



German Formwork Technology

Formwork ■ Support Systems ■ Services



H20 Slab Table System

Assembly and Application Guide

Product Information and Features

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Product Features

H20 Slab Table formwork system consists of H20 Timber Beams, Euroform Plus steel props, Table Head and Table Clamp. Together with the 18 mm thick plywood sheets, the H20 slab table is designed for concrete slabs up to 45 cm thick. H20 slab tables are designed according to the structure of the building and mainly used for high-rise buildings, podiums, parking and large slab areas. Horizontal movement of the tables is made manually by trolleys while vertical movement is made by crane.

Fixing the Table Heads to the H20 slab table is quite simple. It is fastened to the double primary beams by means of the Table Clamp which is a short piece of Tie Rod and Wing Nut. No drilling, no screwing and no special tool is needed.

The H20 Slab Table Formwork System is designed and manufactured in accordance with BS EN 12812 : 2008, code of practice for Falsework

Important information Before Using the H20 Slab Table

All information provided about maximum loads are only valid for horizontally braced slab table arrangements which are secured against existing structural building parts such as columns, shear and core walls.

The system does not allow transfer of any horizontal loads thru the Euroform Plus steel props of the table system to the ground or floor slab. The top structure of the slab table has to be braced and secured horizontally by adequate measures against existing structural concrete parts by means of wedging or any kind of bracing to walls or columns.

After positioning and securing the H20 slab table, the Euroform Plus steel props have to be aligned vertically in order to avoid any moment coming in to the steel prop.

Eccentric as well as big loads have to be avoided because the Euroform Plus steel props are designed to take centric and/or symmetrical loads only.

For cleaning of self-supporting slab table, only one person at the most can stand on it, with the slab table positioned on a solid and stable ground.

Please note that during moving and shifting of the slab tables, no persons, tools, materials, or any other item are allowed to be on the slab table.

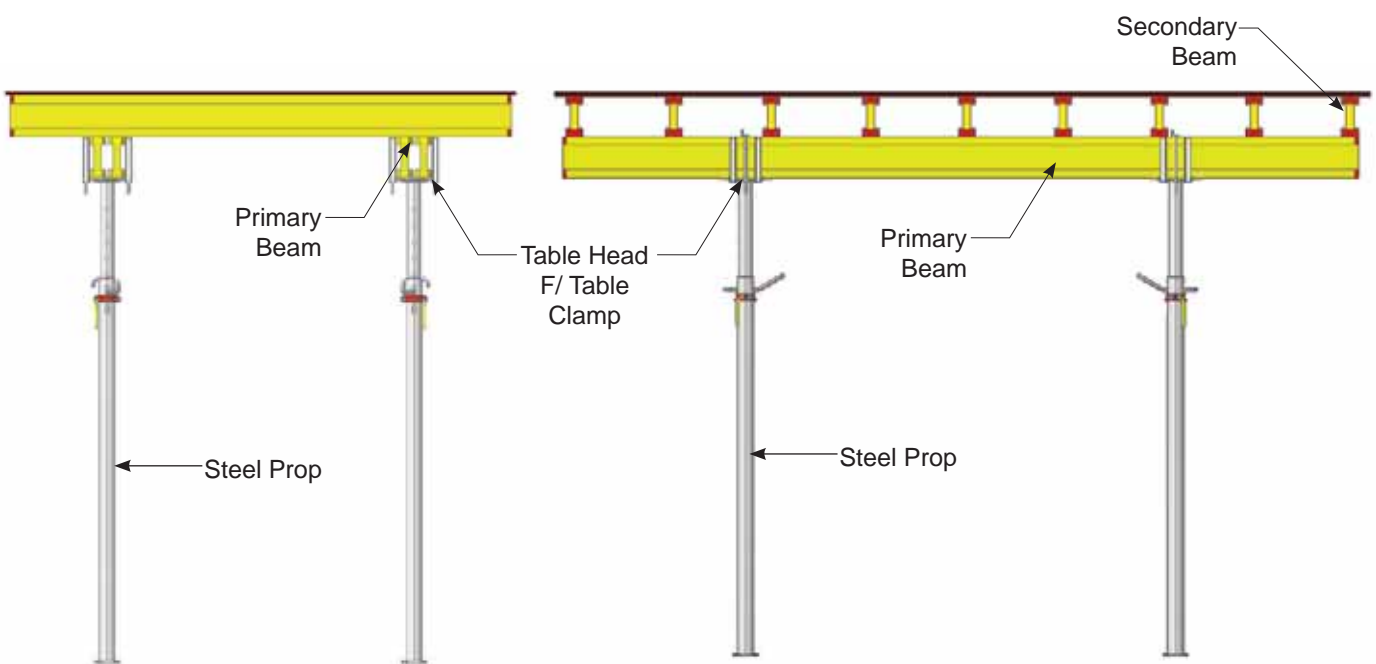
Changes in the slab table size require separate structural verification

Important Remarks

The succeeding assembly and application guide has to be carefully read as it contains detailed information on the proper application and handling of the H20 slab table. All instructions concerning technical operation and function have to be observed carefully. Please note that exceptional use of the H20 slab table requires a separate design calculation.

In order to ensure a technical and safe use of our product, all relevant national safety rules and regulations and safety instructions of national institutes and/or local authorities have to be observed. In general, only undamaged material and components which are in proper working condition must be used.

Product Overview



Components

H20 Timber Beam

	Art. No	Weight Kg/pc.
H20 Beam 190	310011	9.12
H20 Beam 245	310012	11.76
H20 Beam 265	310013	12.72
H20 Beam 290	310014	13.92
H20 Beam 330	310015	15.84
H20 Beam 360	310016	17.28
H20 Beam 390	310017	18.72
H20 Beam 450	310018	21.60
H20 Beam 490	310019	23.52
H20 Beam 590	310020	28.32



- Protective Cap - Shock resistant, protection against splintering which increases durability
- Web - 3-ply laminated solid wood panels, best performance, durability
- Chords - Superior quality selected solid wood with friction fitted finger joints

Tested and approved permissible loads:

- Max. perm. M = 5.00 kNm
- Max. perm. Q = 11.00 kNm
- E . I = 500 kNm² (bending moment)

Euroform Plus Steel Props

Euroform Plus 20kN

260 (L=1.54 - 2.60m)	310031	12.7
300 (L=1.72 - 3.00m)	310032	15.8
350 (L=1.98 - 3.50m)	310033	19.2
400 (L=2.24 - 4.00m)	310034	22.7
500 (L=3.00 - 5.00m)	310036	28.7
550 (L=3.05 - 5.50m)	310035	32.3

Euroform Plus 30kN






260 (L=1.54 - 2.60m)	310037	16.03
300 (L=1.72 - 3.00m)	310038	18.50
350 (L=1.98 - 3.50m)	310039	22.70
400 (L=2.24 - 4.00m)	310040	26.00




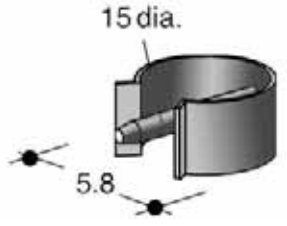



With quick -release bolts for rapid lowering by 2 mm

The inner and outer tubes, including the threads, are hot-dip galvanized steel which ensures the quality and high durability of tubular steel props from GFT



