

ME MASS ENGINEERING

MANUFACTURER OF STEEL SCAFFOLDING AND FORM WORK





Centering System

Floor Forms

Floor forms are manufactured in 14swg. (2mm thick) 12sw I.S. tested CR / HR Sheets. Rib stiffeners are provided in floor forms to give better load bearing capacity and Guest plate in corners to maintain edges even after considerable number of uses. Press Bent Sheets.

- Longitudinal Box / Rib Stiffeners
- Perfect Corner Rigidity
- Easy Handling

Loading Data

Size (mm)	Span (mm)	Max. Slab thickness (mm)
1150x600	1150	300
900x600	900	400



MASS Heavy Duty Telescopic Spans

- Exceptionally high load bearing capacity for its low weight.
- Gives maximum safety with minimum supervision.
- Eliminates cost of cutting and wastage of timber.
- Stands up to tough site handling & reduces maintenance cost.
- No intermediate vertical shoring - free access below.
- Assured load bearing capacity.
- Compact for storage and transport.



Double Bolt System



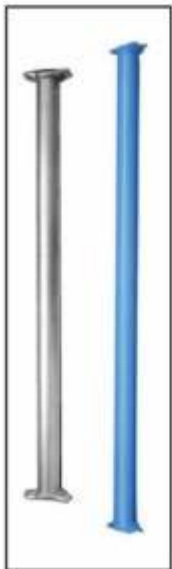
Rigid end with M.S. Flat



MASS Telescopic Span has a unique design to give exceptionally high load bearing capacity for its low weight. Telescopic Span consists of an OUTER & an INNER member - Both INNER & OUTER members are manufactured in three convenient lengths. Combination of any two, will generally meet the site requirement.



Cuplock System

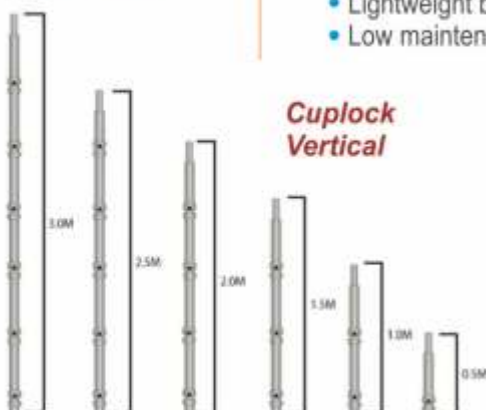


**Cuplock
Ledger**

Cuplock / Cup lock is a unique node point connection allows up to four horizontal members to be connected to a vertical members in one single action - without the use of nuts and bolts or wedges. The locking device is formed by two cups. Single node point action of unique locking make 'Cuplock/Cuuplock' a fast, versatile and optimized system of scaffolding for scaffolding for construction, demolition and maintenance projects throughout the globs.

Silent Features:

- Cuplock system - Easy to STAND - say no to nuts and bolts or wedges
Just a simple locking cup at each node point on the standards enables connection of the ends of up to four members in one locking action.
- Cuplock systems - Versatile!
Best suitable for access or form work support.
- Cuplock systems - Timely tested and proven design with safety accessories
Cuplock system has a proven performance history on an extensive number of sites, meeting the requirements of the various statutory bodies.
- Quick fastiening of horizontals. Only 4 horizontals can be fatened at one time with firm clamping action of top cup making the joint rigid.
- Quick/Fast/Solid erection and dismantling results in time and labour saving.
Widely and versatile use in construction, demolition or maintenance projects for any type of structure i.e. straight or curved.
- Lightweight but high loads carrying capacity.
- Low maintenance.



**Cuplock
Vertical**



Std. Size of Ledger

Height in Mtr.
1.0
1.2
1.5
2.0

Std. Size of Vertical

Height in Mtr.
1.0
1.5
2.0
3.0



Wall form Shuttering System

The wallform system of steel form work gives maximum economy with excellent concrete finish and is used for construction of walls, columns, beams, floors, culverts, docks and precast units. The unique wallform system of steel shuttering comprise of standard panels. Channel or Heavy duty soldiers, Tubes or Channel walers. All these components are assembled together by four types of specially designed clips.

The wallform panels & Soldiers are manufactured out of MS slotted angles of 45x45x5mm and 12 gauge ms sheets to make them rigid & strong.



The curvature of waling tube is changed to suit profiles of different diameter shells. Flexible panel match the curvature when connected to waling tubes by single clips.

Double adjuster panel fills the gap on outer face. between flexible panels, since soldiers on both faces have to be in radial alignment to house wall ties. Double adjuster panels are also used to fill gap in straight wall construction.

Std. Sizes of Wallform and Flexible Panels.

Height in mm	Width in mm
1250	500
1250	450
1250	400
1250	300
1250	250



Adjustable Steel MASS Props



TECHNICAL DETAILS

- Steel tubes continuous welded
- Conforms to IS 1239 / 1161 YST 210
- Outer 60.3mm OD - 50mm NB Medium
- Inner 48.3 mm OD - 40 mm NB Medium
- Heavy duty Props with 'C' Class tubes
- Spl. Locking En 8 Pin which cannot be removed from assembled prop
- Props used beyond 3.65 Mtrs. inner must be braced by tube and coupler
- Infinite Adjustment
- Reliable strength and safety
- Erected in seconds long life.

