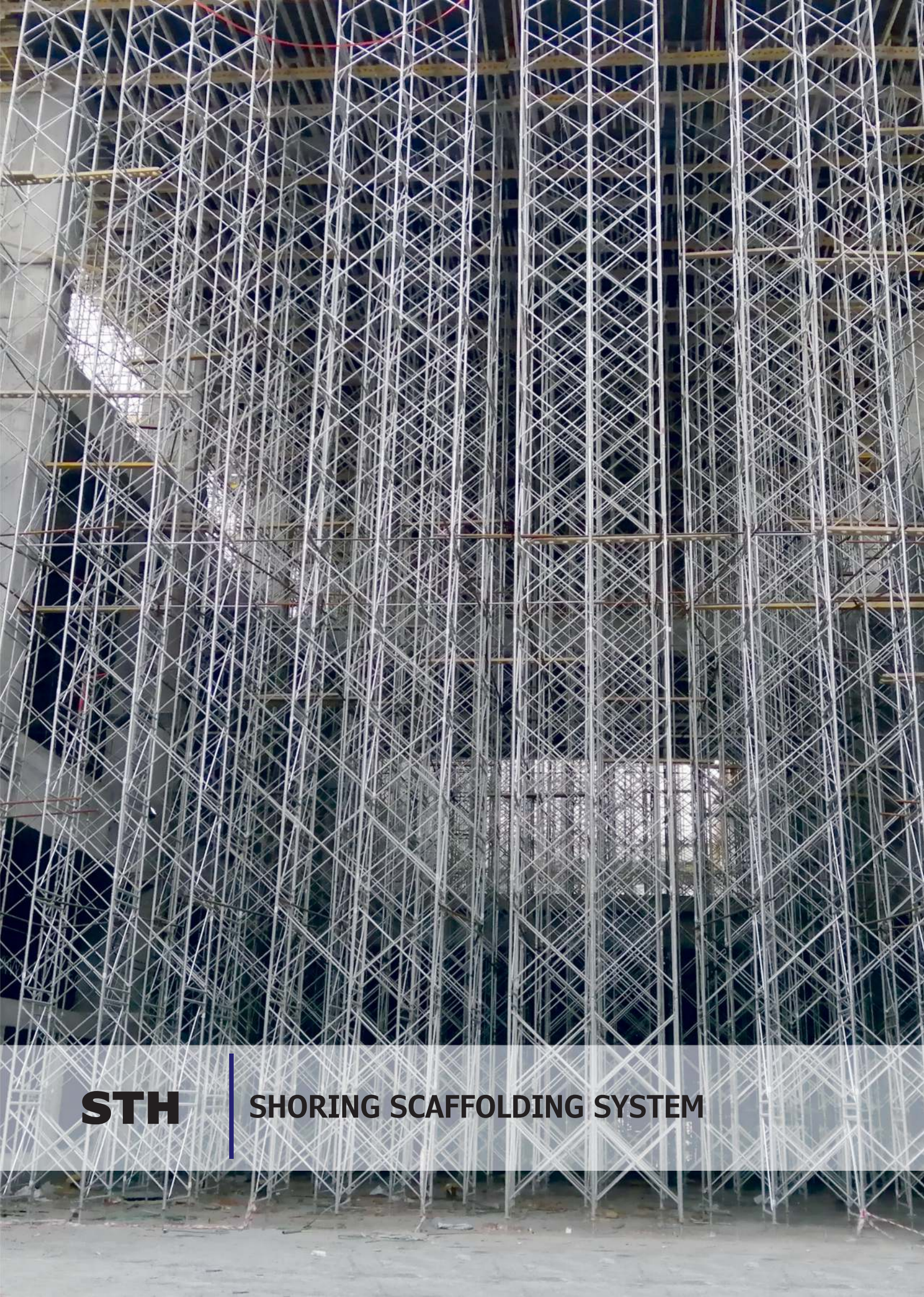
GBM

SHORING AND SCAFFOLDING

SHORING TOWER SYSTEMS

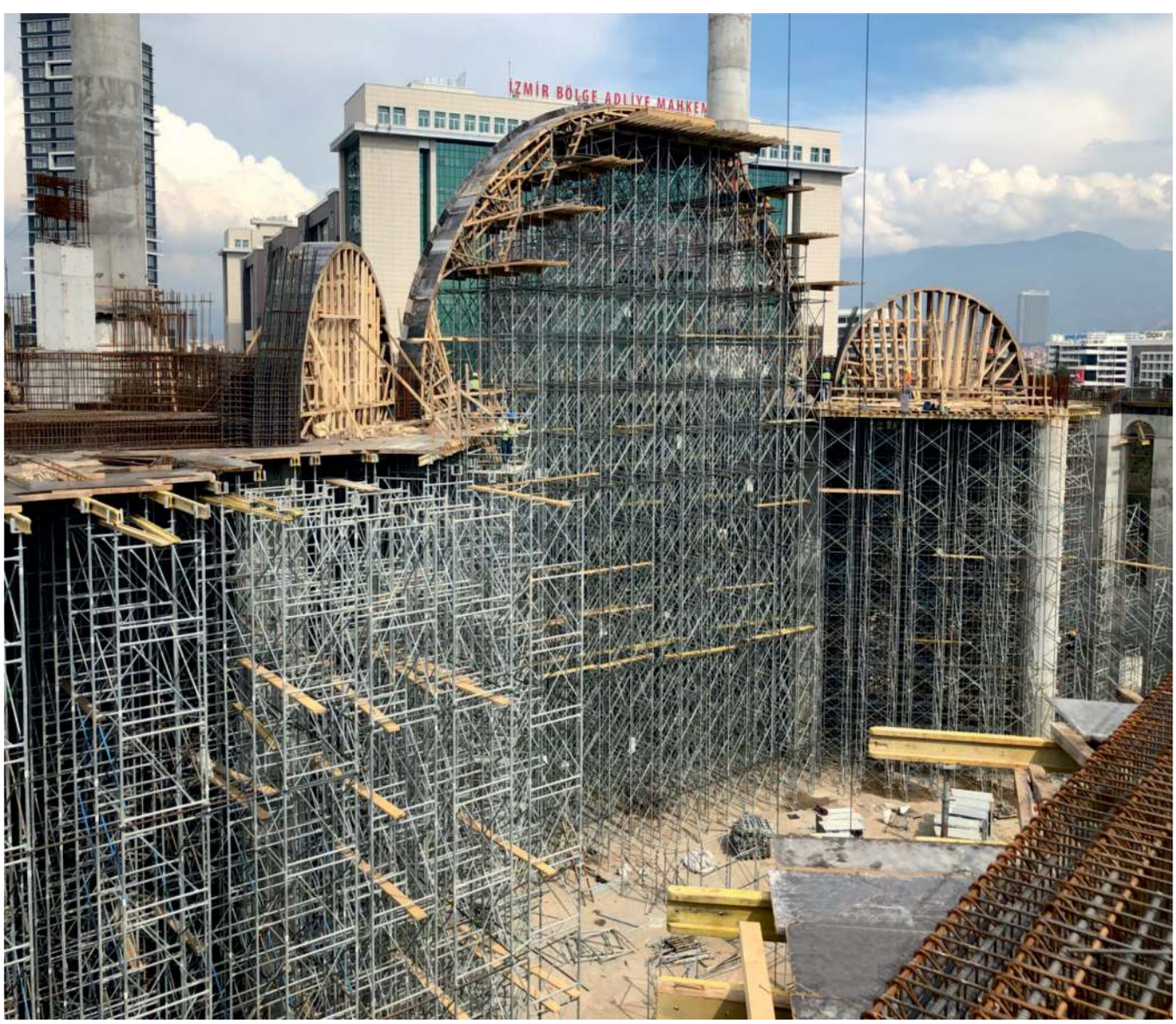


STH

SHORING SCAFFOLDING SYSTEM

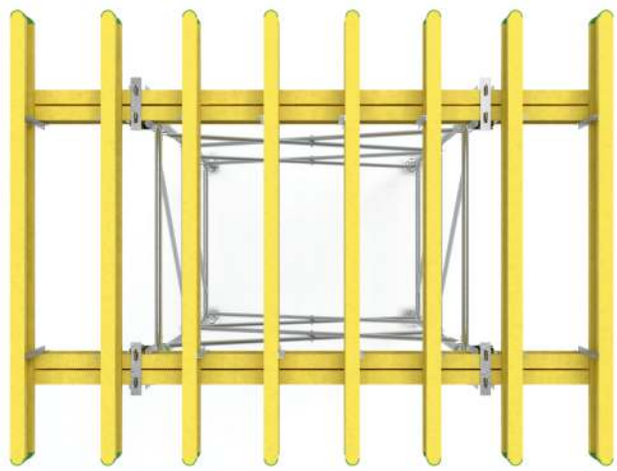
STH / SHORING SCAFFOLDING SYSTEM

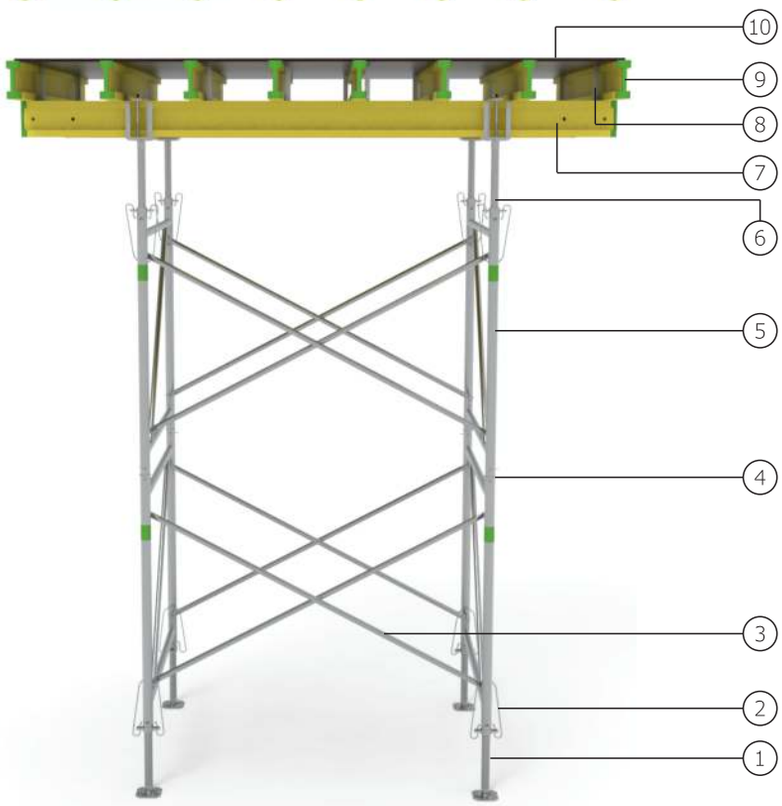
STH is used as load carrier scaffolding under slab and beam. It can be used in 3 different ways such as table form, heavy load scaffold and stair tower. EN 74-3 certified base and head jacks are used to balance the floor and the bottom of the formwork. The STH can be displaced by transport trolleys and crane without disassembling, thus saving labor costs and time. The frames are manufactured as 150 cm width and 120 - 150 - 180 - 200 cm high as standard. EN 12813 certified STH frames are produced from 60 * 3.0 or 60 * 4.0 mm, horizontal and diagonal braces are produced from 34 * 2.5 mm EN certified mechanical tubes. Robotic cutting, drilling and welding processes are applied in our production. The steel products are cleaned with sandblasting before oven painting because of the industrial chemical oil. Upon request, our products can be hot dip galvanized according to EN ISO 1461 standards.