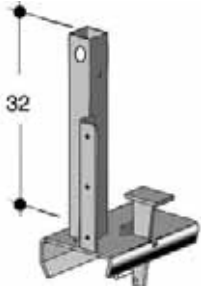
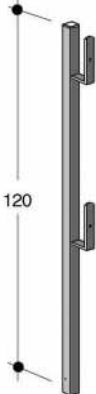

Components

	Art. No	Weight Kg/pc.	
<p>Table Head</p> <p>The Table Head is directly fastened to the base or head plate of the Euroform Plus steel prop by means of 2 Bolts M12 x 30 with Nut.</p>	300021	3.6	
<p>Table Clamp</p> <p>Used as a fixing device for primary beams. It is placed into the Table Head and ensures a tension resistant connection to the Euroform Plus steel prop.</p>	300022	0.8	
<p>Connection Angle 400</p> <p>Used for connecting primary and secondary beams of the decking structure. Fastening is done by means of double-headed nails.</p>	300020	0.8	
<p>Tripode Stand</p> <p>Using the Tripod Stand, the stability of high and self-supporting slab tables can be improved during erection and positioning. The Tripod Stand's height is 83 cm.</p>	310121	11.2	
<p>Bracing Clamp</p> <p>If required, use this Bracing Clamp for bracing, using boards for stabilizing high and self-supporting slab tables during erection (max. size of board: 3x12 cm).</p>	310129	1.6	

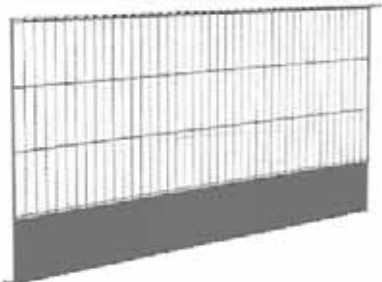


Components

	Art. No	Weight Kg/pc.	
<p>Crane Hook</p> <p>Four Crane Hooks have to be always fixed to the primary beam ends for lifting the table. The 4-way crane tackle is to be fastened to these hooks for shifting the H20 slab table.</p>	300015	7.2	
<p>T-Bolt</p> <p>For fixing and securing the Fork Head to the inner tube of the Euroform Plus steel props.</p>	340172	0.1	
<p>Toe Board Retainer</p> <p>Slipped on the Railing Post before inserting it into the H20 Base Shoe. The Toe Board Retainer secures and positions the Toe Board.</p>	310156	0.4	
<p>Bolt M 12x30 with Nut</p>	490096	0.2	
<p>H20 C-Hook</p> <p>Used for carrying and moving H20 slab tables on the construction site by crane. The H20 C-Hook has a maximum load capacity of 1.2 Tons (12 kN) and is simply attached to the H20 slab table.</p>	300018	800.0	

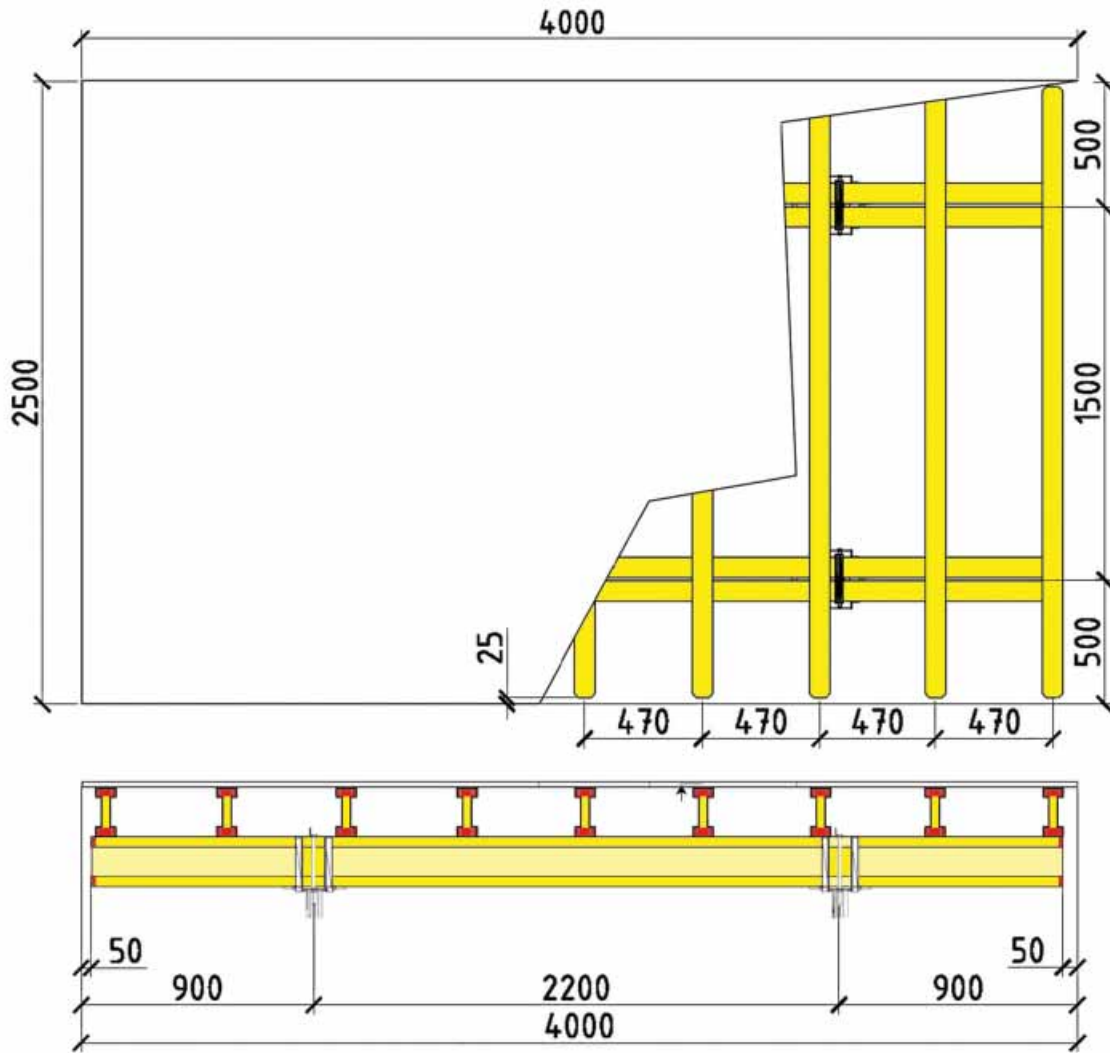
Components

	Art. No	Weight Kg/pc.	
<p>Table Shifting Carriage</p> <p>The H20 slab table can be moved horizontally using the Table Shifting Carriage. For safe moving and lifting of the H20 slab table, the Table Shifting Carriage has to be positioned at the center, underneath the H20 slab table to be dismantled</p>	300023	431.30	
<p>Table Extension Piece 100</p> <p>The Table Extension Piece 100 is used to extend the height of the Table Shifting Carriage from 2.45 m up to 4.20 m.</p>	300024	34.90	
<p>H20 Base Shoe SQ</p> <p>It is fixed on the H20 Timber Beams by Wedge and serves as the holding device for GFT Safety Railing Post SQ and end shuttering.</p>	310136	3.5	
<p>Safety Post</p> <p>To be attached to the H20 slab table by means of the H20 Base Shoe placed on the edge of the table. It serves as a holding device for the railing planks.</p>	310135	3.0	
<p>Timber Beam Attachment - C</p> <p>The Timber Beam Attachment C is fixed by Wedge and serves as the holding device for the GFT Safety Railing Post C and as an alternative to Bolt Socket C.</p>	300027	3.50	

