

Method Statement



Concrete
Support Systems

Method Statement Concrete Support Systems

Introduction

Concrete Support Systems is renowned as one of the leading manufacturers and suppliers of equipment to the construction and civil engineering industries. Our commitment to safety and site efficiency is evident in the design performance and quality of our products, which offer safe access and secure working platforms for an enormous variety of applications.

The enclosed method statement underlines our devotion to site safety by providing recommendations, based on tried and trusted methods, for the proper use and application of Concrete Support Systems shoring and formwork systems. Please take time to read and understand the information presented before using the products covered. If you need further advice or assistance consult a suitably qualified person within your own company or contact Concrete Support Systems.

Disclaimer

The methods presented in this document are solely for the use of Concrete Support Systems equipment and are intended for guidance only. When familiarity has been gained with the equipment preferred methods may be adopted, provided they do not contravene health and safety regulations or accepted safe working practices. The information is correct at time of publication, but Concrete Support Systems reserves the right to change, without prior notice, the specifications and methods mentioned. No responsibility whatsoever can be accepted for any errors or omissions in, or misrepresentation of, the contents. For specific information refer to Concrete Support Systems, LLC.

Site Safety is YOUR Responsibility...

The importance of site safety cannot be over-emphasized. You have a responsibility to yourself, your work colleagues, site visitors, family, friends and others to ensure you do not injure yourself or take actions which put the lives and health of other people at risk. Site safety rules will form part of every site's health and safety plan. You should familiarize yourself with these rules and make sure that you and fellow workers do not contravene their requirements. A prominent notice will identify personnel with overall responsibility for site safety.

You will have a contractual and legal obligation to follow these rules and to adhere to relevant legislation, such as the OSHA regulations, which places specific responsibilities on you and your employer to prevent accidents. Site safety is the responsibility of everyone on site. If you have reason to believe that safety is being compromised, you should report it to the appropriate personnel.

Your Responsibilities

Following are a few suggestions to help you work safely and contribute to safety on your site:

- Make sure you fully understand the safe and proper way to do any job.
- If in doubt ask your supervisor - **DO NOT** guess.
- Always conduct yourself in a responsible and safe manner.
- Do not expose others to danger through your actions.
- Always use the correct tools and equipment for the job.
- Always use appropriate safety equipment and protective clothing.
- Report all defects in plant and equipment.
- Observe and comply with warning and hazard notices.
- Advise newcomers of safe working practices.
- Make sure you know where to go for first aid treatment.
- Report any injury and ensure it is entered in the accident book.
- Never indulge in horseplay or practical jokes at work.
- Never attempt to work whilst under the influence of alcohol or drugs.
- Make sure you have read and understood the site's health and safety requirements.
- Report any situation which might compromise site safety to the site's safety officer

Site Safety is YOUR Responsibility...

Safe Working Practice

- Consider health and safety first. If you are not sure of procedures, ask.
- Do not take short cuts - use the access provided.
- Do not remove ladders or handrails from scaffolds unless instructed to do so and replace them as soon as possible.
- Play your part in keeping the site tidy and safe.
- Look out for hazard warning notices and obey them.
- Never attempt to operate a machine unless you have been trained and authorized to do so.
- Attempting to lift heavy objects or materials can cause injury - obtain assistance where necessary.
- Study your company's safety policy.
- Remember you have a legal duty to take reasonable care of your own health and safety and to avoid placing other people at risk, such as those who work with you and members of the public.
- If in doubt about your job, ask your immediate supervisor for guidance.
- Your co-operation in discouraging children from entering the site will help to reduce the risk of accidents to them and others.
- Remember that entering an unsafe area, using scaffolding or any equipment not up to the required standards could render you liable to prosecution. If it looks or feels unsafe, report it. If you are unsure, ask site supervision for advice.

Personal Protective Equipment

For your protection, always use the safety helmets, ear protectors, face masks, goggles, screens, gloves, safety harnesses and other items of personal protective equipment appropriate to the tasks you are undertaking. When protective clothing and/or equipment is issued to you:

- Wear or use the equipment when required and when there is any possibility of personal injury in the course of your work.
- Look after the equipment.
- If the equipment is on personal issue, store it carefully and ensure that it is available for use when needed.
- Make sure that the equipment is properly maintained.
- Replace defective equipment immediately.

If you have any doubts about the correct use, adjustment or maintenance of the equipment, ask your supervisor.

Megashore Support Systems

Brief Description

The Megashore shoring system is recognised as the leading product in its field by many professionals in the construction and civil engineering industries.

Comprising two main components; legs and frames, together with a comprehensive range of accessories, the Megashore system offers one of the quickest, most effective and versatile means of providing rapid support and access solutions in an enormous variety of situations.

The system can be used in both ‘flying table’ and erect and dismantle applications and is ideal for multi-story structures, water reservoirs and soffit situations where mobility and ease of handling are required.

With the majority of components being manufactured from high grade aluminium to patented designs, the Megashore system possesses an exceptionally high strength to weight ratio which facilitates rapid erection, whilst its excellent corrosion resistance and robust build quality assure long term durability.

The Megashore system is designed to reduce labor costs, increase site efficiency, improve safety and meet the demands of today’s construction and civil engineering techniques.

Technical specifications

- Lightweight components can be easily handled by one man
- Megashore can be loaded up to 22.5 Kips per leg
- 7’ - 10” of jack adjustment with jacks top and bottom
- Two components for fast, efficient erection and dismantling
- No loose fittings
- Rigid connection between Megashore legs and frames self-aligns the system
- Continuous vertical slots on the Megashore legs allow ledger frames to be positioned at convenient working heights
- One system suitable for erect and dismantle shoring and large, rigid flying tables for versatility and economy
- Modular components easily adapt to height and width variations
- Accessories include rocking headplates, guard post brackets, access platforms, cantilever frames and a full range of safety components.

MegaShore Support Systems

Components, MegaShore Legs:

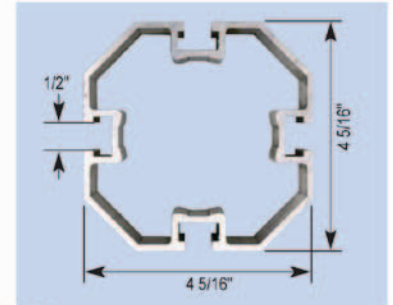
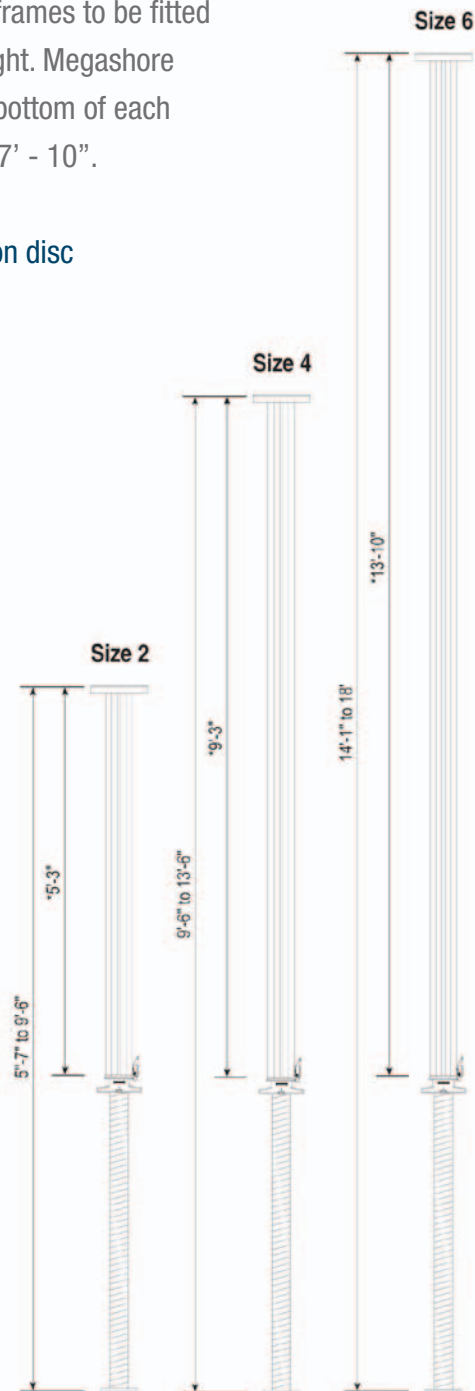
Megashore legs are available in three sizes, each with continuous vertical slots to allow ledger frames to be fitted quickly and securely at the optimum height. Megashore screw jacks can be fitted at the top and bottom of each leg, offering vertical adjustment of up to 7' - 10".

*Note: Length includes headplate and iflon disc

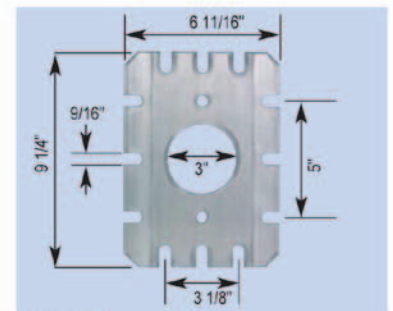
Size 2: 39.60 lbs

Size 4: 50.60 lbs

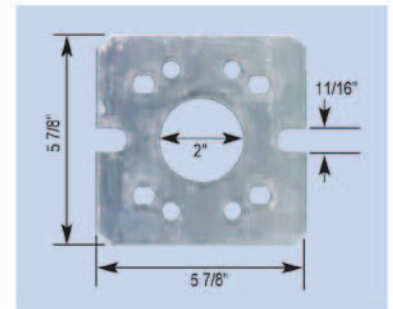
Size 6: 63.80 lbs



Profile



Headplate



Baseplate



Retainer clips

MegaShore Support Systems

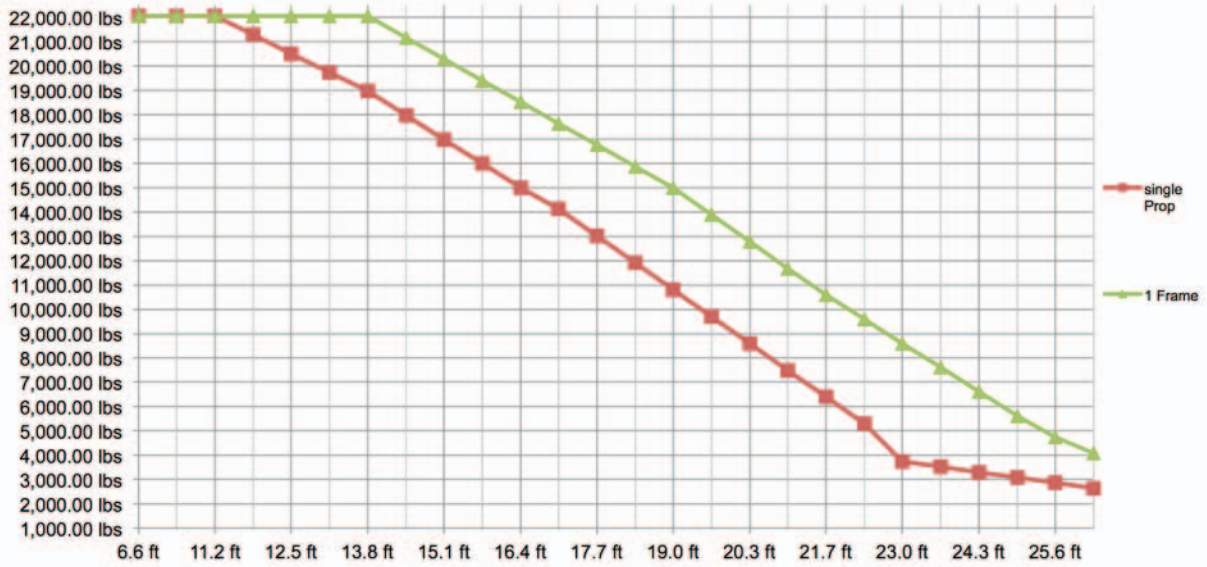
The allowable leg load is determined by the floor to soffit height, the number of ledger frames in height or jack extension

Notes:

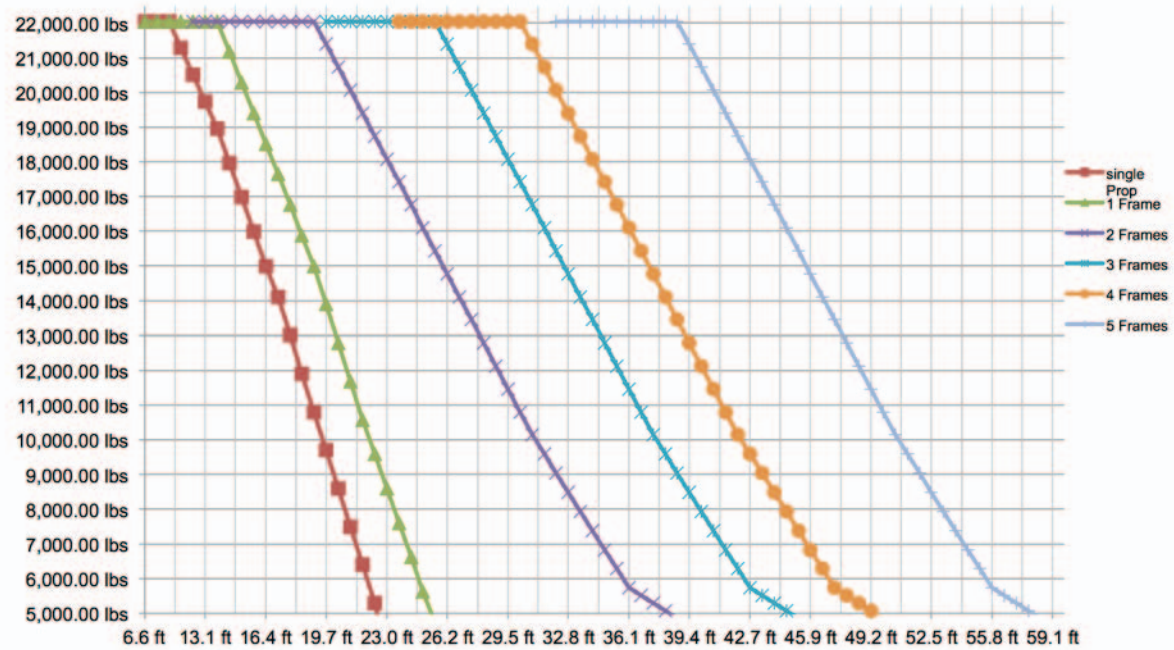
- It is assumed the formwork is restrained from horizontal movement at the formwork level.
- Ledger frames to be fixed in the optimum position.
- Maximum distance between ledger frames not to exceed 6'-6" between top and bottom chords of ledger frames. This rule also applies on floor to soffit heights greater than 36'.
- On propping heights over 36' refer to Concrete Support Systems' Design Services for advice. On the higher propping heights an additional level of frames may be required for ease of erection and stability. Minimum height to base ratio = 4:1.

