

Trigonal

Scaffold towers



Trigonal Formwork

BASIC ELEMENTS

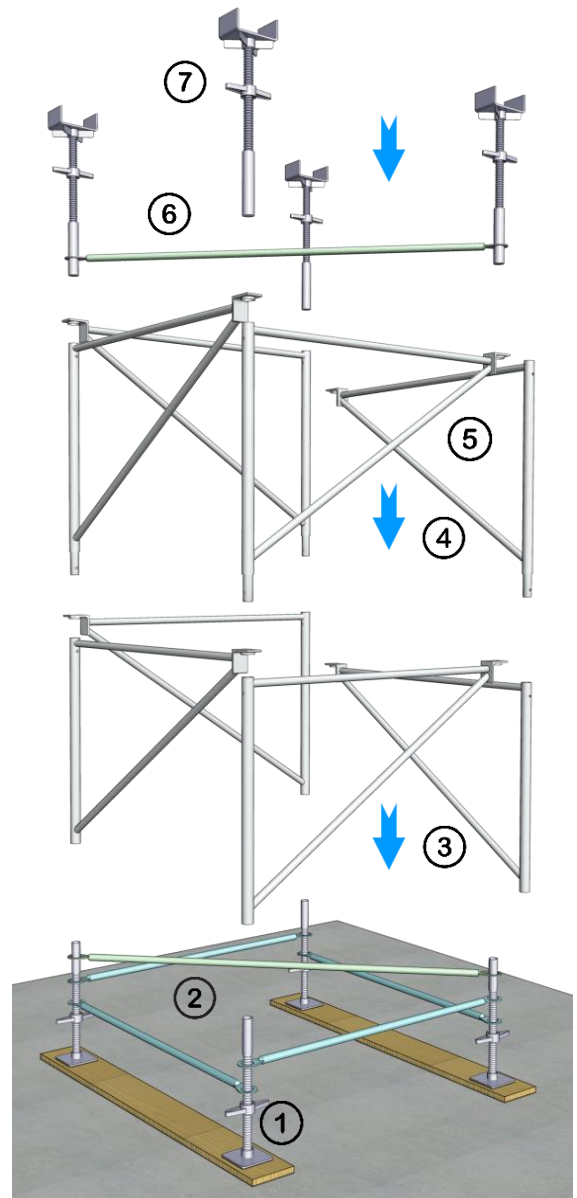
- Only 4 basic elements: **Bases**, **Base Triangles**, **Triangles** and **Head**.
- Modular structure.
- Fixing system with fast and safe coupling nodes.
- High capacity of **load**.
- Easier and safer storage.

Assembly sequence

- **1.** According to the assembly drawing, position the bases after assessing the stability of the support surface.
- **2.** Place the ledgers (4 unit) and diagonal (1 unit) on the bases.
- **3.** Insert base triangles (4 unit) consecutively on the bases, resting on the spindle crank.
- **4.** For the next height, arrange the standard triangles (4 unit) consecutively.
- **5.** For subsequent heights, continue arranging standard triangles.
- **6.** Every two height levels, place one diagonal.
- **7.** Top off with the heads, inserting them onto the last standard triangles.



The shoring tower system meets high requirements for **height, load and safety** making it an ideal system for on-site assembly.



Allowable load with H20 beam: **1200 kg/m²**

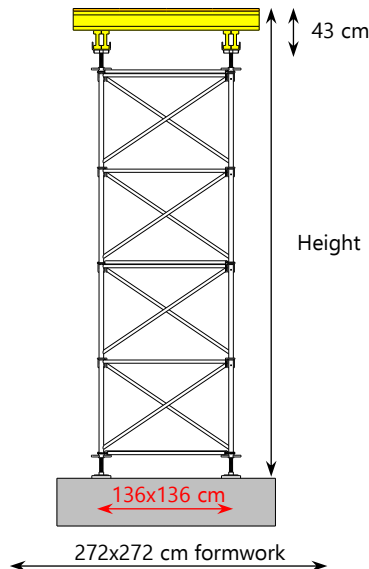
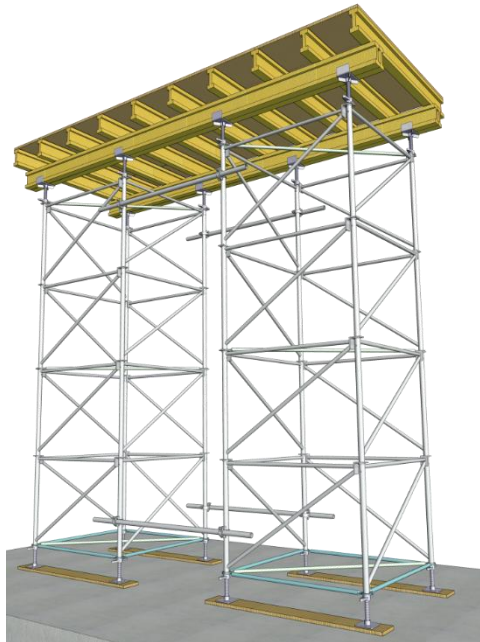
The use of towers is recommended for heights greater than 4.50 m and/or slab thicknesses over 30 cm.