Components

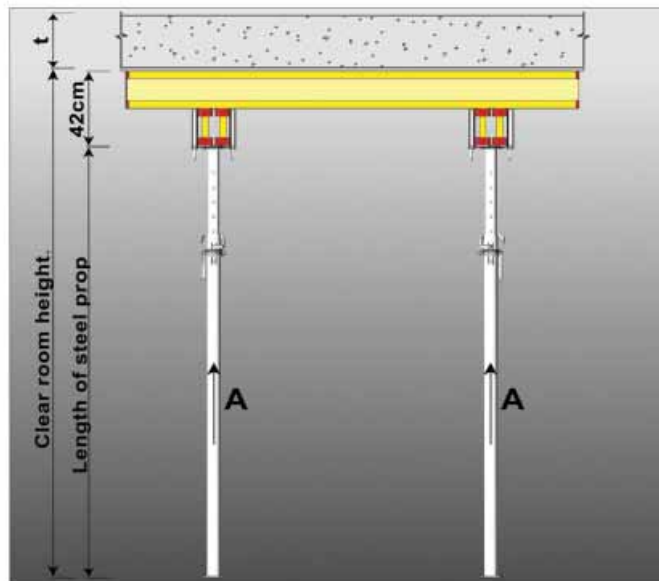
	Art. No	Weight Kg/pc.	
<p>GFT Safety Mesh</p> <p>Used for temporary edge protection as an alternative to board railing. The GFT Safety Mesh is a light-weight and versatile barrier which provides hard-mesh coverage with impact absorbing capacity.</p>	300025	19.40	
<p>GFT Safety Railing Post - C</p> <p>Used with Bolt Socket C and has a height of 135 cm and weighs 2.1 kg. The railing is done by means of Scaffold Tubes and Couplers which must be fixed to the vertical post. The GFT Railing Post C can be used with either railing planks or the GFT Safety Mesh.</p>	300028	2.10	
<p>Bolt Socket - C</p> <p>Used as a holding device for the Safety Railing Post on a horizontal surface. It must be fixed to the concrete slab using Bolt.</p>	300026	1.00	

Dimension of Sample H20 Slab Table



Load per steel prop (A):

Slab thickness t (cm)	Steel prop load A (kN)
10	10.63
15	14.00
20	16.88
25	20.25
30	22.56
35	24.31
40	27.75
45	31.19



Load assumption:

Weight of concrete (wc) $t \times 25.0 \text{ kN/m}^2$
 Dead load of table (wf) 0.25 kN/m^2
 Live load $p = 0.75 + (0.75 \nlessgtr 0.1 \times WC \nlessgtr 1.75) \text{ kN/m}^2$

The above mentioned figures are only valid for a table top structure which is wedged and braced against existing structural concrete parts (walls, columns) and properly fixed against horizontal movement.

Permissible loads for steel props
20-260, 20-300, 20-350, 20-400, 20-500 and 20-550
 permissible prop loads always 20kN maximum

Table A

GFT - Euroform Plus steel props												
permissible prop loads [kn] for use in system-bounded arrangement for slab												
Designation $L_{min} - L_{max}$ position of inner tube (IT) L [m]	20 - 260 1.54m - 2.6m		20 - 300 1.72m - 3.00m		20 - 350 1.98m - 3.50m		20 - 400 2.24m - 4.00m		20 - 500 3.00m - 5.00m		20 - 550 3.05m - 5.50m	
	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom
1.50												
1.60	27.00	27.00										
1.70	25.80	27.00										
1.80	24.30	27.00	38.00	38.00								
1.90	23.30	27.00	38.00	38.00								
2.00	22.30	27.00	35.00	38.00	27.00	27.00						
2.10	22.00	27.00	32.00	38.00	27.00	27.00						
2.20	21.60	27.00	30.50	38.00	27.00	27.00						
2.30	21.00	27.00	29.00	38.00	27.00	27.00	30.00	30.00				
2.40	20.50	26.00	28.00	38.00	27.00	27.00	30.00	30.00				
2.50	20.30	24.00	27.00	38.00	27.00	27.00	30.00	30.00				
2.60	20.00	24.00	26.00	35.00	27.00	27.00	30.00	30.00				
2.70			25.00	32.00	27.00	27.00	30.00	30.00				
2.80			23.50	29.00	27.00	27.00	30.00	30.00				
2.90			22.00	27.00	27.00	27.00	30.00	30.00				
3.00			20.00	24.00	27.00	27.00	30.00	30.00				
3.10					27.00	27.00	30.00	30.00	38.00	38.00	38.00	38.00
3.20					27.00	27.00	30.00	30.00	38.00	38.00	38.00	38.00
3.30					26.50	27.00	30.00	30.00	38.00	38.00	38.00	38.00
3.40					25.00	27.00	29.35	30.00	38.00	38.00	38.00	38.00
3.50					20.00	27.00	29.10	30.00	38.00	38.00	37.50	38.00
3.60							27.05	30.00	37.50	38.00	37.50	38.00
3.70							26.00	30.00	37.50	38.00	37.50	38.00
3.80							24.50	30.00	37.50	38.00	37.50	38.00
3.90							23.50	28.00	37.50	38.00	37.50	38.00
4.00							22.00	26.00	37.50	38.00	37.50	38.00
4.10							20.00	24.00	37.00	38.00	37.00	38.00
4.20									37.00	38.00	36.50	38.00
4.30									35.50	38.00	36.00	38.00
4.40									34.00	38.00	34.00	38.00
4.50									32.50	38.00	32.50	38.00
4.60									31.00	38.00	31.82	38.00
4.70									29.50	35.50	29.50	36.00
4.80									27.00	33.50	27.00	34.00
4.90									26.00	31.00	25.50	31.50
5.00									20.00	29.50	25.00	30.00
5.10											24.50	28.00
5.20											23.50	27.00
5.30											22.70	26.00
5.40											21.50	24.00
5.50											20.00	23.00



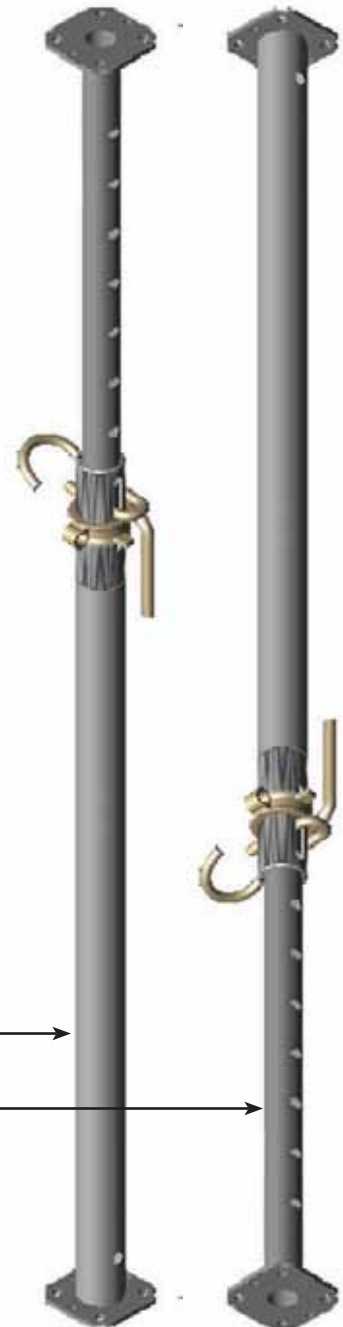
← Outer Tube Bottom

← Inner Tube Bottom

Permissible loads for steel props
30-260, 30-300, 30-350 and 30-400
 permissible prop loads always 30kN maximum

