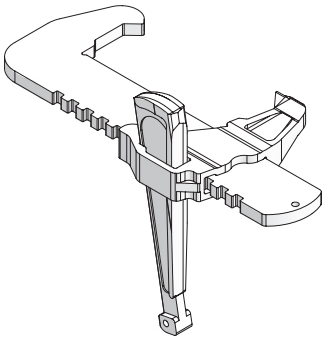


Ref.-No.	Description / Application	lb
29-205-50	EA-assembly lock	3.3

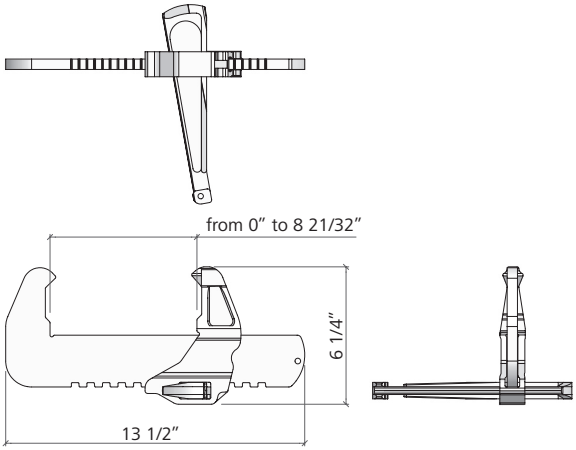


Uni-assembly lock 22

galvanized; for connecting panels with fillers; clamping length = 8 21/32“,
spans fillers up to 6 1/2“ (when using MevaLite panels).

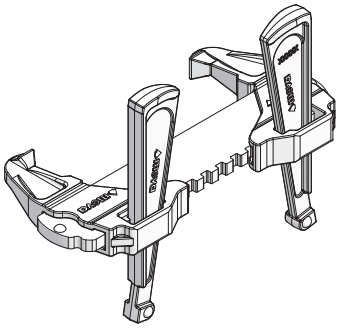


Ref.-No.	Description / Application	lb
29-400-85	Uni-assembly lock 22	7.9

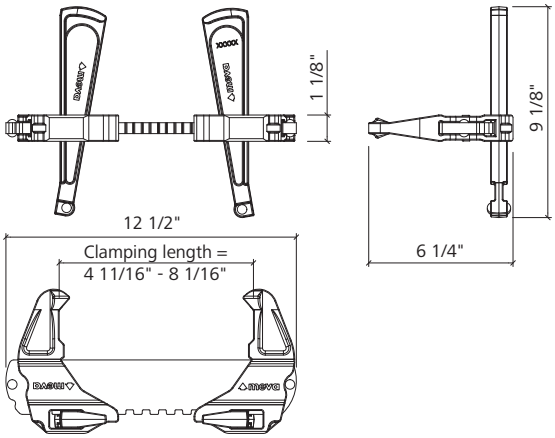


Double wedge lock

galvanized; for connecting ML-panels with fillers at stripping corners;
clamping length = 4 11/16" - 8 1/16“,
spans fillers from 3" (minimum filler size) up to 6 1/4“ (maximum filler size).



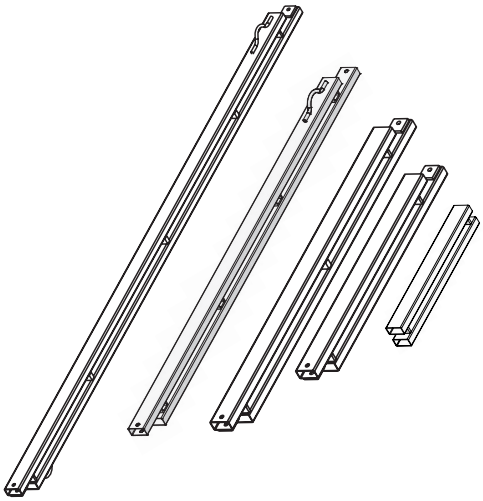
Ref.-No.	Description / Application	lb
23-807-70	Double wedge lock	10.4

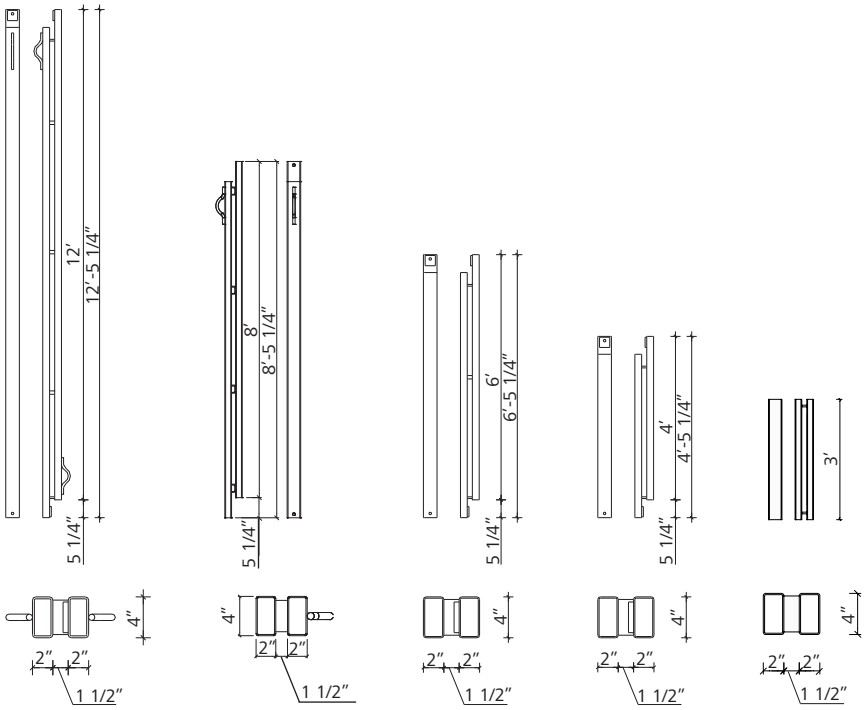


Alignment rails

galvanized; to brace panel joints for gang forming, to support fillers and to build bulkheads. Is attached to formwork with flange screws.

