



Brothers

الأخوة للصناعات المعدنية / (د.م.م - ش.ش.و)
Brothers Steel Industry ./ (S.P.S - LLC)

Scaffolding Sales & Rentals | Cable Tray Management System
 Aluminium Scaffolding | Aluminium Profiles & Glasses
 Sandwich and Roofing Panel



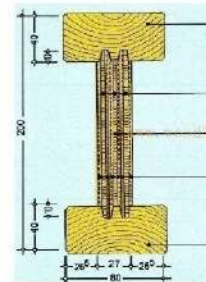
CUPLOCK WITH H20 OR ALUMINUM BEAM AND DECKING INFILL SYSTEM

Wooden Shuttering Grigder H20 Beam

Permissible Bending Moment: $M=5.0 \text{ kNm}$

Permissible Shear Force: $Q = 11.0 \text{ kN}$

Weight = 4.70 kg/m



Length, cm	kg
200	9.40
245	11.50
265	12.50
290	13.60
330	15.50
390	18.30
450	21.20
490	23.00
590	28.00

Aluminum Beam S-150

Timber Weight = 0.865 kg/m

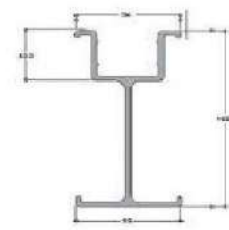
Weight of Profile with Timber = 4.012 kg/m

Weight of Profile without Timber = 3.147 kg/m

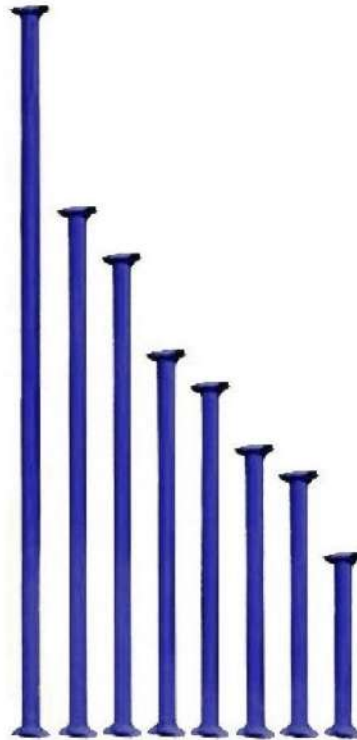
Inertia X-X = 370 cm^4

Inertia Y-Y = 44 cm^4

Moment of Resistant = 6.80 kN-m [kilonewton-meter]



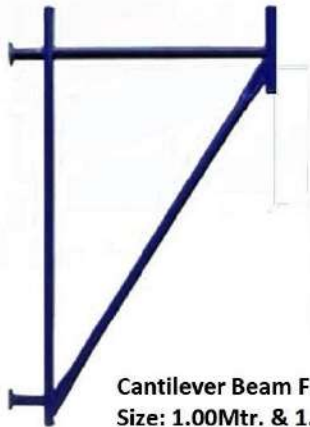
Standard/Vertical
 Size: 1.00Mtr. To 3.00Mtr.



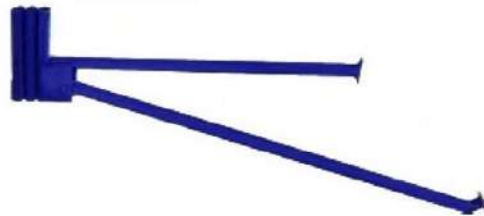
Ledger / Horizontal
 Size: 2.50Mtr. To 0.60Mtr.



QUALITY .. SAFETY .. STRENGTH .. RELIABILITY



Cantilever Beam Frame
Size: 1.00Mtr. & 1.50Mtr.