STH
Floor Tables Assembly Details

1 - Base Jack Ø48
2 - Spindle Hook
3 - Sth Diagonal
4 - Scaffold Connection Ø60
5 - Sth Frame
6 - H20 Head Jack Ø48
7 - Main Beam - H20 Wooden Beam
8 - Girder Connector
9 - Secondary Beam - H20 Wooden Beam
10 - 3Ply Wooden Panel



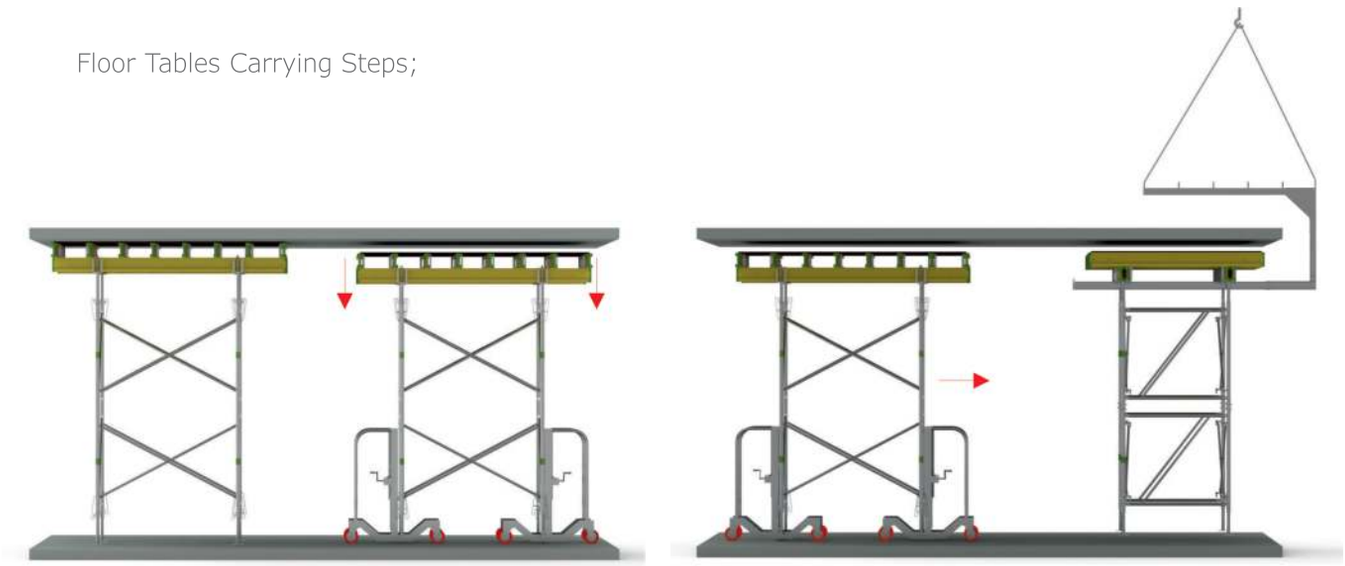


SYSTEM HEIGHT mt	FORMWORK HEIGHT mt	FRAME 120 cm ROW	FRAME 150 cm ROW	FRAME 180 cm ROW	DIAGONAL 120×150	DIAGONAL 150×150	DIAGONAL 180×150	BASE JACK EXTENSION mt	HEAD JACK EXTENSION mt	JACK HEIGHT mt	TOTAL FRAME HEIGHT mt	SYSTEM WEIGHT kg	MAXIMUM LOAD kN
2,50	0,42	-	-	1	0	0	2	0,14	0,14	1,00	1,80	140,00	50,67
3,00	0,42	-	-	1	0	0	2	0,39	0,39	1,00	1,80	140,00	50,56
3,50	0,42	-	-	1	0	0	2	0,64	0,64	1,00	1,80	140,00	50,44
4,00	0,42	1	-	1	2	0	2	0,29	0,29	1,00	3,00	196,40	50,33
4,50	0,42	1	-	1	2	0	2	0,54	0,54	1,00	3,00	196,40	50,22
5,00	0,42	-	-	2	0	0	4	0,49	0,49	1,00	3,60	212,40	50,11
5,50	0,42	-	-	2	0	0	4	0,74	0,74	1,00	3,60	212,40	50,00
6,00	0,42	1	-	2	2	0	4	0,39	0,39	1,00	4,80	268,80	49,88
6,50	0,42	-	-	3	0	0	6	0,34	0,34	1,00	5,40	284,80	49,77
7,00	0,42	-	-	3	0	0	6	0,59	0,59	1,00	5,40	284,80	49,66
7,50	0,42	1	-	3	2	0	6	0,24	0,24	1,00	6,60	341,20	49,55
8,00	0,42	1	-	3	2	0	6	0,49	0,49	1,00	6,60	341,20	49,44
8,50	0,42	-	-	4	0	0	8	0,44	0,44	1,00	7,20	357,20	49,32
9,00	0,42	-	-	4	0	0	8	0,69	0,69	1,00	7,20	357,20	49,21
9,50	0,42	1	-	4	2	0	8	0,34	0,34	1,00	8,40	413,60	49,10
10,00	0,42	1	-	4	2	0	8	0,59	0,59	1,00	8,40	413,60	48,99
10,50	0,42	-	-	5	0	0	10	0,54	0,54	1,00	9,00	429,60	48,88
11,00	0,42	2	-	4	4	0	8	0,49	0,49	1,00	9,60	470,00	48,76
11,50	0,42	1	-	5	2	0	10	0,44	0,44	1,00	10,20	486,00	48,65
12,00	0,42	-	-	6	0	0	12	0,39	0,39	1,00	10,80	520,00	48,54

Maximum Carrying Capacity 750 kg

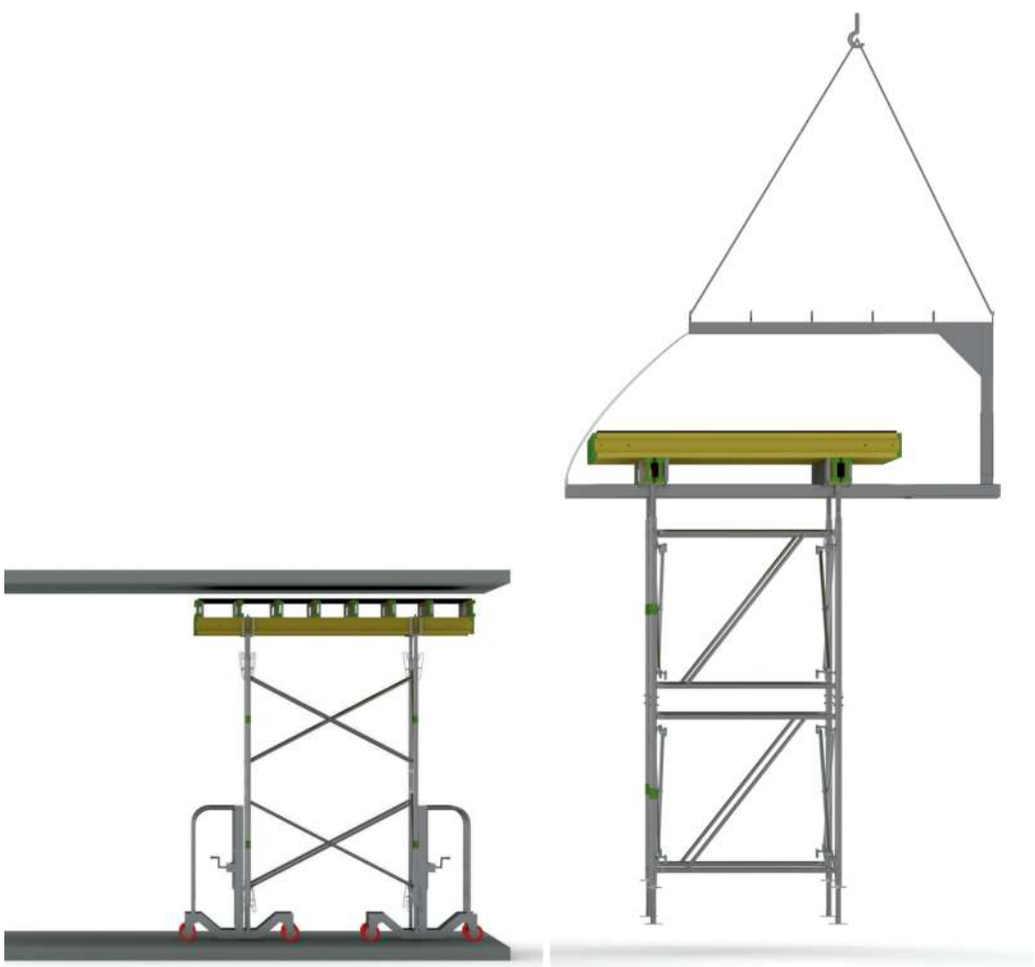
Maximum Carrying Capacity 500 kg

Floor Tables Carrying Steps;



Step1

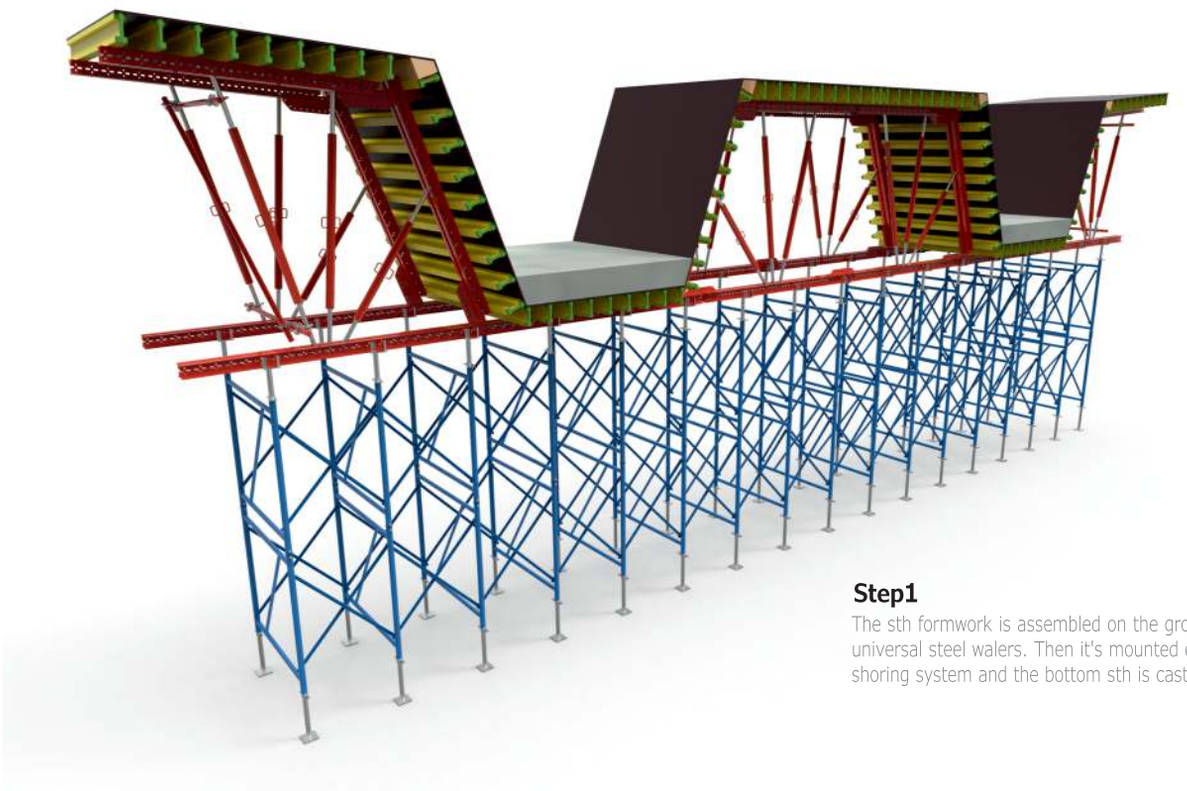
Floor tables that are going to be moved to the upper levels are separated and brought near to the slab's edge using the table carriers.



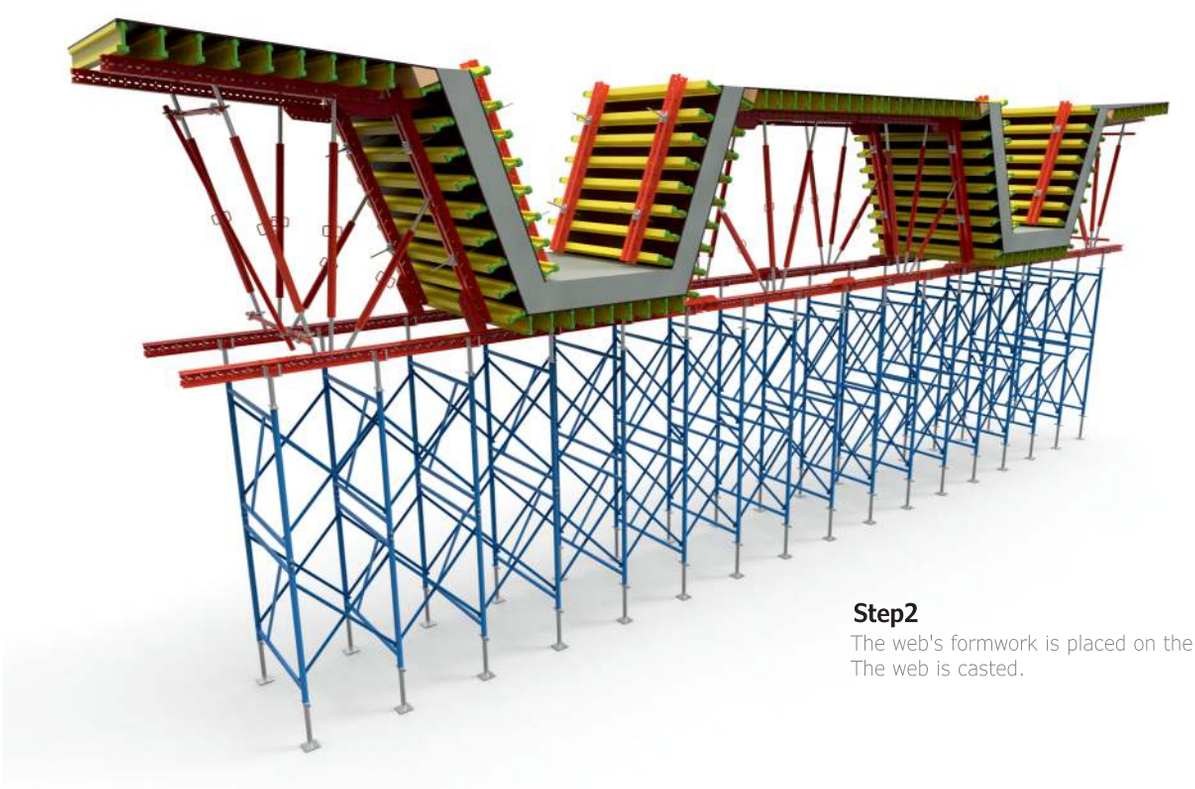
Step2

Floor tables that are near the edge are moved to the desired floor using table lifting component.