Ref.-No.	Description / Application	lb
2-500-2331040	Steel rail 12'	155.0
2-500-2331035	Steel rail 8'	80.0
2-500-2331030	Steel rail 6'	61.0
2-500-2331020	Steel rail 4'	44.0
2-500-2251010	Steel rail 3'	29.0

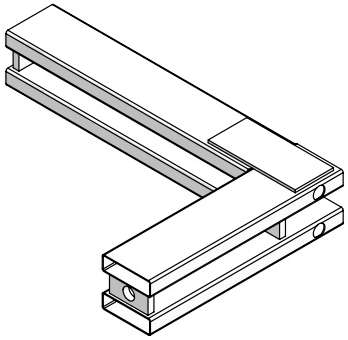


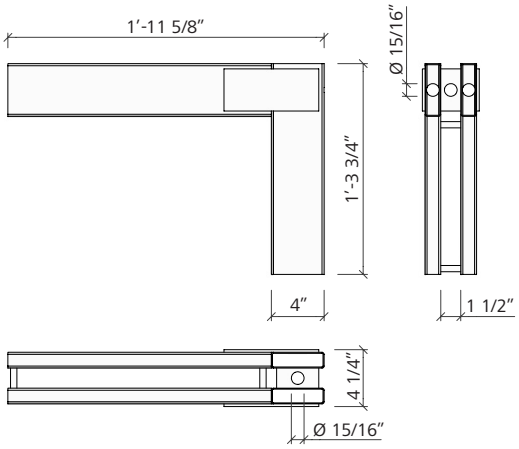


Corner bracket 40/60

galvanized; to reinforce corner applications.

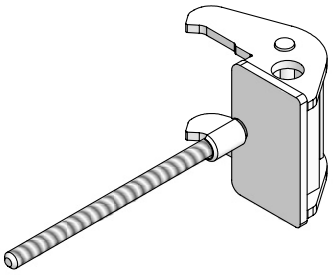
Ref.-No.	Description / Application	lb
29-402-25	Corner bracket 40/60	20.9



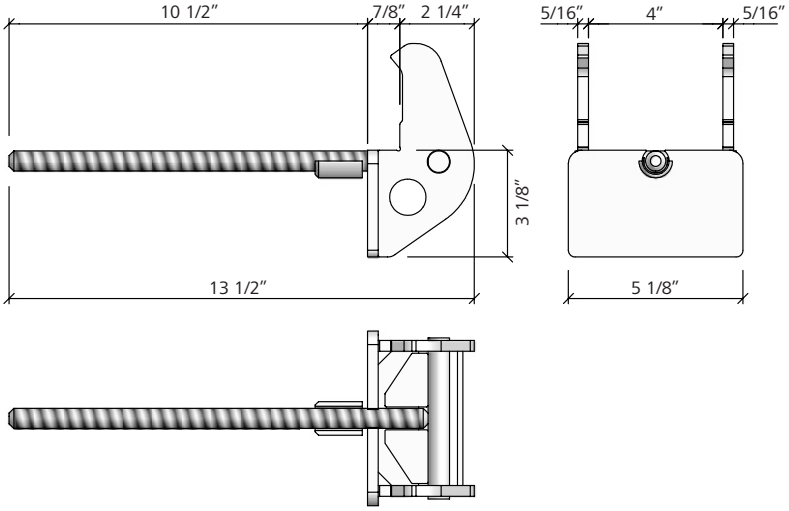


ML-column clamp

galvanized, permits connection of panels at an angle of 90°. To form columns with ML-multi-purpose panels; needs one flange nut 100 or articulated flange nut 15/120.

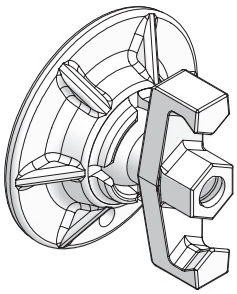


Ref.-No.	Description / Application	lb
29-210-70	ML-column clamp	5.4

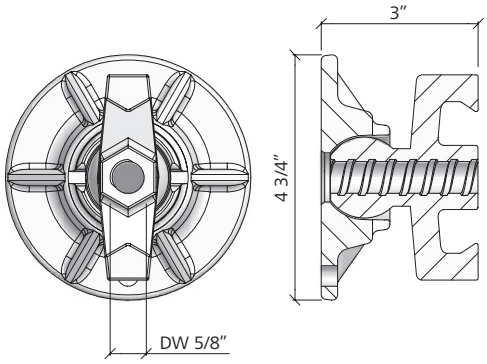


Articulated flange nut 15/120

forged part with cut thread, ball-and-socket joint; max. inclination 10°; for threadbars with 5/8" (15 mm); plate diameter: 4 3/4"; admissible load-bearing capacity: 21,900 lbs.

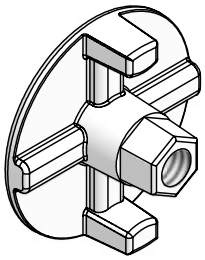


Ref.-No.	Description / Application	lb
29-900-10	Articulated flange nut 15/120	4.0

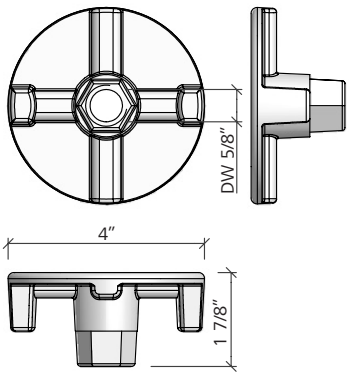


Flange nut 100

forged part with cut thread; for threadbars with 5/8" (15 mm); plate diameter: 4"; admissible load-bearing capacity: 21,900 lbs.