Table B

GFT - Euroform Plus steel props									
permissible prop loads [kn] for use in system-bounded arrangement for slab									
Designation $L_{min} - L_{max}$ position of inner tube (IT) L [m]	30 - 260 1.54m - 2.60m		30 - 300 1.72m - 3.00m		30 - 350 1.98m - 3.50m		30 - 400 2.24m - 4.00m		
	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	
1.50									
1.60	32.00	33.00							
1.70	32.00	33.00							
1.80	32.00	33.00	36.00	36.00					
1.90	32.00	32.00	36.00	36.00					
2.00	32.00	32.00	36.00	36.00	48.00	48.00			
2.10	32.00	32.00	36.00	36.00	48.00	48.00			
2.20	32.00	32.00	36.00	36.00	48.00	48.00			
2.30	31.50	32.00	36.00	36.00	48.00	48.00	36.00	36.00	
2.40	31.00	32.00	35.50	36.00	48.00	48.00	36.00	36.00	
2.50	31.00	32.00	35.00	36.00	46.50	48.00	36.00	36.00	
2.60	30.00	32.00	34.50	36.00	45.50	48.00	36.00	36.00	
2.70			34.00	36.00	44.00	48.00	36.00	36.00	
2.80			33.00	36.00	42.50	46.50	36.00	36.00	
2.90			32.00	36.00	41.50	46.00	36.00	36.00	
3.00			30.00	36.00	40.50	44.00	36.00	36.00	
3.10					39.00	43.00	36.00	36.00	
3.20					37.00	40.50	36.00	36.00	
3.30					34.50	35.50	36.00	36.00	
3.40					32.50	35.05	36.00	36.00	
3.50					30.00	32.00	36.00	36.00	
3.60							36.00	36.00	
3.70							36.00	36.00	
3.80							36.00	36.00	
3.90							33.00	36.00	
4.00							30.00	36.00	
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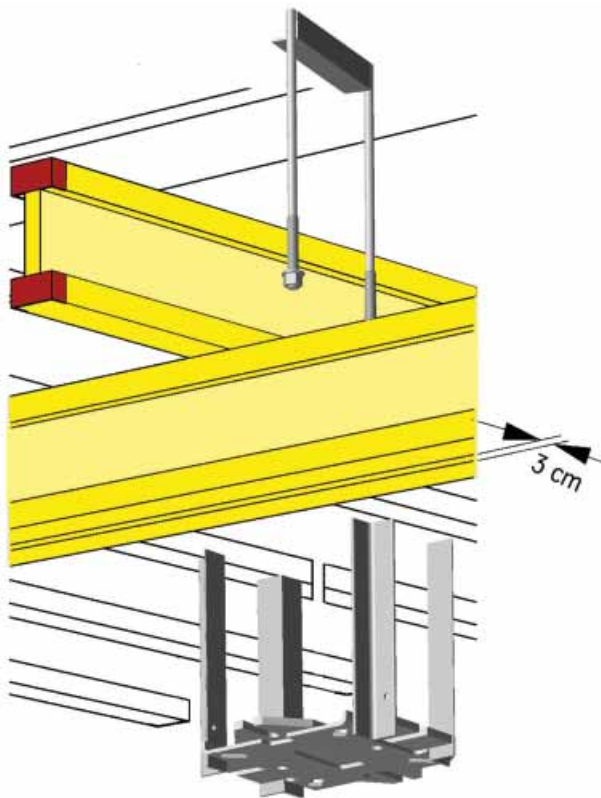
Mounting of the Table Head

Assembly and Dismantling of the Table Head

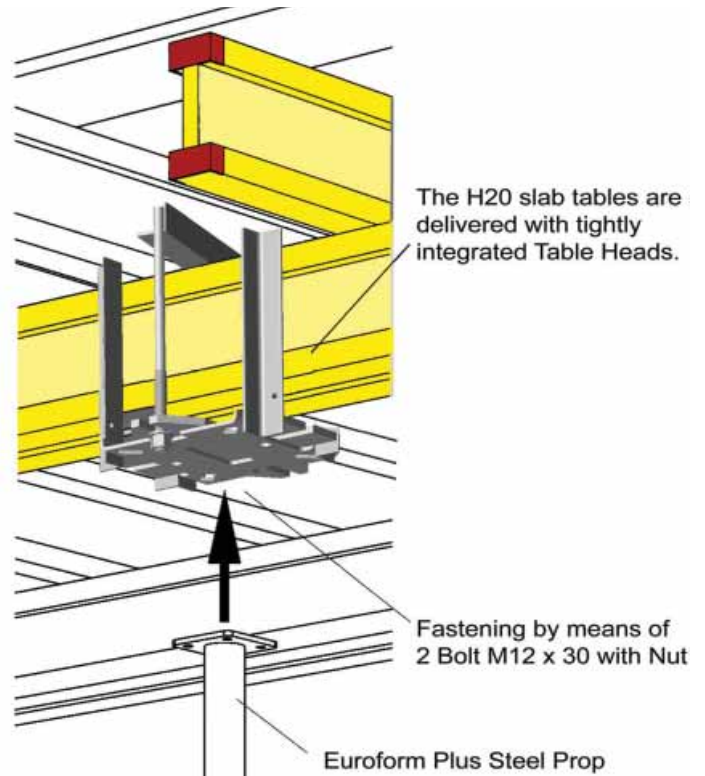
The Table Head can be quickly and simply assembled & dismantled by loosening the 2 Bolts M12 x 30. The threaded rods of the Table Clamp are positioned between the double H20 primary beams and properly tightened to the Table Head by means of the nuts.

No holes have to be drilled and no special tools for erection and dismantling are needed.

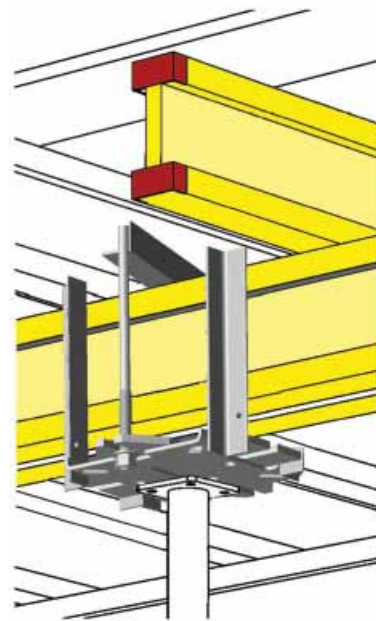
The Table Head allows connection to all H20 Timber Beams with widths of 8 cm and height of up to 24 cm (when using Lattice Girders as primary beams). The required distance between the double beams must be at least 3 cm.