Cantiliver Frame
Size: 1.00 Mtr-1.50 Mtr



Beam Bracket
Size: 1.00 Mtr-1.50 Mtr



Base Plate



Base Adaptor



Universal Jack



Base Jack



Adj. Fork Head



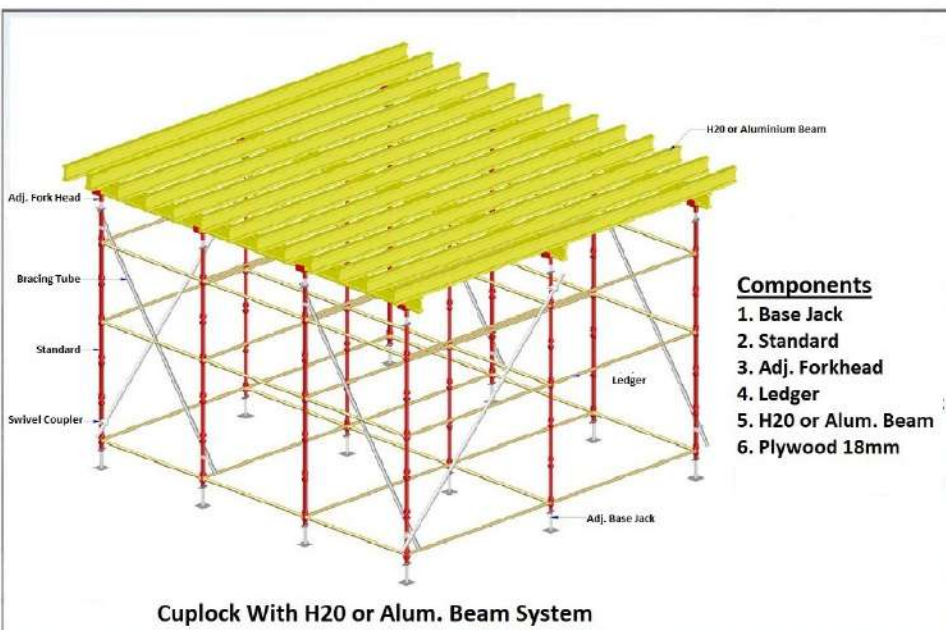
Conector



**Swivel Coupler
Drop Forged**



**Fixed Coupler
Drop Forged**



Cuplock With H20 or Alum. Beam System

Components

1. Base Jack
2. Standard
3. Adj. Forkhead
