VARIO VT 20

The variable Girder Wall Formwork System with the proven Girder VT 20

Edition 1 | 2016

PERI GmbH
Formwork Scaffolding Engineering
P.O. Box 1264
89259 Weissenhorn
Germany
Tel. +49 (0)7309.950-0
Fax +49 (0)7309.951-0
info@peri.com
www.peri.com

Important Notes:

Without exception, all current safety regulations must be observed in those countries where our products are used.

The photos shown in this brochure feature construction sites in progress. For this reason especially safety and anchor details cannot always be considered as conclusive or final. These are subject to the risk assessment carried out by the contractor.

Safety instructions and load specifications are to be strictly observed at all times. Separate structural calculations are required for any deviations from the standard design data.

Content

General

2 The variable girder wall formwork system
6 Complicated geometries with standard system components
8 VT 20 Formwork Girder
9 The standard system components of a VARIO VT 20 panel

Standard Applications

10 Continuously adjustable panel connections
12 Fillers, stopend formwork and panel width extension units
14 External corners, internal corners
15 Push-pull prop connector, crane lifting units
17 Working and Concreting Scaffold
18 Panel extensions

Special applications

20 Architectural concrete
24 Tower construction
26 Water-retaining structures
28 Single-sided walls
30 Design Tables for VT20

33 Components

50 PERI International

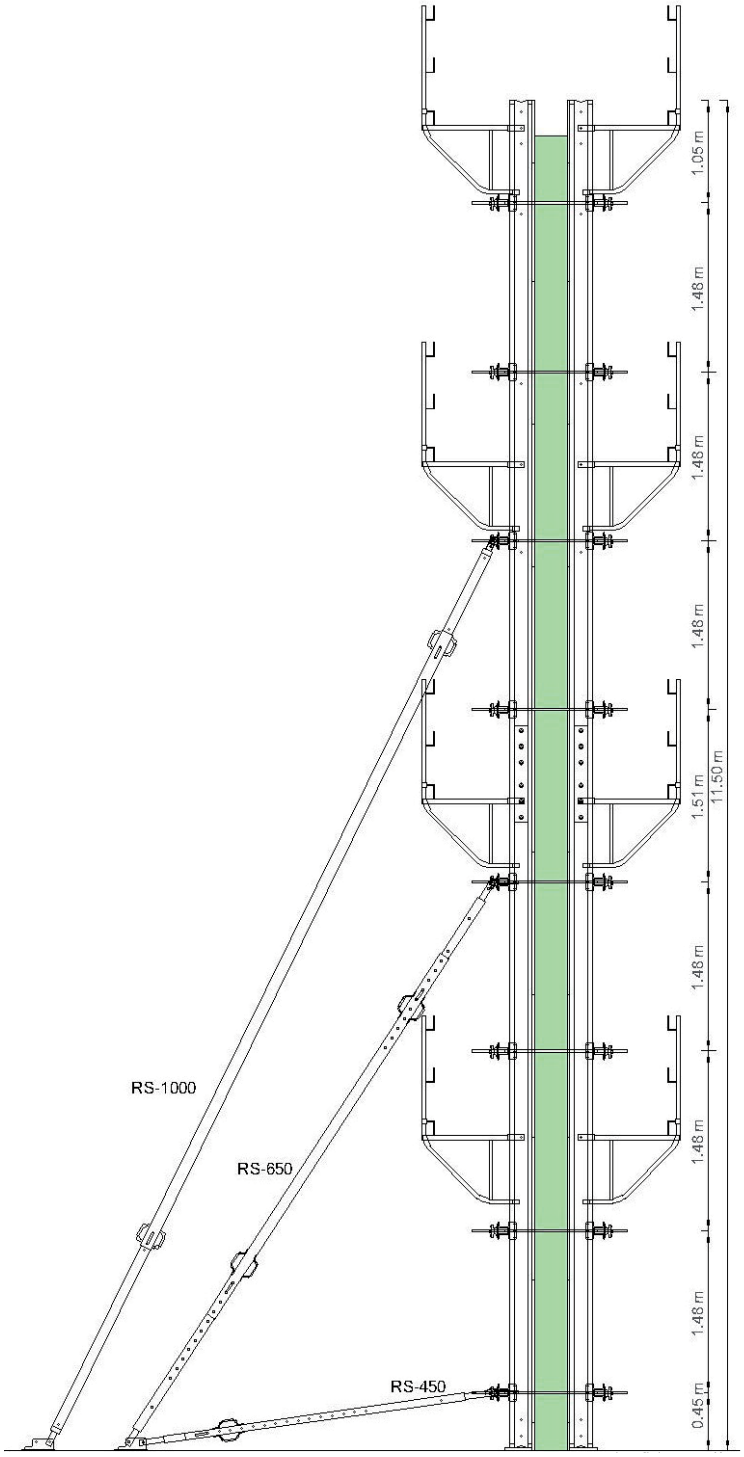
General
The variable girder wall formwork system

VARIO VT 20 is the proven girder wall formwork system complete with the continuously adjustable elongated hole couplings.

Regardless whether it is industrial or residential construction, bridge abutments or retaining walls, every layout and any height up to 11.9 m can be formed with PERI VARIO-VT.

VT 20 girder allow easy adjustment to suit the required height.

Pre-assembled, ready-to-use platforms provide site personnel with a very high level of safety, as well as large time savings particularly with multiple usage.



The VARIO VT 20 girder wall formwork system offers many advantages. This includes simple planning, minimum on-site material requirements and fast, efficient formwork sequencing.

Optimally-sized large elements can be assembled specifically for every project. In the process, the following points can always be freely selected:

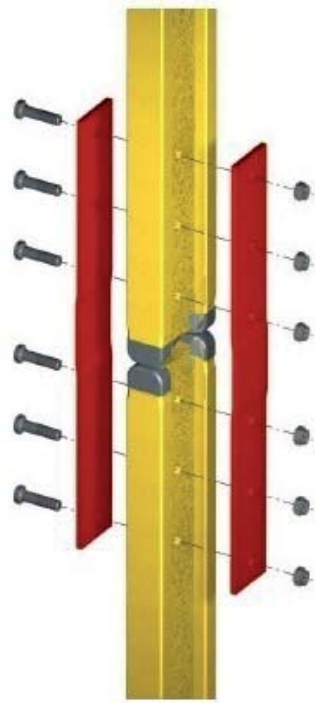
- type and size of the formlining
- formlining fixings
- panel widths and heights
- position of any height extension or reduction
- girder length and spacing
- waler position, profile and length
- permissible fresh concrete pressure
- tie arrangement (horizontal, vertical)
- type of panel (straight, curved, offset)

Extended VARIO VT 20 panels being used to shutter administration building.

General
The variable girder wall formwork system

Cut and cover tunnel constructed using extended VARIO VT formwork.

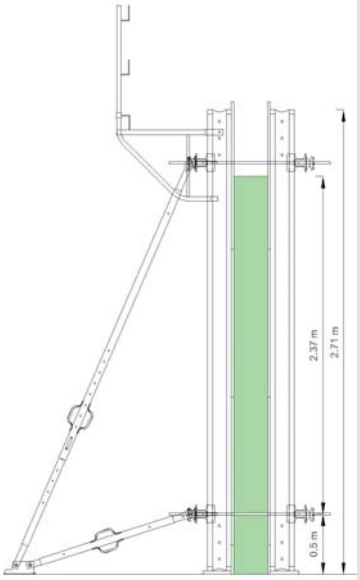
The formwork is extended with the VARIO Extension Splice VT 20
Quickly and easily fitted through the existing end holes at the web of VT 20, without having to drill girders.
The flexurall rigid connection automatically aligns the girders. The splice consist of just two components which are quickly connected using 6 Bolts and nuts M20.



VARIO VT 20 formwork specially adapted to the requirements with defined formlining joint formation and tie point positioning.

CB240 climbing system were combined with VARIO VT20 wall formwork to cast the cores ahead of slab which reduce time and cost for the client.

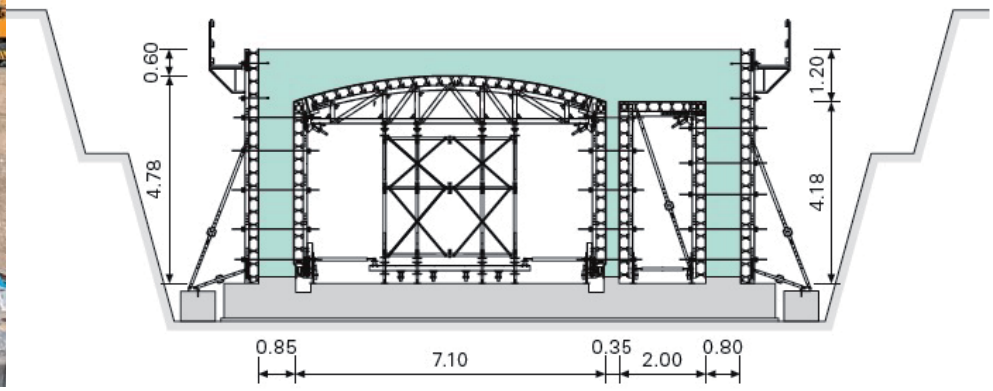
VARIO panels, with concreting scaffold and push-pull props, are shifted as a complete unit.



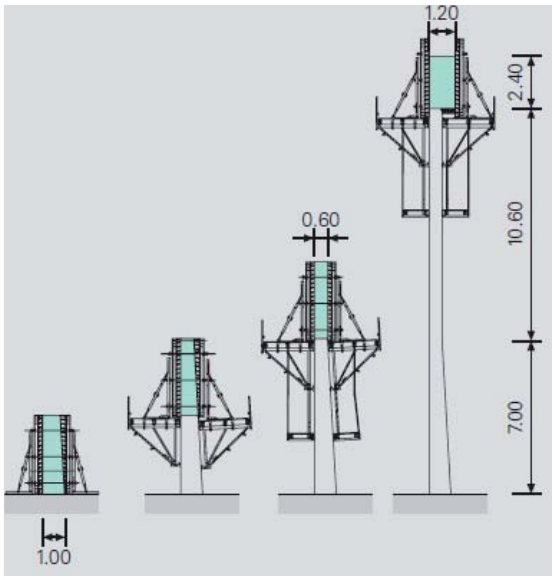
Soundproof sealing of the tie points costs 50% less as the top tie point is above the concrete with waler spacing of 2.37 m.

General
Complicated geometries with standard system components

Enabled by PERI tunnel formwork, a rapid four-day cycle per section was achieved at a tunnel construction site near Muscat. Through its cost-effective and flexible design, the side shutter and decking also relied on VARIO VT 20.

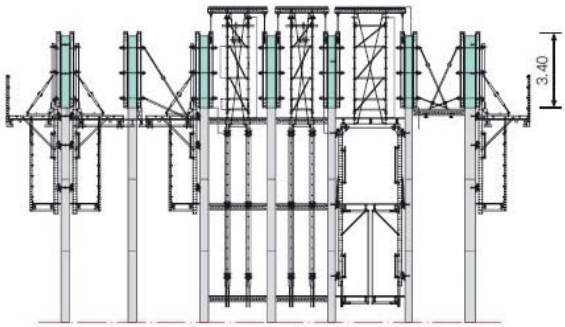


VARIO VT 20 being used to construct a circular tank. Timber on top of VT girders and steel walers produce the circular shape.



Even for this complicated layout, over 90% of the formwork consists of standard system components.

Multi-storey Hotel and Service Appartment with VARIO VT 20 and RCS/VARIO rail climbing formwork systems used for lifting core walls.



General
VT 20K Formwork Girder
Cost-effective and durable

Robust steel caps
at the end of the girders protect against damages.

The PERI VT 20K is the 200 mm solid web girder complete with optimal protection at the girder ends.

The robust steel cap which surrounds the end of the girder, as well as the concave web end, reliably prevent damage to the girder ends in demanding and tough conditions on the construction site. Here, the natural elasticity of the timber is used to absorb the impact energy if the girder falls to the ground.

Securing of the steel cap was intentionally done in the unstressed area of the web. The highly compressed web board has a high proportion of synthetic resin which ensures high dimensional stability. These improvements in the details, in connection with chords made of high-quality Nordic softwood, greatly extend the service life of the girder.

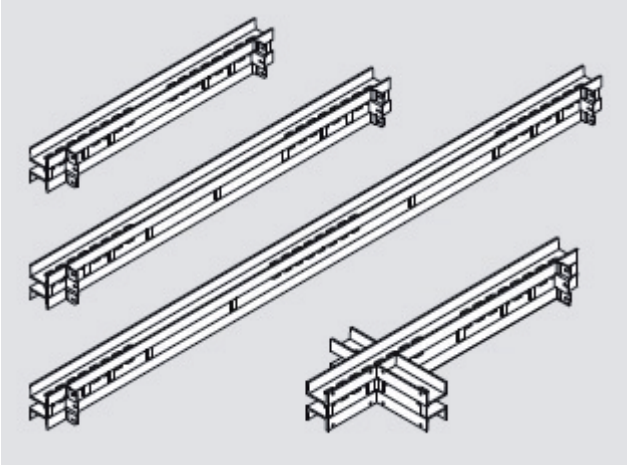
Note
Girder meets the requirmenrt DIN EN 13377 class P20 (declaration of conformity).

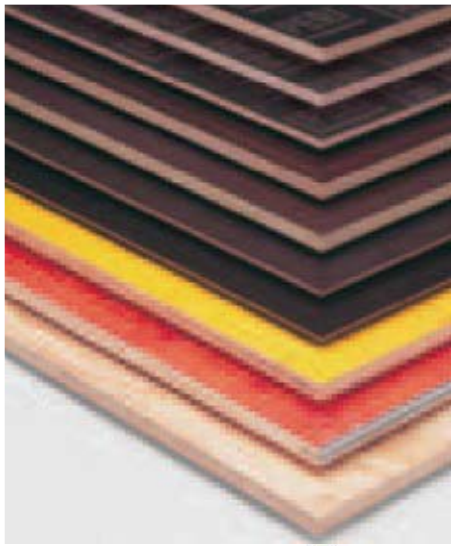
Technical Data
perm. Q = 11.0 kN
perm. M = 5.0 kN.m
Iy = 4181 cm^4

General

The standard system components of a VARIO VT 20 panel

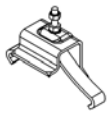
Steel Waler SRZ/SRU
Available in standard length as well as las any special sizes and forms.Profile cross-sections range from U100 to U140 and others.





Formling
PERI formling sheets come in range of sizes,thickness and grades to ensure that the most appropriate formling is available to meet individual site requirments.

Connecting Components
Hook Strap HB for VT
For connecting the VT20 to SRZ and SRU walers .



Hook Strap Uni HBU
For connecting the VT20 to SRZ and SRU Walers from top of the girder.

TSS Torx Screw
for assembling the formling

Standard Applications
Continuously adjustable panel connections

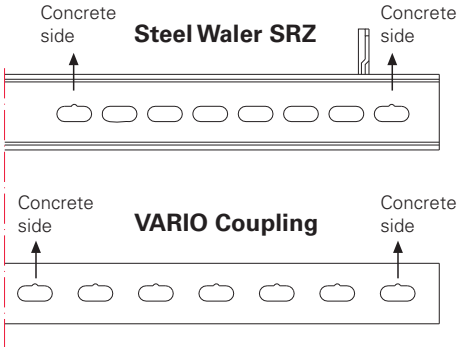
The rows of slots in the PERI steel walers and couplings allow continuous tightening of panel joints of even roughly erected panels.

VARIO Coupling VK
With the VARIO coupling, the panels are simultaneously aligned.