The Table Head is directly fastened to the base or head plate of the Euro steel prop by means of 2 Bolt M12 x 30 with Nut.



After placing the primary beams into the Table Head, a tension resistant connection to the Euro steel props is made using the Table Clamp. The Table Clamp is tightly fixed to the Table Head.



By mounting the Table Head to the Euro steel prop as illustrated above, a safe and rigid connection between the H20 slab table structure and the Euro steel prop is achieved.

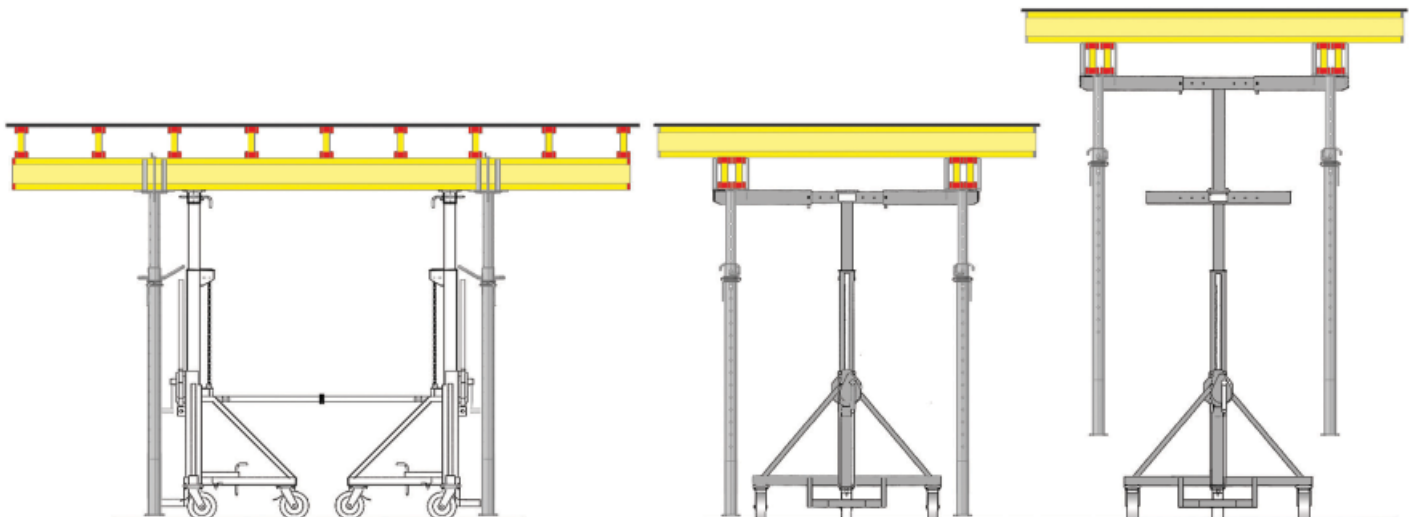
Moving the H20 Slab Table by Table Shifting Carriage

The H20 Slab Table can be moved horizontally by means of the Table Shifting Carriage. For safe moving and lifting of the H20 slab table, the Table Shifting Carriage should be positioned at the center, underneath the H20 slab table.

The two supporting arms are moved by the winch from below the double H20 Timber Beam which serves as main guide.

Once the H20 Slab Table rests on the Table Shifting Carriage, the Euroform plus steel prop can be released and shortened for moving the H20 slab table easily.

The standard Table Shifting Carriage is used for heights of 1.90 m up to 3.20 m.

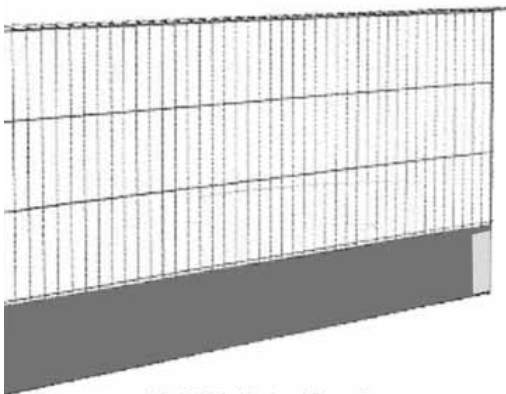
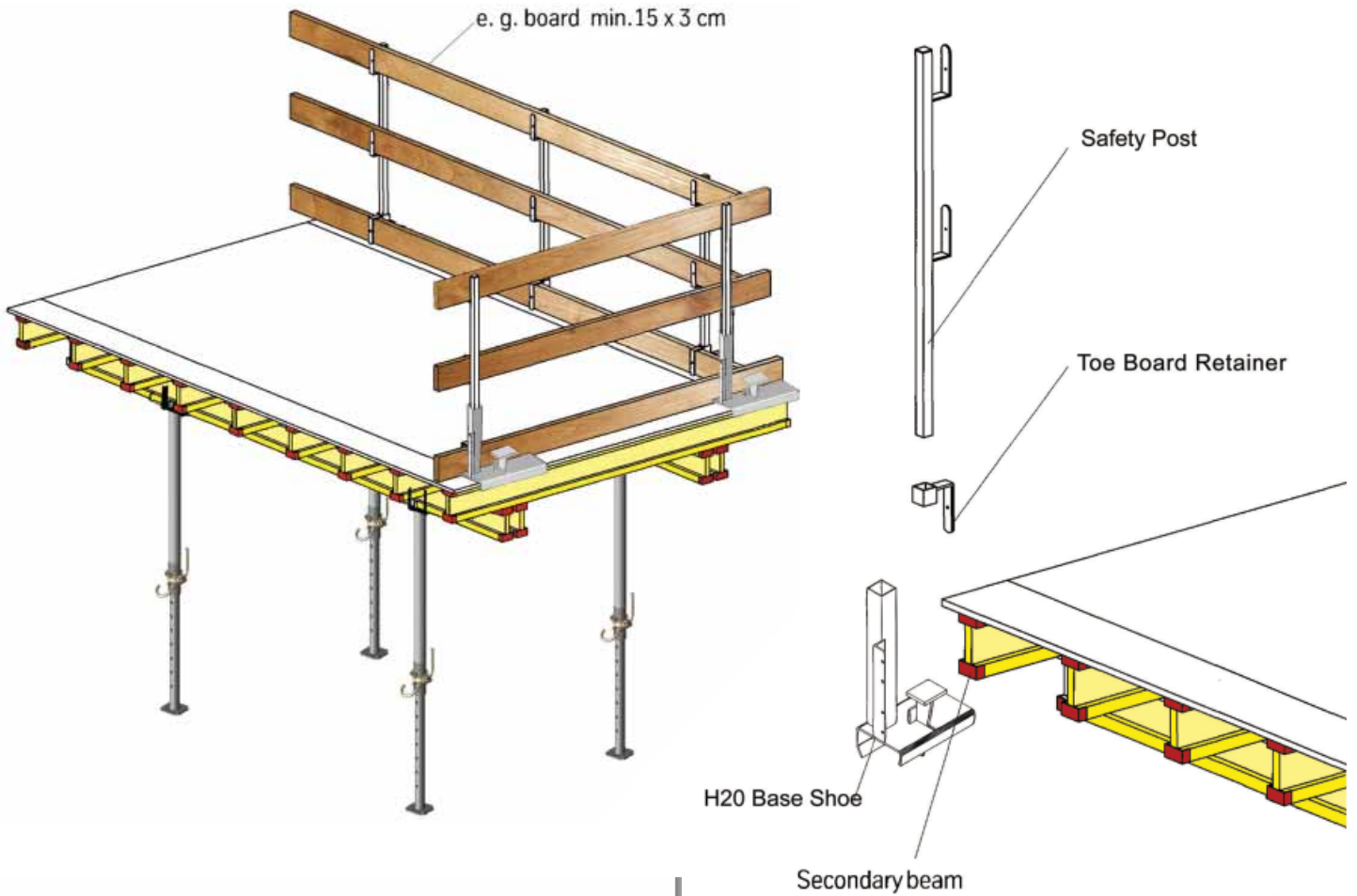


Guard Railing H20 Beam Shoe and Safety Post

The exterior slab edges are secured by means of H20 Base Shoe and Safety Post to provide protection from objects falling from the H20 slab table.

