YOUR PARTNER IN CONSTRUCTION FORMWORK SOLUTIONS

VARIANT

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VARIANT

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VARIANT CONTENTS

GENERAL INFORMATION 4

VARIANT WALL FORMWORK SYSTEMS 26

FRAMED FORMWORK
Framed formwork VARIMAX 28
Lightweight framed formwork VARIMID 38
Lightweight framed formwork VARIECO 46
Super-lightweight framed formwork HANDI 52

TIMBER-BEAM FORMWORK
Large-area formwork VERTEX 60 60
Adjustable circular formwork RINGFORM 70

COLUMN FORMWORK
Circular column SK 100 78
Column formwork VARIMAX 84
Column formwork VARIMID 88
Colum formwork HANDI 92
Column formwork VERTEX 60 94

SINGLE-SIDED FORMWORK
Modular supporting frames 100
Adjustable supporting frames 108

VARIANT SLAB FORMWORK SYSTEMS 116

PROP SLAB FORMWORK
Slab formwork VARIFLEX 118

TABLE SYSTEMS
Formwork tables VARITABLE 124
Formwork tables VARITABLE PLUS 132
Slab props 140

VARIANT LOAD-BEARING SCAFFOLDING
Load-bearing scaffolding TOPTOWER 40 150
Load-bearing scaffolding TOPTOWER 60 156
Load-bearing scaffolding TOPTOWER 100 162

VARIANT CONTENTS

166 **VARIANT CLIMBING FORMWORK**
168 Crane-climbing formwork system CCF
172 Climbing working platform CWP

176 **VARIANT SPECIAL FORMWORK SYSTEMS**
178 Configurable tunnel system UNIFORM
188 Custom made formwork

190 **VARIANT SAFETY SYSTEMS**

WORKING AND PROTECTION PLATFORMS
192 Folding brackets CWP
196 Shaft platform

GUARDRAILS
200 Guard rail clamp
200 Handrail post

ACCESS SYSTEMS
202 Stair tower TOPTOWER 40

206 **REUSABLE PACKAGING**

208 Packaging items

VARIANT
GENERAL INFORMATION

About Company

VARIANT

Variant Factory Ltd. is a part of a production corporation consisting of five enterprises, which are involved in processes of metalworking such as blanking, rolling, cutting etc. and production of metalworking machinery.

The enterprise continuously strives to produce quality goods and provide professional services to meet every client's expectation. The level of customer service is constantly being improved due to permanent investments, which are aimed at production plant modernization, diversification, quality control and employees skill improvement.

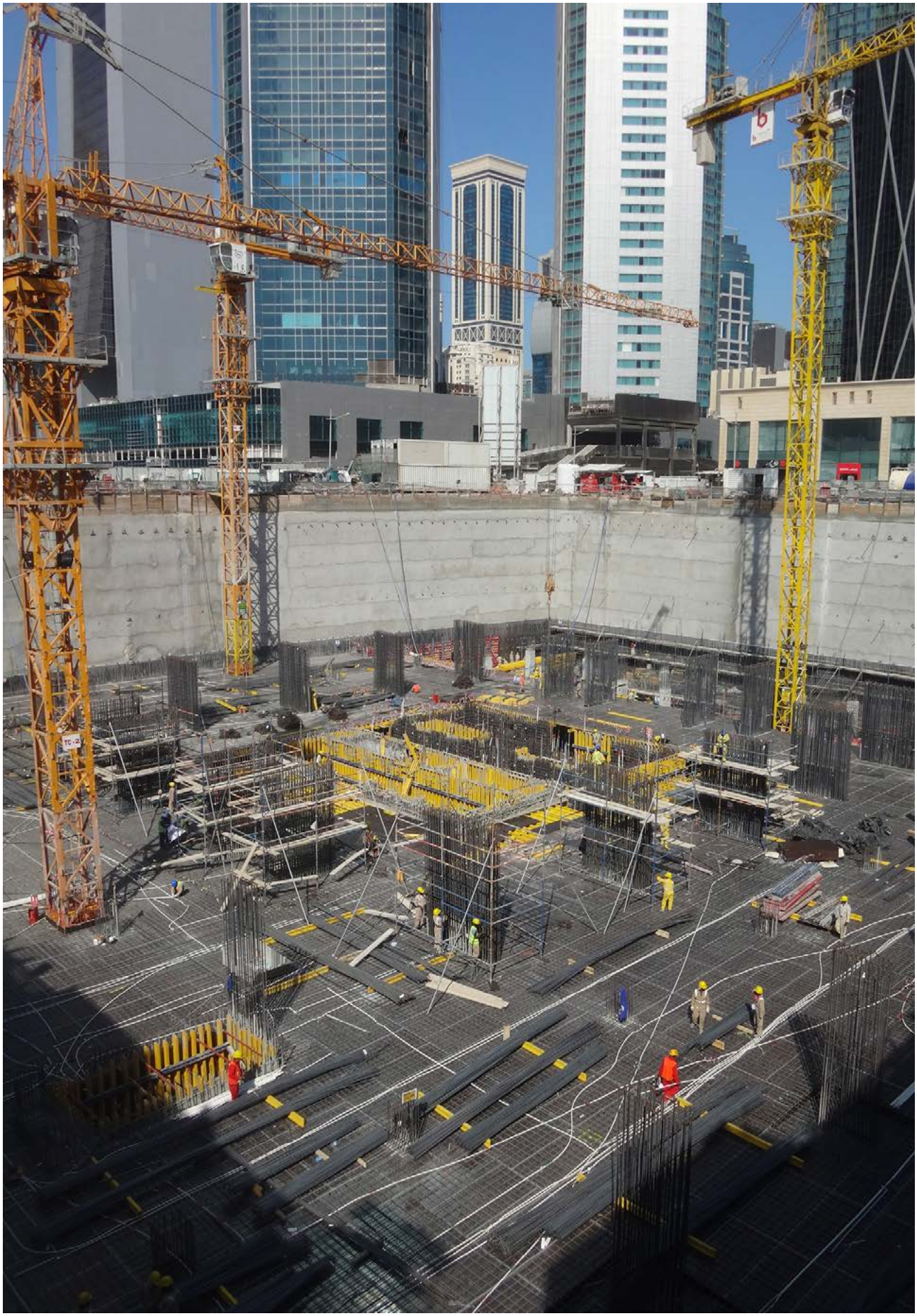
The result of these efforts is trust of hundreds of customers, among which there are many well known construction organizations, production enterprises and sales companies from Ukraine and other countries.

Currently Variant Factory Ltd offers the following formwork systems for concrete casting:

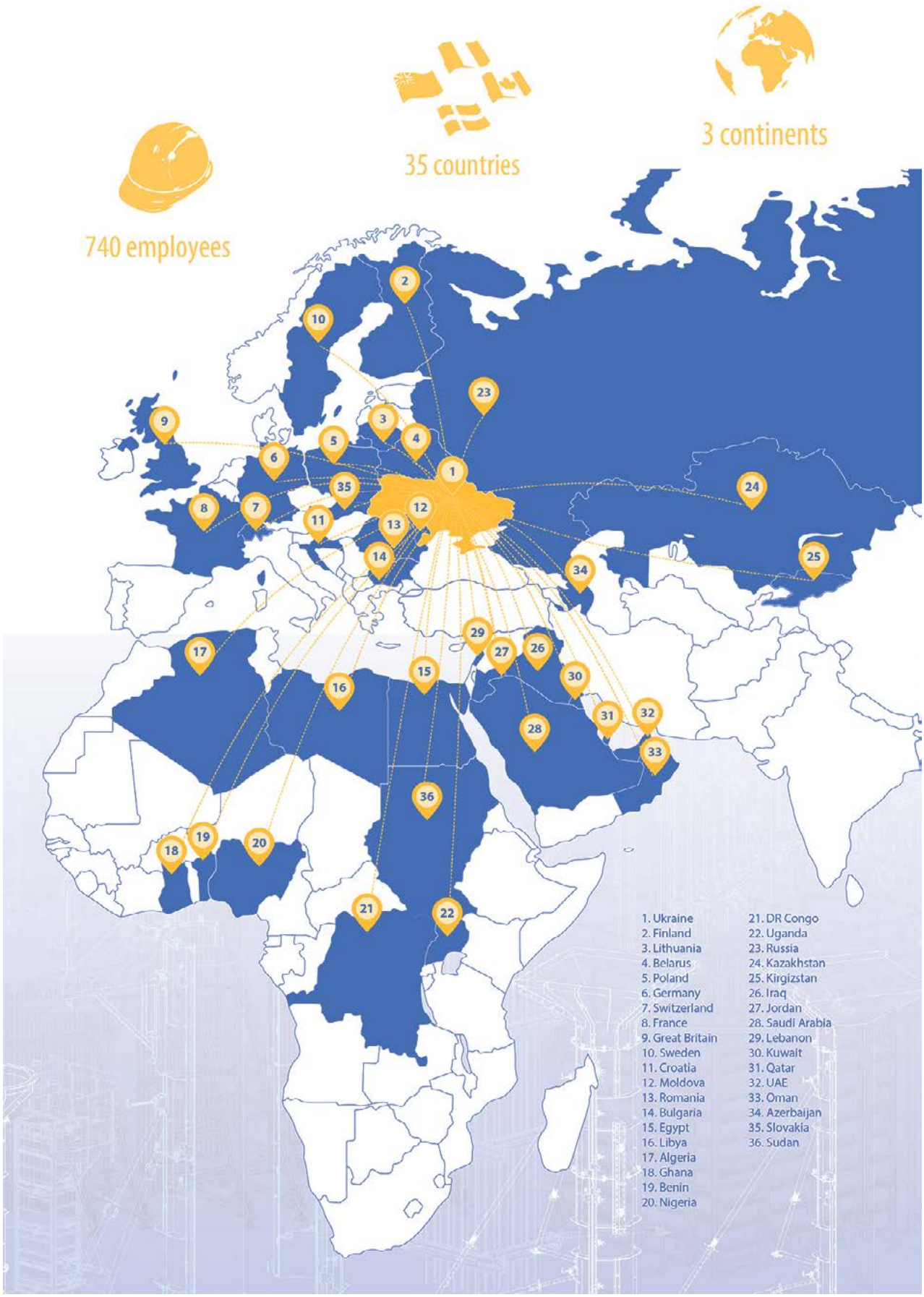
- wall formwork systems;
- slab formwork systems;
- systems for special tasks solution.

The quality of the goods produced by Variant Factory base on skillful labor, use of high quality domestic and imported raw materials as well as advanced level of production technologies. All the products meet the national standards, construction codes and regulations.

VARIANT FACTORY LTD.



VARIANT FACTORY LTD.



Foreign sales markets of Variant Factory

Variant has more than 20 years of experience in providing practical and cost-effective formwork solutions for civil and industrial construction projects. As a result, increasing of demand on goods produced by Variant in the Ukrainian market as well as in the markets of CIS countries, Middle East countries and countries of European Union.

We are proud of our cooperation with such countries as: Finland, Russia, Lithuania, DR Congo, Belarus, Ukraine, Slovakia, Moldova, Kazakhstan, Kirgizstan, Iraq, Lebanon, Kuwait, Qatar, Libya, UAE, Saudi Arabia, Uganda, Nigeria, Ghana, Egypt, Germany, Poland, Benin, Jordan, Romania, Azerbaijan, Bulgaria, Switzerland, Croatia, Sweden, Oman, France, Great Britain.

Every day we are expanding the boundaries of our contacts by:
- providing formwork solutions for construction projects of any complexity level;
- delivering our products to any destination point;
- providing your projects with professional engineering support.

Quality assurance procedures & safety measures

Due to the fact that Variant is always willing to demonstrate its ability to consistently provide products that meets customer and applicable statutory and regulatory requirements, it holds the certificate ISO 9001 Quality Management System.

According to the system of quality management, all the products produced by Variant Factory pass several stages of the control:

• new products testing – all new lines of the products are first done as test samples so testing department can check the quality and stability of the items.

• incoming inspection of all the raw materials and spare parts when being received from suppliers.

•"first detail inspection" – each first detail (done on new equipment, done at the beginning of every new work shift, etc.) goes through this inspection, only after this workers can start production run.

• operational control – control, done after finishing of every operation – cutting, welding, painting, etc.

• final control – last stage control takes place before packing the material when the production cycle has been finished.

• logistic control - after container/track has been loaded.

Variant devotes special attention to the professional skill of its employees, all the staff of the Product Quality Department has been trained and certified in accordance with the requirements of ISO Quality Management System.

All the technical processes of production in the company are going under constant checking and control of certified experts in order to comply with requirements of safe and efficient production.

Elementary safety warnings

Variant provides every client in every project with appropriate technical information (e.g. shop drawing of formwork assembling, user manuals, instructions for assembly and use, technical catalogs etc.) and client is to ensure that all the material provided are available to all users and that they have been made aware of them.

The customer must ensure that Variant products are erected and dismantled, reset and generally used for their intended purpose under the direction and supervision of Variant's engineering team or suitably skilled persons with the authority to issue instructions.

The functional/technical instructions, safety warnings and loading data must all be strictly observed and complied with. Failure to do so can cause accidents and severe (even life-threatening) damage to health, as well as very great material damage.

SAFETY MEASURES

OUR PROJECTS

Project development phase

Variant offers its partners a wide service package, providing support at all stages of project development and implementation.

To each project, developed by our partners, we pay maximum attention and responsibility. Variant's engineers closely study the technical characteristics of a project and offer the most optimal and cost-effective solution using different formwork and scaffolding systems.

The development of special formwork solutions

The Experts of Variant permanently design new lines of products. Also we provide special formwork solutions for non-standard construction projects.

Training and planning

Careful planning is the key to a successful project. Therefore, Variant experts are ready to provide support in all phases of your project:

- calculation and design of different formwork and scaffolding solutions;
- providing client's engineering staff with shop drawings, user manuals and other technical documentation;
- training the personnel of the companies using different Variant formwork and scaffolding systems;
- logistics solutions, etc.

Execution of construction work

International project experience allows Variant's specialists to take into consideration the smallest peculiarities of different regions and provide the most optimal and cost-effective solution for each and every project. Engineers and project managers provide support at all stages of construction.

OUR PROJECTS

Military Hospital, Al Qassim

Saudi Arabia

Systems in use:

- Framed formwork Varimax
- Large-area formwork Vertex 60
- Formwork tables Varitable
- Slab formwork Variflex
- Circular column SK 100
- Climbing working platform CWP
- Crane-climbing formwork system CCF
- Load-bearing scaffolding:
  Top Tower 40
  Top Tower 60

OUR PROJECTS

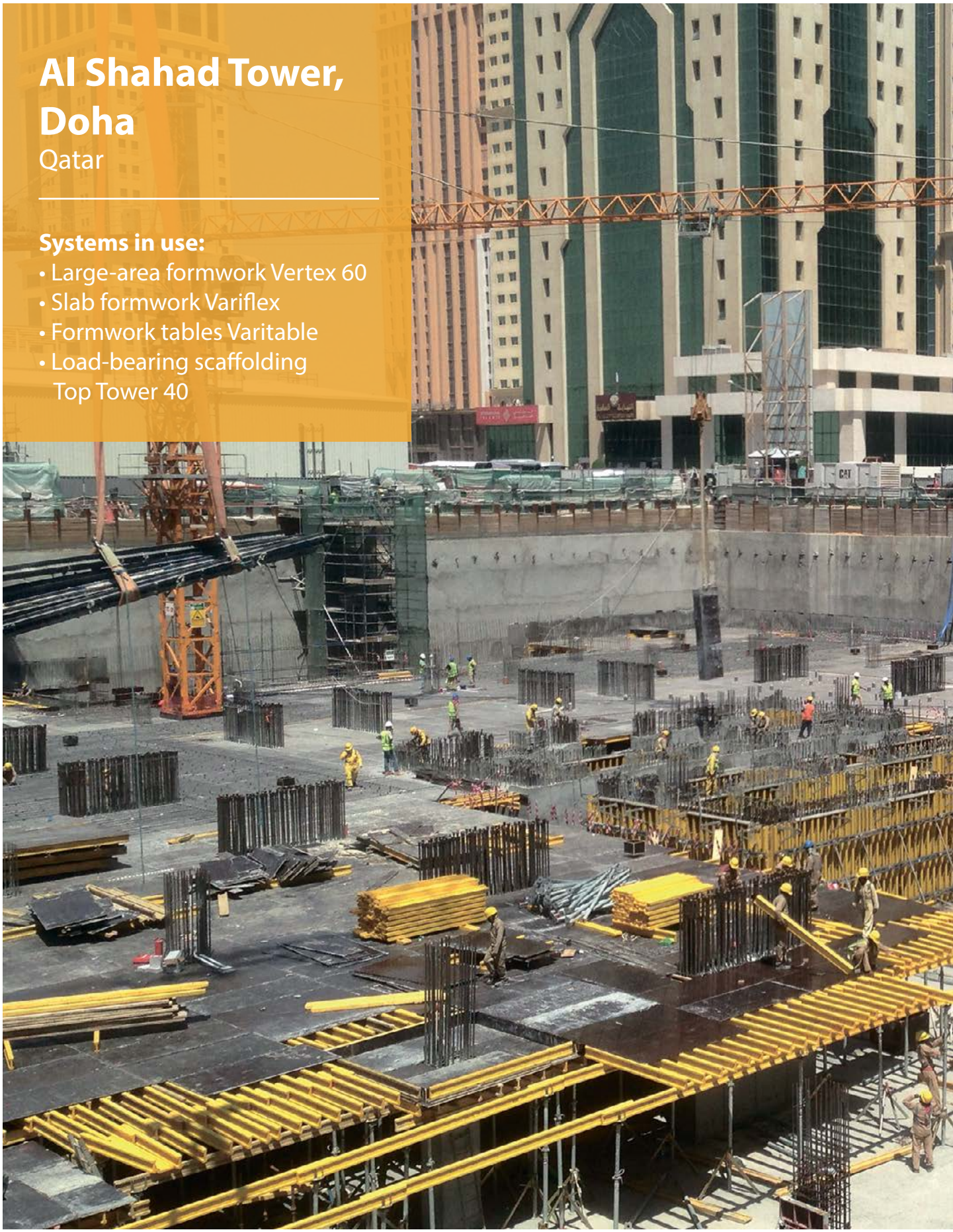
OUR PROJECTS

Al Shahad Tower, Doha

Qatar

Systems in use:

- Large-area formwork Vertex 60
- Slab formwork Variflex
- Formwork tables Varitable
- Load-bearing scaffolding Top Tower 40



OUR PROJECTS

OUR PROJECTS

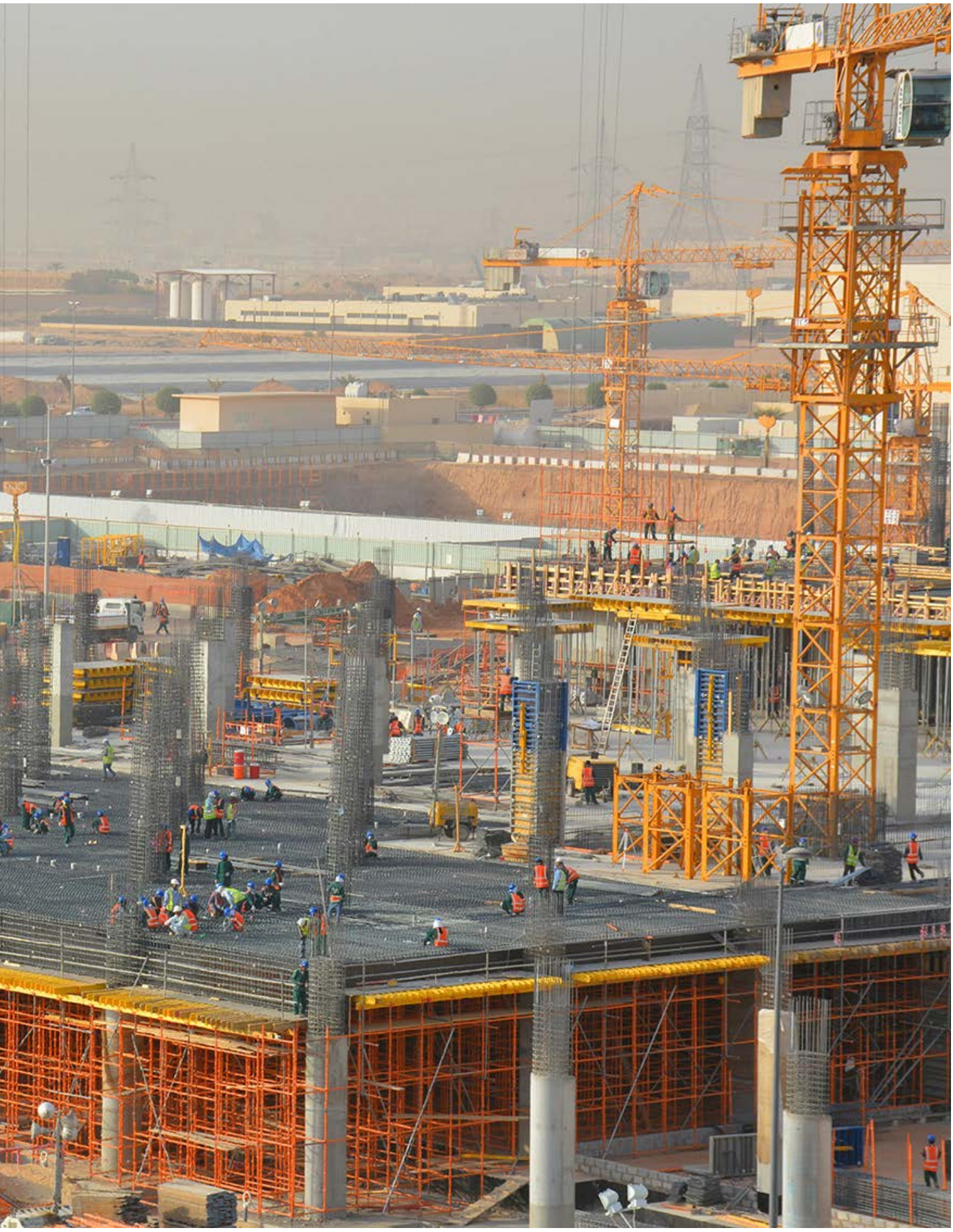
Maternity Hospital, Riyadh

Saudi Arabia

Systems in use:

- Framed formwork Varimax
- Large-area formwork Vertex 60
- Formwork tables Varitable
- Slab formwork Variflex
- Circular column SK 100
- Shaft platform
- Climbing working platform CWP
- Crane-climbing formwork system CCF
- Load-bearing scaffolding:
  Top Tower 40
  Top Tower 60

OUR PROJECTS



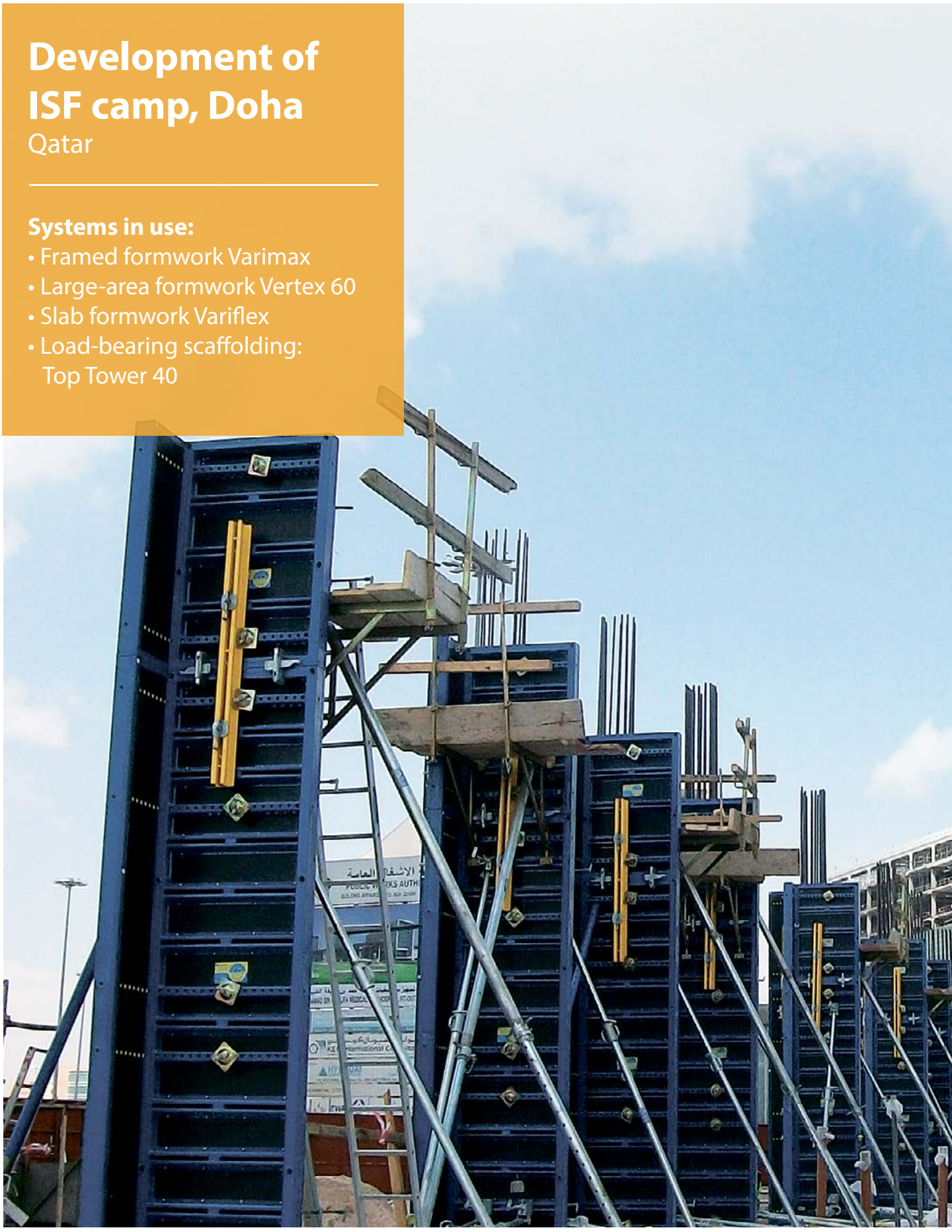
OUR PROJECTS

Development of ISF camp, Doha

Qatar

Systems in use:

- Framed formwork Varimax
- Large-area formwork Vertex 60
- Slab formwork Variflex
- Load-bearing scaffolding: Top Tower 40



OUR PROJECTS

OUR PROJECTS

PORT 19

Tammisaari
Finland

Systems in use:

- Framed formwork Varimax
- Super-lightweight framed formwork Handi

OUR PROJECTS

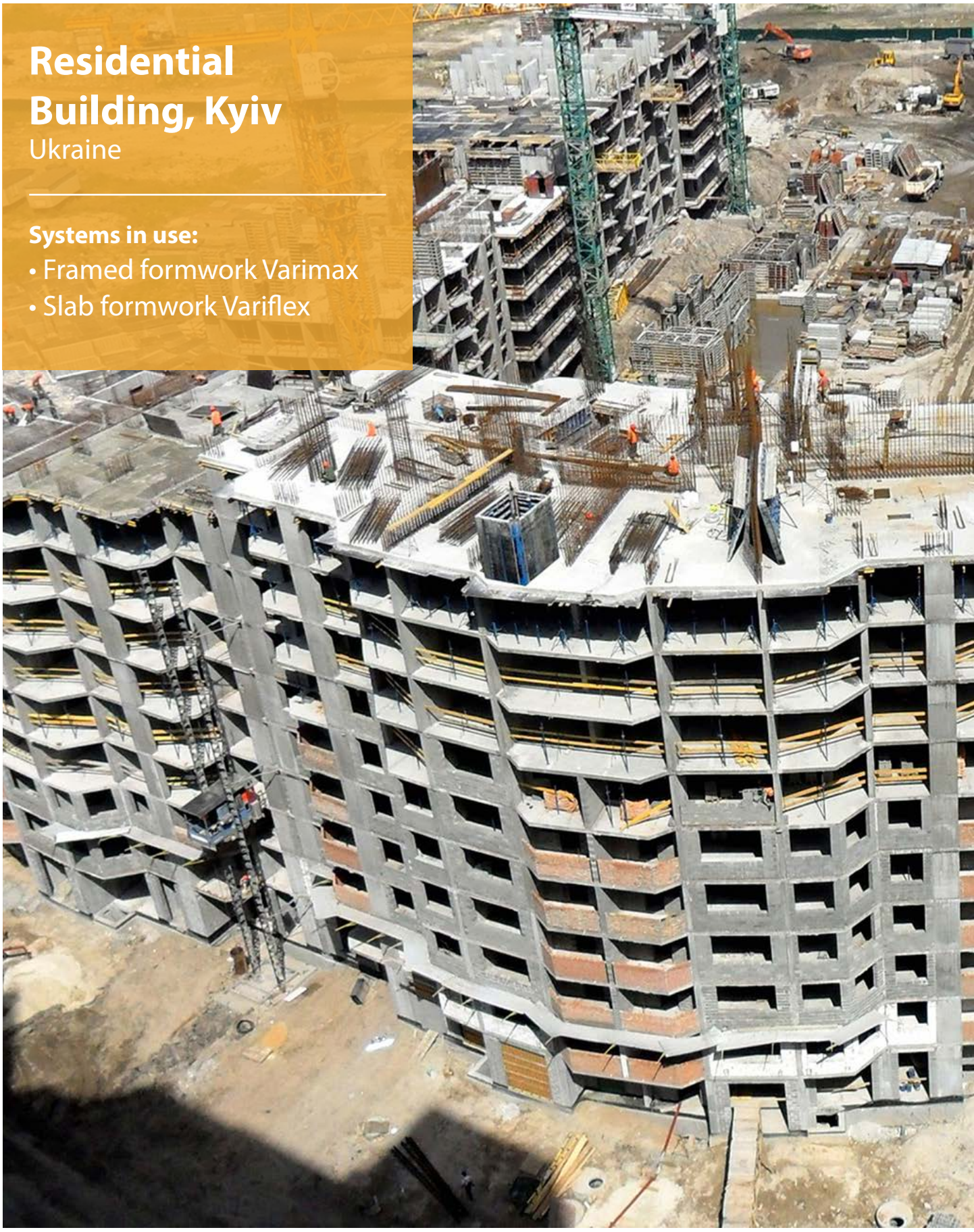
OUR PROJECTS

Residential Building, Kyiv

Ukraine

Systems in use:

- Framed formwork Varimax
- Slab formwork Variflex



OUR PROJECTS

VARIANT

WALL FORMWORK SYSTEMS

Framed formwork VARIMAX

Tried and tested system designed to withstand high hydrostatic pressure of fresh concrete.

The framed formwork Varimax by Variant is a complete system, including accessories, designed for heavy-duty use. The Varimax system ensures fast, safe and cost efficient concreting process and provides you with an opportunity to make any concrete surface possible.

Heavy-duty formwork
- 60 kN/m^2 pressure of fresh concrete acting on whole area using tie-rod system 15.0 mm
- 80 kN/m^2 pressure of fresh concrete acting on whole area using tie-rod system 20.0 mm
- High quality film faced plywood with thickness of 21 mm. Film weight 240 g/m^2

Easy to use
- Having only 5 standard panel widths provides much easier planning and forming.
- All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized.

Cost-effective
- Installation of pre-assembled units minimizes use of a crane.
- High number of use cycles means lower follow-up expenses.
- Reduction of expenses by means of restoration and cleaning possibilities.
- Galvanized or powder-coated steel frames, for long service life.
- High quality of concrete surface minimizes finishing work.

Safe use
- Accessories such as — lifting hooks, wall brackets, supporting struts etc. make for save and easier handling of the system.

VARIMAX panels

The heights and widths of the Varimax panels result in a logical and advantageous increment-grid. Small amount of different panels' sizes makes planning easier and forming faster.

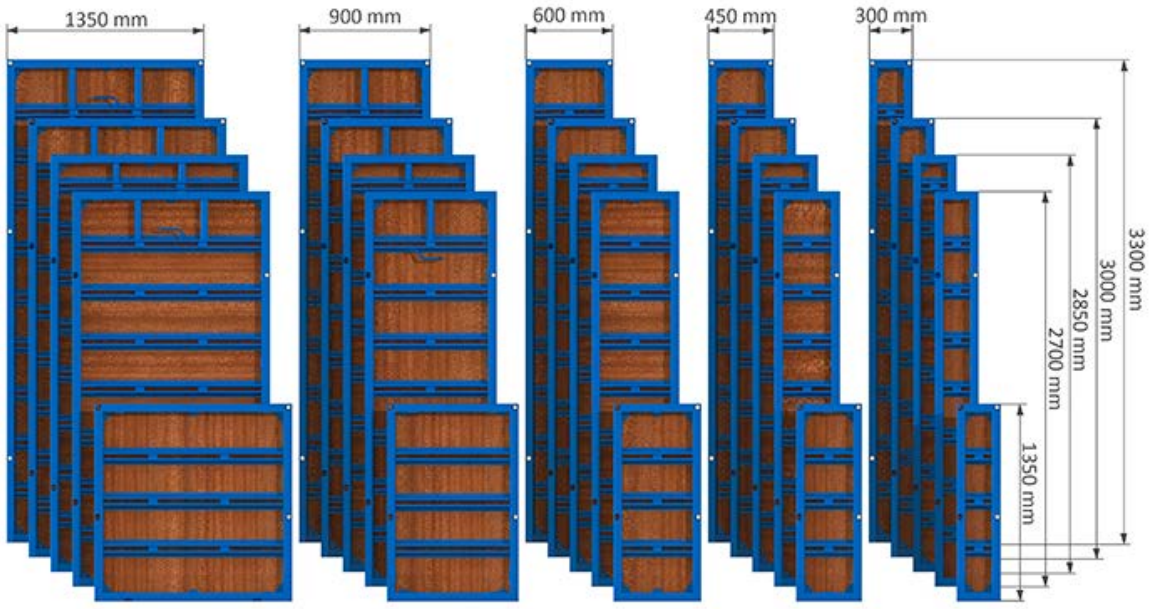
- 5 widths of panel
- 5 heights of panel
- 5 extra-large panels

For any type and size of the panel two options of covering are available.

Galvanized

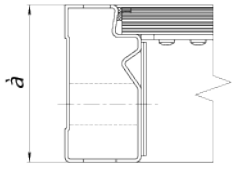
Powder-coated

STANDARD PANELS HEIGHTS



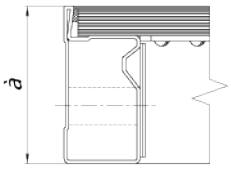
Two option of external profile available:

Varimax profile



a =123 mm

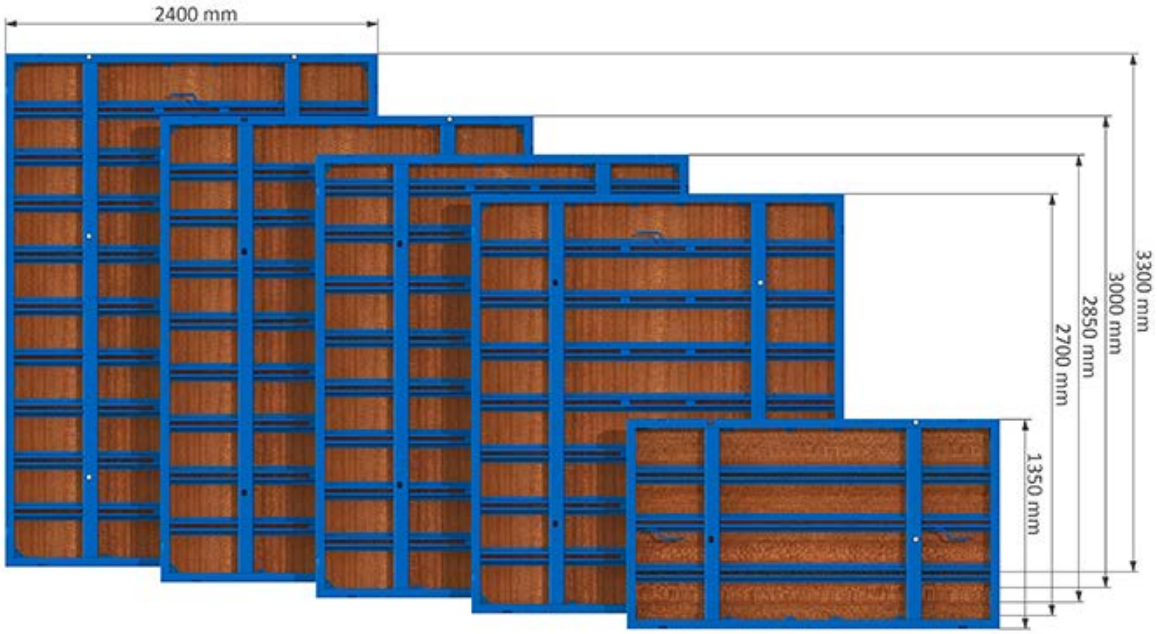
Varimax P profile



a =123 mm

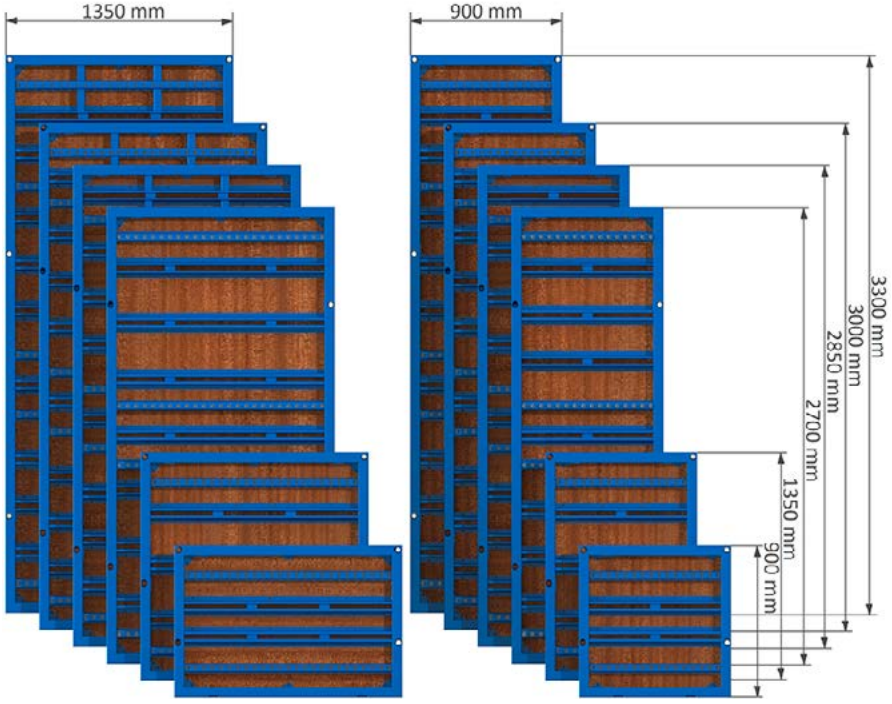
EXTRA-LARGE PANELS

- Intended to be used for large area wall forming.
- Fewer connectors and accessories are needed.
- Can be installed vertically or horizontally.



VERSATILE PANELS

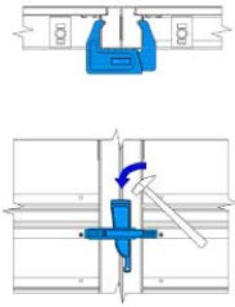
The special hole pattern makes these panels particularly suitable for efficient forming of:
- Corners;
- Wall junctions;
- Stop-ends;
- Columns.



VARIMAX panel connection

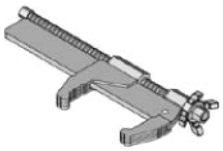
JOINING

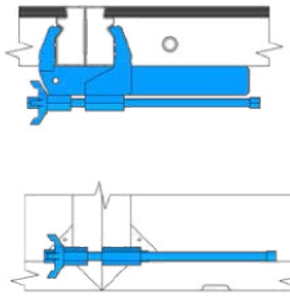
Thanks to a continuous slot placed all along the panel's profile, a clamp device can be installed in any desired point, simply with a blow of the hammer. This makes assembly super-fast and no special tools required.



CLOSURES

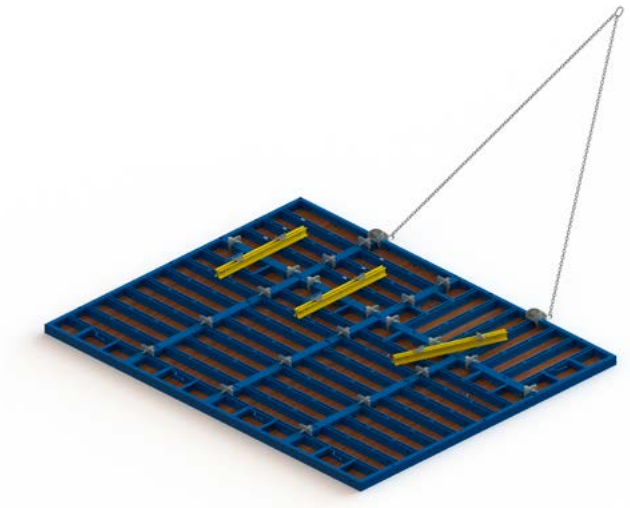
Closures are intended to be used for places where formwork cannot be stroke easily. Filled with construction timber, tighten with use of an adjustable clamp device.





VERTICAL STAKING

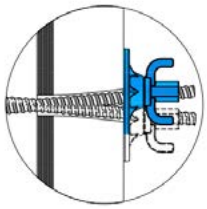
With use of the guide plates or steal walings fixed with contact devices, the panels can be easily assembled in large and rigid gang-form to be put up and set down by crane.