MegaShore Support System Load Charts

MegaShore Frame Loads

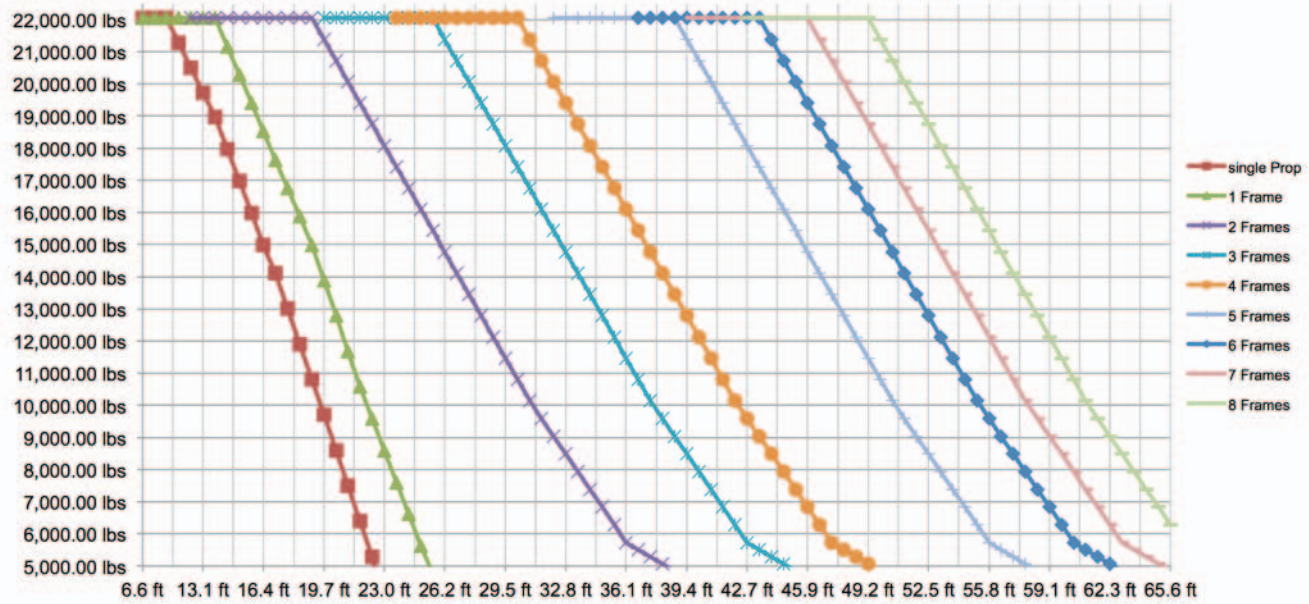


MegaShore Frame Loads

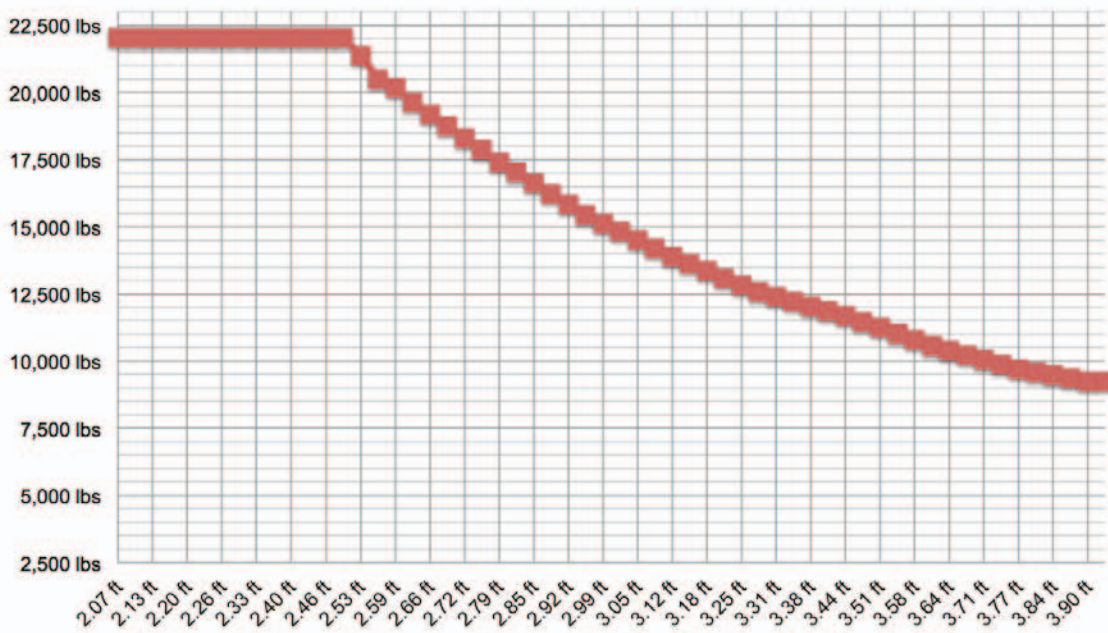


MegaShore Support System Load Charts

MegaShore Frame Loads



Megashore Screw Jack Extension



HV Support System

Brief Description

The HV Support System shoring system is recognised as the leading product in its field by many professionals in the construction and civil engineering industries.

Comprising two main components; legs and frames, together with a comprehensive range of accessories, the HV Support System offers one of the quickest, most effective and versatile means of providing rapid support and access solutions in an enormous variety of situations.

The system can be used in both 'flying table' and erect and dismantle applications and is ideal for multi-story structures, water reservoirs and soffit situations where mobility and ease of handling are required.

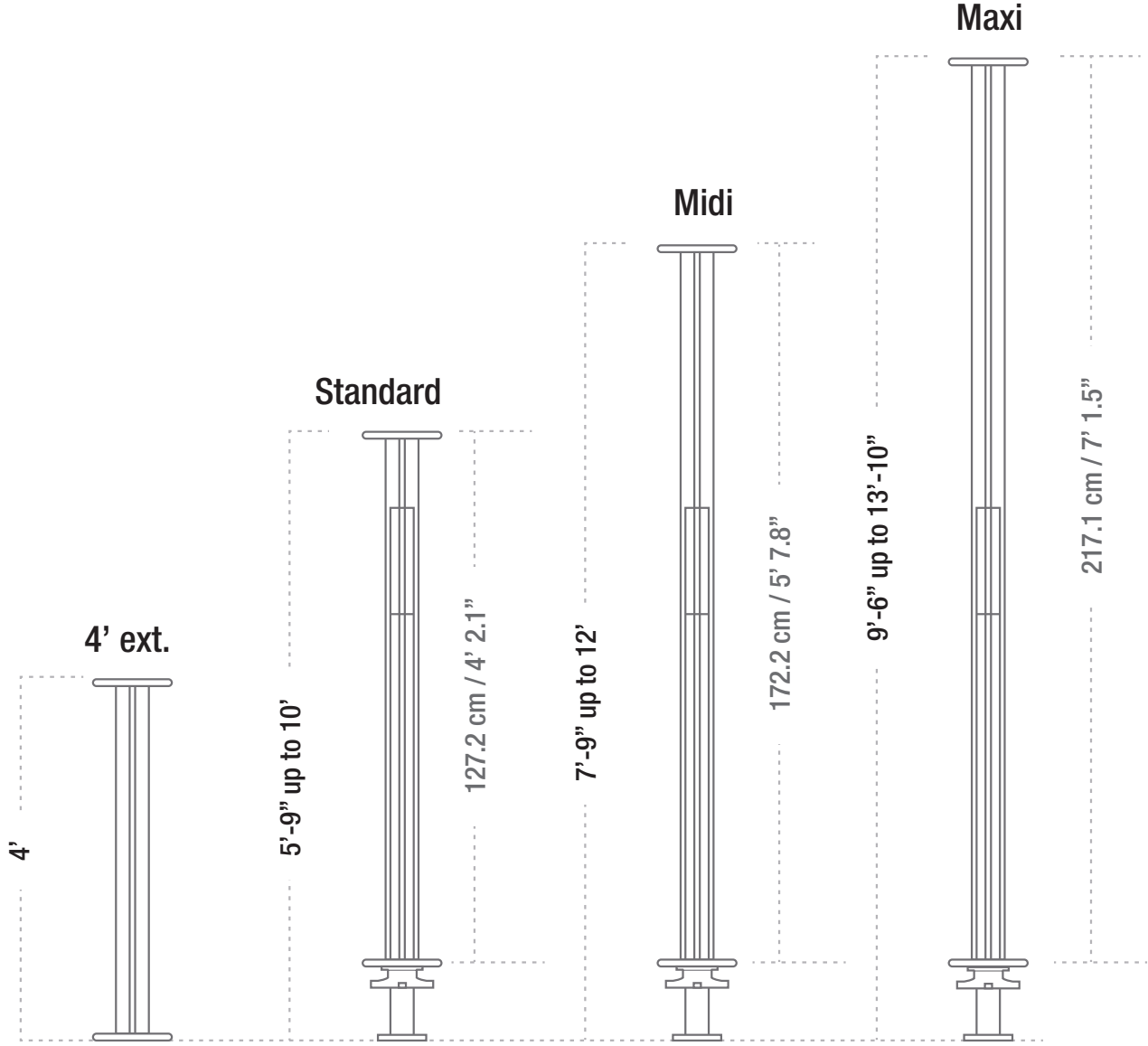
With the majority of components being manufactured from high grade aluminium to patented designs, the HV Support System possesses an exceptionally high strength to weight ratio which facilitates rapid erection, whilst its excellent corrosion resistance and robust build quality assure long term durability.

The HV Support System is designed to reduce labor costs, increase site efficiency, improve safety and meet the demands of today's construction and civil engineering techniques.

Technical specifications

- Lightweight components can be easily handled by one man
- Megashore can be loaded up to 18.0 Kips per leg
- 7' - 10" of jack adjustment with jacks top and bottom
- Two components for fast, efficient erection and dismantling
- No loose fittings
- Rigid connection between HV Legs and frames self-aligns the system
- Continuous vertical slots on the HV legs allow ledger frames to be positioned at convenient working heights
- One system suitable for erect and dismantle shoring and large, rigid flying tables for versatility and economy
- Modular components easily adapt to height and width variations
- Accessories include rocking headplates, guard post brackets, access platforms, cantilever frames and a full range of safety components.

HV Support System



HV Support System

Lite Jack 130 cm HV Screw Jack 130 cm

HV Leg Endplate

The HV Leg is made out of Aluminum and the Endplate is made out of Aluminum with a thickness of 3/8".

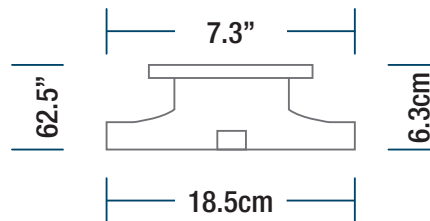
Screw Jack Endplate

The HV Screw Jack is made out of high strength Steel and the Endplate is also Steel with a thickness of 5/16".

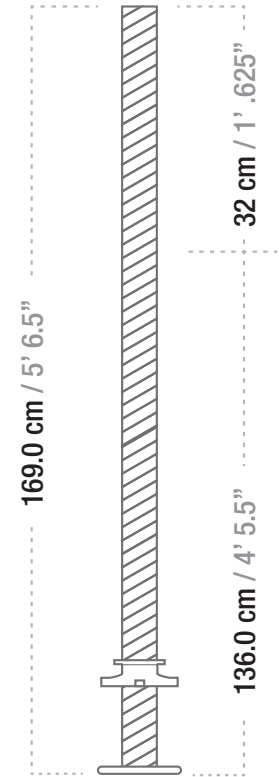
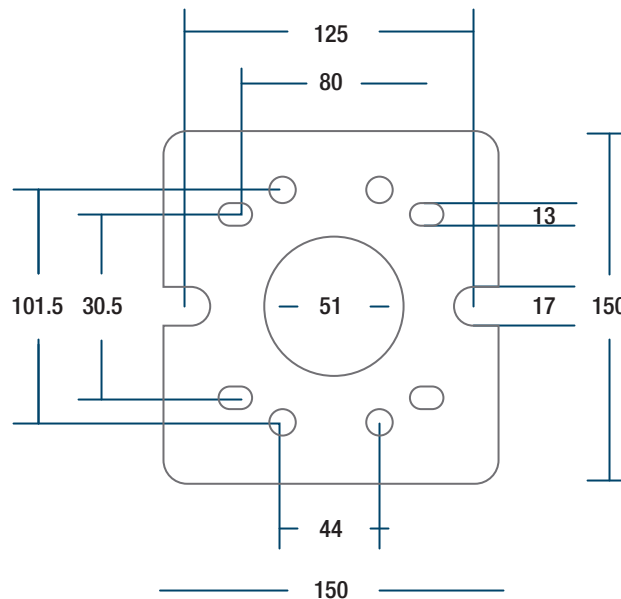
The Hole Pattern on all Endplates is the same



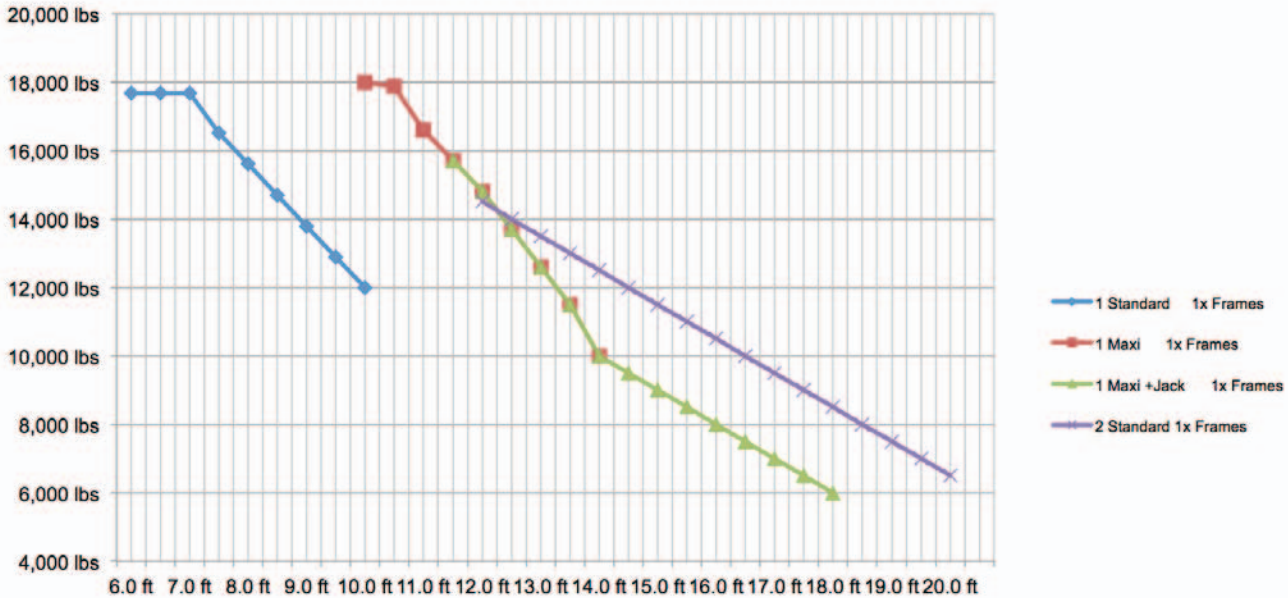
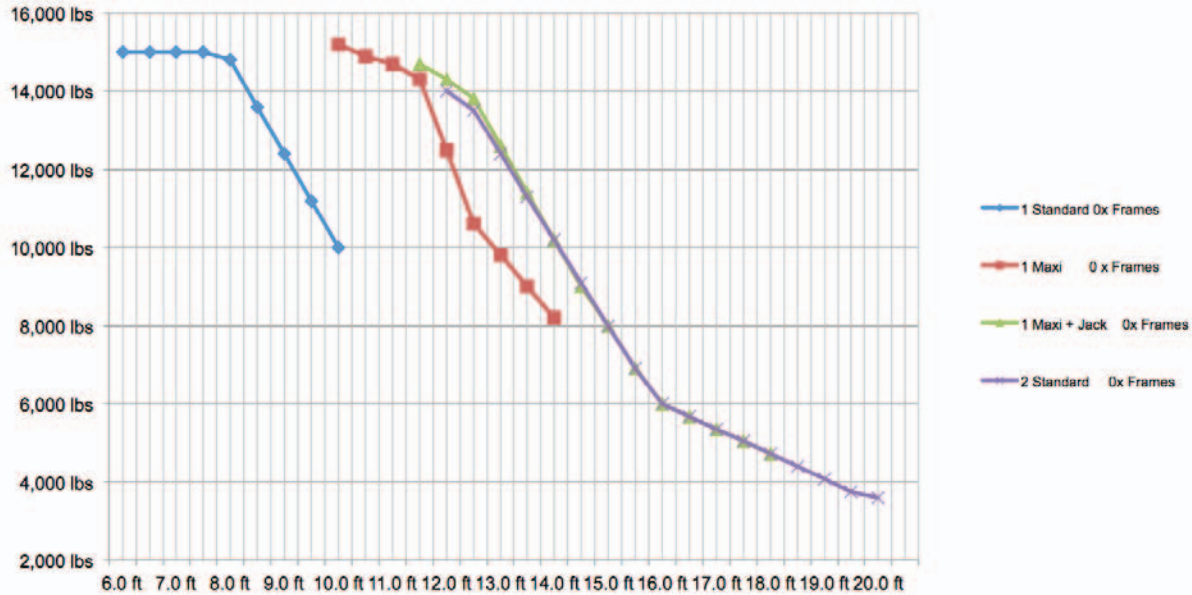
Collar Nut for Jack