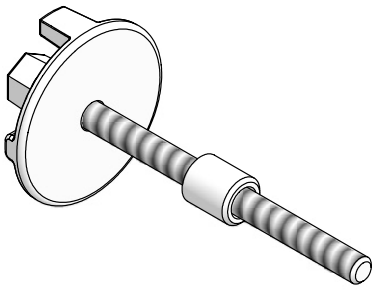
Ref.-No.	Description / Application	lb
29-900-20	Flange nut 100	1.5

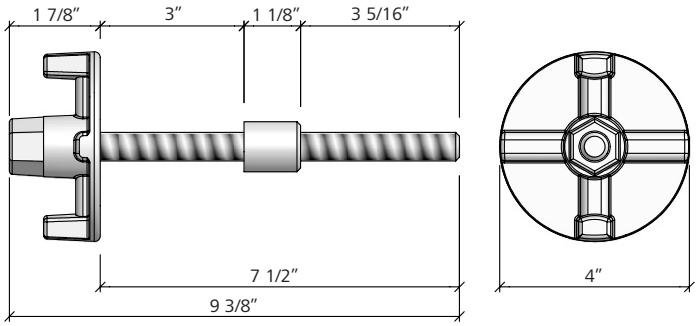


ML-tensioning screw

to connect two ML-multi-purpose panels at an angle of 90° with each other

Ref.-No.	Description / Application	lb
29-210-80	ML-tensioning screw	2.6

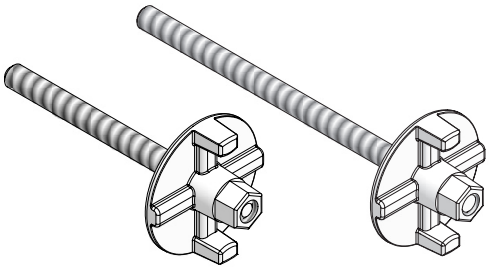


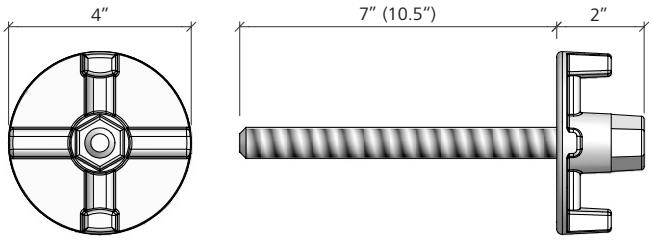


Flange screw 18/28

galvanized; to attach steel rails, scaffolding brackets and formwork-prop connectors etc.; length of thread: 7" for flange screw 18 and 10.5" for flange screw 28.

Ref.-No.	Description / Application	lb
29-401-10	Flange screw 18	2.4
29-401-12	Flange screw 28	2.7

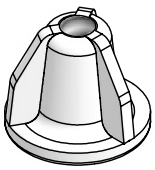


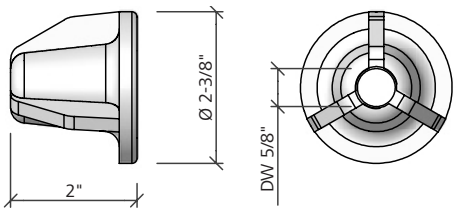


Drive nut 60

galvanized; DW thread Ø 5/8" (15 mm), plate Ø 2-3/8" (60 mm)
safe working load = 21.9 K @ 2:1 safety factor
Is used to tie the formwork to the ground or to a wall connection

Ref.-No.	Description / Application	lb
29-900-23	Drive nut 60	1.1

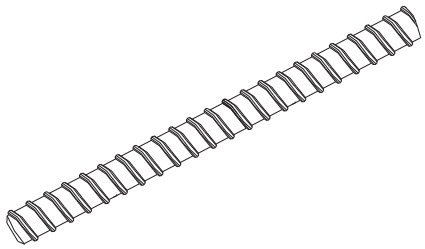


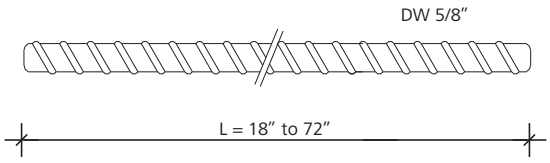


Threadbar 5/8" (15mm)

to tie formwork;
safe working load = 21.9 kips @ 2:1 safety factor

Ref.-No.	Description / Application	lb
2-500-2990158	18"	1.5
2-500-2990156	42"	3.5
2-500-2990154	54"	4.5
2-500-2990152	72"	6.0

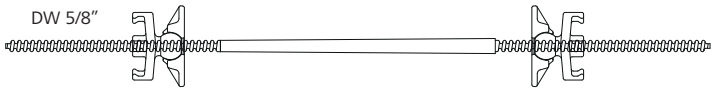




Taper tie

to tie formwork; 5/8" (15mm) thread diameter,
1" to 3/4" taper diameters;
safe working load = 18.75 kips @ 2:1 safety factor

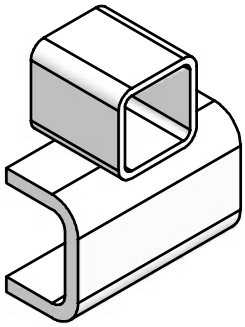
Ref.-No.	Taper Length	Overall Length	lb
2-500-2990131	16"	41"	5.1
2-500-2990133	24"	49"	6.4
2-500-2990135	32"	57"	7.7

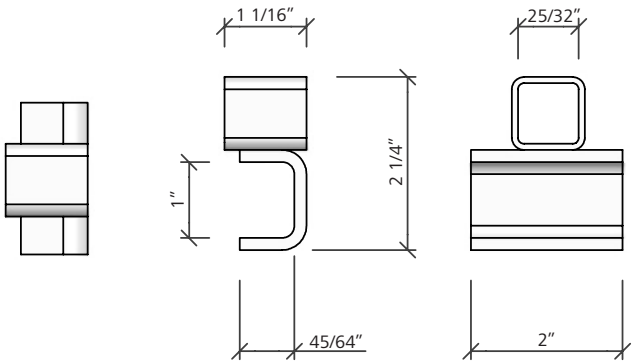


Tie claw 23

galvanized; permits tieing directly above or
beside MevaLite panels.

