

# VARIO GT 24

The variable Girder Wall Formwork System with the proven Lattice Girder GT 24



Edition 06 | 2016

#### PERI GmbH

#### Formwork Scaffolding Engineering

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#### Important Notes

All current safety regulations and guidelines 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, safety and anchor details in particular cannot always be considered as conclusive or final. These are subject to the risk assessment carried out by the contractor.

In addition, computer graphics are used which are to be understood as system representations. For ensuring a better understanding, these and the detailed illustrations shown have been partially reduced to certain aspects. The safety installations which have possibly not been shown in these detailed descriptions must nevertheless be available.

The systems or items shown might not be available in every country.

Safety instructions and load specifications are to be strictly observed at all times. Separate structural calculations are required in case of changes and deviations.

The information contained herein is subject to technical changes in the interests of progress. Errors and typo-graphical mistakes reserved.

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## General The variable girder wall formwork system

VARIO GT 24 is the proven girder wall formwork system complete with the continuously adjustable elongated hole couplings.

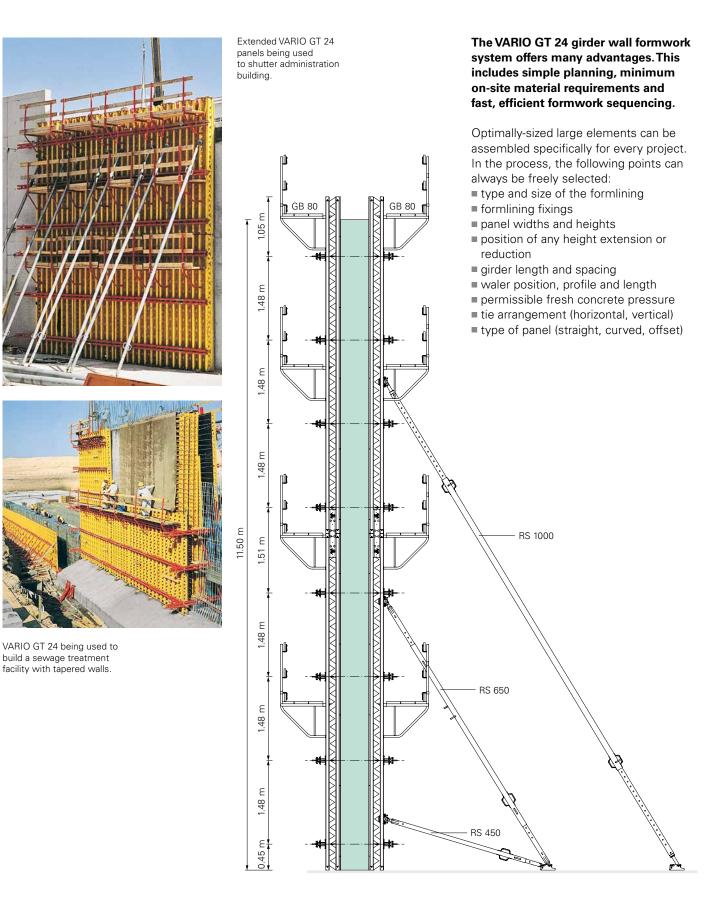
Regardless whether it is industrial or residential construction, bridge abutments or retaining walls, every layout and any height up to 18 m can be formed with PERI VARIO.

> The 30 cm increments of the GT 24 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.







## General

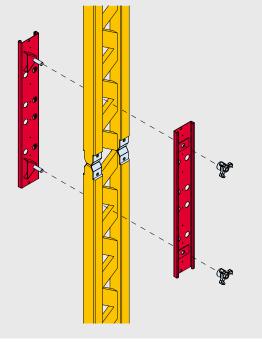
The variable girder wall formwork system



# The formwork is extended with the VARIO Extension Splice 24.

Quickly and easily fitted through the latticework of the GT 24, without having to drill girders.

The flexurall rigid connection automatically aligns the girders. The splice consists of just two components which are quickly connected using triple wingnuts.



VARIO GT 24 formwork specially adapted to the requirements with defined formlining joint formation and tie point positioning.



VARIO GT 24 on the RCS rail climbing system for constructing the elevator and stairway shafts of a highrise building.

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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

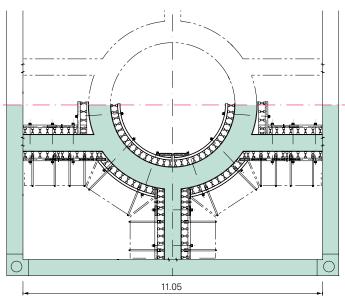




VARIO GT 24 being used to construct a circular tank. Timber wedges between girders and steel walers produce the circular shape.



Multi-storey building in Paris with VARIO GT 24 and CB 240 climbing formwork systems.



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

The stringent French safety standards for high-rise construction were taken into account during the formwork planning. They included fine wire mesh panels for all safety handrails, and end handrail swing frames for the outside climbing units, in order to maximise the protection against falling, even during climbing.

### **General** The **GT 24** lattice girder

As the main component in slab and wall formwork, the formwork girder significantly determines the profitability of the formwork. Thereby, it is not the initial investment costs but the durability and handling costs which are the decisive factors.

#### The GT 24 from PERI offers:

long service lifeshorter forming times

### Therefore, successful contractors use the GT 24 lattice girder from PERI:

- light and manageable for slabs
- strong for wall formwork
- cost-effective for customized formwork solutions



More information is available in the GT 24 brochure.

### Designed by timber specialists to ensure a long service life

The patented girder nodes with mini-finger joints has virtully no "water cavities" which could trap moisture. The latticework design ensures excellent air circulation even when the girders are stacked.



The GT 24 in comparison	VT 20	GT 24	Diff.%
Permissible reaction force	22 kN	28 kN*	+ 27%
Permissible bending moment	5 kNm	7 kNm*	+ 40%
Flexural stiffness	460 kNm <sup>2</sup>	887 kNm²	+ 86%
Weight	5.9 kg/m	5.9 kg/m	±0%

\* When supported at the nodes.

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### High load-bearing capacity with low weight

Perm. Q on the compression struts  $Q_D = 14 \text{ kN}$ Perm. bending moment M = 7 kNm $I_v = 8.064 \text{ cm}^4$ 

#### Steel end caps with through-rivets

- Robust end protection
- Prevents end being sawn off accidentally
- Can be used to replace the rubbing board on VARIO panels if required

#### 6 x 8 cm thick chord

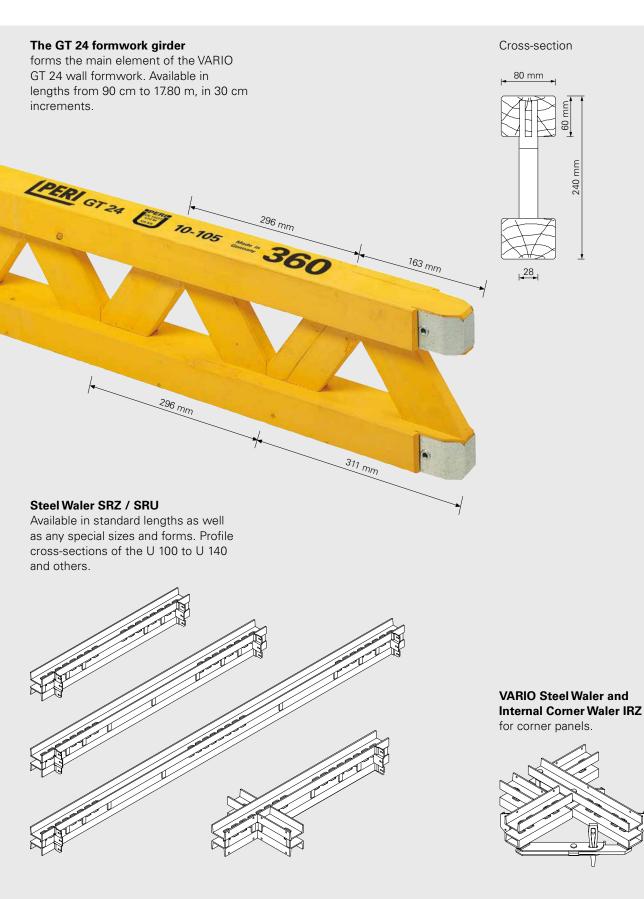
For easy screwing and nailing. The girder chord is prevented from splitting as the full depth of the chord is finger-jointed to the struts and tied at each girder connection.

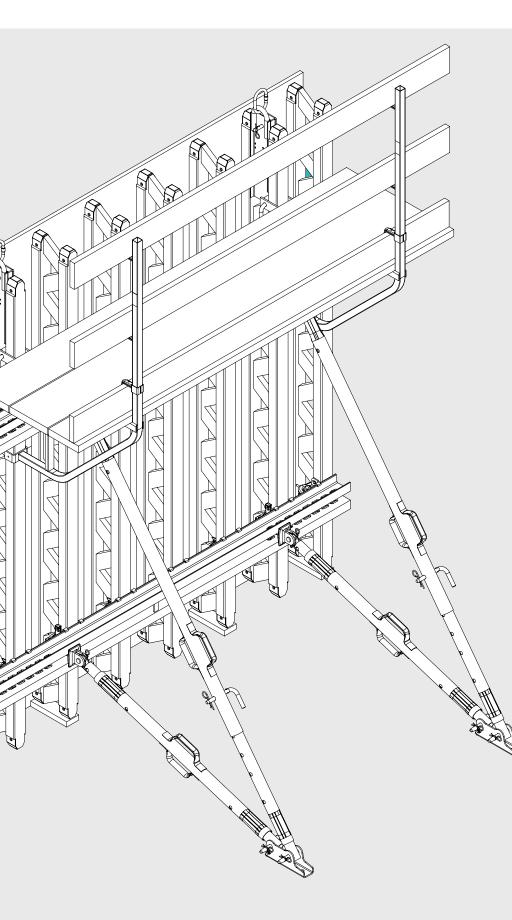
PERI Design Tables are available for slab and wall formwork operations. The girder is monitored according to the requirements of DIN EN 13377.