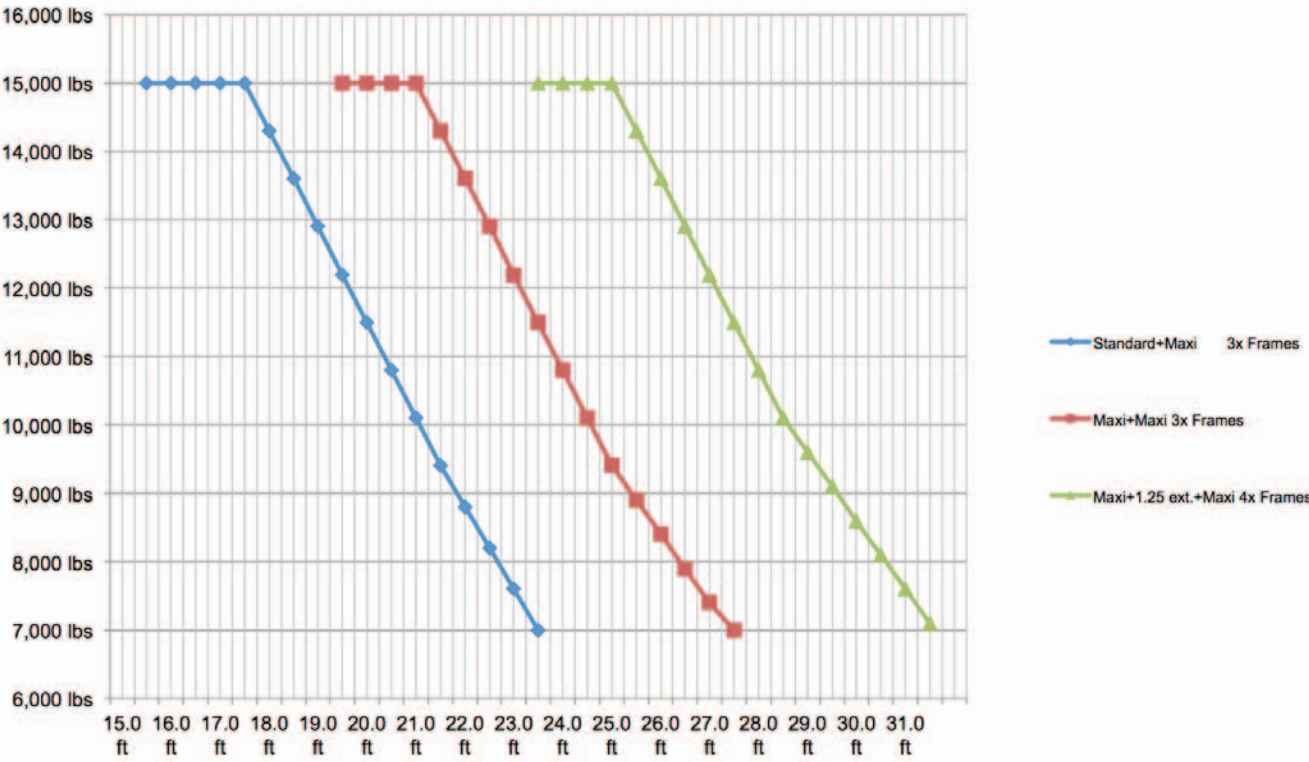
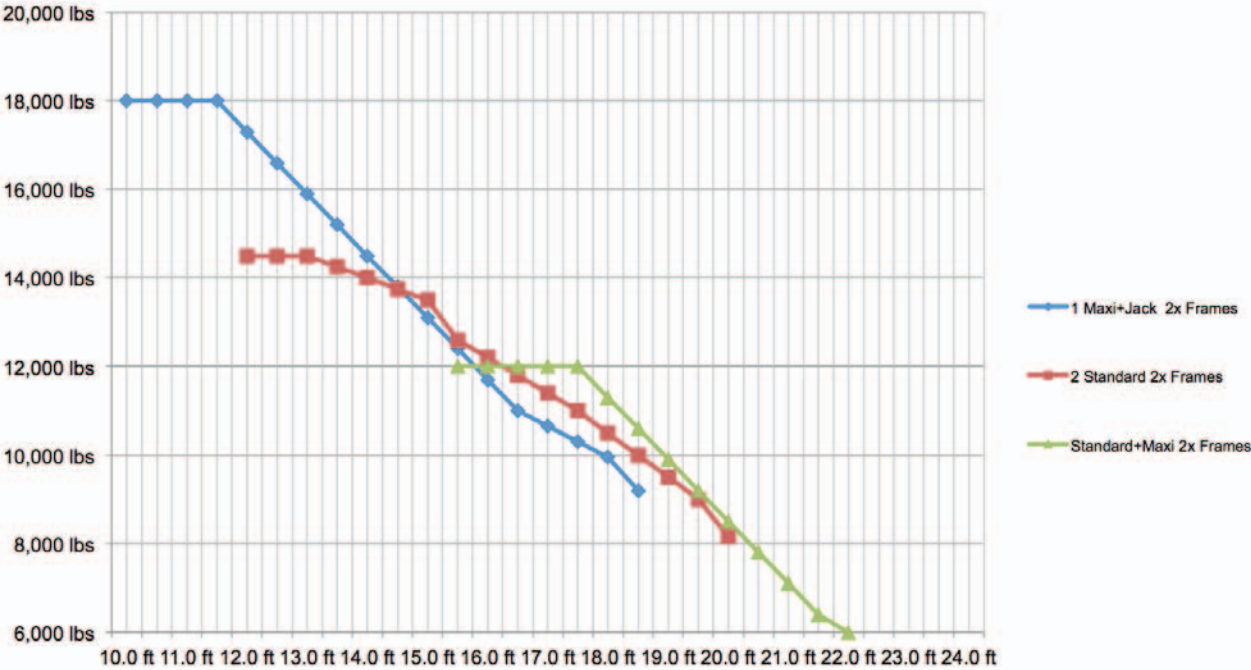
Screw Jack Endplate



HV Support System



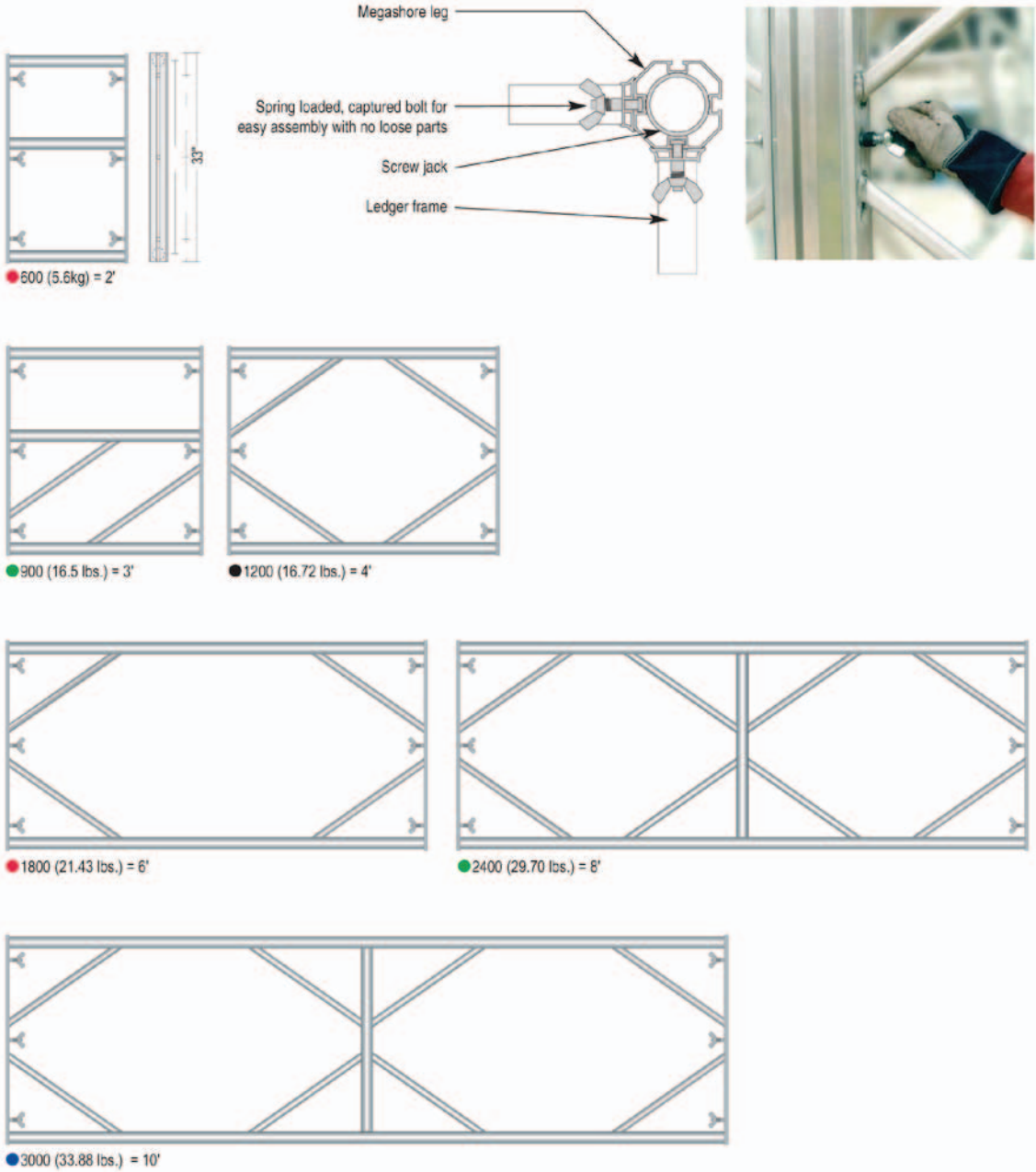
HV Support System Load Charts



Components for Ledger Frame

A range of six ledger frames is available.

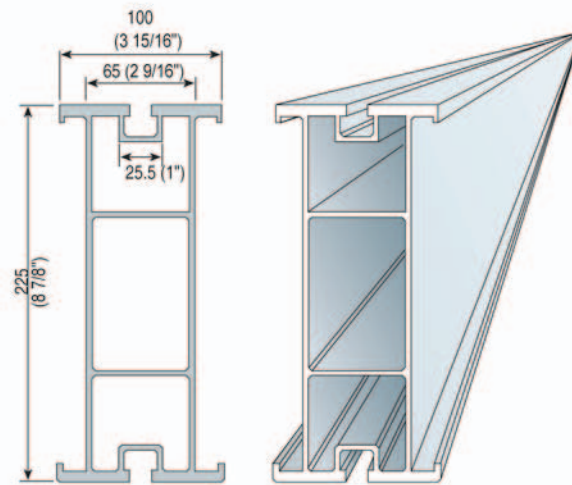
Note: Frame lengths shown are in feet and center to center of Legs.



Alu Beam

Component Beams

Manufactured from extruded aluminium section, Alu Beams offer a lightweight, easy to handle solution for decking/soffit applications.



Megashore 225 beam

Area	5,057 in ²
I _{xx} Moment of inertia	54.00 in ⁴
Z _{xx} Section modulus	12.16 in ³
E Modulus of elasticity	9,799,883 lbs/in ²
E.I. Bending stiffness	13,623 lbs/ft ²
W Weight	5.94 lbs./ft
M Resistance moment	21,020 lbs. ft
S Allowable shear force	20,000 lbs.

length (m + feet)	length (m + feet)
1.2 = 3'-11"	8.0 = 26'-3"
1.8 = 5'-11"	9.0 = 29'-6"
2.4 = 7'-11"	10.0 = 32'-10"
3.0 = 9'-10"	11.0 = 36'-1"
3.6 = 11'-10"	
4.2 = 13'-9"	
4.8 = 15'-9"	
5.4 = 17'-9"	
6.0 = 19'-8"	
6.4 = 21'	
7.2 = 23'-7"	



Beam to beam fixing



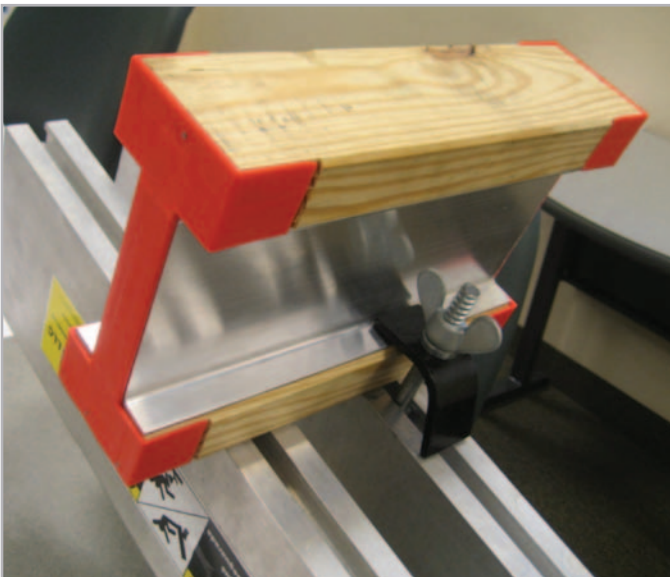
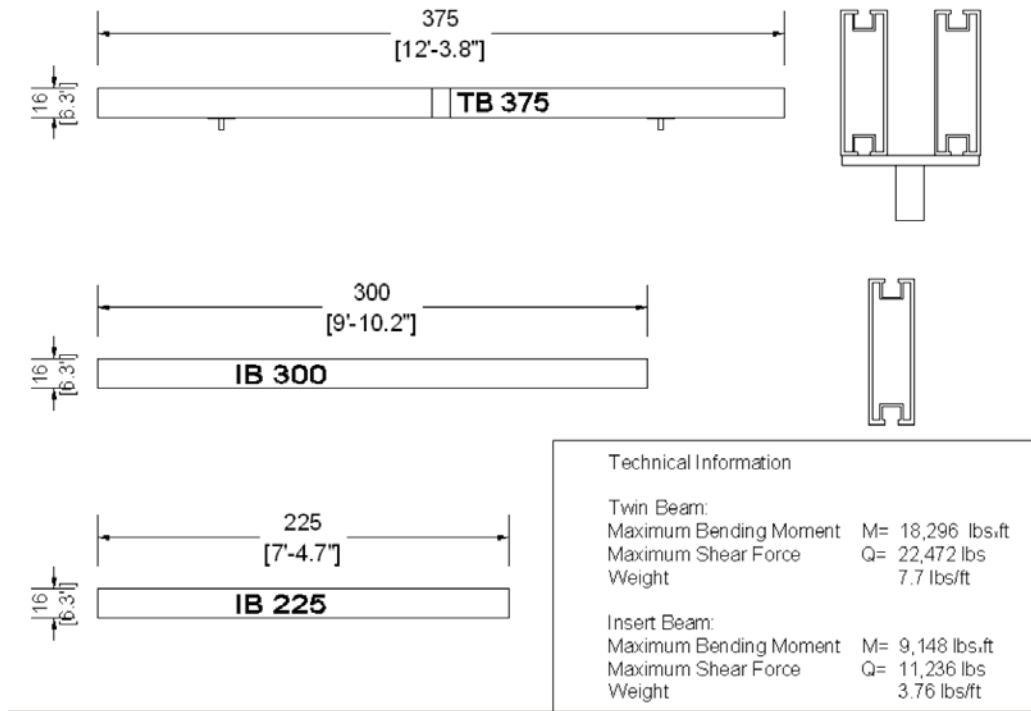
Megashore Clamp



Headplate to beam fixing

Twin Beam

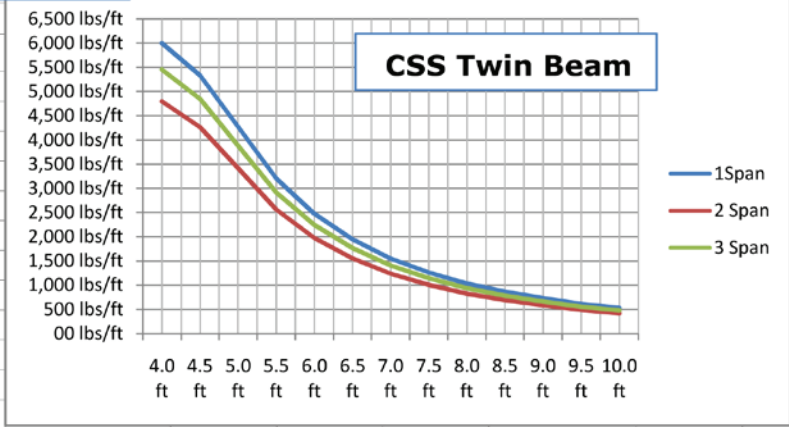
Twin and Insert Beam



Twin Beam Load Charts

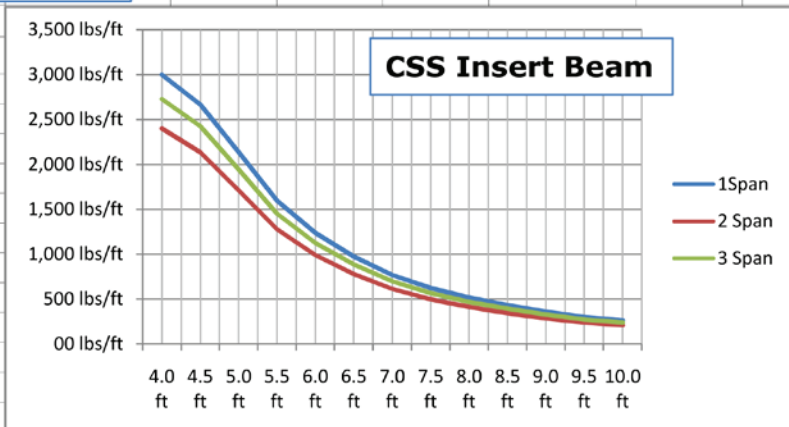
CSS Twin Beam

	1Span	2 Span	3 Span
4.0 ft	6,000 lbs/ft	4,800 lbs/ft	5,455 lbs/ft
4.5 ft	5,333 lbs/ft	4,267 lbs/ft	4,848 lbs/ft
5.0 ft	4,272 lbs/ft	3,418 lbs/ft	3,884 lbs/ft
5.5 ft	3,204 lbs/ft	2,563 lbs/ft	2,913 lbs/ft
6.0 ft	2,472 lbs/ft	1,978 lbs/ft	2,247 lbs/ft
6.5 ft	1,944 lbs/ft	1,555 lbs/ft	1,767 lbs/ft
7.0 ft	1,548 lbs/ft	1,238 lbs/ft	1,407 lbs/ft
7.5 ft	1,260 lbs/ft	1,008 lbs/ft	1,145 lbs/ft
8.0 ft	1,032 lbs/ft	826 lbs/ft	938 lbs/ft
8.5 ft	864 lbs/ft	691 lbs/ft	785 lbs/ft
9.0 ft	732 lbs/ft	586 lbs/ft	665 lbs/ft
9.5 ft	612 lbs/ft	490 lbs/ft	556 lbs/ft
10.0 ft	528 lbs/ft	422 lbs/ft	480 lbs/ft