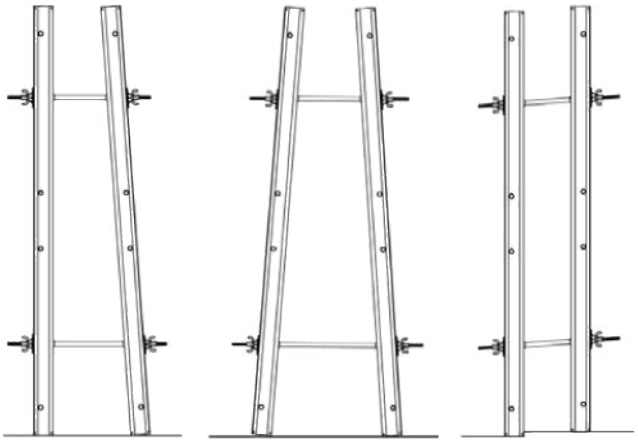
VARIMAX panel connection

TYING

The large, conical form-tie sleeves in the panels enable them to be stood at an angle on one or both sides, and to be height-mismatched.

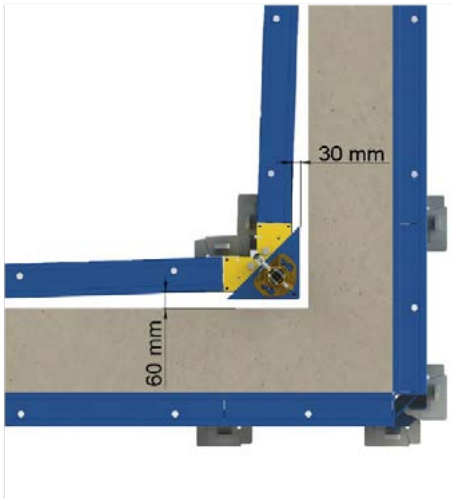


Conical on 1 side	Conical on both sides	Conical on 1 side
max. 4°	max. 2 x 4.5°	Form-tie system 15.0: **max. 1.9 cm** per 10 cm of wall thickness Form-tie system 20.0: **max. 1.0 cm** per 10 cm of wall thickness



STRIPPING CORNER

The Varimax stripping corner was specifically designed for use with shaft formwork. It enables the formwork to be closed and opened in accordance with accident protection regulations, i.e. without using the crane, simply by operating easy-to-turn spindles with a reinforcement rod or the convenient ratchet. It is then lifted and reset in one piece, thus saving crane-time. The Varimax stripping corner is also suitable for use on pilasters and as an inside corner on wall formwork.

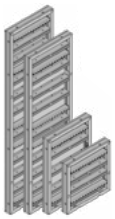


VARIMAX

Item		[kg]	Article nº
Standard panel Varimax	1.35x3.30m	260,40	11 104 000
	0.90x3.30m	183,33	11 108 000
	0.60x3.30m	127,05	11 110 000
	0.45x3.30m	101,85	11 112 000
	0.30x3.30m	80,85	11 114 000
	1.35x3.00m	236,25	11 204 000
	0.90x3.00m	166,70	11 208 000
	0.60x3.00m	114,45	11 210 000
	0.45x3.00m	97,65	11 212 000
	0.30x3.00m	76,65	11 214 000
	1.35x2.85m	231,00	11 304 000
	0.90x2.85m	161,70	11 308 000
	0.60x2.85m	123,59	11 310 000
	0.45x2.85m	95,78	11 312 000
	0.30x2.85m	74,26	11 314 000
	1.35x2.70m	221,00	11 404 000
	0.90x2.70m	143,82	11 408 000
	0.60x2.70m	105,63	11 410 000
	0.45x2.70m	86,42	11 412 000
	0.30x2.70m	63,19	11 414 000
	1.35x1.35m	108,36	11 504 000
	0.90x1.35m	88,04	11 508 000
	0.60x1.35m	56,62	11 510 000
	0.45x1.35m	46,40	11 512 000
	0.30x1.35m	36,24	11 514 000
	1.35x0.90m	54,00	11 604 000
	0.90x0.90m	43,87	11 608 000
	0.60x0.90m	36,90	11 610 000
	0.45x0.90m	30,20	11 612 000
	0.30x0.90m	23,60	11 614 000

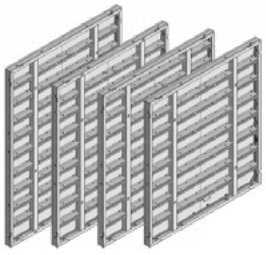
Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Versatile panel Varimax	1.35x3.30m	298,20	11 102 000
	1.35x3.00m	281,40	11 202 000
	1.35x2.85m	268,28	11 302 000
	1.35x2.70m	258,62	11 402 000
	1.35x1.35m	128,63	11 502 000
	1.35x0.90m	95,80	11 602 000
	0.90x3.30m	218,40	11 106 000
	0.90x3.00m	178,50	11 206 000
	0.90x2.85m	166,95	11 306 000
	0.90x2.70m	184,12	11 406 000
	0.90x1.35m	90,36	11 506 000
	0.90x0.90m	67,20	11 606 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Extra-large panel Varimax	2.40x3.30m	500,85	11 100 000
	2.40x3.00m	435,60	11 200 000
	2.40x2.85m	472,95	11 300 000
	2.40x2.70m	407,40	11 400 000
	2.40x1.35m	212,32	11 500 000

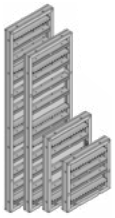


Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Item		[kg]	Article nº
Standard panel Varimax P	1.35x3.30m	276,41	15 104 000
	0.90x3.30m	180,34	15 108 000
	0.60x3.30m	132,47	15 110 000
	0.45x3.30m	110,27	15 112 000
	0.30x3.30m	88,10	15 114 000
	1.35x2.70m	235,20	15 404 000
	0.90x2.70m	141,54	15 408 000
	0.60x2.70m	109,62	15 410 000
	0.45x2.70m	93,56	15 412 000
	0.30x2.70m	68,85	15 414 000
	1.35x1.35m	115,03	15 504 000
	0.90x1.35m	91,35	15 508 000
	0.60x1.35m	65,53	15 510 000
	0.45x1.35m	50,24	15 512 000
	0.30x1.35m	39,49	15 514 000

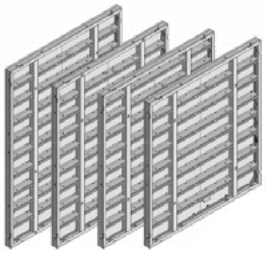
Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Versatile panel Varimax P	1.35x3.30m	324,20	15 102 000
	1.35x2.70m	196,35	15 402 000
	1.35x1.35m	139,84	15 502 000
	0.90x3.30m	208,68	15 106 000
	0.90x2.70m	184,12	15 406 000
	0.90x1.35m	94,74	15 506 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

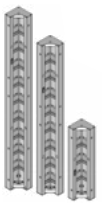
Extra-large panel Varimax P	2.40x3.30m	536,56	15 100 000
	2.40x2.70m	436,40	15 400 000
	2.40x1.35m	227,43	15 500 000
	2.70x3.30m	585,84	15 101 000
	2.70x2.70m	476,50	15 401 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

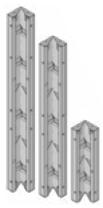
VARIMAX

Item		[kg]	Article nº
Internal angle Varimax	0.30x3.30m	121,80	11 710 000
	0.30x3.00m	114,17	11 720 000
	0.30x2.85m	108,47	11 730 000
	0.30x2.70m	103,49	11 740 000
	0.30x1.35m	51,90	11 750 000
	0.30x0.90m	36,07	11 760 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Joint angle internal Varimax	0.30x3.30m	141,23	11 712 000
	0.30x3.00m	129,15	11 722 000
	0.30x2.85m	120,44	11 732 000
	0.30x2.70m	116,55	11 742 000
	0.30x1.35m	61,36	11 752 000
	0.30x0.90m	41,16	11 762 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

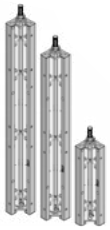
External angle Varimax	3.30m	60,69	11 714 000
	3.00m	54,50	11 724 000
	2.85m	51,98	11 734 000
	2.70m	49,35	11 744 000
	1.35m	24,26	11 754 000

Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Joint angle external Varimax	3.30m	64,68	11 716 000
	3.00m	58,83	11 726 000
	2.85m	54,08	11 736 000
	2.70m	52,88	11 746 000
	1.35m	27,25	11 756 000

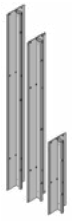
Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Item		[kg]	Article nº
Stripping corner Varimax	0.30x3.30m	207,90	11 718 000
	0.30x3.00m	190,30	11 728 000
	0.30x2.85m	176,20	11 738 000
	0.30x2.70m	168,70	11 748 000
	0.30x1.35m	97,65	11 758 000



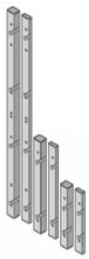
Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Expansion block Varimax	3.30m	68,69	11 810 000
	3.00m	62,30	11 820 000
	2.85m	59,33	11 830 000
	2.70m	57,77	11 840 000
	1.35m	28,10	11 850 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Steel closure plate Varimax	0.10x3.30m	40,10	11 812 000
	0.10x3.00m	36,45	11 822 000
	0.10x2.85m	34,60	11 832 000
	0.10x2.70m	32,80	11 842 000
	0.10x1.35m	16,40	11 852 000
	0.10x0.90m	11,39	11 862 000
	0.05x3.30m	29,80	11 814 000
	0.05x3.00m	27,12	11 824 000
	0.05x2.85m	25,80	11 834 000
	0.05x2.70m	24,40	11 844 000
	0.05x1.35m	12,23	11 854 000
	0.05x0.90m	8,40	11 864 000

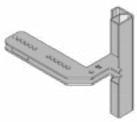


Options available:
xx xxx 000 - Powder coated
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Stripping spindle Varimax		3,71	11 942 100

Lifting hook LH-H-1t Varimax		10,34	11 924 000

VARIMAX

Item		[kg]	Article nº
Clamp device Varimax 		3,90	11 902 100
Adjustable clamp Varimax 		6,00	11 904 100
Guide plate 	0.90m 1.50m	11,35 18,85	11 912 000 11 914 000
Corner guide plate 	0.60x0.60m	14,04	11 916 000
Contact device 		1, 49	11 918 100
Stop-end tie Varimax 		1, 76	11 906 100
Connection screw 	10-16 10-25	0,63 0,79	11 908 100 11 910 100
Transition plate 	12/18 12/21 10/18 10/21	18,70 19,05 17,90 18,25	23 500 100 23 502 100 23 504 100 23 506 100

Item	[kg]	Article nº
Panel holder Varimax 	1,84	11 922 000
Wall bracket Varimax 	13,28	11 926 100
Guide rail clamp 	12,40	52 400 100
Supporting strut 340 	37,38	11 928 100
Supporting strut 540 	56,91	11 930 100

Item		[kg]	Article nº
Adjustable plumbing strut 			
Spindle head 		3,48	11 932 100
Spindle element without end-hinge 		36,62	11 934 000
Extension strut 3.70 m		78,75	11 936 000
Extension strut 2.40 m		54,13	11 938 000
Spindle element with end-hinge 		43,81	11 940 000
Superplate 	15 20	1,22 2,10	95 200 100 95 202 100
Star-shaped nut 	15	0,40	95 206 100
Hexagon nut 	15	0,37	95 208 100
Pressure plate 		0,86	95 210 100

Item		[kg]	Article nº
Tie holder Varimax 		1,30	11 920 000
Plastic tube 22 mm 	2.00m	0,36	99 100 400
Plastic cone 22 mm 		0,005	99 102 400
Tie rod 15.0 mm 	0.50m 0.75m 1.00m 1.25m 1.50m 1.75m 2.00m 2.25m 2.50m 2.75m 3.00m 6.00m	0,80 1,20 1.60 2,00 2,40 2,80 3,20 3,60 4,00 4,40 4,80 9,60	92 050 300 92 075 300 92 100 300 92 125 300 92 150 300 92 175 300 92 200 300 92 225 300 92 250 300 92 275 300 92 300 300 92 600 300
Tie rod 20.0 mm 	0.50m 0.75m 1.00m 1.25m 1.50m 1.75m 2.00m 2.25m 2.50m 2.75m 3.00m	1,20 1,80 2,40 3,00 3,60 4,20 4,80 5,40 6,00 6,60 7,20	93 050 300 93 075 300 93 100 300 93 125 300 93 150 300 93 175 300 93 200 300 93 225 300 93 250 300 93 275 300 93 300 300
Plug for anchoring holes Varimax 		0,008	11 990 400
Plug for versatile holes Varimax 		0,005	11 992 400

Framed formwork VARIMID

Tried and tested system designed for forming where use of a crane is limited.

The framed formwork Varimid by Variant is a complete system including accessories, which delivers perfect forming performance on construction sites with limited use of a crane. High load-bearing capacity and long service life of the Varimid system makes it an cost-effective solution.

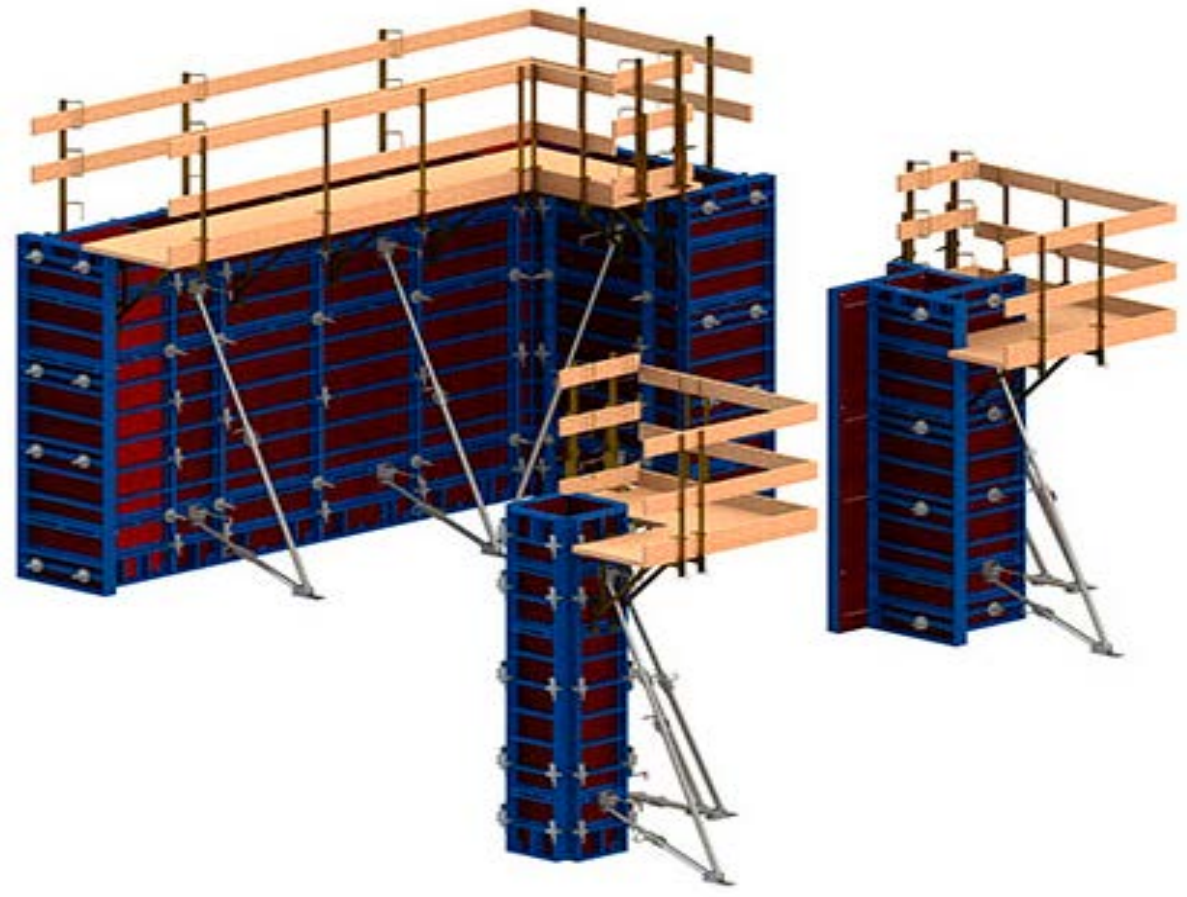
High load-bearing capacity:
• 60 kN/m^2 pressure of fresh concrete up to 3.00 m;
• Can be vertically stacked up to 6.00 m with use of one joint;
• High quality film faced plywood with thickness of 15 mm. Film weight 240 g/m^2.

Cost-effective:
• Manhandled formwork panels minimize use of a crane;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of restoration and cleaning possibilities;
• Galvanized or powder-coated steel frames, for long service life;
• High quality of concrete surface minimizes finishing work.

Easy handling and planning:
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• The ingeniously coordinated panel widths permit optimum adaptation to any structure.

Safe use
• Accessories such as — lifting hooks, wall brackets, supporting struts etc. make for save and easier handling of the system.

Areas of use of the Varimid system:
• Wall formwork;
• Column formwork;
• Foundation formwork.



VARIMID panels

The heights and widths of the Varimid panels result in a logical and advantageous increment-grid. Small amount of different panels' sizes makes planning easier and forming faster.

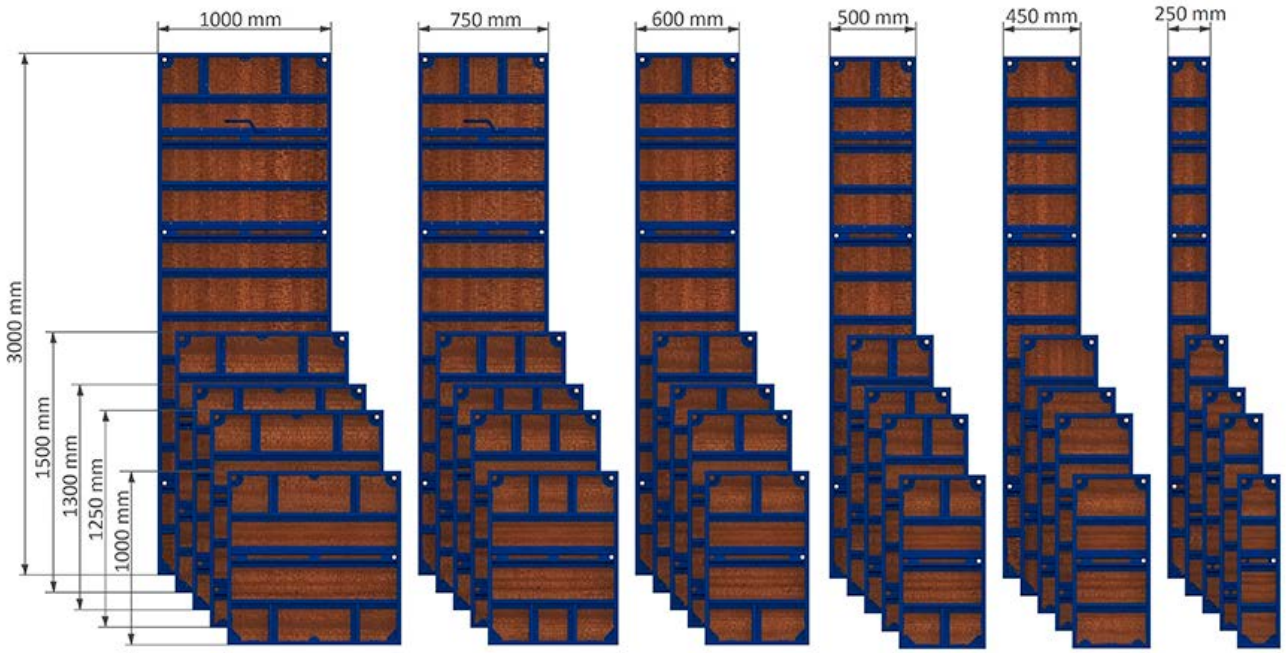
- 7 widths of panel
- 4 heights of panel

For any type and size of the panel two options of covering are available.

Galvanized

Powder-coated

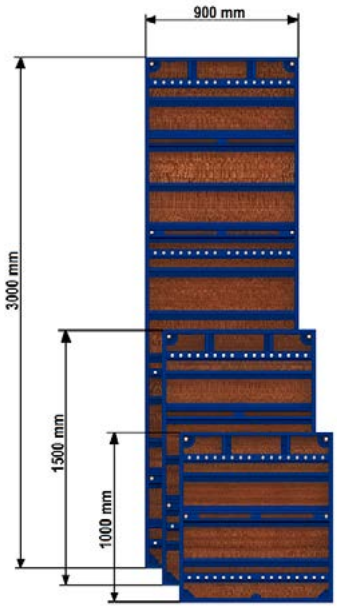
STANDARD PANELS



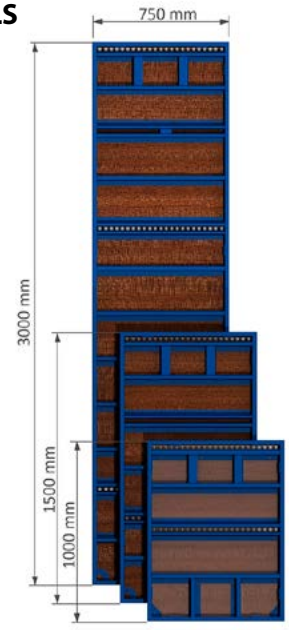
VERSATILE PANELS

The special hole pattern makes these panels particularly suitable for efficient forming of:

- Corners;
- Wall junctions;
- Stop-ends;
- Columns.

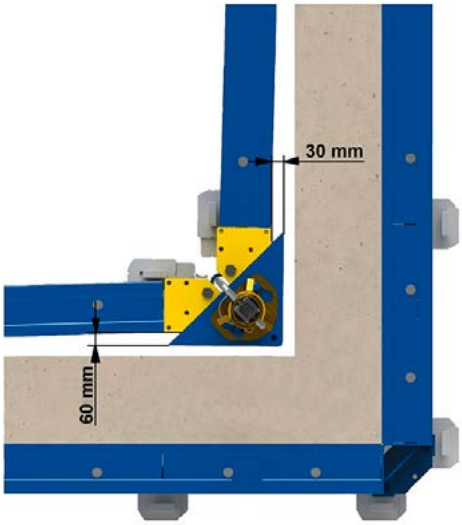


MODULE PANELS



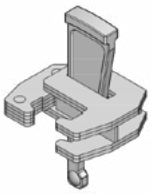
STRIPPING CORNER

The Varimid stripping corner was specifically designed for use with shaft formwork. It enables the formwork to be closed and opened in accordance with accident protection regulations, i.e. without using the crane, simply by operating easy-to-turn spindles with a reinforcement rod or the convenient ratchet. It is then lifted and reset in one piece, thus saving crane-time. The Varimid stripping corner is also suitable for use on pilasters and as an inside corner on wall formwork.



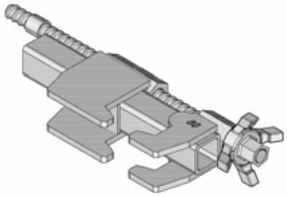
JOINING

Thanks to a continuous slot placed all along the panel's profile, the Varimid clamp device can be installed in any desired point, simply with a blow of the hammer. This makes assembly super-fast and no special tools required.



CLOSURES

Closures are intended to be used for places where formwork cannot be stroke easily. Filled with construction timber, tighten with use of an adjustable clamp device.



VARIMID

Item		[kg]	Article nº
Standard panel Varimid	1.00x3.00m	131,25	12 100 000
	0.75x3.00m	107,10	12 110 000
	0.60x3.00m	85,45	12 112 000
	0.50x3.00m	80,85	12 114 000
	0.45x3.00m	77,18	12 116 000
	0.25x3.00m	63,95	12 118 000
	1.00x1.50m	73,17	12 200 000
	0.75x1.50m	59,35	12 210 000
	0.60x1.50m	49,44	12 212 000
	0.50x1.50m	43,76	12 214 000
	0.45x1.50m	39,74	12 216 000
	0.25x1.50m	28,38	12 218 000
	1.00x1.00m	48,47	12 300 000
	0.75x1.00m	39,70	12 310 000
	0.60x1.00m	34,58	12 312 000
	0.50x1.00m	29,55	12 314 000
	0.45x1.00m	27,37	12 316 000
	0.25x1.00m	19,22	12 318 000

Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Versatile panel Varimid	0.90x3.00m-V	131,25	12 102 000
	0.75x3.00m-V	114,56	12 106 000
	0.90x1.50m-V	71,89	12 202 000
	0.75x1.50m-V	65,43	12 206 000
	0.90x1.00m-V	53,70	12 302 000
	0.75x1.00m-V	46,63	12 306 000

Options available: xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized; xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Stop-end panel Varimid	0.90x3.00m-E	131,53	12 104 000
	0.90x1.50m-E	71,88	12 204 000
	0.90x1.00m-E	53,69	12 304 000

Options available: xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized; xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Multipurpose panel Varimid	0.75x3.00m-M	116,87	12 108 000
	0.75x1.50m-M	65,52	12 208 000
	0.75x1.00m-M	45,15	12 308 000

Options available: xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized; xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

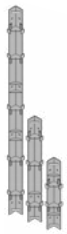
Item		[kg]	Article nº
Internal angle Varimid	0.25x3.00m	74,55	12 610 000
	0.25x1.50m	41,09	12 620 000
	0.25x1.00m	26,50	12 630 000

Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Joint angle Varimid	0.25x3.00m	99,75	12 612 000
	0.25x1.50m	48,71	12 622 000
	0.25x1.00m	34,86	12 632 000

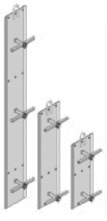
Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

External angle Varimid	3.00m	39,38	12 614 000
	1.50m	20,04	12 624 000
	1.00m	13,70	12 634 000



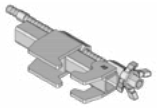
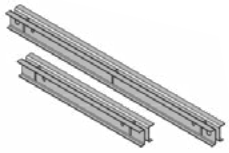
Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Expansion block Varimid	3.00m	54,14	12 700 000
	1.50m	28,60	12 702 000
	1.00m	20,80	12 704 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

VARIMID

Item		[kg]	Article nº
Lifting hook LH-H-0.5t Varimid		7,61	12 718 000
			
Clamp device Varimid		2,02	12 710 100
			
Adjustable clamp Varimid		4,95	12 712 100
			
Guide plate	0.90 m 1.50 m	11,35 18,85	11 912 000 11 914 000
			
Corner guide plate	0.60x0.60m	14,04	11 916 000
			
Contact device		1,49	11 918 100
			
Stop-end tie Varimid		1,31	12 714 100
			
Connection screw	10-16 10-25	0,63 0,79	11 908 100 11 910 100
			

Item	[kg]	Article nº
Wall bracket Varimid	12,92	12 720 000
		
Guide rail clamp	12,40	52 400 100
		
Supporting strut 250	22,94	12 722 100
		
Supporting strut 340	37,38	11 928 100
		
Supporting strut 540	36,91	11 930 100
		

VARIMID

Item		[kg]	Article nº
Superplate	15	1,22	95 200 100
			
Hexagon nut	15	0,37	95 208 100
			
Pressure plate		0,86	95 210 100
			
Plastic tube 22 mm	2.00m	0,36	99 100 400
			
Plastic cone	22	0,005	99 102 400
			
Tie rod 15.0 mm	0.50m	0,80	92 050 300
	0.75m	1,20	92 075 300
	1.00m	1,60	92 100 300
	1.25m	2,00	92 125 300
	1.50m	2,40	92 150 300
	1.75m	2,80	92 175 300
	2.00m	3,20	92 200 300
	2.25m	3,60	92 225 300
	2.50m	4,00	92 250 300
	2.75m	4,40	92 275 300
	3.00m	4,80	92 300 300
	6.00m	9,60	92 600 300
			
Clamp device Vari-right		2,69	12 724 100
			
Clamp device Vari-left		2,69	12 726 100
			

Item	[kg]	Article nº
Stacking angle Varimid	0,031	12 994 400
		
Stacking spacer Varimid	0,026	12 992 400
		
Plug for holes	0,003	12 990 400
		

VARIMID

Lightweight framed formwork VARIECO

Tried and tested crane-independent manhandled framed system for foundations, walls and columns.

The lightweight framed formwork Varieco by Variant is a complete system including accessories, which delivers perfect forming performance on construction sites without use of a crane. Sufficient load-bearing capacity and long service life of the Varieco system makes it an cost-effective solution.

Sufficient load-bearing capacity:
• 60 kN/m^2 pressure of fresh concrete up to 3.00 m;
• 40 kN/m^2 pressure of fresh concrete up to 4.50 m;
• Can be vertically stacked up to 4.50 m with use of one joint;
• High quality film faced plywood with thickness of 15 mm. Film weight 240 g/m^2.

Cost-effective:
• Manhandled formwork panels minimize use of a crane;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of restoration and cleaning possibilities;
• Galvanized or powder-coated steel frames, for long service life;
• High quality of concrete surface minimizes finishing work.

Easy handling and planning:
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• The ingeniously coordinated panel widths permit optimum adaptation to any structure.

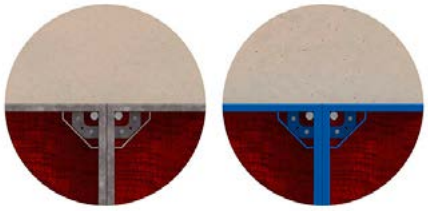
Safe use:
• Accessories such as - supporting struts, wall brackets etc. make for save and easier handling of the system.

Areas of use of the Varieco system:
• Wall formwork;
• Column formwork;
• Foundation formwork.

The heights and widths of the Varieco panels result in a logical and advantageous increment-grid. Small amount of different panels' sizes makes planning easier and forming faster.

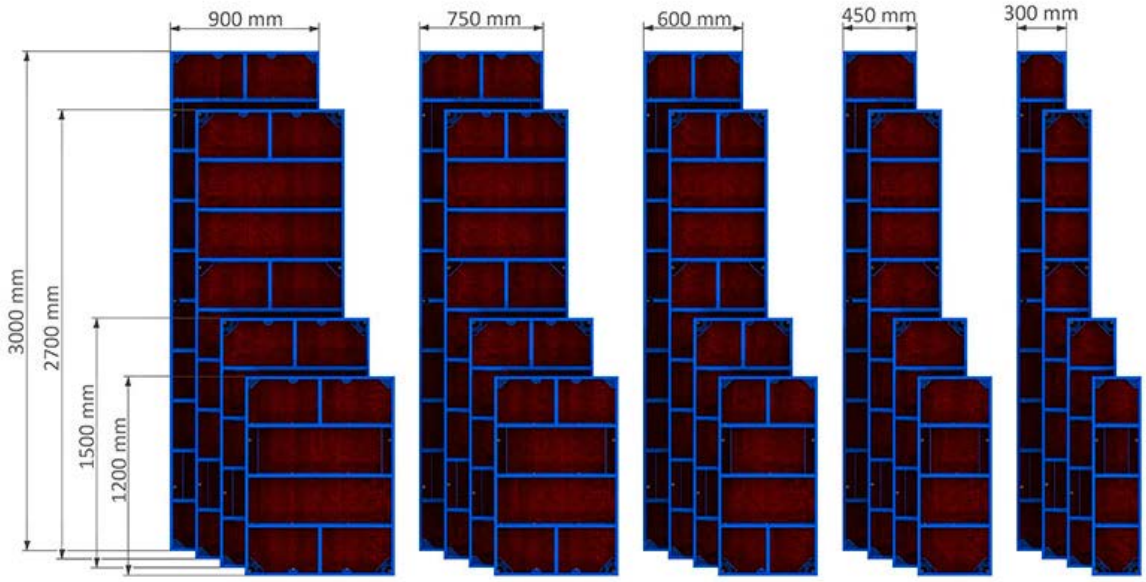
- 5 widths of panel
- 4 heights of panel

For any type and size of the panel two options of covering are available.



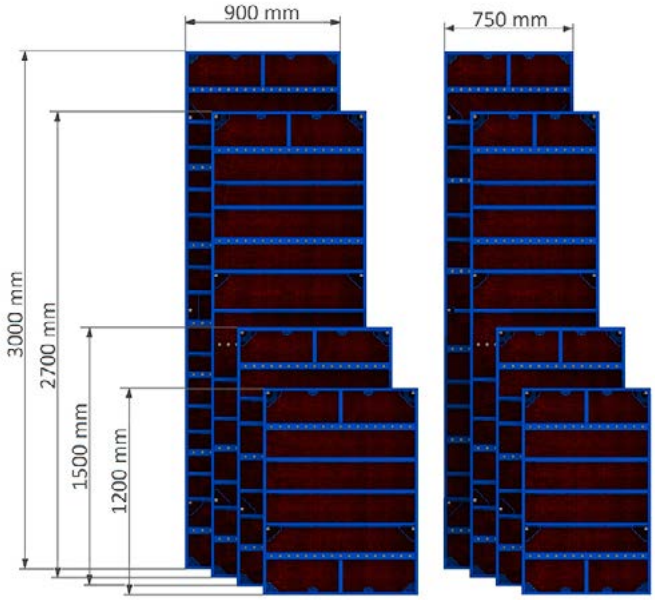
Galvanized Powder-coated

STANDARD PANELS



VERSATILE PANELS

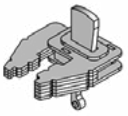
The special hole pattern makes these panels particularly suitable for efficient forming of:
- Corners;
- Wall junctions;
- Stop-ends;
- Columns.

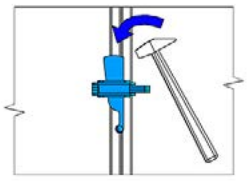


VARIECO panel connection

JOINING

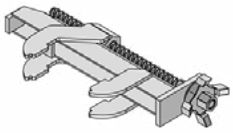
Thanks to a continuous slot placed all along the panel's profile, the Varieco clamp device can be installed in any desired point, simply with a blow of the hammer. This makes assembly super-fast and no special tools required.

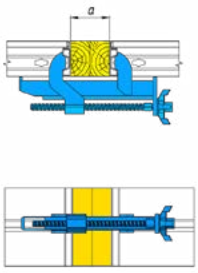




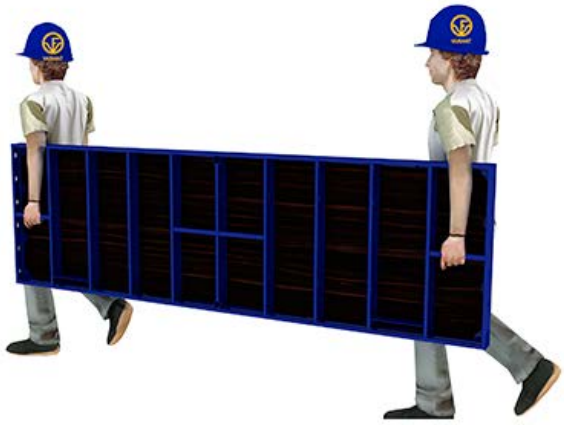
CLOSURES

Closures are intended to be used for places where formwork cannot be stroke easily. Filled with construction timber, tighten with use of an adjustable clamp device.



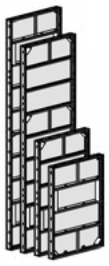


a... max. 15 cm



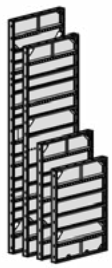
VARIECO

Item		[kg]	Article nº
Standard panel Varieco	0.90x3.00m	85,58	16 102 000
	0.75x3.00m	75,39	16 106 000
	0.60x3.00m	65,10	16 108 000
	0.45x3.00m	53,66	16 110 000
	0.30x3.00m	43,47	16 112 000
	0.90x2.70m	77,18	16 202 000
	0.75x2.70m	67,94	16 206 000
	0.60x2.70m	58,59	16 208 000
	0.45x2.70m	48,41	16 210 000
	0.30x2.70m	39,17	16 212 000
	0.90x1.50m	45,68	16 302 000
	0.75x1.50m	40,32	16 306 000
	0.60x1.50m	34,86	16 308 000
	0.45x1.50m	28,46	16 310 000
	0.30x1.50m	23,10	16 312 000
	0.90x1.20m	37,59	16 402 000
	0.75x1.20m	33,18	16 406 000
	0.60x1.20m	28,67	16 408 000
	0.45x1.20m	23,52	16 410 000
	0.30x1.20m	19,11	16 412 000



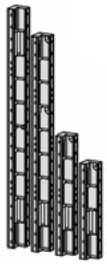
Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Versatile panel Varieco	0.90x3.00m	117,42	16 100 000
	0.75x3.00m	95,24	16 104 000
	0.90x2.70m	98,18	16 200 000
	0.75x2.70m	85,47	16 204 000
	0.90x1.50m	57,65	16 300 000
	0.75x1.50m	50,19	16 304 000
	0.90x1.20m	44,73	16 400 000
	0.75x1.20m	38,96	16 404 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Internal angle Varieco	0.20x3.00m	61,43	16 610 000
	0.20x2.70m	54,93	16 620 000
	0.20x1.50m	32,16	16 630 000
	0.20x1.20m	26,62	16 640 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

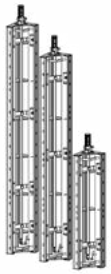
Item		[kg]	Article nº
External angle Varieco	3.00m	20,80	16 614 000
	2.70m	19,02	16 624 000
	1.50m	10,35	16 634 000
	1.20m	8,68	16 644 000

Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Joint angle Varieco	0.20x1.50m	39,94	16 632 000
	0.20x1.20m	33,04	16 642 000

Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Stripping corner Varieco	0.30x3.00m	151,83	16 616 000
	0.30x2.70m	135,14	16 626 000
	0.30x1.50m	82,01	16 636 000

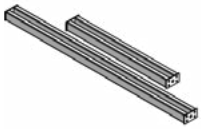
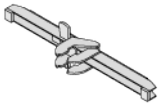
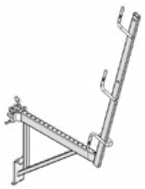


Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Clamp device Varieco		1,47	16 902 100

Adjustable clamp Varieco		3,79	16 904 100

VARIECO

Item		[kg]	Article nº
Profile connector 5-18 Varieco 		0,80	16 906 100
Connection screw 5-12 Varieco 		0,48	16 908 100
Guide plate Varieco 	0.70m 1.25m	4,20 6,98	16 910 000 16 912 000
Contact device Varieco 		1,20	16 914 100
Clip Varieco 		0,30	16 916 100
Aligning clamp Varieco 		3,26	16 918 100
Profile adapter Varieco to Varimax 		0,62	16 920 100
Lifting hook LH-SL-0.5t Varieco 		7,67	16 950 000
Wall bracket Varieco 		8,73	16 960 100

Item		[kg]	Article nº
Supporting strut 260 Varieco 		16,62	16 970 100
Supporting strut 340 Varieco 		33,50	16 972 100
Strut connection profile Varieco 		11,03	16 922 000
Superplate 	15	1,22	95 200 100
Plastic tube 22 mm 	2.00m	0,36	99 100 400
Plastic cone 	22	0,005	99 102 400
Tie rod 15.0 mm 	0.50m 0.75m 1.00m 1.25m 1.50m 1.75m 2.00m	0,80 1,20 1,60 2,00 2,40 2,80 3,20	92 050 300 92 075 300 92 100 300 92 125 300 92 150 300 92 175 300 92 200 300

VARIANT

QUALITY IS BASIS OF SAFETY

Super-lightweight framed formwork HANDI

The universal super-lightweight formwork for working without crane.

Handi is a lightweight framed formwork system, which has been specially designed for quick and cost-saving construction. Thanks to its lightweight panels the forming process is effectively implemented by hand. Consequently, the Handi system suits best for forming of foundations, small aboveground and underground concreting work in projects with limited use of crane or without it and with difficulties in use of heavy framed formwork systems (e.g. Varimax system). In addition, it has made a good use in small projects such as villas, private houses, living compounds etc.

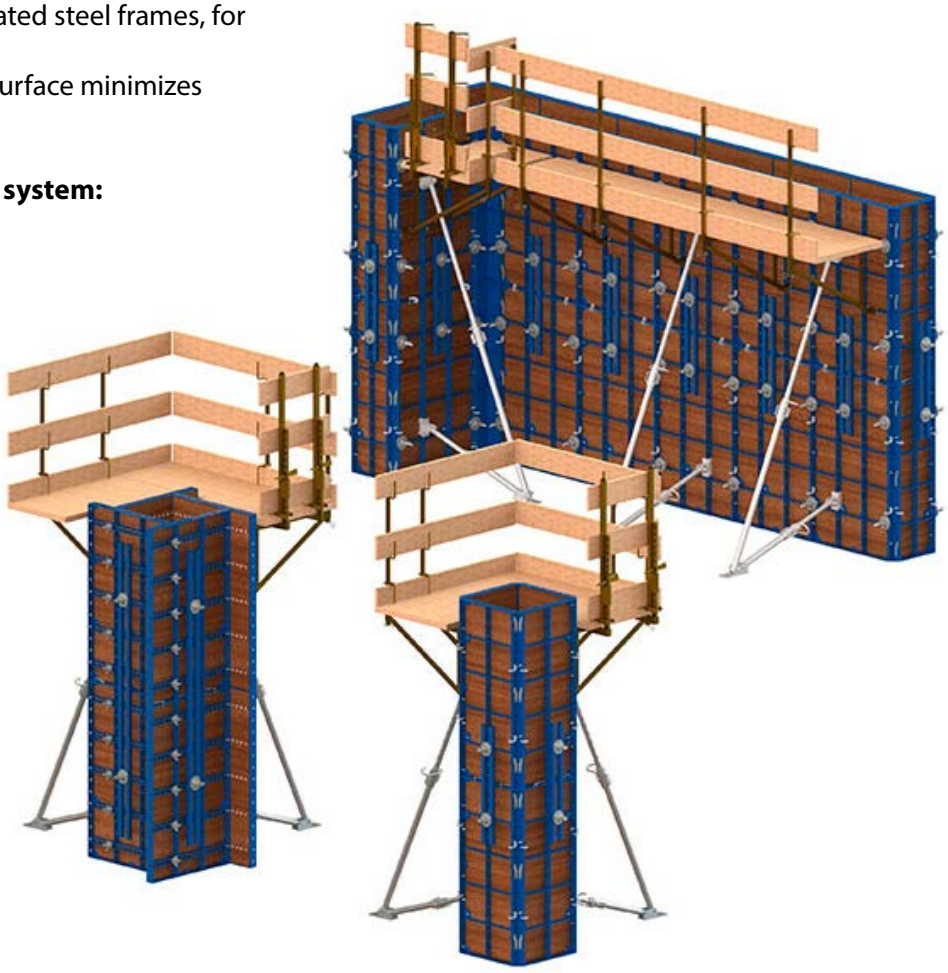
Load-bearing capacity:
• 35 kN/m^2 pressure of fresh concrete;
• High quality film faced plywood with thickness of 15 mm. Film weight 240 g/m^2.