The GT 24 lattice girder – the girder that reduces your shuttering costs!

### **General** The standard system components of a VARIO GT 24 panel





#### Formlining

PERI formlining sheets come in a range of sizes, thicknesses and grades to ensure that the most appropriate formlining is available to meet individual site requirements.



**Connecting components Hook Strap HB 24** for connecting the GT 24 to SRZ and SRU walers on the girder nodes.



**Hook Strap Uni HBU** for connecting the GT 24 to SRZ and SRU walers outside of the girder nodes.



**TSS Torx Screw** for assembling the formlining.



### Standard Applications VARIO GT 24 standard panels

VARIO GT 24 standard elements complete with platforms.

# VARIO standard panels are pre-assembled rentable formwork panels which are fitted with 21 mm formlining.

The ready-to-use wall formwork is assembled using tried and tested VARIO system components. The panels are supplied complete with lifting eyes and rubbing board.

**Permissible fresh concrete pressure:** 60 kN/m<sup>2</sup> with tie spacings 55/140/55 or 50 kN/m<sup>2</sup> with tie spacings 62.5/125/62.5 according to DIN 18202, Table 3, Line 7.

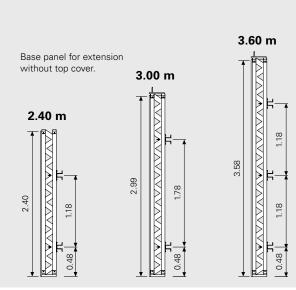
Integrated crane lifting unit as well as top cover board for protecting against concrete splashes.

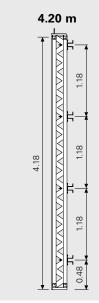


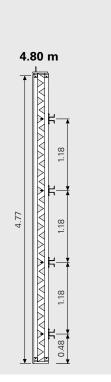


#### Height increments

VARIO standard panels are available in 60 cm height increments. These panels are simply extended for greater heights.





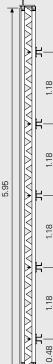




5.40 m

ΔΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥΔΥ

5.36



6.00 m



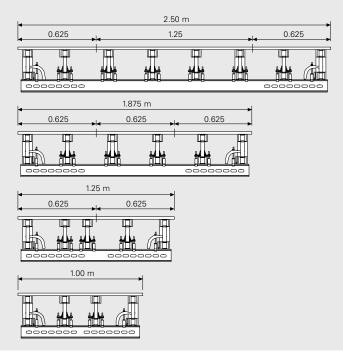
0.75

The VARIO standard internal corner is available in 5 heights: 2.40, 3.00, 3.60, 4.80 and 6.00 m.

0.75

#### Width increments

VARIO standard panels are available in 4 widths:



#### VARIO standard internal corners

The consistent leg length of 75 cm allows this design to be used as a left-hand or right-hand corner.



VARIO standard panels for 9 m high tunnel walls.

### **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:

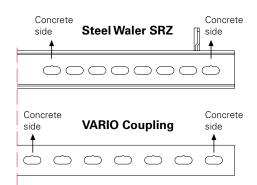
- continuously tightens until joint is grout-tight
- aligns panels
- supports plywood fillers
- extends the width of panels
- fixes stopend formwork
- stabilises internal corners
- is continuously adjustable on both sides

#### 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.



#### Internal corner

The same VARIO coupling as for the straight joint.



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



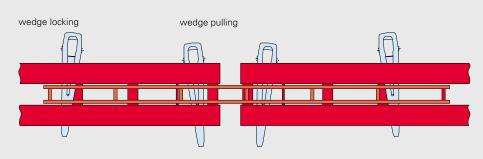
#### **Practical tip**

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

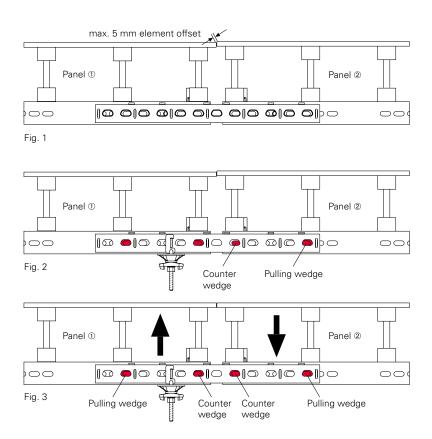
With the VARIO Coupling VKS and the Alignment Clamp VRS, it is easy and quick to carry out.

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 trapezoidalshaped 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 <sup>(2)</sup>.
- Use counter wedge to slightly open the formlining joint on Panel <sup>(2)</sup>. (Fig. 2)
- Loosen pulling and counter wedges on Panel ①.
- Eliminate panel offset by tensioning the Alignment Clamp VRS.
- Release pulling wedge on Panel <sup>(2)</sup>.
- Tightly close joint on Panel ② with counter wedge.
- Counter with pulling wedge on Panel @. (Fig. 3)

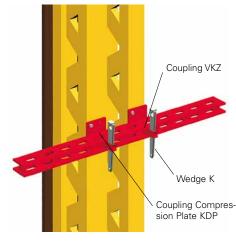


### **Standard Applications**

# Fillers, stopend formwork and panel width extensions units

### Infill areas

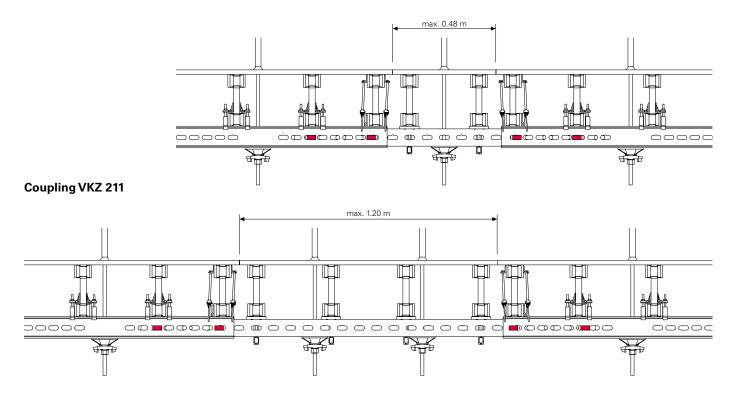
VARIO GT 24 infill areas are shuttered using the Couplings VKZ 147 and VKZ 211.





Continuous infill area width with Couplings VKZ.

Coupling VKZ 147

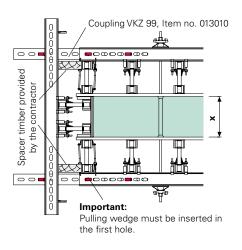


### **Stopend Formwork**

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

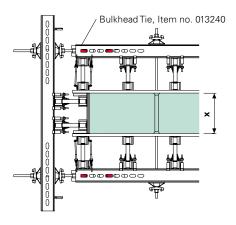
#### Coupling VKZ

perm. tension force 50 kN.



#### **Bulkhead Tie**

perm. tension force 30 kN.





#### Complete stopend formwork with bulkhead tie.

### Panel width extensions



Panel width extensions are also realised using VARIO with system components.

### **Standard Applications**

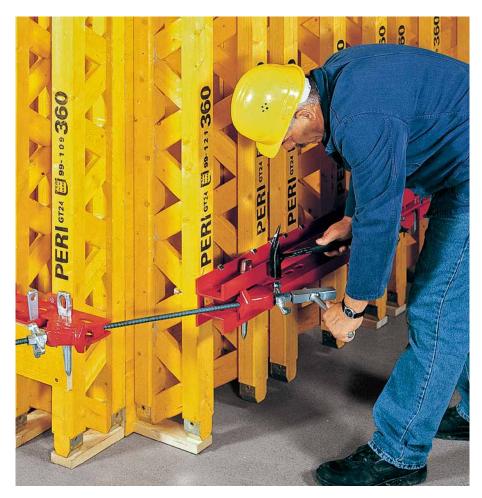
**External corners, internal corners and shafts** 

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: Panel w = 2.50 m1 panel with extension. Internal: Corner Panel w = 1.25 / 0.50 m and Panel w = 1.25 m with filler element.



### **Internal Corner**

VARIO Internal Corner with filler element.



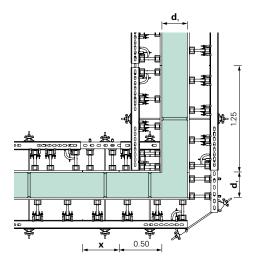
#### **External Corner**

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



The waler on the panel width extension unit must project 2 cm to enable firm pre-tensioning of the corner.