4. Ledger
5. H20 or Alum. Beam
6. Plywood 18mm



Horizontal Formwork | Cuplock System

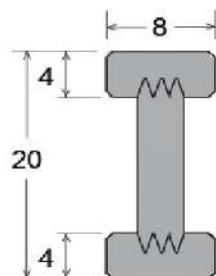
H20 Timber Beams Decking

H20 Timber Beam

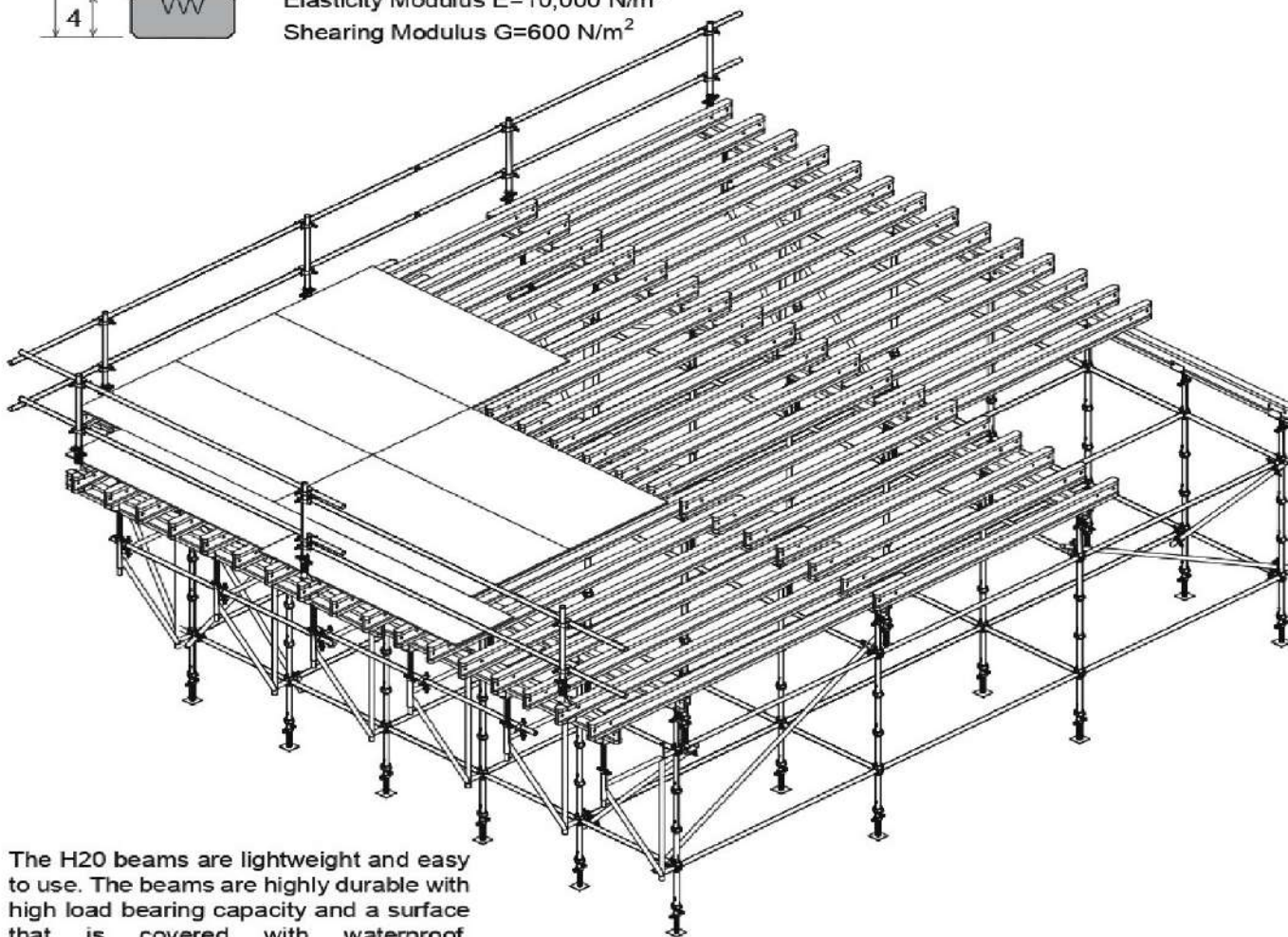
The H20 beams are rounded at the end for damage protection with sealed ends and minimal cracking. The beam is robust made with three-ply web of solid wood (EN 13353).