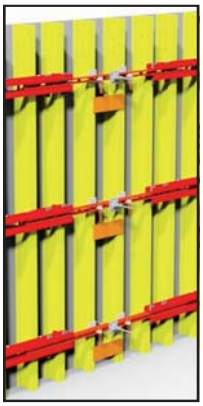
The multi-functional VARIO coupling with the wedge:
- continuously tightens until joint is grout-tight
- aligns panels
- supports plywood fillers
- extends the width of panels
- fixes stopend formwork
- stabilises internal corners
- is continuously adjustable on both sides

Important:
PERI steel walers and couplings have notches in the elongated holes. These must always point towards the concrete side. As a result, the tolerances are equal to zero and the panel joints are optimally aligned.

Standard joint
The continuous adjustment possibility ensures extremely tight panel joints.

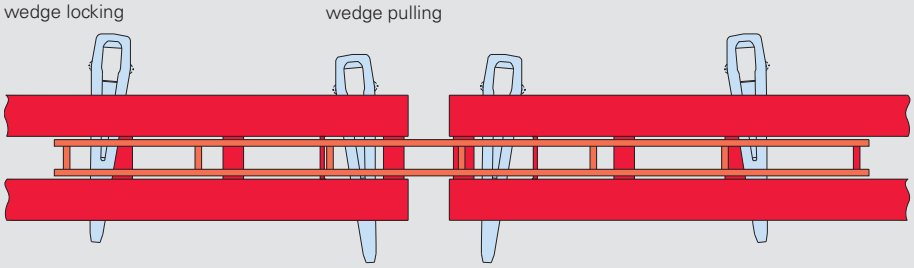


Filler joint
Any gap up to 1.25 m wide can be filled.



Oblique joint
Any angle can be shuttered with the articulated coupling.

Practical tip
Whether a wedge is locking or pulling is evident from its inclination:
Wedge tip points to the element joint
= wedge pulls
Wedge tip points away from the element joint
= wedge pushes



Neat and precise panel joints are always specifically required where special architectural requirements are placed on the concrete surface.

VARIO Coupling Concrete Finish VKS
With the VARIO Coupling VKS and the Alignment Clamp VRS, it is easy and quick to carry out.

The Coupling VKS allows offsets up to 5 mm to be compensated. At the same time, the Coupling VKS can be used as a "standard panel connection".

Handling

- Centrally position the Coupling VKS on the element joint in the steel waler.
- The smaller side of the trapezoidal-shaped cut-outs points to the concreted side. (Fig. 1)

- Position the Wedge KZ in the same way as with coupling VKZ.
- With element offsets, mount Alignment Clamp VRS on Panel ① positioned to the rear.
- Release pulling wedge on Panel ②.
- Use counter wedge to slightly open the formlining joint on Panel ②. (Fig. 2)

- Loosen pulling and counter wedges on Panel ①.
- Eliminate panel offset by tensioning the Alignment Clamp VRS.
- Release pulling wedge on Panel ②.
- Tightly close joint on Panel ② with counter wedge.
- Counter with pulling wedge on Panel ②. (Fig. 3)

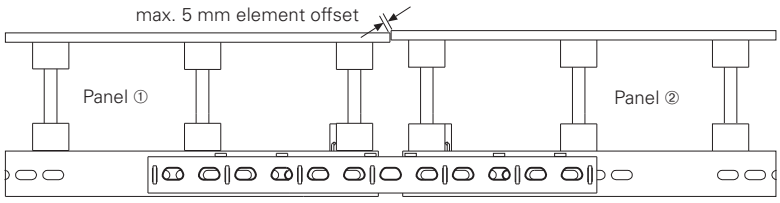


Fig. 1

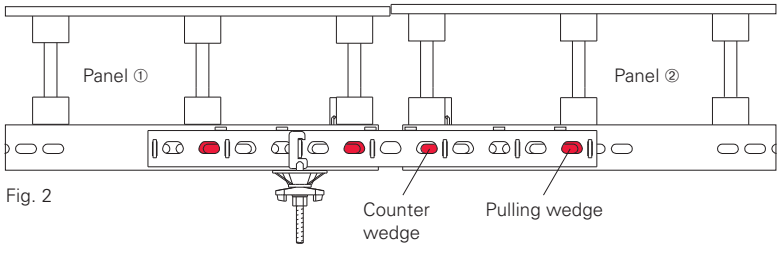


Fig. 2

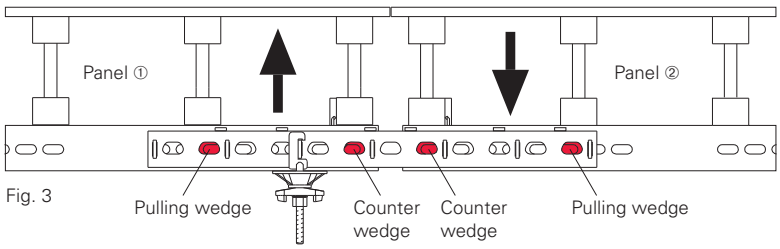


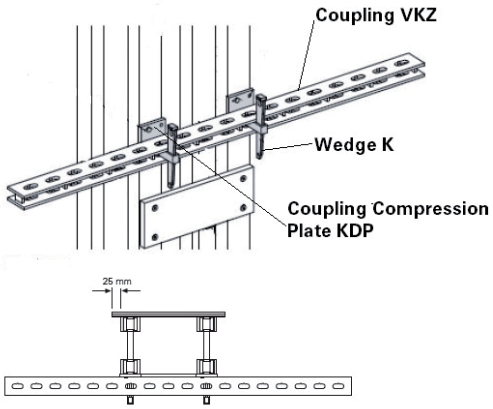
Fig. 3

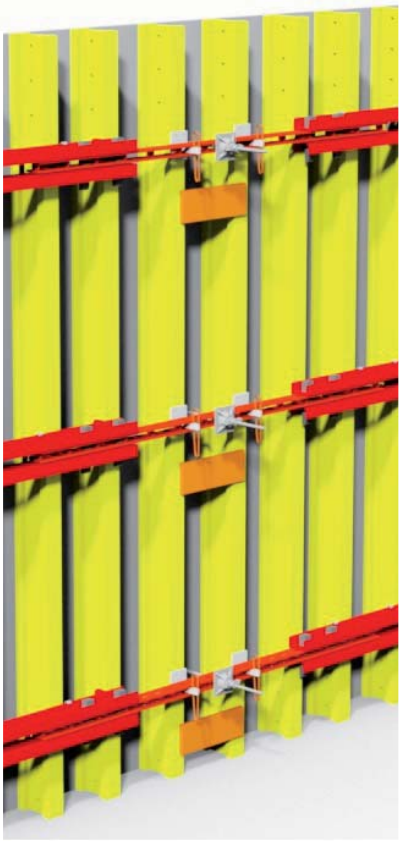
Standard Applications

Fillers, stopend formwork and panel width extensions units

Infill areas

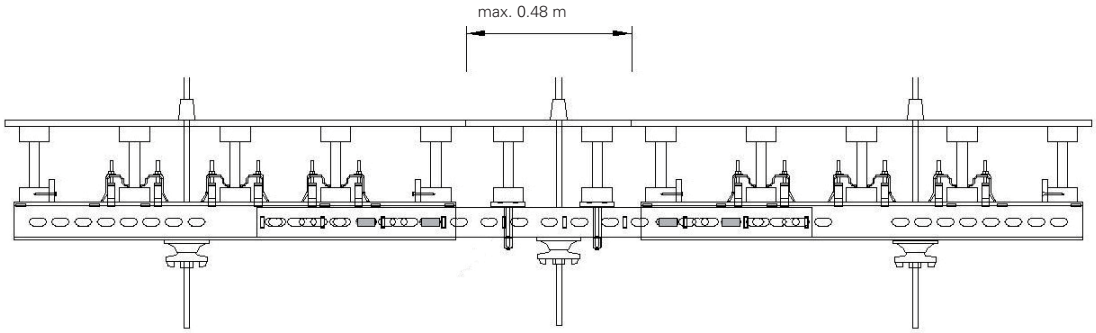
VARIO VT 20 infill areas are shuttered using the Couplings VKZ 147 and VKZ 211.



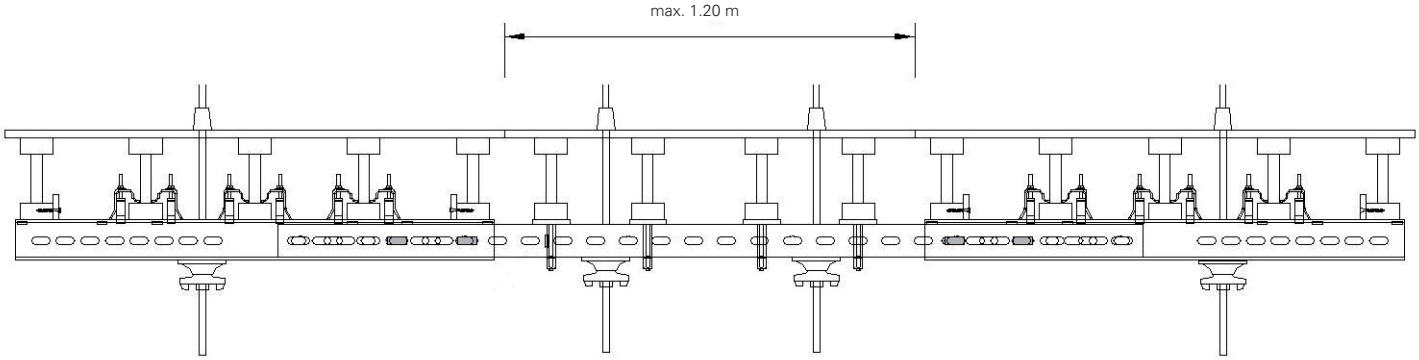


Continuous infill area width with Couplings VKZ.

Coupling VKZ 147



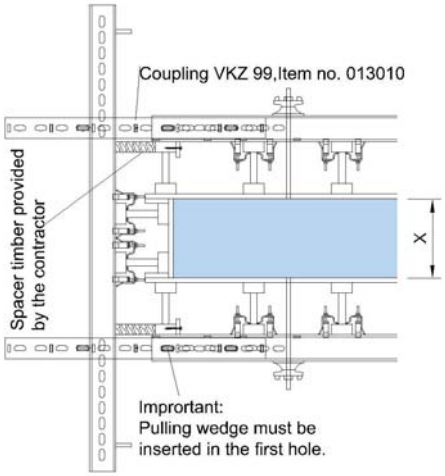
Coupling VKZ 211



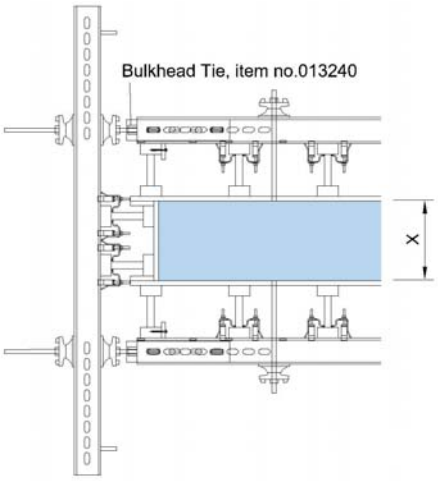
Stopend Formwork

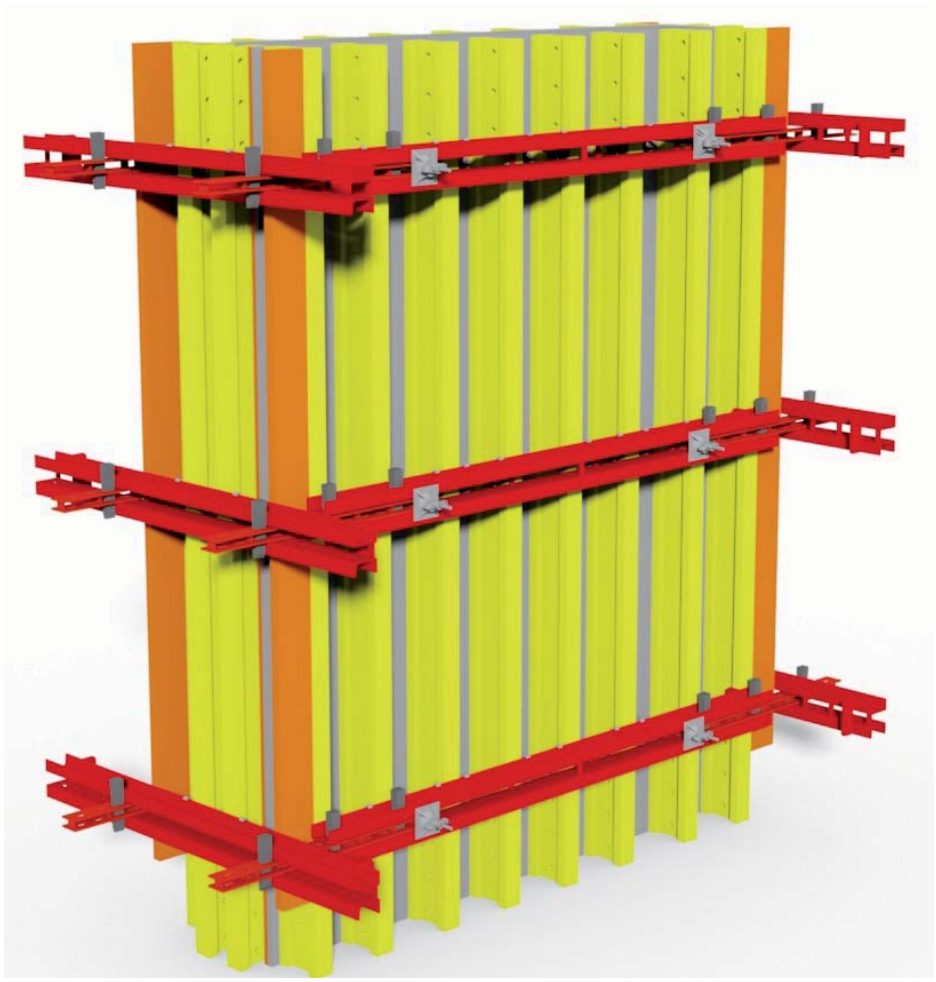
VARIO offers 2 possibilities for realising stopend formwork: either the Coupling VKZ or Bulkhead Tie is used.

Coupling VKZ
perm. tension force 50 kN.



Bulkhead Tie
perm. tension force 30 kN.





Complete stopend formwork with coupling VKZ.

Standard Applications
External corners, internal corners

Depending on the application, external and internal corners can be formed in various alternative ways.

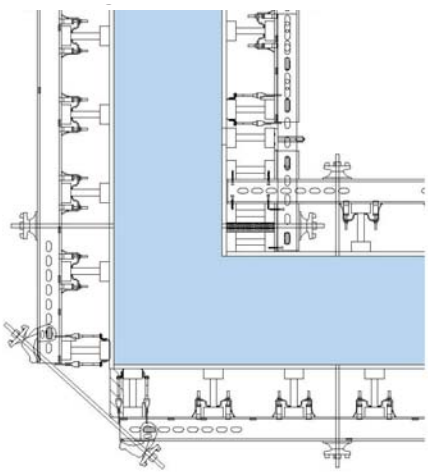
- With VARIO Corner Panels
- With Cross Walers & Shaft Corners
- With Special Walers

VARIO Corner Panel
With this solution, especially for thin walls and low utilisation, the fillers consist of standard components.