Cost-effective:
• Universal application of the Handi system will give you an opportunity to use one system for variety of different tasks;
• Reduction of expenses due to minimization of crane usage;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of restoration and cleaning possibilities;
• Galvanized or powder-coated steel frames, for long service life;
• High quality of concrete surface minimizes finishing work.

Areas of use of the Handi system:
• Wall formwork;
• Column formwork;
• Foundation formwork.

Easy to use:
• Having a grid of standard panel sizes provides much easier planning and forming;
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• Ergonomic of the system ensures fast and save assembly.

Safe use:
• Accessories such as — lifting hooks, wall brackets, supporting struts etc. make for save and easier handling of the system.



HANDI panels

The heights and widths of the Handi panels result in a logical and advantageous increment-grid. Small amount of different panels sizes makes planning easier and forming faster.

- 7 widths of panel
- 3 heights of panel

For any type and size of the panel two options of covering are available.

Galvanized

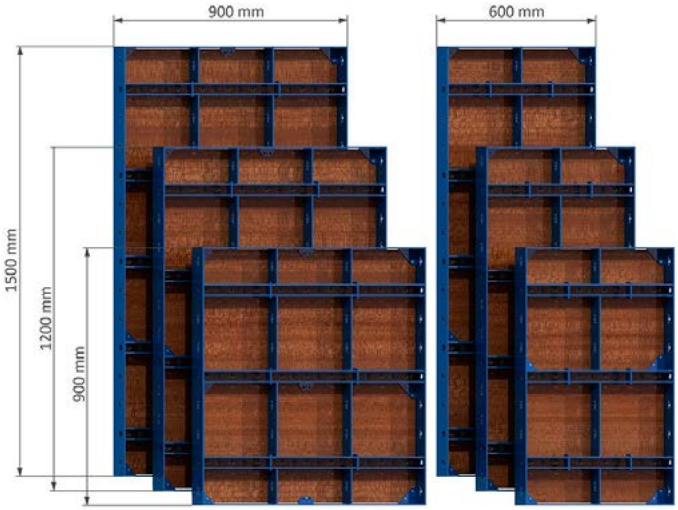
Powder-coated

STANDARD PANELS

VERSATILE PANELS

The special hole pattern makes these panels particularly suitable for efficient forming of:

- Corners;
- Wall junctions;
- Columns.



CLIP

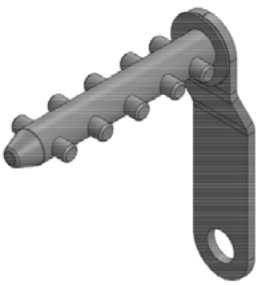
For Handi panels connection use binding clip. Install the clip into the slot and turn it 90°- elements are firmly connected.

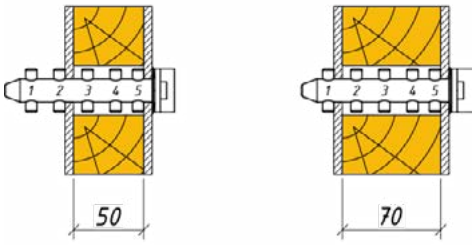
BINDING CLIP

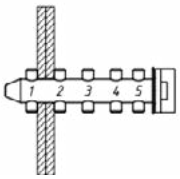
For Handi panes connection binding clips can also be used.

5-PIN CLAMP FOR COMPENSATION OF LINEAR EXTENSIONS

In case of compensation of linear extensions (1-5 cm; 7 cm) between the panels connect panels with 5-pin clamp. Installation of the 5-pin clamp is identical to the installation of the clip.

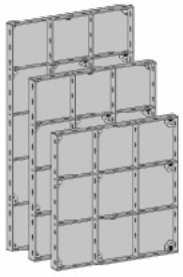






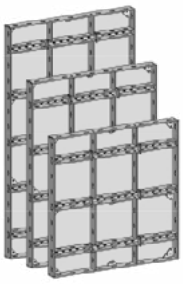
HANDI

Item		[kg]	Article nº
Standard panel Handi	0.90x1.50m	54,10	13 112 000
	0.60x1.50m	37,95	13 116 000
	0.50x1.50m	34,15	13 118 000
	0.40x1.50m	30,35	13 120 000
	0.30x1.50m	22,48	13 122 000
	0.25x1.50m	20,32	13 124 000
	0.20x1.50m	18,51	13 126 000
	0.15x1.50m	16,57	13 128 000
	0.90x1.20m	44,17	13 212 000
	0.60x1.20m	30,96	13 216 000
	0.50x1.20m	27,72	13 218 000
	0.40x1.20m	24,60	13 220 000
	0.30x1.20m	18,24	13 222 000
	0.25x1.20m	16,52	13 224 000
	0.20x1.20m	15,00	13 226 000
	0.15x1.20m	13,44	13 228 000
	0.90x0.90m	34,59	13 312 000
	0.60x0.90m	23,98	13 316 000
	0.50x0.90m	21,79	13 318 000
	0.40x0.90m	19,02	13 320 000
	0.30x0.90m	14,23	13 322 000
	0.25x0.90m	12,78	13 324 000
	0.20x0.90m	11,62	13 326 000
	0.15x0.90m	10,37	13 328 000



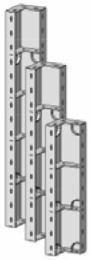
Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Versatile panel Handi	0.90x1.50m-V	64,65	13 110 000
	0.60x1.50m-V	45,59	13 114 000
	0.90x1.20m-V	52,51	13 210 000
	0.60x1.20m-V	36,93	13 214 000
	0.90x0.90m-V	41,04	13 310 000
	0.60x0.90m-V	28,77	13 314 000



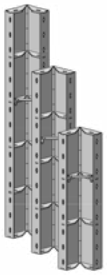
Options available:
xx xxx 000 - Powder coated;
xx xxx 100 - Galvanized;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Internal angle Handi	0.20x1.50m	35,64	13 410 000
	0.20x1.50m	28,71	13 420 000
	0.20x0.90m	21,07	13 430 000



Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

Item		[kg]	Article nº
Joint angle Handi	0.20x1.50m	38,06	13 412 000
	0.20x1.20m	29,19	13 422 000
	0.20x0.90m	22,17	13 432 000

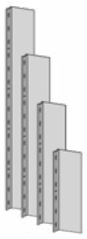


Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

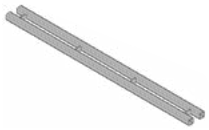
External angle Handi	1.50m	10,50	13 414 000
	1.20m	8,42	13 424 000
	0.90m	6,34	13 434 000
	0.60m	4,27	13 444 000

Options available:
xx xxx 000 - Powder coated;
xx xxx 200 - Hot dip galvanized;
Custom size on inquiry

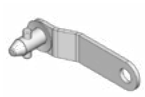
Expansion block Handi	1.50m	14,93	13 610 000
	1.20m	11,95	13 620 000
	0.90m	9,07	13 630 000
	0.60m	5,96	13 640 000

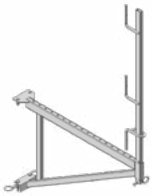


Waling Handi	0.50m	4,67	13 505 000
	1.00m	9,37	13 510 000
	1.50m	13,86	13 515 000
	2.00m	18,46	13 520 000
	2.50m	23,05	13 525 000
	3.00m	27,57	13 530 000

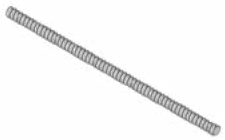


Lifting hook Handi		2,89	13 706 100

Item		[kg]	Article nº
Clip Handi 		0,18	13 710 100
5-pin clamp Handi 		0,27	13 712 100
Binding clip Handi 		0,27	13 714 100
Tension screw Handi 		0,36	13 708 100
Connection screw 	5-10	0,42	13 718 100
Stop-end plate Handi 	6x75x750mm	2,48	13 716 000
Foundation clamp Handi 		1,64	13 722 100
Perforated tape 50x2 mm 	1.00m 1.50m 2.00m 2.50m 3.00m	0,68 1,02 1,36 1,70 2,04	96 110 300 96 115 300 96 120 300 96 125 300 96 130 300

Item		[kg]	Article nº
Wall bracket Handi 		11,98	13 700 100
Guide rail clamp 		12,40	52 400 100
Supporting strut 250 Handi 		22,94	13 702 100
Supporting strut 340 Handi 		33,29	13 704 100
Superplate 	15	1,22	95 200 100
Star-shaped nut 	15	0,40	95 206 100

HANDI

Item		[kg]	Article nº
Washer 		0,10	13 720 100
Plastic tube 22 mm 	2.00m	0,36	99 100 400
Plastic cone 22 mm 		0,005	99 102 400
Tie rod 15.0 mm 	0.50m	0,80	92 050 300
	0.75m	1,20	92 075 300
	1.00m	1,60	92 100 300
	1.25m	2,00	92 125 300
	1.50m	2,40	92 150 300
	1.75m	2,80	92 175 300
	2.00m	3,20	92 200 300
	2.25m	3,60	92 225 300
	2.50m	4,00	92 250 300
	2.75m	4,40	92 275 300
	3.00m	4,80	92 300 300
Handle Handi 		0,84	13 724 100
Stacking angle Handi 		0,03	13 990 400
Plug for holes 		0,003	12 990 400

Item	[kg]	Article nº

Variant your best partner in construction formwork

variant-factory.eu

Large-area formwork VERTEX 60

Practically and economically useful system for large-area walls forming.

Easily adaptable system, which solves all requirements for architectural concrete design. Vertex 60 means applications in different type of projects and construction sites. Starting from simple straight walls, complicated column cross-section through residential and high-rise construction up to bridges construction. Also it can be used as formwork shutters for single sided or climbing systems. The standard components of the system such as steel walings, H20 beams and flange clamps can be assembled in formwork and customized for a particular project.

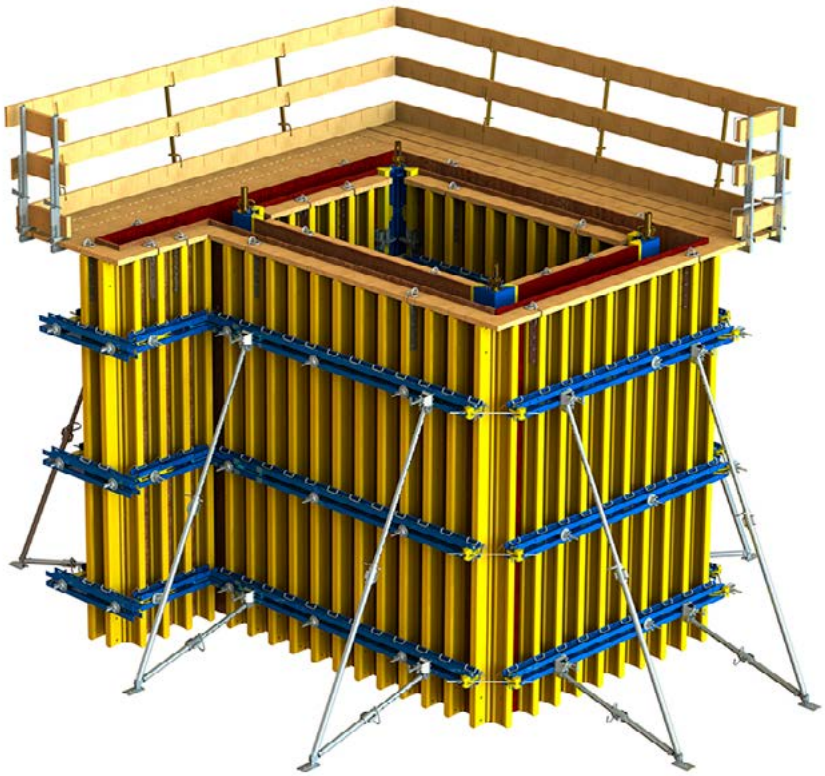
Adaptable load-bearing capacity:
• Due to its adaptability Vertex 60 can be assembled and customized to withstand almost any pressure of fresh concrete (recommended range is from 30 up to 70 kN/m^2);
• The most cost-efficient in terms of formwork price and pace of forming is 40 kN/m^2 of permitted pressure of fresh concrete.

Cost-effective:
• Large-areas of concrete surface can be easily cast;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability;
• High quality of concrete surface minimizes finishing work;
• Project-specific adaptation possible, as it can be faced with any type of form-ply.

Easy handling and planning:
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• Load-bearing capacity of the system can be adjusted by means of H20 beams and steel walings;
• Any requirements for architectural concrete design can be met, due to the system adaptability.

Safe use:
• Accessories such as — lifting hooks, wall brackets, supporting struts etc. make for save and easier handling of the system.

Areas of use of the Vertex 60 system:
• Large area wall formwork;
• Column formwork;
• For single sided system;
• Bridges construction;
• For climbing system.



VERTEX 60 panels

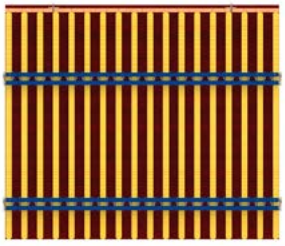
SIZES

The size of a panel which is going to be assembled depends on:

- Length of steel waling used—determines possible width of the Vertex 60 panel.
Variant provides wide range of waling starting from 0.5 m up to 6.0 m in a 250 mm grid.
- Length of H20 beams—determines possible height of the Vertex 60 panel.
Variant provides wide range of H20 beams starting from 1.25 m up to 5.9 m.

Consequently the smallest panel possible is 0.5 m in width and 1.25 m in height the biggest 6.0 m in width by 6.0 m in height.

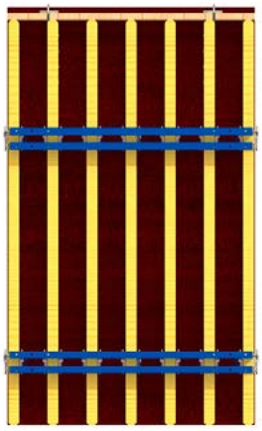
Vertex 60 elements can be assembled **in heights of up to 6.0 m.**



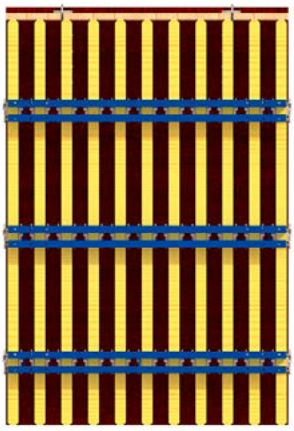
Vertex 60 elements can be assembled **in width of up to 6.0 m.**

LOAD-BEARING ADAPTABILITY

Depending on the concrete pressure required, the Variant H20 beams and the walings are spaced closer together or further apart. This ensures optimum formwork design and great economy of materials. For more information on structural design of Vertex 60 elements, see "User manual"



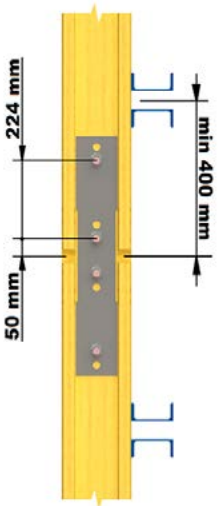
e.g. concrete pressure **30 kN/m²**



e.g. concrete pressure **70 kN/m²**

STACKING

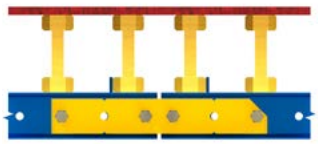
Vertex 60 panels can be assembled in a gang-form by means of vertical staking. A panel connection using stacking plate has sufficient flexural stiffness to allow panel units up to 12 m height to be lifted in one piece.



Maximum height of a gang-form **up to 12 m height.**

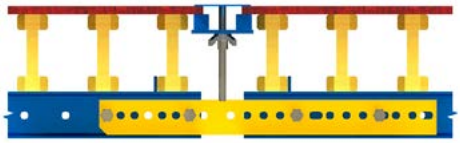
VERTEX 60 inter-panel connection

JOINING WITH USE OF THE CONNECTING PLATE
For standard inter-panel connection the connecting plate and four pins with spring cotters are required.



JOINING WITH USE OF THE ADJUSTABLE CONNECTING PLATE AND JOINT PLATE

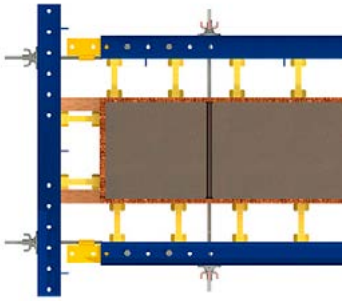
In case when you have space between panels adjustable connecting plate with pins and spring cotters are used. For easier stripping joint plate is required.



VERTEX 60 stop-end and corners forming

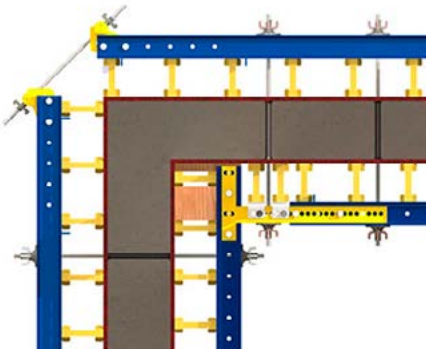
STOP-END FORMING

The Vertex 60 is a complete formwork system. As such, it offers practical solutions for e.g. the stop-end formwork. The tie rods are screwed into the Anchoring plate, and the correct spacing of the stop-end element is adjusted using the Superplate 15.

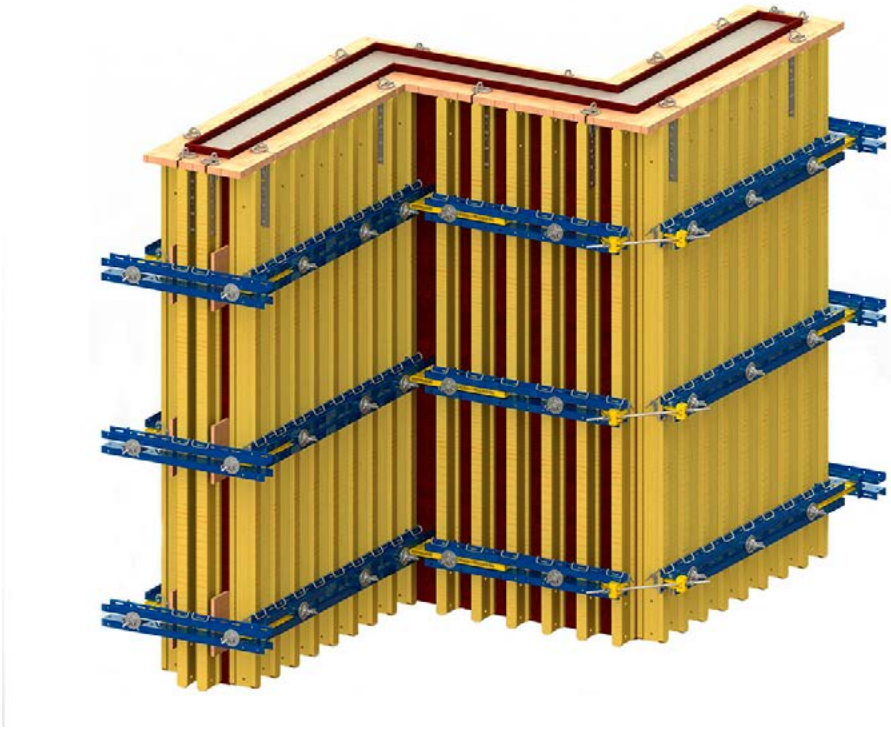


CORNERS

By nailing a form-ply to the end face of standard elements, these are turned into corner elements. The concrete pressure on the end face is transferred by means of reinforcements on the edge beam.



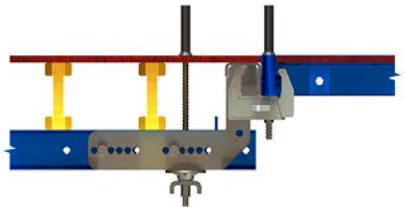
VERTEX 60 stop-end and corners forming



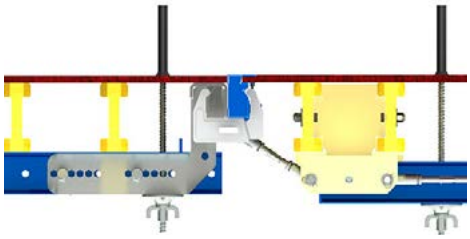
COMBINING WITH DIFFERENT FORMWORK SYSTEMS

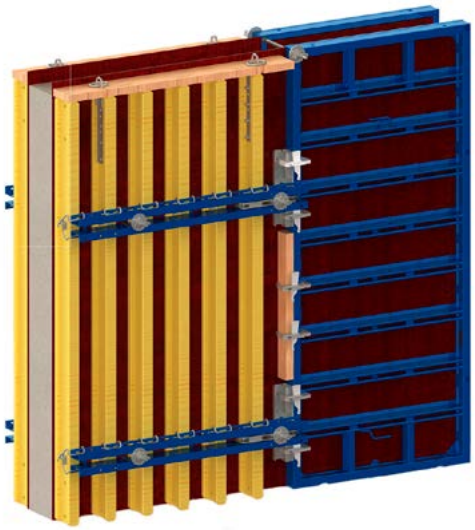
Vertex 60 timber-beam formwork can be combined with the following formwork systems:

- Varimax framed formwork

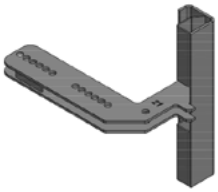


- Ringform circular formwork



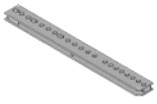


The Transition plate 18 mm or 21 mm is required for these combinations.

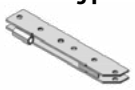


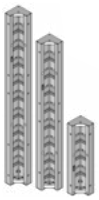
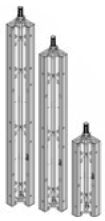
VERTEX 60

Item		[kg]	Article nº
Waling 12 	0.50m	10,92	21 050 000
	0.75m	15,96	21 075 000
	1.00m	21,00	21 100 000
	1.25m	26,25	21 125 000
	1.50m	31,82	21 150 000
	1.75m	37,07	21 175 000
	2.00m	42,32	21 200 000
	2.25m	47,46	21 225 000
	2.50m	52,71	21 250 000
	2.75m	58,28	21 275 000
	3.00m	63,53	21 300 000
	3.25m	69,00	21 325 000
	3.50m	75,33	21 350 000
	3.75m	80,21	21 375 000
	4.00m	85,47	21 400 000
	4.50m	95,99	21 450 000
	5.00m	106,37	21 500 000
	6.00m	128,63	21 600 000
Waling 10 	0.50m	10,92	22 050 000
	0.75m	16,17	22 075 000
	1.00m	21,42	22 100 000
	1.25m	26,67	22 125 000
	1.50m	32,45	22 150 000
	1.75m	37,70	22 175 000
	2.00m	41,00	22 200 000
	2.25m	48,30	22 225 000
	2.50m	53,55	22 250 000
	2.75m	59,22	22 275 000
	3.00m	64,48	22 300 000
	3.25m	70,04	22 325 000
	3.50m	76,34	22 350 000
	3.75m	81,27	22 375 000
	4.00m	86,94	22 400 000
Joint plate Vertex 	3.00m	42,85	23 104 000
	4.00m	55,35	23 106 000
Stripping plate Vertex 	3.00m	71,93	23 108 000
	4.00m	79,80	23 110 000
Corner waling Vertex 	10	24,17	23 102 000
	12	23,81	23 100 000

Item		[kg]	Article nº
Lifting hook Vertex 		6,41	23 200 100
Stacking plate Vertex 		8,82	23 202 100
Flange clamp Vertex 		1,16	23 300 100
Beam screw 	60	0,07	23 302 100
	110	0,09	23 304 100
Beam screw Vertex W 		0,24	23 306 100
Beam clamp Vertex 	12	1,38	23 308 100
	10	1,27	23 310 100
Connecting pin 		0,39	23 400 100
Spring cotter 		0,05	23 402 100
Connecting plate Vertex 		6,47	23 404 000
Adjustable connecting plate Vertex 		9,69	23 406 000

VERTEX 60

Item		[kg]	Article nº
Anchoring plate Vertex 		7,17	23 408 100
Half splice plate Vertex 		5,64	23 410 000
Shaft corner plate Vertex 		11,87	23 412 000
Column corner plate Vertex 		13,34	23 414 000
Shaft waling squaring plate 		9,18	23 416 000
Corner tie bracket Vertex 		4,46	23 418 000
Corner hinge plate Vertex 		18,43	23 420 100
Corner spindle Vertex 		20,10	23 422 100
Transition plate 	12/18 12/21 10/18 10/21	18,70 19,05 17,90 18,25	23 500 100 23 502 100 23 504 100 23 506 100

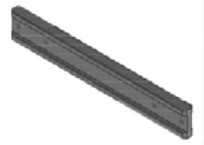
Item		[kg]	Article nº
Clamp device Varimax 		3,90	11 902 100
Adjustable clamp Varimax 		6,00	11 904 100
Internal angle Varimax  Options available: xx xxx 000 - Powder coated; xx xxx 200 - Hot dip galvanized; Custom size on inquiry	0.30x3.30m 0.30x3.00m 0.30x2.85m 0.30x2.70m 0.30x1.35m	121,80 98,70 108,47 103,49 51,90	11 710 000 11 720 000 11 730 000 11 740 000 11 750 000
Joint angle internal Varimax  Options available: xx xxx 000 - Powder coated; xx xxx 200 - Hot dip galvanized; Custom size on inquiry	0.30x3.30m 0.30x3.00m 0.30x2.85m 0.30x2.70m 0.30x1.35m	141,23 129,15 120,44 116,55 61,36	11 712 000 11 712 000 11 732 000 11 742 000 11 752 000
Stripping corner Varimax  Options available: xx xxx 000 - Powder coated; xx xxx 200 - Hot dip galvanized; Custom size on inquiry	0.30x3.30m 0.30x3.00m 0.30x2.85m 0.30x2.70m 0.30x1.35m	207,90 190,30 176,20 168,70 97,65	11 718 000 11 728 000 11 738 000 11 748 000 11 758 000
Stripping spindle Varimax 		3,71	11 942 100

VERTEX 60

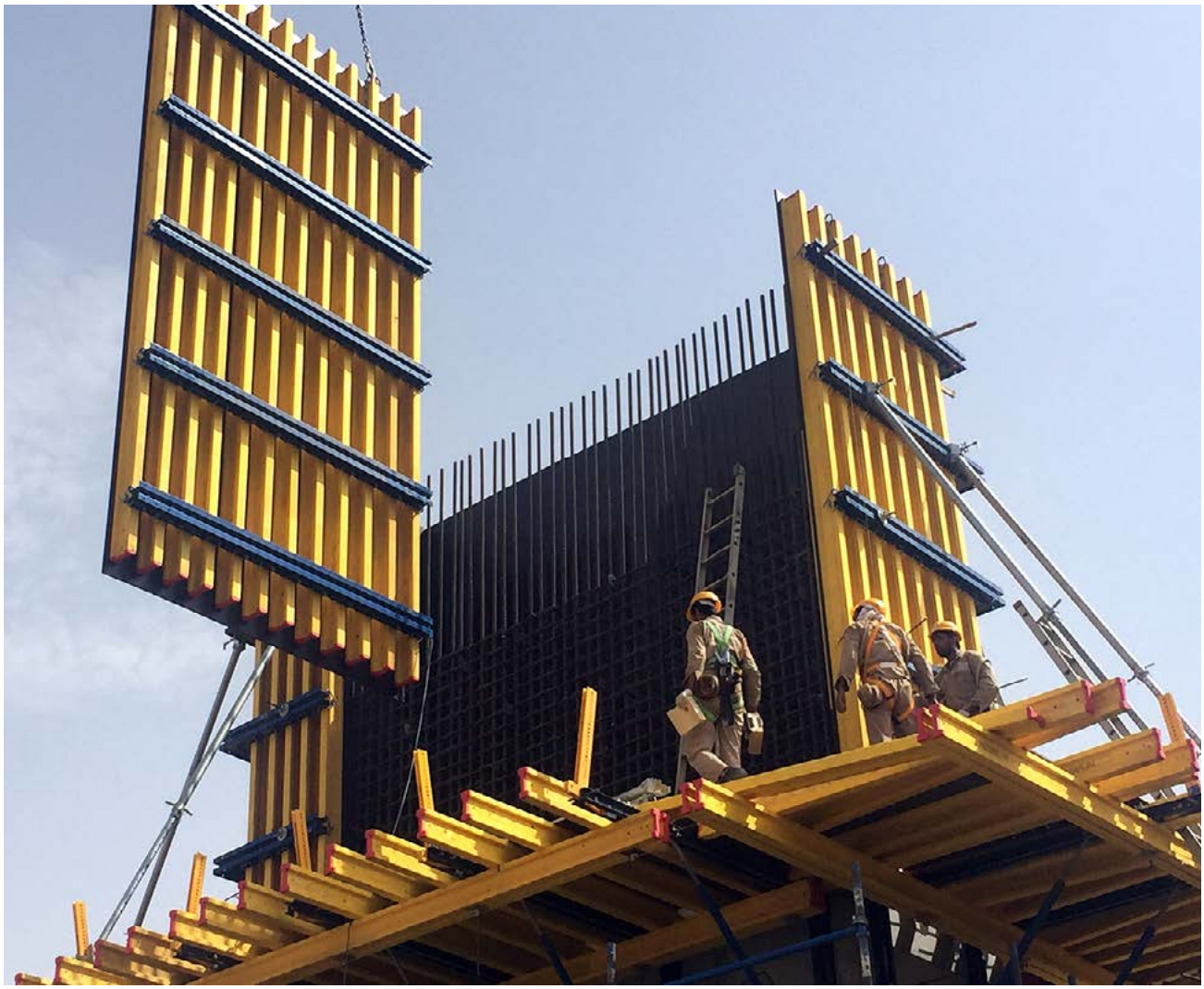
Item		[kg]	Article nº
Wall bracket H20 		11,46	23 700 100
Guide rail clamp 		12,40	52 400 100
Handrail post 		12,85	52 402 100
Spindle strut T7 	1.26-1.89m 1.42-2.05m 1.92-2.55m 2.42-3.05m 2.97-3.60m	23,26 24,29 27,56 33,41 36,89	23 800 100 23 802 100 23 804 100 23 806 100 23 808 100
Supporting strut 340 		37,38	11 928 100
Supporting strut 540 		56,91	11 930 100

Item		[kg]	Article nº
Adjustable plumbing strut 			
Spindle head 		3,48	11 932 100
Spindle element without end-hinge 		36,62	11 934 000
Extension strut 3.70 m		78,75	11 936 000
Extension strut 2.40 m		54,13	11 938 000
Spindle element with end-hinge 		43,81	11 940 000
Rafter plates 	right left	0,09 0,09	52 306 100 52 308 100
Superplate 	15	1,22	95 200 100
Wing nut 	15	0,38	95 204 100
Star-shaped nut 	15	0,40	95 206 100
Plastic tube 	2.00m	0,36	99 100 400

VERTEX 60

Item		[kg]	Article nº
Plastic cone 22 mm 		0,005	99 102 400
Tie rod 15.0 mm 	0.50m	0,80	92 050 300
	0.75m	1,20	92 075 300
	1.00m	1,60	92 100 300
	1.25m	2,00	92 125 300
	1.50m	2,40	92 150 300
	1.75m	2,80	92 175 300
	2.00m	3,20	92 200 300
	2.25m	3,60	92 225 300
	2.50m	4,00	92 250 300
	2.75m	4,40	92 275 300
	3.00m	4,80	92 300 300
	6.00m	14,40	92 600 300
H20 beam 	1.45m	7,25	91 145 500
	1.80m	9,00	91 180 500
	1.95m	9,75	91 195 500
	2.15m	10,75	91 215 500
	2.45m	12,25	91 245 500
	2.65m	13,25	91 265 500
	2.90m	14,50	91 290 500
	3.30m	16,50	91 330 500
	3.60m	18,00	91 360 500
	3.90m	19,50	91 390 500
	4.50m	22,50	91 450 500
	4.90m	24,50	91 490 500
	5.90m	29,50	91 590 500

Item	[kg]	Article nº



Adjustable circular formwork RINGFORM

Circular formwork for curved walls forming with infinite range of radii starting from 3.5 m.

The circular formwork Ringform by Variant is a practical system for forming of smooth and curved walls. Only 6 types of elements are used: 3 sizes in height 1.2 / 2.4 / 3.0 m and 2 widths, 2.4 m for inner part of the wall and 2.5 m for outer. The required radius is easily achieved by using adjustable spindles.

Load-bearing capacity:
• 50 kN/m^2 permitted pressure of fresh concrete;
• High quality film faced plywood with thickness of 21 mm. Film weight 240 g/m^2.

Easy to use
• Having only 6 standard panel provides much easier planning and forming;
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• No need for extra holes in plywood. The same anchor hole's used throughout a project;
• Can be easily connected to the framed formwork Varimax;
• Radii can be continuously adjusted from a radius of 3.5 m upward, simply by turning spindles.

Cost-effective
• The system elements are pre-assembled and are ready for use simply by setting the desired radius with the adjusting spindles;
• Installation of pre-assembled units minimizes use of a crane;
• Smaller quantities are needed, as it adapts effortlessly to any layout;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of restoration and cleaning possibilities;
• High quality of concrete surface minimize finishing work.

Safe use
• Accessories such as — bracing platforms, bracing struts etc. make for save and easier handling of the system.

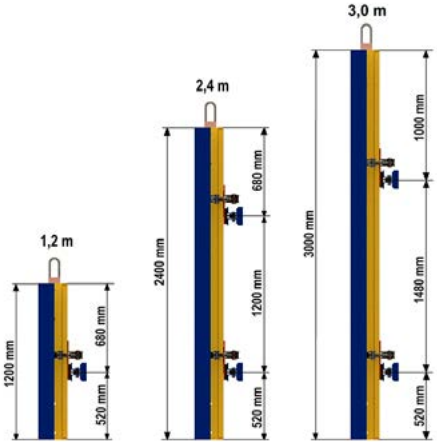
Fast working
• Radii are set easily—simply by turning spindles;
• Can easily be combined with Varimax, Vertex 60;
• There is only one type connection device (Adjustable clamp).

RINGFORM

RINGFORM panels

PANELS HEIGHT

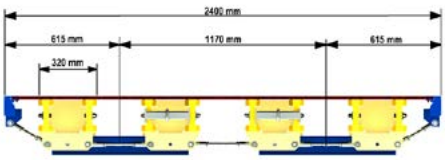
The panels of the adjustable circular formwork have 3 sizes in height 1.2 m, 2.4 m, 3.0 m which provide a good range of sizes. By stacking the panels vertically, optimal needed height can be reached.



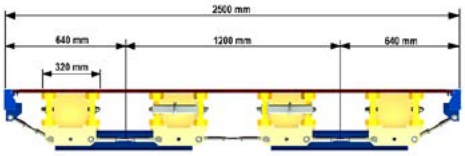
- 2 widths of panel
- 3 heights of panel

PANELS WIDTH

The 2.40 m wide elements are used for the inside formwork, and the 2.50 m wide ones for the outside formwork. This speeds up work by making it easy to see which element belongs where.



Inner panel

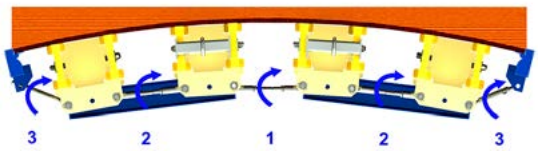


Outer panel

ADJUSTMENT

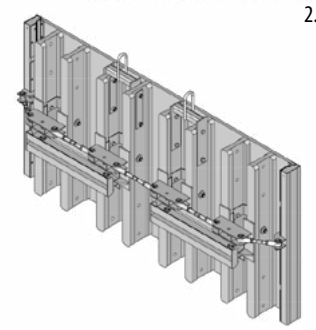
- Template shall be used for adjusting of the element.
- Make sure that you turn each spindle exactly as much as the ones above and below it.
- Check the radius with the template before every pour.

Process the spindles in the prescribed order when bending the formwork.



RINGFORM

RINGFORM

Item		[kg]	Article nº
Panel Ringform	2.50x3.00m	543,90	25 100 000
	2.40x3.00m	532,67	25 102 000
	2.50x2.40m	483,26	25 104 000
	2.40x2.40m	472,08	25 106 000
	2.50x1.20m	261,25	25 108 000
	2.40x1.20m	257,25	25 110 000
			
Stacking plate Ringform		9,41	25 504 100
			
Adjustable clamp Ringform	50-100mm	5,00	25 500 100
	0-50mm	4,53	25 502 100
			
Clamp device Varimax		3,90	11 902 100
			
Guide plate	0.90m	11,35	11 912 000
	1.50m	18,85	11 914 000
			
Stop-end tie Varimax		1,76	11 906 100
			

Item	[kg]	Article nº
Wall bracket H20	11,46	23 700 100
		
Guide rail clamp	12,40	52 400 100
		
Supporting strut Ringform 340	32,92	25 508 100
		
Supporting strut Ringform 540	52,71	25 510 100
		

Item		[kg]	Article nº
Adjustable plumbing strut			
			
Strut head Ringform		1,95	25 506 100
			
Spindle element without end-hinge		36,62	11 934 000
			
Extension strut 3.70 m		78,75	11 936 000
Extension strut 2.40 m		54,13	11 938 000
Spindle element with end-hinge		43,81	11 940 000
			
Rod connector	15	0,50	95 214 100
			
Superplate	15	1,22	95 200 100
			
Plastic tube 22 mm	2.00m	0,36	99 100 400
			

Item		[kg]	Article nº
Plastic cone 22 mm		0,005	99 102 400
			
Tie rod 15.0 mm	0.50m	0,80	92 050 300
	0.75m	1,20	92 075 300
	1.00m	1,60	92 100 300
	1.25m	2,00	92 125 300
	1.50m	2,40	92 150 300
	1.75m	2,80	92 175 300
	2.00m	3,20	92 200 300
	2.25m	3,60	92 225 300
	2.50m	4,00	92 250 300
	2.75m	4,40	92 275 300
	3.00m	4,80	92 300 300

VARIANT
COLUMN FORMWORK

Circular column SK 100

Steel formwork for all conventional circular cross-sectional columns of any height

The circular column formwork SK 100 has been designed for forming columns with circular cross-section. To form curved stop-end or oval column, the SK 100 system can be combined with Varimax and circular formwork Ringform. The system consists of two semicircular formwork halves, with standard diameters from 30 cm up to 130 in a 10 cm grid. The semicircular elements are fixed to each other by means of integrated connectors (no additional fixation elements are required). 3 heights of elements are available, 50 cm, 100 cm and 200 cm, which can be combined by means of vertical stacking to assemble any height required.

Heavy-duty formwork:
Permitted pressure of fresh concrete:
• up to Ø 600 mm - 150 kN/m^2
• up to Ø 800 mm - 100 kN/m^2
• up to Ø 1300 mm - 80 kN/m^2

Easy to use:
• Having only 3 standard elements heights and 11 standard diameters in a 10 cm grid provides much easier planning and forming;
• Any custom size up to 200 cm in diameter can be produced on enquiry;
• All the connectors are integrated and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized.

Cost-effective:
• Fast concreting operations;
• Installation of pre-assembled units minimizes use of a crane;
• For a column forming only 2 pre-assembled units are used meaning that forming and stripping time are optimized;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means fast cleaning possibilities;
• Powder-coated steel formwork, for long service life;
• High quality of concrete finish minimizes finishing work (architectural concrete surface).

Safe use:
• Accessories such as — wall brackets, supporting struts etc. make for save and easier handling of the system.

SK 100 elements

ELEMENTS HEIGHTS

There are 3 standard heights of the semicircular formwork elements 50 cm, 100 cm and 200 cm, which can be easily assembled, by means of vertical staking, to a formwork element of any height required.

ELEMENT DIAMETERS

There are 11 standard diameters of the semicircular formwork elements from 30 cm up to 130 cm in a 10 cm grid.

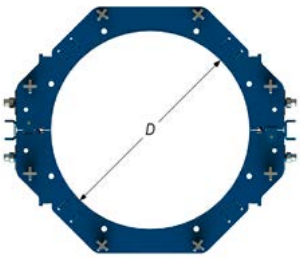
D = 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130 cm

Any custom size up to 200 cm in diameter can be produced on enquiry.

ELEMENTS FEATURES

The following options are integrated in the SK 100 elements:

- Connectors for linking two semi-circular elements;
- Connectors for vertical stacking;
- Points for crane hooks.



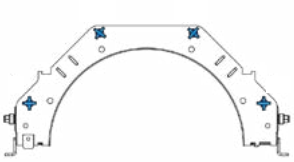
SK 100 elements connection

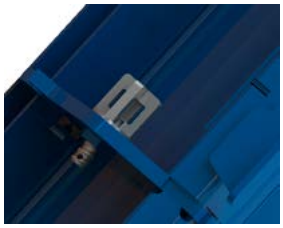
JOINING OF TWO SEMI-CIRCULAR ELEMENTS TOGETHER

The integral centering mechanism makes it easy to position the two halves correctly.

CONNECTION OF THE ELEMENTS FOR STACKING

Link the Elements SK 100 together with the integrated connecting bolts SK. To achieve an exact interelement join, it is recommended tightening the connection bolts in the following order.