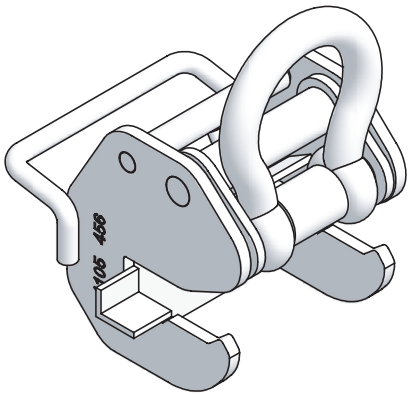
Ref.-No.	Description / Application	lb
29-901-44	Tie claw 23	0.4



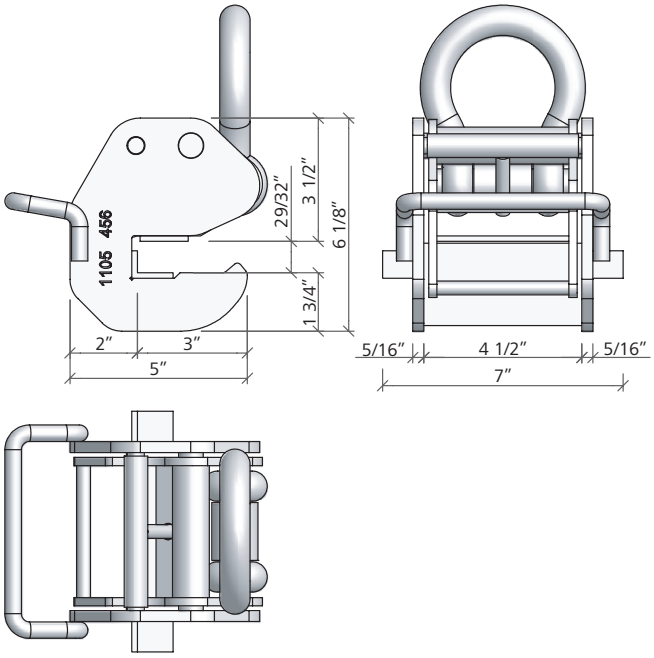


ML-crane hook

to move panels and lift gangs; self-locking mechanism; admissible load-bearing capacity: 1,300 lbs; for application and safety test – see „Crane Hook“ section.



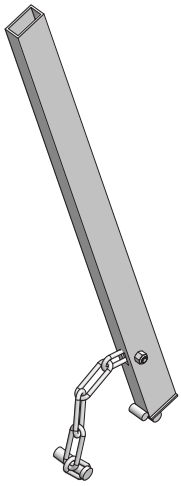
Ref.-No.	Description / Application	lb
29-103-10	ML-crane hook	12.6

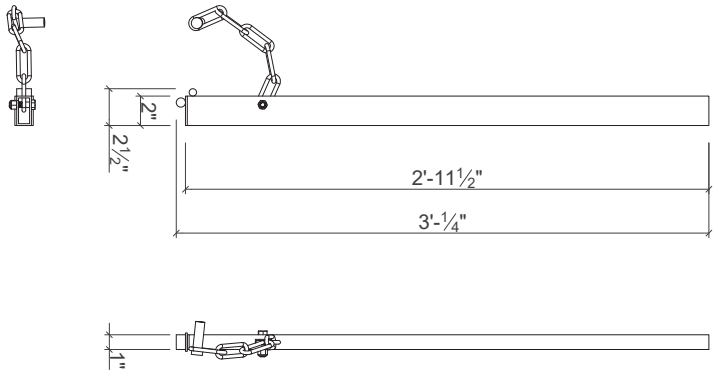


Stripping corner lever tool

is used to strip and reset wall formwork when using stripping corners.

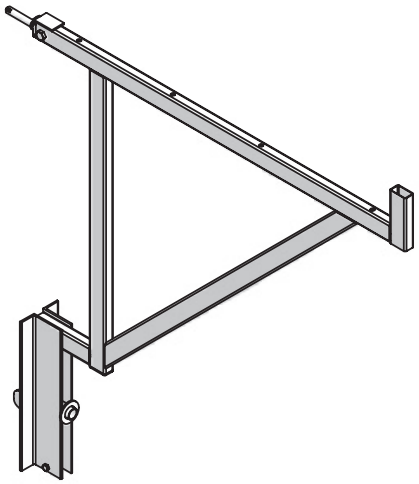
Ref.-No.	Description / Application	lb
2-500-2250980	Stripping corner lever tool	8.0