Thanks to its high stability, it does not require tripods or similar elements; its adjustable bases allow **adaptation to irregular surfaces** and the adjustable head facilitates level adjustment and is essential for slab striking.

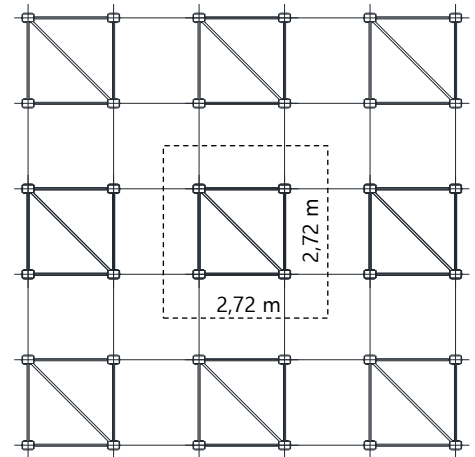
SCAFFOLDING

Trigonal roof system system description

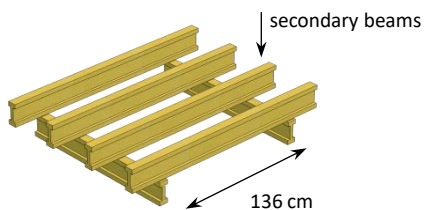
Trigonal Features



Distribution Plan



Material ratios



Slab depth allowed	Spacing Secondary beams	Beam 2,90/m2 H20
30 cm depth 9,6 KN/m2	100 cm	0,65 unit of 2.90
37 cm depth 12 KN/m2	66 cm	0,86 unit of 2.90
	61 cm	0,90 unit of 2.90
	50 cm	1,03 unit of 2.90
	41 cm	1,21 unit of 2.90

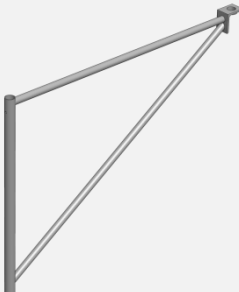
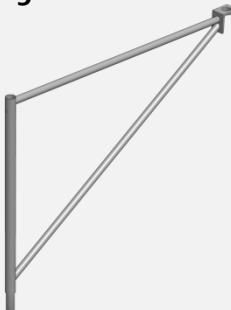
The Trigonal system uses few elements per square metre. A standard material count is detailed below.

ITEM \ Height [m]	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5	7,0	7,5	8,0	8,5	9,0	9,5	10,0	10,5	11,0	11,5	12,0	12,5	13,0	13,5	14,0	14,5	15,0
Adjustable base	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2-timber head	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Diagonal 192	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8
Ledger 136	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Triangle 136x100			4		8	4	12	8	16	12	20	16	24	20	28	24	32	28	36	32	40	36	44	40	48	44	52
Triangle 136x75		4		8		8		8		8		8		8		8		8		8		8		8		8	
Triang.. Base 136x100	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
m2 Surface	7,2																										
m3 volume	14.8	18.5	22.2	25.9	29.6	33.3	37.0	40.7	44.4	48.1	51.8	55.5	59.2	62.9	66.6	70.3	74.0	77.7	81.4	85.1	88.8	92.5	96.2	99.9	103.6	107.3	111.0
kg (total weight)	110	149	152	191	198	234	240	281	287	323	330	369	376	411	418	457	464	500	506	546	553	589	596	635	642	677	684
kg/m3	7,43	8,05	6,85	7,39	6,70	7,04	6,50	6,90	6,46	6,71	6,37	6,65	6,35	6,54	6,28	6,50	6,27	6,44	6,22	6,42	6,23	6,36	6,19	6,35	6,19	6,31	6,16

* Volume in flat slabs: Length x Width x Height [m]. Example: for a 1000 m2 slab and 6 m height = 6000 m3, 6000/44.4 = 136 towers at 6 m would be needed

* Volume in downstand beams: Length x 2.72 x Height [m]. Example: for 100 linear m of beam and 5 m height = 1360 m3, 1360/37 = 37 towers at 5 m would be needed

	[kg]
Fixed base 	3,36
Adjustable base 	4,96
2-timber head 	7,70
4-timber head 	9,78

		[kg]
Base triangle 	1360 x 1000 mm	11,10
Triangle 	1360 x 1000 mm 1360 x 750 mm 1360 x 500 mm	11,26 10,11 9,05
Ledger 	1360 mm	3,37
Diagonal 	1920 mm	4,6