### **Details of the VARIO Corner**



### Shafts

In particular, small shafts can be realised extremely cost-effectively with customised Cross Walers and the quick-release Shaft Corner SSE.

#### Practical tip

The shaft corner should be stripped at the very latest one day after concreting.

150 mm Knul Small lift shaft with Cross Walers and Quick Release Corner SSE.

150 mm

Details of the Quick Release Corner

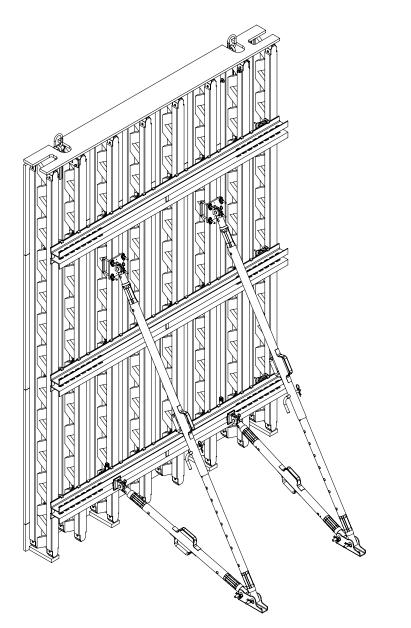
### **Standard Applications**

### 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 the Girder Headpiece or 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 the GT 24 girder by means of the Girder Headpiece, Item no. 028050.



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

### **Crane Lifting Unit**

### PERI VARIO offers three possibilities for lifting panels with the crane.

**1. The Crane Splice 24** as easily assembled and dismantled lifting unit.

**2. The Crane Lifting Eye 24, right / left** as permanently mounted lifting unit.

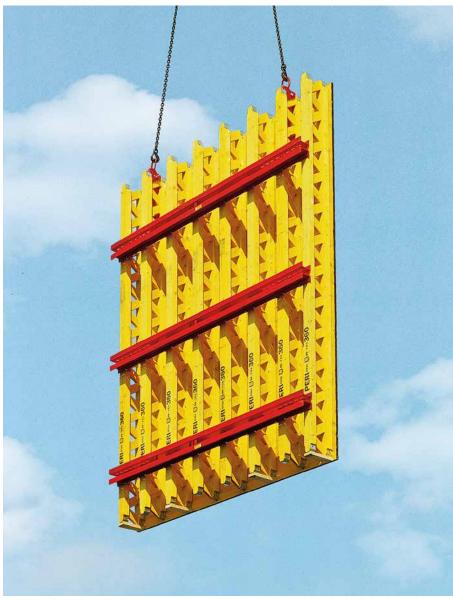
**3. The Crane Lifting Unit 2 t / GT 24** for very heavy formwork units.

#### 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.



Instructions for Use for the Crane Splice 24.



Customized, ready-to-use VARIO GT 24 element.



Instructions for Use for the Crane Lifting Unit 2t/GT 24.



**Crane Splice 24** Permissible load-bearing capacity 700 kg with a crane sling angle of max. 15°.



**Crane Lifting Eye 24, right/left** Permissible load-bearing capacity 700 kg with a crane sling angle of max. 15°.

### **Standard Applications** Working and Concreting Scaffold

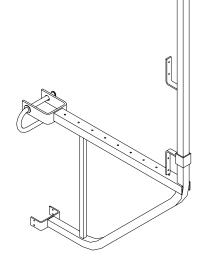
### Scaffold Bracket GB 80

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 with PERI End Guardrail Frame 55, Item no. 065066.

PERI Scaffold Bracket GB 80, perm. working load 1.5 kN/m<sup>2</sup>, max. width of influence 1.25 m.



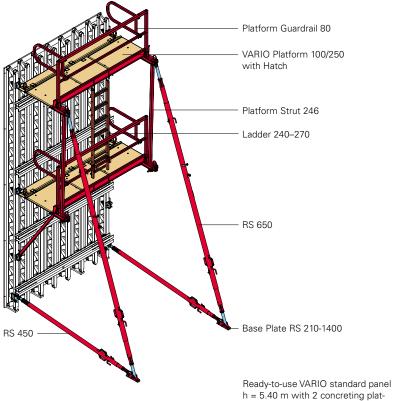
Several working platform levels are required at great heights.





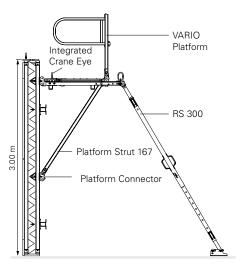


forms, ladder and push-pull props.



VARIO Platform System

Pre-assembled concreting/working platforms in different widths. Complete with guardrails, end handrail frame, push-pull prop connections and crane eye. With or without access hatch.



### **Standard Applications**

**Panel extensions** 

### Heights up to 8.00 m

# The standard method of extension is to use the VARIO Extension Splice 24.

The flexurally stiff connection also automatically aligns the panels. The splice consists of only two components and is connected in no time with two quick action wingnuts.

# Static values for the Extension Splice 24

M perm.	= 1.73 kNm
Q perm.	= 0 kN
or	
M perm.	= 0 kNm
Q perm.	= 5 kN

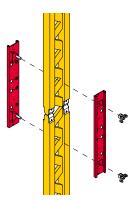
#### Extensions up to 5.00 m

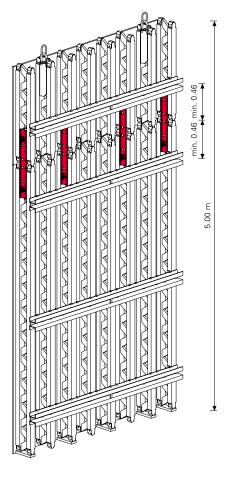
 $4\ x$  Extension Splices 24 for a 2.50 m element width.

60 cm high timber extension simply realised with the Extension Splice 24.



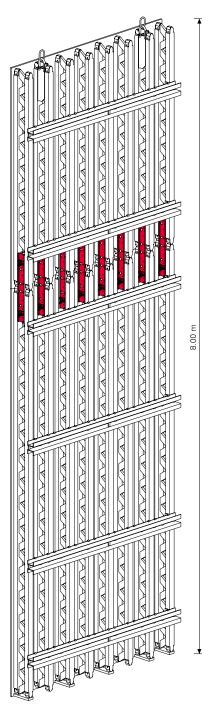
Assembly of the Extension Splice 24 takes place through the lattice work of the GT 24 without having to drill the girders.





#### Extensions up to 8.00 m

8 x Extension Splices 24 for a 2.50 m element width.

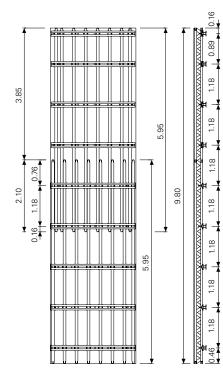




11.00 m high bridge abutment with butted girders and additional overlapping girders for stiffening.

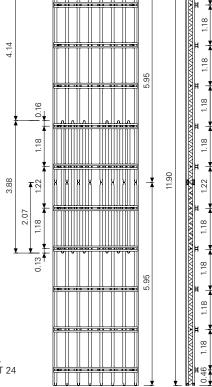


# Heights up to 9.80 m with overlapping girders.



### Heights up to 11.90 m

with additional girders.



For more information on extensions, see PERI Design Tables or VARIO GT 24 assembly instructions. 78

# **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 GT 24 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.

Consecretion Hall, Neubiberg, Germany. VARIO with an orderly tie pattern. Formlining screwed on from the rear.



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 (Secondary School in Kletow).

#### 2.50 x 3.60 m panel

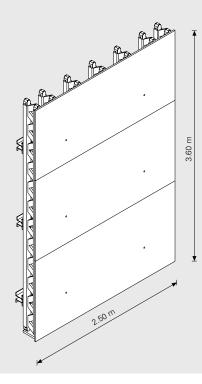
with tie spacings of 1.25 x 1.18 m. 2 ties horizontally, 3 ties vertically.

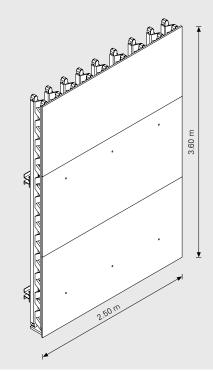
#### 2.50 x 3.60 m panel

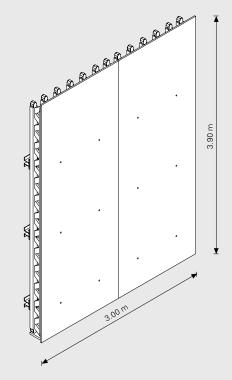
with tie spacings of 0.88 x 1.78 m. 3 ties horizontally, 2 ties vertically.

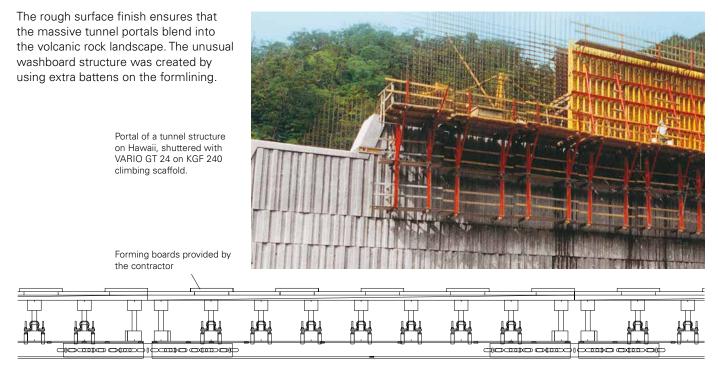
#### 3.00 x 3.90 m panel

Architectural concrete with an orderly pattern of joints and tie spacings of 0.75 x 1.18 m. 4 ties horizontally, 3 ties vertically.