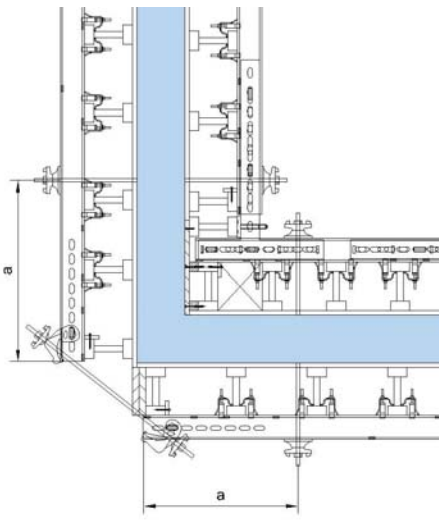
External Corner
Ensure that it is tightened when the correct angle is achieved. The continuous adjustment possibility facilitates this process.

Details of the VARIO Internal Corner

VSRZ waler used for Internal corner



TKZ waler used for Internal corner



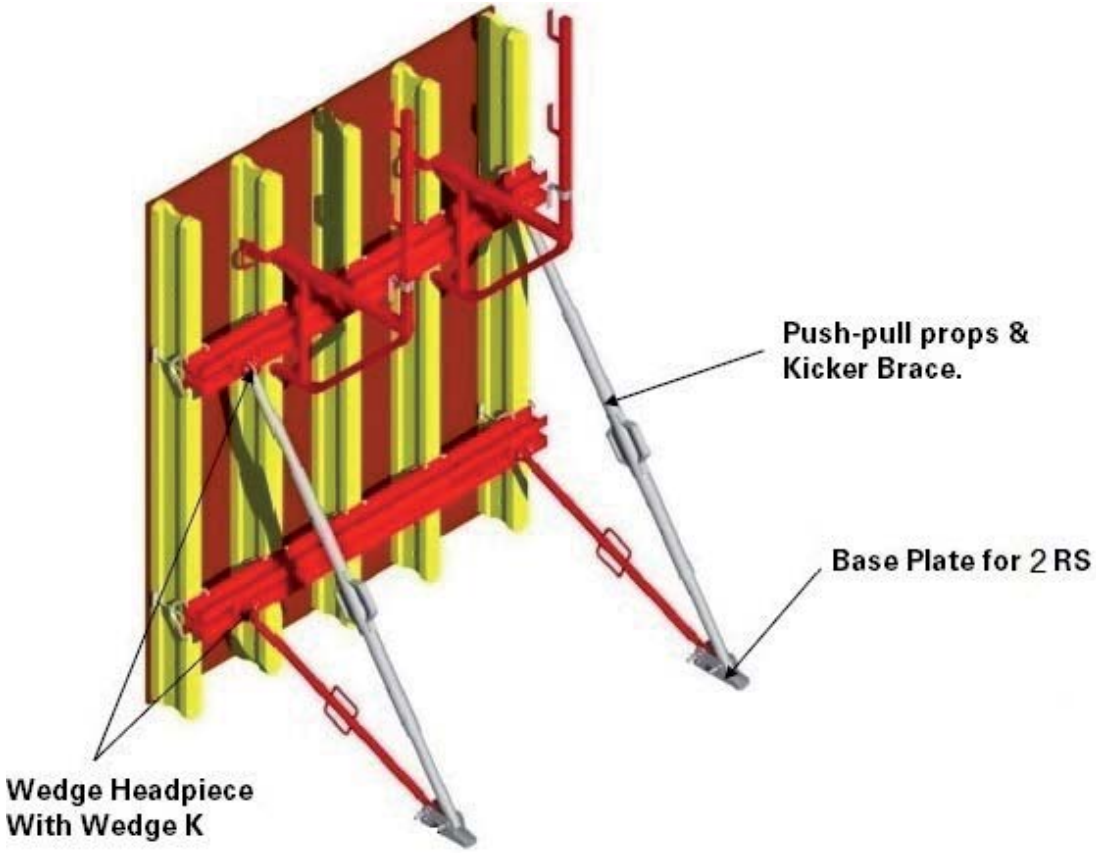
Standard Applications

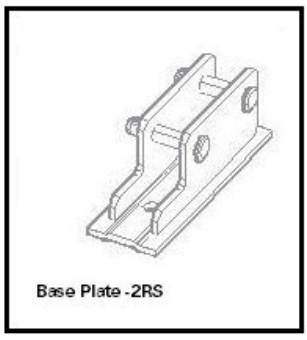
Push-pull prop connector, crane lifting units

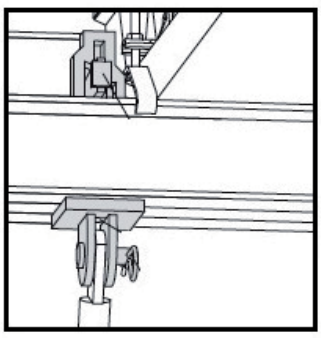
Push-Pull Prop Connector

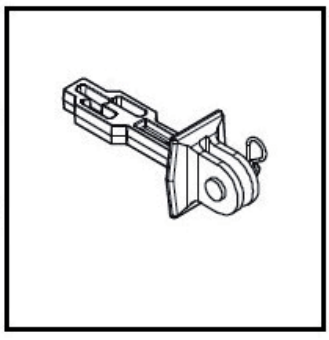
Connecting the push-props and kickers to the VARIO panel is carried out using Wedge Headpiece. Fixing to the slab takes place using Base Plates and PERI Anchor Bolts14/20 x 130.

The first panel must always be secured with 2 push-pull props.









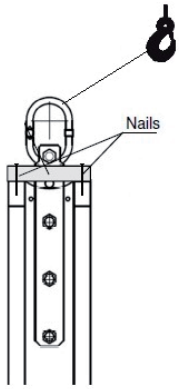
Connecting to Steel Waler SRZ with the Wedge Headpiece, Item no. 028060 and Wedge K, Item no. 024250.

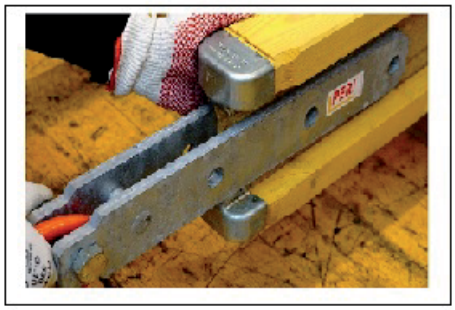
Crane Lifting Unit

PERI VARIO
for lifting panels with the crane.

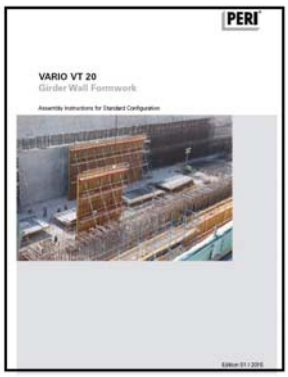
Crane Splice - VT 20
as easily assembled and dismantled lifting unit.

Important:
In general, two crane lifting units are used per moving unit. The Instructions for Use contain important information and must be followed at all times.





Crane Splice- VT 20
Permissible load-bearing capacity to be referred in the instruction of use manual.



Assembly Instructions for Standard configuration for Vario VT 20.

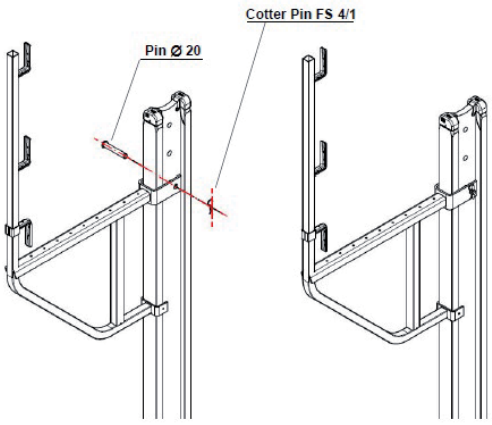
Standard Applications
Working and Concreting Scaffold

Scaffold Bracket GB 80-VT

The Scaffold Bracket GB 80 is used for the assembly of an 80 cm wide working scaffold. Scaffold components supplied by the contractor must comply with local valid safety regulations (for Germany DIN 4420). Timber components must conform at least to S10 or MS10 classification according to DIN 4074 as well as being clearly marked (BGR 169).
Cross-section of guardrail boards:
3 cm x 15 cm.
Secure planking and guardrails with nails or screws.

A correctly assembled concreting platform complete.

PERI Scaffold Bracket GB 80-VT
perm. working load 1.5 kN/m²,
max. width of influence 1.25 m.



Several working platform levels are required at great heights.

Standard Applications
Panel extensions

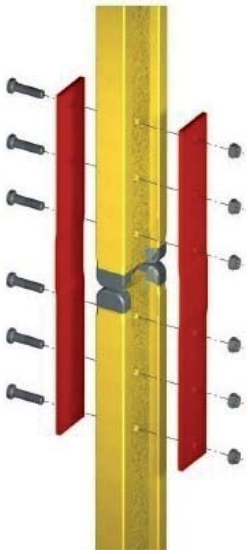
Heights up to 8.00 m

The standard method of extension is to use the VARIO Extension Splice VT 20.

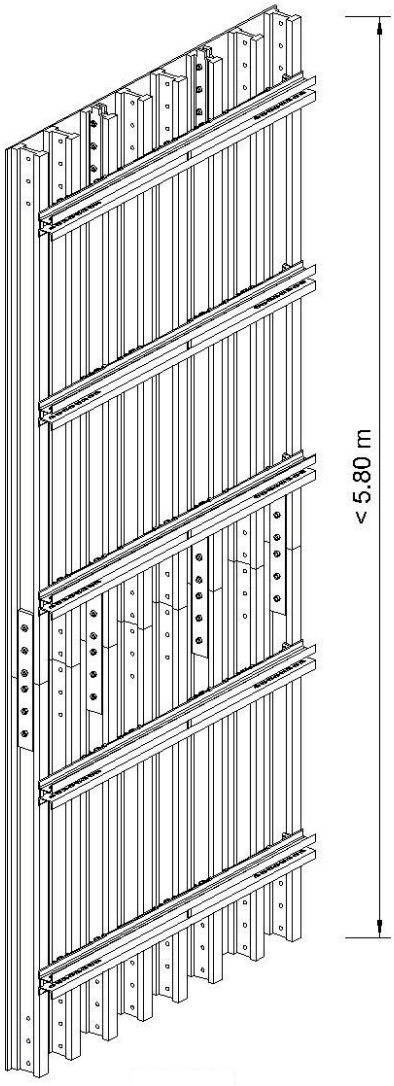
The flexurally stiff connection also automatically aligns the panels. The splice consists of only two components and is connected in no time with 6 Bolts M20x80 & 6 Nuts M20-8-VZ.

Static values for the Extension Splice VT 20

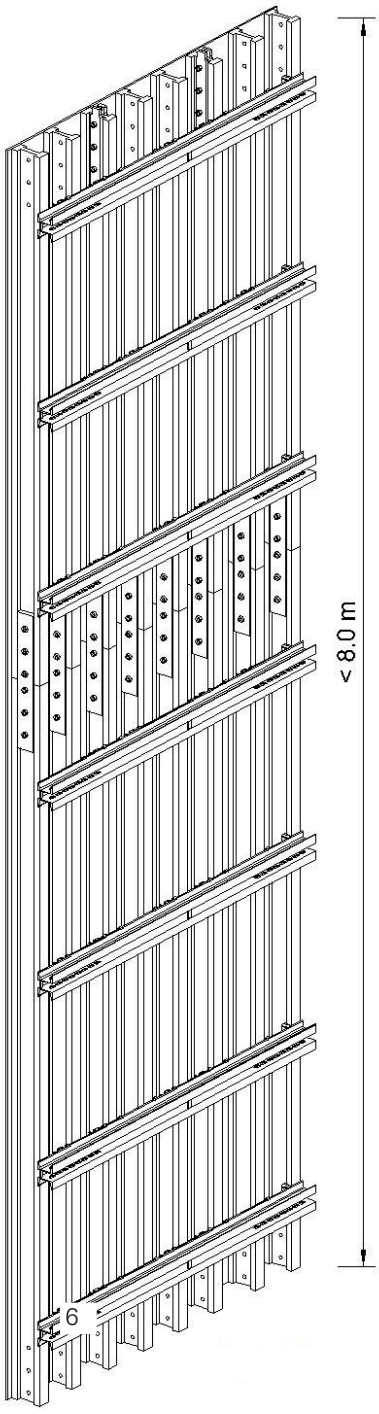
$M_{perm.}$ = 1.3 kNm
$Q_{perm.}$ = 0 kN
or
$M_{perm.}$ = 0 kNm
$Q_{perm.}$ = 4.6 kN



Extensions up to 5.80 m
4 x Extension Splices VT 20 for a 2.50 m element width.



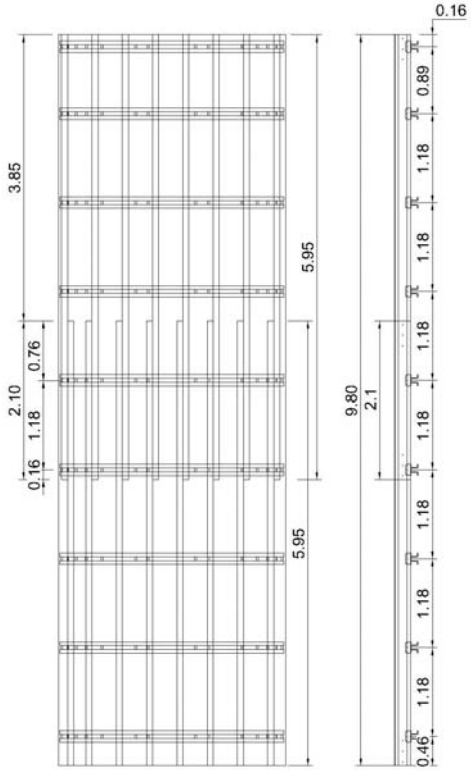
Extensions up to 8.00 m
8 x Extension Splices VT 20 for a 2.50m element width.



8.00 m high Metro station walls extended with extenstion splice for VT .

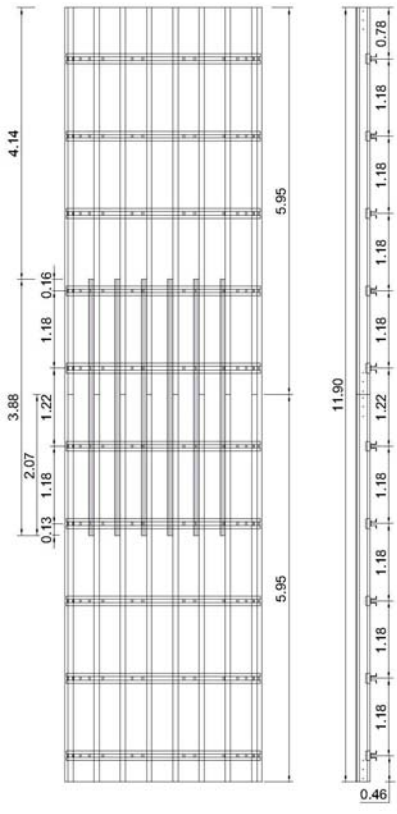
Heights up to 9.80 m

with overlapping girders.



Heights up to 11.90 m

with additional girders.