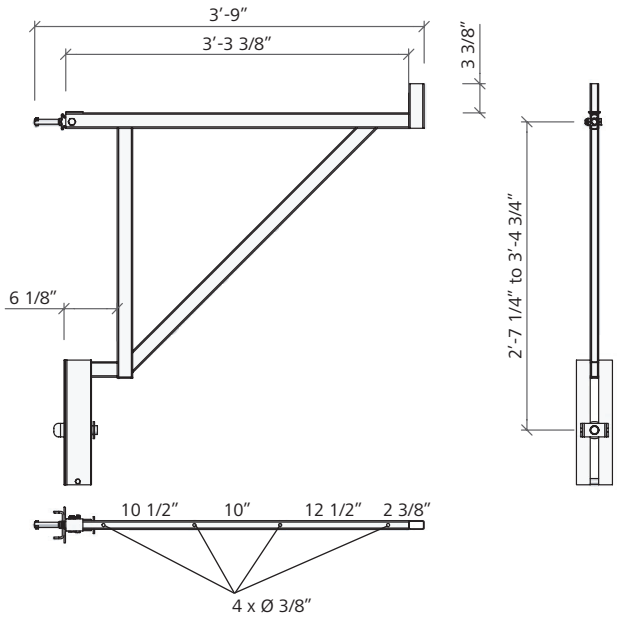


Walkway bracket 90

galvanized; is attached to the multi-function profile and secured to the multi-function profile below by means of a flange screw 18. The planking has to be bolted to the brackets. Working width approx. 3'. Guard-railing post 100 is required in addition.

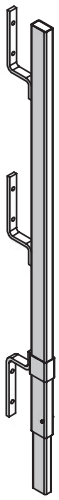


Ref.-No.	Description / Application	lb
29-106-00	Walkway bracket 90 (3')	22.0

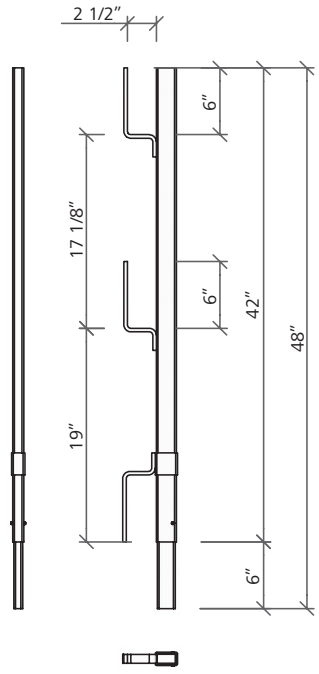


Guard-railing post 100

galvanized; is attached to the walkway bracket.

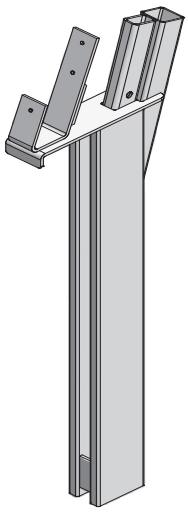


Ref.-No.	Description / Application	lb
29-106-75	Guard-railing post 100	8.2

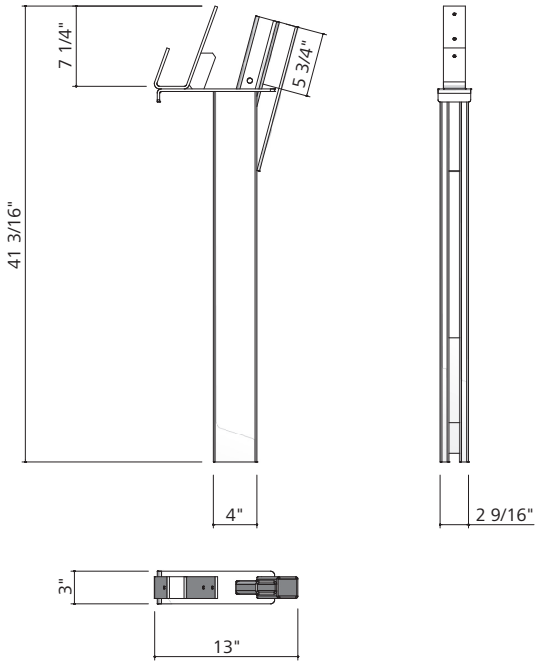


Support 800 for guard-railing post

galvanized; allows plugging in of all MEVA guard-railing posts. The support 800 is mounted to MEVA wall-formwork panels by using a flange screw 18.
The angle between wall formwork and guard-railling post is about 15°.
Not for use on horizontal panels!
Guard-railing post and flange screws 18 must be ordered separately.

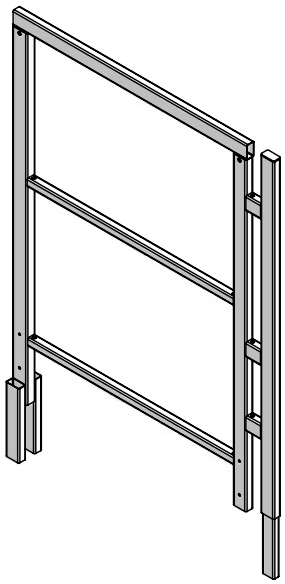


Ref.-No.	Description / Application	lb
29-108-50	Support 800 for guard-railing post	22.5

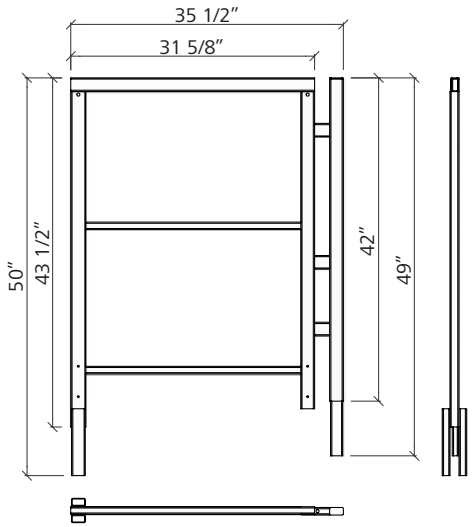


Side railing

galvanized; for walkway brackets.