The H20 Base Shoe can be fixed to the edges of the H20 slab table as illustrated.

The H20 Base Shoe is fixed to the secondary beams with a maximum distance of 2.00 m. The Safety Post with the Toe Board Retainer are fixed to the H20 Base Shoe while the wooden boards or GFT Safety Mesh serves as railing.



GFT Safety Mesh



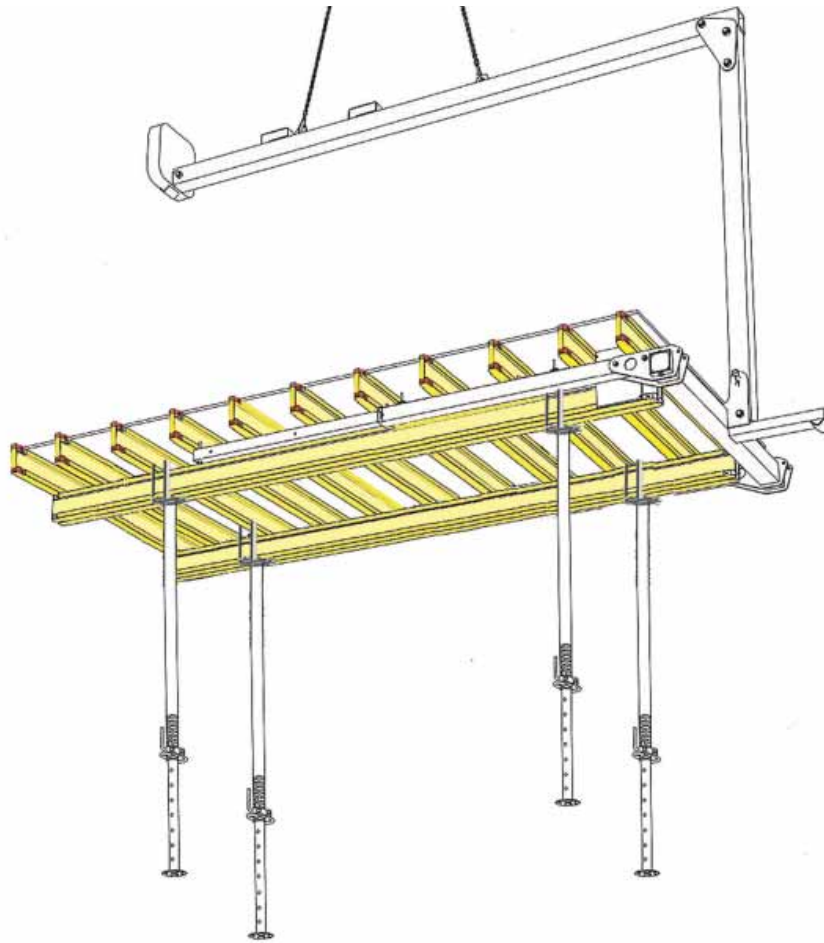
GFT Safety Railing Post - C



Timber Beam Attachment - C

Shifting the H20 Slab Tables by H20 C-Hook

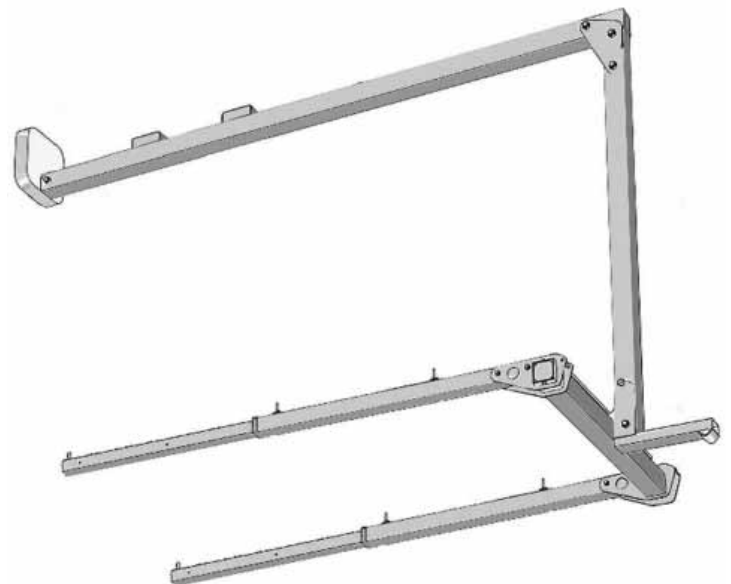
Moving and carrying of the H20 slab table is considerably simplified on site by using the H20 C-Hook. The H20 slab tables are shifted in horizontal or vertical position into the next position of application.



The dimensions of the H20 C-Hook have been designed based on the H20 slab table size. The H20 slab table can be lifted from either the short or long side. By conducting trial lifts on site, an ideal position of the H20 slab table can be achieved by selecting the correct suspension points for the crane ropes.

The H20 C-Hook enlarges the clear height in order to strike H20 slab tables in lower stories which has to remain in concrete position for a longer curing time.

The total load capacity for the crane is 2 Tons = 20 kN. This is because the H20 Crane Hook weighs .8 Tons = 8 kN and its load capacity is 1.2 Tons = 12 kN.

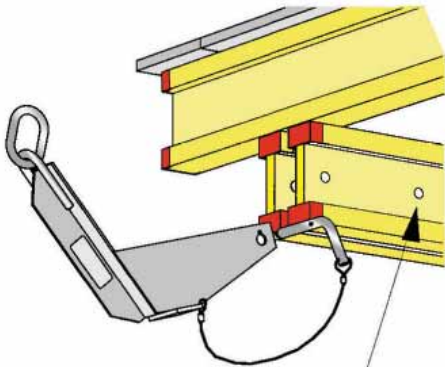


Crane Handling and stacking Using Crane Hooks

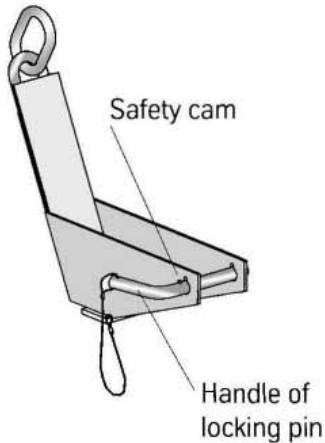
The Crane Hook has to be fixed to the primary beam ends and secured by means of an integrated locking pin. Four Crane Hooks are always required whereby the crane rope can be fastened for moving the H20 slab table. The Crane Hook is used for the following situations:

- A. Loading and unloading the truck.
- B. Assembly and dismantling of steel props.
- C. Moving H20 slab tables on the job site.