For more information on extensions, see PERI Design Tables or VARIO VT 20 assembly instructions.8

Special Applications

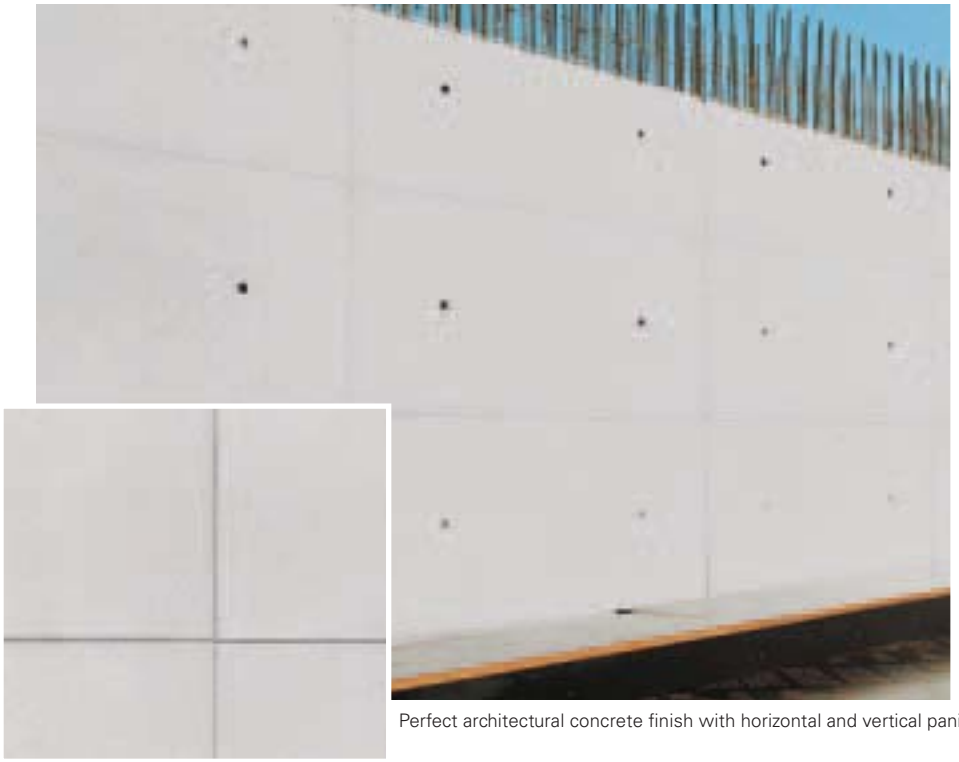
Architectural concrete | Perfect concrete surfaces with VARIO

Achieving a first-class architectural concrete finish is primarily a question of selecting the most suitable formwork and formlining. Other factors such as the accuracy of the formwork assembly, shuttering work, concrete release agent, concrete and its placing all significantly influence the result. Through the free choice of girder lengths and spacings, tie positions and formlining, the VARIO VT 20 girder wall formwork offers the highest possible degree of flexibility for the realisation of architectural concrete structures.

Attractive looking concrete finish with rough vertical board finish.

43.50 m high tower with architectural concrete with a board finish for an industrial plant.

Exemplary fairfaced concrete with
rough horizontal board finish.



Perfect architectural concrete finish with horizontal and vertical panicular pattern.

Special Applications

Architectural concrete | Perfect concrete surfaces with VARIO

Due to the freely configurable waler and tie spacings, numerous possibilities for realising neat joint and tie arrangements can be executed.

An orderly pattern of ties spaced at 0.75 x 1.18 m and smooth, architectural concrete are the result

The rough surface finish ensures that the massive tunnel portals blend into the volcanic rock landscape. The unusual washboard structure was created by using extra battens on the formlining.

Portal of a tunnel structure shuttered as shown with VARIO VT 20 on KGF 240 climbing scaffold.

High-quality architectural concrete with vertical board finish.
The panels were pre-assembled at PERI's Weissenhorn factory.

The BAB 4 motorway bridge over the Triebischbach valley was constructed with 49 m high circular piers featuring trumpet-shaped pier heads.

Special Applications

Tower construction / VARIO on climbing scaffold and working platforms

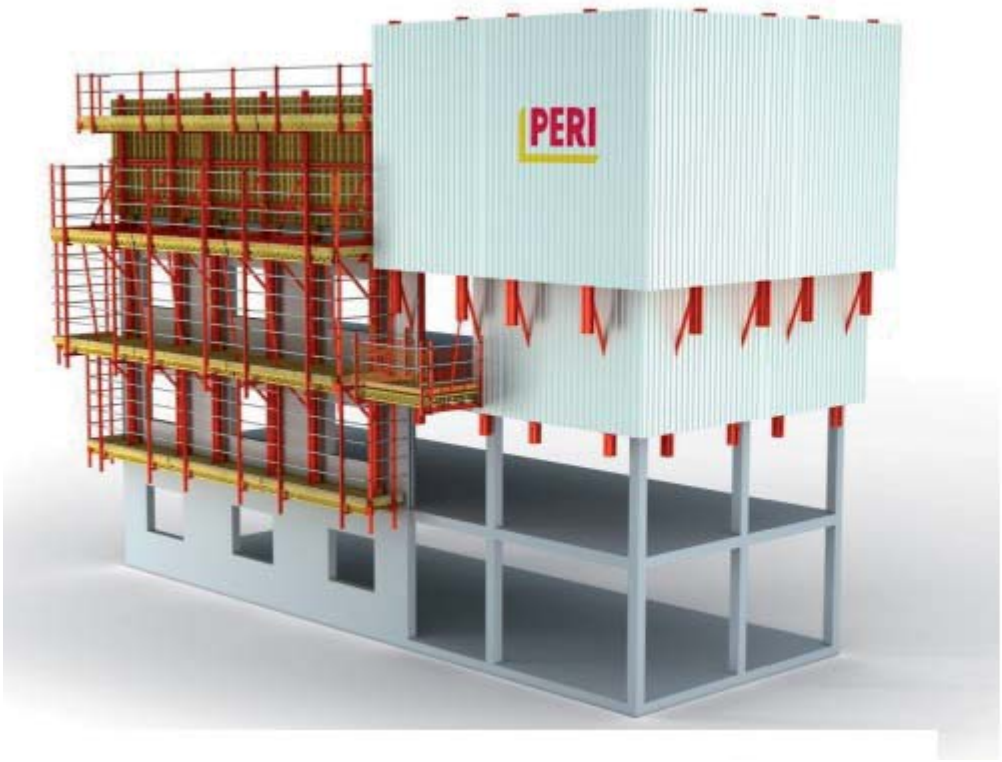
Further information:
Climbing Scaffold CB,
ACS product brochure.

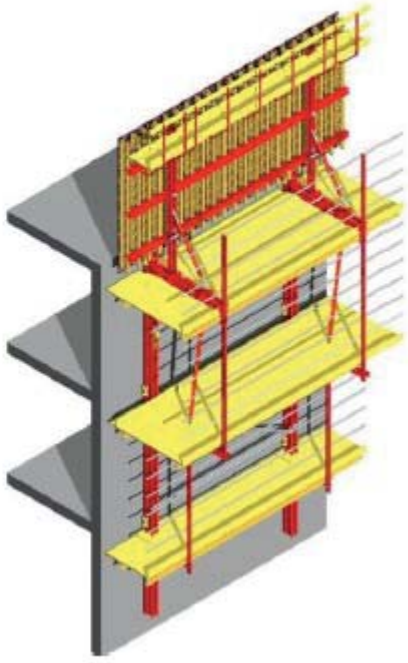
Type-tested safety with ACS and CB 240 systems.

The CB 240 carriages with high safe allow formwork to be moved 0.75 m on a platform without a crane. The formwork is moved together with the scaffold vertically in one crane lift. This saves time.

The ACS system with a strongback and formwork carrriage on brackets. Formwork platform and scaffolding with suspened movable formwork on adjustable bracket.

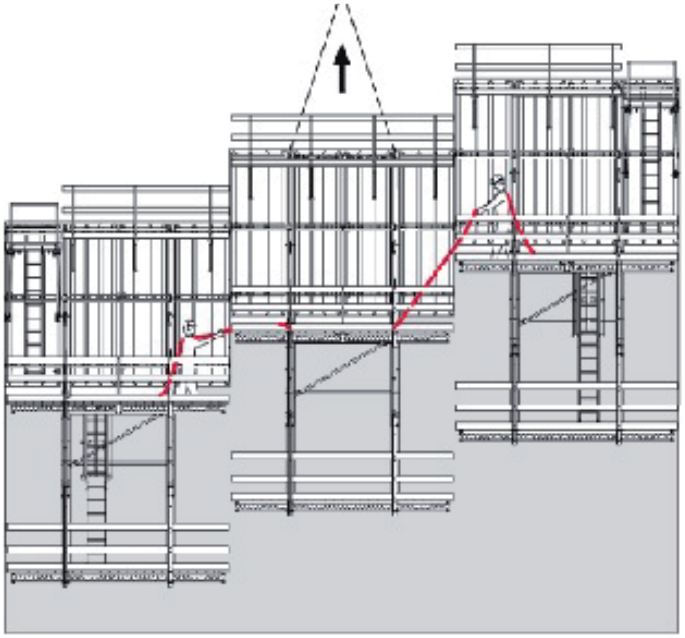
The platform lining can be pre-assembled and can be used immediately when moving from one site to the next. This results in considerable assembly time savings.

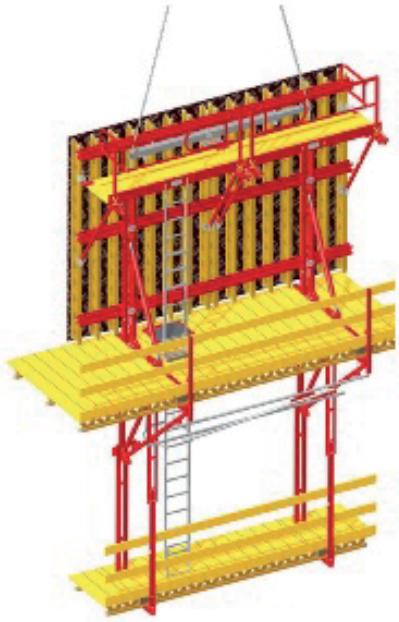




CB climbing saves time with cores climbing ahead of the slabs.

Climbing Sequence C240





Special Applications

Water-retaining structures | Circular structures with VARIO

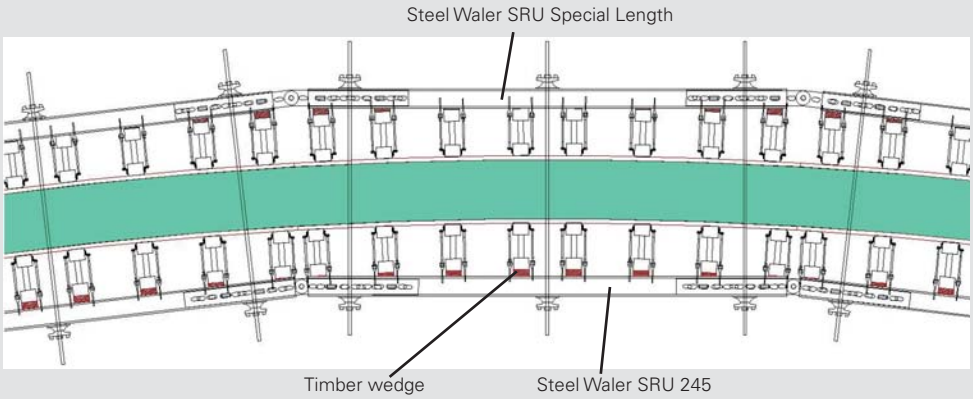
VARIO VT 20– for shuttering circular structures

The VARIO articulated couplings connect the straight steel walers in a polygonal arrangement. It can be moved continuously to the right or to the left via the wedges. This results in a flush and neat panel joint.

In general, two design versions is standard.

Silo, h = 20 m, Ø = 47 m for 3 storage tank for ethylene, India. Shuttered with circular VARIO VT20 girder formwork on CB 240 climbing ssystem.

More information on PERI circular formwork: RUNDFLEX and GRV product brochures.



Version 1
Spacer timber inserted between
VT 20 girders and SRU steel walers.

The haunched transition to the ground slab was pre-assembled with the VARIO wall formwork panels to form a single unit for lifting.

Version 2
Segment profile timbers between the formlining and girders.

7.50 m hight circular formwork with segment profile timbers on the VT 24 girders.

Special Applications
Single-sided walls | With VARIO and Brace Frame SB

For concreting against rock faces, existing walls or sheet piling, VARIO VT 20 with SB Brace Frames is used.

PERI brace frames
allow single-sided concreting up to a max. height of 8.75 m (see PERI Design Tables).

PERI Brace Frames SB-A0, A, B, C
are sized for loading on a lorry or in a container.

PERI brace frames
can be connected to all PERI wall formwork systems with standard system components.

A Max. concreting height of 8.75 m, can be achieved using Brace Frame SB-A0, A, B and C with VARIO VT 20 wall formwork.

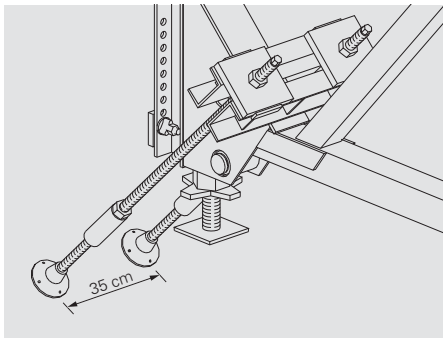
The PERI V-Tie Holder
For easy and accurate installation of anchors when using brace frames.
The V-Tie Holder and the Leading Anchor Coupler allow accurate assembly of the Tension Anchor under 45°.

Anchor system is easily fixed to the reinforcement with wire and pliers.

The advantages of the anchoring system with the Leading Anchor Coupler and V-Tie Holder are:
- less on-site material requirements
- no need to cut the tie rods to size
- tie rods are recoverable

The Leading Anchor Coupler is removed using the Single-Ended Spanner SW 70.

The tension forces arising at the brace frame's anchor point determine the choice of anchor system.



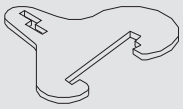
Example: DW 20 anchor system
Perm. tension force according to DIN 18216 2 x 150 kN = 300 kN.

When using PERI brace frames, the following must be taken into consideration:

1. The structural members (e.g. foundations or ground slabs) must be able to carry the tension and compression forces arising. Check the design of the members and position of the anchors when planning.
2. The "other side" of the single-sided formwork (existing walls, planking, rocks etc.) must obviously be able to withstand the fresh concrete pressure acting upon it.
3. DW tie rods installed for anchoring purposes must not be welded or bent. We recommend the use of PERI V-Tie Holders.