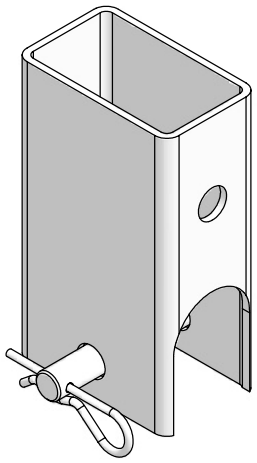
Ref.-No.	Description / Application	lb
29-108-20	Side railing 90/100	27.1

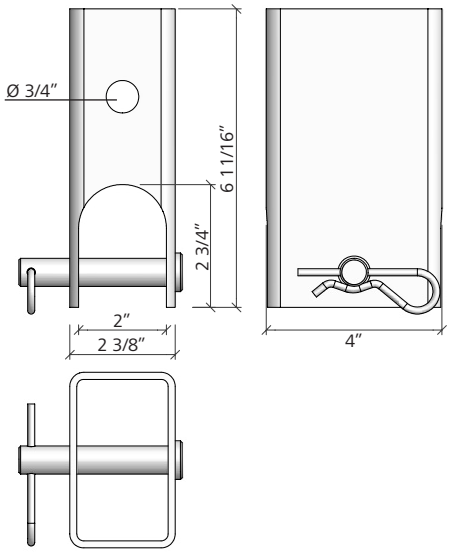


Formwork-prop connector

galvanized; to connect braces, brace frames and push-pull props to the multi-function profile by means of a flange screw 18. Delivery includes head bolt 16/90 and cotter pin 4.

Ref.-No.	Description / Application	lb
29-804-85	Formwork-prop connector	3.6

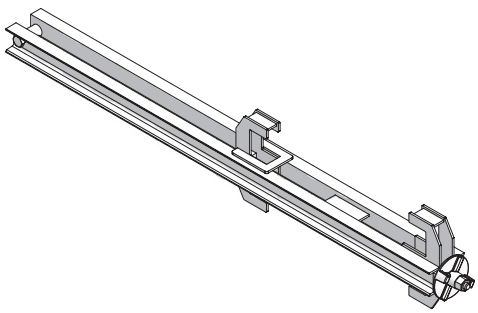


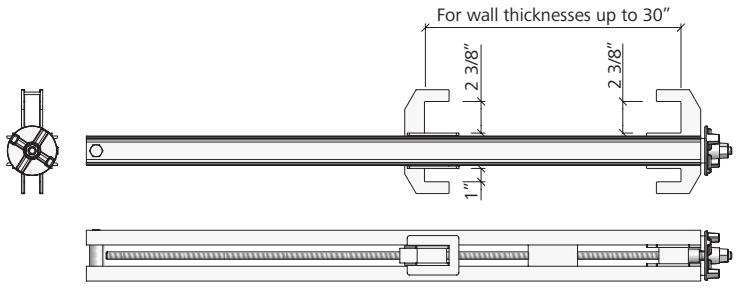


Bulkhead bracket 60/23

galvanized; replaces the tie rod or taper tie. Bulkhead bracket 60/23: suited for modular panels with a profile width of 7/8″ (MevaLite) and 2 3/8″ (Imperial).

Ref.-No.	Description / Application	lb
29-105-60	Bulkhead bracket 60/23	44.1

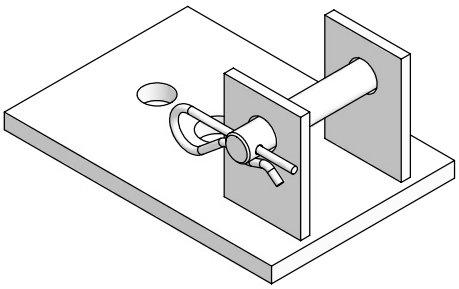


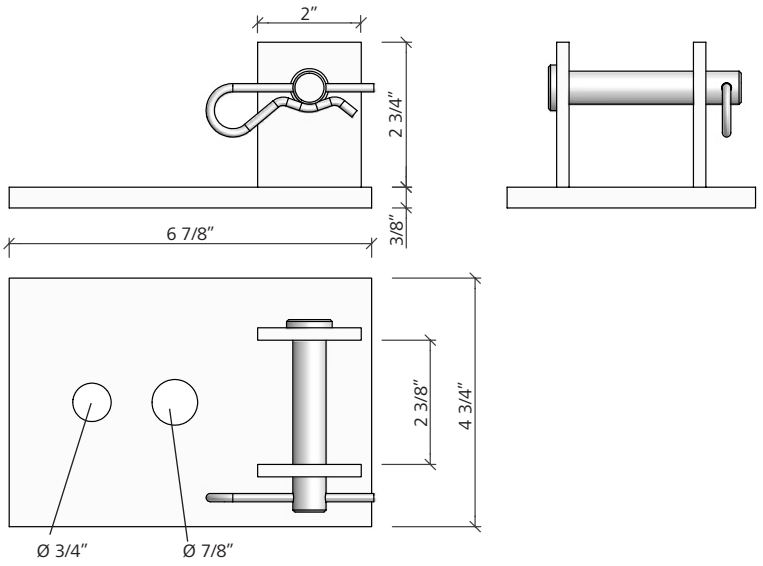


Articulated foot plate

galvanized; to anchor braces with up to 2 1/4“ (58 mm) outside diameter, includes M16x90 bolt and cotter pin.