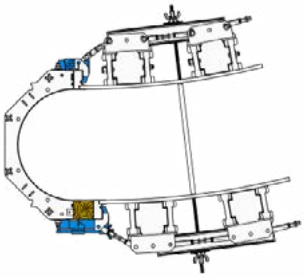
STIFFENING WITH STEEL WALINGS

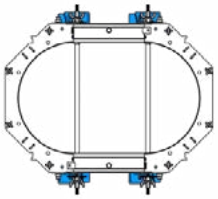
This measure is recommended:
- on tall multi-element column formworks SK (from 4.00 m upward), in order to stiffen the formwork when it is stood upright;
- on multi-element column formworks SK assembled from a large number of small elements.

The steel walings should be long enough to overlap the reinforcement ribs immediately above and below the join.

ADDITIONAL UTILIZATION

SK 100 elements can be connected directly to the Varimax panels to form 'oval' columns or curved stop-end, or to the elements of the circular formwork Ringform.





SK 100

Item		[kg]	Article nº
Column element SK 100	D 1.30x2.00m	336,00	14 100 000
	D 1.30x1.00m	197,40	14 102 000
	D 1.30x0.50m	114,45	14 104 000
	D 1.20x2.00m	318,15	14 106 000
	D 1.20x1.00m	211,05	14 108 000
	D 1.20x0.50m	107,10	14 110 000
	D 1.10x2.00m	302,40	14 112 000
	D 1.10x1.00m	190,05	14 114 000
	D 1.10x0.50m	100,80	14 116 000
	D 1.00x2.00m	246,75	14 118 000
	D 1.00x1.00m	157,50	14 120 000
	D 1.00x0.50m	88,20	14 122 000
	D 0.90x2.00m	226,80	14 124 000
	D 0.90x1.00m	138,60	14 126 000
	D 0.90x0.50m	80,85	14 128 000
	D 0.80x2.00m	199,50	14 130 000
	D 0.80x1.00m	116,03	14 132 000
	D 0.80x0.50m	68,25	14 134 000
	D 0.70x2.00m	186,90	14 136 000
	D 0.70x1.00m	102,90	14 138 000
	D 0.70x0.50m	59,85	14 140 000
	D 0.60x2.00m	164,85	14 142 000
	D 0.60x1.00m	101,33	14 144 000
	D 0.60x0.50m	54,08	14 146 000
	D 0.50x2.00m	154,35	14 148 000
	D 0.50x1.00m	94,50	14 150 000
	D 0.50x0.50m	54,60	14 152 000
	D 0.40x2.00m	139,65	14 154 000
	D 0.40x1.00m	85,05	14 156 000
	D 0.40x0.50m	48,30	14 158 000
	D 0.30x2.00m	117,60	14 160 000
	D 0.30x1.00m	69,30	14 162 000
Custom size on inquiry	D 0.30x0.50m	39,90	14 164 000
Waling 12	1.75m	37,07	21 175 000
	2.00m	42,32	21 200 000
	2.25m	47,46	21 225 000
	2.50m	52,71	21 250 000
	2.75m	58,20	21 275 000
	3.00m	63,53	21 300 000
Guide plate	1.50m	18,85	11 914 000
Connection screw	10-16	0,63	11 908 100
	10-25	0,79	11 910 100

Item	[kg]	Article nº
Wall bracket adapter	6,70	14 166 100
Wall bracket Varimax	13,28	11 926 100
Guide rail clamp	12,40	52 400 100
Supporting strut 340	37,38	11 928 100
Supporting strut 540	56,91	11 930 100

Item		[kg]	Article nº	Item	[kg]	Article nº
Adjustable plumbing strut 						
Spindle head 		3,48	11 932 100			
Spindle element without end-hinge 		36,62	11 934 000			
Extension strut 3.70 m		78,75	11 936 000			
Extension strut 2.40 m		54,13	11 938 000			
Spindle element with end-hinge 		43,81	11 940 000			
Superplate 	15	1,22	95 200 100			

Column formwork VARIMAX

Framed heavy-duty formwork for rectangular and square columns forming.

The system is broadly applicable for projects where large numbers of square and rectangular columns, with variable cross-sections, are to be formed cost-effectively and quickly. For column forming versatile panels of the VARIMAX system are used. Using the versatile panels 90 cm width a column cross-section up to 75x75 cm in a 5 cm grid can be formed, with use of 135 cm panel a column cross-section up to 120x120 cm in a 5 cm grid can be formed. Height extension can be accomplished by means of vertical stacking.

Heavy-duty formwork:
• 80 kN/m^2 pressure of fresh concrete;
• High quality film faced plywood with thickness of 21 mm. Film weight 240 g/m^2.

Easy to use:
• Having only 2 standard panel widths provides much easier planning and forming;
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• Any column cross-section up to 120x120 cm in a 5 cm grid can be easily assembled.

Cost-effective:
• Maximum utilization is obtained form the formwork by using versatile panels for columns, corners, stop-ends and wall junctions;
• Installation of pre-assembled units minimizes use of a crane;
• For a column forming only 2 pre-assembled units are used, meaning that forming and stripping time is optimized;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of restoration and cleaning possibilities;
• Galvanized or powder-coated steel frames, for long service life;
• High quality of concrete surface minimizes finishing work.

Safe use
• Accessories such as — wall brackets, lifting hooks, supporting struts etc. make for save and easier handling of the system.

VARIMAX versatile panels

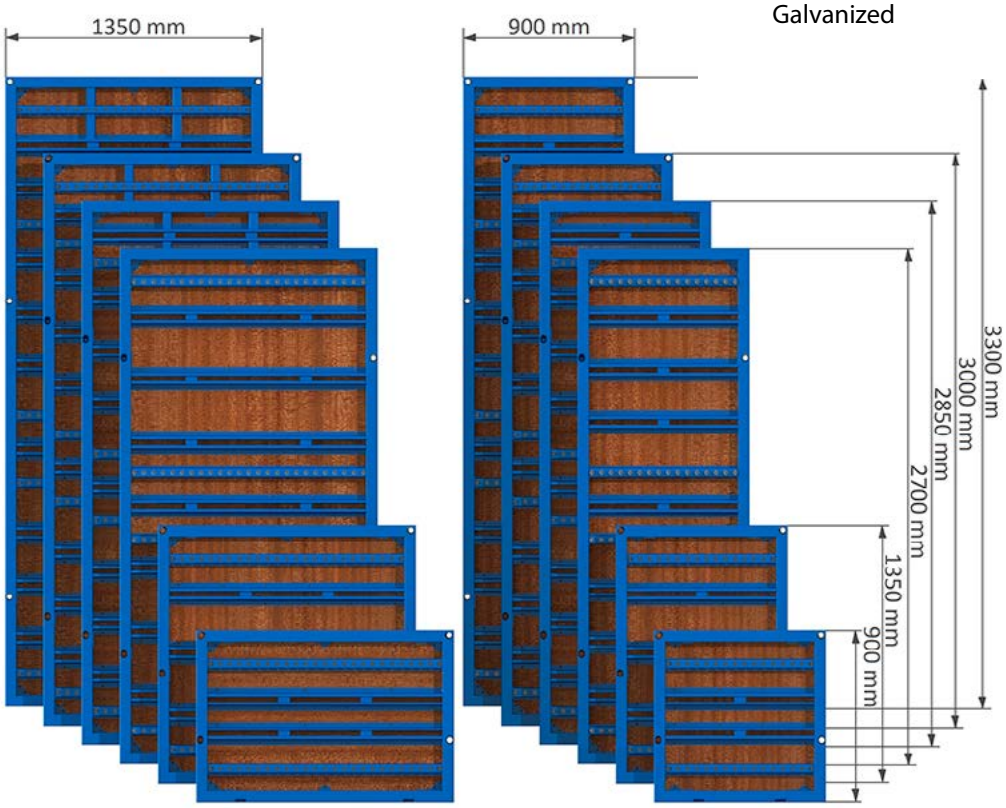
VERSATILE PANELS

The special hole pattern makes these panels particularly suitable for efficient forming of:

- Columns;
- Corners;
- Wall junctions;
- Stop-ends.

For any type and size of the panel two options of covering are available.

Galvanized Powder-coated

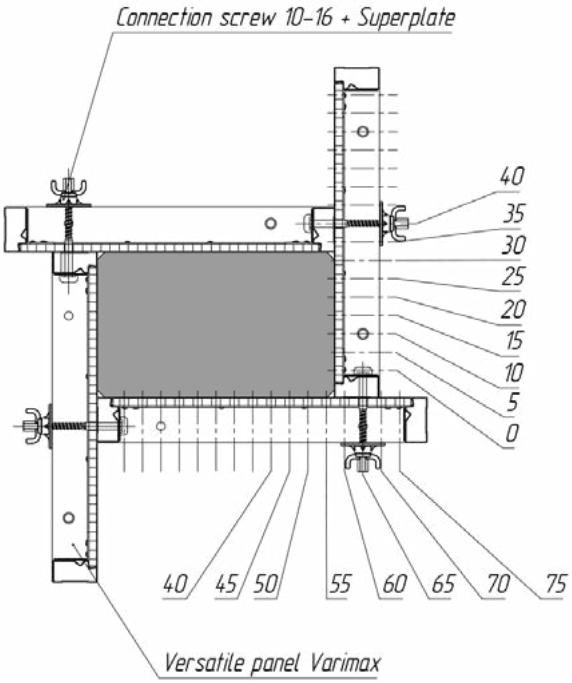


VERSATILE PANEL CONNECTION

For panel connection only one type of connectors is used, implemented by means of Variant Connection screw 10-16 and Superplate 15, which simplify and speed up the processes of pre-assembly, forming and stripping.

Superplate 15

Connection screw 10-16



Column formwork VARIMID

Framed lightweight formwork for rectangular and square column forming.

The lightweight framed formwork Varimid by Variant delivers perfect forming performance in projects where use of a crane is limited, can be assembled by hand. When a large number of square and rectangular columns, with variable cross-sections, are to be formed cost-effectively and quickly, with limited use of lifting equipment, column formwork Varimid is the best solution. Using versatile panels 75 cm width a column cross-section up to 60x60 cm in a 5 cm grid can be formed, with use of 90 cm panel a column cross-section up to 75x75 cm in a 5 cm grid can be formed. Height extension can be accomplished by means of vertical stacking. Maximum height of a column set is 6 m, with one staking joint.

High load-bearing capacity:
- 60 kN/m^2 pressure of fresh concrete;
- Can be vertically stacked up to 6.00 m with use of one joint;
- High quality film faced plywood with thickness of 15 mm. Film weight 240 g/m^2.

Cost-effective:
- Manhandled formwork panels minimize use of a crane;
- High number of use cycles means lower follow-up expenses;
- Reduction of expenses by means of restoration and cleaning possibilities;
- Galvanized or powder-coated steel frames, for long service life;
- High quality of concrete surface minimize finishing work;
- Reduction of cost by using panels which are already used on site;
- Maximum utilization by means of using versatile panels for forming stop-ends, corners, wall junctions etc.

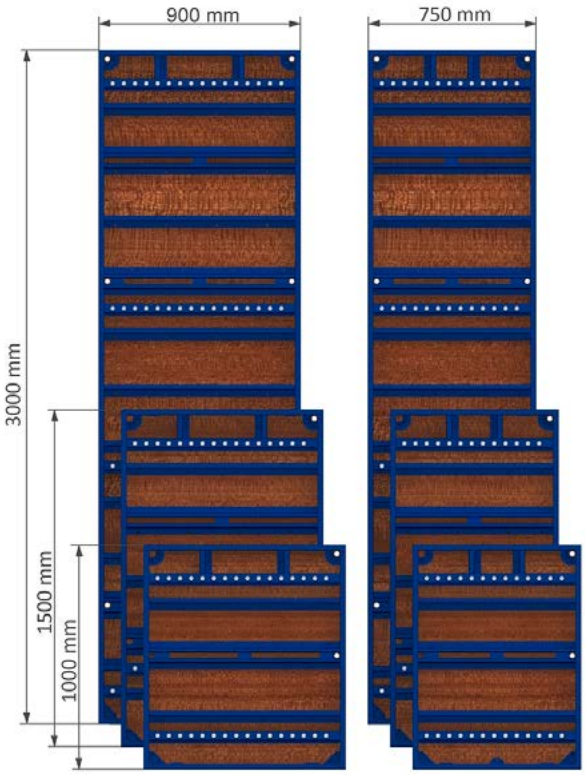
Easy handling and planning:
- All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized.

Safe use:
- Accessories such as — wall brackets, lifting hooks, supporting struts etc. make for save and easier handling of the system.

VARIMID versatile panels

VERSATILE PANELS

The special hole pattern makes these panels particularly suitable for efficient forming of:
- Corners;
- Wall junctions;
- Stop-ends;
- Columns.



For any type and size of the panel two options of covering are available.

Galvanized

Powder-coated

VERSATILE PANEL CONNECTION

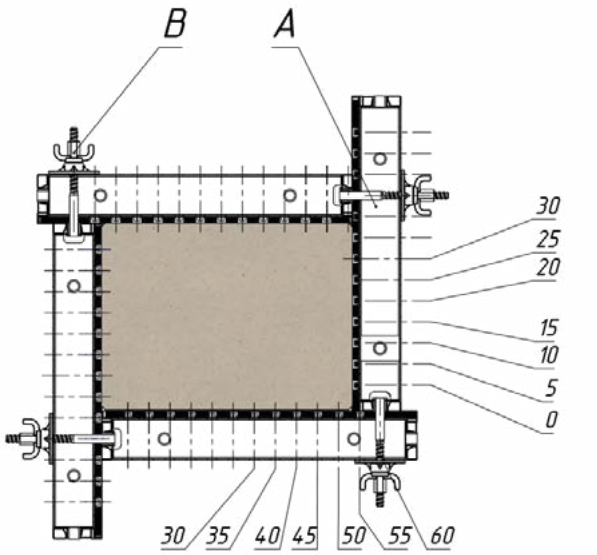
For panel connection only one type of connectors is used, implemented by means of Variant Connection screw 10-16 and Supper plate, which simplify and speed up the processes of pre-assembly, forming and stripping.

Connection screw 10-16

Superplate 15

Using versatile panel 75 cm—cross-section up to 60x60 cm in a 5 cm grid can be formed.
Using versatile panel 90 cm—cross-section up to 75x75 cm in a 5 cm grid can be formed.

Possible cross-sections in a 5 cm increment grid



Column formwork HANDI

Framed super-lightweight formwork for column forming.

The Handi is super-lightweight framed formwork, which has been specifically designed for quick and cost-effective construction. Owing to its super-lightweight panels, the system can be easily handled and assembled by hand. Consequentially, for column forming, the Handi system ideally suited in projects where a large number of square and rectangular columns, with variable cross-sections, need to be formed with limited use of crane and difficulties applying of heavier framed formwork systems (such as Varimax system). To form a column section, versatile panels of the Handi system are used. Using versatile panel 60 cm width, column cross-section up to 50x50 cm can be formed in a 5 cm grid. Using versatile panel 90 cm width, column cross-section up to 80x80 cm can be formed in a 5 cm grid (it is recommended not increasing cross-section sizes 60x60 cm, due to high level of pressure of fresh concrete).

Load-bearing capacity:
• 35 kN/m^2 pressure of fresh concrete;
• High quality film faced plywood with thickness of 15 mm. Film weight 240 g/m^2.

Cost-effective:
• Universal application of the Handi system will give you an opportunity to use one system for variety of different tasks;
• Reduction of expenses due to minimizing of crane usage;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of restoration and cleaning possibilities;
• Galvanized or powder-coated steel frames, for long service life;
• High quality of concrete surface minimizes finishing work;
• Reduction of expenses by using panels which are already used on site;
• Maximum utilization by means of using versatile panels for forming stop-ends, corners, wall junctions etc.

Easy to use
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• Ergonomic of the system ensures fast and save assembly.

Safe use
• Accessories such as — wall brackets, lifting hooks, supporting struts etc. make for save and easier handling of the system.

HANDI versatile panels

VERSATILE PANELS

The special hole pattern makes these panels particularly suitable for efficient forming of:

- Corners;
- Wall junctions;
- Columns.

For any type and size of the panel two options of covering are available.

Galvanized

Powder-coated

Versatile panels connection

For panel connection only one type of connectors is used, implemented by means of Variant Connection screw 5-10 and Star-shaped nut with Washer, which simplify and speed up the processes of pre-assembly, forming and stripping.

Connection screw 5-10

Star-shaped nut

Use of versatile panels 90 cm

Use of versatile panels 60 cm

Column formwork VERTEX 60

Formwork system for forming columns of any size and shape.

Owing to the system's flexibility, column formwork VERTEX 60 allows to form columns and pillars of different types, shapes and sizes of cross-section. Maximum height of the formwork set is 12 m , which can be achieved by means of vertical stacking. Depending on distances between walings and H20 beams, VERTEX 60 can be easily adapted to any requirements and loads. Maximum pressure of fresh concrete 80 kN/m^2 is permitted. In order to maximize utility, column formwork sets of VERTEX 60 are designed and pre-assembled for a particular project and purpose (shape and size of column cross-section as well as the height). No tie-rods in column cross-section up to 120x120 are required. Erection of the column formwork Vertex 60 is carried out quickly, reliably and cost effectively.

Adaptable load-bearing capacity:
• Due to its adaptability Vertex 60 can be assembled and customized to withstand almost any pressure of fresh concrete up to 80 kN/m^2.

Cost-effective:
• Idea for forming large number of columns economically. For fast operation it is recommended to use one set of pre-assembled formwork for a particular cross-section size;
• Pre-assembled sets can be used to maximize utility and optimize forming time;
• High number of use cycles means lower follow-up expenses;
• High quality of concrete surface minimizes finishing work;
• Project-specific adaptation possible, as it can be faced with any type of form-ply.

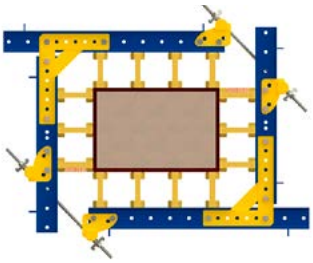
Easy handling and planning
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• Load-bearing capacity of the system can be adjusted by means of H20 beams and steel walings;
• Any requirements for architectural concrete design and shape of the column cross-section can be met, due to the system adaptability.

Safe use
• Accessories such as — wall brackets, lifting hooks, supporting struts. make for save and easier handling of the system.

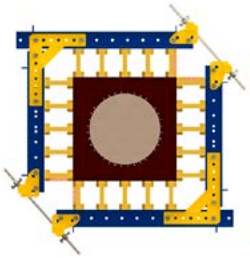
Column formwork VERTEX 60 design and pre-assembly

Depending on how walings are arranged and the distance between H20 beams, a maximum fresh concrete pressure of 80 kN/m^2 is permitted.

All column cross-sections up to 120x120 can be assembled using standard equipment and no tie-rods are required. As well as rectangular, circular and columns with cross-section of special shape can be encased.



Rectangular column formwork



Circular column formwork

Column formwork VERTEX 60 elements of connection

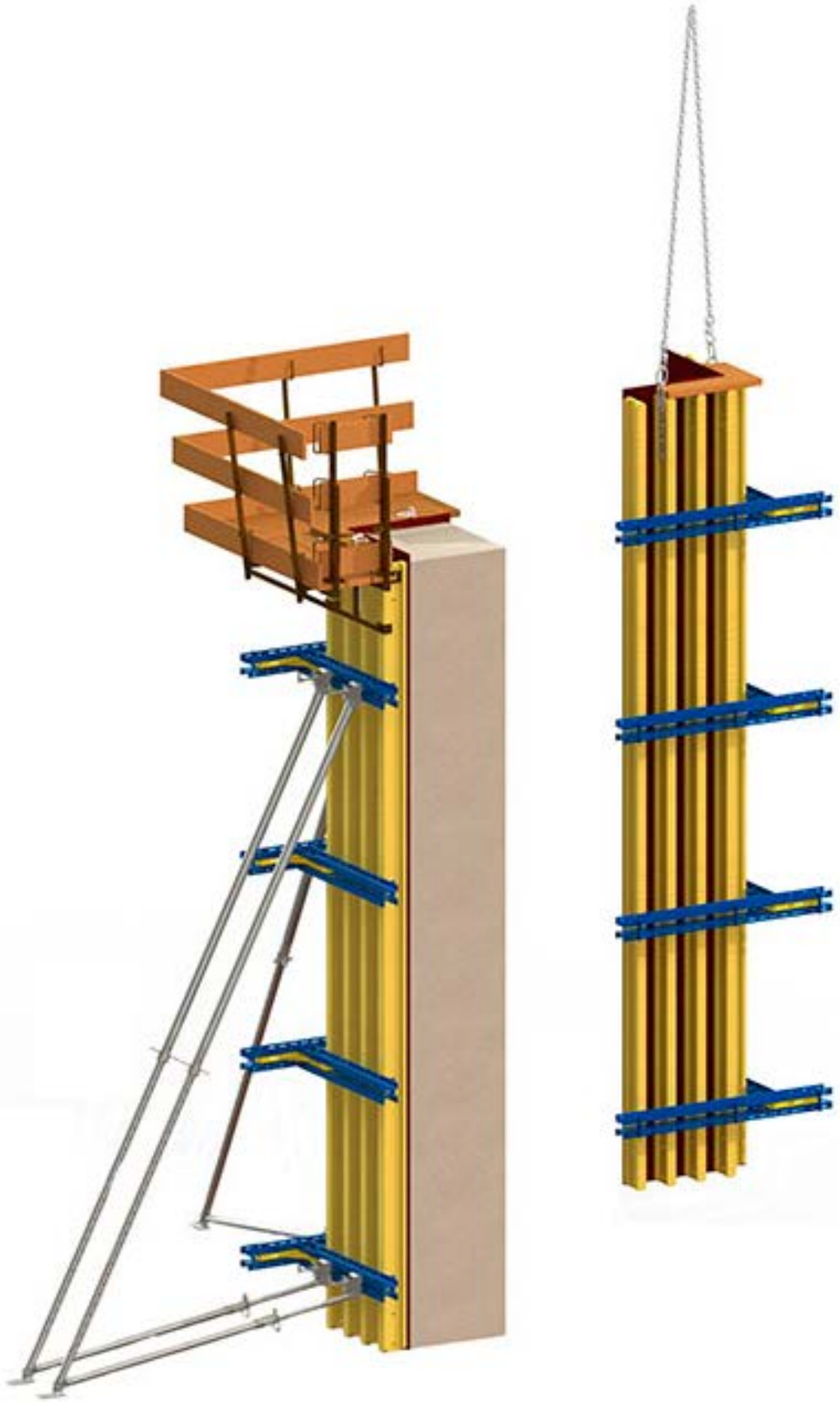
The **Column corner plate** connects the walings rigidly and precisely in a preassembled half (gang-form) of the formwork set across the corner.

To connect two halves (gang-forms) of the column set together the **Corner tie brackets** are used, which are tighten and fixed by means of tie-rods and wing nuts. The Corner tie bracket enables the walings to be diagonally tension-braced and make forming and striking much easier and faster.

Corner tie bracket

Column corner plate

VERTEX 60 column formwork



VARIANT

SINGLE-SIDED FORMWORK

Modular supporting frames

Tried and checked system for single-sided walls forming of height up to 8.00 m

The system of modular supporting frames by Variant is used for single-sided walls forming such as retaining walls, dam walls etc. Shear forces which appear on the formwork shutters owing to fresh concrete pressure, are held and redistributed on the base by means of modular supporting frames and diagonal anchors. Single-sided supporting system allows walls with the required pouring-height up to 8.00 m to be formed.

Load-bearing capacity :
• Owing to its load-bearing flexibility, the Single - sided modular supporting system can be assembled and customized for different pressure of fresh concrete required, up to 50 kN/m^2.

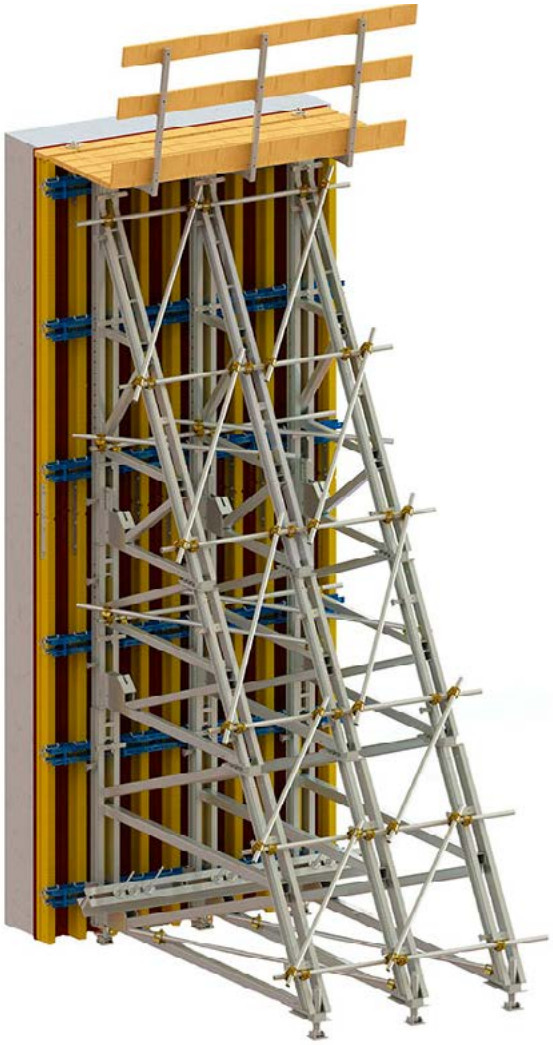
System adaptability:
• Flexible height adjustment;
• Easily combines with Variant's wall systems, such as, framed formwork Varimax and large-area formwork Vertex 60;
• Rapid adaptation to any unevenness of the ground in an installation area;
• Can be used for special application. (e.g. positioned horizontally and anchored to the structure used as heavy-duty working platforms).

Cost-effective
• Can be repositioned by use of wheel units, in order to save crane time;
• Large areas of single-sided wall can be easily cast;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability;
• Galvanized steel frames, for long service life.

Easy handling and planning
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• Any requirements for architectural concrete design can be met.

Safe use
• Accessories such as — wall brackets makes for save and easier handling of the system.

Areas of use of the single-sided modular supporting system:
• Retaining walls;
• Dam walls;
• Stop-ends of walls and slabs with large thickness;
• Walls of great thickness, in this case single-sided system is to be installed on both sides;
• Walls where there is no place for installation of opposite formwork shutter (double-sided system).



Modular supporting frames — supporting units assembly

TYPES AND SIZES

The supporting modular frame units are formed by combining of supporting or attachable frames in one block by means of bracing. The modular units must be correctly braced with scaffold tubes to attain stated capacity.

There are 3 types of modular units which can be formed by combing the following frames:
- Supporting frame 4.50 m;
- Attachable frame 1.50 m;
- Attachable frame 2.00 m.

The supporting modular units are assembled in identical fashion for use with either timber-beam or framed formwork.

Modular supporting unit formed by combing Supporting frames 4.50 m

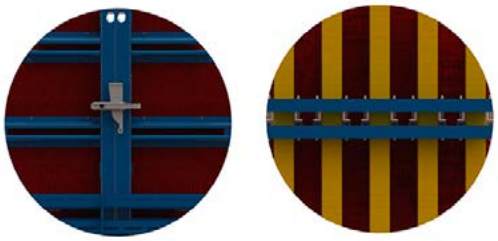
Modular supporting unit formed by combing Attachable frames 1.50 m

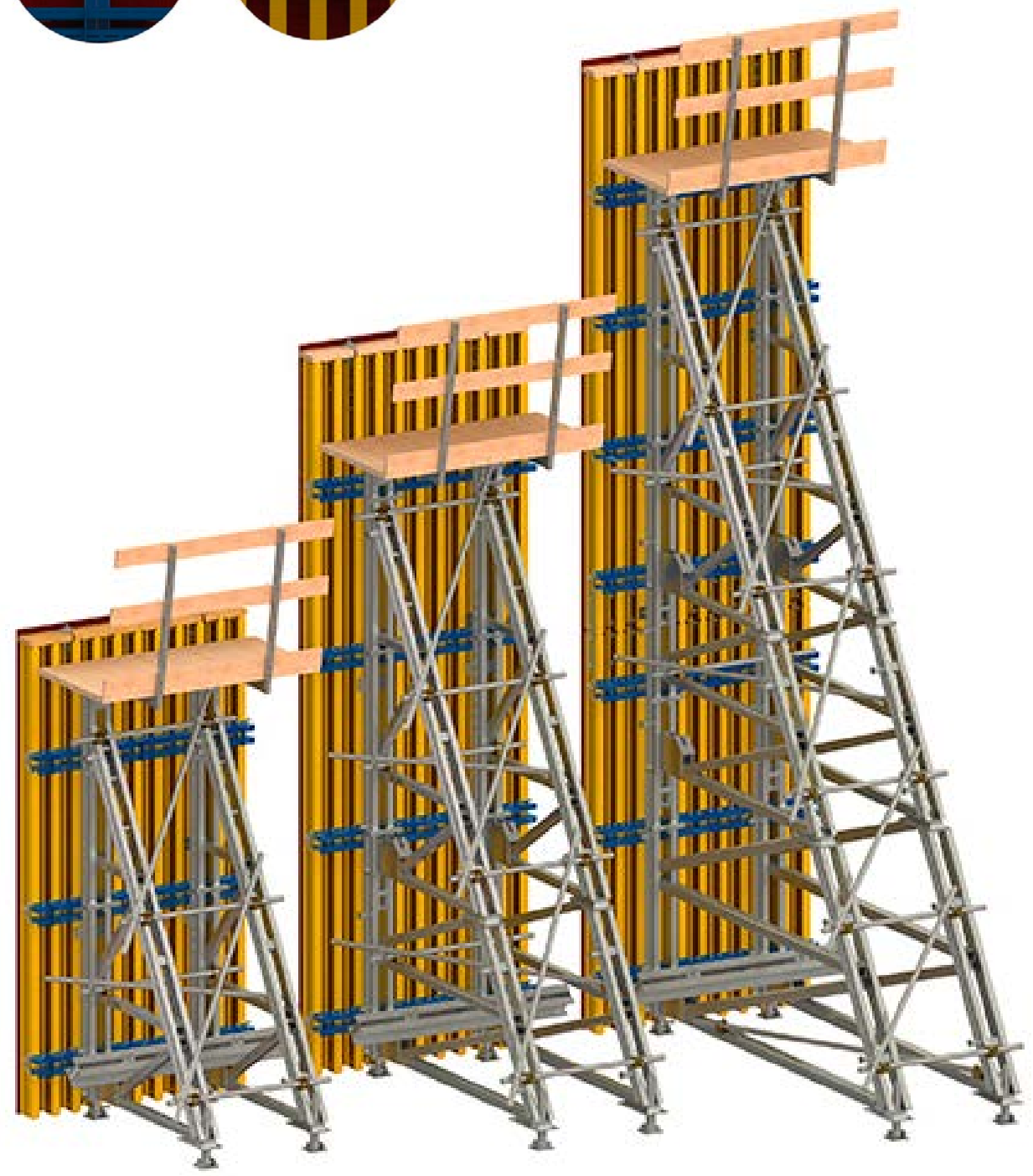
Modular supporting unit formed by combing Attachable frames 2.00 m

Modular supporting frames — combining with wall formwork

Single-sided modular supporting system easily combines with Variant's wall formwork systems, such as, framed formwork Varimax and large-area formwork Vertex 60.

The supporting modular units are assembled in identical fashion for use with either timber-beam or framed formwork.

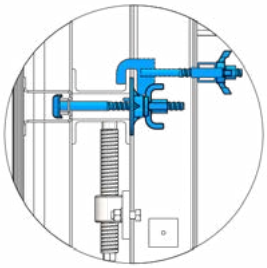




Modular supporting frames — combining with wall formwork

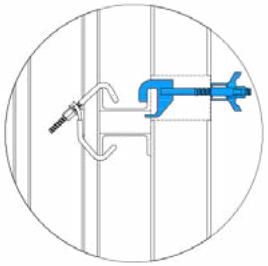
FIXATION OF THE FRAMED FORMWORK VARIMAX

In order to be able to fix Varimax panels to the modular supporting frames, walings 10 or 12 are used ,which are fixed to the framed formwork by means of connection screw 10-16 and Superplate 15. Then the panel is fixed to the modular supporting frames using the waling-to-bracket holder.



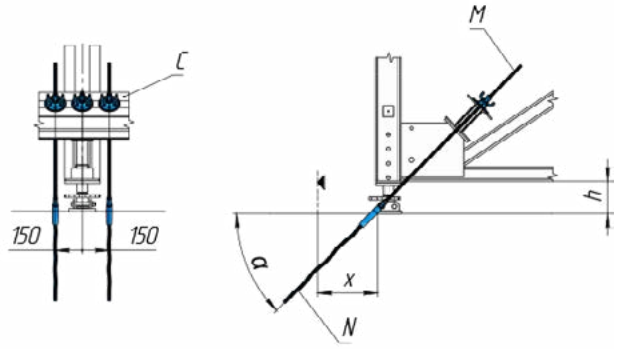
FIXATION OF THE TIMBER-BEAM FORMWORK VERTEX 60

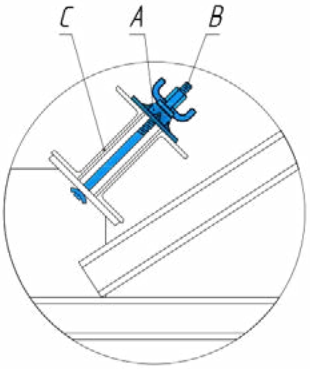
Vertex 60 formwork elements are clamped directly onto the modular supporting frame using the waling-to-bracket holder. The modular supporting frames are designed in such a way that the waling of formwork shutter can be fixed anywhere along the frame.



Modular supporting frames— anchoring

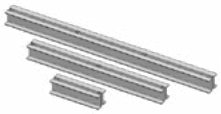
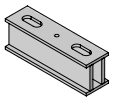
Horizontal forces on the single-sided formwork, caused by fresh concrete pressure , are held by the modular supporting units and redistributed onto the ground by means of diagonal anchors. The diagonal anchors fixed to the anchor waling of the modular supporting unit using superplate.

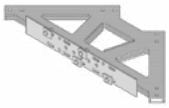




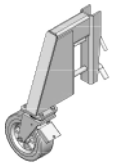
Together with the superplate 15 (A), the anchor waling positioner (B) secures the anchor waling (C) so that it cannot tilt or slip out of position.

Modular supporting frames

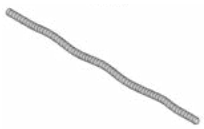
Item		[kg]	Article nº
Supporting frame 4.50 m		350,87	31 001 200
			
Attachable frame 1.50 m		263,67	31 002 200
			
Attachable frame 2.00 m		497,04	31 003 200
			
Waling 12	1.00m 2.00m 3.00m	21,00 42,32 63,53	21 100 000 21 200 000 21 300 000
			
Anchor waling 18	0.70m 1.95m 2.95m	26,45 72,40 108,93	33 070 200 33 195 200 33 295 200
			
Special anchor waling	0.55m	47,39	33 055 200
			
Anchor waling positioner		0,63	32 108 100
			

Item		[kg]	Article nº
Corner plate MSF		47,25	32 100 100
			
Front spindle MSF		19,43	32106100
			
Rear spindle MSF		19,18	32104100
			
Adjusting spindle		6,62	32102100
			
Connecting pin		0,39	23 400 100
			
Spring cotter		0,05	23 402 100
			
Connection screw	10-16	0,63	11908 100
			
Wailing-to bracket holder		2,61	75 200 100
			
Screw-on access bracket		17,32	75 116 100
			

Modular supporting frames

		[kg]	Article nº
Swivel plate 		4,10	75 118 100
Attachable roller A for supporting frame 4.50 m 		9,78	34 100 000
Attachable roller B for supporting frame 4.50 m 		41,06	34 102 000
Adjustable jack 		30,45	34 104 000
Framed tube 48 mm 	1.00m 1.50m 2.00m 2.50m 3.00m	4,60 6,91 9,21 11,51 13,81	94 100 200 94 150 200 94 200 200 94 250 200 94 300 200
Swivel coupler 	48x48mm	1,22	95 106 100
Screw-on coupler 48 mm 	30 70 100	1,21 1,26 1,33	95 100 100 95 102 100 95 104 100

Item		[kg]	Article nº
She-bolt 	15.0mm 0.65m 15.0mm 1.20m 20.0mm 1.25m	1,83 2,72 5,94	95 304 100 95 306 100 95 308 100
Tie rod 	15.0mm 1.50m 20.0mm 1.50m 26.5mm 1.50m	2,40 3,60 6,83	92 150 300 93 150 300 95 310 300
Rod connector 	15	0,50	95 214 100
Clearance cone 	15 20	0,38 0,38	95 300 100 95 302 100
Anchoring cone 	20	1,05	95 312 100
Superplate 	15 20	1,22 2,10	95 200 100 95 202 100
Hexagon nut 	15 26.5	0,37 0,80	95 208 100 95 218 100
Rod connector 	26.5	1,51	95 216 100
Anchor plate 	26.5	3,47	95 220 100

Item		[kg]	Article nº	Item	[kg]	Article nº
Pigtail anchor	15	0,92	99 208 300			
	20	1,90	99 210 300			
	26.5	3,60	99 212 300			
Stop anchor	15.0mm 0.16m	0,43	99 200 100			
	15.0mm 0.40m	1,07	99 202 100			
	20.0mm 0.22m	0,64	99 204 100			
	20.0mm 0.45m	1,30	99 206 100			
Sealing sleeve	15	0,008	99 104 400			
	20	0,03	99 106 400			
Anchor holder	15	0,34	99 214 300			
	20	0,42	99 216 300			

Adjustable supporting frames

Tried and tested system for single-sided walls forming with height up to 4.00 m

The system of adjustable supporting frames by Variant is used for forming single-sided walls such as retaining walls, dam walls etc. Shear forces which appear on the formwork shutters due to fresh concrete pressure, are held and redistributed on the base by means of adjustable supporting frames and diagonal anchors. Single-sided adjustable supporting system allows walls with the required pouring-height up to 4.00 m to be formed.

Load-bearing capacity :
• Owing to its load-bearing flexibility, the Single-sided adjustable supporting system can be assembled and customized for different pressure of fresh concrete required, up to 50 kN/m^2.

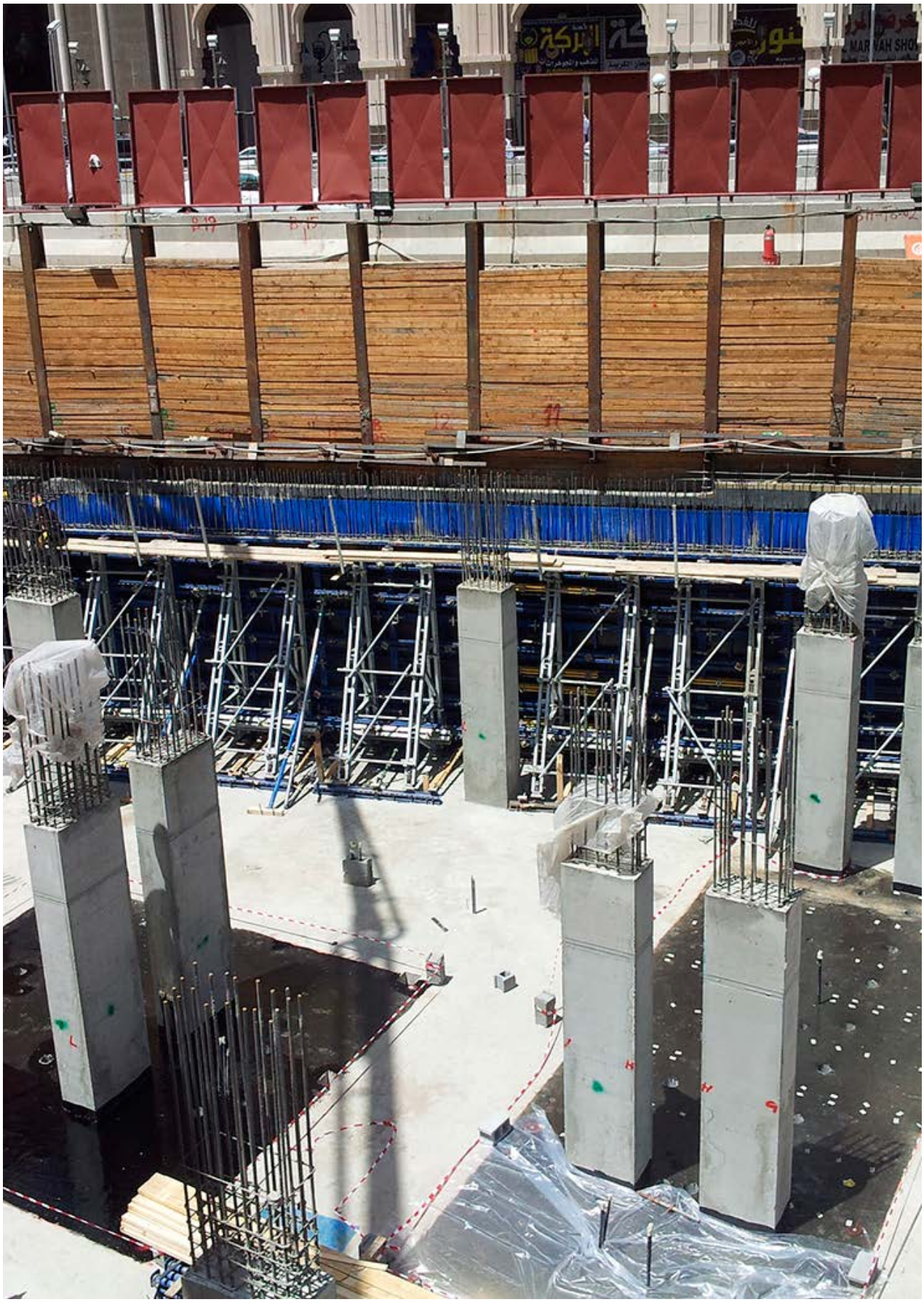
System adaptability:
• Easily combines with Variant's wall systems, such as, framed formwork Varimax and timber-beam formwork Vertex 60.