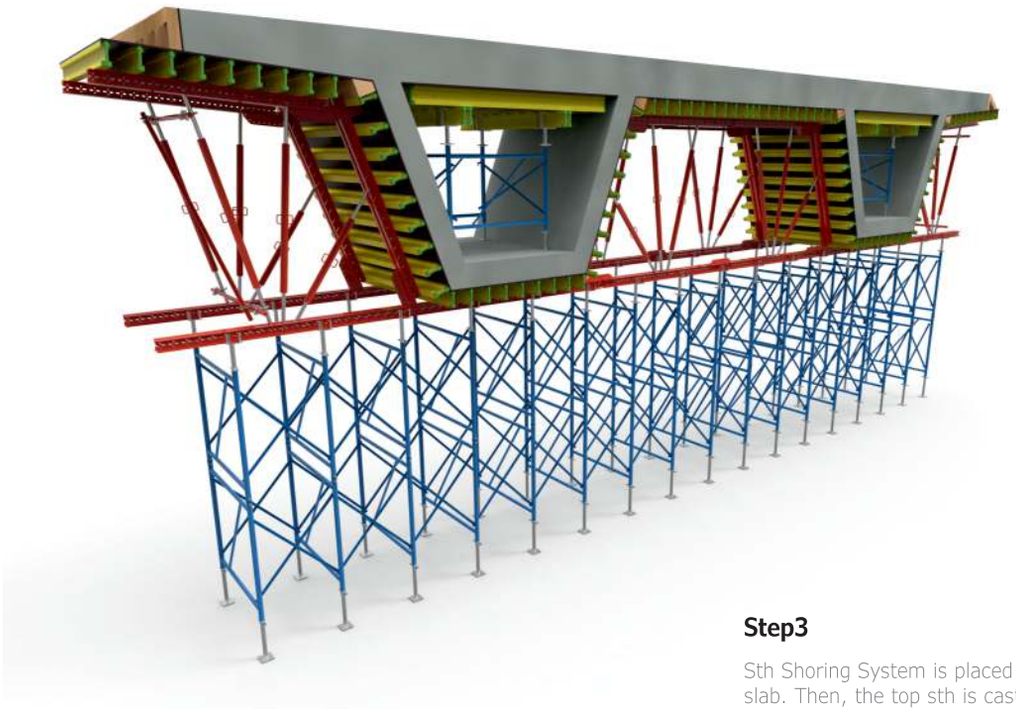
Bridge formwork assembly steps



Step1
The sth formwork is assembled on the ground using universal steel walers. Then it's mounted on the Sth shoring system and the bottom sth is casted



Step2
The web's formwork is placed on the bottom sth. The web is casted.



Step3

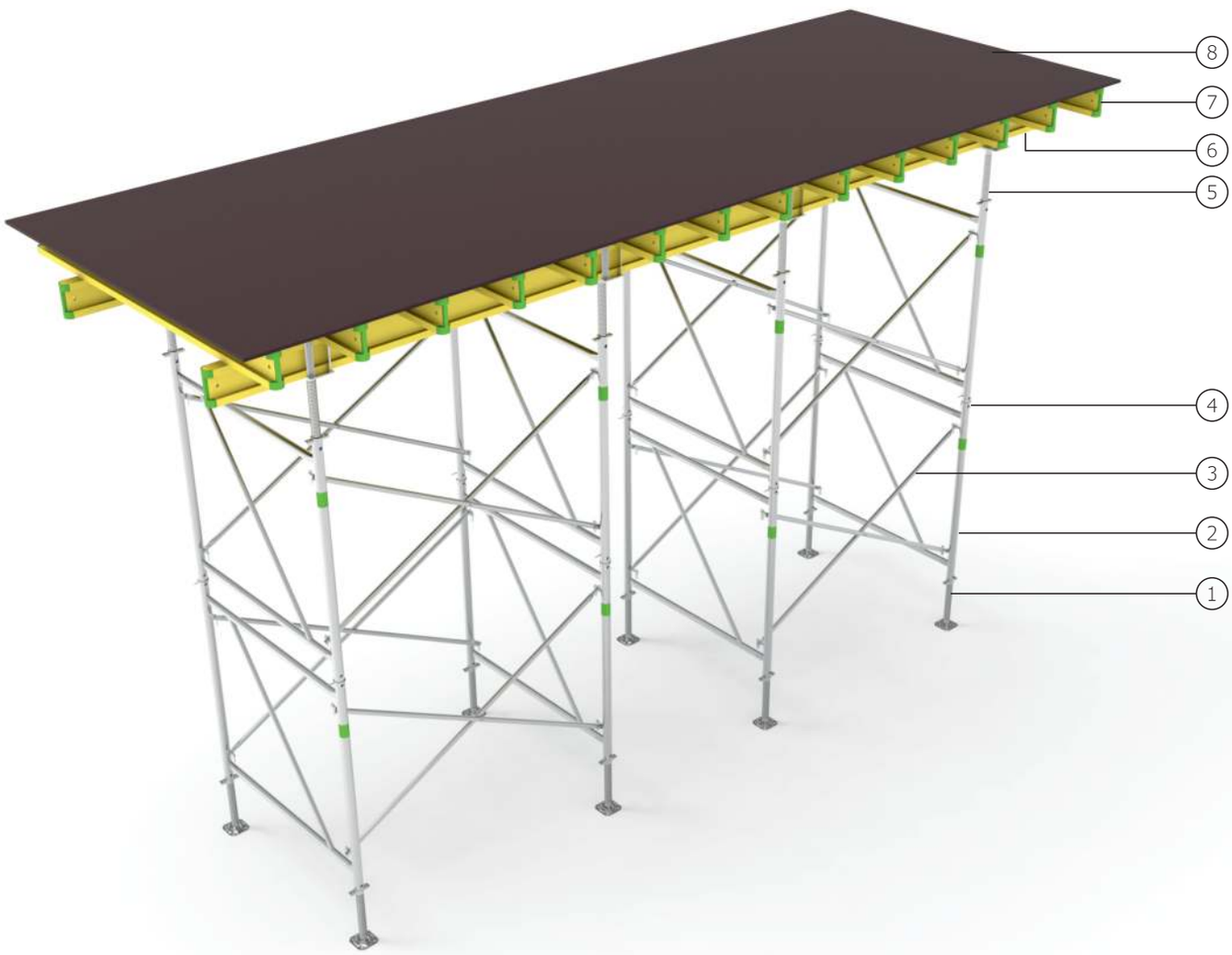
Sth Shoring System is placed on the bottom slab. Then, the top sth is casted.

Step4

Formwork and shoring system is removed. The shape of the casted bridge is as shown above.

STH

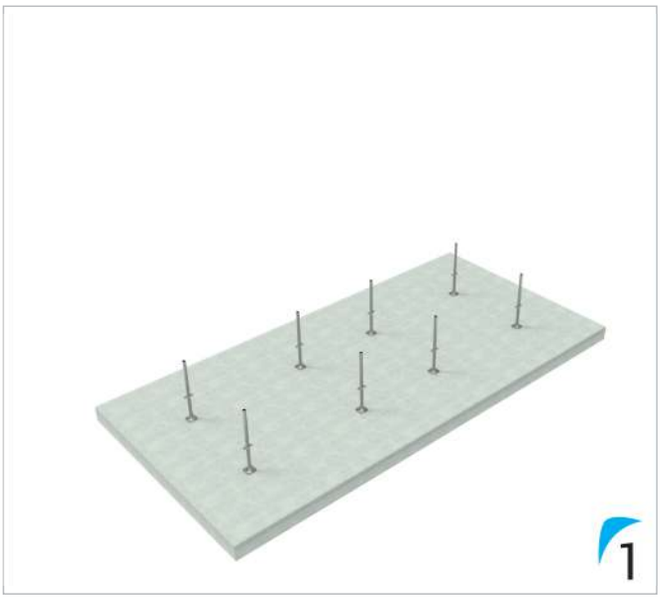
Shoring Scaffolding System



1 - Base Jack Ø48
2 - Sth Frame
3 - Sth Diagonal
4 - Scaffold Connection Ø60
5 - H20 Head Jack
6 - Main Beam - H20 Wooden Beam
7 - Secondary Beam - H20 Wooden Beam
8 - 3Ply Wooden Panel