Ref.-No.	Description / Application	lb
29-802-48	Articulated foot plate	5.1

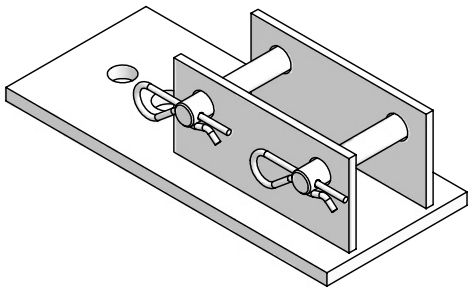


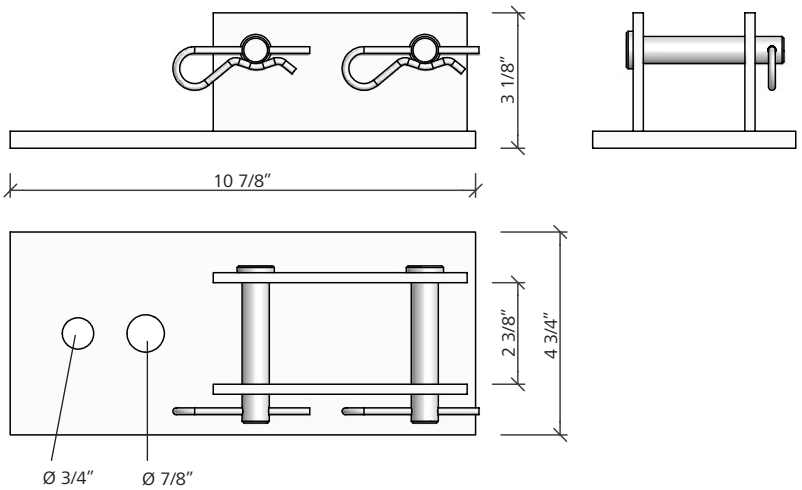


Double-jointed foot plate

galvanized; to anchor two braces with diameters up to 2 1/4“(58 mm). Includes two M16x90 bolts and cotter pins.

Ref.-No.	Description / Application	lb
29-402-32	Double-jointed foot plate	8.8

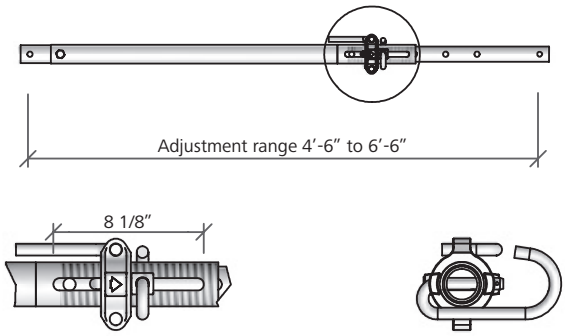




Push-pull prop R 160

galvanized; high tensile and compression strength, for aligning formwork.
Articulated foot plate and formwork-prop connector must be ordered separately.
Adjustment range: 4’-6” to 6’-6”.

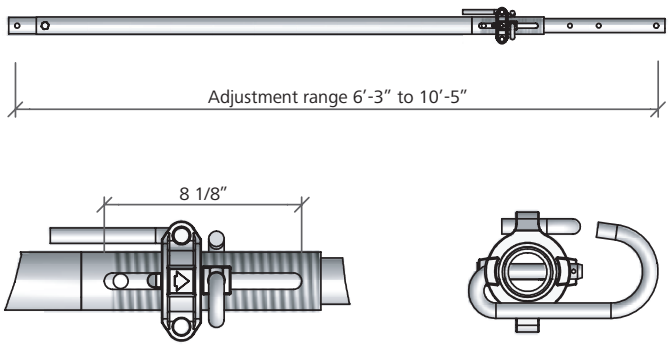
Ref.-No.	Description / Application	lb
29-109-40	Push-pull prop R 160	24.3



Push-pull prop R 250

galvanized; high tensile and compression strength, for aligning formwork.
Articulated foot plate and formwork-prop connector must be ordered separately.
Adjustment range: 6’-3” to 10’-5”.

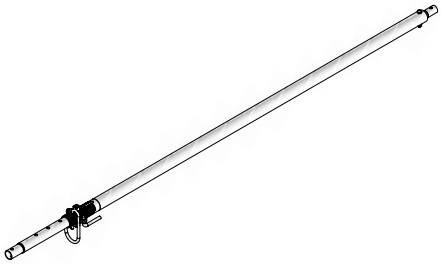
Ref.-No.	Description / Application	lb
29-109-60	Push-pull prop R 250	40.8

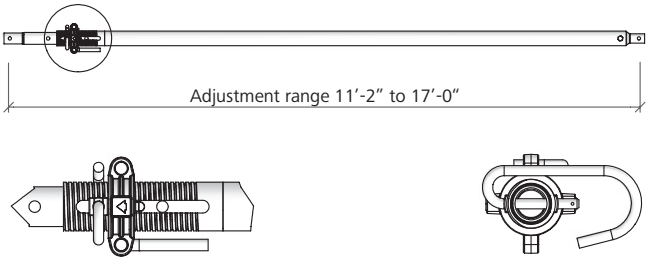


Push-pull prop R 460

Ref.-No.	Description / Application	lb
29-109-80	Push-pull prop R 460	78.9

galvanized; high tensile and compression strength, for aligning formwork.
Articulated foot plate and formwork-prop connector must be ordered separately.
Adjustment range: 11’-2” to 17’-0”.