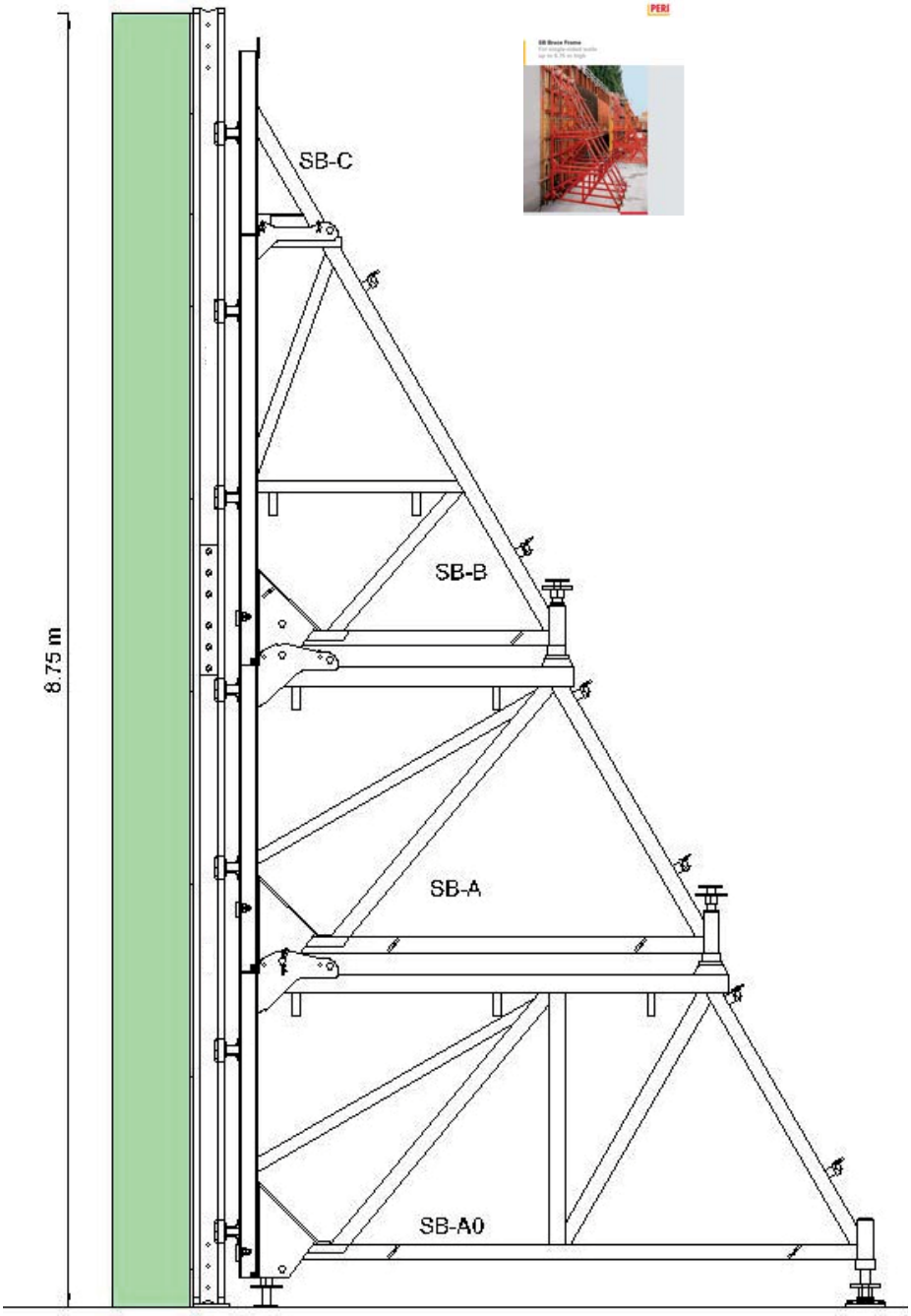
The following connecting parts are required for connecting VARIO GT 24 to Brace Frames SB-A0, A, B and C:

Waler Connector
SB-A, B, C
Item no.: 025760



Wedge K, galv.
Item no.: 024250

Instructions and information regarding the use: PERI Brace Frame SB product brochure.



Example:
Vario VT 20, h= 8.75 m

VARIO VT 20

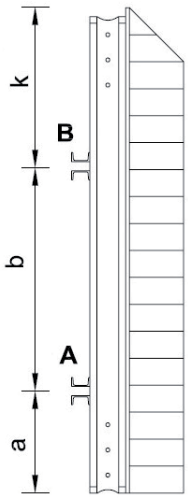
Girder VT 20

Panel Height = 2.50 m
Girder VT 20, l= 2.45 m

Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a = 0.45 b =1.20 k = 0.90	30	0.69	0.1	0.43	32	25		
	40	0.53	0.19	0.4	42	26		
	50	0.45	0.19	0.29	49	26		
	60	0.42	0.35	0.2	53	25		
	70							
	80							

Panel Height = 2.70 m
Girder VT 20, l = 2.65 m

Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a = 0.45 b =1.35 k = 0.90	30	0.65	0.55	0.83	34	29		
	40	0.49	0.82	0.83	45	31		
	50	0.41	0.69	0.69	54	31		
	60	0.38	0.48	0.55	59	31		
	70							
	80							



Panel Height = 3 m
Girder VT 20, l = 2.90 m

Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a = 0.45 b =1.60 k = 0.95	30	0.59	2.07	1.9	37	35		
	40	0.44	2.47	1.93	50	38		
	50	0.37	2.39	1.81	60	40		
	60	0.32	2	1.52	69	39		
	70	0.3	1.72	1.33	73	39		
	80							

f_K = cantilever deflection
f_F = span deflection

VARIO VT 20

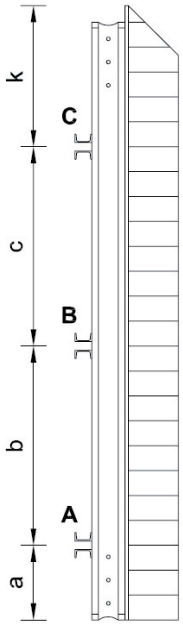
Girder VT 20

Panel Height = 3.40 m
Girder VT 20, l = 3.30 m

Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a = 0.45 b = 1.20 c = 1.20 k = 0.55	30	0.56	0.45	0.34	31	39	15	
	40	0.46	0.34	0.26	41	49	14	
	50	0.41	0.25	0.33	52	54	14	
	60	0.35	0.18	0.33	62	56	14	
	70	0.31	0.17	0.28	70	56	14	
	80	0.3	0.28	0.23	75	55	14	

Panel Height =3.70 m
Girder VT 20, l =3.60 m

Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a = 0.45 b = 1.20 c = 1.20 k = 0.85	30	0.58	0.16	0.23	31	38	24	
	40	0.44	0.1	0.24	41	50	25	
	50	0.38	0.08	0.3	52	58	25	
	60	0.32	0.15	0.36	68	69	27	
	70	0.3	0.15	0.33	72	64	24	
	80	0.28	0.17	0.29	80	64	24	



Panel Height =4.00 m
Girder VT 20, l = 3.90 m

Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a = 0.45	30	0.59	2.12	0.49	32	37	32	
b = 1.30	40	0.44	1.36	0.46	43	51	34	
c = 1.20	50	0.36	1.14	0.49	54	62	34	
k = 1.05	60	0.32	1.13	0.55	65	70	33	
	70	0.30	1.1	0.59	76	74	33	
	80	0.27	1.0	0.54	85	74	33	

f_K = cantilever deflection
f_F = span deflection

VARIO VT 20

Girder VT 20

Panel Height =4.60 m
Girder VT 20, l = 4.50 m

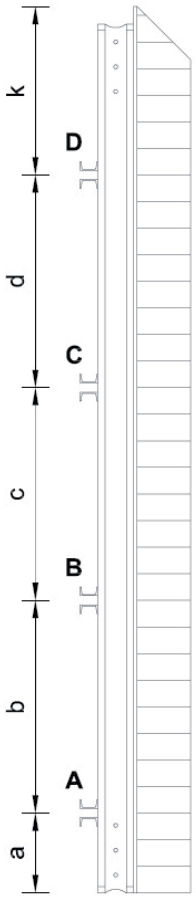
Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a= 0.45 b = 1.20 c = 1.30 d = 1.05 k = 0.55	30	0.58	0.49	0.37	31	36	38	15
	40	0.45	0.36	0.27	41	49	47	15
	50	0.36	0.24	0.22	51	62	53	14
	60	0.3	0.19	0.25	62	74	54	14
	70	0.26	0.16	0.28	72	84	54	14
	80	0.25	0.17	0.33	83	90	53	14

Panel Height = 5.00 m
Girder VT 20, l = 4.90 m

Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a= 0.45 b = 1.20 c = 1.20 d = 1.20 k = 0.95	30	0.6	0.84	0.26	31	37	36	29
	40	0.45	0.45	0.26	41	49	48	30
	50	0.36	0.38	0.25	51	62	57	30
	60	0.29	0.04	0.02	62	75	62	29
	70	0.25	0.34	0.24	72	87	64	29
	80	0.23	0.31	0.27	83	96	64	29

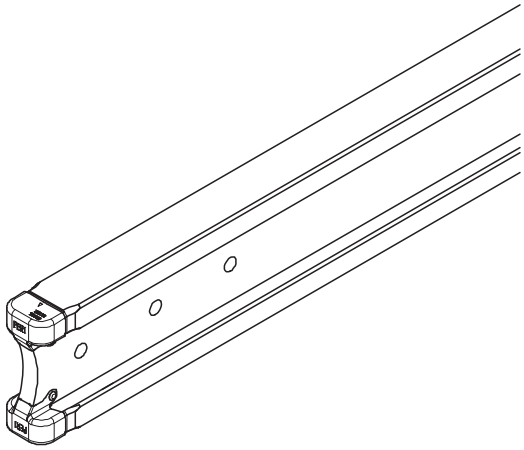
Panel Height = 6.00 m
Girder VT 20, l = 5.90 m

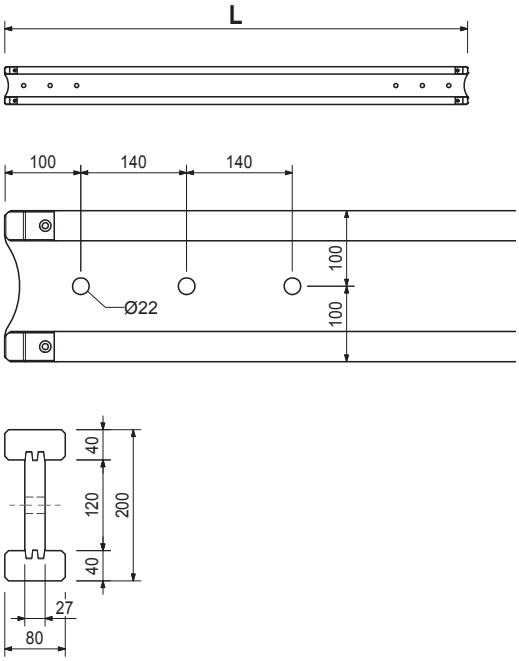
Waler Spcaing [m]	Fresh Concrete Pressure σ_{hk} [kN/m^2]	Girder Spacing $a_{perm.}$ [m]	Deflection [mm]		Waler Load[kN/m]			
			f_k	f_F	A	B	C	D
a= 0.45 b = 1.50 c = 1.55 d = 1.55 k = 0.95	30	0.45	0.39	0.72	34	48	48	32
	40	0.34	0.7	0.74	45	64	65	33
	50	0.27	0.64	0.64	56	80	79	35
	60	0.23	0.47	0.63	67	97	89	35
	70	0.19	0.3	0.6	78	114	95	34
	80	0.17	0.31	0.61	90	131	98	34



f_K = cantilever deflection
f_F = span deflection

Item no.	Weight kg	Girders VT 20K with Steel Cap	L
074990	8,560	**Girder VT 20K L = 1.45 m**	1445
074905	12,700	**Girder VT 20K L = 2.15 m**	2150
074910	14,460	**Girder VT 20K L = 2.45 m**	2450
074890	15,640	**Girder VT 20K L = 2.65 m**	2650
074920	17,110	**Girder VT 20K L = 2.90 m**	2900
074930	19,470	**Girder VT 20K L = 3.30 m**	3290
074940	21,240	**Girder VT 20K L = 3.60 m**	3590
074950	23,010	**Girder VT 20K L = 3,90 m**	3890
074960	26,550	**Girder VT 20K L = 4.50 m**	4490
074970	28,910	**Girder VT 20K L = 4.90 m**	4900
074980	34,810	**Girder VT 20K L = 5.90 m**	5900





Item no.	Weight kg	Girders VT 20 without Steel Cap	L
073710	8,560	**Girder VT 20 L = 1.45 m**	1445
073720	12,700	**Girder VT 20 L = 2.15 m**	2150
073730	14,460	**Girder VT 20 L = 2.45 m**	2450
073740	15,640	**Girder VT 20 L = 2.65 m**	2650
073750	17,110	**Girder VT 20 L = 2.90 m**	2900
073760	19,470	**Girder VT 20 L = 3.30 m**	3290
073770	21,240	**Girder VT 20 L = 3.60 m**	3590
073780	23,010	**Girder VT 20 L = 3.90 m**	3890
073790	26,550	**Girder VT 20 L = 4.50 m**	4490
073800	28,910	**Girder VT 20 L = 4.90 m**	4900
073810	34,810	**Girder VT 20 L = 5.90 m**	5900

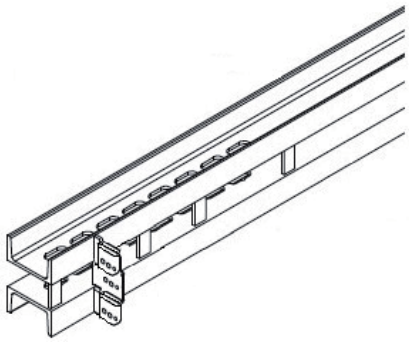
Item no.	Weight kg		
		Steel Waler SRZ U100 (Metric Length)	**L**
010600	19,800	**Steel Waler SRZ U-100 l = 0.95 m**	950
010030	25,100	**Steel Waler SRZ U-100 l = 1.20 m**	1200
010610	30,400	**Steel Waler SRZ U-100 l = 1.45 m**	1450
010060	38,300	**Steel Waler SRZ U-100 l = 1.825 m**	1825
010070	40,900	**Steel Waler SRZ U-100 l = 1.95 m**	1950
010050	51,600	**Steel Waler SRZ U-100 l = 2.45 m**	2450
010120	61,500	**Steel Waler SRZ U-100 l = 2.95 m**	2950

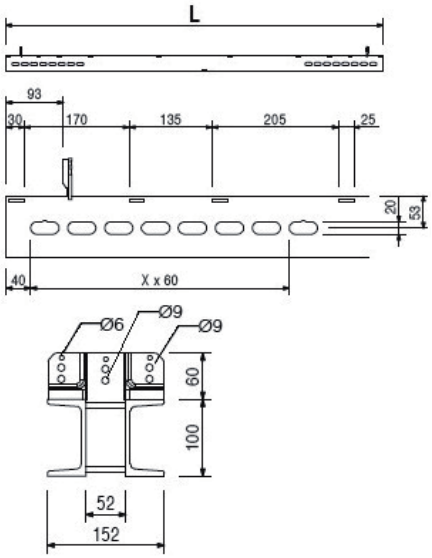
Steel waler for VARIO VT 20 panels and special applications.

Note
Special lengths and other profile sizes on request.

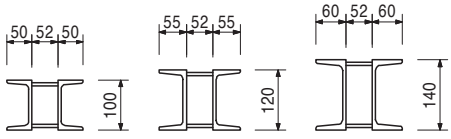
Technical Data
Wy = 82.4 cm³, Iy = 412 cm⁴

		Steel Waler SRZ U-100 (Imperial Length)	**L**
010360	25,900	**Steel Waler SRZ U-100 l = 1.17 m**	1170
010610	30,400	**Steel Waler SRZ U-100 l = 1.45 m**	1450
010110	38,100	**Steel Waler SRZ U-100 l = 1.78 m**	1780
010370	50,200	**Steel Waler SRZ U-100 l = 2.39 m**	2390
010380	75,900	**Steel Waler SRZ U-100 l = 3.61 m**	3610
010390	102.00	**Steel Waler SRZ U-100 l = 4.83 m**	4830





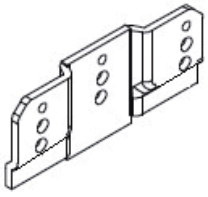
		Steel Waler SRZ Spec. Length	**Technical Data**
010080	22,000	**Steel Waler SRZ U-100 Spec. Length**	Wy = 82.4 cm³, Iy = 412 cm⁴
010150	28,000	**Steel Waler SRZ U-120 Spec. Length**	Wy = 121.4 cm³, Iy = 728 cm⁴
010090	33,000	**Steel Waler SRZ U-140 Spec. Length**	Wy = 172.8 cm³, Iy = 1210 cm⁴
010350	0,000	**Additional Row of SRZ Slots**	

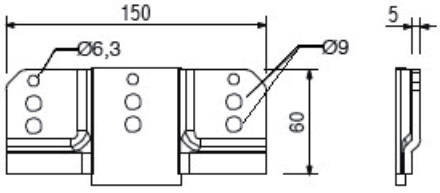


U100 **U120** **U140**

710001	0,376	**End Plate SRZ**

For Steel waler SRZ with special lengths.