STH SHORING SYSTEM ASSEMBLY STEPS

1. The location and height of the base jacks are adjusted according to the shoring system plan.
2. The first level's frames are mounted on the base jacks.
3. The first level's diagonal braces are connected to the frames. The first level's assembly is completed.
4. Scaffolding connection components are mounted on the frame.
5. The second level's frames are mounted.
6. Frame are combined by attaching the pin and pin split to the scaffolding connection component.
7. The second level's diagonal braces are connected to the frames. The second level's assembly is completed.
8. The steps are repeated until reaching the desired height.
9. The height of the H-20 head jacks are adjusted according to the shoring system plan.
10. Load carrying main beams are placed according to their lengths and their lap lengths as shown in the shoring system plan.
11. Secondary beams are placed according to the shoring system plan.
12. The system is ready after placing the plywood.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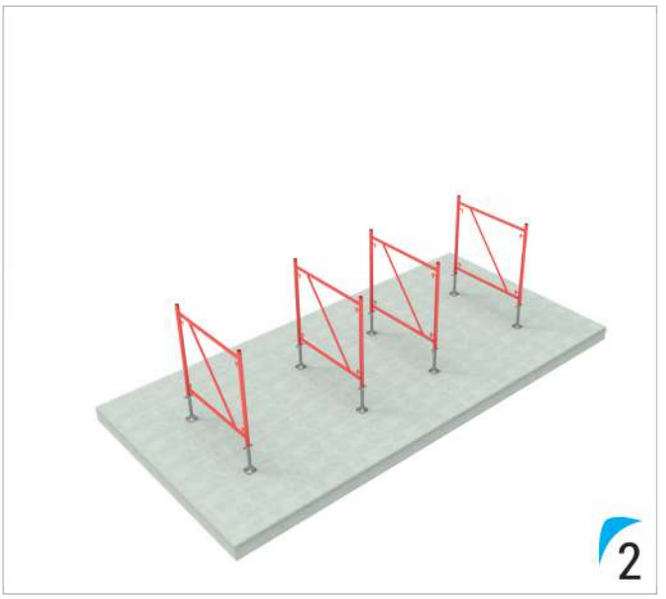
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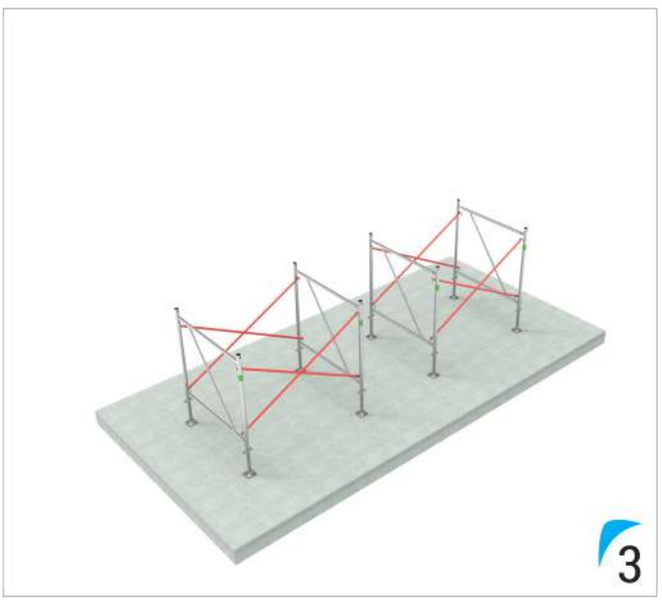
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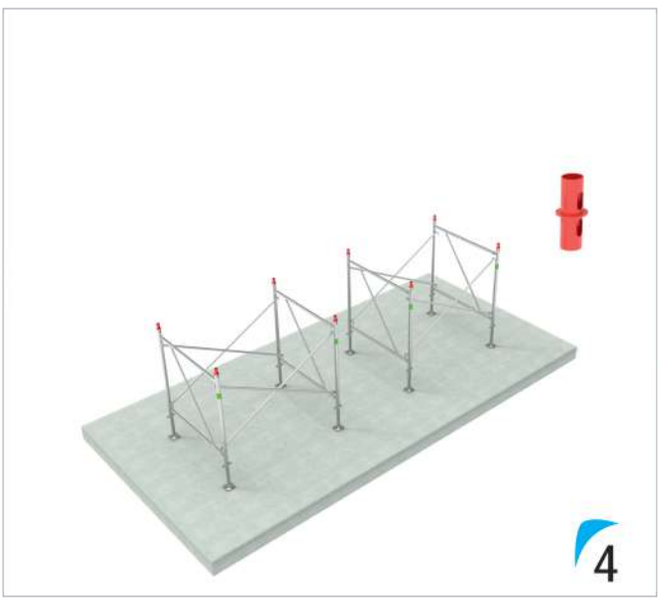
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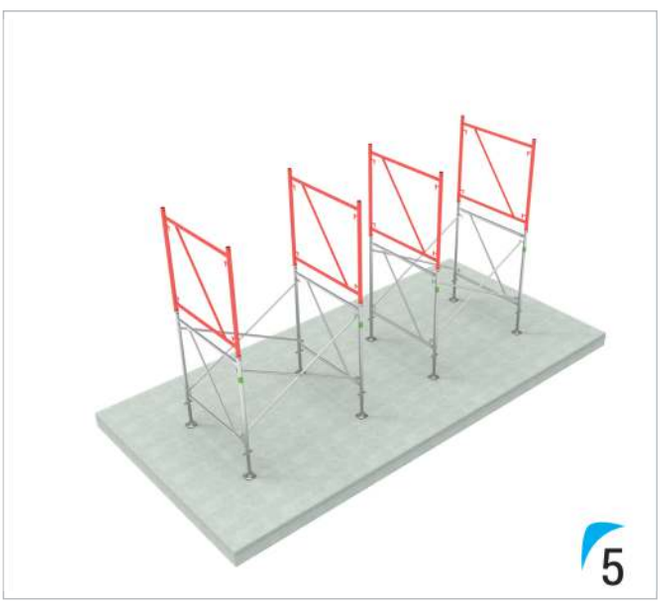
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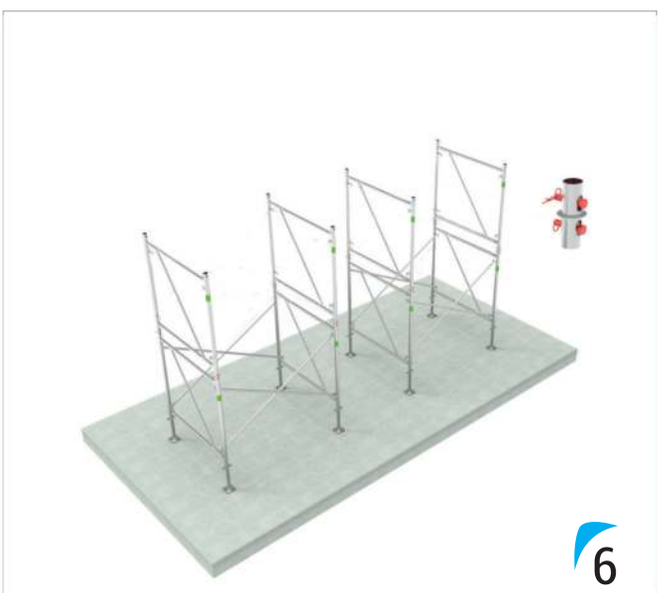
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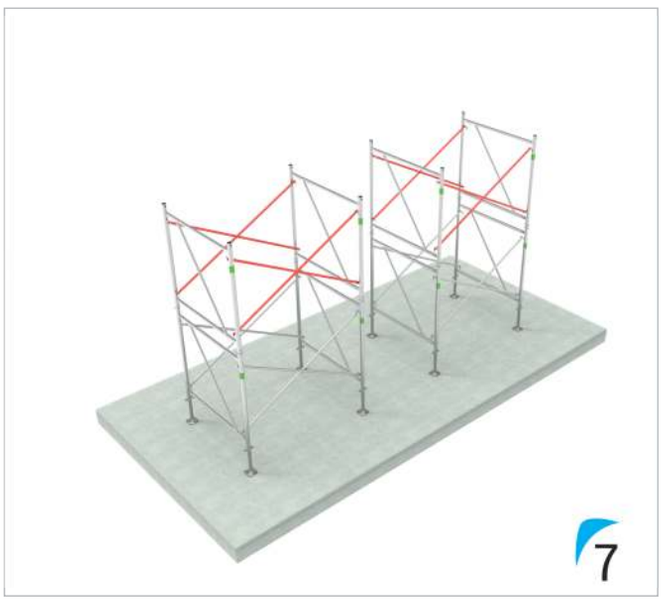
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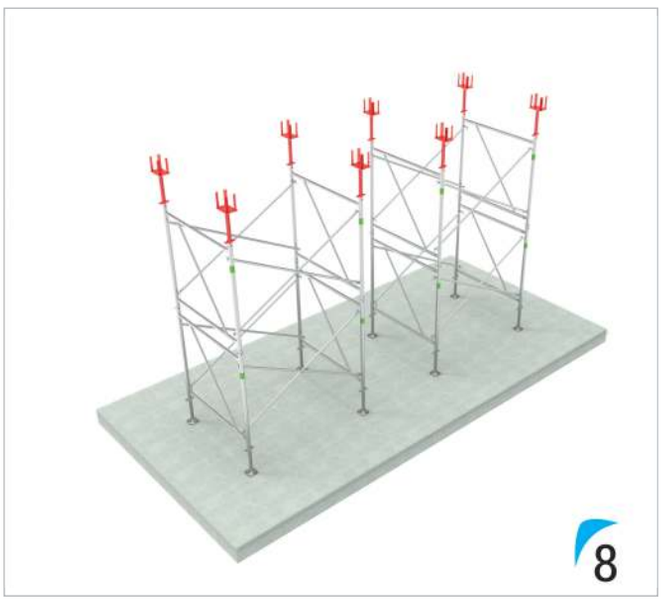
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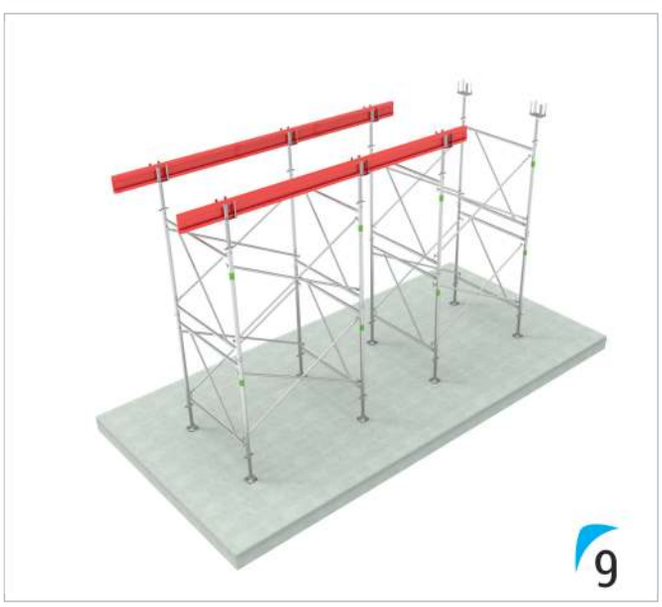
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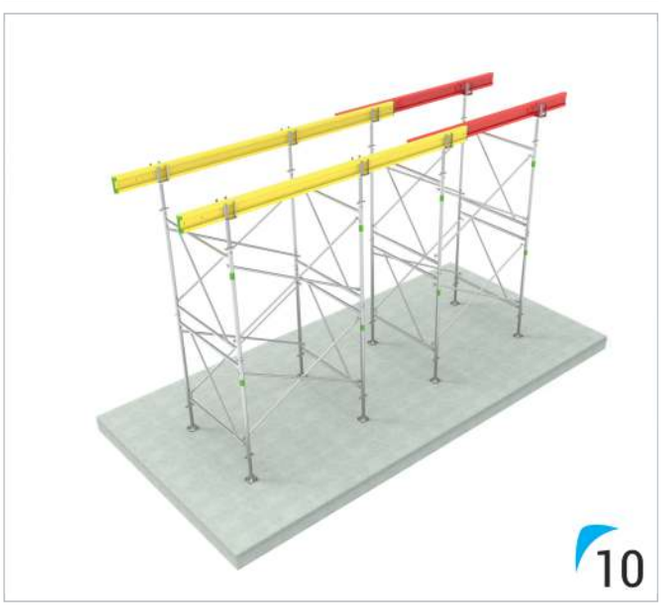
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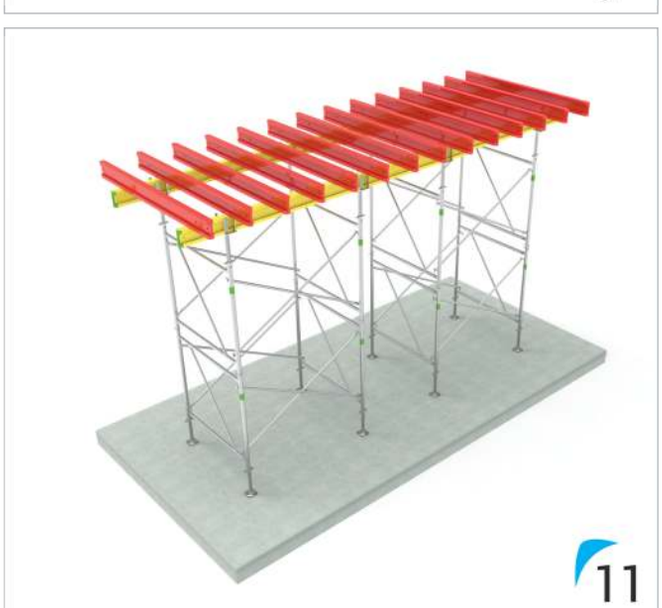

11


12

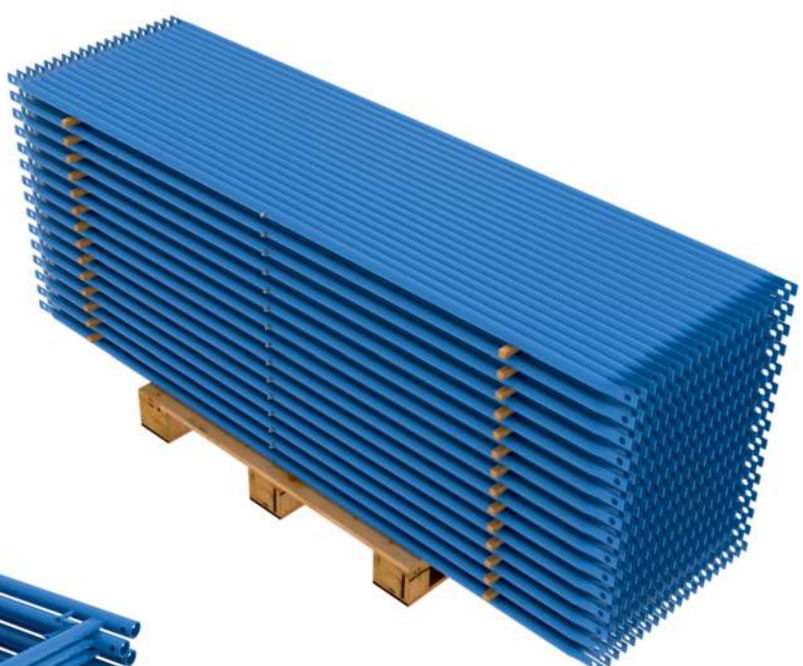
Checking Instructions

1 - After installation
2 - At regular time periods
3 - When a modification happens on it
4 - After negative weather conditions such as seismic tremor, strong winds
5 - Controls should be made when exposed to other conditions that could affect stability.

Packing

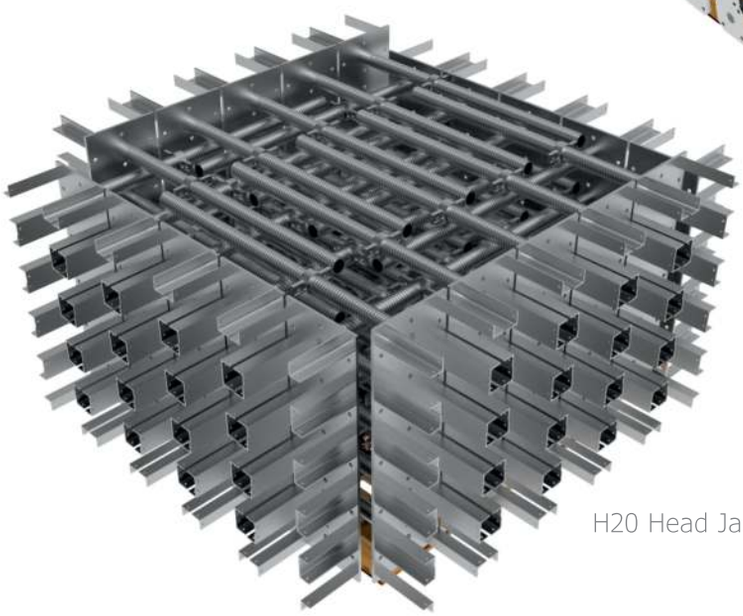
Recommended packing methods of products for transportation and storage.

Sth Diagonal Packing Method



Sth Frame Packing Method

Base Jack Ø48 Packing Method



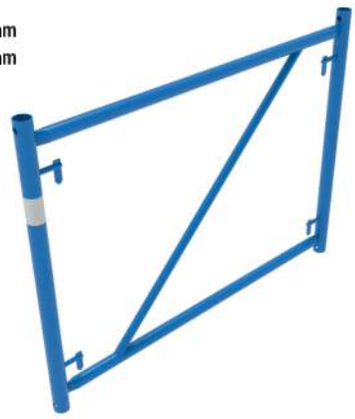
H20 Head Jack Ø48 Packing Method

Maintenance - Repair and Storage Instructions

1 - Since almost all of the materials are made of steel, they should not be kept in water and in extremely humid environments.
2 - It is possible to repair the damaged coating or paint of materials with suitable coating material. For this kind of procedures, consultancy support is provided by the manufacturer.
3 - Repair and reuse of the deformed products must be done under the supervision of authorized personel.If the products are in shape not suitable for using, they must not be used.
4 - The storage of the product must be done so that they are not directly affected by outdoor weather conditions.
5 - Products stored outside must be covered over (canvas, nylon cover).
6 - Products must be transported by being held and carried from under the pack when they are moved to the storage area.