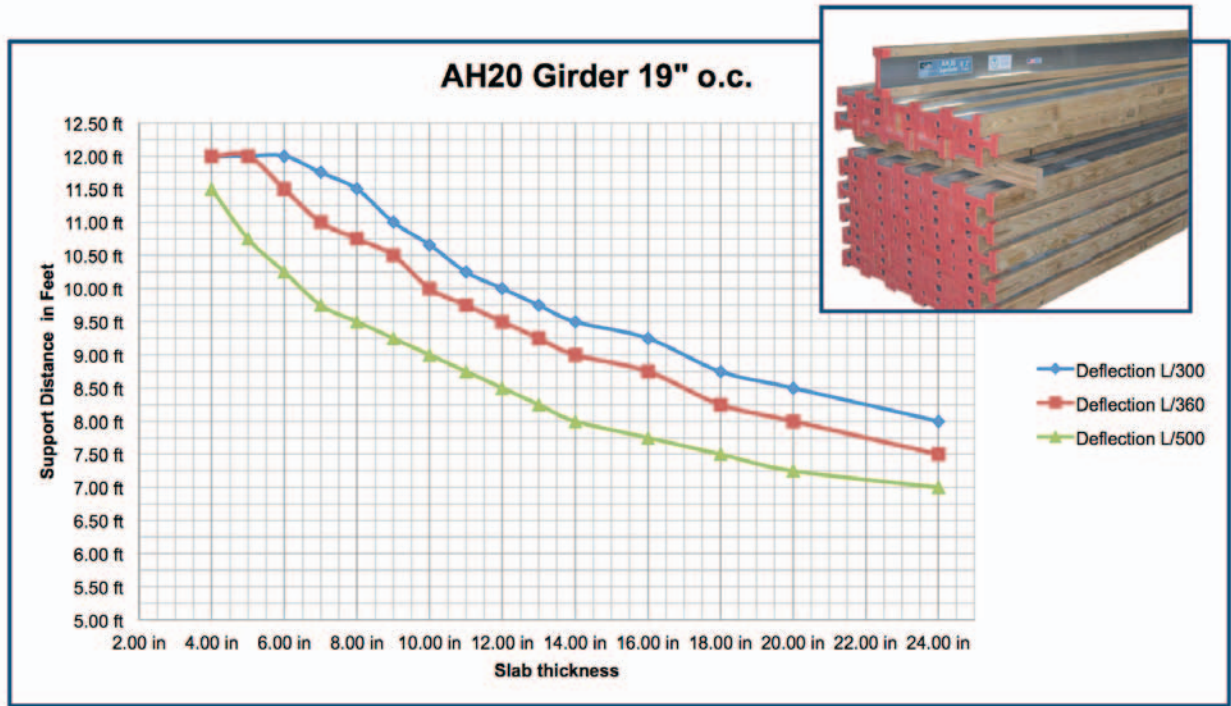
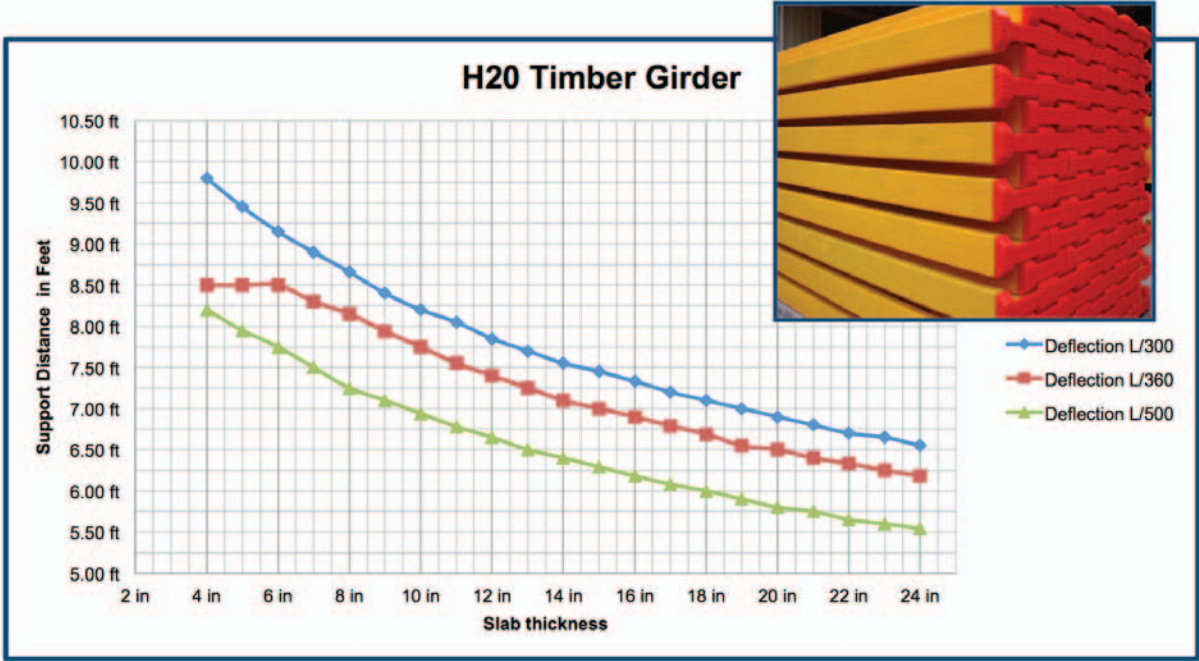


CSS Insert Beam

	1Span	2 Span	3 Span
4.0 ft	3,000 lbs/ft	2,400 lbs/ft	2,727 lbs/ft
4.5 ft	2,667 lbs/ft	2,133 lbs/ft	2,424 lbs/ft
5.0 ft	2,136 lbs/ft	1,709 lbs/ft	1,942 lbs/ft
5.5 ft	1,596 lbs/ft	1,277 lbs/ft	1,451 lbs/ft
6.0 ft	1,236 lbs/ft	989 lbs/ft	1,124 lbs/ft
6.5 ft	972 lbs/ft	778 lbs/ft	884 lbs/ft
7.0 ft	768 lbs/ft	614 lbs/ft	698 lbs/ft
7.5 ft	624 lbs/ft	499 lbs/ft	567 lbs/ft
8.0 ft	516 lbs/ft	413 lbs/ft	469 lbs/ft
8.5 ft	432 lbs/ft	346 lbs/ft	393 lbs/ft
9.0 ft	360 lbs/ft	288 lbs/ft	327 lbs/ft
9.5 ft	300 lbs/ft	240 lbs/ft	273 lbs/ft
10.0 ft	264 lbs/ft	211 lbs/ft	240 lbs/ft



Secondary Beams



Site Safety is YOUR Responsibility...

Method of Erection

The method of erection/dismantling detailed below is not mandatory. It is intended to be used as an initial guide. When familiarity has been gained with the equipment, a preferred method of erection may develop.

1. Set the jack collar nuts in the approximate position to give the correct jack extension. Then insert the jack into the ends of the prop so that the collar nut engages with the retainer clip.
2. Place the prop, complete with jacks, at approximately the required leg centers on the ground, mark the prop 15" from the I-flon washer or leg end plate to get the location of the Mega Frame, introduce the Mega Frame of the correct length between them and secure this in position. It will be found that the operation of tightening the 'T' bolts will be facilitated if the middle 'T' bolt is left until last. It will be necessary to completely unscrew wing nuts before attempting to engage the T bolt. When the line on the end of the T bolt is in line with the slot in the outer leg, the 'T' bolt has been positioned correctly. The T bolt can be hand tied but with a torque of 440 Lbsin.
3. A further pair of props may now be assembled in the same fashion and an additional pair of Mega Frames fitted vertically to them.
4. The two assemblies may now be raised until the props are vertical and the exposed ends of the Mega Frames connected to the other pair of props to form a four legged tower.
5. Mega Frames can be hung off any face of this tower and the erection continued until the desired shoring area has been achieved.
6. If the shoring requires more than one lift of Mega Frames and prop, this can be achieved by working off a temporary platform resting on the previously erected Mega Frames. The next lift of legs is inverted and connected to the first lift by using Mega Connection Brackets, followed by assembly of the Mega Frames. If scaffold boards are used, transom units or tubular intermediate transoms would be required to limit the board span to 4'-0". Temporary tubular handrails can, if required, be connected to the props by means of the Mega Half Coupler. It is also possible to connect tubular guard posts to the ledger frames using standard scaffold fittings.

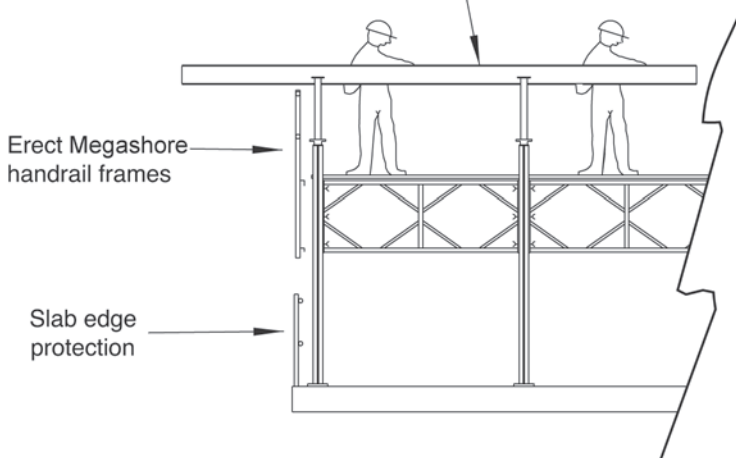
Site Safety is YOUR Responsibility...

7. An alternative to #6 above is to assemble a tower as #1 to #4 above, crane handle the tower onto the first tower and connect the end plates with Mega Connection Brackets.
8. Lacing and bracing, when required, may be added when the structure is standing, but must be in place before the working load is applied.
9. Mega Alum Beams can now be placed on top of the jack or prop and must be secured with at least one Mega Clamp R12x50.
10. Secondary beams (i.e. AH20, H20) are then placed on top of the Mega Alum Beam at predetermined centers and fixed by the Mega Clamp R12x100 at each intersection with the Mega Alum Beam.
11. All narrow width structures should be stabilized against overturning from either wind forces or horizontal loading due to construction loads.

Erection Guide

Stage 1

Cantilevered primary beams must have a minimum of 2 bays of support.



Note A:

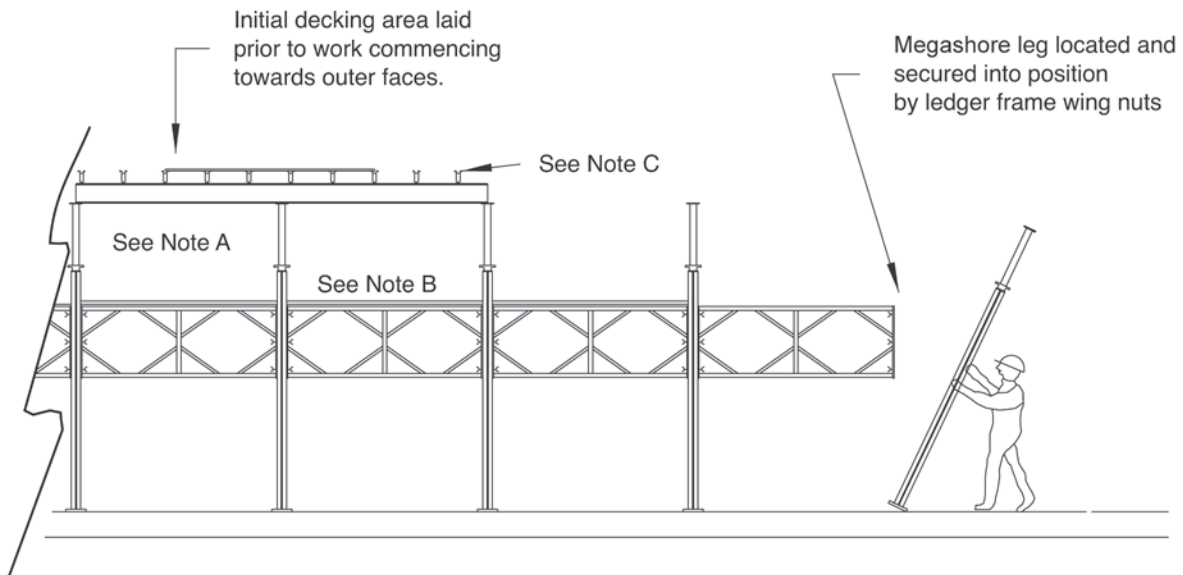
Min. dimension from work platform to underside of primary beam must be 3'-9"

Note B:

Fully boarded platform moved in direction of Shoring

Note C:

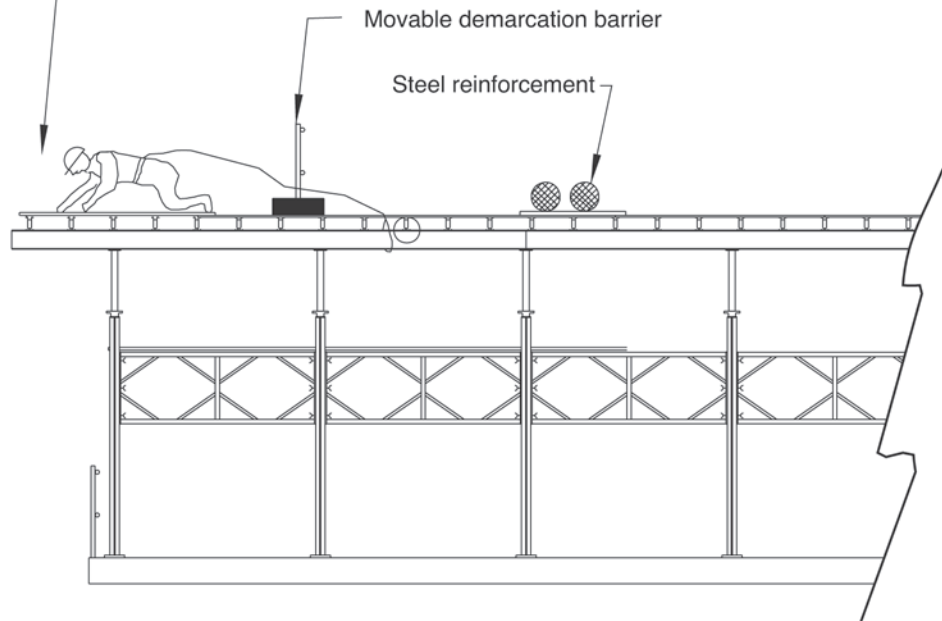
Initial secondary's taken from ground / slab and manhandled onto Mega Alum Beams. Once sufficient ply deck is laid then secondary bundles can be landed on the ply decking.