### 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**

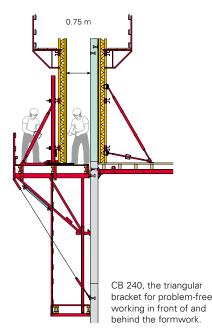
# Bridge construction | VARIO on climbing scaffold and working platforms

#### Type-tested safety with KGF 240, KG 180 and CB 240, CB 160 systems.

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

The KGF 240 and CB 240 provide a high level of safety due to the obstruction-free surface of the platform. The brackets are positioned below the platform which means there are no tripping hazards.

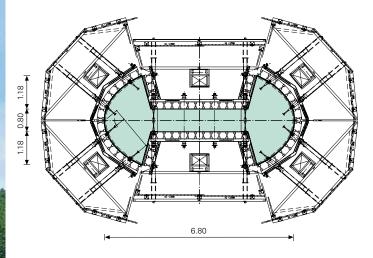
The platform lining can be pre-assembled and can be used immediately when moving from one site to the next. This results in considerable assembly time savings.



Further information: Climbing Scaffold CB product brochure.

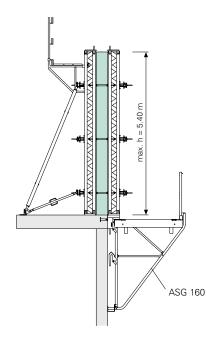
### PERI

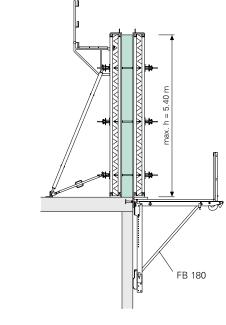




Motorway viaduct in France. Sophisticated pier geometry with an extraordinary concrete finish. Formed with VARIO GT 24 and SKS climbing brackets.











PERI

Further information: Folding Platform FB 180 product brochure.

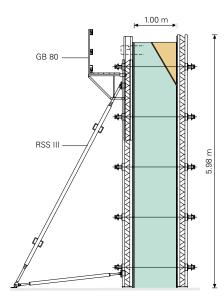
# **Special Applications**

**Bridge construction | Abutments and piers** 

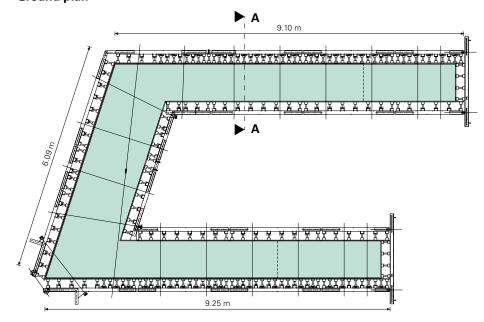


Bridge over the Danube, BAB 8 motorway near Leipheim.

### Section A-A



Ground plan



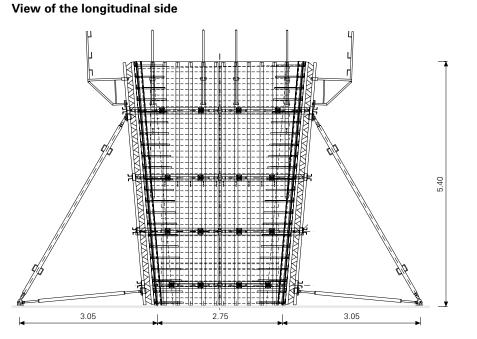


Bridge over the Danube, BAB 8 motorway near Leipheim.

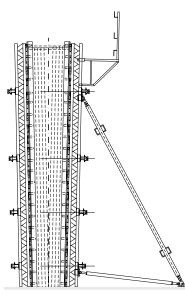


Abutment and bridge pier with VARIO GT 24. Crossing structure for the suburban railway line to the new Munich Airport. Sides of hollow piers on the banks of the river, climbed with VARIO GT 24 on PERI KG 240 climbing scaffold. Adapting to the arch-shaped ends was achieved with VARIO standard components and forming boards.

Example of a bridge pier tapered towards the top.



Section



### **Special Applications**

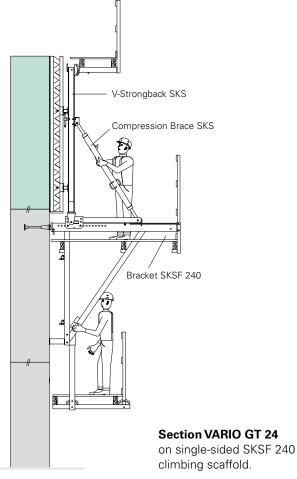
Water-retaining structures

# Single-sided forming without formwork ties

When constructing locks, dams, cooling towers and walls requiring single-sided shuttering,VARIO GT 24 is frequently used with KG and CB, or SKS, climbing scaffold systems.



Magdeburg Waterway Intersection. The intersection for three transort routes: rail – road – waterway. As part of this major transportation project, a number of key structures had to be realised. The photo shows the Rothensee lock facility. It was formed with VARIO GT 24 on KG climbing scaffold and single-sided SKS climbing scaffold.

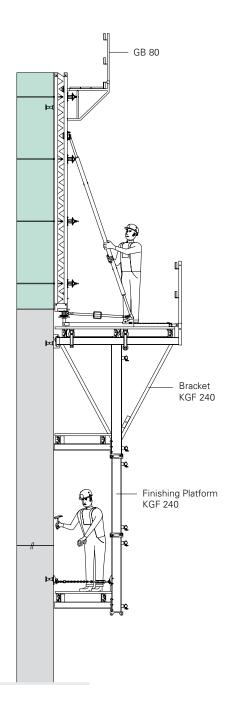




Front of the weir pier. VARIO in combination with GRV circular formwork system on KGF 240 climbing scaffold.

# VARIO GT 24 – tied formwork

#### Section VARIO GT 24, tied girder wall formwork on KGF 240 climbing scaffold.





Power station on the River Isar near the town of Plattling-Pielwachs. Pier formwork with VARIO GT 24 in combination with GRV circular formwork. The concrete surface was realised in the form of architectural concrete with a vertical board finish. PERI VARIO GT 24's versatility and easy adaptability makes it a particularly cost-effective shuttering system in this area. Rear side of the weir pier. The VARIO GT 24 could be easily adapted to suit the inclined rear wall requirements.

# **Special Applications**

Water-retaining structures | Circular structures with VARIO

# VARIO GT 24 – 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.

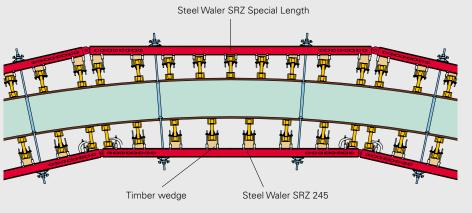
In general, two design versions is standard.



Silo, h = 72 m,  $\emptyset = 20 \text{ m}$  for power station in Oppeln, Poland. Shuttered with circular VARIO girder formwork on KGF climbing scaffold.



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





**Version 1** Spacer timber inserted between GT 24 girders and SRZ 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 GT 24 girders.

# **Special Applications**

# Single-sided walls | With VARIO and Brace Frame SB

For concreting against rock faces, existing walls or sheet piling, VARIO GT 24 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.



Max. concreting height of 8.75 m, Brace Frame SB-A0, A, B and C with VARIO GT 24 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°.



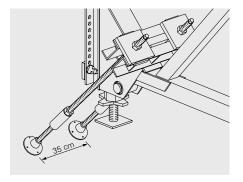
Anchor system is easily fixed to the reinforcement with wire and pliers.

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.

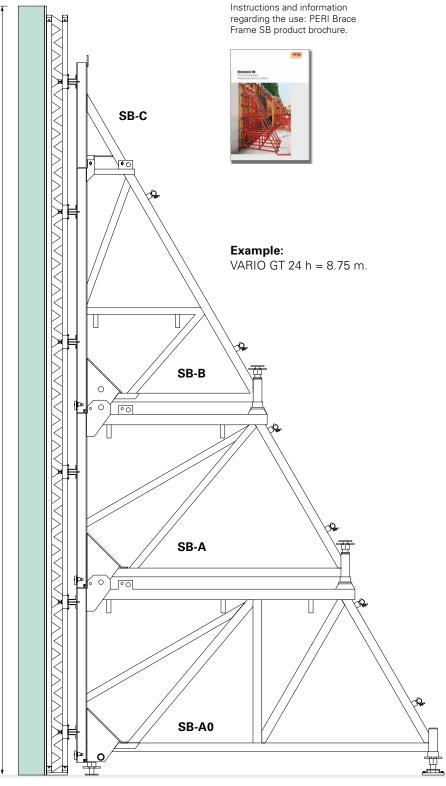
2. The "other side" of the single-sided formwork (existing walls, planking, rocks etc.) must obviously be able to withstand the fresh concrete pressure acting upon it.