Beam Bottom



Standard
Head

MASS Prop sizes & capacities

Note

1. Props must be braced on both directions by tubes and Double Couplers at approximately 250mm above Prop Nut when used for height beyond 3.6 Meters.
2. Use of props for double stage centering recommended only upto 7 metre height. Beyond 7 meters. All purpose scaffold units recommended.
3. For Double stage centering, lower prop shall be braced at two levels in both directions one at 250 mm above prop nut and another just below the joint between props and upper prop braced at one level at 250mm above nut. Maximum safe load for this combination is 2000 kgs.

Sizes	Height Closed	State Axial Extended	State Axial Load Closed	Safe Axial Load Extended
x0	1.05m	1.80m	3500kgs	3000kgs
x2	2.15m	3.75m	3100kgs	2200kgs
x3	2.35m	3.96m	2900kgs	2000kgs
x4	3.2m	4.70m	2300kgs	1150kgs



Check list

- Before using old MASS spans. Check all welds for soundness.
- Make sure locking screw is tightened properly.
- Make sure bearer plates rest firmly on the support
- Ensure runners supporting MASS span bearer plate is adequately strong and that it properly transfers load to supporting prop.

For a given slab thickness one can fix the spacing for the MASS span and determine their maximum clear span, as in example.

Example : Slab thickness 125mm Required spacing 1150mm, Permissible Clear Span 3760mm

Slab thickness	Total load including slab 2400 kg/cu m + live 250 kg/sqm + Shuttering 70kg/sqm	Permissible clear spans for centre line spacing					
		300 mm	450 mm	600 mm	800 mm	900 mm	1150 mm
100	560	8050	6550	5690	5000	4650	4010
115	596	7800	6400	5510	4750	4470	3890
125	620	7570	6200	5330	4650	4340	3760
140	656	7310	5970	5160	4500	4190	3630
150	680	7110	5790	5000	4350	4090	3560
165	716	6880	5660	4870	4250	3960	3430
180	752	6730	5490	4750	4100	3890	3350
190	776	6550	5360	4620	4050	3780	3280
200	800	6400	5230	4520	3950	3680	3200
225	860	6150	5000	4340	3800	3530	3070
250	920	5920	4830	4140	3650	3380	2840
275	980	5660	4050	4010	3500	3280	2640
300	1040	5490	4490	3730	3400	3150	2490



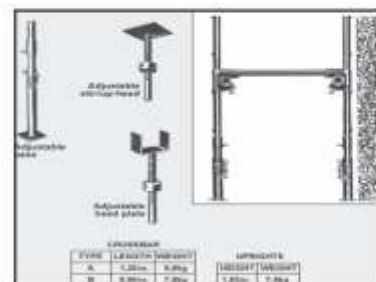
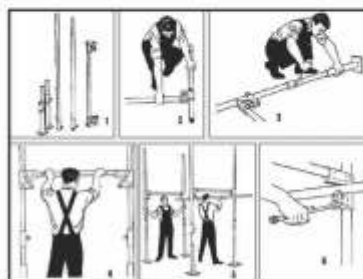
Tubular Scaffolding System



All Purpose Scaffolding (A.P.S Unit) :

Size : 2 M x 1.25 M

All purpose scaffolding units consist of two verticals and 1 horizontal / cross bar, both manufactured out of 40 NB 'C' class / 'B' class ERW pipes and sockets out of 50 NB 'C' class / 'B' class ERW pipes conforming to IS 1161 grade. Lugs are welded at 500mm centres, provide positive support to specially made "C" clamps welded on to both ends of cross bars, which has a unique 3 way coupling. The ledger pipes are connected to cross bar, thus connecting the units



H - Frame Scaffolding :

Size : 2 M x 1.25 M

1.5 M x 1.25 M

H- Frame scaffolding units consist of two verticals and horizontals welded to the verticals, both manufactured out of 40 NB 'C' class / 'B' class ERW pipes and sockets out of 50 NB 'C' class / 'B' class ERW pipes conforming to IS 1161. Cross Bracing provided to H-Frames which is made of 25NB Light/Medium duty pipe, Scissor type Bracing is provided between each frames with spacing of 5Ft or 8Ft depending on the requirement.



Formwork Accessories

Swivel Coupler



Available in - 40mm x 40mm
Finish - Electrogalvanized

Fixed/Double Coupler



Available in - 40mm x 40mm
- 40mm x 50mm
Finish - Electrogalvanized

Wing Nut



Material - Cast Iron
Finish - Electrogalvanized

Anchor Plates



Material - Mild Steel Plates
Available in - 120mm x 120mm
Finish - Electrogalvanized

Tie Rod



Expandable Joint Pin



Spigot Pin



Single Clip



Walkway Chalis / Platform



ME **MASS**
ENGINEERING

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