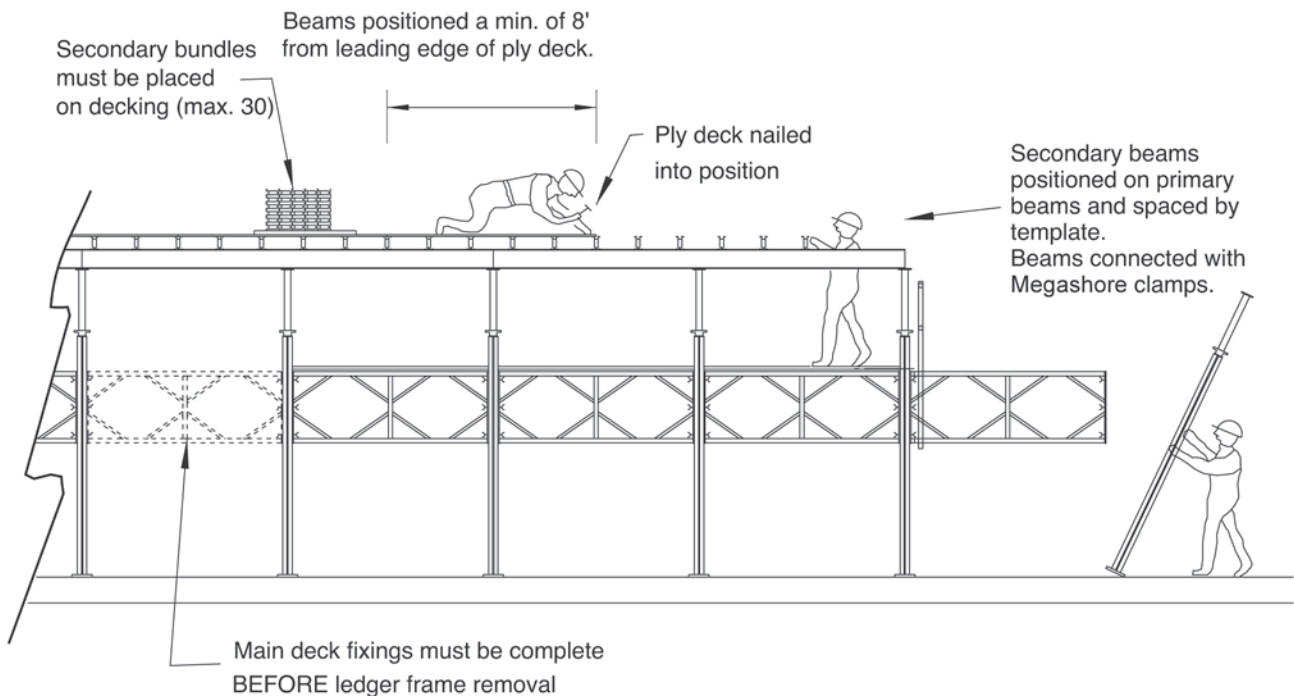
Erection Guide

Stage 2

Secondary beams placed and spaced using a template. Operatives must be harnessed to a secure structure eg. bolted down primary beam.

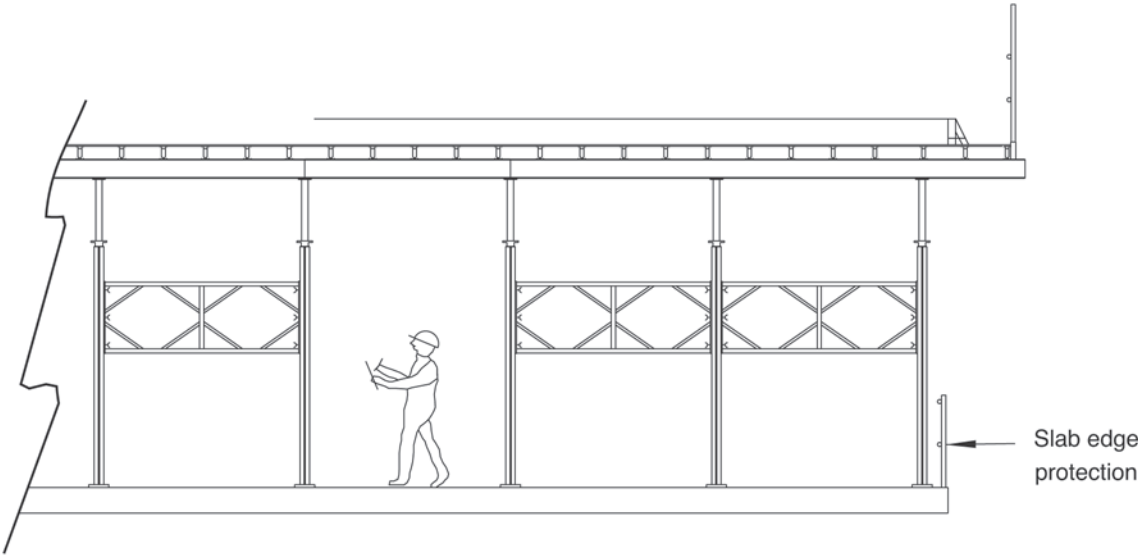
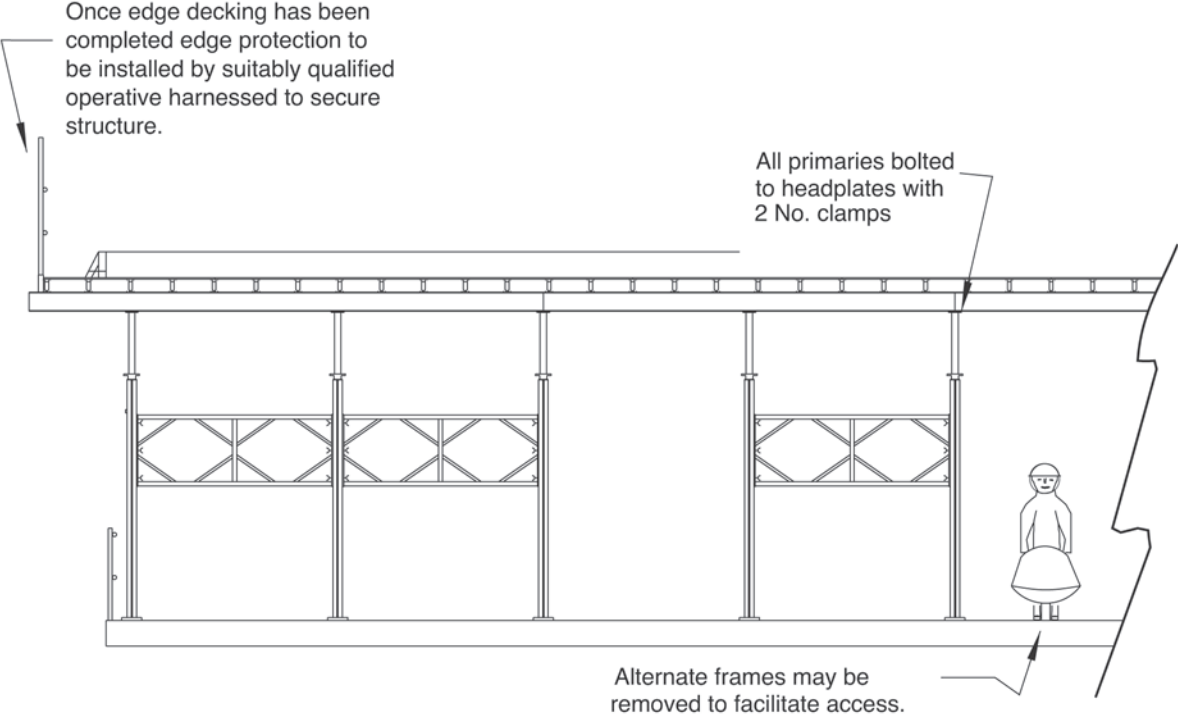


IMPORTANT NOTE:
All Shoring erection to be carried out from intermediate work/crash platform



Erection Guide

Stage 3



Method of Dismantling

1. Begin dismantling operation by lowering the jacks with spanner.
2. Release secondary beams by undoing the Mega Clamp R12x100 and passing each beam to the ground from an intermediate working platform.
3. Release Mega Alum Beams by undoing the Mega Clamp R12x50 and passing each beam to the ground from an intermediate working platform.
4. Stripping of shoring should begin by releasing one end of one Mega Frame at all three locations and repeat this procedure for the adjacent Mega Frame which runs off at right angles.
5. The above procedure will then release a leg, leaving two Mega Frames “hanging” from other props.
6. The Mega Frames should now be removed by following process
7. Continue repeating processes 4 and 5 until all shoring is removed.
8. On shoring structures greater than one leg in height, all works as previously described should be carried out from safe, temporary working platforms as previously recommended.

Safety Checklist

The following checklist should be adhered to prior to the placement of concrete:

1. Ensure plumbness of props.
2. Ensure that all spring loaded wing nuts are tight with a torque of 440 Lbsin on Mega Frames (over-exposed thread on 'T' bolt indicates otherwise).
3. Ensure that jack extensions are within design parameters.
4. Ensure that jack collar nut is properly located in prop (retainer clip securely fixed).
5. Ensure that the jack base plate/head plate maintains positive friction against floor slab.
6. Ensure that the size, number and location of Mega Frames are as per design drawings.
7. If props are extended (2 props or extension legs) make sure each connection uses 2 Mega Connection Brackets and wing nuts are tightened to the required torque of 440 Lbsin.
8. If using jacks at the top of the shoring, ensure items 3 and 4 above are followed and that 2 Mega Clamps R12x50 are used to locate jacks securely to underside of Mega Alum Beams.
9. Ensure that Mega Alum Beam spans are no greater than those shown in design drawings.
10. Ensure spacing and span of secondary beams are no greater than those shown in design drawings.
11. Ensure all/any damaged parts are removed and replaced immediately.
12. Ensure the proper safety procedures are adopted to facilitate the above items in compliance with construction and health and safety working regulations.

Twin Beam Support System

Method of Erection

The method of erection/dismantling detailed below is not mandatory. It is intended to be used as an initial guide. When familiarity has been gained with the equipment, a preferred method of erection may develop.

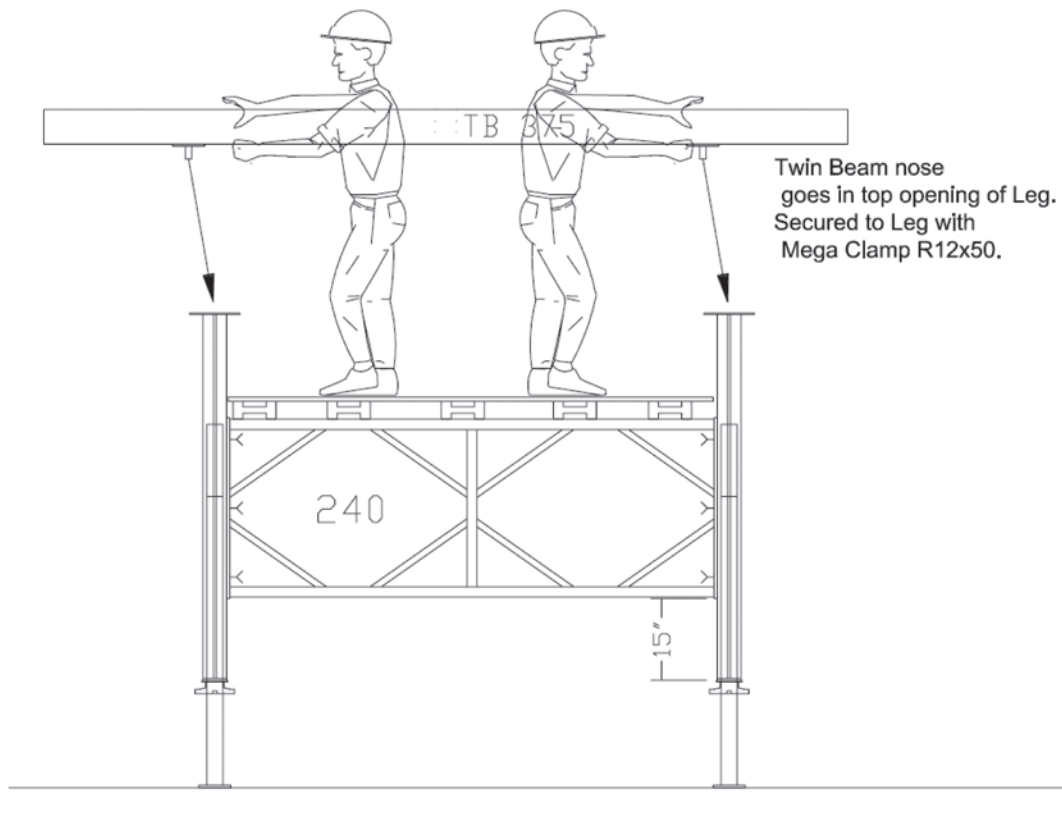
For the Twin and Insert Beam system different kind of support legs can be used. These are Mega Props or HV Props. For easier understanding in the description below, all supports will be called Legs.

1. Set the leg jack collar nuts in the approximate position to give the correct leg jack extension. Then insert the jack into the ends of the leg so that the collar nut engages with the retainer clip.
2. Place the legs, complete with jacks, at approximately the required leg centers on the ground, mark the Leg 15” from the Iflon washer or leg end plate to get the location of the Mega Frame, introduce the Mega Frame of the correct length between them and secure this in position. It will be found that the operation of tightening the ‘T’ bolts will be facilitated if the middle ‘T’ bolt is left until last. It will be necessary to completely unscrew wing nuts before attempting to engage the T bolt. When the line on the end of the T bolt is in line with the slot in the outer leg, the ‘T’ bolt has been positioned correctly. The T bolt can be hand tied but with a torque of 440 Lbsin.
3. A further pair of legs may now be assembled in the same fashion and an additional pair of Mega Frames fitted vertically to them.
4. The two assemblies may now be raised until the legs are vertical and the exposed ends of the Mega Frames connected to the other pair of legs to form a four legged tower. Ensure that the 15” distance from the Iflon washer or leg end plate, to the Mega Frame appears on all 4 legs.
5. Place Twin Beams on top of the legs and secure them with Mega Clamp R12x50.
6. Introduce the Insert Beam to the Twin Beam and add support Leg. Secure support leg to insert beam with Mega Clamp R12x50.

Twin Beam Support System

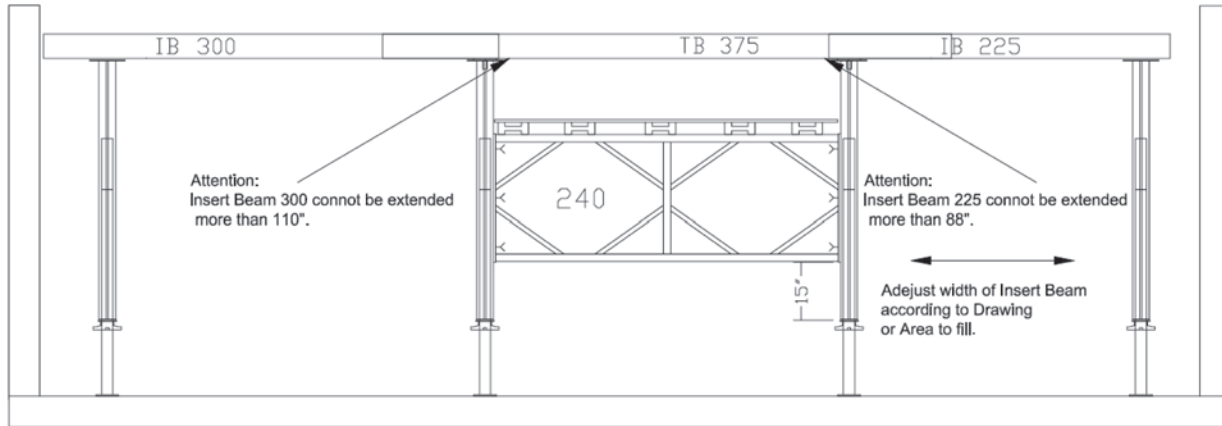
7. Adjust the extended width of the insert beam according to proved drawings.
If insert beam is used on both sides of twin beam, repeat above steps.
8. Secondary beams (i.e. AH20, H20) are then placed on top of the twin and insert beam at predetermined centers and fixed by the Mega Clamp R12x100 at each intersection with the twin and insert beam.
9. All narrow width structures should be stabilized against overturning from either wind forces or horizontal loading due to construction loads.