Sth Frame 150/110

CODE	SIZE cm	WEIGHT kg	
120101002	150/110	19,50	Ø60*3,0 mm
120103002	150/110	22,60	Ø60*4,0 mm

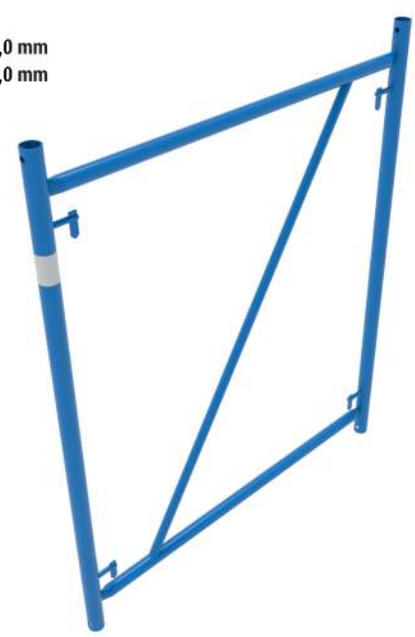


Sth Frame 150/150

CODE	SIZE cm	WEIGHT kg	
120201002	150/150	22,10	Ø60*3,0 mm
120203002	150/150	26,10	Ø60*4,0 mm

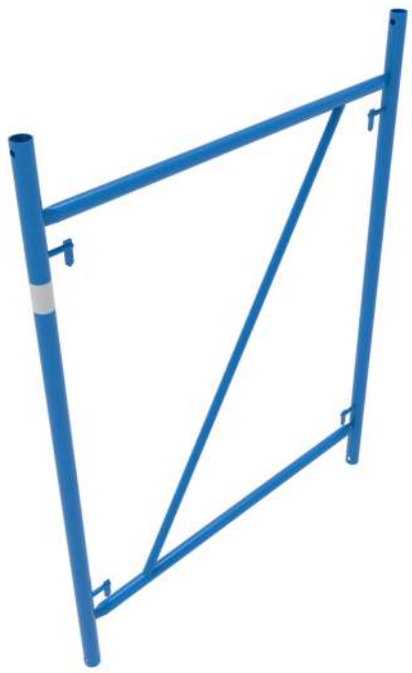
Sth Frame 150/180

CODE	SIZE cm	WEIGHT kg	
120301002	150/180	24,80	Ø60*3,0 mm
120303002	150/180	29,50	Ø60*4,0 mm



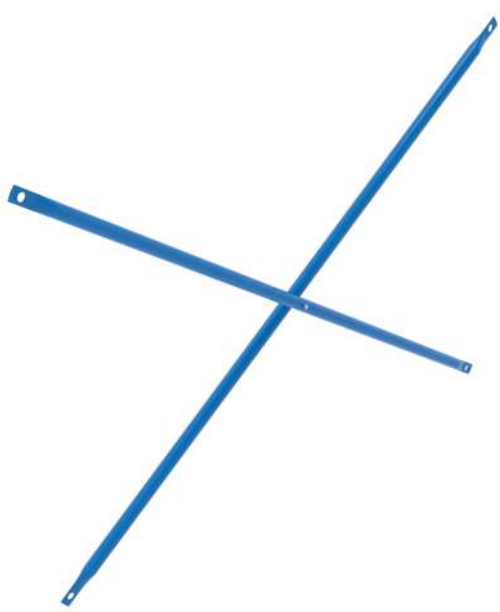
Sth Frame 150/200

	CODE	SIZE cm	WEIGHT kg
Ø60*3,0 mm	120401002	150/200	26,40
Ø60*4,0 mm	120403002	150/200	31,70



Sth Diagonal

	CODE	SIZE cm	WEIGHT kg
Ø34*2,0 mm	120601002	110/100	4,00
Ø34*2,0 mm	120603002	110/150	5,30
Ø34*2,0 mm	120605002	110/200	6,60
Ø34*2,0 mm	120607002	110/250	8,00
Ø34*2,0 mm	120701002	150/100	4,70
Ø34*2,0 mm	120703002	150/150	5,80
Ø34*2,0 mm	120705002	150/200	7,10
Ø34*2,0 mm	120707002	150/250	8,40
Ø34*2,0 mm	120801002	180-200/100	5,40
Ø34*2,0 mm	120803002	180-200/150	6,40
Ø34*2,0 mm	120805002	180-200/200	7,50
Ø34*2,0 mm	120807002	180-200/250	8,70



Jack Ø48

CODE	SIZE cm	WEIGHT kg
120900003	080	3,70
120901003	100	4,80
120902003	120	5,80

Base Jack Ø48

CODE	SIZE cm	WEIGHT kg
121000003	080	4,75
121001003	100	6,70
121002003	120	7,70

H20 Head Jack Ø48

CODE	SIZE cm	WEIGHT kg
121100003	080	9,10
121101003	100	10,20
121102003	120	11,30

Sth Head-H20

CODE	SIZE cm	WEIGHT kg
121201003		4,30

Head-H20 Coupler

CODE	SIZE cm	WEIGHT kg
121203003		1,20

Girder Connector

CODE	SIZE cm	WEIGHT kg
121302003	40	0,50

Jack Hook

CODE	SIZE cm	WEIGHT kg
121401003		0,10

Scaffold Connection Ø60

CODE	SIZE cm	WEIGHT kg
121501003		0,50

Pin and Split Pin

CODE	SIZE cm	WEIGHT kg
H115P16080	16*80	0,15

Table Carrier

CODE	SIZE cm	WEIGHT kg
121701001		162,00

Table Lifting Component

CODE	SIZE cm	WEIGHT kg
121801001		230,00

Sth Guardrail

CODE	SIZE cm	WEIGHT kg
121901002	145	6,90

Sth Guardrail Compressible

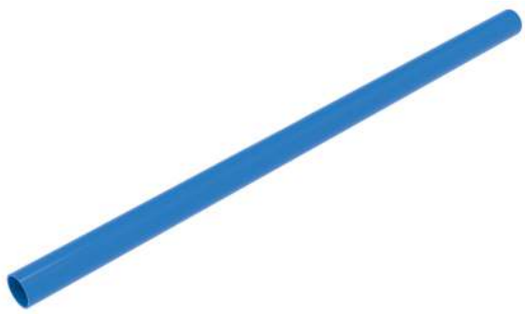
CODE	SIZE cm	WEIGHT kg
121903002	145	7,20

Compressible Sth Guardrail

CODE	SIZE cm	WEIGHT kg
121905002	145	8,00

Tube Ø48*2,5

CODE	SIZE cm	WEIGHT kg
300401002	100	2,55
300402002	150	3,70
300403002	200	5,10
300404002	300	7,70
300405002	400	10,20
300407002	600	15,40



Swivel Coupler

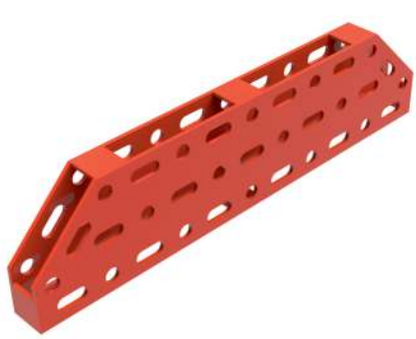
CODE	SIZE	WEIGHT kg
301302023	1,5*1,5	1,00
300502003	1,5*2,0	1,25

Universal Steel Waler

CODE	SIZE cm	WEIGHT kg
270101005	070	17,50
270102005	090	23,75
270103005	120	30,00
270104005	145	36,25
270105005	170	42,50
270106005	195	48,75
270107005	220	55,00
270108005	245	61,25
270109005	270	67,50
270110005	295	73,75
270111005	320	80,00
270112005	345	86,25
270113005	370	92,50
270114005	395	98,75
270115005	420	105,00
270116005	445	111,25
270117005	470	117,50
270118005	495	123,75
270119005	520	130,00
270120005	545	136,25
270121005	570	142,50
270122005	595	148,75

Universal Steel Waler Coupler

CODE	SIZE cm	WEIGHT kg
270201005	75	9,80



Universal Waler Hook

CODE	SIZE cm	WEIGHT kg
270301003		1,00

Storage Cage - Opened Type

CODE	SIZE cm	WEIGHT kg
600001001	120*78*83	49,00

Storage Cage - Mesh Type

CODE	SIZE cm	WEIGHT kg
600002001	120*78*83	70,00

STL | SHORING SCAFFOLDING SYSTEM

STL / SHORING SCAFFOLDING SYSTEM

STL is used as load carrier scaffolding under slab and beam. EN 74-3 certified base and head jacks are used to balance the floor and the bottom of the formwork. The STL can be displaced by transport trolleys and crane without disassembly, thus saving labor costs and time. The frames are manufactured as 120 cm width and 120 - 150 - 180 cm high as standard. EN 12813 certified STL frames are produced from 48 * 3.0 or 48 * 4.0 mm, horizontal and diagonal braces are produced from 34 * 2.5 mm EN certified mechanical tubes. Robotic cutting, drilling and welding processes are applied in our production. The steel products are cleaned with sandblasting before oven painting because of the industrial chemical oil. Upon request, our products can be hot dip galvanized according to EN ISO 1461 standards.

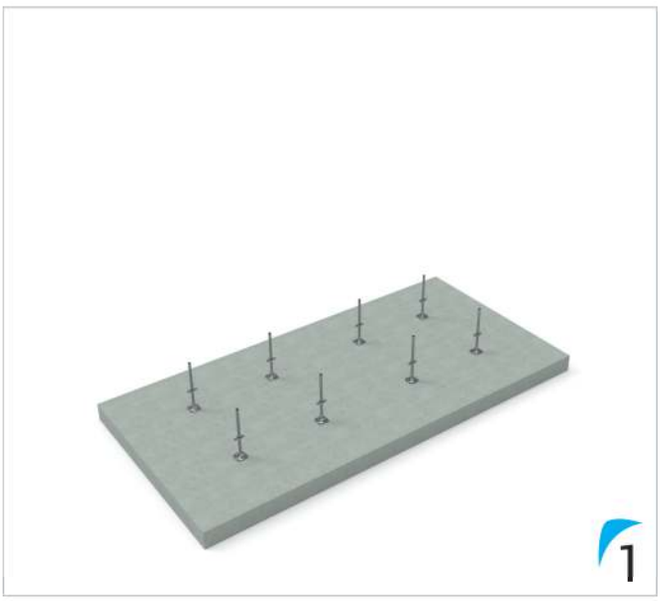
STL
Shoring Scaffolding System

1 - Base Jack Ø38
2 - Stl Frame
3 - Stl Diagonal
4 - Scaffold Connection Ø48
5 - H20 Head Jack Ø38
6 - Main Beam - H20 Wooden Beam
7 - Secondary Beam - H20 Wooden Beam
8 - 3Ply Wooden Panel

SYSTEM HEIGHT mt	FORMWORK HEIGHT mt	FRAME 120 cm ROW	FRAME 150 cm ROW	FRAME 180 cm ROW	DIAGONAL UNIT	BASE JACK EXTENSION mt	HEAD JACK EXTENSION mt	JACK HEIGHT mt	TOTAL FRAME HEIGHT mt	SYSTEM WEIGHT kg	MAXIMUM LOAD kN
2,50	0,42	-	-	1	2	0,14	0,14	0,70	1,80	91,60	36,24
3,00	0,42	-	-	1	2	0,39	0,39	0,70	1,80	91,60	36,15
3,50	0,42	-	-	1	2	0,64	0,64	1,00	1,80	100,00	36,07
4,00	0,42	1	-	1	4	0,29	0,29	0,70	3,00	128,60	34,01
4,50	0,42	1	-	1	4	0,54	0,54	1,00	3,00	137,00	33,92
5,00	0,42	-	-	2	4	0,49	0,49	1,00	3,60	150,00	35,82
5,50	0,42	-	-	2	4	0,74	0,74	1,00	3,60	150,00	35,73
6,00	0,42	1	-	2	6	0,39	0,39	0,70	4,80	178,60	34,33
6,50	0,42	-	-	3	6	0,34	0,34	0,70	5,40	191,60	35,57
7,00	0,42	-	-	3	6	0,59	0,59	1,00	5,40	200,00	35,48
7,50	0,42	1	-	3	8	0,24	0,24	0,70	6,60	228,60	34,41
8,00	0,42	1	-	3	8	0,49	0,49	1,00	6,60	237,00	34,32
8,50	0,42	-	-	4	8	0,44	0,44	0,70	7,20	241,60	35,23
9,00	0,42	-	-	4	8	0,69	0,69	1,00	7,20	250,00	35,15
9,50	0,42	1	-	4	10	0,34	0,34	0,70	8,40	278,60	34,27
10,00	0,42	1	-	4	10	0,59	0,59	1,00	8,40	287,00	34,19
10,50	0,42	-	-	5	10	0,54	0,54	1,00	9,00	300,00	34,89
11,00	0,42	2	-	4	12	0,49	0,49	1,00	9,60	324,00	33,49
11,50	0,42	1	-	5	12	0,44	0,44	0,70	10,20	328,60	34,07
12,00	0,42	-	-	6	12	0,39	0,39	0,70	10,80	341,60	34,64