Cost-effective:
• Can be assembled, disassembled and repositioned by hand;
• Large-areas of single-sided wall can be easily cast;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability;
• Powder coated steel elements, for long service life.

Easy handling and planning:
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently forming time is efficient and maximized;
• Any requirements for architectural concrete design can be met.

Safe use:
• Accessories such as — bracing platforms makes for save and easier handling of the system.

Areas of use of the single-sided adjustable supporting system:
• Retaining walls;
• Dam walls;
• Stop-ends of walls and slabs with large thickness;
• Walls of great thickness, in this case single-sided system is to be installed on both sides;
• Walls where there is no place for installation of opposite formwork shutter (double-sided system).



Adjustable supporting frames— supporting units assembly

The adjustable supporting units are formed by combining of steel section elements, walings 12, spindle struts in one block. The adjustable units must be correctly braced with scaffold tubes to attain the stated capacity.

There are 2 types of modular units which can be formed:
• Adjustable supporting unit for pour height of up to 3.25 m;
• Extended adjustable supporting unit for pour height of up to 4.00 m.

The supporting modular units are assembled in identical fashion for use with either timber-beam or framed formwork.

Adjustable supporting unit for pour height of up to 3.25 m

Extended adjustable supporting unit for pour height of up to 4.05 m

In case of necessity, the adjustable supporting unit can be assembled with use of 3 parallel frames

Adjustable supporting frames — combining with wall formwork

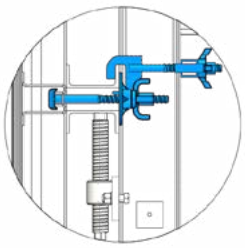
Single-sided adjustable supporting system easily combines with Variant's wall formwork systems, such as, framed formwork Varimax and timber-beam formwork Vertex 60.

The supporting adjustable units are assembled in identical fashion for use with either timber-beam or framed formwork.

Adjustable supporting frames — combining with wall formwork

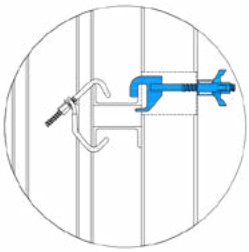
FIXATION OF THE FRAMED FORMWORK VARIMAX

To be able to fix Varimax panels to the modular supporting frames, walings 10 or 12 are used, which are fixed to the framed formwork by means of connection screw 10-16 and Superplate 15. Then the panel is fixed to the adjustable supporting frames using the waling-to-bracket holder.



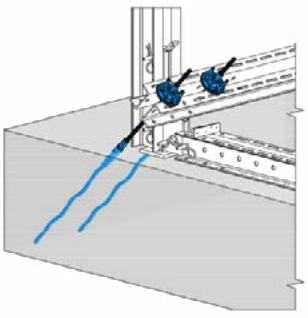
FIXATION OF THE TIMBER-BEAM FORMWORK VERTEX 60

Vertex 60 formwork elements are clamped directly onto the adjustable supporting frame using the waling-to-bracket holder. The adjustable supporting frames are designed in such a way that the waling of formwork shutter can be fixed anywhere along the frame.

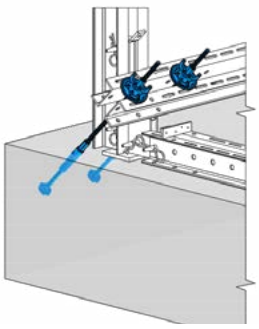


Adjustable supporting frames— anchoring

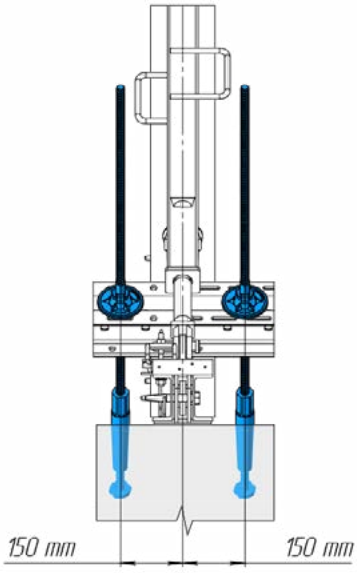
Loads on the single-sided formwork, caused by fresh concrete pressure, are held by the adjustable supporting units and redistributed onto the ground by means of diagonal anchors. The diagonal anchors fixed to the anchor waling of the ajustable supporting unit using super plate.



Anchoring with use of pigtail anchor



Anchoring with use of stop-anchor



Distance between anchors for either pigtail anchoring system or stop-anchor system.

Adjustable supporting frames

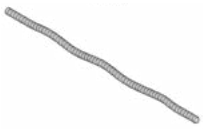
Adjustable supporting frames

Item		[kg]	Article nº
Steel section ASF		65,84	35 100 000
Anchoring shoe ASF		12,34	35 102 100
Supporting shoe ASF		10,21	35 104 100
Pressure shoe ASF		6,29	35 106 100
Tension plate ASF		2,61	35 108 100
Spindle strut ASF	3.00m	34,79	35 200 100
Spindle strut T7	3.05-3.55m	36,05	35 202 100

Item		[kg]	Article nº
Waling 12	1.00m	21,00	21 100 000
	2.00m	42,32	21 200 000
	3.00m	63,53	21 300 000
Anchor waling 14	1.60m	45,34	36 160 200
	2.00m	56,06	36 200 200
	2.60m	73,60	36 260 200
Connecting plate Vertex		6,47	23 404 000
Connecting pin		0,39	23 400 100
Spring cotter		0,05	23 402 100
Connecting screw	10-16cm	0,63	11 908 100
Waling-to-bracket holder		2,61	75 200 10
Screw-on access bracket		17,32	75 116 100
Swivel plate		4,10	75 118 100

Adjustable supporting frames

Item		[kg]	Article nº
Supporting strut 340 		37,38	11 928 100
Framed tube 48 mm 	1.00m 1.50m 2.00m 2.50m 3.00m	4,60 6,91 9,21 11,51 13,81	94 100 200 94 150 200 94 200 200 94 250 200 94 300 200
Swivel coupler 	48x48mm	1,22	95 106 100
Screw-on coupler 48 mm 	30 70 100	1,21 1,26 1,33	95 100 100 95 102 100 95 104 100
Superplate 	15 20	1,22 2,10	95 200 100 95 202 100
She-bolt 	15.0mm 0.65m 15.0mm 1.20m 20.0mm 1.25m	1,83 2,72 5,94	95 304 100 95 306 100 95 308 100
Tie rod 	15.0mm 1.50m 20.0mm 1.50m	2,40 3,60	92 150 300 93 150 300
Rod connector 	15,0	0,50	95 214 100

Item		[kg]	Article nº
Clearance cone 	15,0 20,0	0,38 0,38	95 300 100 95 302 100
Anchoring cone 	20,0	1,05	95 312 100
Pigtail anchor 	15 20	0,92 1,90	99 208 300 99 210 300
Stop anchor 	15.0mm 0.16m 15.0mm 0.40m 20.0mm 0.22m 20.0mm 0.45m	0,43 1,07 0,64 1,30	99 200 100 99 202 100 99 204 100 99 206 100
Sealing sleeve 	15 20	0,008 0,03	99 104 400 99 106 400
Anchor holder 	15 20	0,34 0,42	99 214 300 99 216 300


PUBLIC PROSECUTION
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VARIANT
SLAB FORMWORK SYSTEMS

Slab formwork VARIFLEX

Flexible system for fast and cost-effective forming of concrete slabs.

Variflex by Variant is a conventional prop formwork system for flat slabs forming and shoring. Having only 5 main components, the system is fast and easily assembled, consequently operational time and labor costs are optimized. Variflex adapts to any slab applications due to beams overlap and the fact that the props can be placed anywhere along the main beam. Simply by changing 3 variables (distance between main rows, distance between props in the main row and distance between secondary beams), the system can be applied to any load.

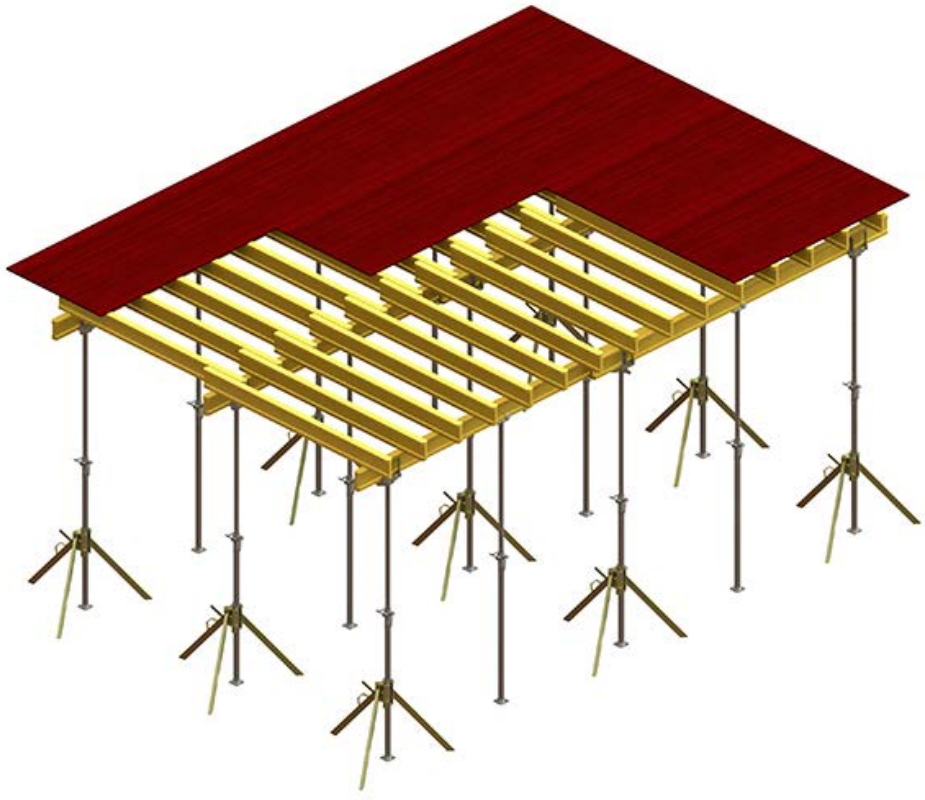
Load-bearing capacity :
• Due to its load-bearing flexibility, Variflex can be adapted to withstand loads of fresh concrete of different kinds of slab thicknesses. Optimal and cost-effective use within the range of slab thicknesses up to 500 mm;
• Maximum formwork height—6.0 m.

Cost-effective:
• Fewer parts speed up assembly;
• Assembly, stripping and disassembly by hand;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability;
• Galvanized or powder coated elements, for long service life.

System adaptability:
• Easily adapts to different and varying layouts, especially in case of irregular geometrics, specific load cases, different slab thicknesses.

Easy handling and planning:
• All the connectors and accessories are easily fixed into the slots and quickly tighten, consequently
forming time is efficient and maximized;
• Any requirements for architectural concrete flat slab design can be met.

Safe use:
• Accessories such as — handrail makes for save and easier handling of the system;
• Safe working already during assembly.




SOLUTIONS
P 20
350
P 20

VARIFLEX— system overview

The key benefit of Variflex is its easy adaptation to different and varying layouts. Owing to relatively low material costs, Variflex allows for cost-effective solutions even for several concrete pours.

- Fewer parts speed up assembly
- Assembly and stripping by hand without crane
- Adaptation to all kind of slab thicknesses and layouts
- Free choice of facing
- Free choice of Variant props

(A) Facing
Any kind of facing can be used from conventional plywood and plastic panels to permanent formwork panels.

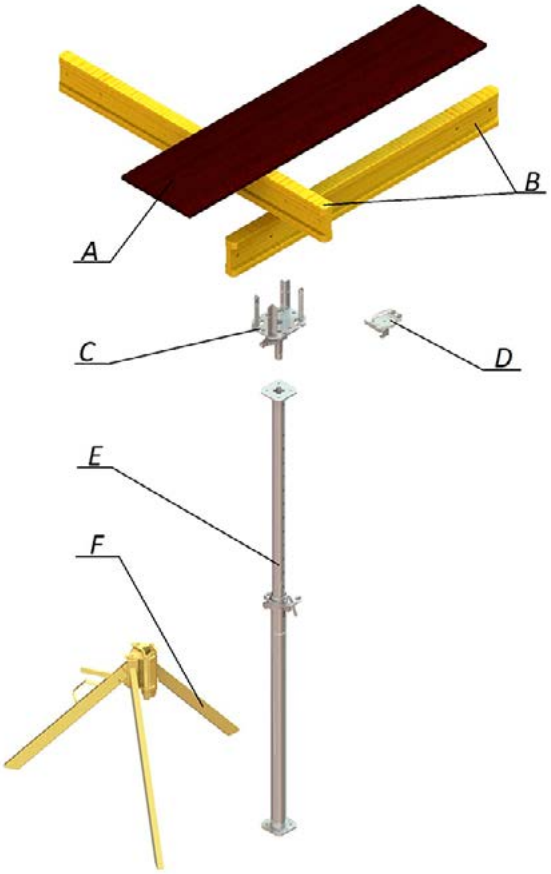
(B) H20 beams
Redistribute loads from fresh concrete on props.

(C) Lowering head (Crown head)
Used in conjunction with supporting props as a main support of primary beams. Lowering head has integrated quick-lowering function for fast stripping.

(D) Support head
Is used for connecting intermediate props to the primary beams.

(E) Supporting prop
Wide range of Variant supporting props can be used with the system. The choice is to be made depending on loads, formwork height and working conditions.

(F) Removable folding tripod
Is used for aligning and holding props upright during formwork assembly and stripping.



Item		[kg]	Article nº
Heavy duty prop RBGU	1.50m	13,45	51 115 000
	2.50m	17,29	51 125 000
	3.00m	20,49	51 130 000
	3.50m	22,66	51 135 000
	4.00m	24,84	51 140 000
	4.50m	27,02	51 145 000
	5.00m	29,20	51 150 000
	5.50m	31,36	51 155 000

Options available:
xx xxx 000 - Powder coated
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Item		[kg]	Article nº
Medium duty prop RBGN	2.50m	11,15	51 225 000
	3.00m	12,58	51 230 000
	3.50m	14,16	51 235 000
	4.00m	16,02	51 240 000
	4.50m	17,45	51 245 000
	5.00m	18,88	51 250 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Item		[kg]	Article nº
Medium duty prop RBG	2.50m	10,87	51 425 000
	3.00m	12,30	51 430 000
	3.50m	13,55	51 435 000
	4.00m	14,94	51 440 000
	4.50m	16,38	51 445 000
	5.00m	17,80	51 450 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Item		[kg]	Article nº
Light duty prop RBGE	2.50m	9,67	51 325 000
	3.00m	10,97	51 330 000
	3.50m	12,15	51 335 000
	4.00m	13,45	51 340 000
	4.50m	14,70	51 345 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Item		[kg]	Article nº
Extra light duty prop RBR 57	3.00m	8,51	51 730 000
	3.50m	9,56	51 735 000

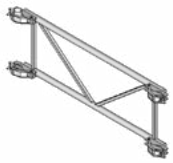
Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Item		[kg]	Article nº
Extra light duty prop RBR 48	3.00m	7,44	51 630 000
	3.50m	8,24	51 635 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

VARIFLEX

Item	[kg]	Article nº
Tripod W 	15,75	52 100 100
Tripod L 	7,80	52 102 100
Tripod L light 	6,42	52 104 100
Lowering head 	6,,33	52 200 100
Lowering head ES 	10,19	52 202 100
Crown head 	2,87	52 204 100
Crown head light 	1,51	52 206 100
Support head 	0,78	52 208 100

Item		[kg]	Article nº
Spring locked connection pin 16 mm 		0,23	52 310 100
Beam forming support 		7,77	52 302 000
Extension for beam forming support 		3,83	52 304 100
Bracing clamp 		1,45	52 300 100
Bracing frame Variflex 	1.50m 1.80m	17,04 18,80	52 314 000 52 316 000
End - shutter support for slab 		1,73	52 312 000
Rafter plate 	right left	0,09 0,09	52 306 100 52 308 100
Guide rail clamp 		12,40	52 400 100

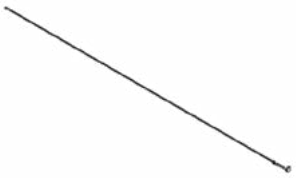
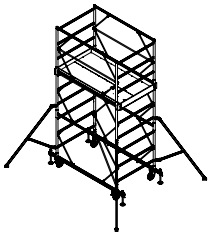
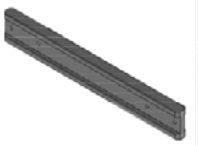
Item		[kg]	Article nº
Handrail post		12,58	52 402 100
			
Wind bracing	7.00m	17,47	73 114 100
			
Mobile scaffolding			98 100 000
			
Working height upon request			
H20 beam	1.45m	7,25	91 145 500
	1.80m	9,00	91 180 500
	1.95m	9,75	91 195 500
	2.15m	10,75	91 215 500
	2.45m	12,25	91 245 500
	2.65m	13,25	91 265 500
	2.90m	14,50	91 290 500
	3.30m	16,50	91 330 500
	3.60m	18,00	91 360 500
	3.90m	19,50	91 390 500
	4.50m	22,50	91 450 500
	4.90m	24,50	91 490 500
	5.90m	29,50	91 590 500
Beam fork Variflex		1,47	52 500 600
			

Table formwork VARITABLE

Efficient and cost-effective formwork system for carrying out large-area slab projects.

Varitable by Variant is a fast and efficient way of forming large-area slabs. The system can be easily adjusted to varying structural and architectural designs (loads, shapes, concrete surface etc.) Once assembled, a complete table unit can be positioned, adjusted, stripped and repositioned to a new area of concrete placement minimal labor. The table can be shifted along the slab using Variant's shifting trolley. In order to gain maximum efficiency, Varitable can be easily combined with Varitable plus and Variflex systems.

Load-bearing capacity :
• Due to its load-bearing flexibility, Varitable system can be adapted to bear loads of fresh concrete of different kinds of slab thicknesses. Optimal and cost-effective use within a range of slab thicknesses up to 500 mm;
• Maximum table form height—6.0 m.

System adaptability:
• Can easily be combined with Varitable Plus and Variflex systems;
• Any type of form-facing can be selected.

Easy handling and planning:
• Any requirements for architectural design of flat concrete slabs can be met;
• Can cover a wide area of practical applications.

Cost-effective:
• Rapid pace of work and cutting of re-assembly costs, due to the repositioning of complete units;
• Table form can be horizontally repositioned with no use of a crane;
• Fewer parts speed up assembly;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability;
• Galvanized or powder coated props, for long service life.

Safe use:
• Accessories such as — working platforms makes for save and easier handling of the system;
• Safe working already during assembly.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VARITABLE— system overview

Main features of the system:

• Assembled form components of the Variflex system;
• 4 standard formats: 2.50x4.00 m / 2.50x5.00 m / 2.00x4.00 m / 2.00x5.00 m;
• Maximum slab height up to 6.00 m;
• Wedge-lock of the table head makes it easy to attach and detach props.
• Pre-assembled table grille for facing with any desired form-ply.

Fitting intermediate props

Intermediate props are mainly required where the tables have to be adapted for greater slab thickness (increased slab loads). The main props of the table (at least 4 of them must always be attached with a table head).

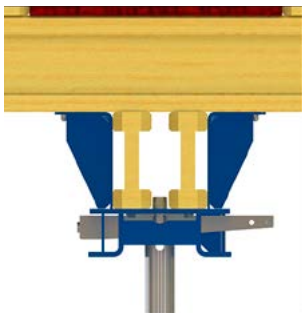
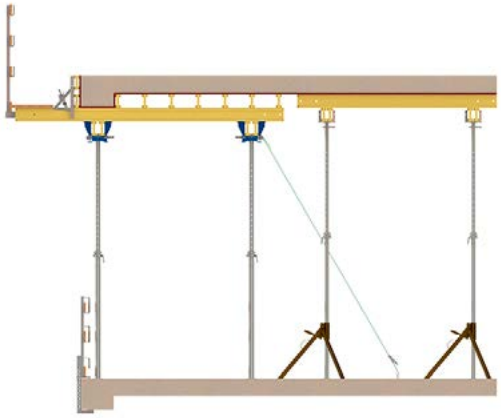


Table head Varitable firmly links double H20 primary beams of the table to the props.

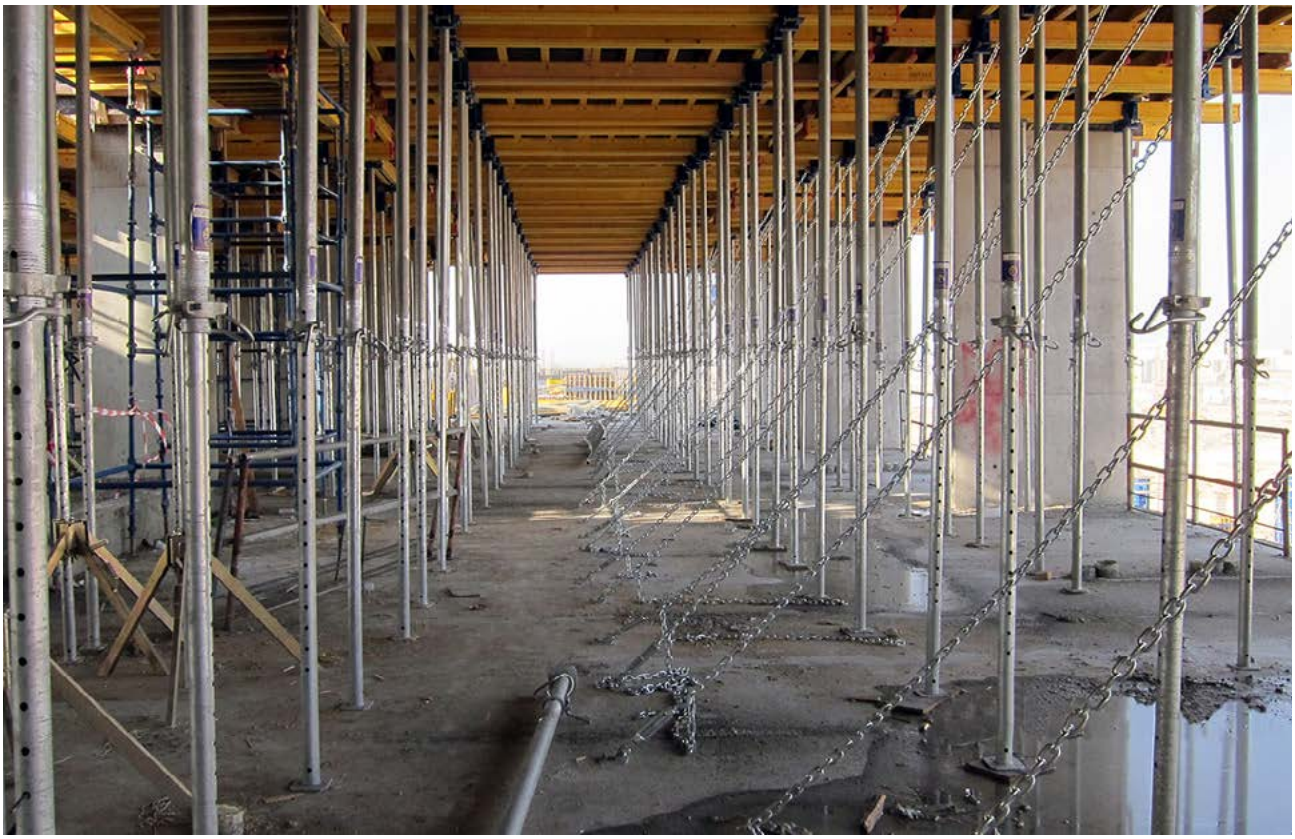
Intermediate head Varitable firmly links the intermediate props to double H20 primary beams.

VARITABLE— tables around the edge of a slab



Varitable system for edge zones of a slab can be assembled in a way, that casting of drop-beams or stop-ends can be provided much easier, with all features integrated in one system.

There is a risk of edge-tables topping over due to cantilevering platforms. Moreover, stop-end formwork and drop beams cause horizontal forces to occur in the direction of the edges of the slab. For this reason, all the edge tables must be secured with a suitable tie-back fixed to each primary beam.



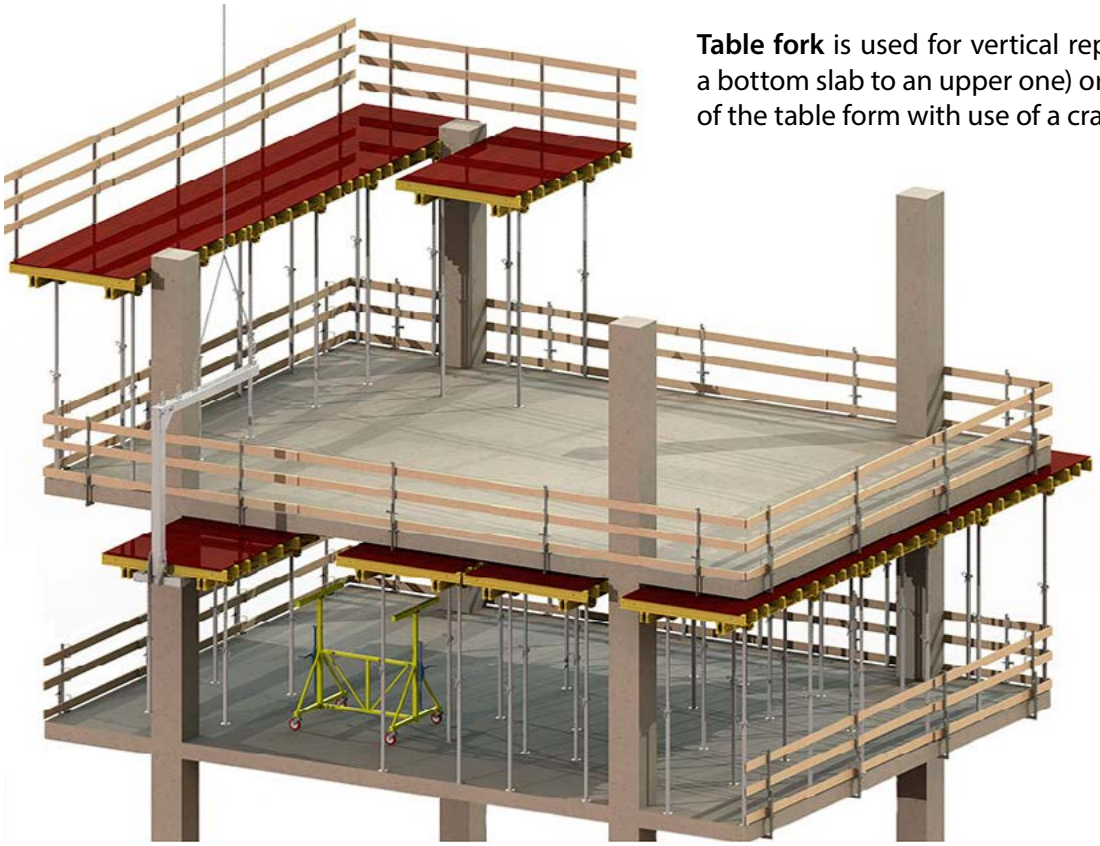
VARITABLE — table shifting and repositioning

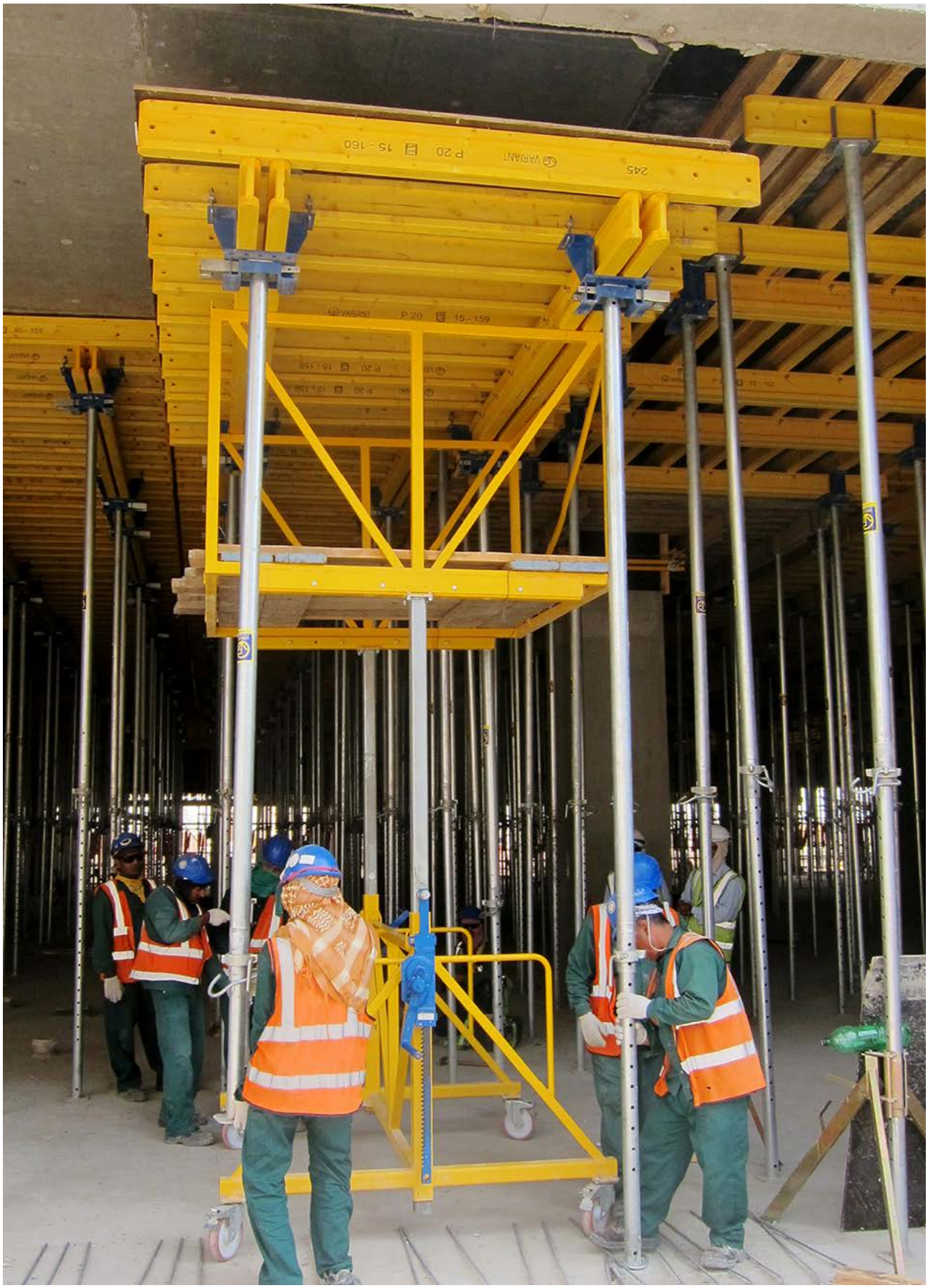
Horizontal shifting

Shifting trolley is used for shifting the table forms along the firm and flat surface in order to deliver them to an installation zone or to a zone for further vertical repositioning by a crane. Fine adjustment of the table form in an installation zone without use of a crane can be made.

Vertical repositioning

Table fork is used for vertical repositioning (from a bottom slab to an upper one) or other relocation of the table form with use of a crane.

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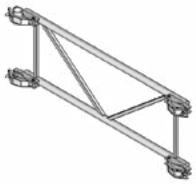
15 - 159
245

VARITABLE

Item		[kg]	Article nº
Heavy duty prop RBGU	2.50m	17,29	51 125 000
	3.00m	20,49	51 130 000
	3.50m	22,66	51 135 000
	4.00m	24,84	51 140 000
	4.50m	27,02	51 145 000
	5.00m	29,20	51 150 000
	5.50m	31,36	51 155 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized Custom size on inquiry			
Table head Varitable		19,74	53 200 000
			
Intermediate head Varitable		3,43	53 202 100
			
Connection unit Varitable		1,05	53 204 100
			
Beam screw	60	0,07	23 302 100
	110	0,09	23 304 100
			
Beam forming support		7,77	52 302 000
			
Extension for beam forming support		3,83	52 304 100
			

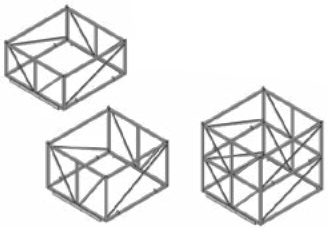
Item		[kg]	Article nº
Bracing frame	1.50m	17,04	52 314 000
	1.80m	18,80	52 316 000
			
End - shutter support for slab		1,73	52 312 000
			
Rafter plate	right	0,09	52 306 100
	left	0,09	52 308 100
			
Guide rail clamp		12,40	52 400 100
			
Handrail post		12,85	52 402 100
			
Lifting hook Varitable		6,17	53 500 100
			

Item		[kg]	Article nº
Transport fork 1t	0.93m	545,16	53 502 000
	1.31m	567,32	53 504 000
	2.03m	601,97	53 506 000

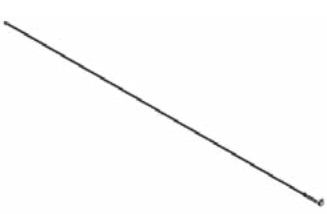
Transport fork' vertical extension		185,6	53 508 000

Shifting trolley Varitable	2.85m	264,81	53 510 000
	3.60m	281,61	53 512 000

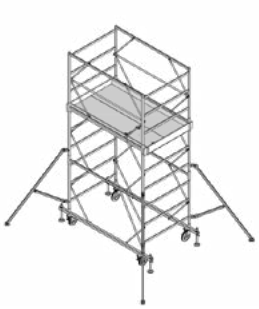
Stacking frame Varitable	1.95x1.86x1.80m	196,18	53 514 000
	1.95x1.86x1.20m	131,57	53 516 000
	1.95x1.86x0.90m	120,75	53 518 000



Wind bracing	7.00m	17,47	73 114 100



Item		[kg]	Article nº
Mobile scaffolding			98 100 100



working height upon request

H20 beam	1.95m	9,75	91 195 500
	2.15m	10,75	91 215 500
	2.45m	12,25	91 245 500
	2.65m	13,25	91 265 500
	2.90m	14,50	91 290 500
	3.30m	16,50	91 330 500
	3.60m	18,00	91 360 500
	3.90m	19,50	91 390 500
	4.50m	22,50	91 450 500
	4.90m	24,50	91 490 500
	5.90m	29,50	91 590 500

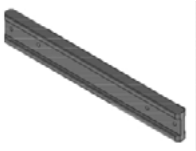


Table formwork VARITABLE PLUS

Even more efficient and cost-effective formwork system for carrying out casting of large-area slabs

Varitable Plus by Variant is a fast and efficient way of forming large-area slabs. The system can be easily adjusted to varying structural and architectural designs (loads, shapes, concrete surfaces etc.) Once assembled, a complete table unit can be positioned, adjusted, stripped and repositioned to a new area of concrete placement using minimal labor. The table can be shifted along the slab using Variant's shifting trolley. In order to gain maximum efficiency, Varitable Plus can be easily combined with Varitable and Variflex systems.

Consisting of high-grate system components, Waling 12 (as main beams) and H20 beams (as secondary beams) Varitable Plus system has several distinctive features, compared with Varitable system:
• Higher load bearing capacity;
• Faster and simpler assembly;
• Integrable working platforms;
• System solutions for forming drop beams and stop-ends;
• Swivel-heads make it easy to move the tables out over parapets.

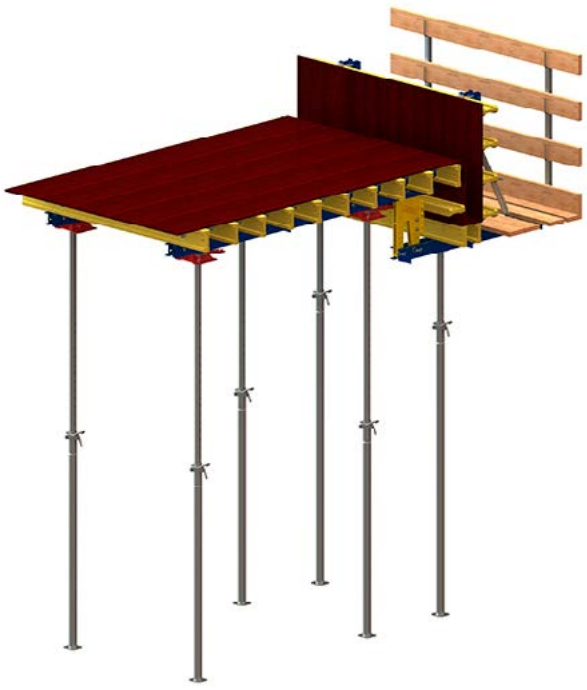
Load-bearing capacity:
• Due to its load-bearing flexibility, Varitable plus system can be adapted to withstand loads of fresh concrete of different kinds of slab thicknesses. Optimal and cost-effective use within a range of slab thicknesses up to 500 mm;
• Maximum table form height—6.0 m.

System adaptability:
• Can easily be combined with Varitable and Variflex systems;
• Any type of form-facing can be selected.

Cost-effective:
• Rapid pace of work and cutting of assembly costs, due to the repositioning of complete units;
• Outer drop beam and slab can be formed using one system;
• Table form can be horizontally repositioned without use of a crane;
• Fewer parts speed up assembly;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability.

Easy handling and planning:
• Any requirements for architectural concrete flat slab design can be met;
• Can cover a wide area of practical applications.

Safe use:
• Integrated working platforms for save and easier handling of the system;
• Safe working already during assembly.




RMG
RMG

VARITABLE PLUS— system overview

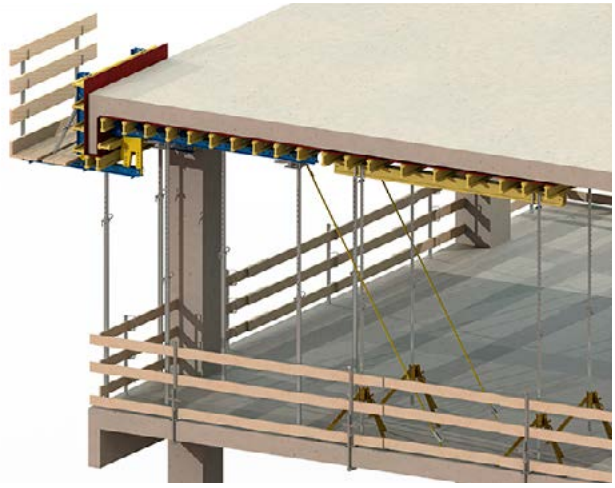
Main features of the system:
• Higher load bearing capacity comparing to Varitable system;
• Consisting of high-grate system components: Waling 12 (as main beams) and H20 beams (as secondary beams);
• 4 standard formats: 2.50x4.00 m / 2.50x5.00 m / 2.00x4.00 m / 2.00x5.00 m;
• Maximum slab height up to 6.00 m ;
• The tilting mechanism of the swivel head enables to fold and fix props at an angle of either 75 or 90 for lifting tables out across parapets and railings;
• The swivel head is easy to relocate along primary beam;
• Wedge-lock of the swivel head makes it easy to attach and detach props;
• Pre-assembled table grille for facing with any desired formply.

Fitting intermediate props
Intermediate props are mainly required where the tables have to be adapted for greater slab thickness (increased slab loads). The main props of the table (at least 4 of them) must always be attached with a table head.

Swivel head Varitable plus firmly links steel primary beams of the table to the props.

Intermediate head Varitable plus firmly links the intermediate props to steel primary beams.

VARITABLE PLUS— tables around the edge of a slab



Varitable plus system for edge zones of a slab can be assembled in a way, that casting of drop-beams or stop-ends can be provided much easier, with all features integrated in one system.

There is a risk of edge-tables topping over due to cantilevering platforms. Moreover, stop-end formwork and drop beams cause horizontal forces to occur in the direction of the edges of the slab. For this reason, all the edge tables must be secured with a suitable tie-back fixed to each primary beam.

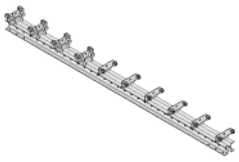
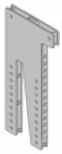
VARITABLE PLUS — table shifting and repositioning

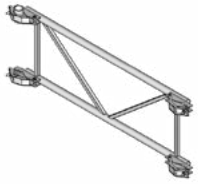
Horizontal shifting

Shifting trolley is used for shifting of the table-forms along the firm and flat surface in order to deliver them to an installation zone or to a zone for further vertical repositioning by a crane. Fine adjustment of the tableform in an installation zone without use of a crane can be made.

Vertical repositioning

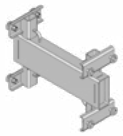
Table fork is used for vertical repositioning (from a bottom slab to an upper one) or other relocation of the tableform with use of a crane.