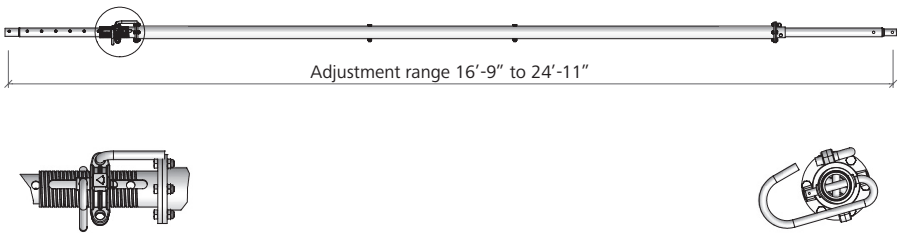




Push-pull prop R 630

Ref.-No.	Description / Application	lb
29-109-85	Push-pull prop R 630	149.9

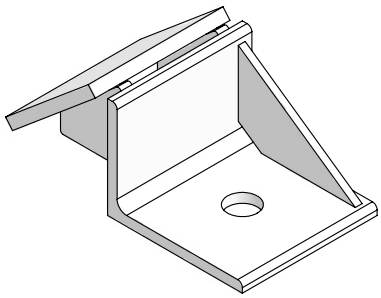
galvanized; high tensile and compression strength, for aligning formwork.
Articulated foot plate and formwork-prop connector must be ordered separately.
Adjustment range: 16’-9” to 24’-11”.

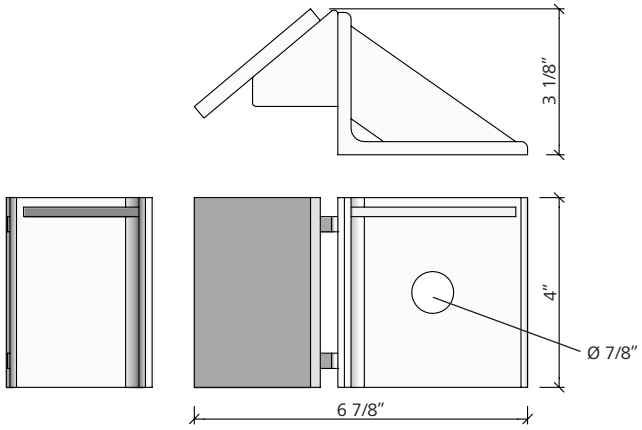


Shoe plate 23

galvanized; to anchor forms to the supporting structure.

Ref.-No.	Description / Application	lb
2-500-2331196	Shoe plate 23	4.7

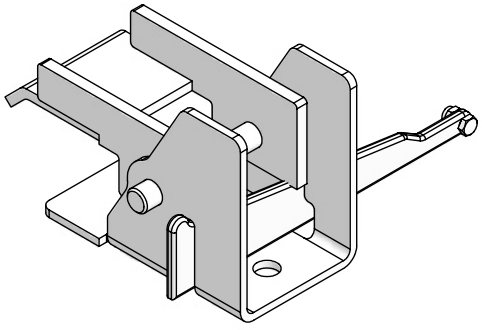


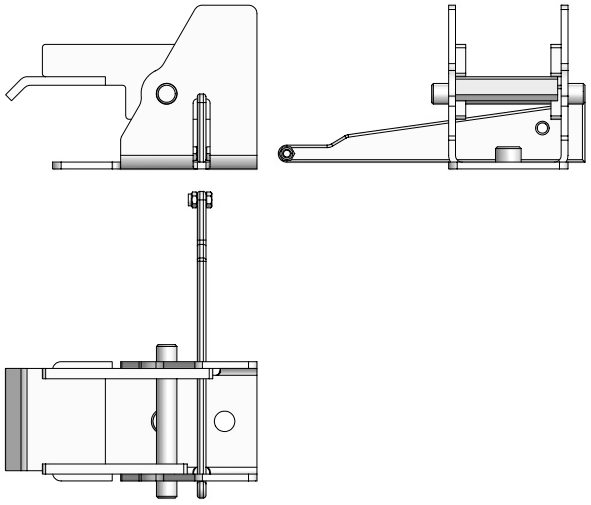


Foundation spanner ML

galvanized; to connect the foundation tape to MevaLite panels; it serves as bottom tie when panels are assembled in horizontal position. Two (2) foundation spanners are required per tieing position.

Ref.-No.	Description / Application	lb
29-307-85	Foundation spanner ML	3.7

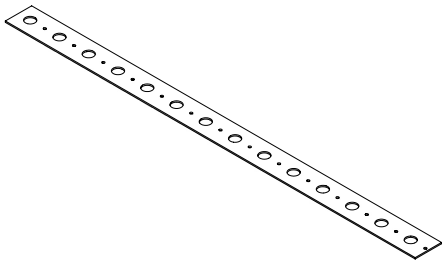


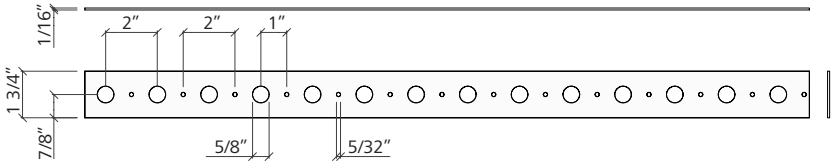


Foundation tape

Ref.-No.	Description / Application	lb
29-307-50	Foundation tape	44.1

galvanized; hole spacing 2″ (50 mm);
hole diameter 5/8″ (16 mm);
length 164′ (50 m);
adm. tension force 2.2 kips (10.0 KN);
to be cut at hole center. Together with foundation spanners it serves as bottom tie when panels are assembled in horizontal position.

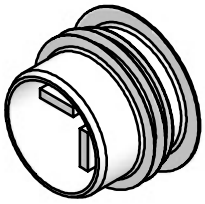


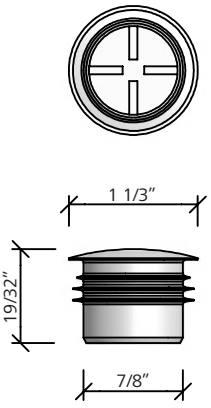


Plug D 27/30

Ref.-No.	Description / Application	lb
29-902-61	Plug D 27/30	0.01

for plugging unneeded tie holes.





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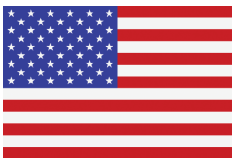

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