H20 Product Range

Length: 190, 245, 250, 265, 275, 290, 300, 330, 360, 390, 450, 490, 590 cm, special lengths up to 12 m are possible.



Shear force $Q=11.0 \text{ kN}$
 Bending Moment $M=5.0 \text{ kN}$
 Section Modulus $S_x=461 \text{ cm}^3$
 Moment of Inertia $I_x=4613 \text{ cm}^4$
 Elasticity Modulus $E=10,000 \text{ N/m}^2$
 Shearing Modulus $G=600 \text{ N/m}^2$



The H20 beams are lightweight and easy to use. The beams are highly durable with high load bearing capacity and a surface that is covered with waterproof, environmentally friendly impregnation.

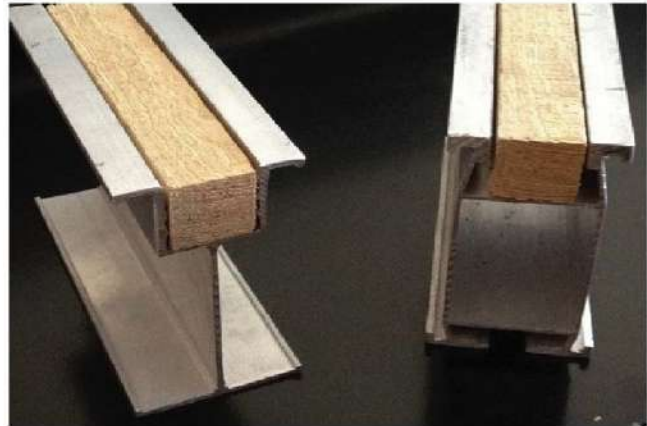
Horizontal Formwork | Cuplock System

Aluminum Beams Decking

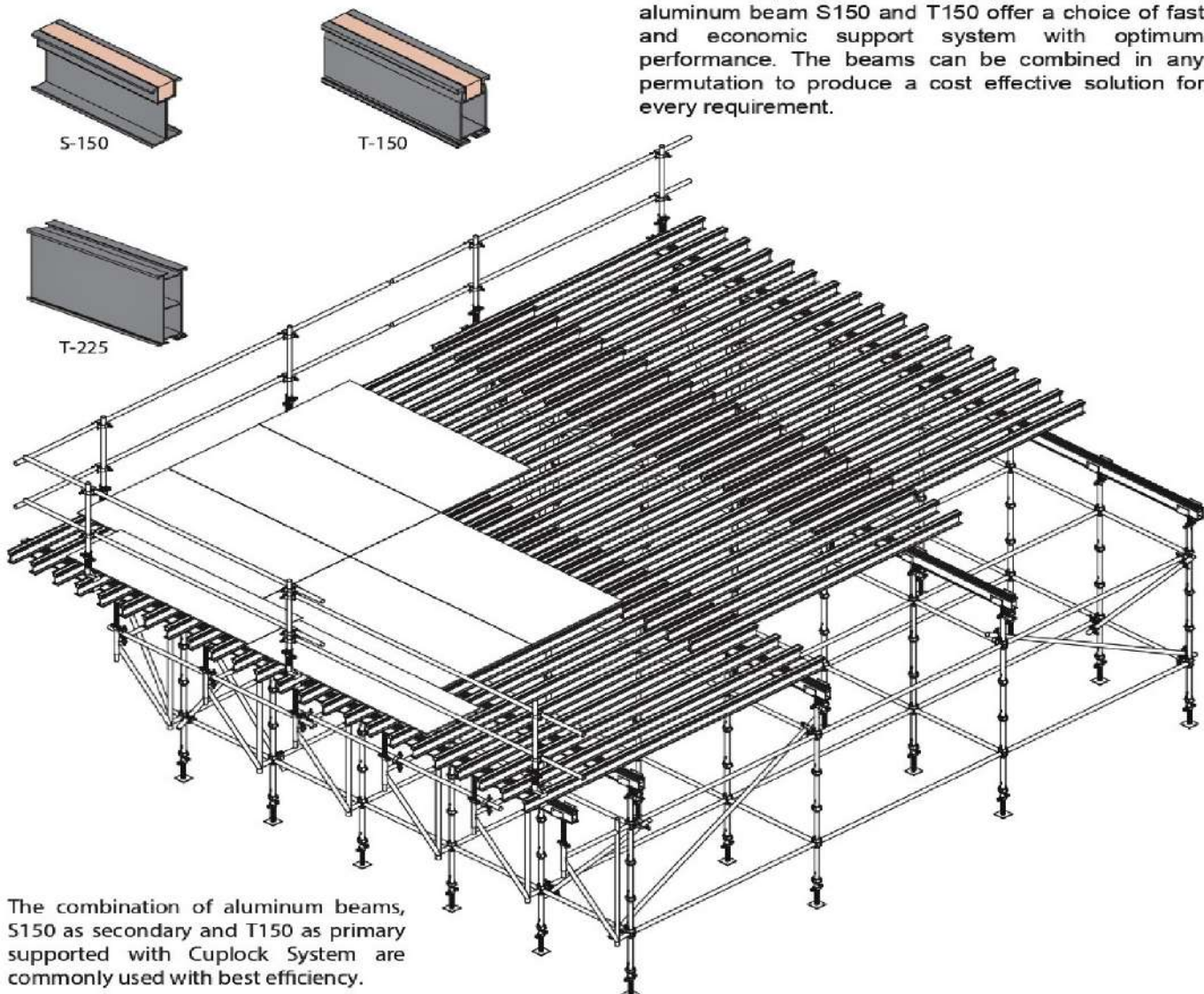
The benefits of aluminum formwork products compared with their steel and timber equivalents have had a major impact on formwork practice.

The light weight of aluminum beams which can weigh as little as one-third of their steel equivalent opens the way to greatly increased site acceptance and productivity. The corrosion resistance of aluminum ensures a long maintenance-free life, further extended by the fact that it cannot be easily cut up on site like timber beams.

The two factors of productivity and long material life combine to explain the increasing trend towards the adoption of aluminum formwork system for both small and large sites.



For soffit applications, the Cuplock System with aluminum beam S150 and T150 offer a choice of fast and economic support system with optimum performance. The beams can be combined in any permutation to produce a cost effective solution for every requirement.



The combination of aluminum beams, S150 as secondary and T150 as primary supported with Cuplock System are commonly used with best efficiency.