3. DW tie rods installed for anchoring purposes must not be welded or bent. We recommend the use of PERI V-Tie Holders.

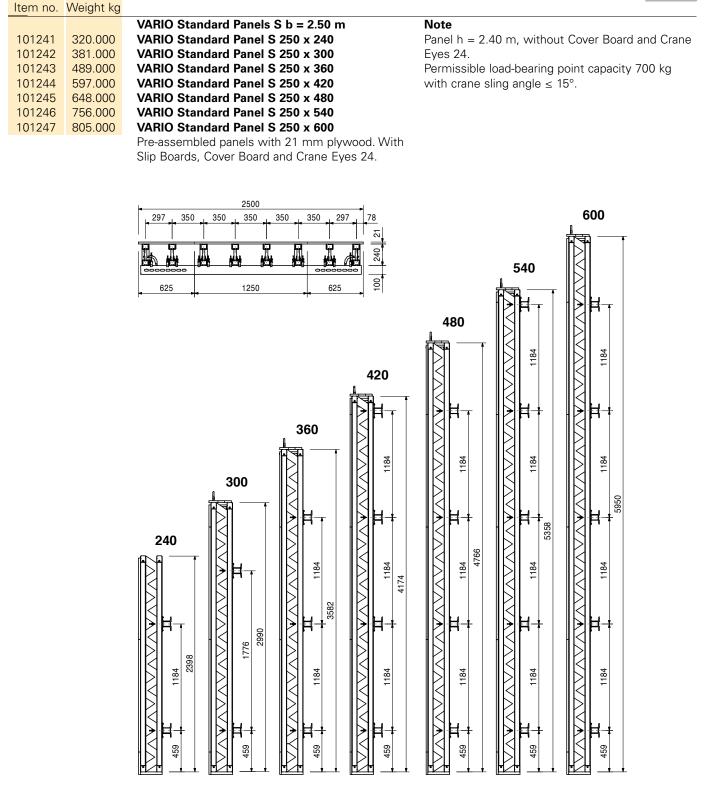
The following connecting parts are required for connecting VARIO GT 24 to Brace Frames SB-A0, A, B and C:

8.75 m





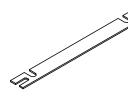




101311

6.170 Protection Board 250

As top covering for VARIO GT 24 standard panels.



-	2500	

Item no. Weight kg

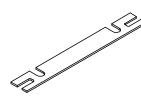


101249284101250364101251444101252481101253562	2,000VARIO S2,000VARIO S2,000VARIO S2,000VARIO S2,000VARIO S2,000VARIO S2,000VARIO S2,000VARIO S	<ul> <li>VARIO Standard Panel S 187.5 x 300</li> <li>VARIO Standard Panel S 187.5 x 360</li> <li>VARIO Standard Panel S 187.5 x 420</li> <li>VARIO Standard Panel S 187.5 x 480</li> <li>VARIO Standard Panel S 187.5 x 540</li> </ul>			Eyes 24. Permissible I		Cover Board and Crane oint capacity 700 kg 5°.
	319,5 625				480	540	
						$\begin{array}{c c c c c c c c c c c c c c c c c c c $	

4.470 Protection Board 187.5

101318

As top covering for VARIO GT 24 standard panels.



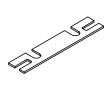


Item no. Weight	t kg				
101255         173.0           101256         209.0           101257         267.0           101258         324.0           101259         352.0           101260         410.0           101261         438.0	00VARIO Standard Panel S 12900VARIO Standard Panel S 129	5 x 240 5 x 300 5 x 360 5 x 420 5 x 480 5 x 540 5 x 600 I mm plywood. With	<b>Note</b> Panel h = 2.40 m, without Cover Board and Cran Eyes 24. Permissible load-bearing point capacity 700 kg with crane sling angle $\leq$ 15°.		
	1248 297 180 320 297 77 10 10 10 10 10 10 10 10 10 10		480		
	300				
		$\begin{array}{c c} 4 \\ 1 \\ 3582 \\ \hline \end{array} \\ 3582 \\ 3582 \\ \hline \end{array} \\ 3582 \\ \hline \end{array} \\ 4 \\ 4 \\ 4 \\ 1184 \\ \hline \end{array} \\ 4 \\ 1 \\ 1184 \\ \hline \end{array} \\ 4 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		
	$ \begin{array}{c c} \hline 184 \\ \hline 459 \\ \hline 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\$				

101319

2.860 Protection Board 125

As top covering for VARIO GT 24 standard panels.







Item no.         Weight kg           101411         138.000           101410         168.000           101409         214.000           101407         283.000           101406         329.000           101405         351.000	VARIO Standard Panels S b = 1.00 m VARIO Standard Panel S 100 x 240 VARIO Standard Panel S 100 x 300 VARIO Standard Panel S 100 x 360 VARIO Standard Panel S 100 x 420 VARIO Standard Panel S 100 x 480 VARIO Standard Panel S 100 x 540 VARIO Standard Panel S 100 x 540 VARIO Standard Panel S 100 x 600 Pre-assembled panels with 21 mm plywood. With Slip Boards, Cover Board and Crane Eyes 24.	<b>Note</b> Panel h = 2.40 m, without Cover Board and Crane Eyes 24. Permissible load-bearing point capacity 700 kg with crane sling angle $\leq 15^{\circ}$ .
	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \\ $	

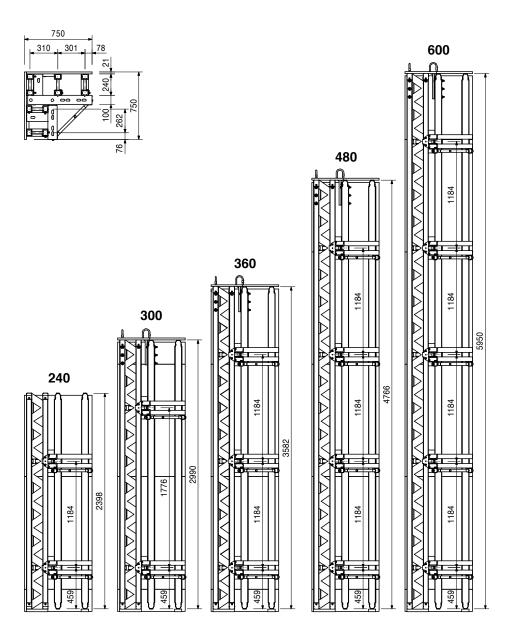
101404

2.230 **Protection Board 100** As top covering for VARIO GT 24 standard panels.





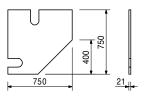
Veight kg		
	VARIO Internal Edges S 75/75	Note
211.000	VARIO Internal Edge S 75/75 x 240	Panel h = 2.40 m, without Cover Board and Crane
251.000	VARIO Internal Edge S 75/75 x 300	Eyes 24.
325.000	VARIO Internal Edge S 75/75 x 360	Permissible load-bearing point capacity 700 kg
429.000	VARIO Internal Edge S 75/75 x 480	with crane sling angle $\leq 15^{\circ}$ .
534.000	VARIO Internal Edge S 75/75 x 600	
	Pre-assembled panels with 21 mm plywood. With Slip Boards, Cover Board and Crane Eves 24	
	211.000 251.000 325.000 429.000	VARIO Internal Edges S 75/75 VARIO Internal Edge S 75/75 x 240 VARIO Internal Edge S 75/75 x 300 VARIO Internal Edge S 75/75 x 300 VARIO Internal Edge S 75/75 x 360 VARIO Internal Edge S 75/75 x 480 VARIO Internal Edge S 75/75 x 600





4.730 **Protection Board IE 75/75** As top covering for VARIO GT 24 standard panels.



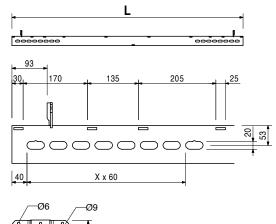




Weight kg		
	Steel Walers SRZ U100	L
19.800	Steel Waler SRZ U100, I = 0.95 m	950
24.900	Steel Waler SRZ U100, I = 1.20 m	1200
30.400	Steel Waler SRZ U100, I = 1.45 m	1450
38.300	Steel Waler SRZ U100, I = 1.825 m	1825
40.900	Steel Waler SRZ U100, I = 1.95 m	1950
51.600	Steel Waler SRZ U100, I = 2.45 m	2450
61.500	Steel Waler SRZ U100, I = 2.95 m	2950
	Steel waler for VARIO GT 24 panels and special	Note
	applications.	Special lengths and other profile sizes on request.
	19.800 24.900 30.400 38.300 40.900 51.600	Steel Walers SRZ U100           19.800         Steel Waler SRZ U100, I = 0.95 m           24.900         Steel Waler SRZ U100, I = 1.20 m           30.400         Steel Waler SRZ U100, I = 1.45 m           38.300         Steel Waler SRZ U100, I = 1.825 m           40.900         Steel Waler SRZ U100, I = 1.95 m           51.600         Steel Waler SRZ U100, I = 2.45 m           61.500         Steel Waler SRZ U100, I = 2.95 m           Steel waler for VARIO GT 24 panels and special

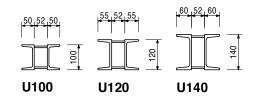
#### Technical Data

U100: Wy = 82.4 cm<sup>3</sup>, ly = 412 cm<sup>4</sup>.