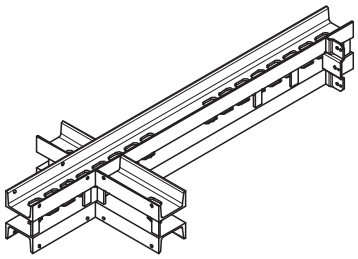


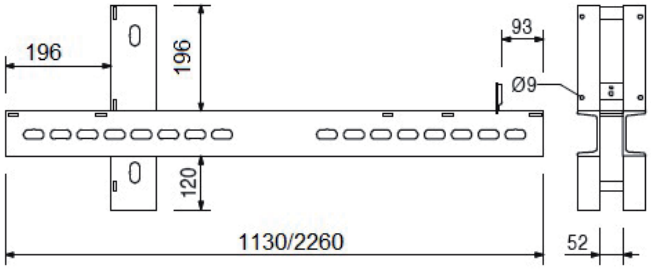


Item no.	Weight kg
821901	31,500

Steel Waler VSRZ for VT 20
Steel Waler VSRZ-20 U-100 l = 1.13
Steel Waler for VARIO VT 2o corner panels and special applications.

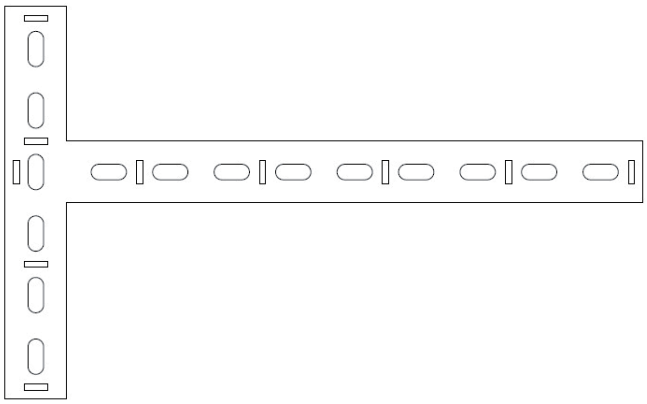
Note
Special lengths and other profile sizes on request.
Technical Data
Wy = 82.4 cm³, Iy = 412 cm⁴

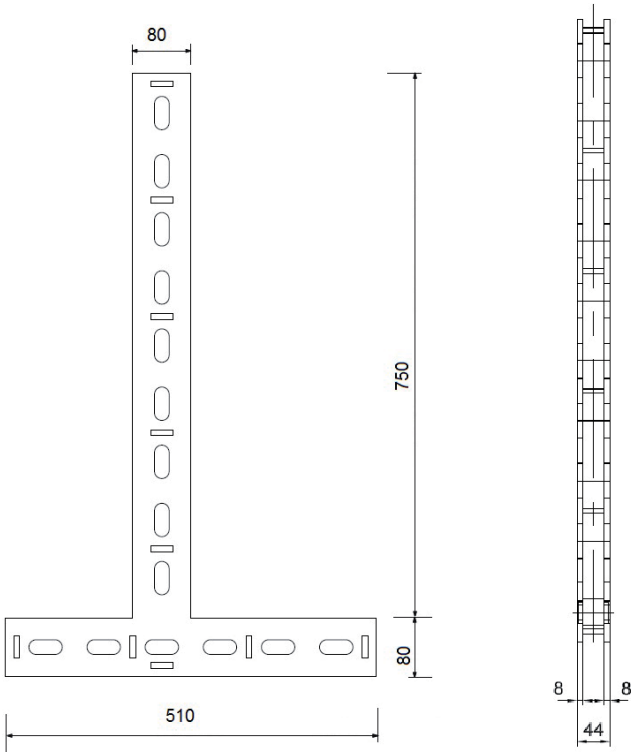




Item no.	Weight kg
828367	11,500

T Coupling TKZ
For continuously variable tight (tension and compression) connection of SRZ and SRU steel waler on internal corner.

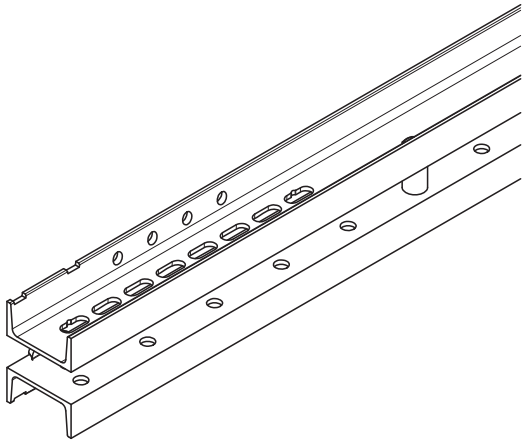


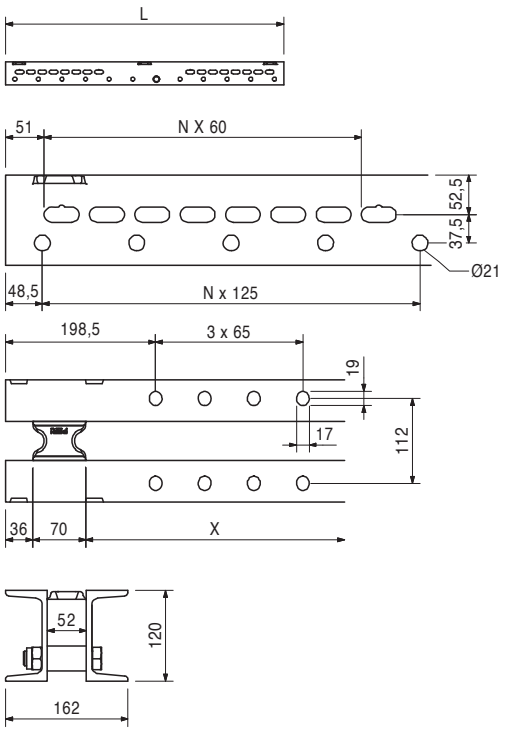


Item no.	Weight kg	Steel Walers Universal SRU	L
103868	18,100	**Steel Waler Universal SRU U120, l = 0.72 m**	722
103871	24,200	**Steel Waler Universal SRU U120, l = 0.97 m**	972
103874	30,900	**Steel Waler Universal SRU U120, l = 1.22 m**	1222
103877	38,100	**Steel Waler Universal SRU U120, l = 1.47 m**	1472
103886	44,700	**Steel Waler Universal SRU U120, l = 1.72 m**	1722
103889	52,000	**Steel Waler Universal SRU U120, l = 1.97 m**	1972
103898	58,600	**Steel Waler Universal SRU U120, l = 2.22 m**	2222
103892	65,600	**Steel Waler Universal SRU U120, l = 2.47 m**	2472
103929	72,000	**Steel Waler Universal SRU U120, l = 2.72 m**	2722
103903	81,000	**Steel Waler Universal SRU U120, l = 2.97 m**	2972
103906	92,600	**Steel Waler Universal SRU U120, l = 3.47 m**	3472
103915	106,000	**Steel Waler Universal SRU U120, l = 3.97 m**	3972
103918	119,000	**Steel Waler Universal SRU U120, l = 4.47 m**	4472
103922	135,000	**Steel Waler Universal SRU U120, l = 4.97 m**	4972
103925	146,000	**Steel Waler Universal SRU U120, l = 5.47 m**	5472
103928	159,000	**Steel Waler Universal SRU U120, l = 5.97 m**	5972

Universal steel waler profile U120 used as waling for girder wall formwork and for diverse special applications. With adjustable spacers.

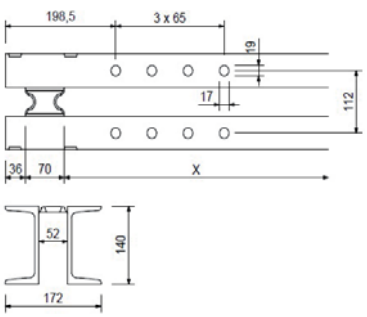
Note
Permissible load: see PERI Design Tables.
Technical Data
U120: Wy = 121.4 cm³, Iy = 728 cm⁴.

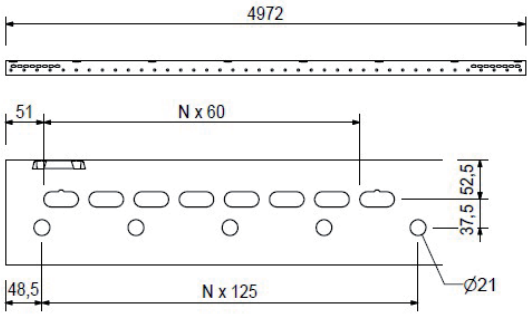




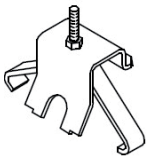
Item no.	Weight kg	**Steel Waler Universal SRU U140, l = 4.97 m**
103943	157,000	Universal steel waler profile U140 used as waling for girder wall formwork and for diverse special applications. With adjustable spacers.

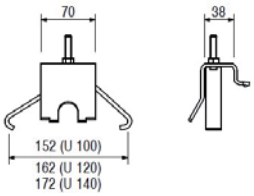
Note
Permissible load: see PERI Design Tables.
Technical Data
U140: Wy = 172.8 cm³, Iy = 1210 cm⁴





Item no.	Weight kg	
024880	0,520	**Hook Strap HB for VT.** For fixing VT 20 Girders to the Steel Waler SRZ or SRU, Profiles U100 – U140.

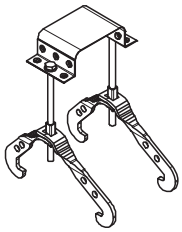


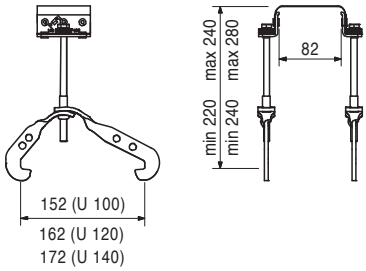


Note
The girders can be mounted at right-angles or diagonally to the steel walers.

		Hook Straps Uni HBU
104931	0,865	**Hook Strap Uni HBU 20-24**
103845	0,893	**Hook Strap Uni HBU 24-28**

For fixing GT 24 Girders or VT 20 Girders to the Steel Waler SRZ or SRU, Profiles U100 – U140.

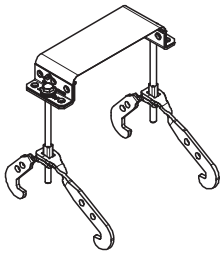


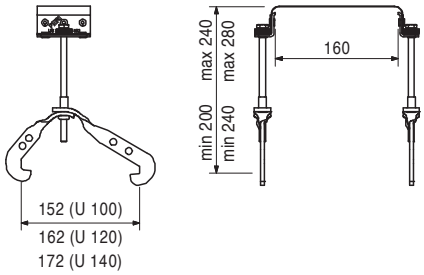


Note
The girders can be mounted at right-angles or diagonally to the steel walers and also outside of the nodes.

		Hook Straps Uni Double HBUD
104930	0,887	**Hook Strap Uni Double HBUD 20-24**
104096	0,912	**Hook Strap Uni Double HBUD 24-28**

For fixing two GT 24 girders or VT 20K girders to SRZ steel walers and SRU Profiles U100 – U140.

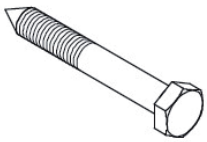


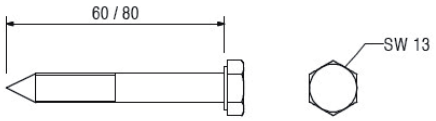


Note
The girders can be mounted at right-angles or diagonally to the steel walers and also outside of the nodes.

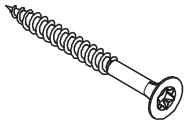
		Accessories Hook Straps HBU, HBUD
071219	0,000	**Screw Change HBU, HBUD**
104929	0,050	**Bolt ISO 4014 M8 x 150-8.8, galv.**
107185	0,060	**Bolt ISO 4014 M8 x 180-8.8, galv.**
103518	0,060	**Bolt ISO 4014 M8 x 190-8.8, galv.**
103844	0,013	**Sleeve HBU/HBUD, galv.**

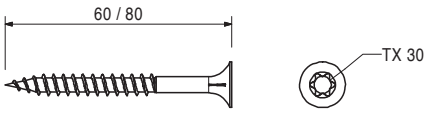
Item no.	Weight kg	
024270	0,023	**Lag Screws DIN 571, galv.**
024260	0,027	**Lag Screw DIN 571 8 x 60, galv.**
		Lag Screw DIN 571 8 x 80, galv.



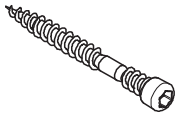


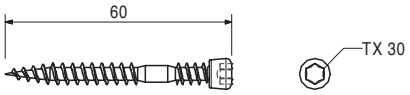
		TSS-Torx, galv.
024470	0,008	**TSS-Torx 6 x 60, galv.**
024690	0,008	**TSS-Torx 6 x 80, galv.**
		For Torx Blade TX 30. Self-drilling.





110272	0,006	**TSS-Torx 6 x 60, ZKS, galv.**
		For Torx Blade TX 30. Self-drilling.





Item no.	Weight kg		
128013	2,100	**Cordless Combi Drill ABS 18** Universal power screwdriver with continuous electronic speed control and clockwise/anti-clockwise rotation. Including 2 batteries and a battery charger in case.	**Note** Follow Instructions for Use!

Accessories

072220	0,400	**Bit Holder for SCU 7-9**
072140	0,005	**Bit Point TX 30**
128016	0,760	**Replacement Battery Li-Ion 18V**

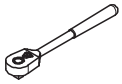
Accessories Cordless Combi Drill ABS 18

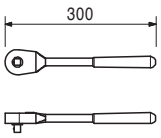
072220	0,400	**Bit Holder for SCU 7-9**
072140	0,005	**Bit Point TX 30**

128011	1,800	**Cordless Impact Screwdriver ASCD 18-W2** Light weight electric power wrench for momentfree working, with clockwise/anti-clockwise rotation and 1/2 square drive. Including 2 batteries and a battery charger in case.	**Note** Follow Instructions for Use!

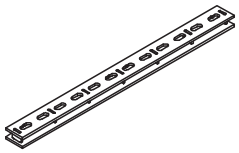
Item no.	Weight kg	
128016	0,760	**Replacement Battery Li-Ion 18V** For use with Cordless Combi Drill ABS 18 and Cordless Impact Screwdriver ASCD 18-W2. **Note** Follow Instructions for Use! **Technical Data** Capacity 4 Ah.