Erection Guide, Stage 1

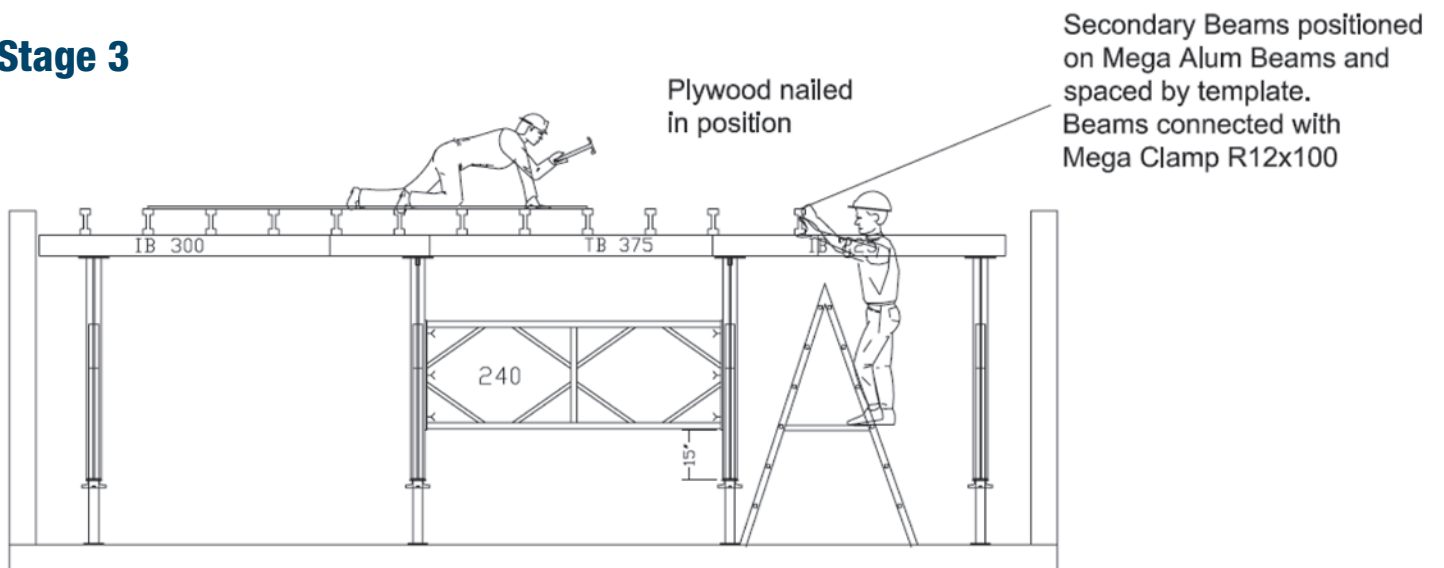


Twin Beam Support System

Stage 2

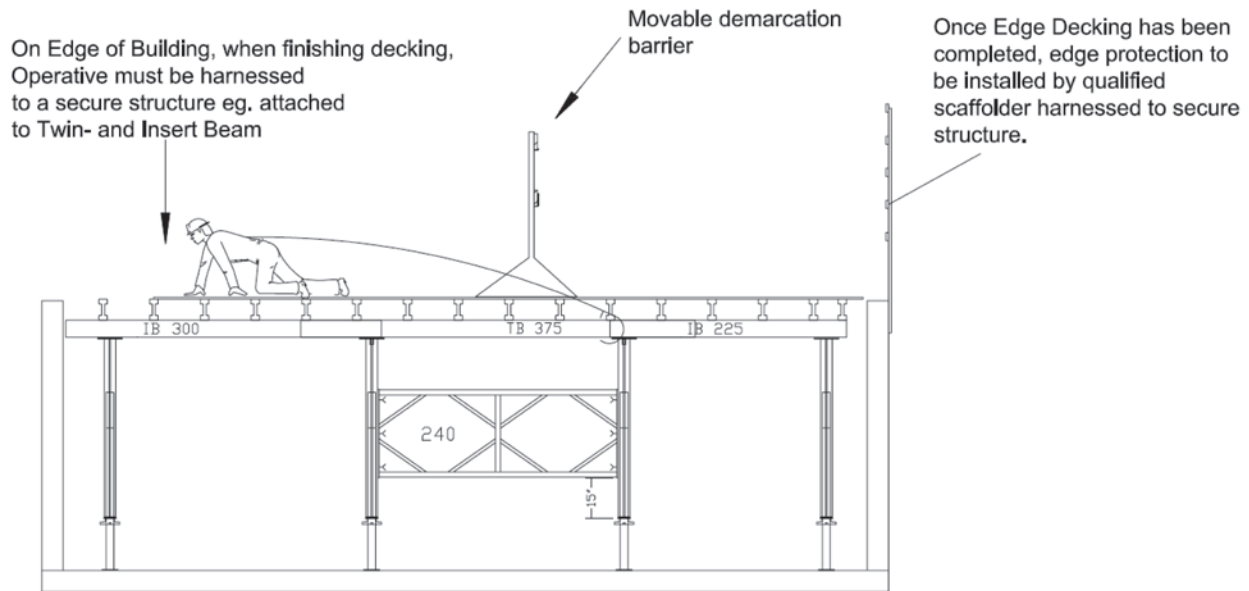


Stage 3



Twin Beam Support System

Stage 4



Method of Dismantling

1. Begin dismantling operation by lowering the jacks.
2. Release secondary beams by undoing the Mega Clamp R12x100 and passing each beam to the ground from an intermediate working platform i.e. a ladder.
3. Release insert beams by undoing the Mega Clamp R12x50 and lowering the leg. Passing each beam and Leg to the ground from an intermediate working platform i.e. ladder.
4. Release twin beam by undoing the Mega Clamp R12x50 and passing each beam to the ground from an intermediate working platform i.e. ladder.
5. Release one Mega Frame by undoing the wing nuts and put them to the ground.
6. Lower the jacks to have enough space to flip the tower 90 degrees.
7. Take apart the Mega Frames from the legs.
8. On shoring structures greater than one leg in height, all works as previously described should be carried out from safe, temporary working platforms as previously recommended.

Twin Beam Support System

Safety Checklist

The following checklist should be adhered to prior to the placement of concrete:

1. Ensure plumbness of legs.
2. Ensure that all spring loaded wing nuts are tight with a torque of 440 Lbsin. on Mega Frames (over-exposed thread on 'T' bolt indicates otherwise).
3. Ensure that jack extensions are within design parameters.
4. Ensure that jack collar nut is properly located in leg (retainer clip securely fixed).
5. Ensure that the jack base plate/head plate maintains positive friction against floor slab.
6. Ensure that the size, number and location of Mega Frames are as per design drawings.
7. If legs are extended (2 legs or outer ext) make sure each connection uses 2 connection brackets and wing nuts are tightened to the required torque of 440 Lbsin.
8. If using jacks at the top of the shoring, ensure items 3 and 4 above are followed and that 2 Mega Clamps R12x50 are used to locate jacks securely to underside of twin and insert beams.
9. Ensure that insert beam spans are no greater than those shown in design drawings.
10. Ensure spacing and span of secondary beams are no greater than those shown in design drawings.
11. Ensure all/any damaged parts are removed and replaced immediately.
12. Ensure the proper safety procedures are adopted to facilitate the above items in compliance with construction and health and safety working regulations.

MegaShore Tables

Introduction

The following identifies the components required and their proper use with a step by step procedure for stripping, flying and landing a MegaShore Table. Instructions are provided for standard tables.

General

It is essential that these procedures are fully understood before the equipment is used. It is, therefore, recommended that all personnel using the equipment on the first occasion should be supervised by a competent and this discipline trained person.

There may be occasions when it is necessary for operatives to work adjacent to unguarded slab edges. In all such cases operatives should wear suitable anchored safety harnesses. In addition, all other site personnel should be made aware of such short duration hazards.

Particular attention should be paid by site management to ensure that crane signaling systems comply with ruling regulations and that laid down procedures are fully understood and complied with.

Loose materials or equipment must not be transported on tables during moving and flying operations. At no time during the operations is it necessary or desirable to exert undue force, either manually or through the equipment.

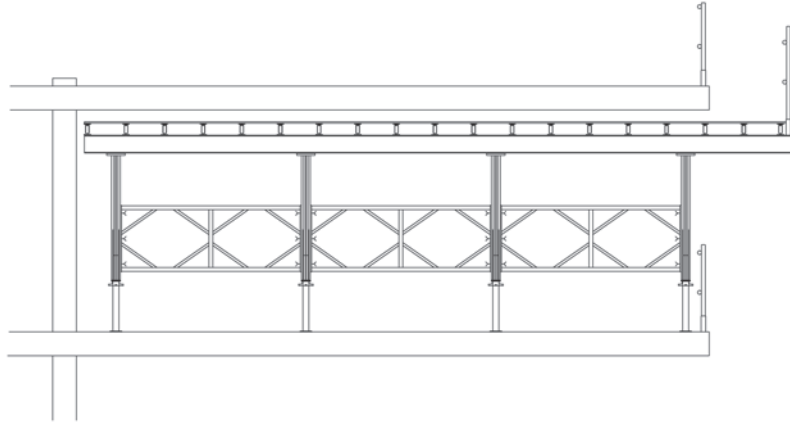
Flying and Stripping Equipment

Mega Trolleys are used in the stripping and flying procedure of a Megashore Table. A minimum of 2 trolleys/castors are used for the movement of the table. 2 trolleys are used adjacent to the second row of legs in from the front of the table. These positions may vary depending on size and weight of table.

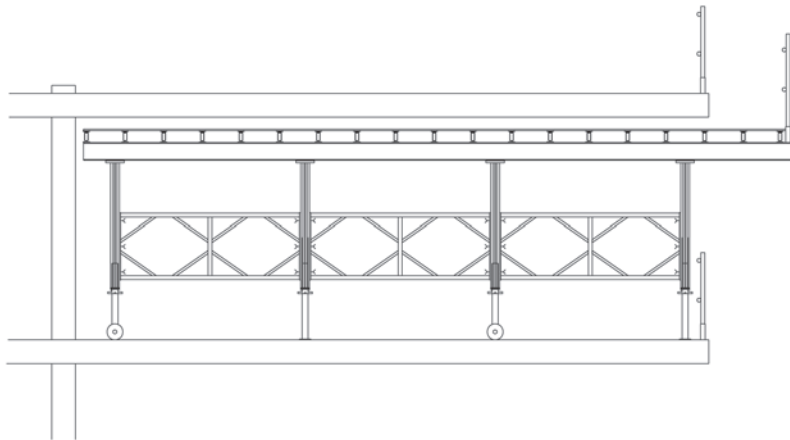
MegaShore Tables

Stripping and Flying Procedure

Before any stripping takes place, all obstructions to the safe movement of the table must be removed!

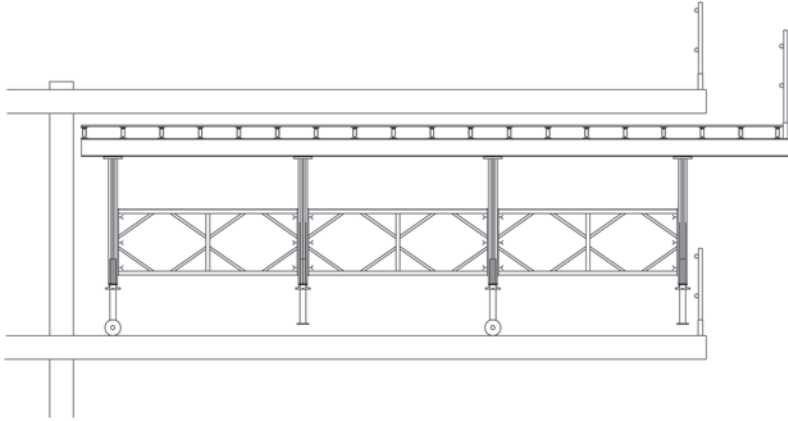


1. Break bond between slab and decking by lowering the collar nuts on the jack thus creating the first stripping action. Mega Spanner must be used for this action.



2. Place the Mega Trolleys as instructed in the drawing. Basic position of Mega Trolleys is in the second bay from edge and last bay on opposite side (see drawing above). Raise the Mega Trolley till props come free.

MegaShore Tables



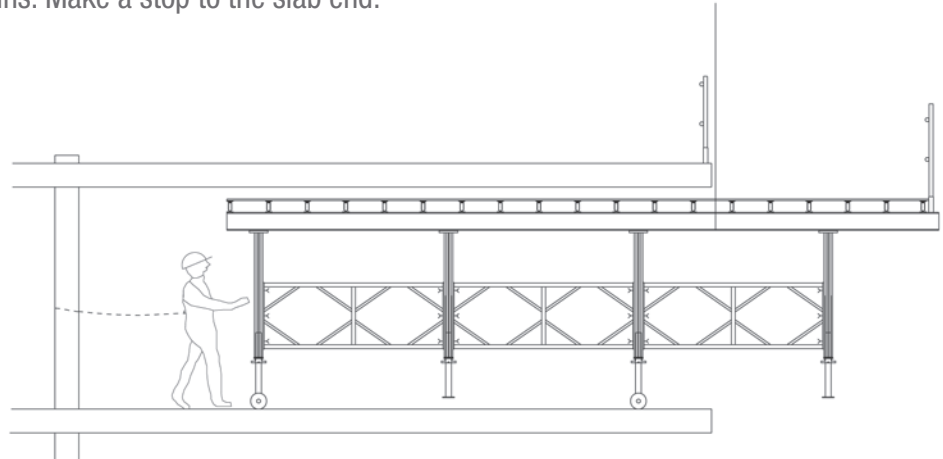
3. With weight of table now being carried by the Mega Trolleys, retract the remaining jacks to provide sufficient clearance for moving.

The table is now in the lowered position

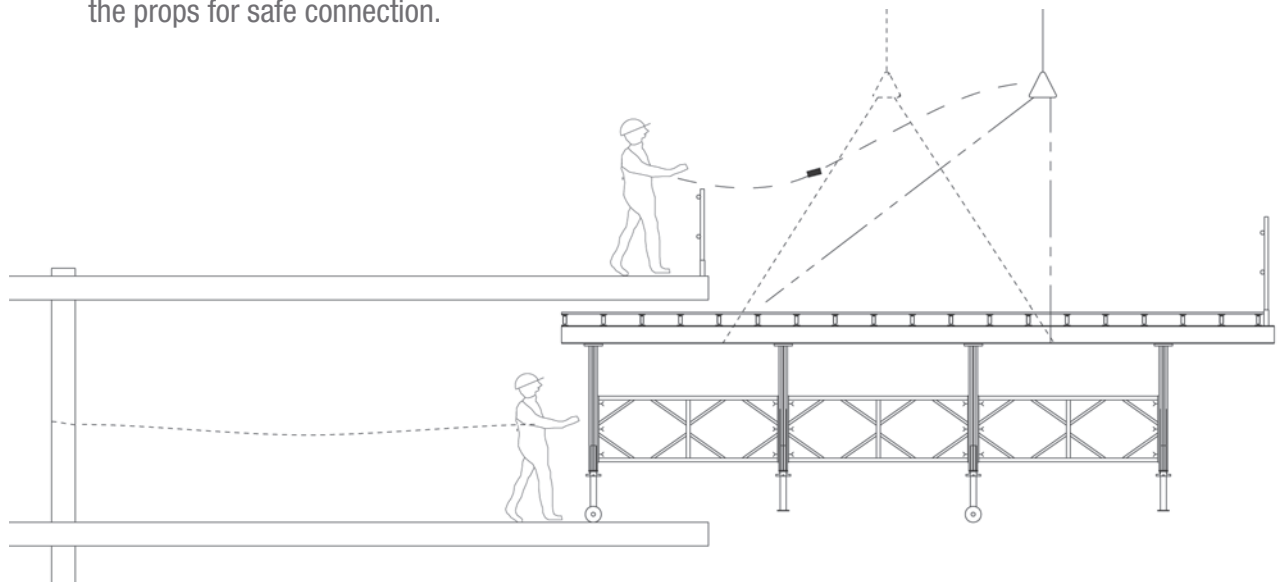
MegaShore Tables

Moving

To enable tables to be removed horizontally it is recommended that electric chain hoists are used to allow compensation of lifting chains. Make a stop to the slab end.

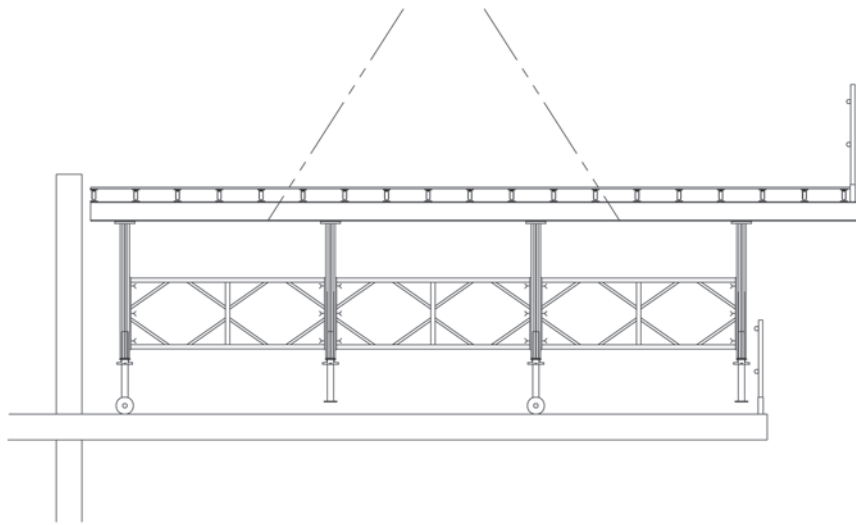


4. After removing slab edge protection, the table should be pushed until the first row of props is clear of the slab. Now the crane ropes can be attached to the table. Attach crane rope around the props for safe connection.