Item		[kg]	Article nº
Heavy duty prop RBGU	2.50m	17,29	51 125 000
	3.00m	20,49	51 130 000
	3.50m	22,66	51 135 000
	4.00m	24,84	51 140 000
	4.50m	27,02	51 145 000
	5.00m	29,20	51 150 000
	5.50m	31,36	51 155 000
			
Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized Custom size on inquiry			
Waling 12 Varitable plus	3.50m	94,01	55 350 000
	4.00m	107,40	55 400 000
	5.00m	134,30	55 500 000
			
Waling 12 modifie	2.00m	42,10	56 200 000
			
Swivel head Varitable plus		16,07	54 200 100
			
Intermediate head Varitable plus		1,04	54 202 100
			
Drop beam plate Varitable plus	0.60m	24,75	54 300 000
	0.80m	32,24	54 310 000
			
Connection angle Varitable plus		2,98	54 302 100
			

Item		[kg]	Article nº
Spindle strut T6	1.00-1.50m	19,01	54 308 100
			
Spring locked connection pin 16 mm		0,23	52 310 100
			
Flange clamp		1,16	23 300 100
			
Connecting pin		0,39	23 400 100
			
Spring cotter		0,05	23 402 100
			
Bracing frame	1.50m	17,04	52 314 000
	1.80m	18,80	52 316 000
			
End - shutter support for slab		1,73	52 312 000
			

VARITABLE PLUS

Item		[kg]	Article nº
Rafter plate	right left	0,09 0,09	52 306 100 52 308 100
			
Guide rail clamp		12,40	52 400 100
			
Handrail post		12,85	52 402 100
			
Beam forming support		7,77	52 302 000
			
Transport fork 1t	0.93m 1.31m 2.03m	545,16 567,32 601,97	53 502 000 53 504 000 53 506 000
			
Transport fork' vertical extension		185,60	53 508 000
			

Item		[kg]	Article nº
Extension profile H20 Varitable plus		44,70	54 306 000
			
Extension clamp H20 Varitable plus		6,13	54 304 000
			
Shifting trolley Varitable	2.85m 3.60m	264,81 281,61	53 510 000 53 512 000
			
Stacking frame Varitable	1.95x1.86x1.80m 1.95x1.86x1.20m 1.95x1.86x0.90m	196,18 131,57 120,75	53 514 000 53 516 000 53 518 000

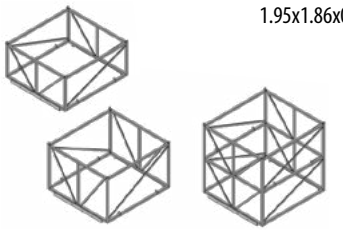



Table strut 340		23,80	54 314 100
			
Table strut 540		44,80	54 316 100
			

VARIANT

YOU CAN RELY ON US

Slab props

Conventional solutions for fast and efficient slab forming

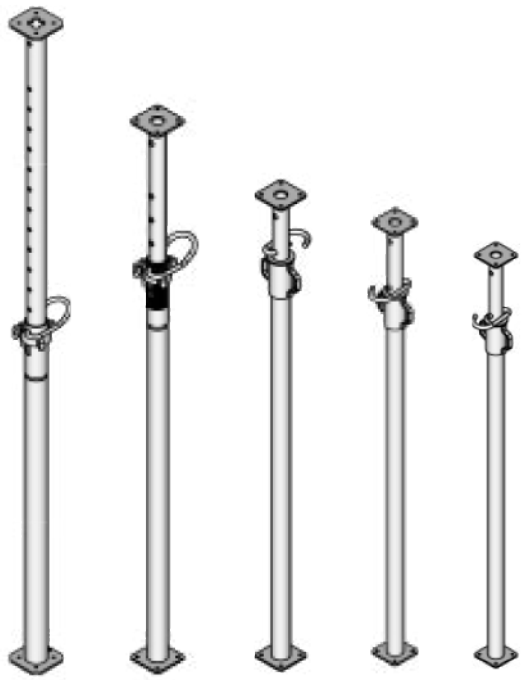
Variant slab props are convenient and cost-effective solution for slab forming. Installation and dismantling requires minimal manpower during everyday work on the site. The anti-handtrap and anti-dropout safeguard, forged nut, Galvanized finish and ergonomically shaped fastening clamp are just a few of the features of these tubular steel props that have convinced customers all over the world. Depending on your construction conditions (load of fresh concrete, formwork height etc.) you can choose the most applicable system for your construction needs.

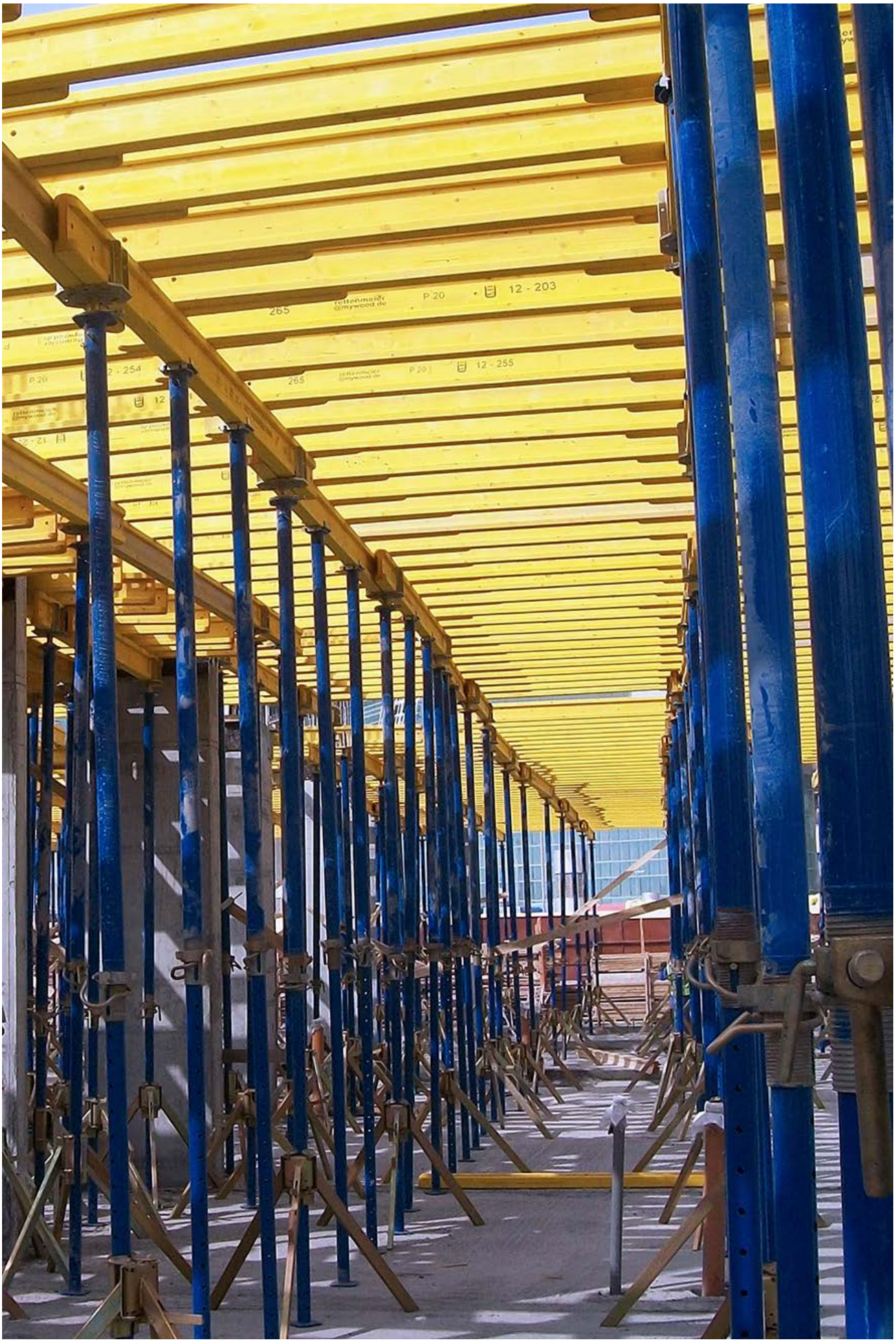
Heavy duty prop RBGU:
• Maximum load-bearing capacity: 25 kN of vertical load (for more detailed information regarding the load-bearing capacity see the section Heavy duty prop RBGU - Item overview);
• Self-cleaning exposed thread;
• Possible formwork height depending on height of the prop is from 0.97 to 5.50 m.

Medium duty prop RBGN:
• Maximum load-bearing capacity: 20 kN of vertical load (for more detailed information regarding the load-bearing capacity see the section Medium duty prop RBGN - Item overview);
• Self-cleaning exposed thread;
• Possible formwork height depending on height of the prop is from 1.46 to 5.00 m.

Medium duty prop RBG:
• Maximum load-bearing capacity: 20 kN of vertical load (for more detailed information regarding the load-bearing capacity see the section Medium duty prop RBG - Item overview);
• Closed thread;
• Possible formwork height depending on height of the prop is from 1.46 to 5.00 m.

Light duty prop RBGE:
• Maximum load-bearing capacity: 14 kN of vertical load (for more detailed information regarding the load-bearing capacity see the section Light duty prop RBGE - Item overview);
• Closed thread;
• Possible formwork height depending on height of the prop is from 1.51 to 4.50 m.

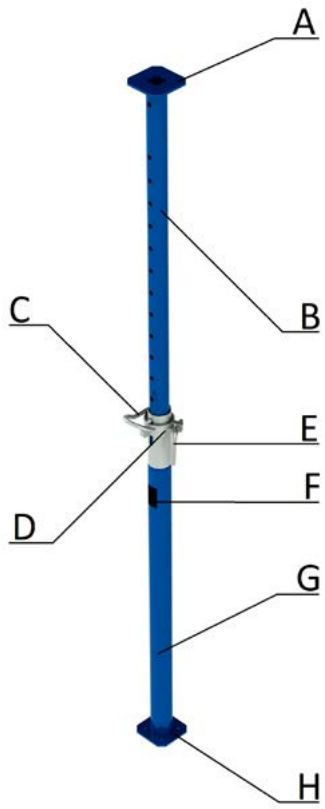



265
P 20
12 - 203
12 - 255

Heavy duty prop RBGU - Item overview

Main features:

- Height load-bearing capacity;
- Pegging holes, for easier height adjustment;
- Quick connection: head adapter of various types can be secured against pull with the spring pin;
- Dropout latch: for safety reasons, Variant slab props have latched to prevent the inner tube sliding out of the fixed tube;
- Special thread geometry, which makes the prop easier to release even when it is under high load;
- Galvanized or powder coated for long service life.



(A) Head plate
(B) Slider tube
(C) Open thread
(D) Peg
(E) Adjusting nut
(F) Type lable
(G) Fixed tube
(H) Baseplate

Permitted prop loads

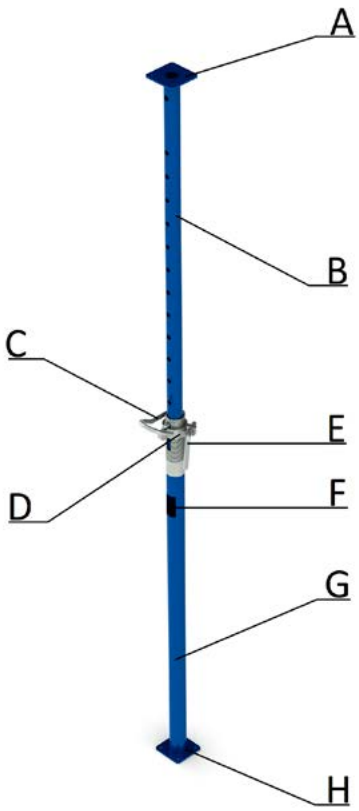
Prop h., m	1.50	2.50	3.00	3.50	4.00	4.50	5.00	5.50
	Range of moving-out, m							
	0.96-1.50	1.52-2.54	1.97-3.04	2.22-3.54	2.47-4.04	2.72-4.54	2.97-5.04	3.22-5.54
5.5								20kN
5.4								
5.3								
5.2								
5.1								
5.0							20kN	
4.9								
4.8								
4.7								
4.6								
4.5						25kN	25kN	25kN
4.4								
4.3								
4.2								
4.1								
4.0					25kN			
3.9								
3.8								
3.7								
3.6								
3.5				25kN				
3.4								
3.3								
3.2								
3.1								
3.0			25kN					
2.9								
2.8								
2.7								
2.6								
2.5		25kN						
2.4								
2.3								
2.2								
2.1								
2.0								
1.9								
1.8								
1.7								
1.6								
1.5	25kN							
0.9								

Permitted prop loads

Prop h., m	2.50	3.00	3.50	4.00	4.50	5.00
	Range of moving-out, m					
	1.52-2.54	1.97-3.04	2.22-3.54	2.47-4.04	2.72-4.54	2.97-5.04
5.0						11kN
4.9						11.45kN
4.8						11.94kN
4.7						12.45kN
4.6						13kN
4.5					13.40kN	13.58kN
4.4					14.03kN	14.21kN
4.3					14.69kN	14.87kN
4.2					15.40kN	15.59kN
4.1					16.18kN	16.36kN
4.0				16kN	17.00kN	17.19kN
3.9				16.83kN	17.90kN	18.08kN
3.8				17.73kN	18.86kN	19.04kN
3.7				18.70kN	20kN	20kN
3.6				19.75kN		
3.5			20kN	20kN		
3.4						
3.3						
3.2						
3.1						
3.0		20kN				
2.9						
2.8						
2.7						
2.6						
2.5	20kN					
2.4						
2.3						
2.2						
2.1						
2.0						
1.9						
1.8						
1.7						
1.6						
1.5						

Main features:

- Medium load-bearing capacity;
- Pegging holes, for easier height adjustment;
- Quick connection: head adapter of various types can be secured against pull with the spring pin;
- Dropout latch: for safety reasons, Variant slab props have latched to prevent the inner tube sliding out of the fixed tube;
- Special thread geometry, which makes the prop easier to release even when it is under high load;
- Galvanized or powder coated for long service life.

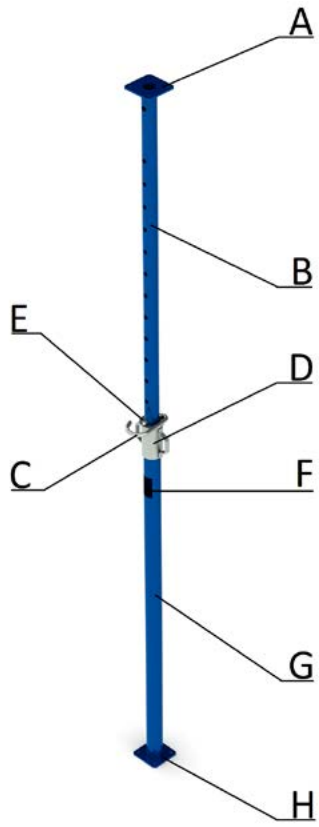


(A) Head plate
(B) Slider tube
(C) Open thread
(D) Peg
(E) Adjusting nut
(F) Type lable
(G) Fixed tube
(H) Baseplate

Medium duty prop RBG - Item overview

Main features:

- Medium load-bearing capacity;
- Pegging holes, for easier height adjustment;
- Quick connection: head adapter of various types can be secured against pull with the spring pin;
- Dropout latch: for safety reasons, Variant slab props have latched to prevent the inner tube sliding out of the fixed tube;
- Special thread geometry, which makes the prop easier to release even when it is under high load;
- Galvanized or powder coated for long service life.



(A) Head plate
(B) Slider tube
(C) Open thread
(D) Peg
(E) Adjusting nut
(F) Type lable
(G) Fixed tube
(H) Baseplate

Permitted prop loads

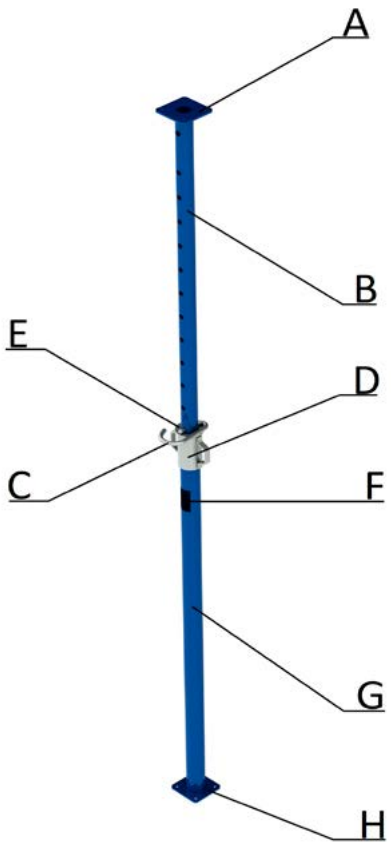
Prop h., m	2.50	3.00	3.50	4.00	4.50	5.00
	Range of moving-out, m					
	1.52-2.54	1.97-3.04	2.22-3.54	2.47-4.04	2.72-4.54	2.97-5.04
5.0						9.58kN
4.9						9.97kN
4.8						10.39kN
4.7						10.84kN
4.6						11.32kN
4.5					11.20kN	11.82kN
4.4					11.50kN	12.37kN
4.3					12.27kN	12.95kN
4.2					12.86kN	13.58kN
4.1					13.49kN	14.25kN
4.0				13.20kN	14.17kN	14.97kN
3.9				13.88kN	14.91kN	15.67kN
3.8				14.63kN	15.70kN	16.59kN
3.7				15.43kN	16.57kN	17.50kN
3.6				16.30kN	17.50kN	18.49kN
3.5			14.50kN	17.25kN	18.52kN	19.56kN
3.4			15.37kN	18.94kN	19.62kN	20kN
3.3			16.31kN	19.40kN	20kN	
3.2			17.35	20kN		
3.1			18.48kN			
3.0		20kN	20kN			
2.9						
2.8						
2.7						
2.6						
2.5	20kN					
2.4						
2.3						
2.2						
2.1						
2.0						
1.9						
1.8						
1.7						
1.6						
1.5						

Permitted prop loads

Prop h., m	2.50	3.00	3.50	4.00	4.50
	Range of moving-out, m				
	1.52-2.54	1.97-3.04	2.22-3.54	2.47-4.04	2.72-4.54
4.5					9.67kN
4.4					10.11kN
4.3					10.59kN
4.2					11.09kN
4.1					11.64kN
4.0				10.90kN	12.23kN
3.9				11.47kN	12.87kN
3.8				12.08kN	13.56kN
3.7				12.74kN	14.30kN
3.6				13.46kN	14.95kN
3.5			12kN	14.24kN	15kN
3.4			12.72kN	14.87kN	
3.3			13.50kN	15kN	
3.2			14.36kN		
3.1			15kN		
3.0		13kN			
2.9		13.91kN			
2.8		14.75kN			
2.7		15kN			
2.6					
2.5	14kN				
2.4	14.95kN				
2.3	15kN				
2.2					
2.1					
2.0					
1.9					
1.8					
1.7					
1.6					
1.5					

Main features:

- Light load-bearing capacity;
- Pegging holes, for easier height adjustment;
- Quick connection: head adapter of various types can be secured against pull with the spring pin;
- Dropout latch: for safety reasons, Variant slab props have latched to prevent the inner tube sliding out of the fixed tube;
- Special thread geometry, which makes the prop easier to release even when it is under high load;
- Galvanized or powder coated for long service life.

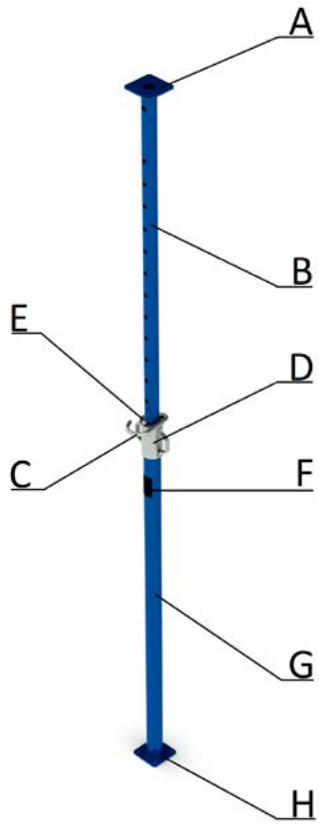


(A) Head plate
(B) Slider tube
(C) Open thread
(D) Peg
(E) Adjusting nut
(F) Type lable
(G) Fixed tube
(H) Baseplate

Extra light duty prop RBR57 & RBR48 - Item overview

Main features:

- Extra light load-bearing capacity;
- Pegging holes, for easier height adjustment;
- Quick connection: head adapter of various types can be secured against pull with the spring pin;
- Dropout latch: for safety reasons, Variant slab props have latched to prevent the inner tube sliding out of the fixed tube;
- Special thread geometry, which makes the prop easier to release even when it is under high load;
- Galvanized or powder coated for long service life.



(A) Head plate
(B) Slider tube
(C) Peg
(D) Adjusting nut
(E) Toggle lever
(F) Type lable
(G) Fixed tube
(H) Baseplate

Permitted prop loads

Prop height, m	RBR57		RBR48	
	3.00 m	3.50 m	3.00 m	3.50 m
	Range of moving-out, m			
	1.71-3.05	1.96-3.55	1.71-3.05	1.96-3.55
3.5		10kN		8kN
3.4				
3.3				
3.2				
3.1				
3.0	10kN		8kN	
2.9				
2.8				
2.7				
2.6				
2.5				
2.4				
2.3				
2.2				
2.1				
2.0				
1.9				
1.8				
1.7				

Item		[kg]	Article nº
Heavy duty prop RBGU	1.50m	13,45	51 115 000
	2.50m	17,29	51 125 000
	3.00m	20,49	51 130 000
	3.50m	22,66	51 135 000
	4.00m	24,84	51 140 000
	4.50m	27,02	51 145 000
	5.00m	29,20	51 150 000
	5.50m	31,36	51 155 000

Options available:
xx xxx 000 - Powder coated
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Medium duty prop RBGN	2.50m	11,15	51 225 000
	3.00m	12,58	51 230 000
	3.50m	14,16	51 235 000
	4.00m	16,02	51 240 000
	4.50m	17,45	51 245 000
	5.00m	18,88	51 250 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Medium duty prop RBG	2.50m	10,87	51 425 000
	3.00m	12,30	51 430 000
	3.50m	13,55	51 435 000
	4.00m	14,94	51 440 000
	4.50m	16,38	51 445 000
	5.00m	17,80	51 450 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Item		[kg]	Article nº
Light duty prop RBGE	2.50m	9,67	51 325 000
	3.00m	10,97	51 330 000
	3.50m	12,15	51 335 000
	4.00m	13,45	51 340 000
	4.50m	14,70	51 345 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Extra light duty prop RBR 57	3.00m	8,51	51 730 000
	3.50m	9,56	51 735 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

Extra light duty prop RBR 48	3.00m	7,44	51 630 000
	3.50m	8,24	51 635 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized
Custom size on inquiry

VARIANT

LOAD-BEARING SCAFFOLDING

Load-bearing scaffolding TOP TOWER 40

The conventional shoring system for many different fields of use.

The system of load-bearing scaffolding Top Tower 40 is based on robust frames made of galvanized or powder-coated steel, with maximum load-bearing capacity 40 kN per leg. The Top Tower 40 has broad spectrum of applications in bridge-building, high-rise and industrial construction fields. The system supports different kinds of slabs cast in place (thickness, heights , inclinations etc.), also the Top Tower 40 is used for shoring of precast elements. TT40 can be adjusted to different layouts and loads owing to variable inter-frame spacing. Assembly is easy, logical and fast, can be done by two workers. Individual adjustment of upper and lower supports is possible.

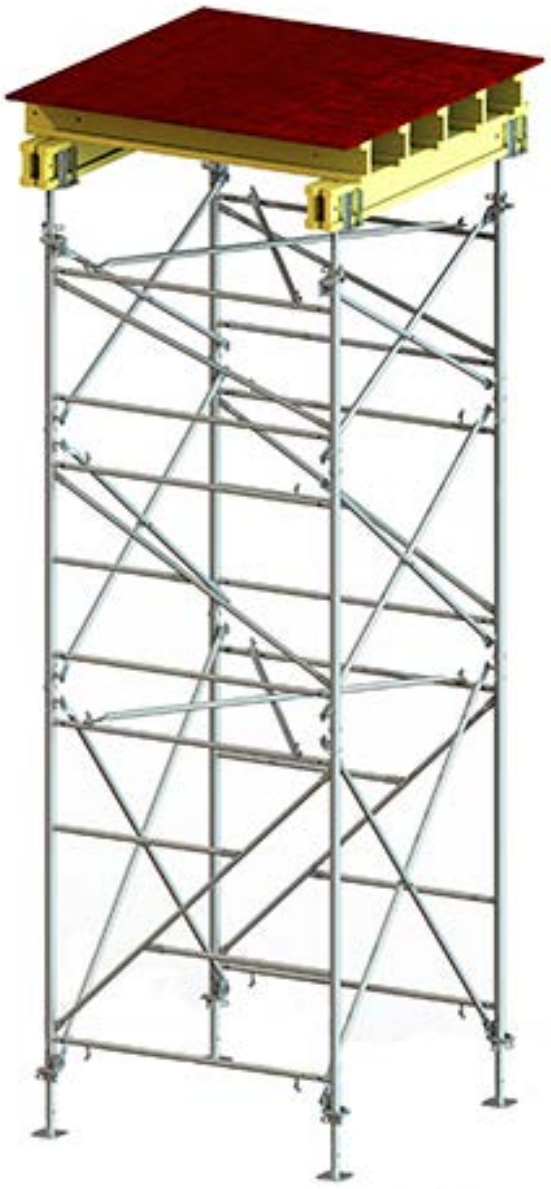
Load-bearing capacity :
• Load-bearing capacity up to 40 kN per leg;
• The inter-frame spacing can be varied in order to provide necessary load-bearing capacity.

System adaptability:
• Excellent adaptation to different layouts, made possible by variable inter-frame spacing;
• Upper and lower supports with 50 cm extension range each, for easier height adjustment;
• The system can be precisely adjusted to any length, width and height.

Cost-effective:
• Rapid pace of work and cutting of assembly costs.
• Fewer parts speed up assembly;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability;
• Galvanized or powder-coated frames, for long service life.

Easy handling and planning:
• Small number of different parts is used;
• For assembly no tools required;
• Any requirements for architectural concrete slab design can be met;
• Can cover a wide area of practical applications.

Safe use:
• Can be pre-assembled horizontally and lifted safely into the vertical position, due to inter-frame connections;
• Dependable stability.

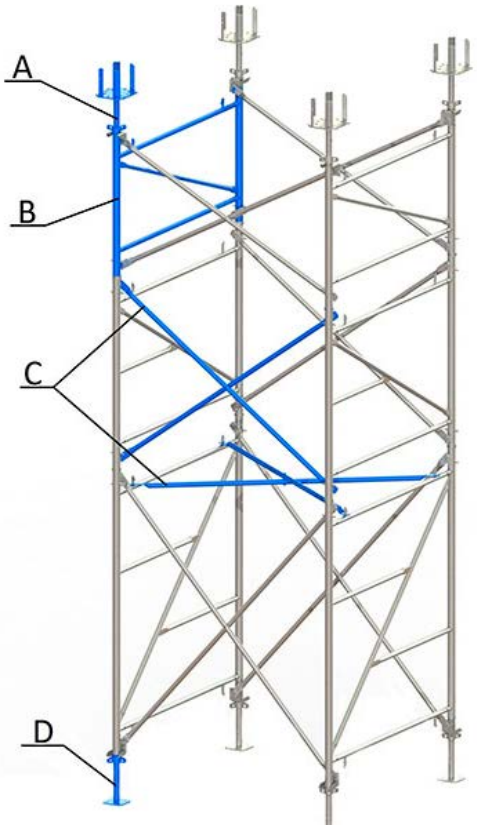


TOP TOWER 40— system overview

(A) Upper support TT40
Upper height-adjustment spindle, which is used for structure support and redistribution of the loads on rigid scaffolding frames, provides 50 cm of adjustment length (up to 30 cm without bracing, from 30 up to 50 cm must be braced using frame tubes).

(B) Scaffold frame TT40
Rigid, galvanized or powder coated frames, in three different heights, are the basis of the economical load-bearing tower, designed for widely varied areas of use.

Basic frame 1.80 m	Basic frame 1.20 m	Basic frame 0.90 m
		



(C) Cross tie
Cross ties connect scaffolding frames horizontally and vertically, providing a stiff structure of guaranteed spatial rigidity. Changing inter-frame space by installation of cross ties with different sizes, makes it possible to adjust the system to various layouts.

There are 3 standard tower dimensions, created by installation of cross ties horizontally and vertically. Horizontal installation depends only on inter-frame spacing, whereas vertical, depends on inter-frame spacing and height of the frame used.

Tower 1.5x1.0 m
Top view
Horizontal cross tie 1.2x1.0

Tower 1.5x1.5 m
op view
Horizontal cross tie 1.2x1.5

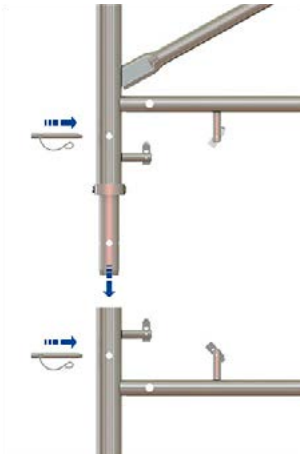
Tower 1.5x2.0 m
Top view
Horizontal cross tie 1.2x2.0

Cross ties used for different tower creation Tower dimensions

Type of installation	1.5x1.0 m	1.5x1.5 m	1.5x2.0 m
Horizontal	1.2x1.0	1.2x1.5	1.2x2.0
Vertical			
frame 0.9x1.5	0.9x1.0	0.9x1.5	0.9x2.0
frame 1.2x1.5	1.2x1.0	1.2x1.5	1.2x2.0
frame 1.8x1.5	1.8x1.0	1.8x1.5	1.8x2.0

(D) Lower support TT40
Lower height-adjustment spindle, which is used for structure support and redistribution of the loads on rigid scaffolding frames, provides 50 cm of adjustment length (up to 30 cm without bracing, from 30 up to 50 cm shall be braced using frame tubes).

TOP TOWER 40— interconnection



For reliable use and safe repositioning of assembled (preassembled) units by a crane, the Top Tower 40 has interconnection system. Consisting of **insert TT40**, which is installed between two frames and fixed by **retainers TT40** to each frame.

TOP TOWER 40— repositioning

Assembled (preassembled) Top Tower 40 unit can be wheeled to the next location, quickly and easily, using a **wheel unit**.

The wheel unit can perform the following functions:

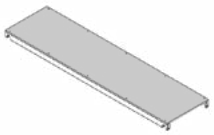
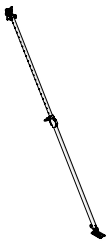
- Lifting;
- Wheeling;
- Lining-and-leveling;
- Lowering.

TOP TOWER 40

Item		[kg]	Article nº
Scaffold frame TT40	0.90x1.50m	14,56	61 110 000
	1.20x1.50m	18,22	61 120 000
	1.80x1.50m	25,70	61 130 000
Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized Custom size on inquiry			
Cross tie	0.90x1.00m	4,08	61 210 000
	1.20x1.00m	4,67	61 220 000
	1.80x1.00m	6,06	61 230 000
	0.90x1.50m	5,36	61 212 000
	1.20x1.50m	5,86	61 222 000
	1.80x1.50m	7,12	61 232 000
	0.90x2.00m	6,79	61 214 000
	1.20x2.00m	7,19	61 224 000
	1.80x2.00m	8,24	61 234 000
	0.90x2.50m	8,22	61 216 000
	1.20x2.50m	8,56	61 226 000
	1.80x2.50m	9,46	61 236 000
Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized Custom size on inquiry			
Insert TT40		0,89	61 400 100
			
Retainer TT40		0,06	61 402 100
			
Upper support TT40		13,86	61 500 100
			
Lower support TT40		11,09	61 502 100
			

Item		[kg]	Article nº
Anti-dropout lock TT40		0,59	61 404 100
			
Framed tube	1.00m	4,60	94 100 200
	1.50m	6,91	94 150 200
	2.00m	9,21	94 200 200
	2.50m	11,51	94 250 200
	3.00m	13,81	94 300 200
Swivel coupler	48x48mm	1,22	95 106 100
			
Screw-on coupler 48 mm	30	1,21	95 100 100
	70	1,26	95 102 100
	100	1,33	95 104 100
Anchoring shoe		5,03	61 800 100
			
Clamping plate		1,71	61 406 100
			
Clamping tie-rod 330		0,95	61 408 100
			
Star - shaped nut	15	0,40	95 206 100
			
Beam screw	60	0,07	23 302 100
	110	0,09	23 304 100

Item		[kg]	Article nº
Drop beam forming support		7,77	52 302 000
			
Extension for drop beam forming support		3,83	52 304 100
			
End - shutter support for slab		1,73	52 312 000
			
Rafter plate	right left	0,09 0,09	52 306 100 52 308 100
			
Tower bracket TT40		16,28	61 410 000
			
Handrail clamp		12,40	52 400 100
			
Handrail post		12,85	52 402 100
			

Item		[kg]	Article nº
Mounting bridge TT40	1.00m 1.50m 2.00m	9,45 13,76 21,63	61 412 000 61 414 000 61 416 000
			
Shifting wheel TT40		47,46	61 600 000
			
Tower strut TT40 340		23,13	61 700 100
			
Tower strut TT40 540		44,10	61 702 100
			

Load-bearing scaffolding TOP TOWER 60

The medium-duty shoring system for many different fields of use.

The system of load-bearing scaffoldings Top Tower 60 is based on robust frames made of galvanized or powder-coated steel, with maximum load-bearing capacity 60 kN per leg. The Top Tower 60 has broad spectrum of applications in bridge-building, high-rise and industrial construction fields. The system supports different kinds of slabs cast in place (thickness, heights , inclinations etc.), also the Top Tower 60 system is used for shoring of precast elements. TT60 can be adjusted to different layouts and loads owing to variable inter-frame spacing. Assembly is easy, logical and fast, can be done by two workers. Individual adjustment of upper and lower supports is possible.

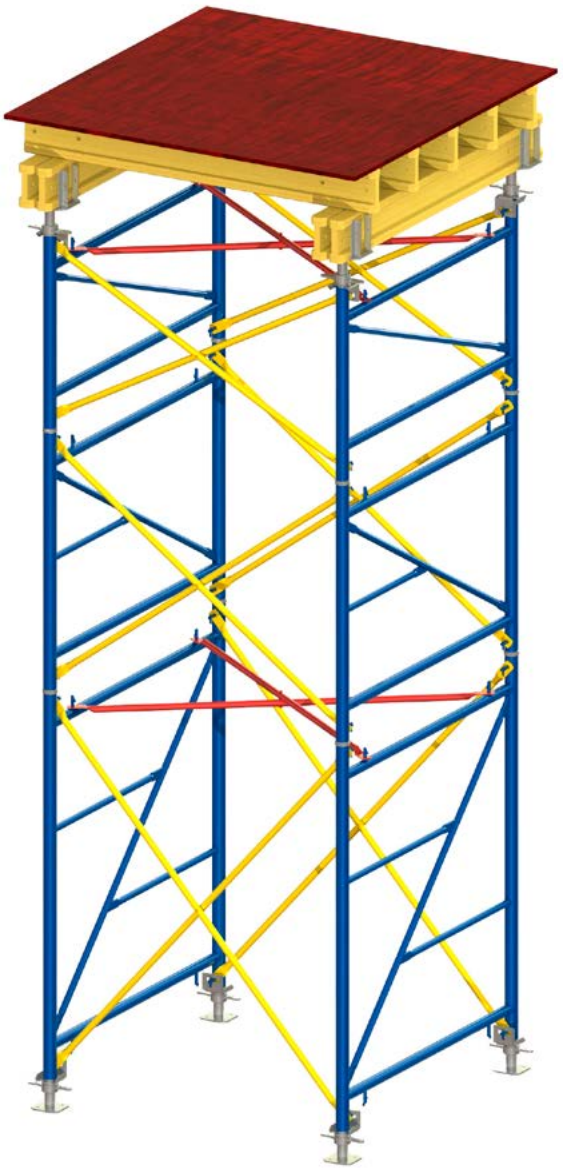
Load-bearing capacity :
• Load-bearing capacity up to 60 kN per leg;
• The inter-frame spacing can be varied to provide necessary load-bearing capacity.

System adaptability:
• Excellent adaptation to different layouts, made possible by variable inter-frame spacing;
• Upper and lower supports with 50 cm extension range each, for easier height adjustment;
• The system can be exactly adapted to any length, width and height.

Cost-effective:
• Rapid pace of work and cutting of assembly costs;
• Fewer parts speed up assembly;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability;
• Galvanized or powder-coated frames, for long service life.

Easy handling and planning:
• Small number of different parts is used;
• For assembly no tools required;
• Any requirements for architectural concrete slab design can be met;
• Can cover a wide area of practical applications.

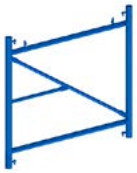
Safe use:
• Can be pre-assembled horizontally and lifted safely into the vertical position, due to inter-frame connections;
• Dependable stability.



TOP TOWER 60— system overview

(A) Upper support TT60
Upper height-adjustment spindle, which is used for structure support and redistribution of the loads on rigid scaffolding frames, provides 50 cm of adjustment length (up to 30 cm without bracing, from 30 up to 50 cm shall be braced using frame tubes).

(B) Scaffold frame TT60

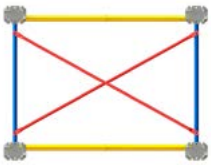
Basic frame 1.80 m	Basic frame 1.20 m	Basic frame 0.90 m
		

(C) Cross tie
Cross ties connect scaffolding frames horizontally and vertically, providing a stiff structure with guaranteed spatial rigidity. Changing inter-frame space by installation of cross ties of different sizes, makes it possible to adjust the system to various layouts

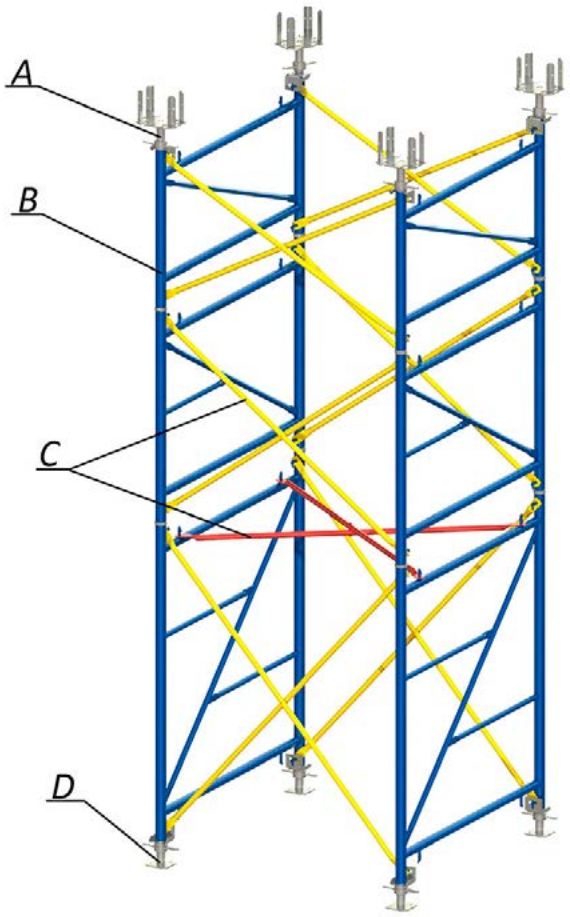
There are 3 standard tower dimensions, created by installation of cross ties horizontally and vertically. Horizontal installation depends only on inter-frame spacing, whereas vertical, depends on inter-frame spacing and height of the frame used.

Tower 1.5x1.0 m
Top view
Horizontal cross tie
1.2x1.0

Tower 1.5x1.5 m
Top view
Horizontal cross tie
1.2x1.5



Tower 1.5x2.0 m
Top view
Horizontal cross tie
1.2x2.0

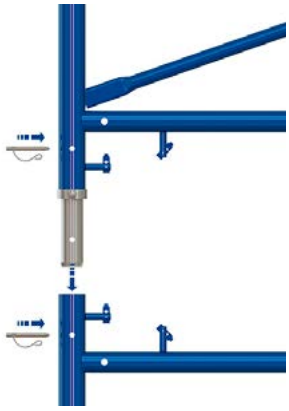


Cross ties used for different tower creation Tower dimensions

Type of installation	1.5x1.0 m	1.5x1.5 m	1.5x2.0 m
Horizontal	1.2x1.0	1.2x1.5	1.2x2.0
Vertical			
frame 0.9x1.5	0.9x1.0	0.9x1.5	0.9x2.0
frame 1.2x1.5	1.2x1.0	1.2x1.5	1.2x2.0
frame 1.8x1.5	1.8x1.0	1.8x1.5	1.8x2.0

(D) Lower support TT60
Lower height-adjustment spindle, which is used for structure support and redistribution of the loads on rigid scaffolding frames, provides 50 cm of adjustment length (up to 30 cm without bracing, from 30 up to 50 cm shall be braced using frame tubes).

TOP TOWER 60— interconnection



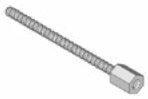
For reliable use and safe repositioning of assembled (preassembled) units by a crane, the Top Tower 60 has interconnection system. Consisting of an insert TT60, which is installed between two frames and fixed by retainers TT60 to each frame.

TOP TOWER 60— repositioning

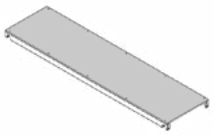
Assembled (preassembled) Top Tower 60 unit can be wheeled to the next location, quickly and easily, using a wheel unit.
The wheel unit can perform the following functions:
- Lifting;
- Wheeling;
- Lining-and-leveling;
- Lowering.