STL SHORING SYSTEM ASSEMBLY STEPS

1. The location and height of the base jacks are adjusted according to the shoring system plan.
2. The first level's frames are mounted on the base jacks.
3. The first level's diagonal braces are connected to the frames. The first level's assembly is completed.
4. Scaffolding connection components are mounted on the frame.
5. The second level's frames are mounted.
6. Frame are combined by attaching the pin and pin split to the scaffolding connection component.
7. The second level's diagonal braces are connected to the frames. The second level's assembly is completed.
8. The steps are repeated until reaching the desired height.
9. The height of the H-20 head jacks are adjusted according to the shoring system plan.
10. Load carrying main beams are placed according to their lengths and their lap lengths as shown in the shoring system plan.
11. Secondary beams are placed according to the shoring system plan.
12. The system is ready after placing the plywood.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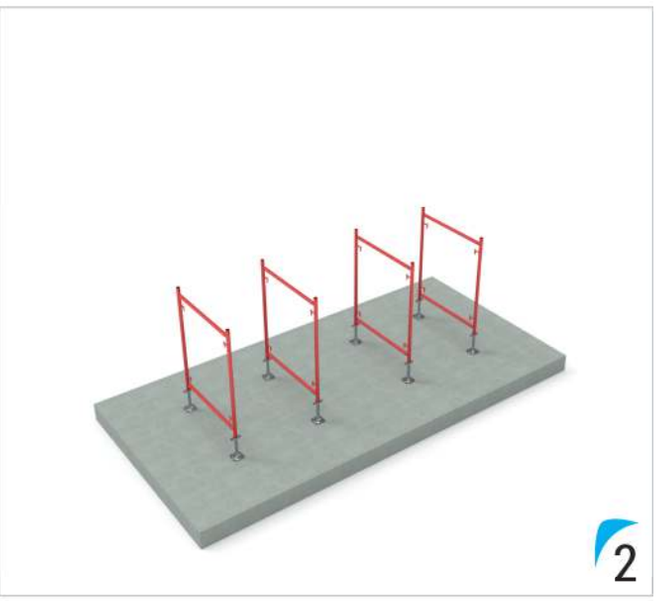
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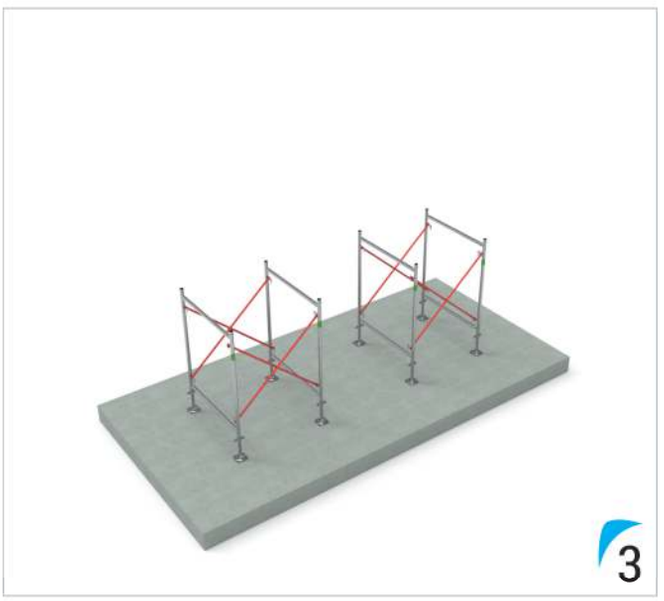
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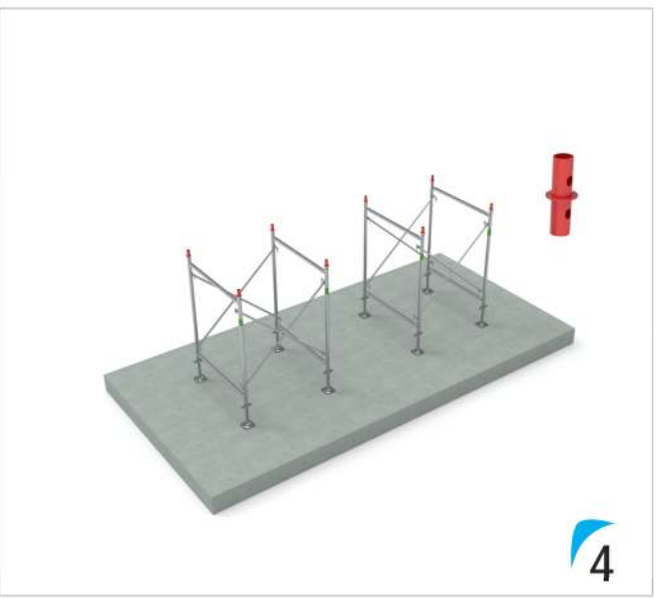
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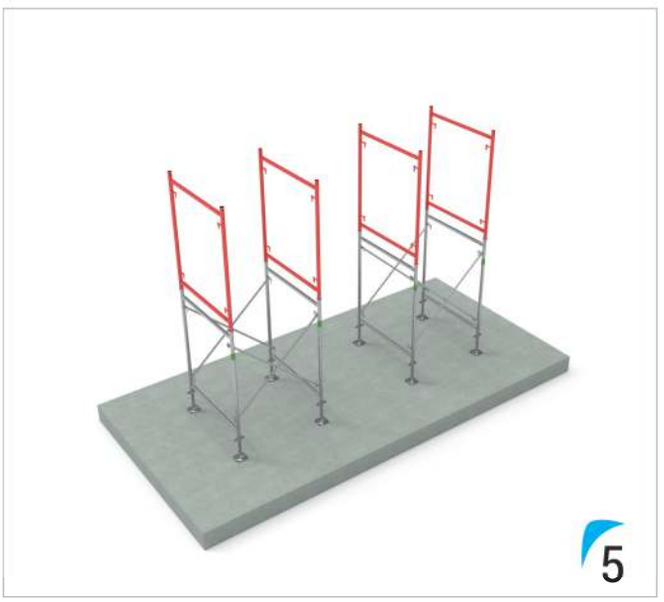
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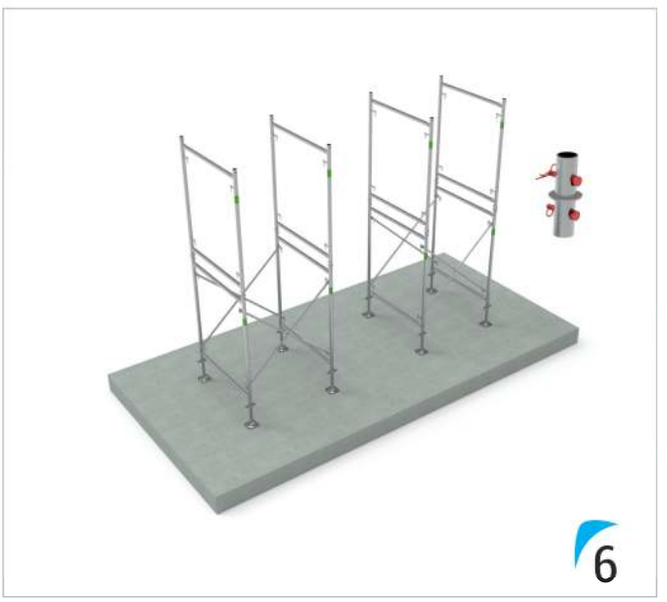
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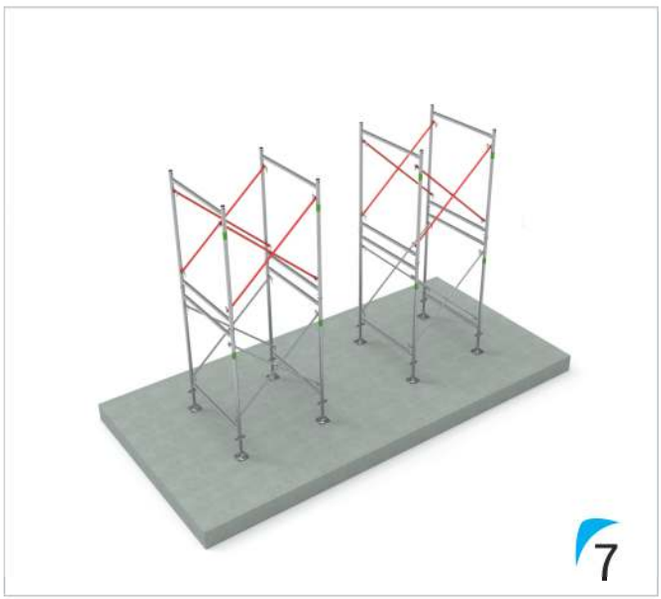
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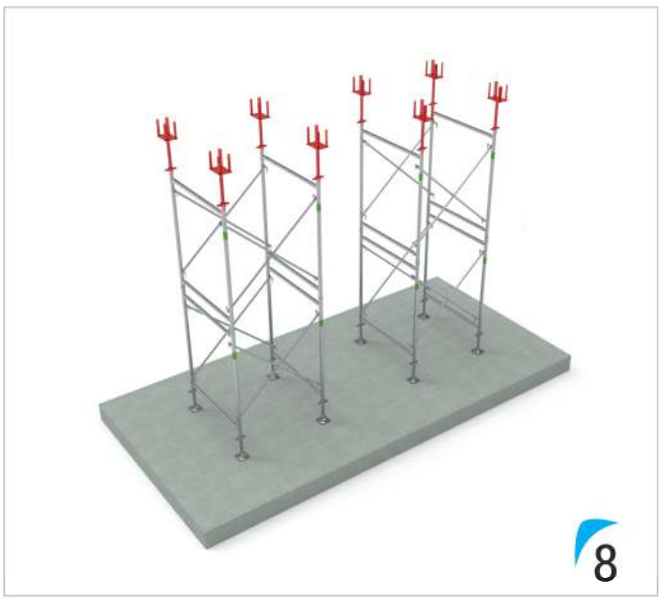
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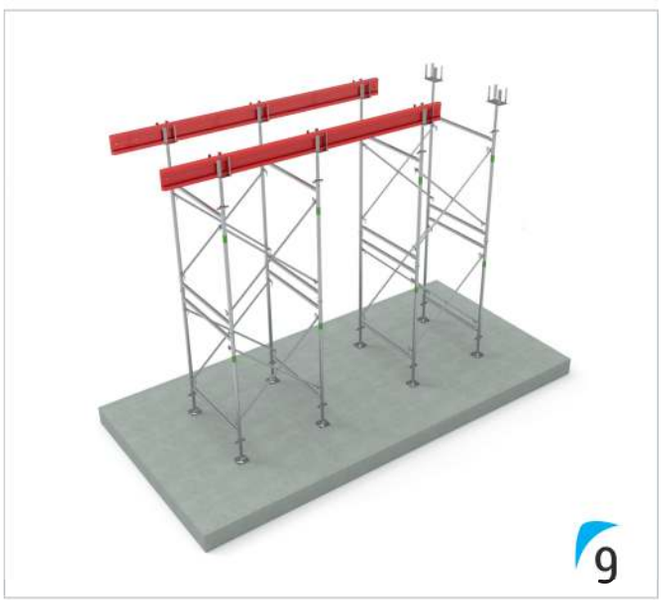
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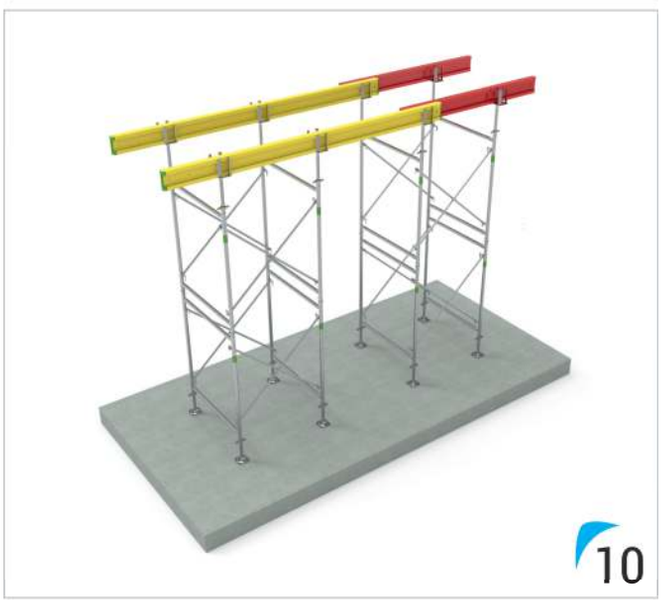
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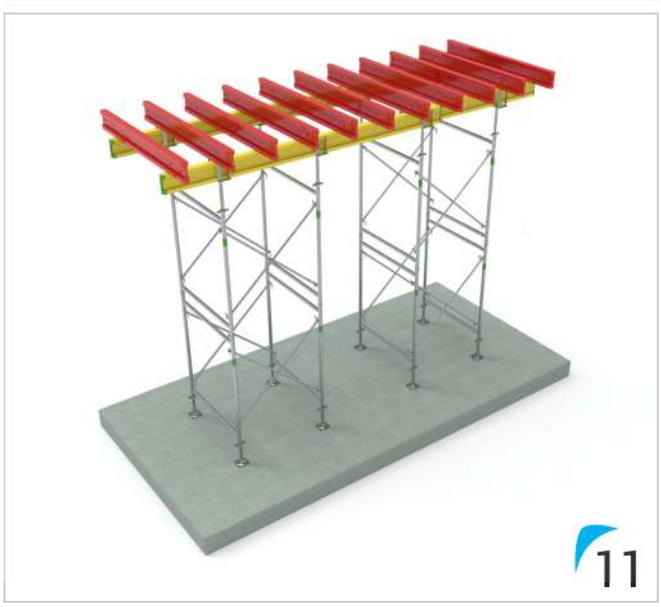
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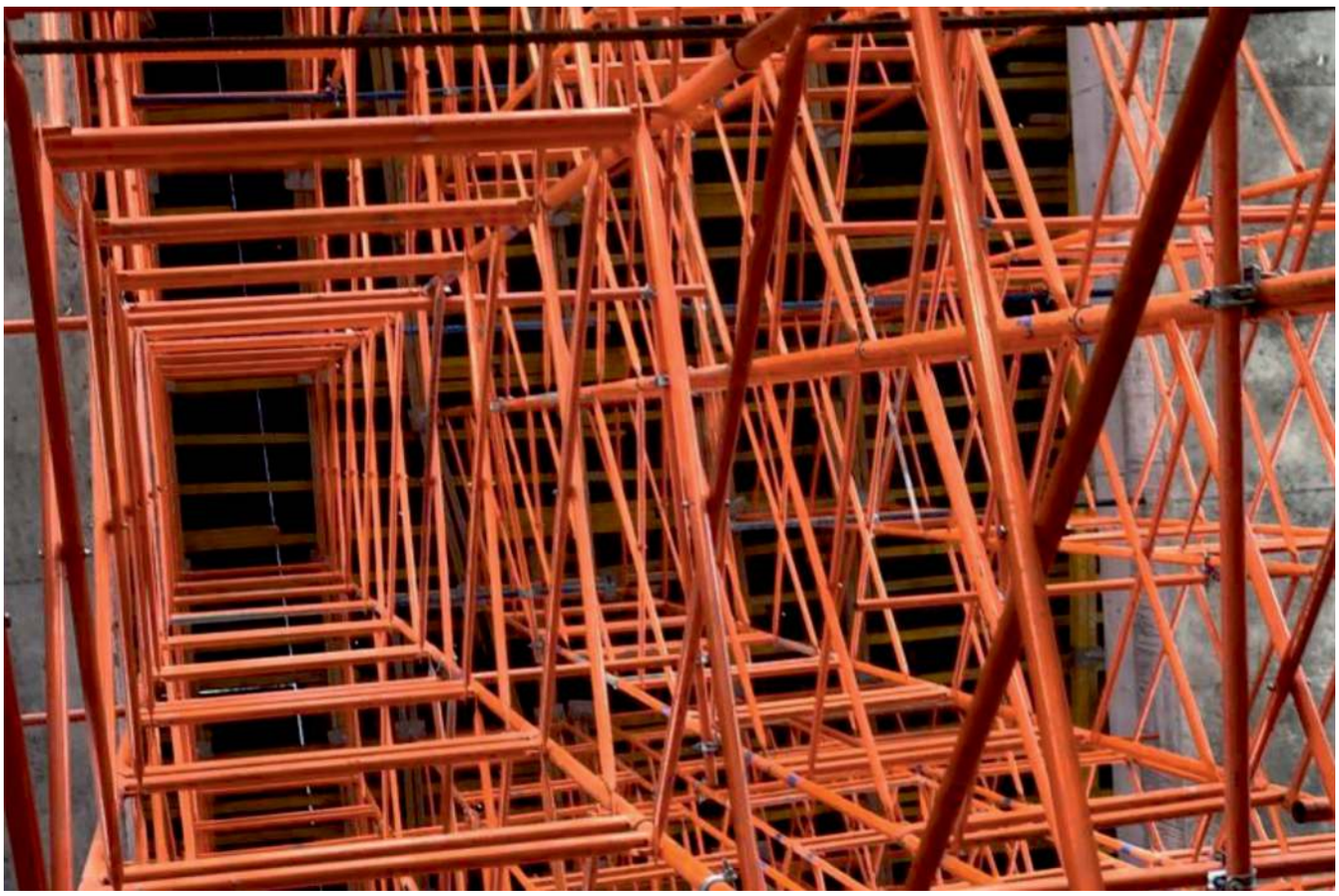
12