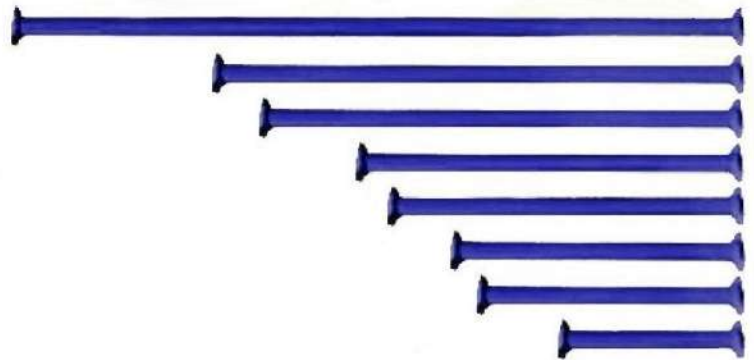
CUPLOCK WITH DECKING INFILL BEAM SYATEM



Standard/Vertical
Size: 1.00Mtr. To 3.00Mtr.



Infill Beam
Size: 0.50Mtr. To 1.70Mtr.



Ledger/Horizontal
Size: 0.60Mtr. To 2.5Mtr.



Place between the decking
beam at 90 degree angle



Decking Beam
Size: 1.20Mtr. , 1.80Mtr. & 2.50Mtr.



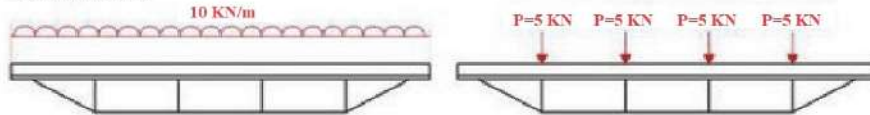
Technical Data

Decking Beams Safe Working Loads

The following figures shown decking beam safe working load with different lengths.

Safe working loads shown as uniform load and point load.

Decking beam 2.5m



Decking beam 1.8m



Decking beam 1.2m



Point Load (P) = 2 (Reaction Of Infill Beam)



Section at mid span of decking beam



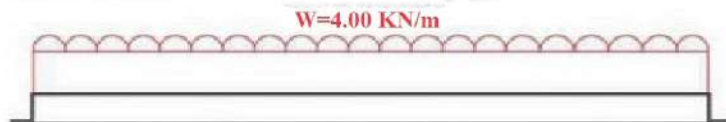
Infill Beam Safe Working Loads

The following figures shown infill beams safe working loads

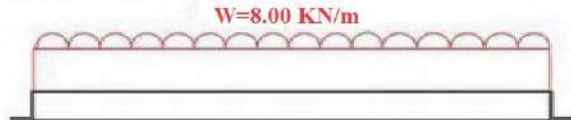
Infill beam 1.70m



Infill beam 1.50m



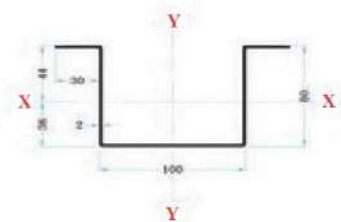
Infill beam 1.20m



Infill beam 0.90m

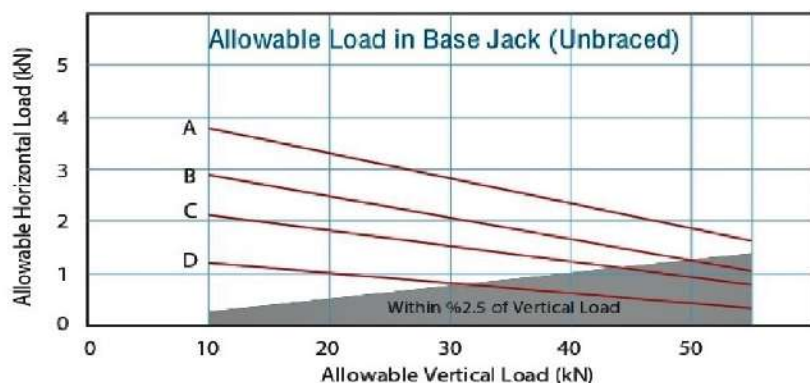


Line Load (W) = Slab Load X Spacing Between Infill Beam



Section at mid span of infill beam





Jack Extension
 A= 10 cm
 B= 20 cm
 C= 30 cm
 D= 40 cm