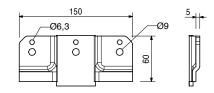
		Steel Walers SRZ spec. length	Technical Data
010080	22.000	Steel Waler SRZ U100 spec. length	U100: Wy = 82.4 cm <sup>3</sup> , ly = 412 cm <sup>4</sup> .
010150	28.000	Steel Waler SRZ U120 spec. length	U120: Wy = 121.4 cm <sup>3</sup> , ly = 728 cm <sup>4</sup> .
010090	33.000	Steel Waler SRZ U140 spec. length	U140: Wy = 172.8 cm <sup>3</sup> , ly = 1210 cm <sup>4</sup> .
010350	0.000	Additional Row of SRZ Slots	



End Plate SRZ

For Steel waler SRZ with special lengths.



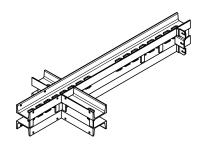




# Item no. Weight kg

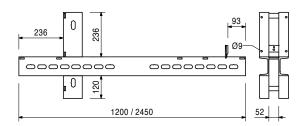
		Steel Walers VSRZ
010440	32.100	Steel Waler VSRZ-24 U100, I = 1.20/12
010420	58.800	Steel Waler VSRZ-24 U100, I = 2.45/12
010490	0.000	Welding Unit for VSRZ/12
010500	0.000	Welding Unit for VSRZ
		Steel waler for VARIO GT 24 corner panels and

special applications.



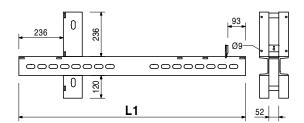
Note

Special lengths and other profile sizes on request. Technical Data  $Wy = 82.4 \text{ cm}^3$ ,  $Iy = 412 \text{ cm}^4$ .



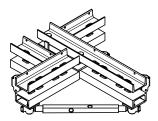
		VARIO Walers VSRZ, spec. lenght	Note
010240	22.000	VARIO Waler U100 VSRZ, spec. lenght	When ordering, state dimensions L
010430	28.000	VARIO Waler U120 VSRZ, spec. lenght	Technical Data
010250	33.000	VARIO Waler U140 VSRZ, spec. lenght	U100: Wy = 82.4 cm <sup>3</sup> , ly = 412 cm <sup>4</sup> .
			1120.104 - 1214  and  12 - 729  and

U120: Wy = 121.4 cm<sup>3</sup>, ly = 728 cm<sup>4</sup>. U140: Wy = 172.8 cm<sup>3</sup>, ly = 1210 cm<sup>4</sup>.

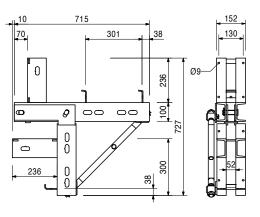


#### 010200 42.300

Internal Corner Waler IRZ 75/75 Steel waler for VARIO GT 24 corner panel 75 x 75 cm. Allows easy striking.

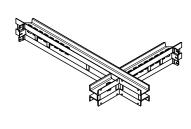


**Technical Data**  $Wy = 82.4 \text{ cm}^3$ ,  $Iy = 412 \text{ cm}^4$ .



### Item no. Weight kg

		Cross Walers KRZ spec. length	Note
010180	22.000	Cross Waler KRZ U100, spec. length	When ordering, state dimensions L1 and L2.
010270	28.000	Cross Waler KRZ U120, spec. length	Technical Data
010190	33.000	Cross Waler KRZ U140, spec. length	U100: Wy = 82.4 cm <sup>3</sup> , ly = 412 cm <sup>4</sup> .
010400	0.000	Welding Unit for KRZ	U120: Wy = 121.4 cm³, ly = 728 cm <sup>4</sup> .
		Steel waler for VARIO GT 24 panels for narrow lift	U140: Wy = 172.8 cm <sup>3</sup> , ly = 1210 cm <sup>4</sup> .
		shafts.	



#### 

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ltem no.	Weight kg	
		Steel Walers Universal SRU
103868	18.100	Steel Waler Universal SRU U120, I = 0.72
103871	24.200	Steel Waler Universal SRU U120, I = 0.97
103874	30.900	Steel Waler Universal SRU U120, I = 1.22
103877	38.100	Steel Waler Universal SRU U120, I = 1.47
103886	44.700	Steel Waler Universal SRU U120, I = 1.72
103889	52.000	Steel Waler Universal SRU U120, I = 1.97
103898	58.600	Steel Waler Universal SRU U120, I = 2.22
103892	65.600	Steel Waler Universal SRU U120, I = 2.47
103929	72.000	Steel Waler Universal SRU U120, I = 2.72
103903	81.000	Steel Waler Universal SRU U120, I = 2.97
103906	92.600	Steel Waler Universal SRU U120, I = 3.47
103915	106.000	Steel Waler Universal SRU U120, I = 3.97
103918	119.000	Steel Waler Universal SRU U120, I = 4.47
103922	135.000	Steel Waler Universal SRU U120, I = 4.97
103925	146.000	Steel Waler Universal SRU U120, I = 5.47

103928

159.000

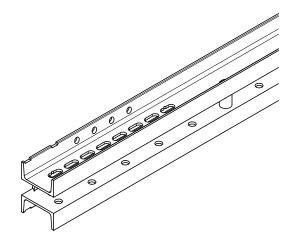
Steel Walers Universal SRU	L
Steel Waler Universal SRU U120, I = 0.72 m	722
Steel Waler Universal SRU U120, I = 0.97 m	972
Steel Waler Universal SRU U120, I = 1.22 m	1222
Steel Waler Universal SRU U120, I = 1.47 m	1472
Steel Waler Universal SRU U120, I = 1.72 m	1722
Steel Waler Universal SRU U120, I = 1.97 m	1972
Steel Waler Universal SRU U120, I = 2.22 m	2222
Steel Waler Universal SRU U120, I = 2.47 m	2472
Steel Waler Universal SRU U120, I = 2.72 m	2722
Steel Waler Universal SRU U120, I = 2.97 m	2972
Steel Waler Universal SRU U120, I = 3.47 m	3472
Steel Waler Universal SRU U120, I = 3.97 m	3972
Steel Waler Universal SRU U120, I = 4.47 m	4472
Steel Waler Universal SRU U120, I = 4.97 m	4972
Steel Waler Universal SRU U120, I = 5.47 m	5472
Steel Waler Universal SRU U120, I = 5.97 m	5972
Universal steel waler profile U120 used as waling	Note

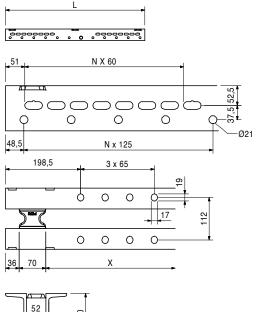
Universal steel waler profile U120 used as for girder wall formwork and for diverse special applications. With adjustable spacers.

Permissible load: see PERI Design Tables.

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**Technical Data** U120: Wy = 121.4 cm<sup>3</sup>, ly = 728 cm<sup>4</sup>.



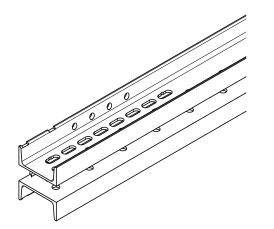




#### Item no. Weight kg 103943 157.000

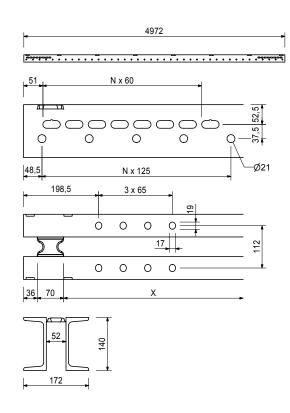
#### Steel Waler Universal SRU U140, I = 4.97 m

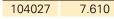
Universal steel waler profile U140 used as waling for girder wall formwork and for diverse special applications. With adjustable spacers.



Permissible load: see PERI Design Tables. **Technical Data** U140: Wy = 172.8 cm<sup>3</sup>, ly = 1210 cm<sup>4</sup>.

PFR





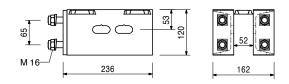
**Extension VARIO 24 U120** For assembly on Steel Waler SRU.

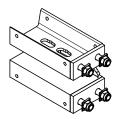
#### **Complete with**

4 pc. 710252 Bolt ISO 4017 M16 x 50-8.8, galv. 4 pc. 104024 Nut ISO 7040 M16-8, galv. 4 pc. 710880 Washer DIN 434 18, galv.

#### **Technical Data**

U120: Wy = 121.4 cm<sup>3</sup>, Iy = 728 cm<sup>4</sup>.