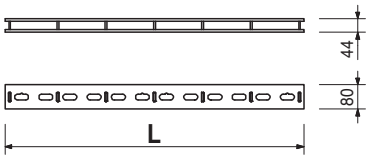
072180	0,560	**Ratchet Wrench 1/2"**



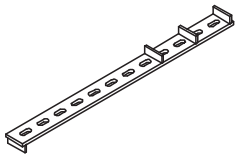


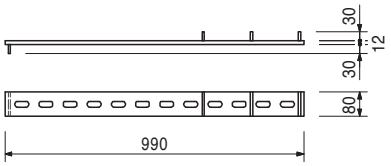
		Couplings VKZ
013010	9,000	**Coupling VKZ 99**
013020	13,300	**Coupling VKZ 147**
013030	19,100	**Coupling VKZ 211**
013080	9,000	**Coupling VKZ Spec. Length** For connection of SRZ and SRU steel walers.





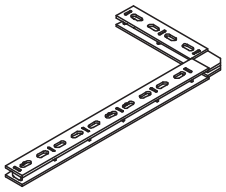
101395	7,110	**Offset Coupling VVKZ 3/99** For connecting extended and non-extended VARIO elements above the extension.

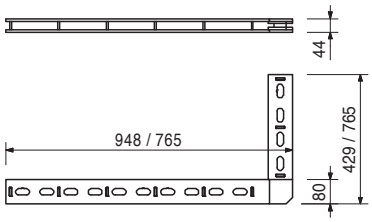




Item no.	Weight kg	
		Corner Couplings EKZ
013140	11,900	**Corner Coupling EKZ 95/43**
013130	13,300	**Corner Coupling EKZ 76/76**
013180	9,000	**Corner Coupling EKZ Spec. Length**

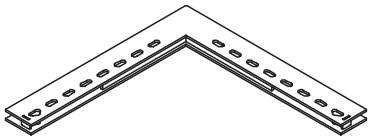
For continuously variable tight (tension and compression) connection of SRZ and SRU steel walers.

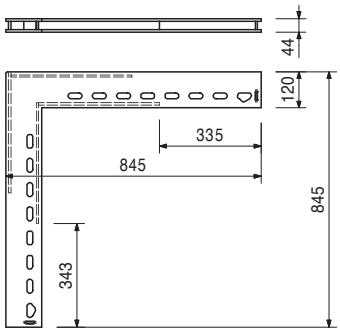




103850	24,700	**Outside Corner Coupling AKZ 85/85**

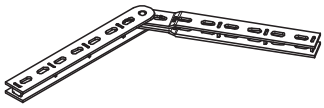
For providing tensile and compression-proof connections of Steel Walers SRZ and SRU on external corners.

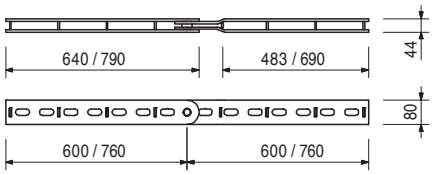




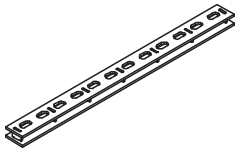
		Articulated Couplings GKZ
013220	11,500	**Articulated Coupling GKZ 60/60**
013210	14,400	**Articulated Coupling GKZ 76/76**
013230	9,000	**Articulated Coupling GKZ Spec. Length**

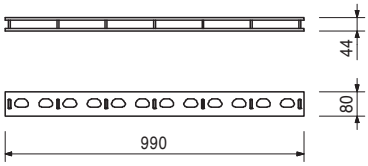
For continuously variable tight (tension and compression) connection of SRZ and SRU steel walers with oblique angles more than 48°.





Item no.	Weight kg	
102825	8,700	**VARIO Coupling Concrete Finish VKS 99** For connecting VARIO VT20 panels. Allows compensation of up to max. 5 mm panel offsets.

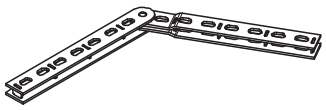


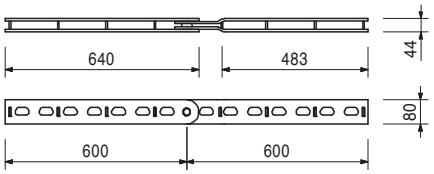


Accessories

102945	2,070	**VARIO Alignment Clamp VRS**

103054	11,300	**Articulated Coupling GKS 60/60 S** For connecting VARIO VT20 panels. Allows compensation of up to max. 5 mm panel offsets.



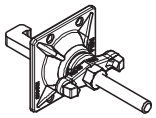


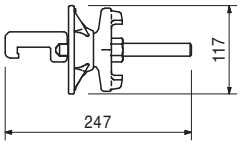
Accessories

102945	2,070	**VARIO Alignment Clamp VRS**

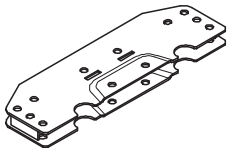
102945	2,070	**VARIO Alignment Clamp VRS** In connection with Coupling VKS 99 or Articulated Coupling GKS 60/60. For compensating maximum 5 mm element offset.

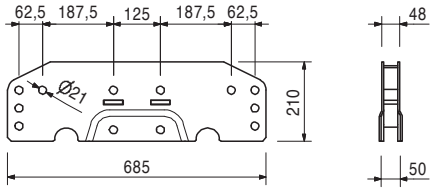
Complete with
1 pc. 030370 Wingnut Pivot Plate DW 15, galv.





103737	10,800	**Universal Coupling UK 70** For a rigid connection of Steel waler SRU and for connecting Heavy-Duty Spindles SLS.

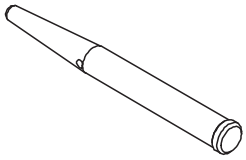


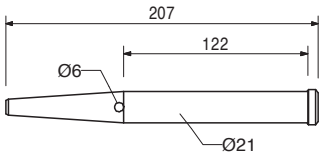


Accessories

104031	0,462	**Fitting Pin Ø 21 x 120**
018060	0,030	**Cotter Pin 4/1, galv.**

Item no.	Weight kg	
104031	0,462	**Fitting Pin Ø 21 x 120** For different connections.



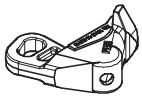


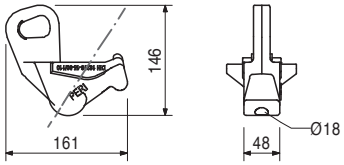
Accessories

018060	0,030	**Cotter Pin 4/1, galv.**

018060	0,030	**Cotter Pin 4/1, galv.**

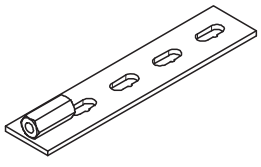
024210	2,180	**Tie Yoke SKZ** For tensioning on external corners with Steel Waler SRZ, SRU, U100 - U140 and VARIO couplings.

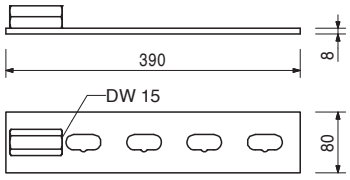




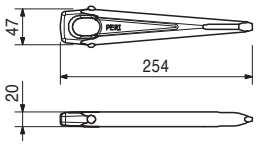
013240	2,100	**Stopend Tie** For assembling stopend formwork with VARIO VT 20.

Technical Data
Permissible tension force 30.0 kN.

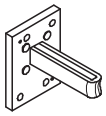


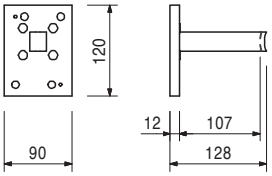


Item no.	Weight kg	
024240	0,805	**Wedge KZ, galv.** For connecting panels with VARIO Couplings or Tie Yoke SKZ.

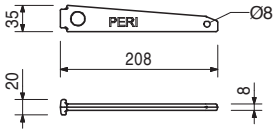


024220	1,230	**Coupling Compression Plate KDP** For mounting girders to VARIO Couplings in infill areas.

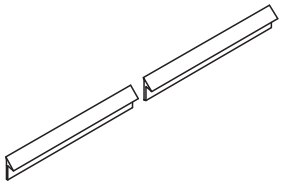


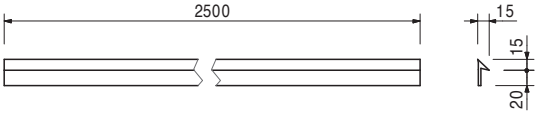


024250	0,331	**Wedge K, galv.** For Coupling Compression Plate KDP, Wedge Head Piece SRZ/SRU and Waler Connector SB-A, B, C.

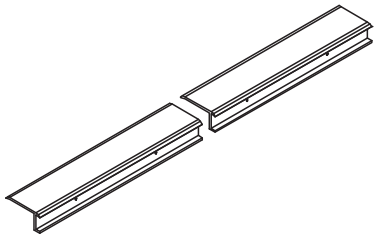


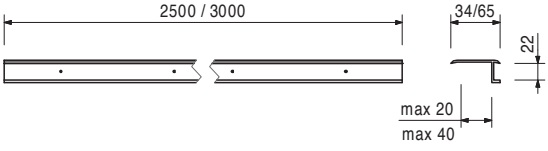
031200	0,470	**Chamfer Strip with Flange l = 2.50 m** Plastic chamfer strip.



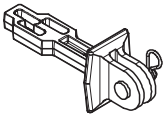


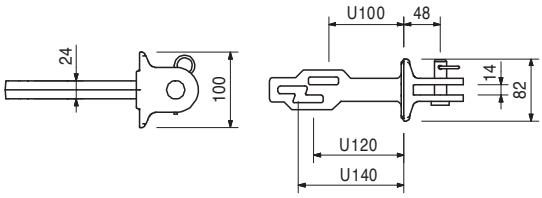
		Formwork Joints
030260	0,500	**Formwork Joint 21/20 l = 2.50 m**
101706	1,230	**Formwork Joint 21/40 l = 3.00 m**
		Plastic profile strip for easier striking of shafts.





Item no.	Weight kg		
028060	1,940	**Wedge Headpiece SRZ/SRU** For connecting push-pull props and kicker braces to Steel Waler SRZ and SRU Profile U100 – U140.	**Complete with** 1 pc. 027170 Bolt Ø 16 x 42, galv. 1 pc. 018060 Cotter Pin 4/1, galv.

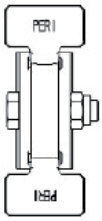


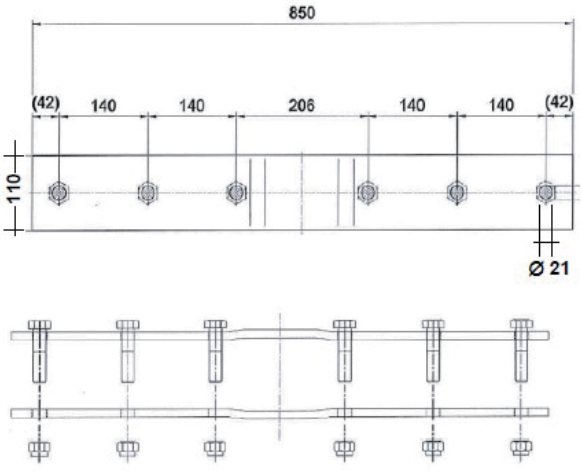


Accessories

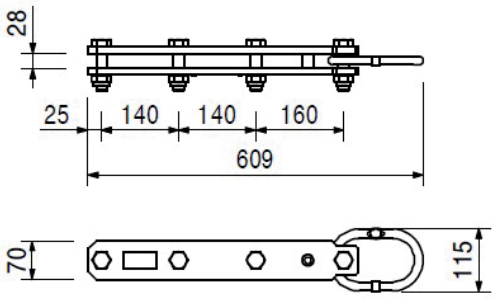
024250	0,331	**Wedge K, galv.**

823419	10,80	**Extension Splice VT 20** For extending VT 20 girders and VARIO VT 20 elements up to max. height of 8.00 m.	**Complete with** 2 Plates 6 pc. 024900 Bolt M20x80-8.8 6 pc. 710334 Nuts M20-8-VZ **Technical Data** Refer to permissible load page xx **Safety Instructions** All girders of the panel have to be connected and never exceed the permissible loads. Follow Instructions of use at all times.

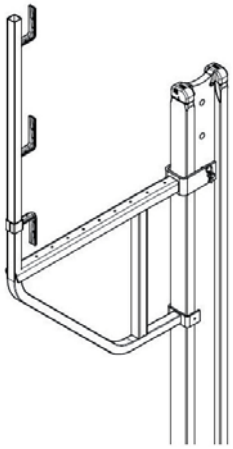


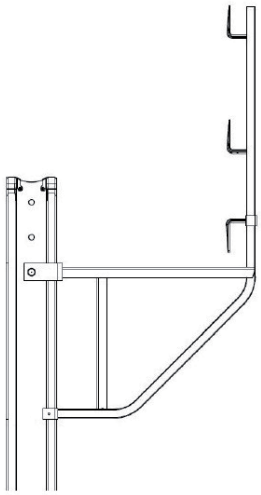


Item no.	Weight kg		
113712	8,10	**Crane Splice VT 20** For transporting elements by crane with the VT 20 Girder	**Complete with** 3 pc. 024900 Bolt M20x80-8.8 3 pc. 710334 Nuts M20-8-VZ **Technical Data** For Load-carrying capacity, refer to permissible table. **Safety Instructions** Always use 2 pieces per transportation unit. Follow Instructions of use at all times.

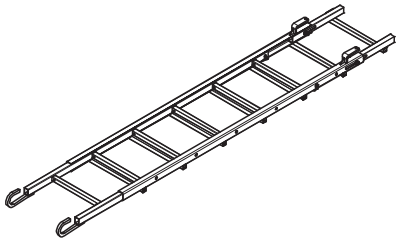


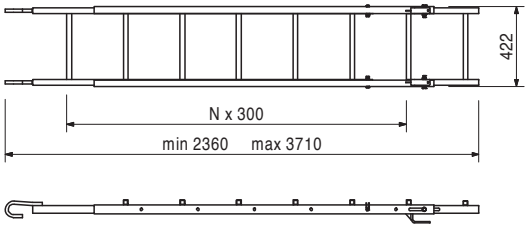
823420	11,20	**Scaffold Bracket GB 80-VT** For assembly of a working and concreting scaffold with VARIO VT 20	**Technical Data** Permissible load 150 kg/m² with a maximum width of influence 1.25 m.





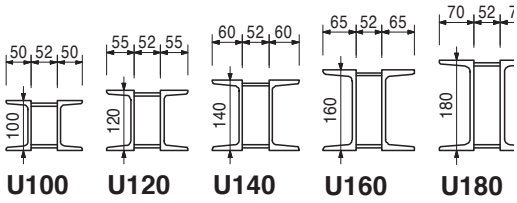
Item no.	Weight kg	
107738	24,100	**Ladder 240-360** Adjustable from 2.40 m to 3.60 m.





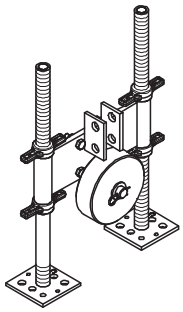
		Tunnel Frame Wales RKR
022310	22,000	**Tunnel Frame Wale RKR U100**
022320	28,000	**Tunnel Frame Wale RKR U120**
022330	33,000	**Tunnel Frame Wale RKR U140**
022340	40,000	**Tunnel Frame Wale RKR U160**
022350	45,000	**Tunnel Frame Wale RKR U180**
022460	0,000	**Welding Unit for RKR**

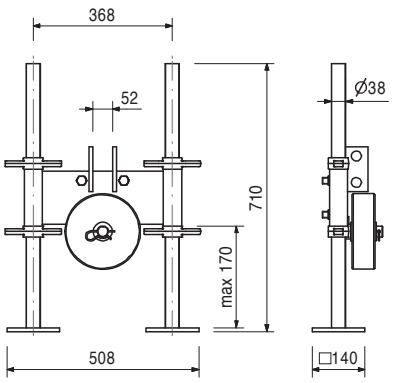
Note
When ordering, please use a copy of the respective version whilst specifying the dimensions. For the wall walers, the VARIO Extension (l= 236 mm) must always be added when determining the total length. Welded joints RKR (1 per wall waler) are to be featured separately.