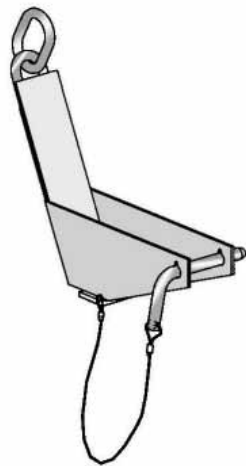
Allowable loading capacity:
3.0 kN per Crane Hook



Connection is made by pinning the Crane Hook to the drilled hole in the web of the primary beam.



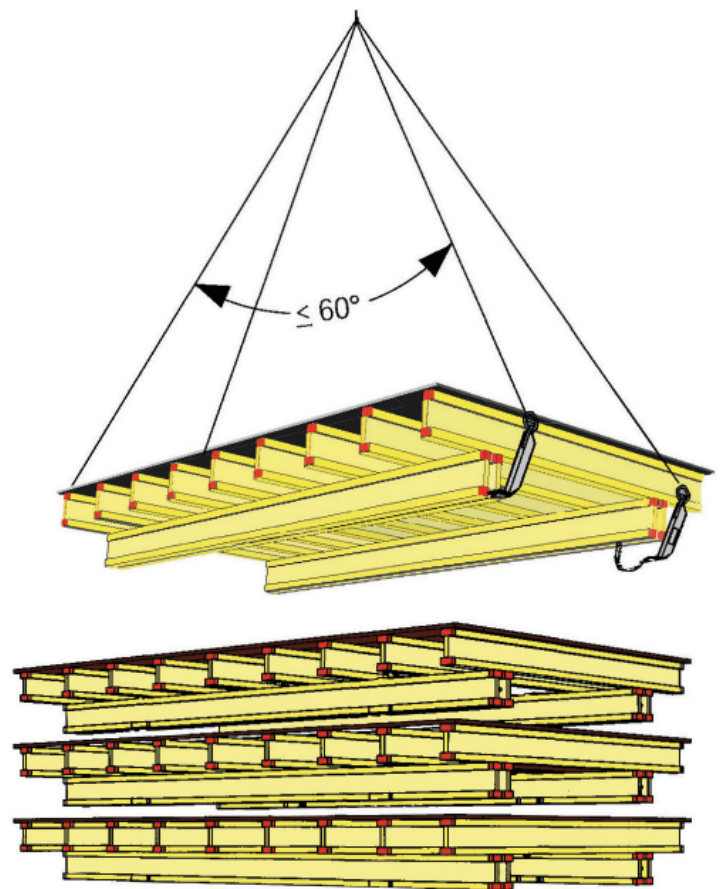
Locking pin while being inserted



Locking pin in final position.

The locking pin has to be operated so that the safety cam disappears in the hole provided. After inserting, the locking pin handle must be in a vertical position.

- A. The maximum spreading angle of the crane rope is 60°.
- B. The Euroform Plus steel props must be removed before stacking the H20 slab tables.
- C. Stack H20 slab tables only on even, solid and loadable ground.
- D. Stack a maximum of 6 H20 slab tables one on the top of the other.
- E. To avoid damaging the plywood sheets when stacking, the Table Heads have to be covered with small plywood strips as pads for protection.
- F. The Crane Hook used for lifting and transporting should always be connected to the H20 slab table top. The H20 slab tables must be moved one by one.

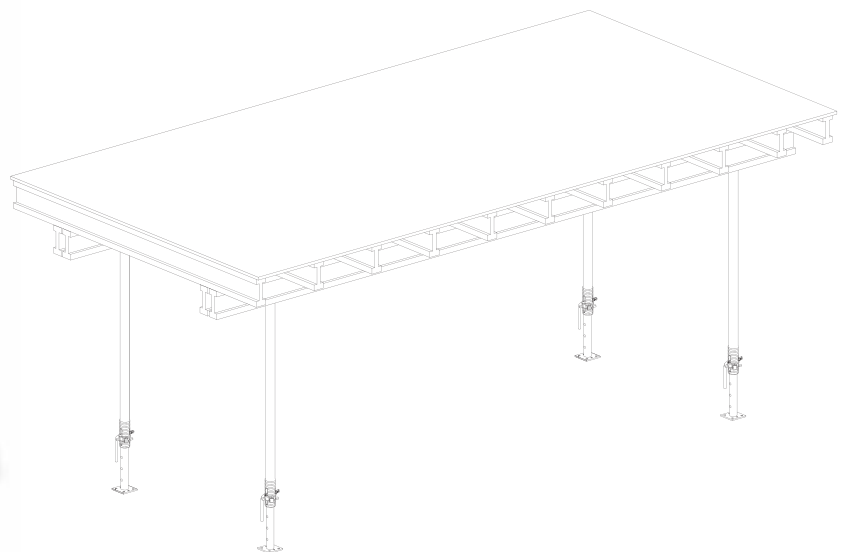
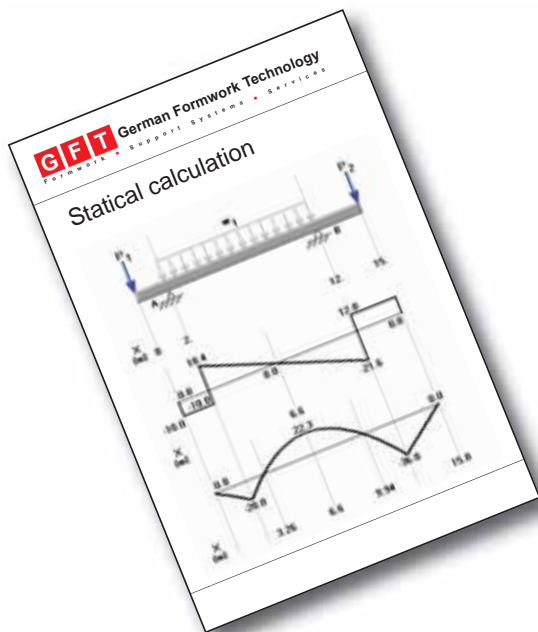