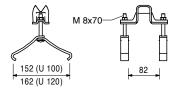




024070 0.691

**Hook Strap HB 24-100/120, galv.** For fixing GT 24 Girders to Steel Walers SRZ, SRU and BR: U100 – U120.

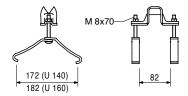




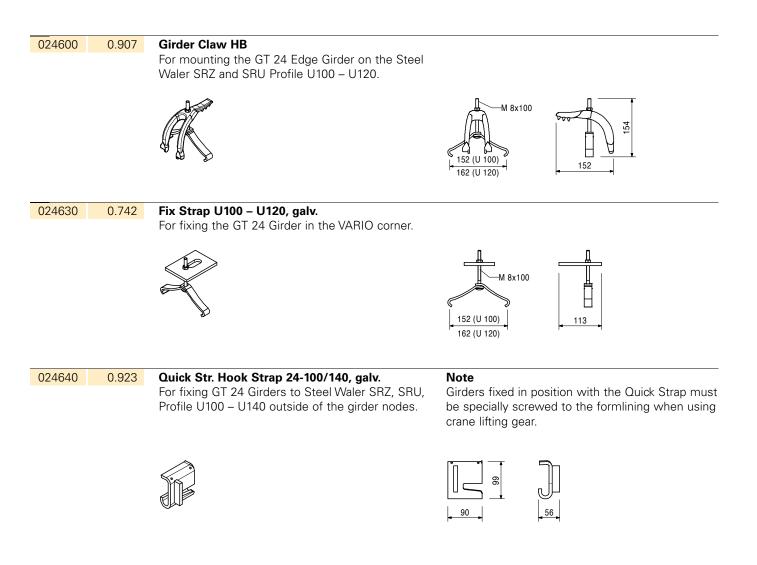


# Item no.Weight kg0240800.735Hook Strap HB 24-140/160, galv.For fixing GT 24 Girders to Steel Walers SRZ, SRU<br/>and BR: U140 – U160.

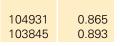




		Accessories Hook Straps HB	
071218	0.000	Screw Change HB, incl. Screws	
126228	0.030	F.H. Bolt DIN 603 M8 x 70 MU, galv.	
710240	0.050	F.H. Bolt DIN 603 M8 x 100 MU, galv.	
024090	0.005	Nut ISO 4032 M8-8, galv.	



#### Item no. Weight kg



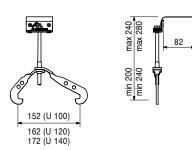
#### Hook Straps Uni HBU Hook Strap Uni HBU 20-24

Hook Strap Uni HBU 24-28 For fixing GT 24 Girders or VT 20 Girders to Steel Walers SRZ and SRU Profiles U100 – U140.



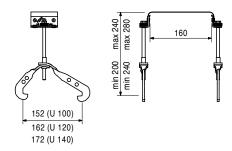
#### Note

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

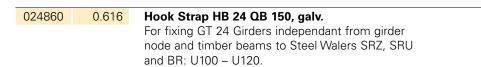


		Accessories	
024540	0.005	TSS-Torx 6 x 40, galv.	
		Hook Straps Uni Double HBUD	Note
104930	0.887	Hook Strap Uni Double HBUD 20-24	The girders can be mounted at right-angles or dia-
104096	0.912	Hook Strap Uni Double HBUD 24-28	gonally to the steel walers and also outside of the
		For fixing two GT 24 Girders or VT 20K Girders to	nodes.
		SRZ steel walers and SRU Profiles U100 – U140.	

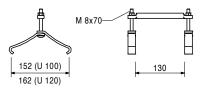


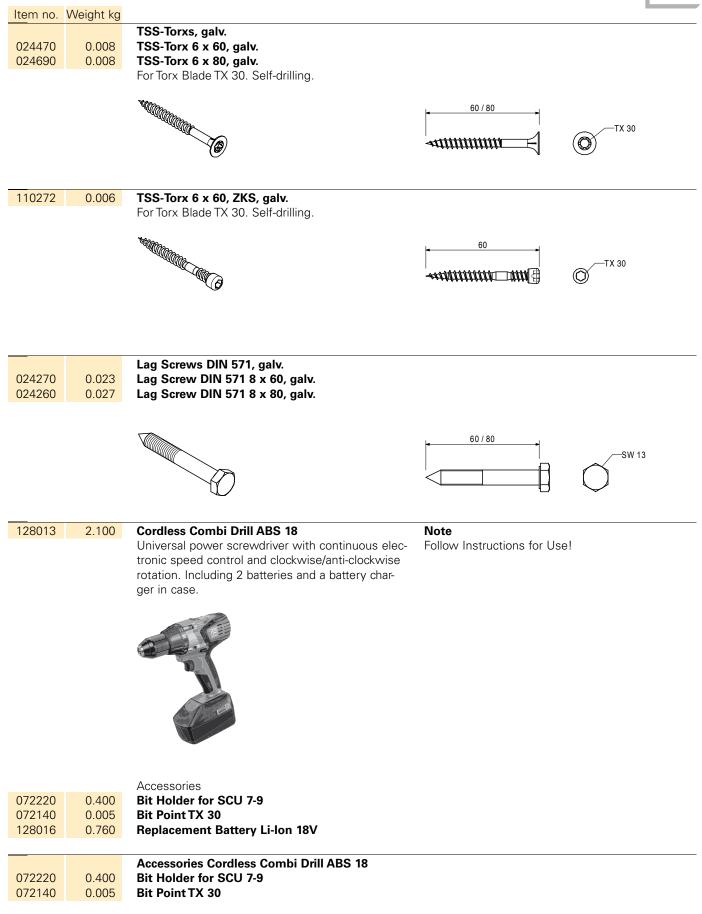


		Accessories Hook Straps HBU, HBUD
071219	0.000	Screw Change HBU, HBUD
104929	0.050	Bolt ISO 4014 M8 x 150-8.8, galv.
107185	0.060	Bolt ISO 4014 M8 x 180-8.8, galv.
103518	0.060	Bolt ISO 4014 M8 x 190-8.8, galv.
103844	0.013	Sleeve HBU/HBUD, galv.







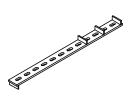


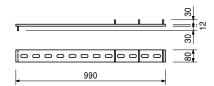
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	Girder Wall Formwork		PERI
Item no. Weight kg 128011 1.800	<b>Cordless Impact Screwdriver ASCD 18-W2</b> Light weight electric power wrench for moment- free working, with clockwise/anti-clockwise rotati- on and 1/2 square drive. Including 2 batteries and a battery charger in case.	Note Follow Instructions for Use!	
128016 0.760	<b>Replacement Battery Li-Ion 18V</b> For use with Cordless Combi Drill ABS 18 and Cordless Impact Screwdriver ASCD 18-W2.	<b>Note</b> Follow Instructions for Use! <b>Technical Data</b> Capacity 4 Ah.	
072180 0.560	Ratchet Wrench 1/2"		
	J.		
0130109.00001302013.30001303019.1000130809.000	Couplings VKZ Coupling VKZ 99 Coupling VKZ 147 Coupling VKZ 211 Coupling VKZ spec. length For connection of SRZ and SRU Steel Walers.	L 990 1470 2110 <b>Technical Data</b> Wy = 17.1 cm <sup>3</sup> , ly = 68.3 cm <sup>4</sup> .	
	HE TES BE THE PARTY OF THE PART		

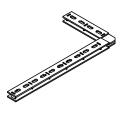


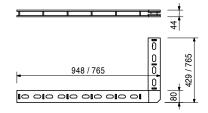
# Item no. Weight kg 101395 7.110 Offset Coupling VVKZ 3/99 For connecting extended and non-extended VARIO panels above the extension.





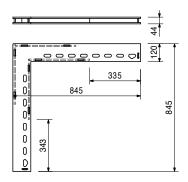
		Corner Couplings EKZ
013140	11.900	Corner Coupling EKZ 95/43
013130	13.300	Corner Coupling EKZ 76/76
103938	8.850	Corner Coupling EKZ 47/43
013180	9.000	Corner Coupling EKZ spec. length
		For continuously variable tight (tension and
		compression) connection of SRZ and SRU Steel
		Walers.

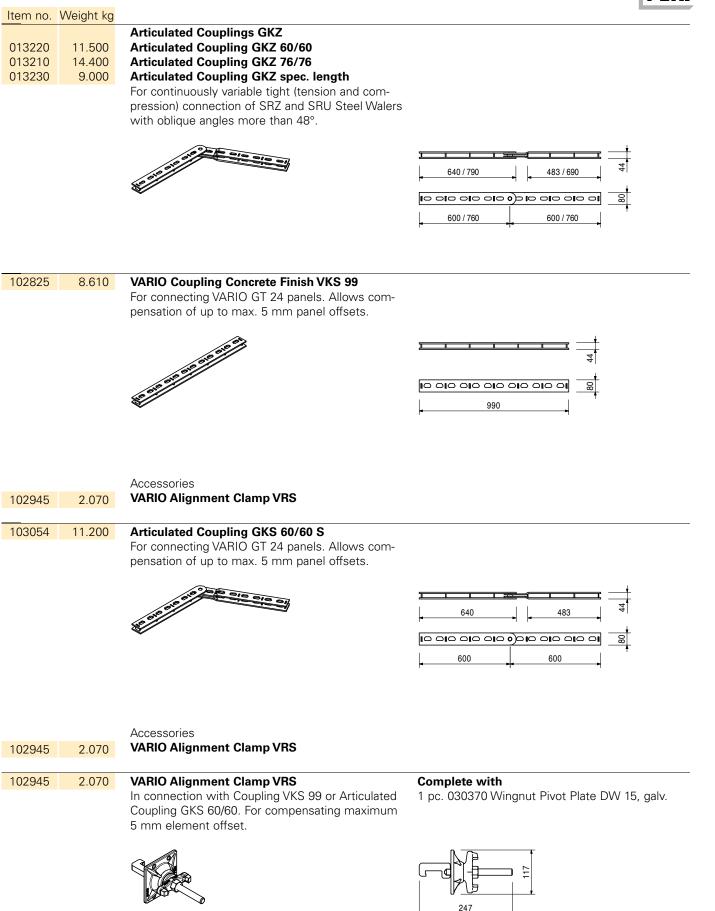




# 10385024.700Outside Corner Coupling AKZ 85/85For providing tensile and compression-proof connections of Steel Walers SRZ and SRU on external corners.