TOP TOWER 60

Item		[kg]	Article nº
Scaffold frame TT60	0.90x1.50m	20,49	62 110 000
	1.20x1.50m	24,77	62 120 000
	1.80x1.50m	33,56	62 130 000
Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized Custom size on inquiry			
Cross tie	0.90x1.00m	4,08	61 210 000
	1.20x1.00m	4,67	61 220 000
	1.80x1.00m	6,06	61 230 000
	0.90x1.50m	5,36	61 212 000
	1.20x1.50m	5,86	61 222 000
	1.80x1.50m	7,12	61 232 000
	0.90x2.00m	6,79	61 214 000
	1.20x2.00m	7,19	61 224 000
	1.80x2.00m	8,24	61 234 000
	0.90x2.50m	8,22	61 216 000
	1.20x2.50m	8,56	61 226 000
	1.80x2.50m	9,46	61 236 000
Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized Custom size on inquiry			
Insert TT60		1,19	62 400 100
			
Retainer TT60		0,07	62 402 100
			
Upper support TT60		16,80	62 500 100
			
Lower support TT60		14,06	62 502 100
			

Item		[kg]	Article nº
Anti-dropout lock TT60		0,68	62 404 100
			
Framed tube	1.00m	4,60	94 100 200
	1.50m	6,91	94 150 200
	2.00m	9,21	94 200 200
	2.50m	11,51	94 250 200
	3.00m	13,81	94 300 200
Swivel coupler	48x48mm	1,22	95 106 100
	60x48mm	1,47	95 108 100
Screw-on coupler 48 mm	30	1,21	95 100 100
	70	1,26	95 102 100
	100	1,33	95 104 100
Anchoring shoe		5,03	61 800 100
			
Clamping plate		1,71	61 406 100
			
Clamping tie-rod 330		0,95	61 408 100
			
Star - shaped nut	15	0,40	95 206 100
			
Beam screw	60	0,07	23 302 100
	110	0,09	23 304 100

Item		[kg]	Article nº
Drop beam forming support		7,77	52 302 000
			
Extension for drop beam forming support		3,83	52 304 100
			
End - shutter support for slab		1,73	52 312 000
			
Rafter plate	right	0,09	52 306 100
	left	0,09	52 308 100
			
Tower bracket TT40		16,28	61 410 000
			
Handrail clamp		12,40	52 400 100
			
Handrail post		12,85	52 402 100
			

Item		[kg]	Article nº
Mounting bridge TT40	1.00m	9,45	61 412 000
	1.50m	13,76	61 414 000
	2.00m	21,63	61 416 000
			
Shifting wheel TT40		47,46	61 600 000
			
Tower strut TT60 340		23,13	61 700 100
			
Tower strut TT60 540		44,10	61 702 100
			

Load-bearing scaffolding TOP TOWER 100

Heavy-duty system for high shoring and heavy loads.

Top Tower 100 is a heavy-duty scaffolding system with broad spectrum of applications in bridge-building, high-rise and industrial construction. Having maximum load-bearing capacity of 100 kN per leg, the system is mainly used for:
- Forming of different kinds of cast in place slabs e.g. flat and inclined;
- Shoring system for bridges superstructures e.g. precast or metal;
- Temporary support during complex installation works.

Top Tower 100 is a cost-saving shoring system for heavy loads, which suits best for construction of bridges, flyovers, overpasses, viaducts as well as other types of industrial projects.

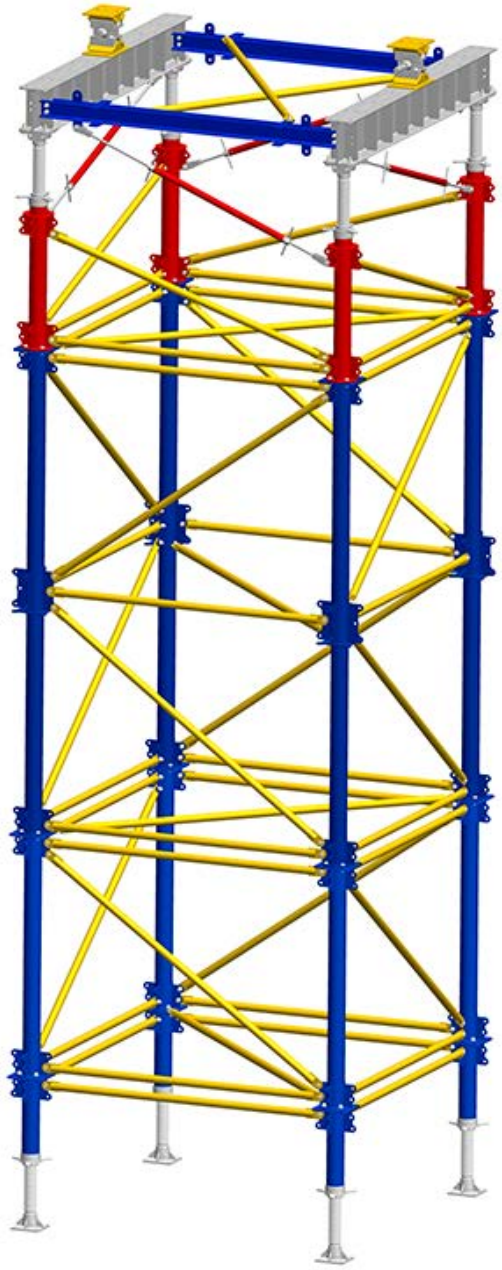
Load-bearing capacity:
• Load bearing capacity up to 100 kN per leg;
• Tower base can be anchored to the ground in order to increase load bearing capacity.

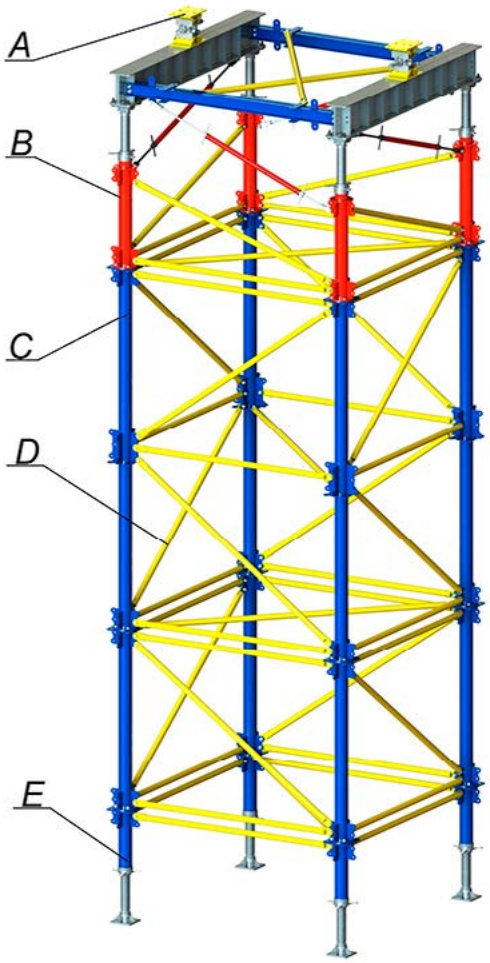
System adaptability:
• Very versatile modular system for different shoring configurations;
• The system can be precisely adjusted to any length, width and height;
• Independent jacks for elevations.

Cost-effective:
• Quick and safe on-site erection;
• Fewer parts speed up assembly;
• High number of use cycles means lower follow-up expenses;
• Reduction of expenses by means of system adaptability;
• Galvanized or powder-coated elements, for long service life.

Easy handling and planning:
• Easy and secure joints between components;
• Any requirements for architectural concrete slab design can be met;
• Can cover a wide area of practical applications;
• Few elements for enormous variety of combinations.

Safe use:
• Platform and handrails at any point of the towers. Access stairs between towers;
• Dependable stability.





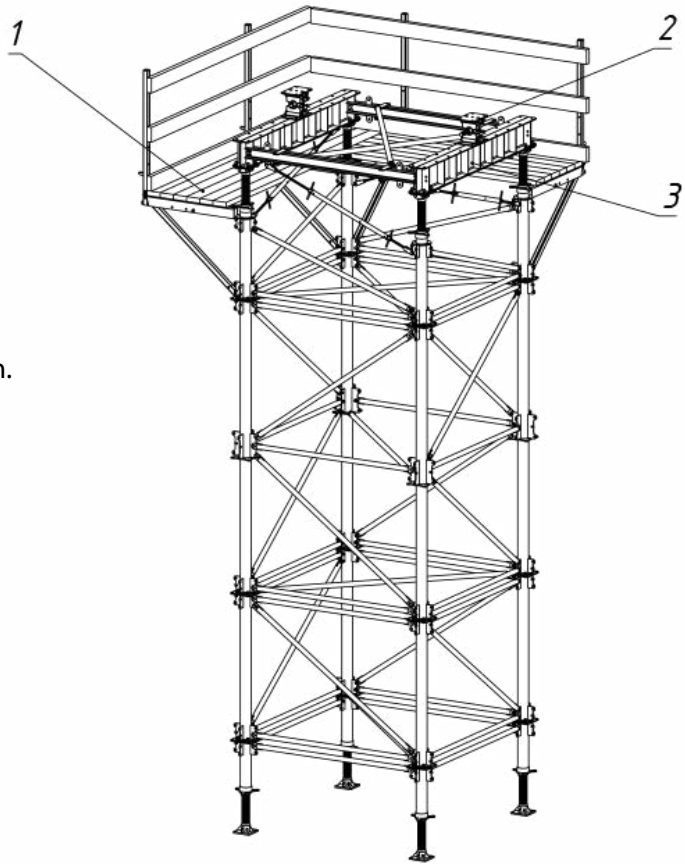
A) Wedge jack TT100

(B) Upper jack TT100

(C) Upright support TT100

(D) Diagonal brace TT100

(E) Base jack TT100

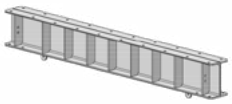
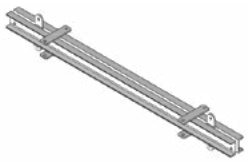


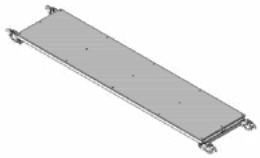
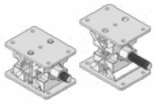
FEATURES

Module sizes of towers in top view: 2x2 m and 2x3 m.

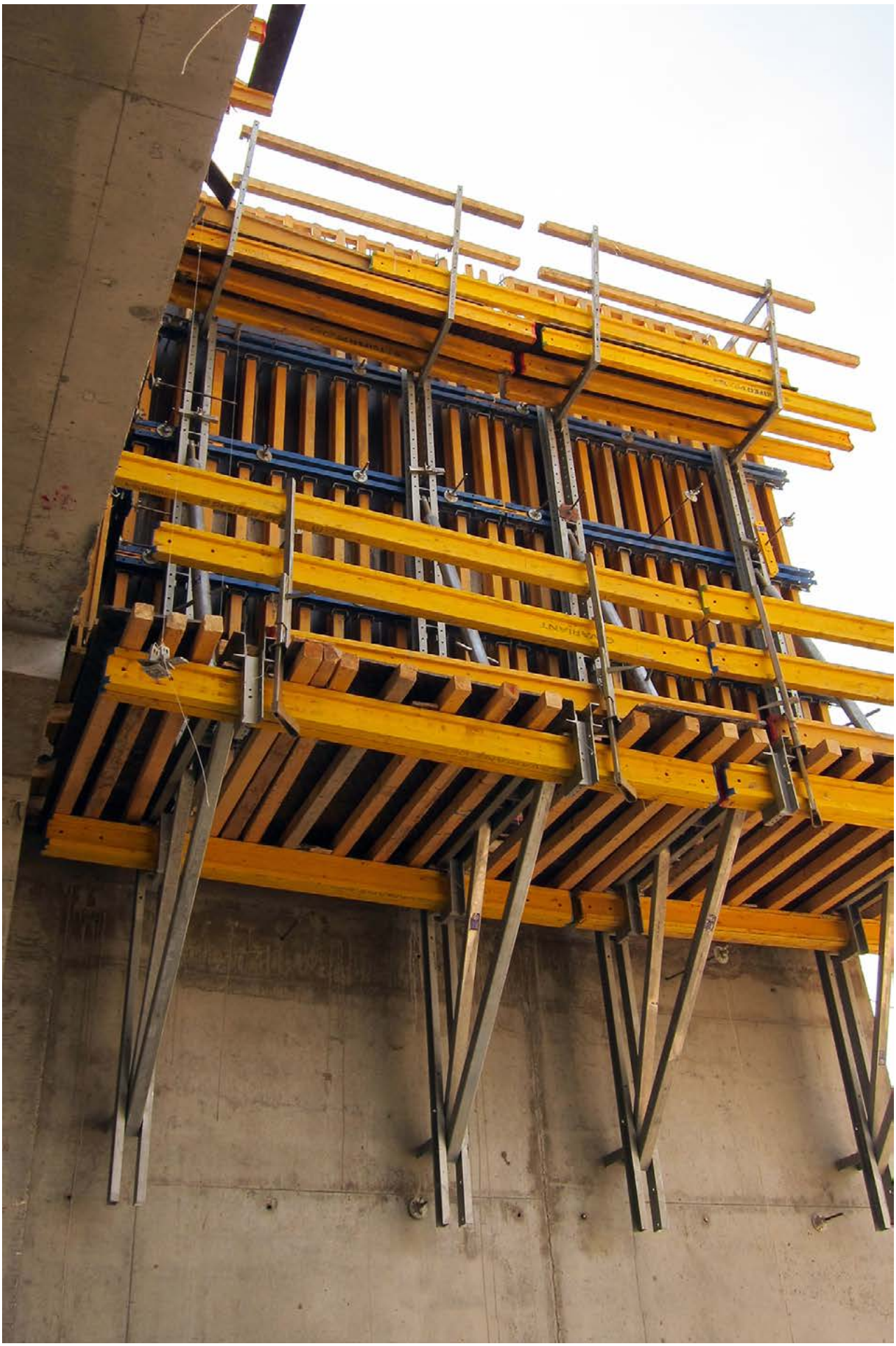
1. Working platform
2. Stripping system
3. Longitudinal beam TT100

TOP TOWER 100

		[kg]	Article nº
Upright support TT100	1.50m 3.00m	25,20 46,20	63 000 63 102 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			
Diagonal brace TT100	2.00-2.00m 2.00-1.50m 2.00-0.90m	8,19 7,04 6,20	63 200 000 63 202 000 63 204 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			
Longitudinal beam TT100	0.30x0.20x2.22m 0.27x0.19x2.22m	194,25 157,50	63 300 000 63 302 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			
Cross beam TT100	0.10x0.11x1.96m	42,00	63 304 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			
Tensioner TT100 2.0		5,99	63 400 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			

Item		[kg]	Article nº
Tensioner TT100		5,99	63 402 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			
Working platform TT100	2.02x0.45m 2.02x0.63m	18,90 22,05	63 404 000 63 406 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			
Working platform with a hatch TT100	2.02x0.63m	28,35	63 408 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			
Ladder TT100	1.70m	8,72	63 410 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			
Wedge jack TT100	280x200x180mm	42,00	63 412 000
 Options available: xx xxx 000 - Powder coated xx xxx 200 - Hot dip galvanized			

		[kg]	Article nº	Item	[kg]	Article nº
Bolted connection	BC1	0,15	63 414 100			
	BC2	0,18	63 416 100			
Base jack TT100	0.65m	36,75	63 500 100			
	1.05m	44,10	63 502 100			
Upper jack TT100	0.65m	35,70	63 504 100			
	1.05m	43,05	63 502 100			



VARIANT CLIMBING FORMWORK

Crane-climbing formwork system CCF

Crane-jumped formwork for applications of any shape and heigh

The Variant's crane-climbing formwork CCF can be easily set up and lifted by a crane. CCF permits controlled, regular working cycles on all structures such as high-rises, bridge piers and pylons. The system is simple to operate with and copes with wall inclinations up to +/- 15 degree. Owing to its flexible modular system, CCF can be extended and upgraded in many ways. CCF is a highly flexible and cost-effective solution, which requires only minimum crane time, what makes it an ideal system solution for many high-rise applications. Crane-climbing formwork CCF can be easily used with framed or timber-beam formwork.

Load-bearing capacity:
• High load-bearing capacity (50 kN per climbing bracket);
• Formwork height of up to 6.0 m.

System adaptability:
• Excellent adaptability to any height, shape and inclination of a wall;
• Swift, precise formwork adjustment in all directions;
• Simple inclination adjustment.

Cost-effective:
• Small number of suspension points, due to the brackets' high load-bearing capacity;
• Less crane-time needed, as the climbing brackets and formwork are moved up as a single unit.

Easy handling and planning:
• Small number of different parts is used;
• Integrated traveling units allow the formwork to be closed and opened (retracted) up to 75 cm quickly with no need for a crane;
• Simple inclination adjustment;
• The formwork can be plumbed and aligned very quickly and accurately in all directions, with a simple adjustment mechanism;
• Any requirements for architectural concrete wall design can be met.

Safe use:
• Safe working conditions provided by fully railed-in 2.40 m wide working platform;
• Formwork can be rolled back 0.75 m, leaving plenty of space for the forming and reinforcing operations.

Crane-climbing formwork system CCF - System overview

Climbing platform (A) - pre-assembled modular element, which is assembled from climbing brackets and decking. Working width of the platform (distance between wall and handrails) is 2.4 m.

Climbing bracket CCF (B) - heart of the system, bears and transfers loads of fresh concrete and live load form working and pouring platforms on the anchoring points and structure.

Traveling gear CCF (C) - using traveling gear an entire formwork panel can be easily moved forward/ backward (retracted) for easier formwork striking.

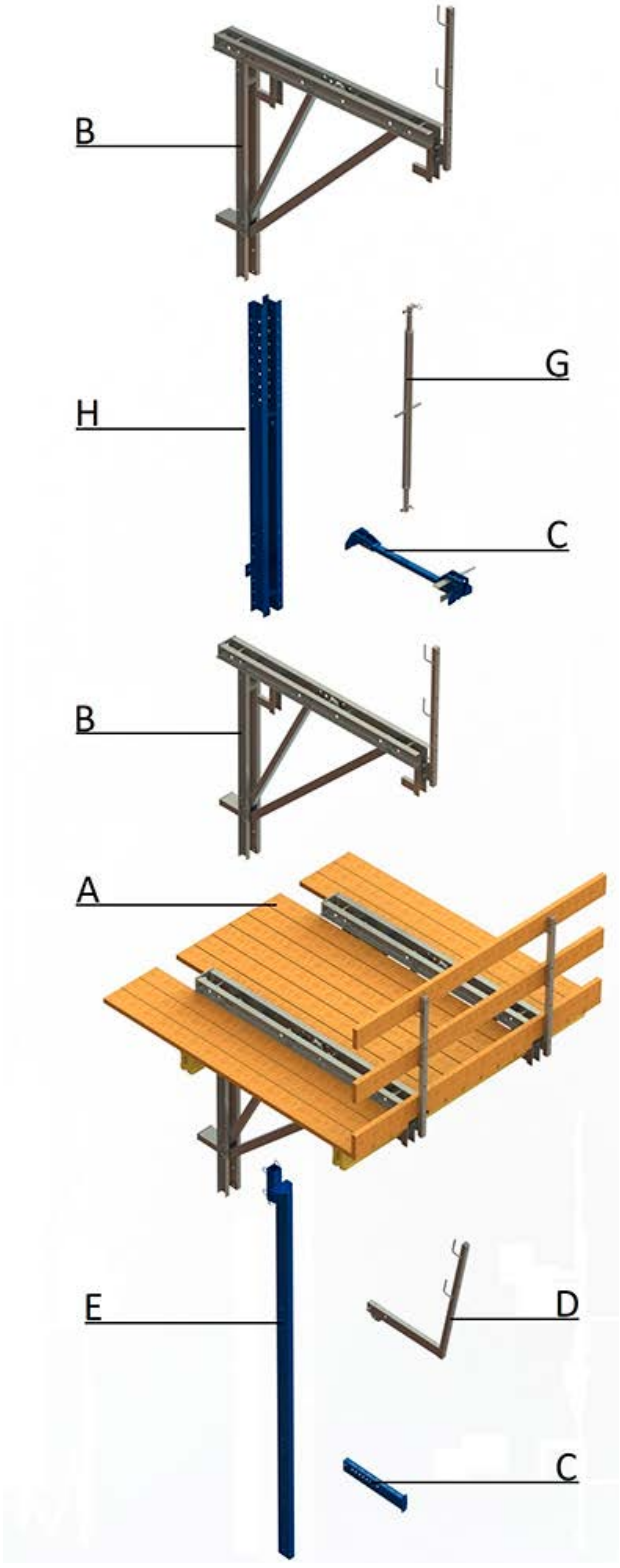
Vertical waling CCF (D) - all types of wall formwork (e.g. large-area, framed) can be fixed to the climbing platform and traveling gear via vertical waling. By using the vertical waling makes it possible to adjust, align, retract and reposition formwork system as one unit.

Spindle strut CCF (E) - used for formwork alignment and/or adjusting of front or rear inclinations.

Suspension profile CCF (F) - fixed to the climbing bracket and used for transferring the load of suspension platform on to the climbing bracket.

Screw-on access bracket (G) - used for creating a pouring platform, when it is fixed to the vertical waling (H). Used as a suspension platform when it is fixed to the suspension profile (E).

Distance profile CCF (H) - used as support for suspended platform.



Crane-climbing formwork CCF

Item		[kg]	Article nº
Climbing bracket CCF 		188,86	75100200
Vertical waling CCF 	3.00m 4.50m	79,23 128,57	75 104 200 75 106 200
Plumbing strut CCF 	3.00m 4.50m	25,34 49,98	75 108 100 75 110 100
Travelling gear CCF 		47,28	75 102 100
Distance profile CCF 		7,99	75 114 000
Suspension profile CCF 		43,21	75 112 000

Item		[kg]	Article nº
Screw-on access bracket 		17,32	75 116 100
Swivel plate 		4,10	75 118 100
Waling-to-bracket holder 		2,61	75 200 100
Framed tube 48 mm 	1.00m 1.50m 2.00m 2.50m 3.00m	4,60 6,91 9,21 11,51 13,81	94 100 200 94 150 200 94 200 200 94 250 200 94 300 200
Swivel coupler 	48x48mm	1,22	95 106 100
Screw-on coupler 48 mm 	30 70 100	1,21 1,26 1,33	95 100 100 95 102 100 95 104 100
Wind bracing 	7.00m	17,47	73 114 100
Positioning disk M30 		0,32	95 500 100

Item		[kg]	Article nº	Item	[kg]	Article nº
Cone bolt M30x70 		0,95	95 502 100			
Universal climbing cone 		1,41	95 504 100			
Stop anchor 	15.0mm 0.16m	0,43	99 200 100			
Sealing sleeve 	15	0,008	99 104 400			

Climbing working platform CWP

Crane-jumped formwork system based on folding protection platforms

CWP system is a reliable combination of Variant's folding working platforms and framed or timer-beam formwork systems for use as a crane-jumped formwork on sites where the formwork has to be repositioned upwards in several casting sections, and there is no need for retractable formwork. CWP can also be used as a roof and edge protection system.

Load-bearing capacity:
• Loads on the suspension point: Horizontal load - 36 kN, Vertical load - 26 kN;
• Live load per unit area 150 kg/m^2 on folding and working platforms;
• Formwork height of up to 3.75 m.

Cost-effective:
• Less crane-time is needed, as the folding platform and formwork are moved up in one single lift;
• Wide choice of formwork, as the platform can be combined with either framed or timber-beam formwork.

Easy handling and planning:
• Small number of different parts is used;
• Time and cost-effective owing to use of pre-assembled elements;
• The formwork can be plumbed and aligned very quickly and accurately in all directions, with a simple adjustment mechanism.

Safe use:
• Safe working conditions provided by fully railed-in 1.80 m wide working platform;
• Dependable suspension points, with certified suspension cone and lift-out guard for the brackets.

Climbing working platform CWP - System overview

Folding platform CWP (A) - Pre-assembled modular element, with nominal length 3.00 or 4.50 m, which is assembled from folding brackets, railings and decking.
Distance between brackets is fixed 1.50 m.

Folding bracket CWP (B) - reliable folding brackets, which bear and transfer loads of fresh concrete and live load form working and pouring platforms on the anchoring points and structure.

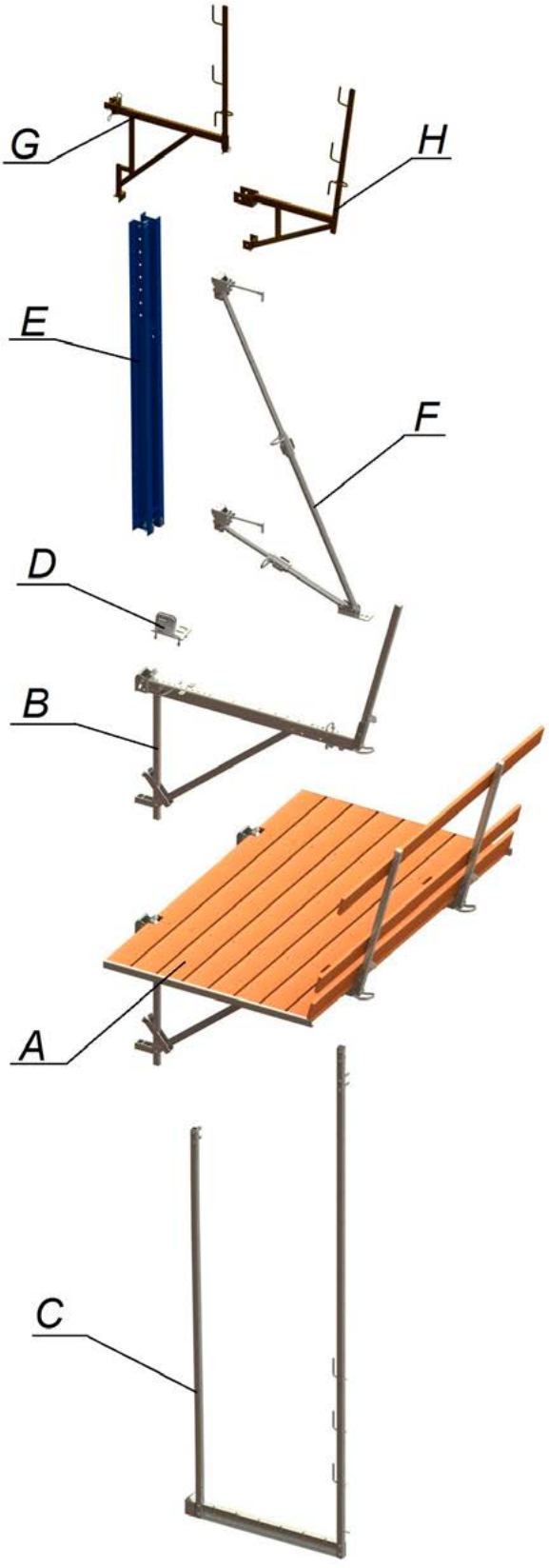
Suspended platform CWP (C) - additional working platform, which is fixed under the folding platform and used for finishing work and to provide good access to the anchoring system after the system have been lifted by crane.

Connection shoe CWP (D) - used for connecting the folding bracket to the vertical wailing, allows the entire climbing unit to be lifted and repositioned in one piece, together with the formwork.

Vertical waling CWP (E) - used for holding the timber-beam or framed formwork. The length of this waling will depend on the height of the formwork elements or panels.

Supporting strut 340 (F) - used for aligning of the formwork elements or panels.

Wall bracket H20 (G) or Wall bracket Varimax (H) is used for assembling pouring platforms. Choose the relevant type of brackets, depending on the formwork system being used (timber-beam or framed).



Climbing working platform CWP

Item		[kg]	Article nº
Folding bracket CWP 		65,40	73 100 200
Suspended platform CWP 	3.30m 4.30m	55,40 69,47	73 102 000 73 104 000
Connection shoe CWP 		6,58	73 106 100
Waling 12 	3.00m 3.50m 4.00m	63,53 75,33 85,47	21 300 000 21 350 000 21 400 000
Adjusting spindle 		6,62	32 102 100
Wailing-to bracket holder 		2,61	75 200 100
Connecting pin 		0,39	23 400 100
Spring cotter 		0,05	23 402 100

Item		[kg]	Article nº
Supporting strut 340 		37,38	11 928 100
Star screw CWP 		0,68	73 200 100
Guide rail clamp 		12,40	52 400 100
Wind bracing 	7.00m	17,47	73 114 100
Framed tube 48 mm 	1.00m 1.50m 2.00m 2.50m 3.00m	4,60 6,91 9,21 11,51 13,81	94 100 200 94 150 200 94 200 200 94 250 200 94 300 200
Swivel coupler 	48x48mm	1,22	95 106 100
Screw-on coupler 48 mm 	30mm 70mm 100mm	1,21 1,26 1,33	95 100 100 95 102 100 95 104 100

Item		[kg]	Article nº	Item	[kg]	Article nº
Fixing plate	15	0,18	95 400 100			
						
Canrilever positioning cone	15	0,53	95 402 100			
						
Suspension cone	15	0,95	95 404 100			
						
Stop anchor	15.0mm 0.16m	0,43	99 200 100			
						
Sealing sleeve	15	0,008	99 104 400			
						

VARIANT

SPECIAL FORMWORK

Configurable tunnel system UNIFORM

Fast project completion with less manpower

Configurable tunnel formwork is a system which allows simultaneous casting of walls and slab in one pouring cycle. Half tunnels can be stripped and moved out to the next phase/level the next day after the pouring. Having faster workflow and being easier to operate with, compared to conventional systems, use of the system can save up to 50% of formwork budget. The system enables you to have smooth concrete surface, dimensional accuracy and eliminates finishing works like plastering. Moreover the system creates good load-bearing concrete structure, which can be applicable for projects in seismic areas.

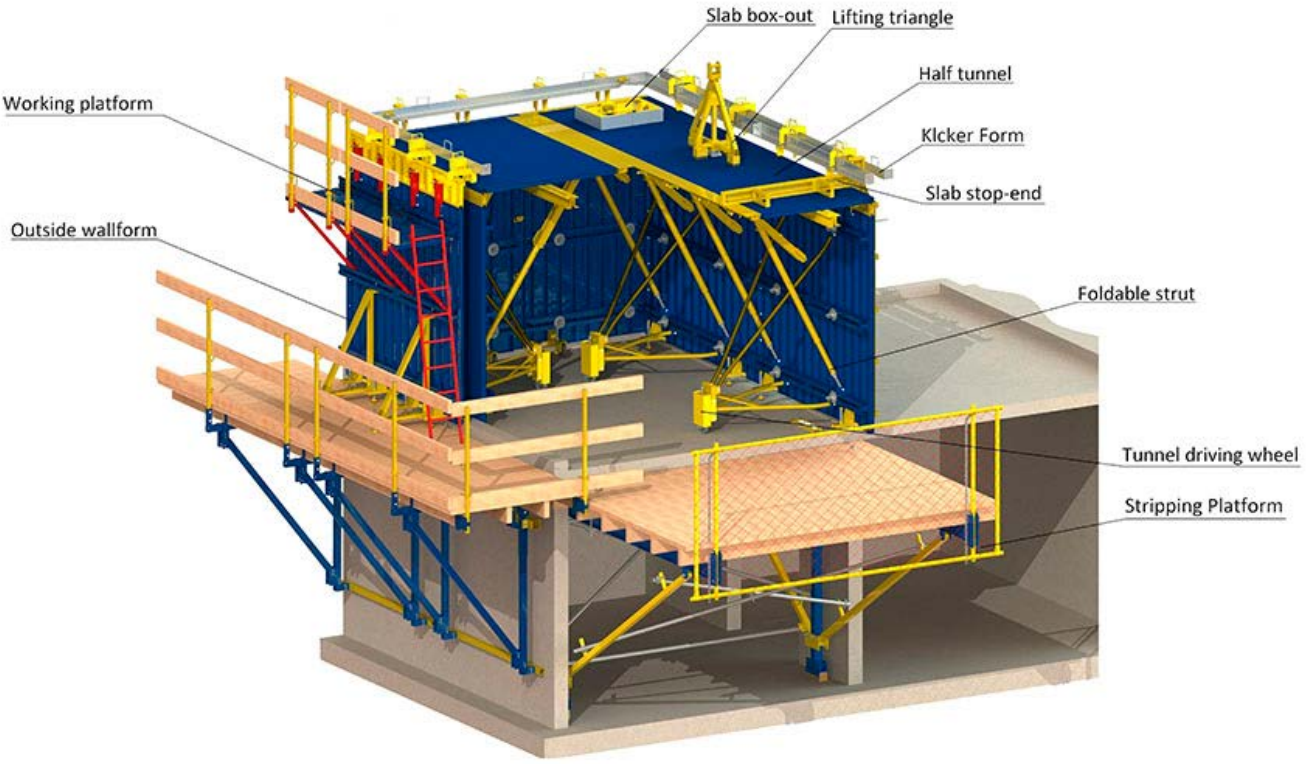
Load-bearing capacity:
• High load-bearing capacity.

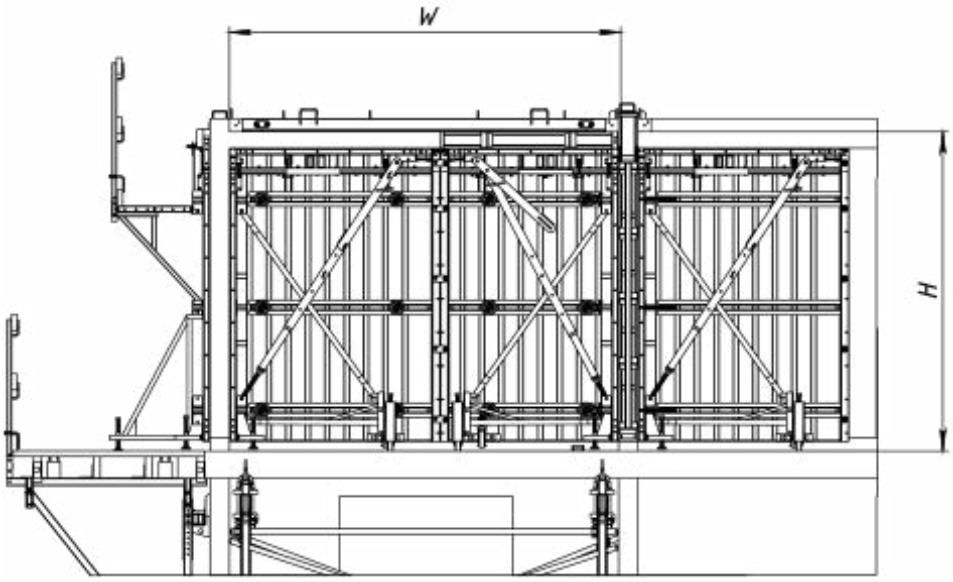
Cost-effective:
• Rapid pace of work and cutting of re-assembly cost due to the repositioning of complete units;
• High quality of concrete surface minimizes finishing work;
• High number of use cycles (up to 500) means lower follow-up expenses.

Easy handling and planning:
• Small number of different parts is used;
• Time and cost-effective owing to use of preassembled half tunnels;
• The formwork can be plumbed and aligned very quickly and accurately in all directions.

Safe use:
• Safe working conditions provided by systems safe equipment.

Configurable tunnel formwork UNIFORM





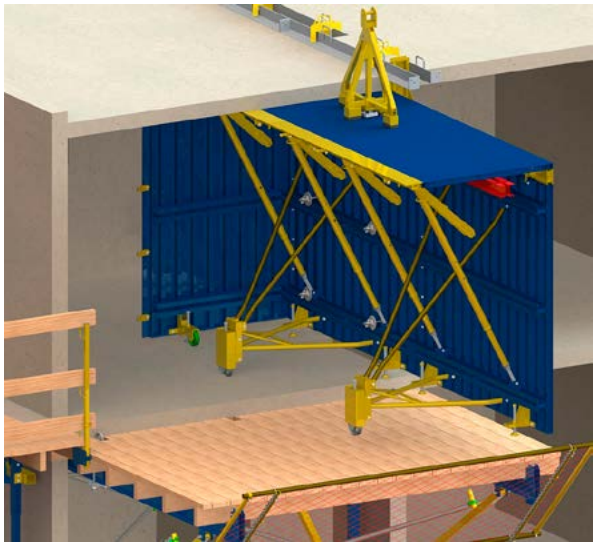
Standard span width W, mm
2100
2400
2700
3000
3300
3600
3900
4200
4500
4800
5100

Standard floor height H, mm
2750
2800
2850
2900
2950
3000
3050
3100

Configurable tunnel formwork UNIFORM - repositioning

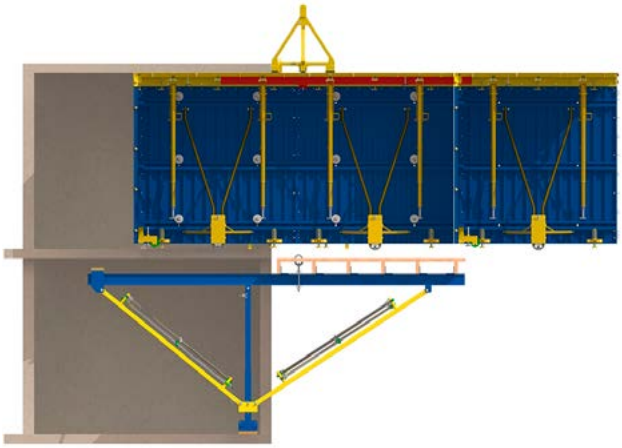
Vertical repositioning:
Assembly hook - using for assembly at the beginning only.

Lifting Triangle - using for lifting and carrying operations of the configurable tunnel formwork.



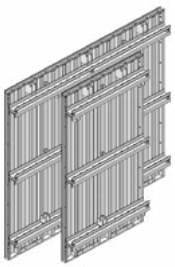
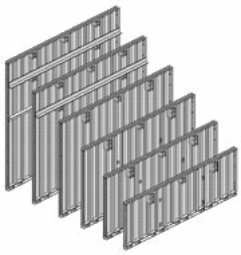
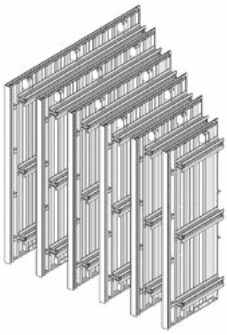
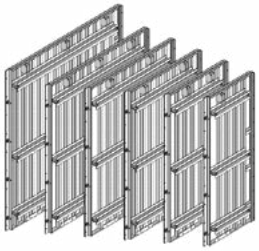
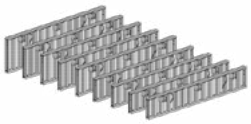
Horizontal repositioning:
Uniform has integrated wheels for shifting half-tunnel blocks, when assembling, dismantling, repositioning.

• Tunnel driving wheel Uniform:



• Back panel jack and wheel Uniform:

Roller
Half-tunnels can be easily moved and stripped on platforms by the help of rollers which are used instead of wheels. It is placed under vertical panel of half-tunnels above the slab and help to reduce vertical forces when stripping.