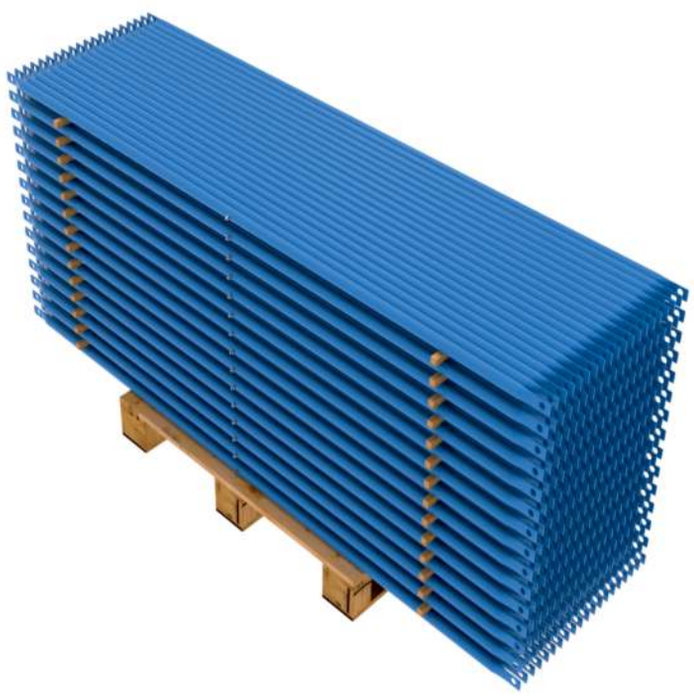
Checking Instructions

1 - After installation
2 - At regular time periods
3 - When a modification happens on it
4 - After negative weather conditions such as seismic tremor, strong winds
5 - Controls should be made when exposed to other conditions that could affect stability.

Packing

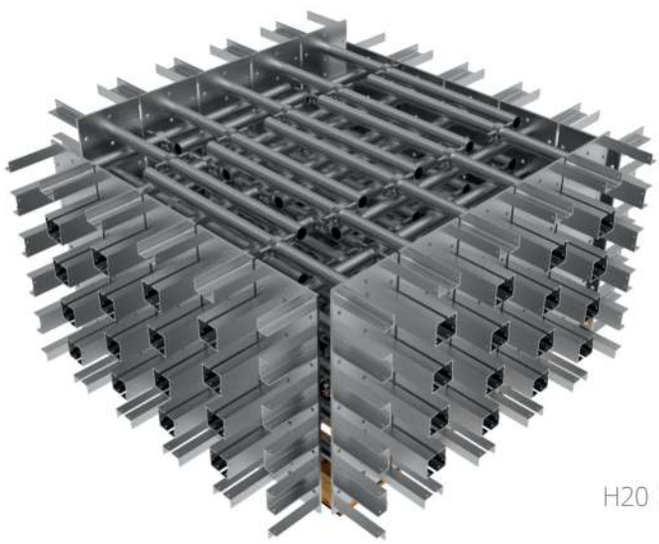
Recommended packing methods of products for transportation and storage.

Stl Diagonal Packing Method



Stl Frame Packing Method

Base Jack Ø38 Packing Method



H20 Head Jack Ø38 Packing Method

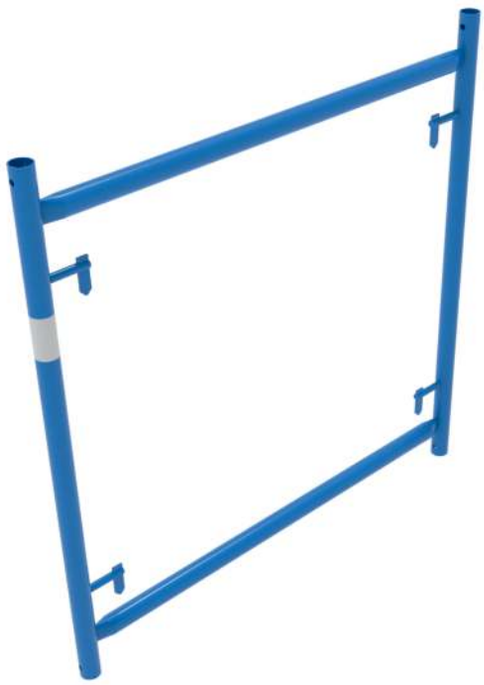
Maintenance - Repair and Storage Instructions

1 - Since almost all of the materials are made of steel, they should not be kept in water and in extremely humid environments.
2 - It is possible to repair the damaged coating or paint of materials with suitable coating material. For this kind of procedures, consultancy support is provided by the manufacturer.
3 - Repair and reuse of the deformed products must be done under the supervision of authorized personel.If the products are in shape not suitable for using, they must not be used.
4 - The storage of the product must be done so that they are not directly affected by outdoor weather conditions.
5 - Products stored outside must be covered over (canvas, nylon cover).
6 - Products must be transported by being held and carried from under the pack when they are moved to the storage area.

Stl Frame 120/120

CODE	SIZE cm	WEIGHT kg
240101002	120/120	14,30

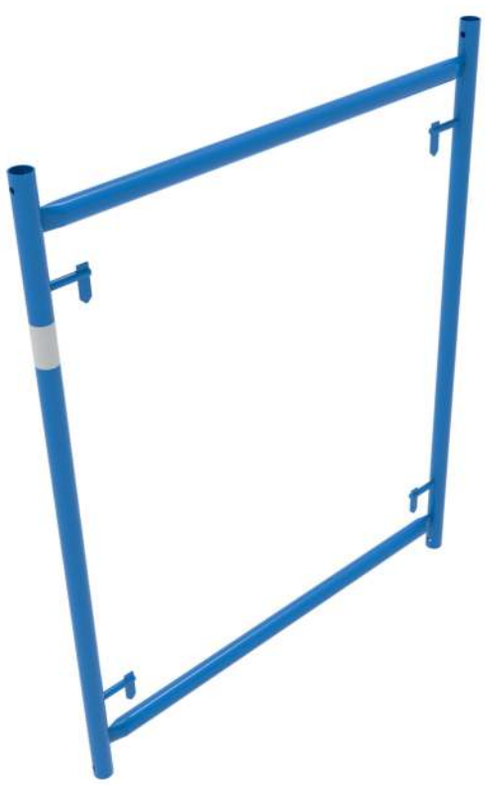
Ø48*3,0 mm



Stl Frame 120/150

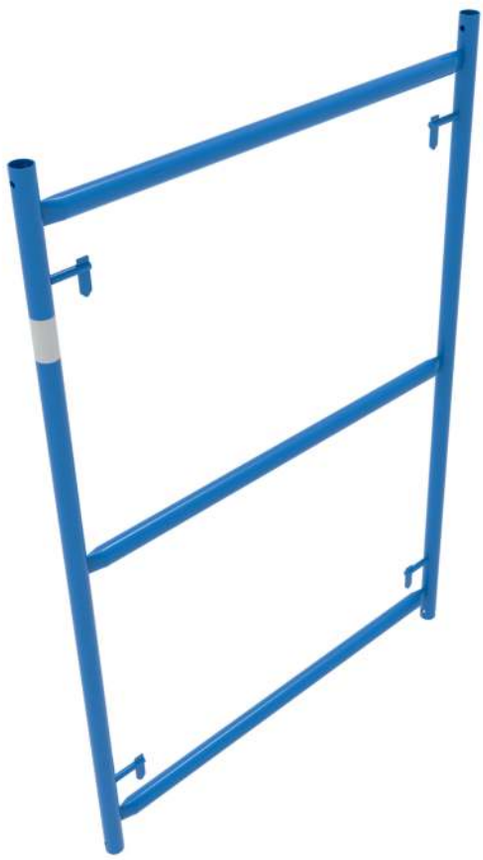
CODE	SIZE cm	WEIGHT kg
240102002	120/150	16,20

Ø48*3,0 mm



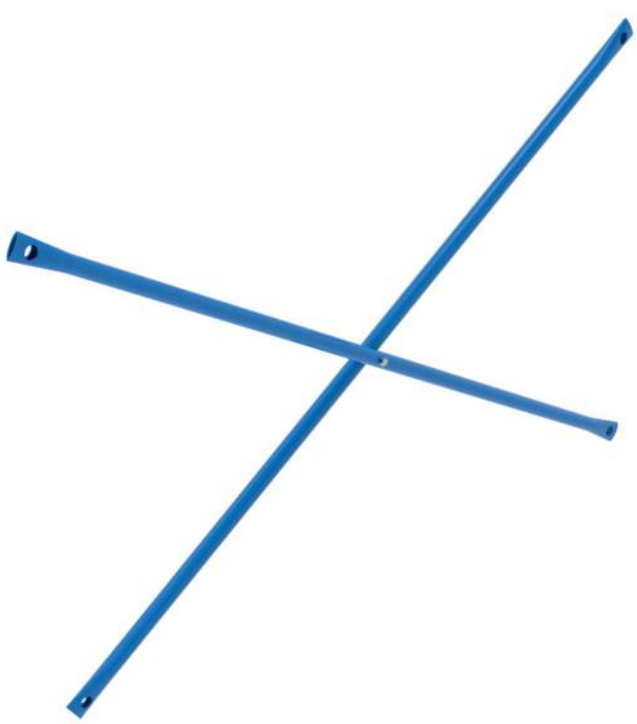
Stl Frame 120/180

	CODE	SIZE cm	WEIGHT kg
Ø48*3,0 mm	240103002	120/180	20,80



Stl Diagonal

	CODE	SIZE cm	WEIGHT kg
Ø27*2,0 mm	240201002	120/120	3,30
Ø27*2,0 mm	240202002	150/120	3,70
Ø27*2,0 mm	240203002	180/120	4,20