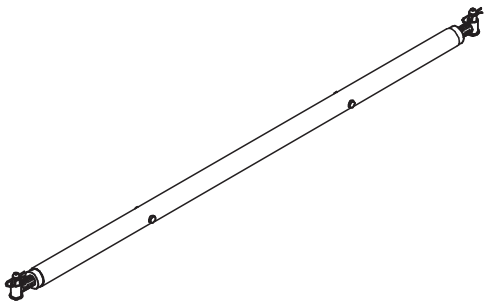
		Double Spindles RKR
022380	23,500	**Double Spindle with Wheel RKR**
022440	20,800	**Double Spindle without Wheel RKR**

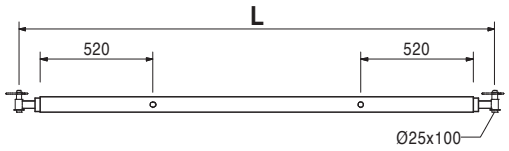
Complete with
4 pc. 710880 Washer DIN 434 18, galv.
1 pc. 710252 Bolt ISO 4017 M16 x 50-8.8, galv.
1 pc. 710229 Nut ISO 4032 M16-8, galv.
Technical Data
Bearing capacity of Double Spindle 102.5 kN.
Bearing capacity of Wheel 6.0 kN.



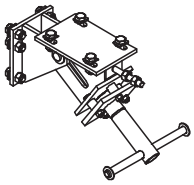


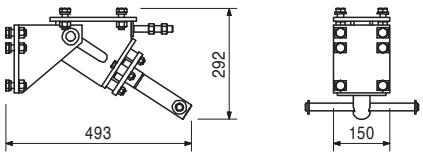
Item no.	Weight kg		
022400	12,300	**Adjusting Spindle RKR, compl.** For aligning RKR culvert frame formwork. Do not use for transferring loads.	**Complete with** 2 pc. 725560 Bolt Ø 25 x 100 2 pc. 018060 Cotter Pin 4/1, galv.





022410	19,600	**Corner Spindle RKR**	**Complete with** 10 pc. 710880 Washer DIN 434 18, galv. 10 pc. 710225 Bolt ISO 4017 M16 x 45-8.8, galv. 10 pc. 710229 Nut ISO 4032 M16-8, galv. **Technical Data** Permissible load 90.0 kN.

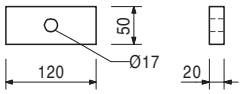




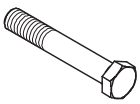
Accessories

701991	0,906	**Plate Fl 50 x 20 x 120, ESP**

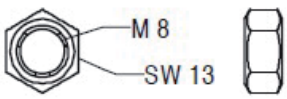
701991	0,906	**Plate Fl 50 x 20 x 120, ESP**



Item no.	Weight kg		
		Bolts ISO 4014-8.8, galv.	**L**
710284	0,031	**Bolt ISO 4014 M8 x 60-8.8, galv.**	60
710285	0,050	**Bolt ISO 4014 M8 x 100-8.8, galv.**	100
722859	0,066	**Bolt ISO 4014 M8 x 140-8.8, galv.**	140
104929	0,050	**Bolt ISO 4014 M8 x 150-8.8, galv.**	150
103518	0,060	**Bolt ISO 4014 M8 x 190-8.8, galv.**	190
710593	0,062	**Bolt ISO 4014 M10 x 80-8.8, galv.**	80
710242	0,063	**Bolt ISO 4014 M10 x 100-8.8, galv.**	100
721817	0,040	**Bolt ISO 4014 M10 x 50-8.8, galv.**	50
710221	0,067	**Bolt ISO 4014 M12 x 60-8.8, galv.**	60
720610	0,075	**Bolt ISO 4014 M12 x 70-8.8, galv.**	70
710220	0,087	**Bolt ISO 4014 M12 x 80-8.8, galv.**	80
750330	0,100	**Bolt ISO 4014 M12 x 100-8.8, galv.**	100
710299	0,123	**Bolt ISO 4014 M16 x 60-8.8, galv.**	60
714093	0,139	**Bolt ISO 4014 M16 x 70-8.8, galv.**	70
710222	0,160	**Bolt ISO 4014 M16 x 80-8.8, galv.**	80
721729	0,170	**Bolt ISO 4014 M16 x 90-8.8, galv.**	90
710219	0,184	**Bolt ISO 4014 M16 x 100-8.8, galv.**	100
710233	0,200	**Bolt ISO 4014 M16 x 110-8.8, galv.**	110
105402	0,200	**Bolt ISO 4014 M16 x 120-8.8, galv.**	120
710232	0,210	**Bolt ISO 4014 M16 x 130-8.8, galv.**	130
722169	0,246	**Bolt ISO 4014 M16 x 140-8.8, galv.**	140
780155	0,278	**Bolt ISO 4014 M16 x 160-8.8, galv.**	160
024900	0,255	**Bolt ISO 4014 M20 x 80-8.8, galv.**	80
710226	0,340	**Bolt ISO 4014 M20 x 90-8.8, galv.**	90
024910	0,303	**Bolt ISO 4014 M20 x 100-8.8, galv.**	100
104477	0,300	**Bolt ISO 4014 M20 x 120-8.8, galv.**	120
711078	0,360	**Bolt ISO 4014 M20 x 130-8.8, galv.**	130
781054	0,447	**Bolt ISO 4014 M20 x 160-8.8, galv.**	160
706462	0,545	**Bolt ISO 4014 M20 x 200-8.8, galv.**	200
109612	0,600	**Bolt ISO 4014 M24 x 130-8.8, galv.**	130
113686	0,839	**Bolt ISO 4014 M24 x 200-8.8, galv.**	200



		Nuts ISO 4032, galv.
024090	0,005	**Nuts ISO 4032 M8-8, glav.**
710234	0,010	**Nuts ISO 4032 M10-8, glav.**
710330	0,017	**Nuts ISO 4032 M12-8, glav.**
710229	0,033	**Nuts ISO 4032 M16-8, glav.**
710334	0,064	**Nuts ISO 4032 M20-8, glav.**
022250	0,100	**Nuts ISO 4032 M24-8, glav.**



PERI International

PERI

01 Germany
PERI GmbH
Rudolf-Diesel-Strasse 19
89264 Weissenhorn
info@peri.com
www.peri.com

02 France
PERI S.A.S.
77109 Meaux Cedex
peri.sas@peri.fr
www.peri.fr

03 Switzerland
PERI AG
8472 Ohringen
info@peri.ch
www.peri.ch

04 Spain
PERI S.A.U.
28110 Algete - Madrid
info@peri.es
www.peri.es

05 Belgium/Luxembourg
N.V. PERI S.A.
1840 Londerzeel
info@peri.be
www.peri.be

06 Netherlands
PERI Holding B.V.
5480 AH-Schijndel
info@peri.nl
www.peri.nl

07 USA
PERI Formwork Systems, Inc.
Elkridge, MD 21075
info@peri-usa.com
www.peri-usa.com

08 Indonesia
PT Beton Perkasa Wijaksana
Jakarta 10210
bpw@betonperkasa.com
www.peri.com

09 Italy
PERI S.p.A.
20060 Basiano
info@peri.it
www.peri.it

10 Japan
PERI Japan K.K.
Tokyo 103-0015
info@perijapan.jp
www.perijapan.jp

11 United Kingdom/Ireland
PERI Ltd.
Rugby, CV23 0AN
info@peri.ltd.uk
www.peri.ltd.uk

12 Turkey
PERI Kalip ve Iskeleleri Sanayi
ve Ticaret Ltd.
Esenyurt / İstanbul 34510
info@peri.com.tr
www.peri.com.tr

13 Hungary
PERI Kft.
1181 Budapest
info@peri.hu
www.peri.hu

14 Malaysia
PERI Formwork Malaysia Sdn. Bhd.
43300 Seri Kembangan,
Selangor Darul Ehsan
info@perimalaysia.com
www.perimalaysia.com

15 Singapore
PERI Asia Pte Ltd
Singapore 387355
pha@periasia.com
www.periasia.com

16 Austria
PERI Ges.mbH
3134 Nußdorf ob der Traisen
office@peri.at
www.peri.at

17 Czech Republic
PERI spol. S r.o.
252 42 Jesenice u Prahy
info@peri.cz
www.peri.cz

18 Denmark
PERI Danmark A/S
2670 Greve
peri@peri.dk
www.peri.dk

19 Finland
PERI Suomi Ltd. Oy
05460 Hyvinkää
info@perisuomi.fi
www.perisuomi.fi

20 Norway
PERI Norge AS
3036 Drammen
info@peri.no
www.peri.no

21 Poland
PERI Polska Sp. z o.o.
05-860 Płochocin
info@peri.com.pl
www.peri.com.pl

22 Sweden
PERI Sverige AB
30262 Halmstad
peri@periform.se
www.periform.se

23 Korea
PERI (Korea) Ltd.
Seoul 06243
info@perikorea.com
www.perikorea.com

24 Portugal
Pericofragens Lda.
2790-326 Queijas
info@peri.pt
www.peri.pt

25 Argentina
PERI S.A.
B1625GPA Escobar – Bs. As.
info@peri.com.ar
www.peri.com.ar

26 Brazil
PERI Formas e
Escoramentos Ltda.
Vargem Grande Paulista – SP
info@peribrasil.com.br
www.peribrasil.com.br

27 Chile
PERI Chile Ltda.
Colina, Santiago de Chile
perichile@peri.cl
www.peri.cl

28 Romania
PERI România SRL
077015 Balotești
info@peri.ro
www.peri.ro

29 Slovania
PERI Agency
2000 Maribor
peri.slo@triera.net
www.peri.com

30 Slovakia
PERI spol. s. r.o.
903 01 Senec
info@peri.sk
www.peri.sk

31 Australia
PERI Australia Pty. Ltd.
Glendenning NSW 2761
info@periaus.com.au
www.periaus.com.au

32 Estonia
PERI AS
76406 Saku vald
Harjumaa
peri@peri.ee
www.peri.ee

33 Greece
PERI Hellas Solely Owned Ltd.
194 00 Koropi
info@perihellas.gr
www.perihellas.gr

34 Latvia
PERI SIA
2118 Salaspils novads, Rigas rajons
info@peri-latvija.lv
www.peri-latvija.lv

35 United Arab Emirates
PERI (L.L.C.)
Dubai U.A.E.
perillc@perime.com
www.perime.com

36 Canada
PERI Formwork Systems, Inc.
Bolton, ON – L7E 1K1
info@peri.ca
www.peri.ca

37 Lebanon
PERI Lebanon Sarl
90416 – Jdeideh
lebanon@peri.de

38 Lithuania
PERI UAB
02300 Vilnius
info@peri.lt
www.peri.lt

39 Morocco
PERI S.A.U.
Tanger
info@peri.ma
www.peri.ma

40 Israel
PERI Formwork
Engineering Ltd.
Rosh Ha'ayin, 48104
info@peri.co.il
www.peri.co.il

41 Bulgaria
PERI Bulgaria EOOD
1839 Sofia
peri.bulgaria@peri.bg
www.peri.bg

42 Iceland
Armar ehf.
220 Hafnarfjörður
armar@armar.is
www.armar.is

43 Kazakhstan
TOO PERI Kazakhstan
050000 Almaty
peri@peri.kz
www.peri.kz

44 Russian Federation
OOO PERI
142407, Noginsk District
moscow@peri.ru
www.peri.ru

45 South Africa
PERI (Pty) Ltd
7600 Stellenbosch
info@peri.co.za
www.peri.co.za

46 Ukraine
TOW PERI
07400 Brovary
peri@peri.ua
www.peri.ua

47 Egypt
Egypt Branch Office
11341 Nasr City /Cairo
info@peri.com.eg
www.peri.com.eg

48 Serbia
PERI – Oplate d.o.o.
22310 Šimanovci
office@peri.rs
www.peri.rs

49 Mexico
PERI Cimbras y Andamios,
S.A. de C.V.
Estado de México, Huehuetoca
info@peri.com.mx
www.peri.com.mx

50 Azerbaijan
PERI Repesentative Office
Baku
peribaku@peri.com.tr
www.peri.com.tr

51 Turkmenistan
PERI Kalıp ve İskeleleri
Aşgabat
ahmet.kadioglu@peri.com.tr
www.peri.com.tr

52 Belorussia
IOOO PERI Belarus
220100 Minsk
info@peri.by
www.peri.by

53 Croatia
PERI oplate i skele d.o.o.
10 250 Luöko-Zagreb
info@peri.com.hr
www.peri.com.hr

54 India
PERI (India) Pvt Ltd
Mumbai – 400064
info@peri.in
www.peri.in

55 Jordan
PERI GmbH - Jordan
11947 Amman
jordan@peri.com
www.peri.com

56 Kuwait
PERI Kuwait W.L.L.
13011 Kuwait
info@peri.com.kw
www.peri.com.kw

57 Saudi Arabia
PERI Saudi Arabia Ltd.
21463 Jeddah
info@peri.com.sa
www.peri.com.sa

58 Qatar
PERI Qatar LLC
P.O.Box: 31295 - Doha
info@periqatar.com
www.peri.qa

59 Algeria
Sarl PERI
Kouba 16092, Alger
info@peri.com
www.peri.com

60 Albania
PERI Representative Office
Tirane
info@peri.com.tr
www.peri.com.tr

61 Peru
PERI Peruana S.A.C.
Villa El Salvador, Lima
contacto@peri.com.pe
www.peri.com.pe

62 Panama
PERI Panama Inc.
0832-00155 Panama City
info@peri.com.pa
www.peri.com.pa

63 Angola
Pericofragens, Lda.
Luanda
renato.portugal@peri.pt
www.peri.pt

64 Nigeria
PERI Nigeria Ltd.
Lagos
info@peri.ng
www.peri.ng

65 Oman
PERI (L.L.C.)
Muscat
perimct@perime.com
www.perime.com

66 Colombia
PERI S.A.S. Colombia
Briceño, Cundinamarca
peri.colombia@peri.com.co
www.peri.com.co

67 Philippines
PERI-Asia Philippines, INC.
Makati City
info@peri.com.ph
www.peri.com.ph

68 Hong Kong
PERI (Hong Kong) Limited
Hong Kong SAR, PRC
bob.dover@periasia.com
www.perihk.com

69 Namibia
PERI (Pty.) Ltd.
Windhoek
windhoek@peri.na
www.peri.na

70 Mozambique
PERI (Pty.) Ltd.
Matola
maputo@peri.co.mz
www.peri.co.mz

The optimal System for every Project and every Requirement

Wall Formwork

Column Formwork

Slab Formwork

Climbing Systems

Tunnel Formwork

Bridge Formwork

Shoring Systems

Construction Scaffold

Facade Scaffold

Industrial Scaffold

Access

Protection Scaffold

System-Independent Accessories

Services

EN 02 | 2016

PERI GmbH
Formwork Scaffolding Engineering
P.O. Box 1264
89259 Weissenhorn
Germany
Tel. +49 (0)7309.950-0
Fax +49 (0)7309.951-0
info@peri.com
www.peri.com