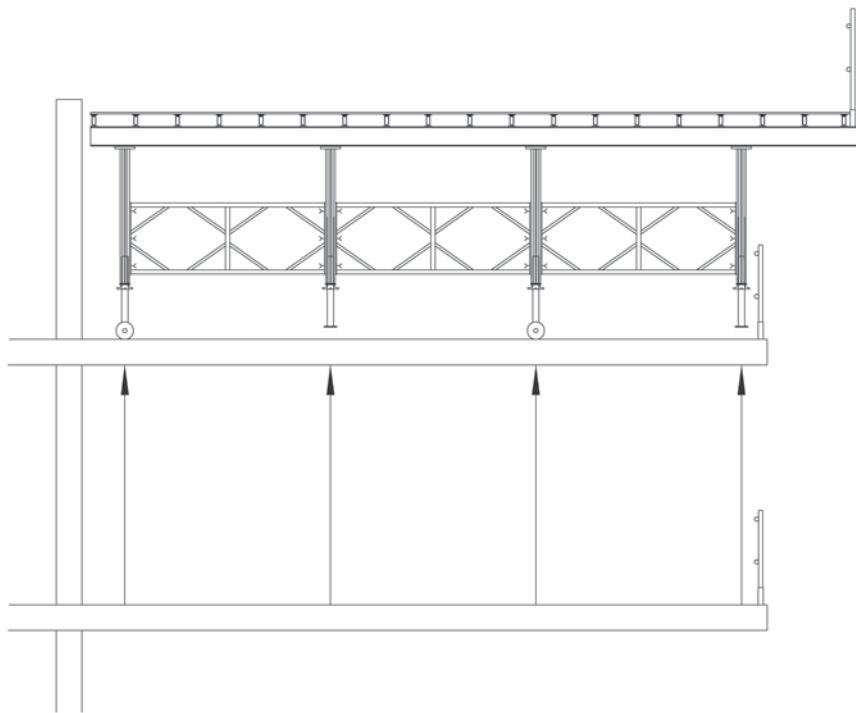


5. Continue pushing table (helped now by pulling action of crane) until Mega Trolley is close to the edge of building. Level the table by using the chain hoist. After table is leveled, release and take out trolley.

MegaShore Tables



6. The table is now ready to be completely cleared from the slab and lifted to the next bay or floor above. If necessary, Mega Trolleys can be used again to move table to final position.



7. When table stays in final position, site engineers can start leveling table to final pour heights.

8. It is suggested at this stage, if required, the props for reshoring are installed at the necessary positions.

MegaShore Tables

Safety Checklist

- All narrow width tables should be stabilized against overturning from either wind forces or horizontal loading due to construction loads.
- Where operatives are required to lean over edges of the slab, a suitable harness must be worn and appropriately fixed.
- Before moving table, make sure, the movement area is free of debris or other disturbing material
- Make sure, there is enough clearance between the floor and the jacks.
- Make sure, there is enough clearance between slab and top of table.
- Check all connections of the Mega Frames and Mega Clamps to ensure, all wing nuts are tighten to the required strength of 440 Lbsin torque.
- The 225 Alum Stringer Beams have to be fully connected with splice plates at all bolt holes.
- Ensure that all retainer clips are in working order to hold the jack in place.
If not, replace retainer clips immediately. Do not fly table with broken retainer clips
- If using jacks at the top of the shoring ensure that the screw jack is connected to the leg with retainer claws and that 2 Mega Clamps R12x50 are used to locate jacks securely to underside of Mega Alum Beams.
- Ensure table weight does not exceed crane capacity
- Check landing area for debris or other disturbing material.
- Move tables with care. Always watch your coworkers and communicate with them.
- Make a communication plan with the crane operator so both of you are on the same page and understand each other.
- Only one person should communicate with the crane operator to avoid confusion and mistakes.
- Check for secure attachment of the crane ropes. The ropes should always go around the props and Alum Beams.
- Make sure, the “flying area” is free of traffic and coworkers. Prepare a signal when the flying process starts so your coworkers can pay attention.

Twin Beam Tables

Method of Erection

The method of erection/dismantling detailed below is not mandatory. It is intended to be used as an initial guide. When familiarity has been gained with the equipment, a preferred method of erection may develop. For the twin and insert beam system different kind of support legs can be used. These are Mega Props, HV Props and HV MAXI Props. For easier understanding in the description below, all supports will be called legs.

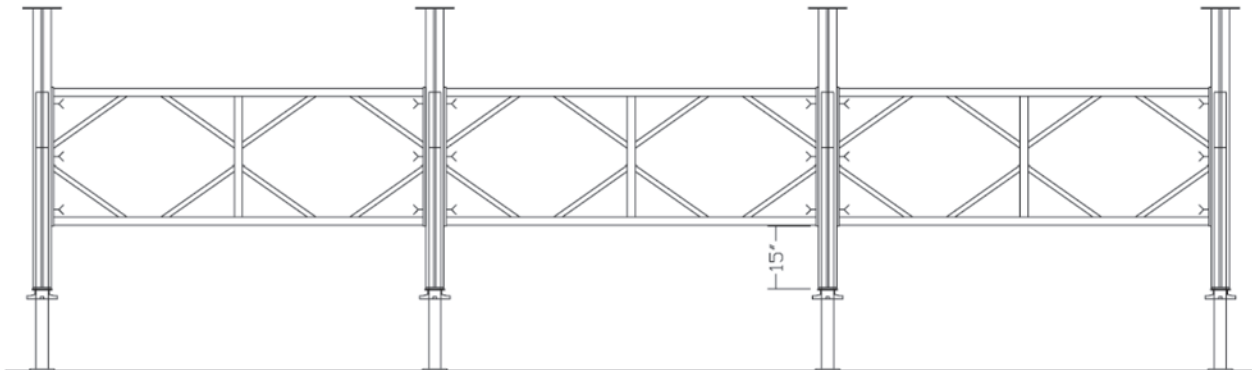
1. Set the leg jack collar nuts in the approximate position to give the correct leg jack extension. Then insert the jack into the ends of the leg so that the collar nut engages with the retainer clip.
2. Place the legs, complete with jacks, at approximately the required leg centers on the ground, mark the leg 15" from the flange washer to get the location of the Mega Frame, introduce the Mega Frame of the correct length between them and secure this in position. It will be found that the operation of tightening the 'T' bolts will be facilitated if the middle 'T' bolt is left until last. It will be necessary to completely unscrew wing nuts before attempting to engage the T bolt. When the line on the end of the T bolt is in line with the slot in the outer leg, the 'T' bolt has been positioned correctly. The T bolt can be hand tied but with a torque of 440 Lbsin.
3. A further pair of legs may now be assembled in the same fashion and an additional pair of Mega Frames fitted vertically to them.
4. The two assemblies may now be raised until the legs are vertical and the exposed ends of the Mega Frames connected to the other pair of legs to form a four legged tower. Ensure that the 15" distance from the flange washer to the Mega Frame appears on all 4 legs.
5. Additional Mega Frames are now introduced to the tower, followed by attaching the legs to build a 8 leg tower.
6. The twin beam is now attached to the on the middle pair of legs and secured with Mega Clamp R12x50.

Twin Beam Tables

7. Insert beam is now inserted into the twin beam and extended to the appropriate length according to the drawing. Secure insert beam to leg with R12x50.
8. Secondary beams (i.e. AH20, H20) are now placed on top of the twin and insert beam in correct span according to drawing. Secondary beams must be secured on twin and insert beam with R12x100/
9. Decking is now placed on top of secondary beams and secured with nails.

Stage 1

Side View



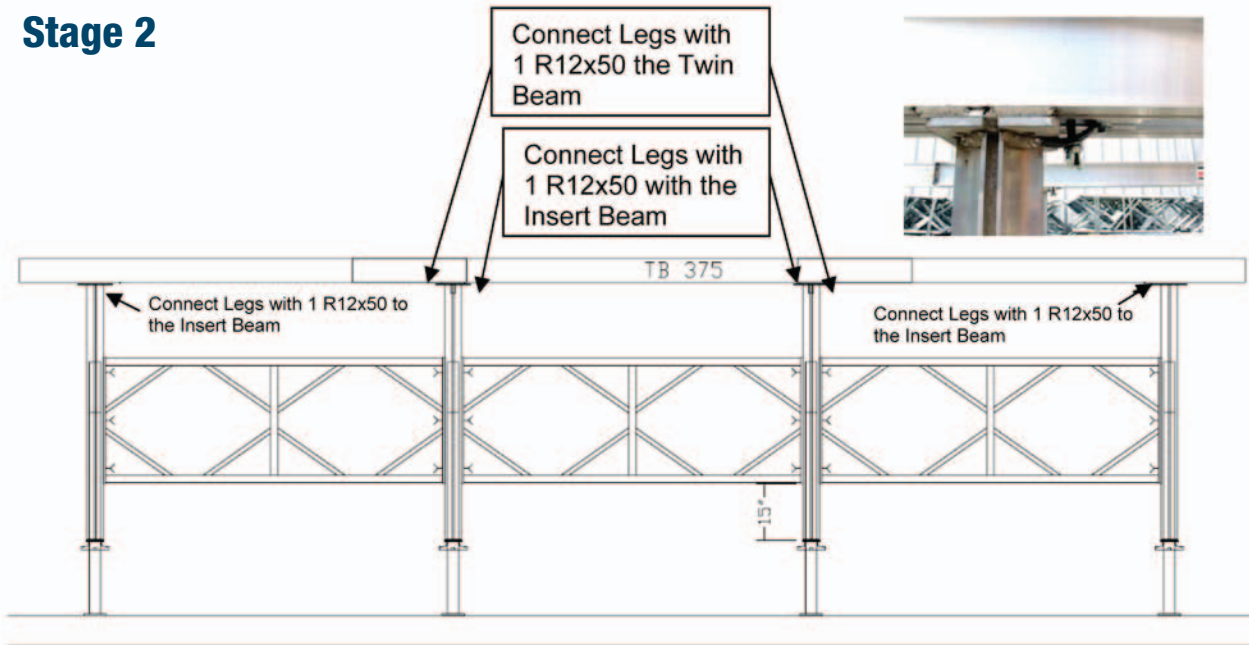
Build 8 leg tower according to drawing

Top View



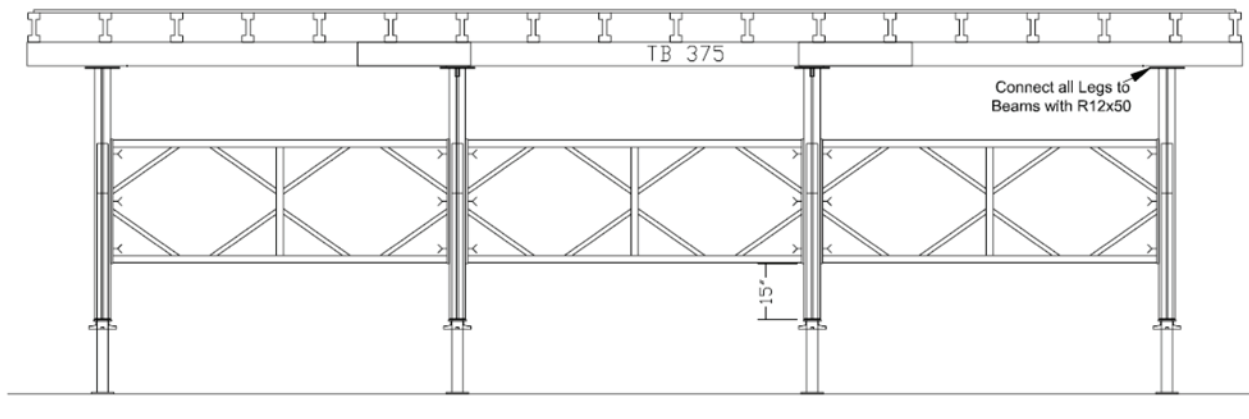
Twin Beam Tables

Stage 2



Attach twin and insert beams to tower.

Stage 3

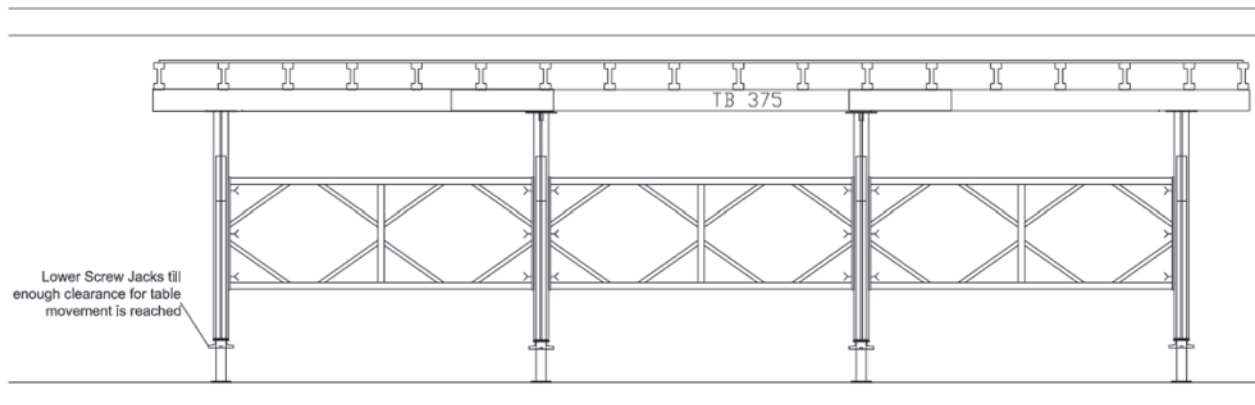


Finish table by attaching secondary beams with R12x100 and decking.
For detailed assembly instructions see page 13-17

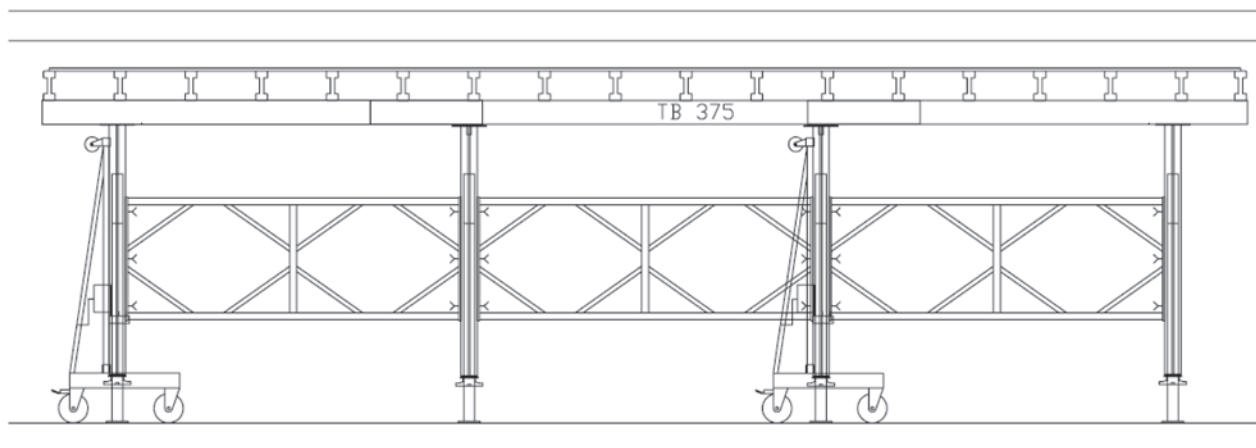
Twin Beam Tables

Stripping and Flying Procedure

Before any stripping takes place, all obstructions to the safe movement of the table must be removed

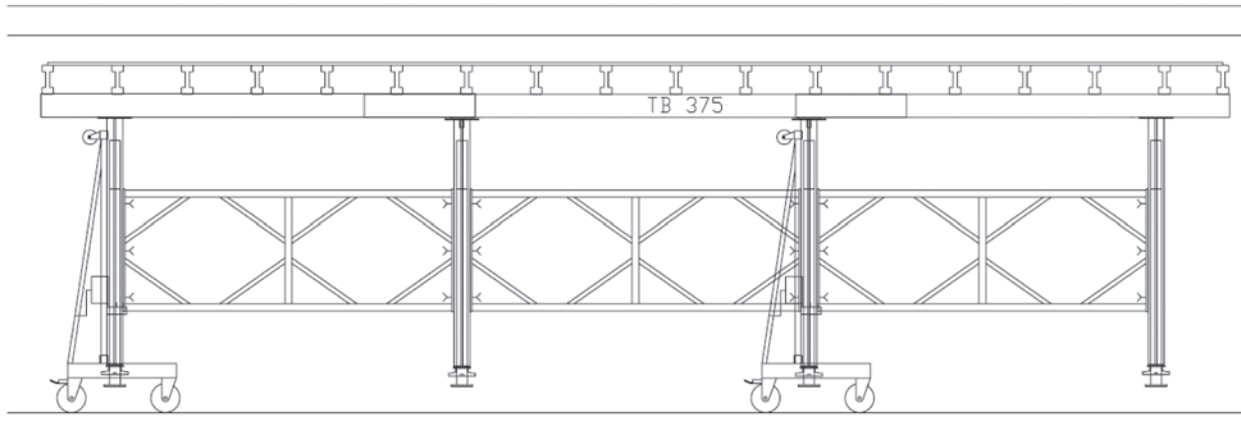


1. Break bond between slab and decking by turning the collar nuts thus creating first stripping action.



2. Place the Mega Trolleys to the Mega Frames as instructed in the drawing. Basic position of Mega Trolleys is in the second bay from edge and last bay on opposite side (see drawing above). Raise Mega Trolleys by turning the handle clockwise until legs come free.