Base Jack Ø38

CODE	SIZE cm	WEIGHT kg
300102003	070	3,10
300103003	100	4,30

H20 Head Jack Ø38

CODE	SIZE cm	WEIGHT kg
300302003	070	7,30
300303003	100	8,10

Scaffold Connection Ø48

CODE	SIZE cm	WEIGHT kg
130401003		0,30

Pin and Split Pin

CODE	SIZE mm	WEIGHT kg
H115P10065	10*65	0,10

Stl Head-H20

CODE	SIZE cm	WEIGHT kg
121201003		4,30

Head-H20 Coupler

CODE	SIZE cm	WEIGHT kg
121203003		1,20

Girder Connector

CODE	SIZE cm	WEIGHT kg
121302003	40	0,50

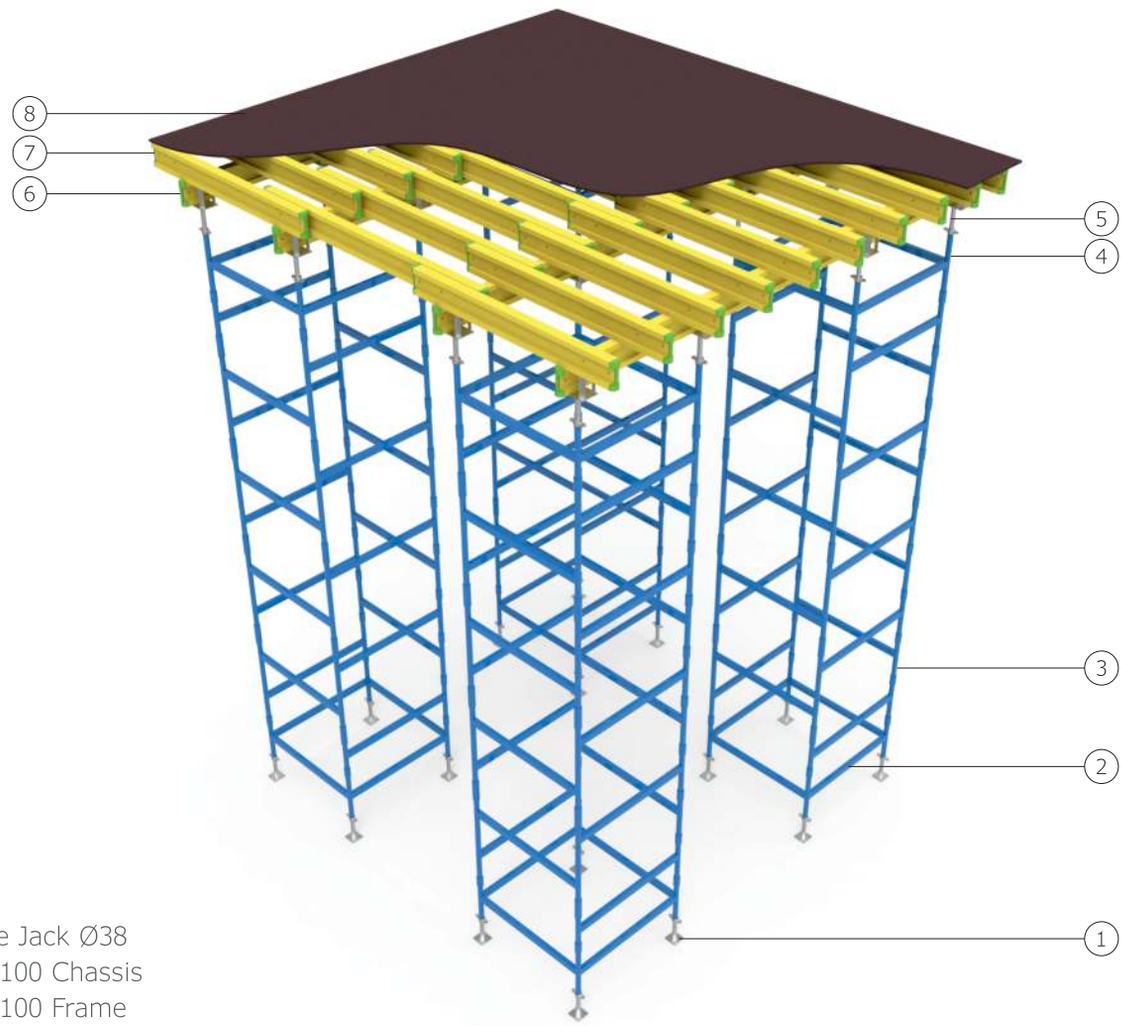
Jack Hook

CODE	SIZE cm	WEIGHT kg
121401003		0,10

STS100 | SHORING SCAFFOLDING SYSTEM

STS100 / SHORING SCAFFOLDING SYSTEM

STS100 is used as carrier scaffolding under slab and beam. It can be installed in a practical way by placing the H panels on the chassis. EN 74-3 certified base and head jacks are used to balance the floor and the bottom of the formwork. The STS100 can be displaced by transport trolleys and crane without disassembly, thus saving labor costs and time. STS100 elements are produced as standard 48 * 3.0 mm certified industrial tubes. Frames have 100 or 120 cm width and 50 cm height. Robotic cutting, drilling and welding processes are applied in our production. The steel products are cleaned with sandblasting before oven painting because of the industrial chemical oil. Upon request, our products can be hot dip galvanized according to 914 EN ISO 1461 standards.



1 - Base Jack Ø38
2 - STS100 Chassis
3 - STS100 Frame
4 - STS100 Chassis
5 - H20 Head Jack Ø38
6 - Main Beam - H20 Wooden Beam
7 - Secondary Beam - H20 Wooden Beam
8 - 3Ply Wooden Panel

SYSTEM HEIGHT cm	H20+H20+3Ply Wooden Panel=42 cm	STS100 Chassis and Frame Quantity H = 50 cm	STS100 End Frame Quantity H = 50 cm	Base Jack Qantity H = 75 cm Max. H = 50 cm	HeadJack Qantity H = 75 cm Max. H = 50 cm	MAXIMUM LOAD kN
300 cm	300 - 42 = 258 cm	2	4	4	4	53,33
400 cm	400 - 42 = 358 cm	2	8	4	4	52,12
500 cm	500 - 42 = 458 cm	2	12	4	4	51,21
600 cm	600 - 42 = 558 cm	2	16	4	4	50,30
700 cm	700 - 42 = 658 cm	2	20	4	4	49,70
800 cm	800 - 42 = 758 cm	2	24	4	4	49,09
900 cm	900 - 42 = 858 cm	2	28	4	4	48,79
1000 cm	1000 - 42 = 958 cm	2	32	4	4	48,48
1100 cm	1100 - 42 = 1058 cm	2	36	4	4	47,88
1200 cm	1200 - 42 = 1158 cm	2	40	4	4	47,27

Shoring Scaffolding System Design Table

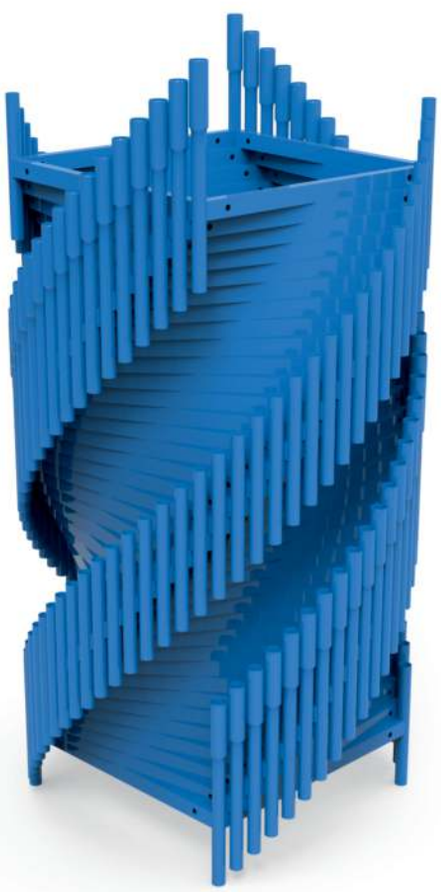
Checking Instructions

1 - After installation
2 - At regular time periods
3 - When a modification happens on it
4 - After negative weather conditions such as seismic tremor, strong winds
5 - Controls should be made when exposed to other conditions that could affect stability.

Packing

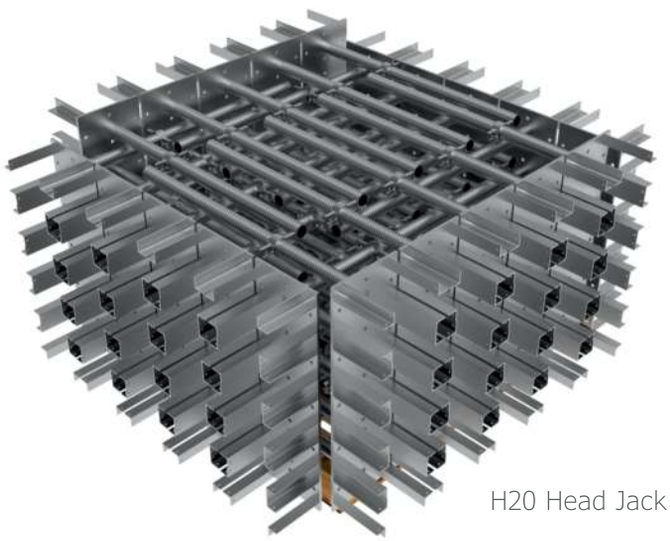
Recommended packing methods of products for transportation and storage.

STS100 Chassis Packing Method



STS100 Frame Packing Method

Base Jack Ø38 Packing Method



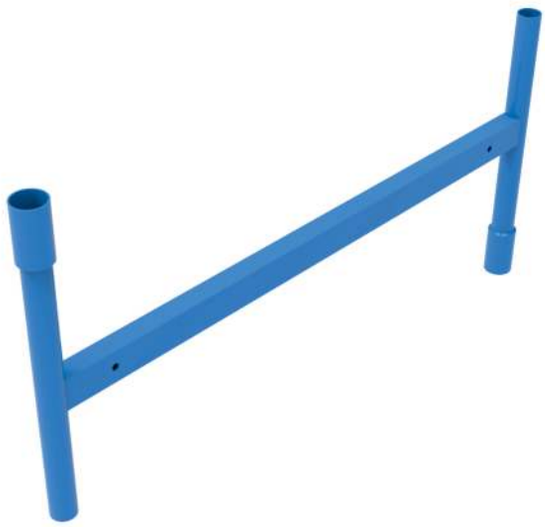
H20 Head Jack Ø38 Packing Method

Maintenance - Repair and Storage Instructions

1 - Since almost all of the materials are made of steel, they should not be kept in water and in extremely humid environments.
2 - It is possible to repair the damaged coating or paint of materials with suitable coating material. For this kind of procedures, consultancy support is provided by the manufacturer.
3 - Repair and reuse of the deformed products must be done under the supervision of authorized personel.If the products are in shape not suitable for using, they must not be used.
4 - The storage of the product must be done so that they are not directly affected by outdoor weather conditions.
5 - Products stored outside must be covered over (canvas, nylon cover).
6 - Products must be transported by being held and carried from under the pack when they are moved to the storage area.

STS100 Frame

CODE	SIZE cm	WEIGHT kg
110101002	100*50	7,20
110102002	120*50	7,60

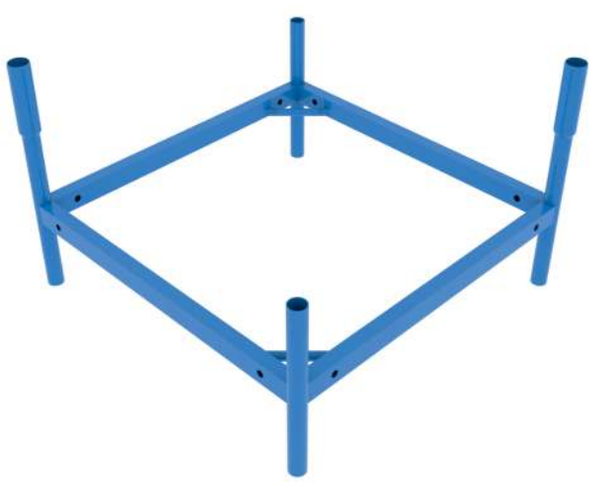


STS100 End Frame

CODE	SIZE cm	WEIGHT kg
110201002	100*50	6,70
110202002	120*50	7,20

STS100 Chassis

CODE	SIZE cm	WEIGHT kg
110301002	100*100	19,50
110302002	120*120	21,90



Base Jack Ø38

CODE	SIZE cm	WEIGHT kg
300102003	070	3,10
300103003	100	4,30

Head Jack UB Ø38

CODE	SIZE cm	WEIGHT kg
300202003	070	3,60
300203003	100	4,40

H20 Head Jack Ø38

CODE	SIZE cm	WEIGHT kg
300302003	070	7,30
300303003	100	8,10

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