Engineering, Design & Drawings

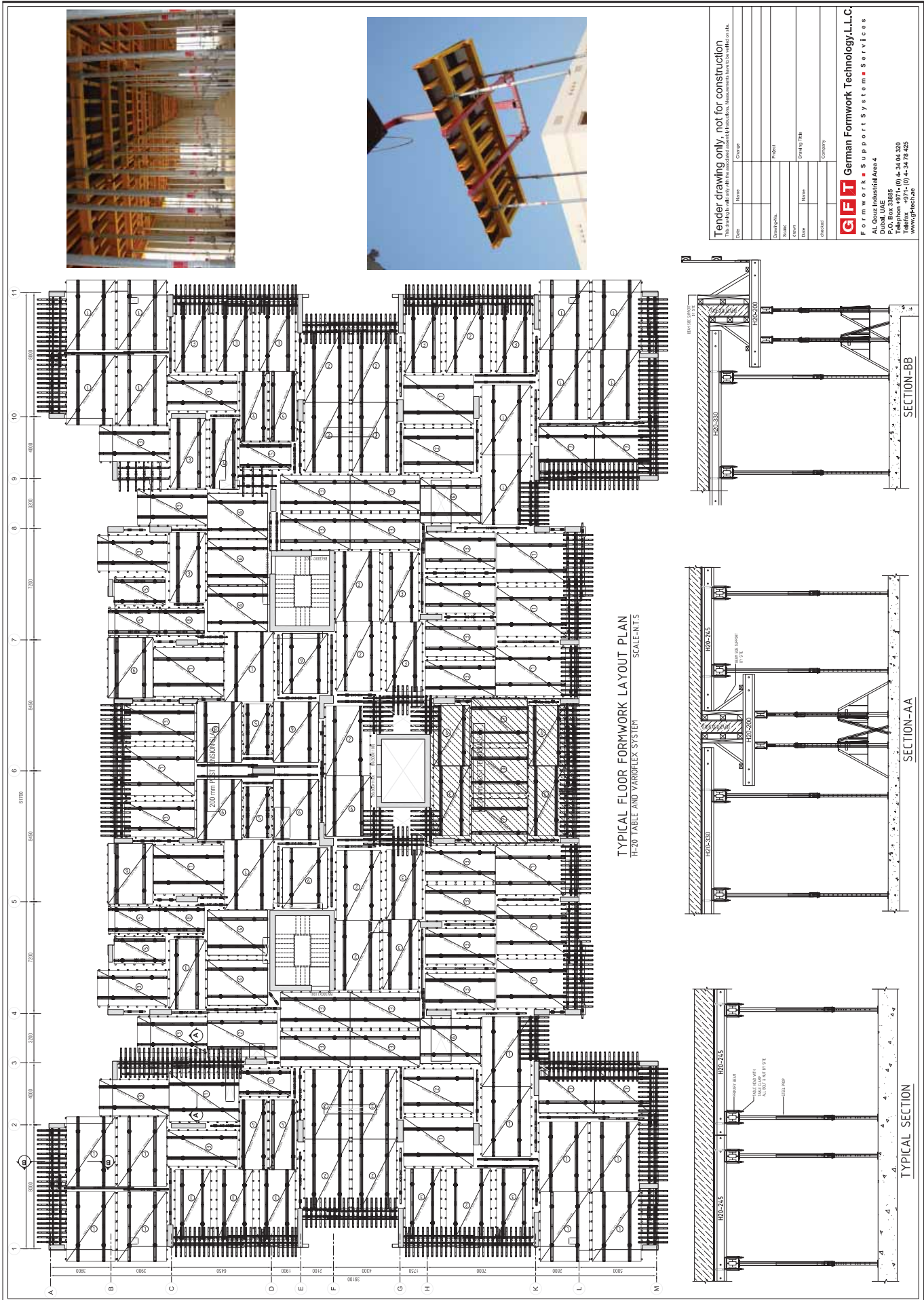
- A. All the Shop drawing, Technical data & the Statical calculation will be Submitted by GFT in accordance with the structural drawing project requirement
- B. The site erection should be done as per GFT's shop drawing and shall be supervised and inspected by GFT's formwork specialist
- C. The spacing and positioning of the Formwork material are arranged based on the statical requirements and as shown in the GFT's execution drawing & Calculation

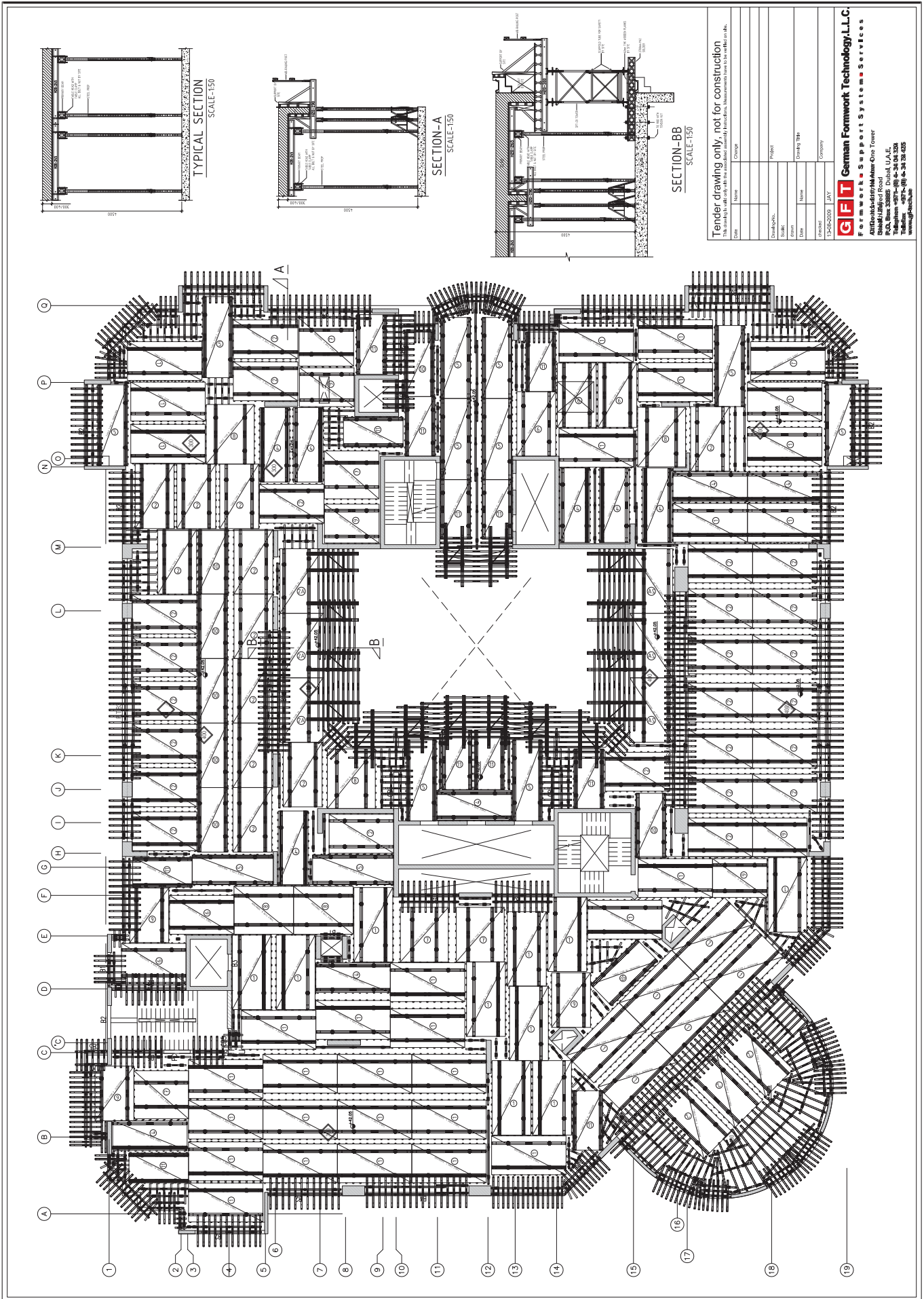


Formwork Layout using H20 Slab Table System



3D model of Table formwork





Tender drawing only, not for construction
 This drawing is valid only with the associated contract documents. Measurements shown to be within tolerance.

Date:	Change:
Name:	Project:
Drawn by:	Checked by:
Date:	Drawing Title:
Project No.:	Company:
1705-0000	GFT

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