Twin Beam Tables



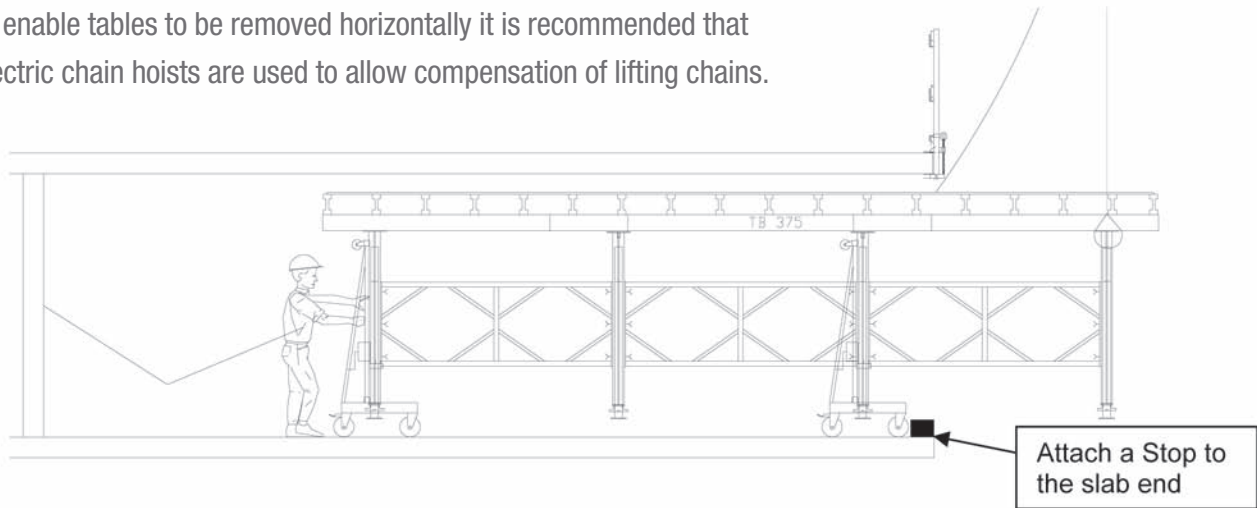
3. With the weight of the table now being carried by the Mega Trolleys, retract the remaining jacks to provide sufficient clearance for moving.

The table is now in the lowered position and ready to move

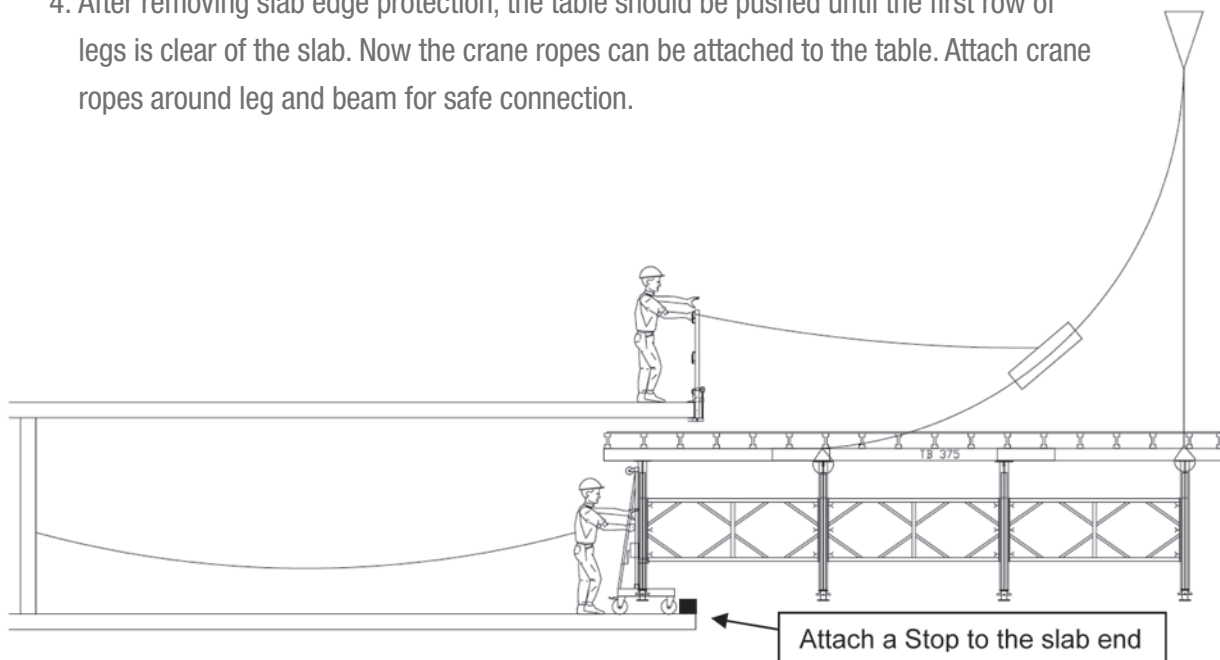
Twin Beam Tables

Moving

To enable tables to be removed horizontally it is recommended that electric chain hoists are used to allow compensation of lifting chains.

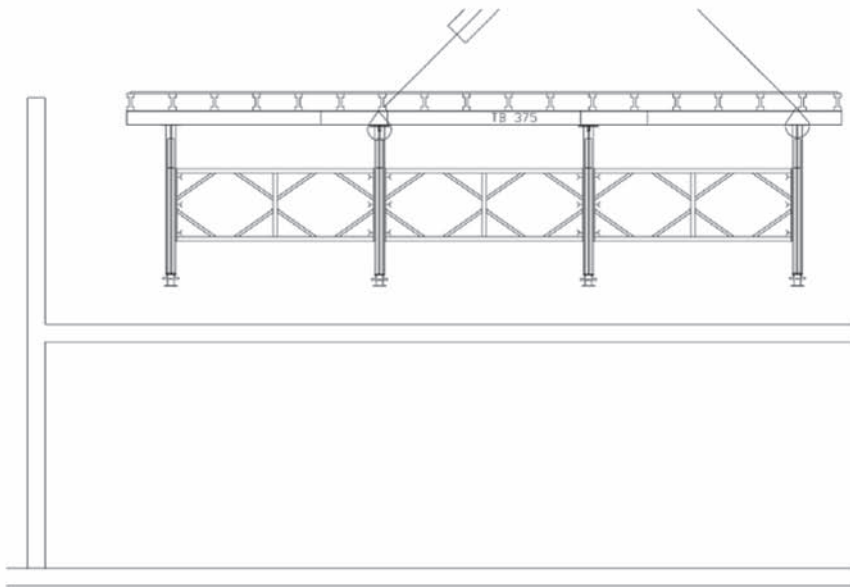


4. After removing slab edge protection, the table should be pushed until the first row of legs is clear of the slab. Now the crane ropes can be attached to the table. Attach crane ropes around leg and beam for safe connection.

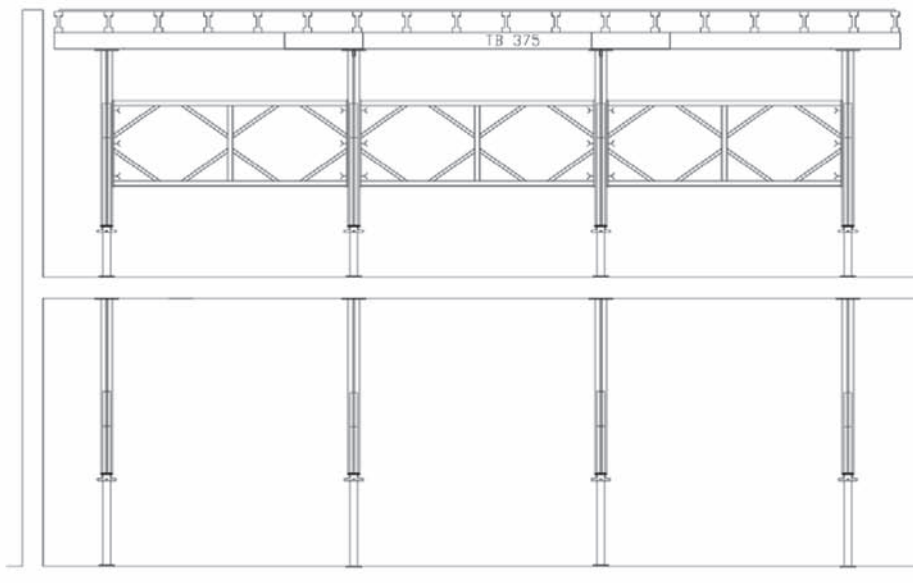


Continue pushing table (helped now by pulling action of crane) until Mega Trolley is close to edge of the building. Level the table by using the chain hoist. After table is leveled, release and take out trolley.

Twin Beam Tables



6. The table is now ready to be completely cleared from the slab and lifted to the next bay or floor above. If necessary, Mega Trolleys can be used again to move table to final position.



7. When table stays in final position, site engineers can start leveling table to final pour heights.

8. It is suggested at this stage, if required, the props for reshoring are installed at the necessary positions.

Twin Beam Tables

Safety Checklist

- All narrow width tables should be stabilized against overturning from either wind forces or horizontal loading due to construction loads.
- Where operatives are required to lean over edges of the slab, a suitable harness must be worn and appropriately fixed.
- Before moving table, make sure, the movement area is free of debris or other disturbing material
- Make sure, there is enough clearance between the floor and the jacks.
- Make sure, there is enough clearance between slab and top of table.
- Check all connections of the Mega Frames and Mega Clamps to ensure, all wing nuts are tighten to the required strength of 440 Lbsin torque.
- Ensure that all retainer clips are in working order to hold the jack in place. If not, replace retainer clips immediately. Do not fly table with broken retainer clips.
- If using additional jacks at the top of the shoring ensure that the screw jack is connected to the leg with retainer claws and that 2 Mega Clamps R12x50 are used to locate jacks securely to underside of Mega Alum Beams.
- Ensure table weight does not exceed crane capacity
- Check landing area for debris or other disturbing material.
- Move tables with care. Always watch your coworkers and communicate with them.
- Make a communication plan with the crane operator so both of you are on the same page and understand each other.
- Only one person should communicate with the crane operator to avoid confusion and mistakes.
- Check for secure attachment of the crane ropes. The ropes should always go around the props and Alum Beams.
- Make sure, the “flying area” is free of traffic and coworkers. Prepare a signal when the flying process starts so your coworkers can pay attention.

Concrete Support Systems Infill Methods

Typical Infill Methods

15" maximum width infill areas between tables

Erection

- a. Cut plywood to suitable width.
- b. Place plywood in gap between tables (plywood supported by existing secondary beams).
If plywood is positioned from above, operatives have to wear a suitable safety harness.

Dismantling

- c. Lower tables
- d. Remove plywood infill. If height is above 7 ft, a temporary access platform will be required.
- e. Reposition tables and then follow erection sequence above.

15" to 36" wide infill areas between table erection

Typical Infill Methods

Erection

- a. Cut plywood to suitable width.
- b. Place plywood in gap between tables (plywood supported by existing secondary beams).
If plywood is positioned from above, operatives have to wear a suitable safety harness.
- c. Support plywood at mid span by means of temporary stringer beam and suitable props.

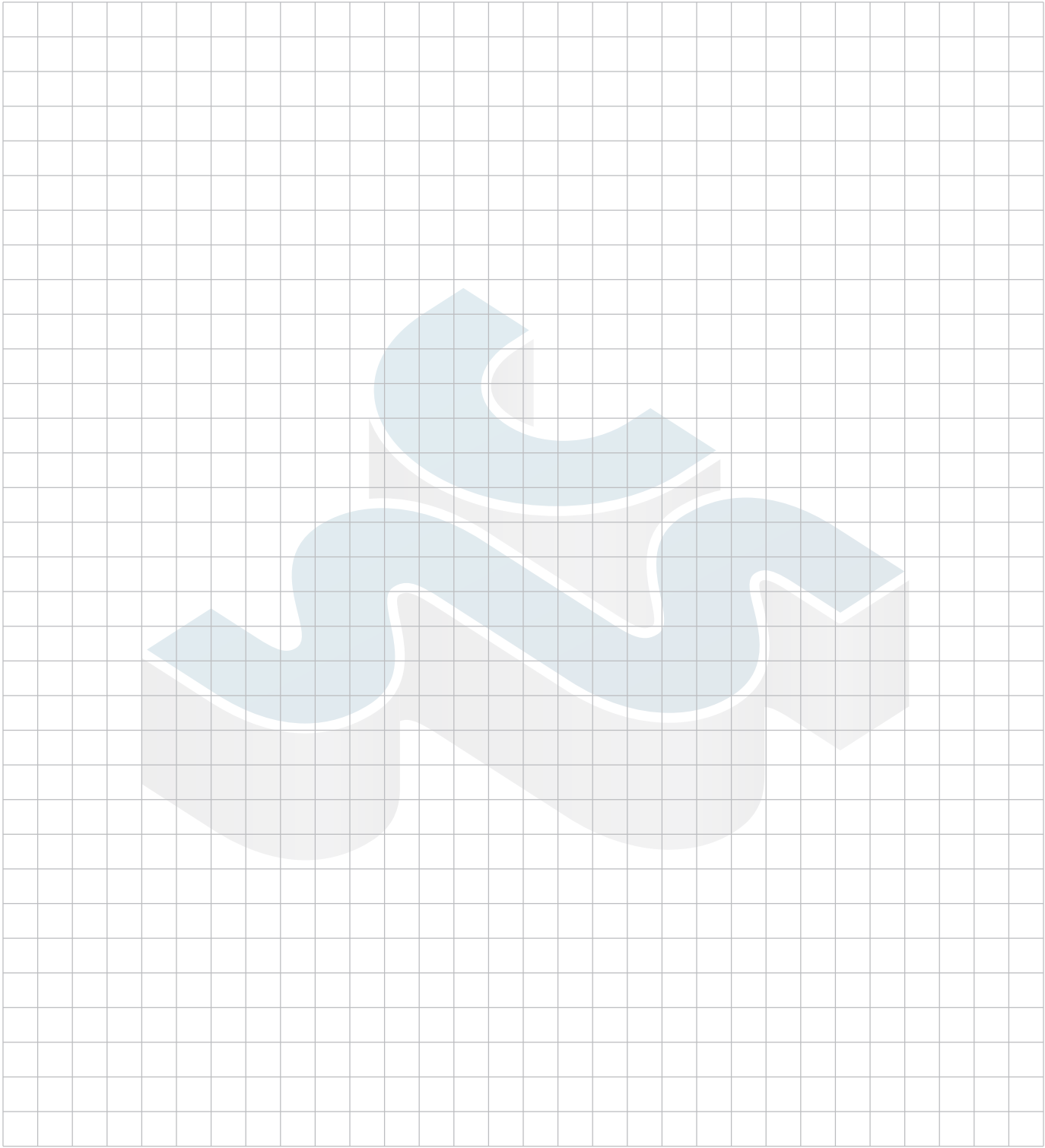
Infill widths shall not exceed what has been indicated on the project-specific drawings.

Typical Infill Methods

Dismantling

- d. Remove temporary props and stringer beams.
- e. Lower tables.
- f. Remove plywood infill. If height is above 7 ft, a temporary access platform will be required.
- g. Reposition tables and then follow erection sequence above.

Notes





p: 239.330.7614 f: 239.330.7958
info@concretesupportusa.com
www.concretesupportusa.com

Give us a call at any of our branch locations, email us at info@formtechinc.com, or click on formtechinc.com/quote to get a quote. Our experienced Form Tech representatives will answer your questions, and help you get your project started with some of the best concrete forming, shoring, and accessory products in the industry, backed by a professional and detail-oriented staff.



Charleston, SC

7377 Peppermill Lane
North Charleston,
SC 29418
843.628.3434



Detroit, MI

Corporate Headquarters
975 Ladd Road
Walled Lake,
MI 48390
Branch: 248.344.8260
Corporate: 248.344.8265



Charleston, WV

161 Industrial Road
St. Albans,
WV 25177
304.722.6804



Pittsburgh, PA

2850-A Kramer Road
Gibsonia,
PA 15044
412.331.4500



Charlotte, NC

1000 Thomasboro Road
Charlotte,
NC 28208
704.395.9910



Raleigh, NC

115 Peffinder Lane
Raleigh,
NC 27603
919.833.0911



Cleveland, OH

20801 Miles Road
North Randall,
OH 44128
216.692.0497



TRUSTED FORMWORK & ACCESSORY SPECIALISTS

800-876-4857 | info@formtechinc.com | formtechinc.com