Item		[kg]	Article nº
Vertical panel Uniform	1250x2500	266,28	81 100 000
	2500x2500	520,59	81 102 000
	1250x2700	280,88	81 200 000
	2500x2700	549,57	81 202 000
Deck panel Uniform	(850+63)x1250	79,23	81 300 000
	(1150+63)x1250	100,46	81 302 000
	(1450+63)x1250	121,73	81 304 000
	(1750+63)x1250	142,92	81 306 000
	(1950+63)x1250	178,40	81 308 000
	(2350+63)x1250	206,69	81 310 000
	(850+63)x2500	151,75	81 400 000
	(1150+63)x2500	193,66	81 402 000
	(1450+63)x2500	235,46	81 404 000
	(1750+63)x2500	277,32	81 406 000
	(2050+63)x2500	341,85	81 408 000
	(2350+63)x2500	406,59	81 410 000
Back panel left Uniform	(1049+2500) L93	214,12	81 500 000
	(1049+2700) L93	226,71	81 502 000
	(1349+2500) L93	278,31	81 504 000
	(1349+2700) L93	294,53	81 506 000
	(1649+2500) L93	341,39	81 508 000
	(1649+2700) L93	361,25	81 510 000
	(1949+2500) L93	391,01	81 512 000
	(1949+2700) L93	413,47	81 514 000
	(2249+2500) L93	457,20	81 516 000
	(2249+2700) L93	483,29	81 518 000
	(2549+2500) L93	519,81	81 520 000
	(2549+2700) L93	549,54	81 522 000
Back panel right Uniform	(1049+2500)R93	214,12	81 600 000
	(1049+2700)R93	226,71	81 602 000
	(1349+2500)R93	278,31	81 604 000
	(1349+2700)R93	294,53	81 606 000
	(1649+2500)R93	341,39	81 608 000
	(1949+2700)R93	361,91	81 610 000
	(1949+2500)R93	391,01	81 612 000
	(1949+2700)R93	413,47	81 614 000
	(2249+2500)R93	457,20	81 616 000
	(2249+2700)R93	483,29	81 618 000
	(2349+2500)R93	519,81	81 620 000
	(2349+2700)R93	549,54	81 622 000
Vertical adapter external Uniform	323x1250	33,47	83 200 000
	363x1250	36,31	83 204 000
	443x1250	41,99	83 208 000
	483x1250	44,82	83 212 000
	533x1250	48,38	83 214 000
	323x2500	63,88	83 216 000
	363x2500	69,48	83 220 000
	443x2500	80,65	83 224 000
	483x2500	86,24	83 228 000
	533x2500	93,23	83 230 000

Item		[kg]	Article nº
Vertical adapter internal Uniform	130x1250	16,17	83 104 000
	150x1250	17,14	83 106 000
	170x1250	19,85	83 110 000
	180x1250	20,29	83 112 000
	190x1250	20,79	83 114 000
	200x1250	21,27	83 116 000
	220x1250	22,27	83 118 000
	250x1250	23,76	83 120 000
	350x1250	28,73	83 124 000
	130x2500	31,08	83 130 000
	150x2500	33,03	83 132 000
	170x2500	36,90	83 136 000
	180x2500	37,91	83 138 000
	190x2500	38,85	83 140 000
	200x2500	40,43	83 142 000
	220x2500	42,38	83 144 000
	250x2500	45,33	83 146 000
	350x2500	55,14	83 150 000
Deck panel adapter Uniform	149x1250	23,15	83 300 000
	199x1250	26,37	83 302 000
	249x1250	30,20	83 304 000
	299x1250	32,70	83 306 000
	349x1250	35,20	83 308 000
	149x2500	45,52	83 310 000
	199x2500	50,88	83 312 000
	249x2500	57,24	83 314 000
	299x2500	61,64	83 316 000
	349x2500	66,03	83 318 000
Grip Uniform		9,63	88 340 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Diagonal Uniform	Code 2.9	11,50	88 342 000
	Code 3.3	13,10	88 346 000
	Code 3.7	14,72	88 350 000
	Code 4.2	16,74	88 354 000
	Code 4.7	18,75	88 358 000
	Code 5.3	21,18	88 362 000
	Code 5.5	21,98	88 364 000
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			

UNIFORM

Item		[kg]	Article nº
Back panel adapter left Uniform	(1049+183) AL93	20,91	83 400 000
	(1049+213) AL93	23,62	83 404 000
	(1049+233) AL93	25,00	83 408 000
	(1049+253) AL93	26,36	83 412 000
	(1049+283) AL93	28,40	83 416 000
	(1049+343) AL93	32,50	83 420 000
	(1049+413) AL93	37,26	83 424 000
	(1349+183) AL93	26,63	83 426 000
	(1349+213) AL93	30,39	83 430 000
	(1349+233) AL93	32,02	83 434 000
	(1349+253) AL93	33,64	83 438 000
	(1349+283) AL93	36,08	83 442 000
	(1349+343) AL93	40,95	83 446 000
	(1349+413) AL93	46,64	83 450 000
	(1649+183) AL93	31,97	83 452 000
	(1649+213) AL93	36,29	83 456 000
	(1649+233) AL93	38,27	83 460 000
	(1649+253) AL93	40,26	83 464 000
	(1649+283) AL93	43,23	83 468 000
	(1649+343) AL93	49,20	83 472 000
	(1649+413) AL93	56,17	83 476 000
	(1949+183) AL93	36,78	83 478 000
	(1949+213) AL93	41,48	83 482 000
	(1949+233) AL93	43,73	83 486 000
	(1949+253) AL93	45,97	83 490 000
	(1949+283) AL93	49,33	83 494 000
	(1949+343) AL93	56,08	83 498 000
	(1949+413) AL93	63,95	83 502 000
	(2249+183) AL93	43,05	83 504 000
	(2249+213) AL93	48,95	83 508 000
	(2249+233) AL93	51,56	83 512 000
	(2249+253) AL93	54,17	83 516 000
	(2249+283) AL93	58,08	83 520 000
	(2249+343) AL93	65,91	83 524 000
	(2249+413) AL93	75,05	83 528 000
	(2549+183) AL93	48,39	83 530 000
	(2549+213) AL93	54,84	83 534 000
	(2549+233) AL93	57,81	83 538 000
	(2549+253) AL93	60,79	83 542 000
	(2549+283) AL93	65,24	83 546 000
	(2549+343) AL93	74,16	83 550 000
	(2549+363) AL93	84,58	83 554 000
Back panel adapter right Uniform	(1049+183) AR93	20,91	83 600 000
	(1049+213) AR93	23,62	83 604 000
	(1049+233) AR93	25,00	83 608 000
	(1049+253) AR93	26,36	83 612 000
	(1049+283) AR93	28,40	83 616 000
	(1049+343) AR93	32,50	83 620 000
	(1049+413) AR93	37,26	83 624 000
	(1349+183) AR93	26,63	83 626 000
	(1349+213) AR93	30,39	83 630 000
	(1349+233) AR93	32,02	83 634 000
	(1349+253) AR93	33,64	83 638 000
	(1349+283) AR93	36,08	83 642 000
	(1349+343) AR93	40,95	83 646 000
	(1349+413) AR93	46,64	83 650 000
	(1649+183) AR93	31,97	83 652 000
	(1649+213) AR93	36,29	83 656 000
	(1649+233) AR93	38,27	83 660 000
	(1649+253) AR93	40,26	83 664 000
	(1649+283) AR93	43,23	83 668 000
	(1649+343) AR93	49,20	83 672 000
	(1649+413) AR93	56,17	83 676 000
	(1949+183) AR93	36,78	83 678 000
	(1949+213) AR93	41,48	83 682 000
	(1949+233) AR93	43,73	83 686 000
	(1949+253) AR93	45,97	83 690 000
	(1949+283) AR93	49,33	83 694 000
	(1949+343) AR93	56,08	83 698 000
	(1949+413) AR93	63,95	83 702 000
	(2249+183) AR93	43,05	83 704 000
	(2249+213) AR93	48,95	83 708 000
	(2249+233) AR93	51,56	83 712 000
	(2249+253) AR93	54,17	83 716 000
	(2249+283) AR93	58,08	83 720 000
	(2249+343) AR93	65,91	83 724 000
	(2249+413) AR93	75,05	83 728 000
	(2549+183) AR93	48,39	83 730 000
	(2549+213) AR93	54,75	83 734 000
	(2549+233) AR93	57,81	83 738 000
	(2549+253) AR93	60,79	83 742 000
	(2549+283) AR93	65,24	83 746 000
	(2549+343) AR93	74,16	83 750 000
	(2549+413) AR93	84,58	83 754 000
Wall stop-end Uniform	2823x178	59,87	85 100 000
	2823x198	62,41	85 102 000
	2843x178	60,10	85 108 000
	2843x198	62,64	85 110 000
	2933x178	61,13	85 112 000
	2933x198	63,73	85 114 000
	3033x178	62,27	85 116 000
	3033x198	64,91	85 118 000
Slab stop-end Uniform	(1045+93)x150	18,73	85 200 000
	(1045+93)x180	20,42	85 204 000
	(1045+93)x220	22,68	85 208 000
	(1045+93)x280	26,06	85 212 000
	(1345+93)x150	21,92	85 214 000
	(1345+93)x180	23,85	85 218 000
	(1345+93)x220	26,40	85 222 000
	(1345+93)x280	30,22	85 226 000
	(1645+93)x150	25,13	85 228 000
	(1645+93)x180	27,26	85 232 000
	(1645+93)x220	30,11	85 236 000
	(1645+93)x280	34,38	85 240 000
	(1945+93)x150	31,55	85 242 000
	(1945+93)x180	34,23	85 246 000
	(1945+93)x220	37,79	85 250 000
	(1945+93)x280	43,14	85 254 000
	(2245+93)x150	34,76	85 256 000
	(2245+93)x180	37,64	85 260 000
	(2245+93)x220	41,51	85 264 000
	(2245+93)x280	47,31	85 268 000
	(2545+93)x150	37,94	85 270 000
	(2545+93)x180	41,07	85 274 000
	(2545+93)x220	45,22	85 278 000
	(2545+93)x280	51,47	85 282 000
Kicker form inner L12 Uniform	1498	24,24	87 100 100
	1798	28,86	87 102 100
	2098	33,48	87 104 100
	2398	38,10	87 106 100
	2698	42,72	87 108 100
	2998	47,34	87 110 100
	3298	51,96	87 112 100
	3598	56,58	87 114 100
	3898	61,20	87 116 100
	4198	65,82	87 118 100
	4498	70,44	87 120 100

		[kg]	Article nº
Kicker form straight L12 Uniform	625	13,00	87 122 100
	1200	21,89	87 124 100
	1250	22,67	87 126 100
	2400	40,46	87 128 100
	2500	42,01	87 130 100
	3750	61,35	87 132 100
	4500	77,60	87 134 100
	5000	80,68	87 136 100
Kicker form corner L12 Uniform	(2593x299) L	45,99	87 138 100
	(2593x299) R	45,99	87 140 100
Door boxout Uniform	1600x2013x178	135,63	87 154 000
	1600x2013x198	143,34	87 156 000
Window boxout Uniform	1600x1420x148	97,82	87 158 000
Slab boxout Uniform	600x800x148	42,12	87 160 000
	800x800x148	46,58	87 162 000
Foldable strut Uniform	2500	36,97	87 164 000
	2700	38,06	87 166 000

Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized

Item		[kg]	Article nº
Wheel connector Uniform	850-1150	19,48	87 168 000
	1450-1750	23,72	87 170 000
	2050-2650	26,10	87 172 000
Lifting beam Uniform	1000	22,50	87 174 000
	2000	40,93	87 176 000
	3000	59,36	87 178 000
	4000	78,73	87 180 000
	5000	97,05	87 182 000
Upper panel support Uniform	377	2,79	87 184 000
	387	2,86	87 186 000
	397	2,92	87 188 000
	407	2,98	87 190 000
	417	3,05	87 192 000
	437	3,16	87 194 000
	487	3,48	87 196 000
	537	3,78	87 198 000
	567	3,97	87 200 000
	587	4,08	87 202 000
	637	4,40	87 204 000
Lifting triangle		70,56	87 206 000
Assembly hook		11,89	87 208 000

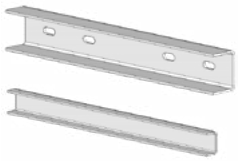
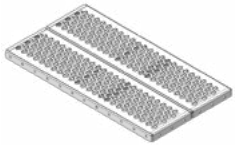
Options available:
xx xxx 000 - Powder coated
xx xxx 100 - Galvanized
xx xxx 200 - Hot dip galvanized

UNIFORM

		[kg]	Article nº
Kicker spacer single sided L12 Uniform	v:148 v:150	3,76	87 210 000
	v:158 v:150	3,90	87 212 000
	v:178 v:150	4,19	87 214 000
	v:198 v:150	4,48	87 216 000
	v:248 v:150	5,21	87 218 000
	v:298 v:150	5,94	87 220 000
	v:148 v:180	4,00	87 222 000
	v:158 v:180	4,15	87 224 000
	v:178 v:180	4,44	87 226 000
	v:198 v:180	4,74	87 228 000
	v:248 v:180	5,46	87 230 000
	v:298 v:180	6,18	87 232 000
	v:148 v:220	4,34	87 246 000
	v:158 v:220	4,48	87 248 000
	v:178 v:220	4,78	87 250 000
	v:198 v:220	5,06	87 252 000
	v:248 v:220	5,80	87 254 000
	v:298 v:220	6,52	87 256 000
Kicker spacer double sided L12 Uniform	v:148 v:150	5,10	87 258 000
	v:158 v:150	5,25	87 260 000
	v:178 v:150	5,54	87 262 000
	v:198 v:150	5,83	87 264 000
	v:248 v:150	6,56	87 266 000
	v:298 v:150	7,29	87 268 000
	v:148 v:180	5,60	87 270 000
	v:158 v:180	5,74	87 272 000
	v:178 v:180	6,04	87 274 000
	v:198 v:180	6,33	87 276 000
	v:248 v:180	7,06	87 278 000
	v:298 v:180	7,79	87 280 000
	v:148 v:220	6,27	87 294 000
	v:158 v:220	6,42	87 296 000
	v:178 v:220	6,70	87 298 000
	v:198 v:220	6,99	87 300 000
	v:248 v:220	7,73	87 302 000
	v:298 v:220	8,45	87 304 000
Kicker clamp single sided L12 Uniform	148	3,07	87 306 000
	158	3,12	87 308 000
	178	3,22	87 310 000
	198	3,32	87 312 000
	248	3,57	87 314 000
	298	3,83	87 316 000
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Kicker clamp double sided L12 Uniform	148	2,79	87 318 000
	158	2,85	87 320 000
	178	2,94	87 322 000
	198	3,05	87 324 000
	248	3,30	87 326 000
	298	3,55	87 328 000
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Concrete stopper L12 Uniform	148	2,03	87 142 100
	158	2,11	87 144 100
	178	2,29	87 146 100
	198	2,47	87 148 100
	248	2,92	87 150 100
	298	3,36	87 152 100

Item		[kg]	Article nº
Vertical panel jack Uniform		8,26	87 330 000
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Tunnel driving wheel Uniform		23,17	87 332 000
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Back panel jack and wheel Uniform			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Roller Uniform	53-R	8,97	87 336 000
	73-R	10,62	87 338 000
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Driver lever bolt Uniform	100	0,32	87 340 100
	150	0,42	87 342 100
	200	0,53	87 344 100
	250	0,63	87 346 100
	300	0,74	87 348 100
	350	0,84	87 350 100
Hinge bolt Uniform	s30	0,14	87 352 100

		[kg]	Article nº
Tie rod d20AC	700	1,93	87 354 100
	800	2,21	87 356 100
	900	2,48	87 358 100
Superplate	SG20	1,60	87 360 100
			
Cotter US	45x60	0,29	87 362 100
			
Dilatation tie cone d25TC	148	1,71	87 364 100
	178	1,97	87 366 100
	218	2,56	87 370 100
	248	3,13	87 372 100
	298	3,98	87 374 100
	348	4,46	87 376 100
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Spacer Uniform	85-115 (2500)	7,93	87 378 000
	145-175 (2500)	9,03	87 380 000
	205-235 (2500)	9,78	87 382 000
	85-115 (2700)	8,66	87 384 000
	145-175 (2700)	9,66	87 386 000
	205-235 (2700)	10,36	87 388 000
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized xx xxx 200 - Hot dip galvanized			
Lifting beam clamp Uniform		4,36	87 390 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized xx xxx 200 - Hot dip galvanized			

Item		[kg]	Article nº
Panel clamp Uniform		0,78	87 392 000
			
Connector Uniform	51-G	1,47	87 394 100
	90-G	3,80	87 396 100
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
External panel support Uniform		28,50	87 398 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Ladder Uniform		16,26	87 400 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Perforated deck Uniform	1250	20,63	87 402 000
	2500	41,27	87 404 000
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized xx xxx 200 - Hot dip galvanized			

UNIFORM

		[kg]	Article nº
Platform support Uniform		6,21	87 406 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized xx xxx 200 - Hot dip galvanized			
Platform bracket Uniform		0,91	87 408 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized xx xxx 200 - Hot dip galvanized			
Guardrail post		6,31	87 410 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Cantilever Uniform		77,89	88 100 000
			
Spacer Uniform	1500	22,51	88 102 000
	2000	28,72	88 104 000
	2500	34,92	88 106 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Extension Uniform		19,65	88 108 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			

Item		[kg]	Article nº
Spacer Uniform	1500	14,02	88 110 000
	2000	18,23	88 112 000
	2500	22,44	88 114 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Shoe Uniform		11,14	88 116 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Guardrail post holder Uniform		3,53	88 118 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Cantilever Uniform	6FP	239,97	88 260 000
	7FP	261,31	88 270 000
	8FP	322,15	88 280 000
			
Brace Uniform	Code 1.8	10,54	88 300 000
	Code 2.4	12,96	88 304 000
	Code 3.0	15,38	88 308 000
	Code 3.6	17,80	88 312 000
	Code 4.2	20,22	88 316 000
	Code 4.5	21,43	88 318 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			
Guardrail	L=2.2m	55,99	88 320 000
	L=2.8m	60,95	88 324 000
	L=3.4m	65,93	88 328 000
	L=4.0m	70,90	88 332 000
	L=4.6m	82,82	88 336 000
	L=4.9m	85,31	88 338 000
			
Options available: xx xxx 000 - Powder coated xx xxx 100 - Galvanized			

VARIANT

We support you from start to finish

Custom made formwork

Custom made forms for structures of any shape or form

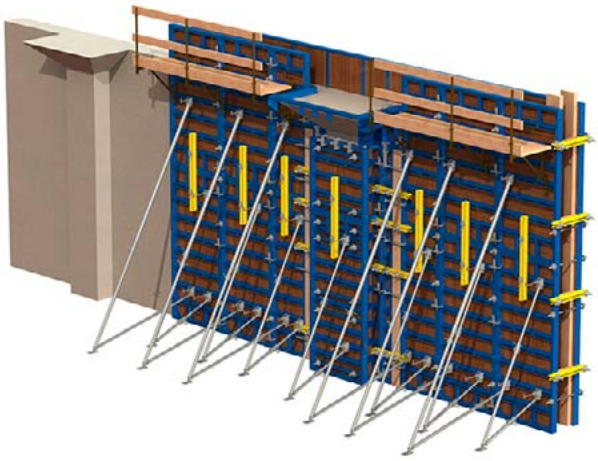
Steel forms which are produced at customer's request, mainly used for forming concrete elements with special or non-standard shapes, in projects where conventional systems are not applicable or difficult to use.

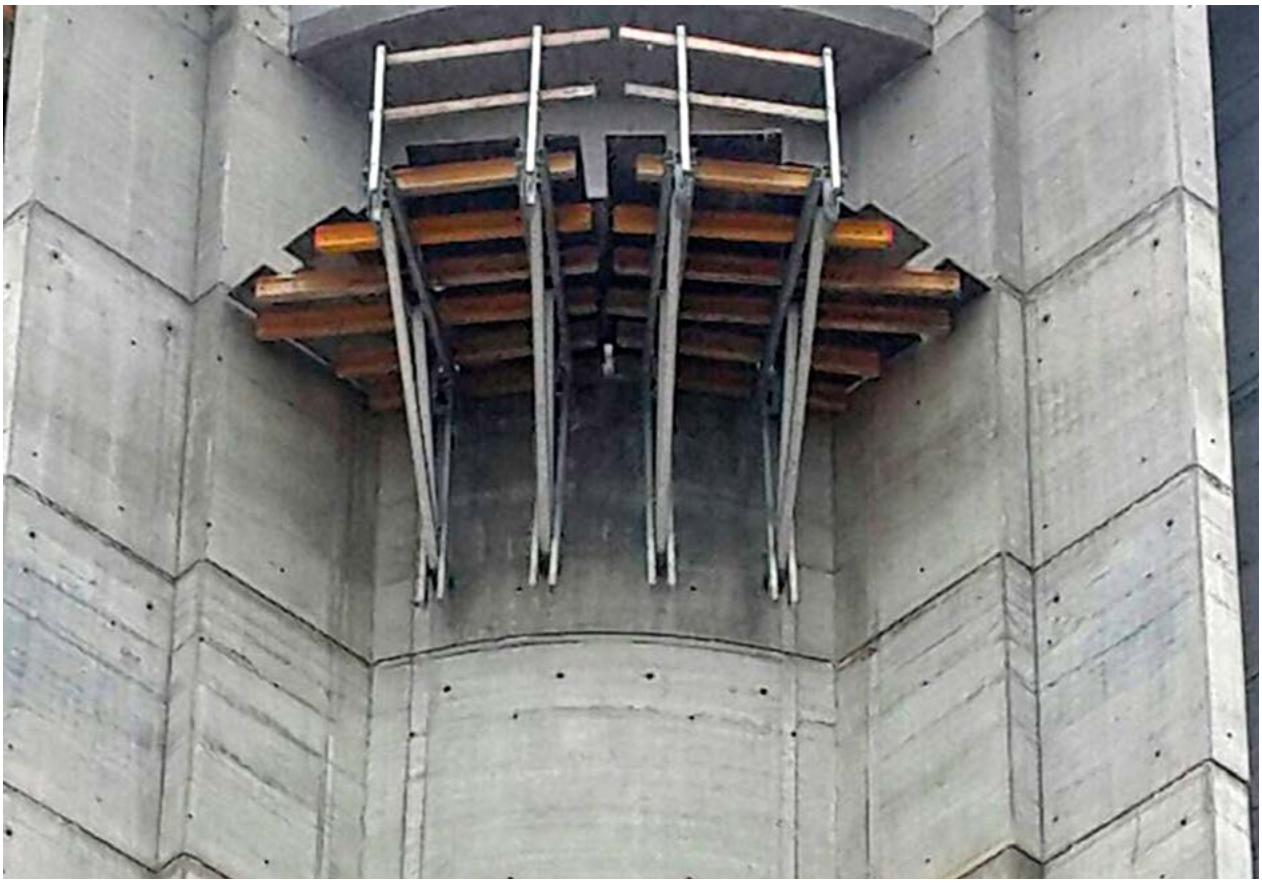
System adaptability:
Variant custom-made steel formwork especially suitable for forming:
• Bridge pylons;
• Concrete elements with curved surfaces in several directions;
• Precast concrete elements as bridge girders, columns etc.

Variant custom made steel formwork reduces time for preparing and assembling of the forms at a construction site, provides exactly required geometrical shape of a structure formed and has high load-bearing capacity, comparing to site-made forms.

Load-bearing capacity:
• The system can be customized to withstand almost any load of fresh concrete.

Custom made formwork





VARIANT

SAFETY SYSTEMS

Folding brackets CWP

Suspended scaffold platforms for safe and practical construction work

The system of working/protective platforms is based on Variant's folding brackets CWP. The system can be easily pre-assemble in ready to use platforms. With only one crane lift the whole platform can be installed/ shifted or reinstalled into a new working area. Owing to system versatility the folding brackets CWP can be used for all types of construction and safety tasks.

Depending on your construction needs you can use the folding brackets CWP as:
- working platforms;
- protective platforms;
- sloping-rooftop fall barriers;
- protective canopies.

Load-bearing capacity:
• High load-bearing capacity up to 600 kg/m^2, meaning that wall formwork up to 5.5 m can be placed on the platforms;
• Depending on class load, live loads on working and pouring platforms per unit area vary:
  - Class 2 - 150 kg/m^2;
  - Class 3 - 200 kg/m^2;
  - Class 4 - 300 kg/m^2;
  - Class 5 - 450 kg/m^2;
  - Class 6 - 600 kg/m^2.
• Loads at the suspension point, using suspension cone as an anchoring system - Vertical load (V)=24 kN, Horizontal load (H)=14 kN.

Safe use:
• Safe working conditions provided by fully railed working platform;
• Dependable anchoring system of suspension cone.

Cost-effective:
• Reduced labour and crane times, due to pre-assembled units;
• Logical concept of the system makes planning and installation much easier;
• The system is ready for use straight away, after a very few quick and easy actions;
• Long service life, owing to its sturdy design and galvanized steel construction.

Folding bracket CWP- System overview

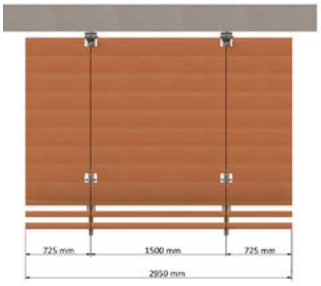
There are 2 possible lengths of pre-assembled platforms, as required by the situation:
- 3.00 m (2 brackets)
- 4.50 m (3 brackets)

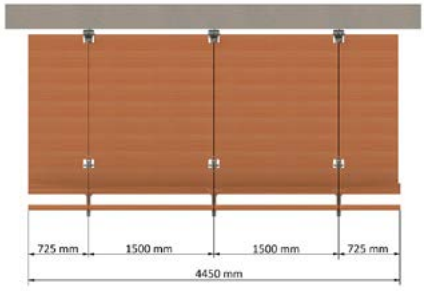
Pre-assemble platform of folding brackets CWP 3.00 m consists of following elements:

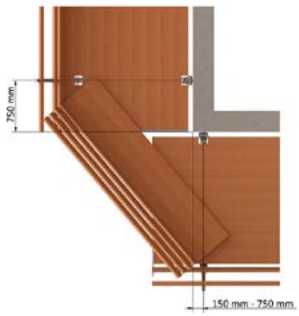
Folding bracket CWP (A)
Planks, min. 20x5 cm (site-provided) (B)
Guard-rail boards, min 15x3 cm (site-provided) (C)
Framed tube 48 mm (D)
Screw-on coupler 48 mm (E)
Swivel coupler 48x48 mm (F)

The suspension points are always spaced the same distance apparat 1.50 m and 0.75 m form the platform edge, which greatly facilitates planning and installation.

Placement of the suspension points at a corner of a structure.







Folding bracket CWP- Areas of use

Working platform

With formwork	Without formwork
	

Protection platform

Fall barrier	Sloping-rooftop fall barrier	Protective canopy
		

Folding brackets CWP

Item		[kg]	Article nº
Folding bracket CWP		65,40	73 100 200
Suspended platform	3.30m	55,40	73 102 000
	4.30m	69,47	73 104 000
Support girder CWP		30,00	73 110 100
Strut CWP		32,97	73 112 100
Bearing profile CWP		5,04	73 108 100
Waling 12	2.75m	58,20	21 275 000
	3.50m	75,33	21 350 000

Item		[kg]	Article nº
Connecting pin D16/112		0,30	73 202 100
Spring cotter for Connecting pin D16/112		0,05	73 204 100
Connecting pin		0,39	23 400 100
Spring cotter		0,05	23 402 100
Star screw CWP		0,68	73 200 100
Guide rail clamp		12,40	52 400 100
Wind bracing	7.00m	17,47	73 114 100
Framed tube 48 mm	1.00m	4,60	94 100 200
	1.50m	6,91	94 150 200
	2.00m	9,21	94 200 200
	2.50m	11,51	94 250 200
	3.00m	13,81	94 300 200
Swivel coupler	48x48mm	1,22	95 106 100

Item		[kg]	Article nº	Item	[kg]	Article nº
Screw-on coupler 48 mm 	30 70 100	1,21 1,26 1,33	95 100 100 95 102 100 95 104 100			
Fixing plate 	15	0,18	95 400 100			
Cantilever positioning cone 	15	0,53	95 402 100			
Suspension cone 	15	0,95	95 404 100			
Stop anchor 	15.0mm 0.16m	0,43	99 200 100			
Sealing sleeve 	15	0,008	99 104 400			

Shaft platform

Crane-jumped platform for shaft concreting

The Variant's crane-climbing platform, combined with Variant wall formwork system is an efficient and safe way of shaft wall concreting. With use of stripping corners, the wall formwork can be easily closed and opened, simply by turning a spindle. The whole set of wall formwork, shaft platform and additional suspended platform can be repositioned by one crane lifting. The main part of shaft platform is a telescopic shaft beam. The item which bears the loads of formwork and working platforms, allowing an easy adaptation to any dimension of shaft structure. Moreover the telescopic shaft beam has a gravity head. Installed inside precast hole the head allows the platform to be shifted by crane only in one direction, upwards. The system serves as a support for wall formwork and as a safe area for maintenance of wall formwork.

Load-bearing capacity:
• Max. support load of the telescopic beam - 20 kN;
• Live load on a shaft platform - 2 kN/m$^{2.}$

System adaptability:
• Excellent adaptability to any shaft dimension;
• Swift and precise formwork adjustment in all directions.

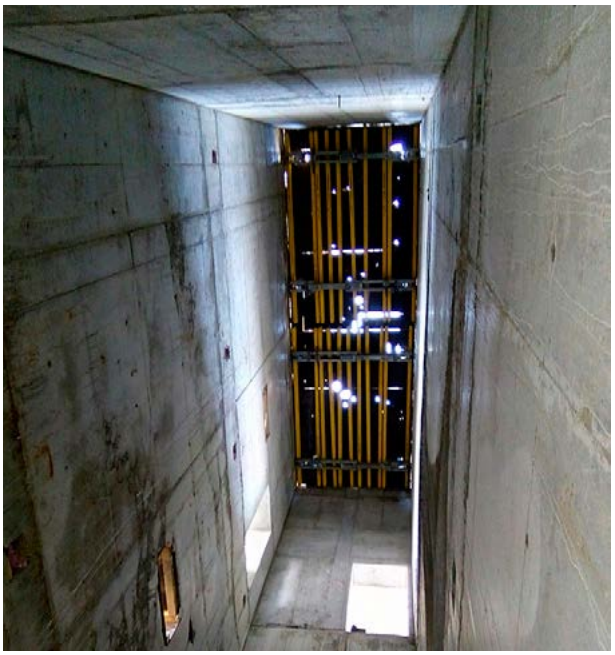
Cost-effective:
• Reduced labor and crane times;
• Fast and simple way of system pre-assembly and installation;
• The entire unit can be repositioned safely and quickly in one piece.

Easy handling and planning:
• Small number of different parts is used;
• Any requirements for architectural concrete wall design can be met.

Safe use:
• Safe working conditions provided by gravity head of the telescopic beams.

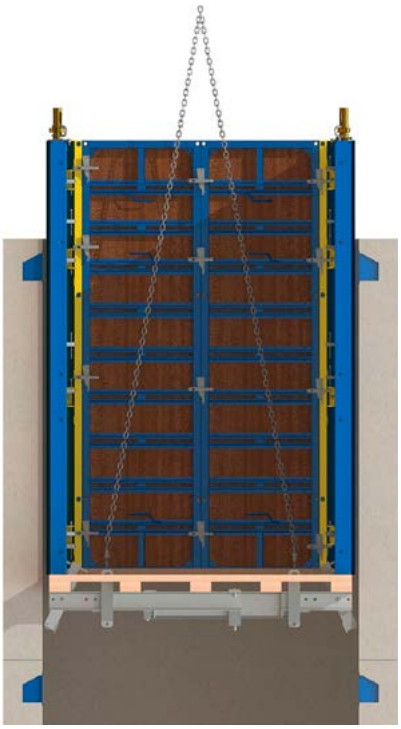
Shaft platform - System overview

The system serves as:
• support for wall formwork;
• safe platform for maintenance of the wall formwork.

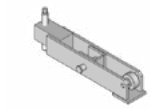
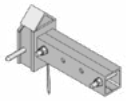


Shaft platform - System repositioning

Owing to heads, integrated in to the telescopic shaft beams, the whole set of the shaft system can be lifted upward to the next pouring area. Only one crane lift is required for the whole system to be relocated. Once the gravitation heads reaches a new precast hole, it goes inside it and since that moment a reliable support is provided. The whole system is ready for a new concreting cycle.



Shaft platform

Item		[kg]	Article nº
Telescopic shaft beam	1.45-1.65m	63,72	71 100 200
	1.65-2.00m	72,05	71 102 200
	2.00-2.70m	108,89	71 104 200
	2.70-3.80m	153,59	71 106 200
	3.80-5.90m	248,30	71 108 200
Gravity shaft beam head		19,62	71 200 200
			
Anchored shaft beam head		18,25	71 202 200
			
Hanging shaft beam head		30,92	71 204 200
			
Box for latch		2,70	71 300 000
			
Shaft beam suspension 4.0…4.5		22,15	71 400 200
			
Waling 12	1.00m	21,00	21 100 000
	1.25m	26,25	21 125 000
	1.50m	31,82	21 150 000
	1.75m	37,07	21 175 000
	2.00m	42,32	21 200 000
	2.25m	47,46	21 225 000
	2.50m	52,71	21 250 000
	2.75m	58,28	21 275 000
	3.00m	63,53	21 300 000

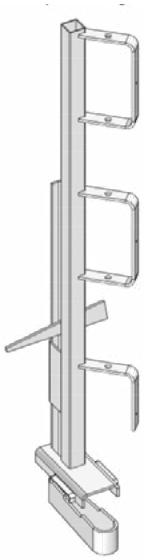
Item		[kg]	Article nº
Beam screw	60	0,07	23 302 100
	110	0,09	23 304 100

Guardrails

Effective protection against fall hazard on any construction site

Guide rail clamp

Owing to convenient and reliable clamp system the guide rail clamp can be easily fixed to any horizontal structure on site such as edge of a slab, wooden girders, formwork H20 beams etc. in order to provide construction personnel with fall protection in accordance with safety norms and rules. When the crew is properly protected, they work safely, which also means more rapidly and thus more efficiently – for your success.



System adaptability:
• Excellent adaptability to any application owing to the clamp system.

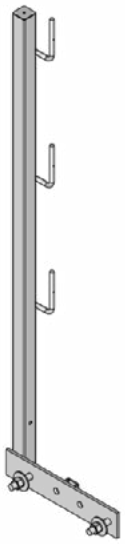
Cost-effective:
• Minimizes time for installation, dismantling and removing to the next area;
• High number of use cycles means lower follow-up expenses;
• Galvanized or powered-coated, for long service life.

Easy handling and planning:
• Convenient and easy to mount owing to fixing method;
• Only one tool is required, a hammer.

Safe use:
• Uninterrupted or powder-coated any construction phase.

Handrail post

Owing to reliable bolt system the handrail post can be easily fixed to H20 beamin order to provide construction personnel with fall protection in accordance with safety norms and rules.When the crew is properly protected, they work safely, which also means more rapidly and thus more efficiently – for your success.



System adaptability:
• Very versatile edge protection. Used with Varitable edge tables, bridge edge beam formwork, etc.

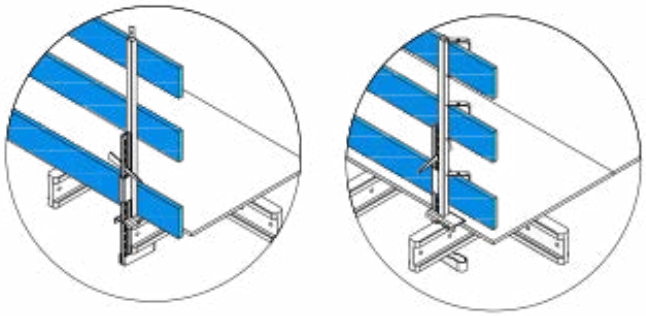
Cost-effective:
• Once installed, moving and dismantling together with formwork as one assembled gang-form;
• High number of use cycles means lower follow-up expenses;
• Galvanized or powder-coated, for long service life.

Easy handling and planning:
• Convenient and easy to mount owing to fixing method;
• Only one tool is required, a ratchet wrench.

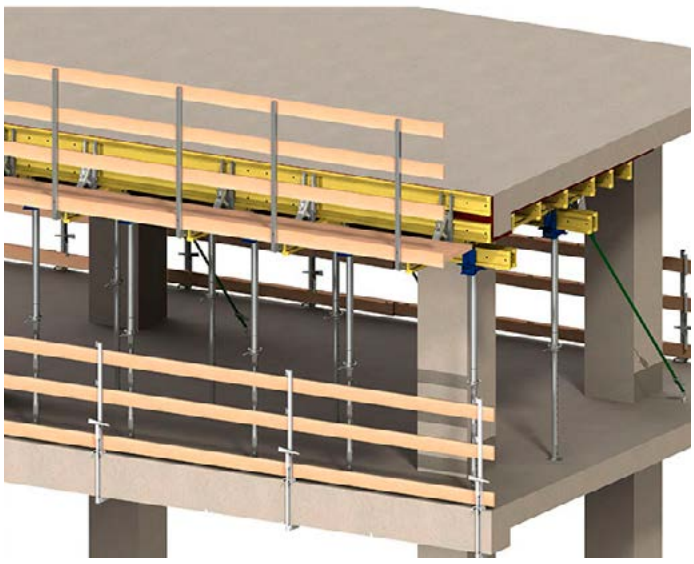
Safe use:
• Uninterrupted safety during any construction phase.

Guardrails – system in use

The guide rail clamp can be fixed on any finished concrete slabs to provide construction personnel with protection against fall hazard.



The guide rail clamp can be fixed anywhere on the timber formwork beam. H20 beam is to be secured against overturning!



Stair tower TT40

Access system which can help attain any height quickly and safely

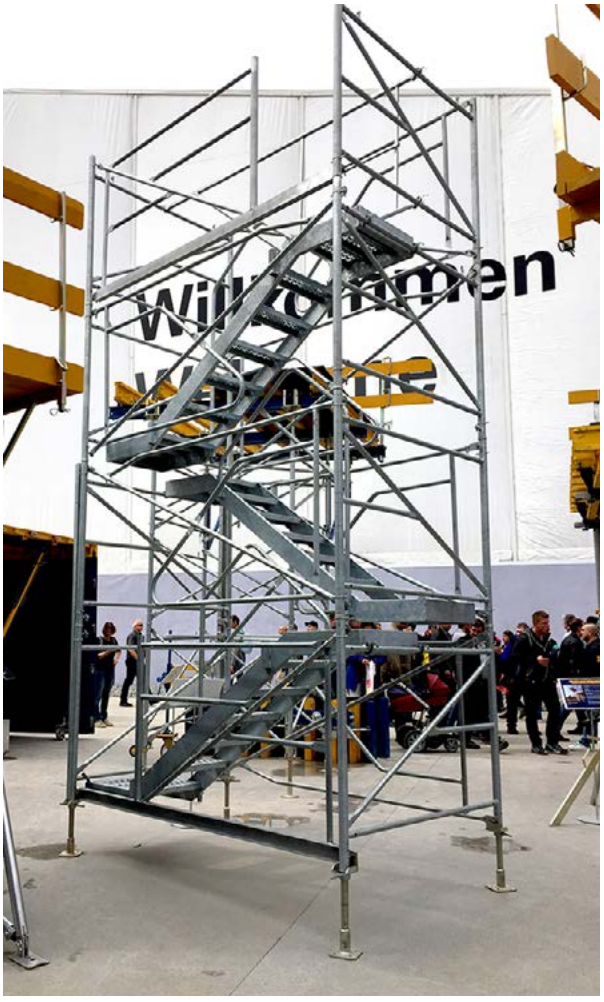
Stair tower TT40 by Variant is a modular stair tower system based on Variant's scaffolding system TopTower40. The stair tower system has been designed for fast and safe access to a working area at a height. Owing to its simple assembly procedure the system is convenient and easy to erect, minimal labor is required. Optimized speed of access to a working area at a height makes use of labor-hours more efficient. Moreover the safety aspect of the system helps to prevent accidents at your construction site. Intermediate exits permit safe access on any level. The Stair tower gets the most use out of your equipment: both stair towers and load-bearing towers can be assembled using the same system.

Load-bearing capacity:
• Maximum stair tower height - 100 m;
• Live load 150 kg/m^2.

Cost-effective:
• Labor-hours are used more efficiently due to quick access of labor at a height;
• Easy and fast assembly, only a hammer is required as an assembly tool;
• All parts of the stair tower are galvanized (HDG), for long service life;
• High number of use means lower follow-up expenses.

Easy handling and planning:
• Small number of different parts is used;
• Can be lifted by crane as a complete tower or as a preassemble units;
• Time and cost-effective owing to use of pre-assembled elements;
• Can be used in space-tight areas, system dimensions 1.5x2.5 m.

Safe use:
• Safe working conditions provided by fully railed stair tower;
• Dependable stability of the stair tower.



Stair tower TT40 - System overview

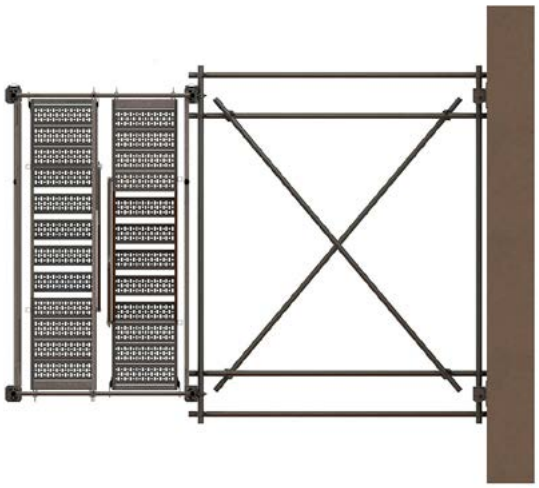
(A) Scaffold frame TT40 1.2x1.5
(B) Lower support TT40
(C) Outer railing
(D) Inner railing
(E) Access railing TT40
(F) Landing railing
(G) Stair TT40
(H) Reinforcing adapter TT40

For reliable use and safe repositioning of assembled (preassembled) units by a crane, the stair tower TT40 has interconnection system. Consisting of insert TT40, which is installed between two frames and fixed by retainers TT40

Stair tower TT40 - Anchoring

Distance from structure up to 1.00 m

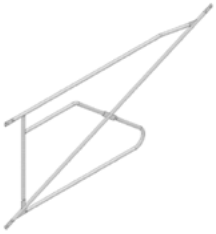
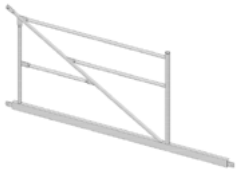
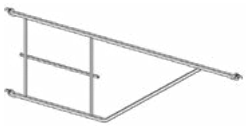
Distance from structure: 1.00 m up to max. 2.50 m



For Stair Tower up to 40 m anchoring distance:
- with/without netting - every 5th frame;
- with tarpaulins - every 4th frame.

For Stair Tower from 40 to 100 m anchoring distance:
- with/without netting - every 4th frame;
- with tarpaulins - every 3rd frame.

Stair tower TT40

Item		[kg]	Article nº
Scaffold frame TT40	1.20x1.50m	18,91	61 120 200
			
Stairs TT40		40,52	64 400 200
			
Outer railing TT40		14,97	64 402 200
			
Inner railing TT40		6,63	64 404 200
			
Access railing TT40		33,15	64 406 200
			
Landing railing TT40		12,20	64 408 200
			

Item		[kg]	Article nº
Reinforcing adapter TT40		13,84	64 410 200
			
Insert TT40		0,89	61 400 100
			
Retainer TT40		0,06	61 402 100
			
Lower Support TT40		11,09	61 502 100
			
Anti-dropout lock TT40		0,59	61 404 100
			
Framed tube	1.00m 1.50m 2.00m 2.50m 3.00m	4,60 6,91 9,21 11,51 13,81	94 100 200 94 150 200 94 200 200 94 250 200 94 300 200
			
Swivel coupler	48x48mm	1,22	95 106 100
			
Screw-on coupler 48 mm	30 70 100	1,21 1,26 1,33	95 100 100 95 102 100 95 104 100
			
Anchoring shoe		5,03	61 800 100
			

Touching the clouds

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VARIANT

REUSABLE PACKAGING

Packaging items

Reusable packaging and storing items for better logistic on site

Multi-use packing items such as containers, stacking pallets and skeleton transport boxes will help to keep your construction site, minimizing the time spent on finding needed formwork parts (small items and accessories) during the installation and improving logistic when shifting to another pouring zone is required. The stacking pallets simplify the storage and handling of slab props, folding tripods, formwork beams. The skeleton transport box is the tidy way of storing and handling lighter accessories (max. load 250 kg). For heavier accessories, there is plenty of space in packaging container (max. load 1000 kg).

Cost-effective:

- Fast loading and unloading of systems components, small items and accessories;
- All the equipment can be easily shifted by crane, minimal labor is required;
- Equipment can be stored efficiently even on sites with limited storage areas.

Folding wire mesh container
(based on Euro-pallet 1200 x 800 mm)

Dimensions 800×1200×h	Weight	Max. load	Wire mesh
800 mm	29.6 kg	250 kg	50x50 mm
1000 mm	35.6 kg		
1200 mm	41.6 kg		

Transportation box

Dimensions 1200x800x800 mm	Weight	Max. load
	120 kg	1000 kg

Stacking pallet

Dimensions	Weight	Max. load
1550x850x750 mm	41.5 kg	900 kg
1700x950x1000 mm	50 kg	

Stacking pallet may be provided on quick-mount wheels with brakes.


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