Item no. Weight kg 103737 10.800

104031

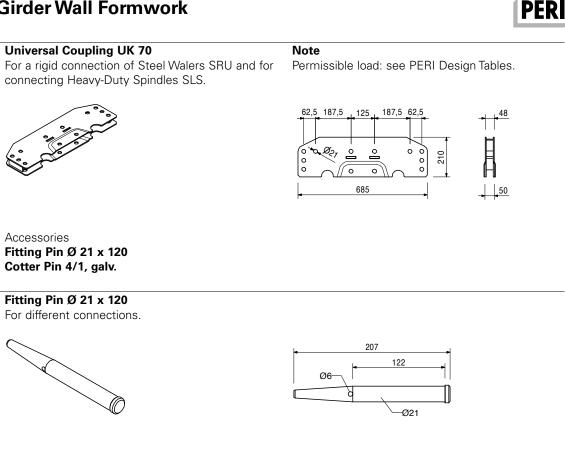
018060

104031

0.462

0.030

0.462



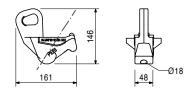
018060	0.030	Accessories Cotter Pin 4/1, galv.	
018060	0.030	Cotter Pin 4/1, galv.	
		()	<u> </u>

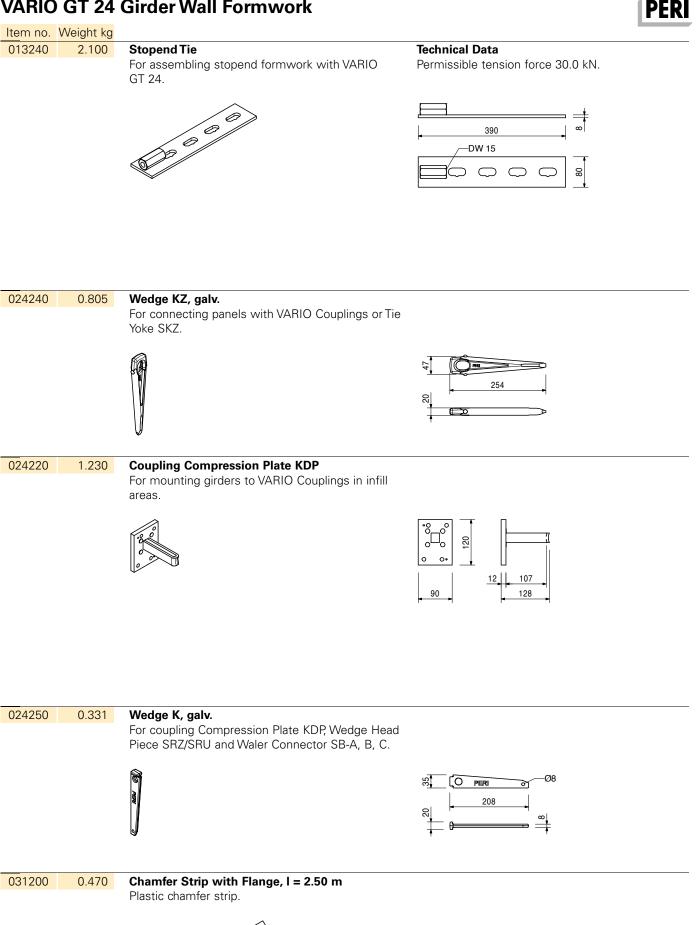
024210 2.180

## Tie Yoke SKZ

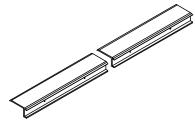
For tensioning on external corners with Steel Waler SRZ, SRU, U100 – U140 and VARIO couplings.

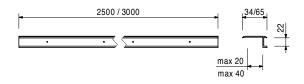






#### Item no. Weight kg Formwork Joints Formwork Joint 21/20, I = 2.50 m 030260 0.500 101706 1.230 Formwork Joint 21/40, I = 3.00 m Plastic profile strip for easier striking of shafts.

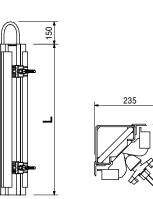




		Quick Release Corners SSE	L
025200	32.200	Quick Release Corner SSE 1.0 m	1000
025210	70.000	Quick Release Corner SSE 2.0 m	2000
025220	105.000	Quick Release Corner SSE 3.0 m	3000
025230	140.000	Quick Release Corner SSE 4.0 m	4000
025240	180.000	Quick Release Corner SSE 5.0 m	5000
025250	35.000	Quick Release Corner SSE spec. length	
		For easier striking of shaft internal formwork. We	Note
		recommend removing the shaft corner immediate-	Formlining size is 15 cm shorter than the

recommend removing the shaft corner immediately after concreting.





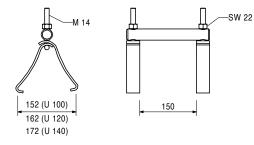
235

dimension of the concrete.

027590 2.400

Hook Strap for SB-1, 2 For fixing Brace Frame SB-1 and SB-2 to Steel Waler SRZ and SRU Profile U100 - U140.





# Item no. Weight kg 024480 7.040

#### Extension Splice 24-2

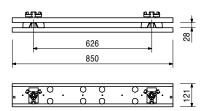
For extending GT 24 girders and VARIO GT 24 panels up to max. height of 8.00 m.

## Complete with

2 pc. 030190 Three Wingnut DW 15, galv. Note

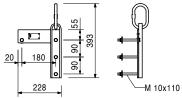
PERI

Permissible load: see PERI Design Tables.



070760	4.650	<b>Crane Splice GT 24</b> For transporting elements by crane with the GT 24 girder.	Complete with1 pc. 018050 Pin Ø 16 x 65/86, galv.2 pc. 018060 Cotter Pin 4/1, galv.NoteFollow Instructions for Use!Technical DataPermissible load-bearing capacity 700 kg with crane sling angle $\leq 15^{\circ}$ .
021990	2.780	Crane Eyes 24 Crane Eye 24, right	<b>Complete with</b> 4 pc. 710138 Bolt ISO 4014 M10 x 110-8.8, galv.
021980	2.780	<b>Crane Eye 24, left</b> For transporting elements by crane with the GT 24	4 pc. 780356 Nut ISO 7042 M10-8, galv. 4 pc. 710139 Washer R11 DIN 440, galv.
		girder. Mounted securely to the element.	Note Illustration shows Crane Eye 24, left. Follow Instructions for Use! Technical Data Permissible load-bearing capacity 700 kg with crane sling angle $\leq 15^{\circ}$ .
		Na A	





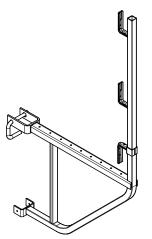
#### Girder Wall Formwork ~ 4

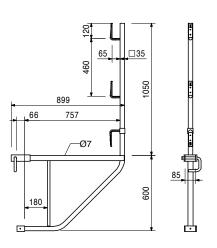


ltem no.	Weight kg		
111238	19.800	<b>Crane Hook 2 t / GT 24</b> For transporting elements by crane with the GT 24 Girder. Adjustable from 230 to 410 mm.	Complete with1 pc. 018060 Cotter Pin 4/1, galv.8 pc. 710138 Bolt ISO 4014 M10 x 110-8.8, galv.8 pc. 780356 Nut ISO 7042 M10-8, galv.NoteFollow Instructions for Use!Technical DataPermissible load-bearing capacity 2.0 t with cranesling angle $\leq 30^{\circ}$ .
			$\begin{array}{c c} \hline \\ \hline $
057050	4.450	Suspension Tube Vario 53 For attaching VARIO GT 24 elements.	Complete with 2 pc. 710593 Bolt ISO 4014 M10 x 80-8.8, galv. 2 pc. 710234 Nut ISO 4032 M10-8, galv. 6000000000000000000000000000000000000
027110	11.000	Scaffold Bracket GB 80	Technical Data

Scattold Bracket GB 80 For assembly of a working and concreting scaffold with GT 24 girder.

**Technical Data** Permissible load 150 kg/m<sup>2</sup>. Maximum width of influence 1.25 m.





#### Item no. Weight kg

027060

027070

#### Corner Scaffold Brackets EGB Corner Scaffold Bracket EGB 24 – 80, right Corner Scaffold Bracket EGB 24 – 80, left

For assembling a working scaffold to panels with GT 24 Girders. With securing bolts.

#### Note

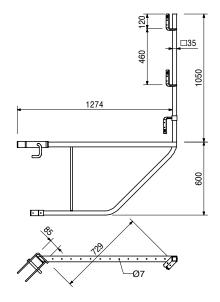
Illustration shows Corner Scaffold Bracket EGB 24 – 80 right.

#### **Technical Data**

Permissible load 150 kg/m $^{2}$  with a maximum width of influence 1.25 m.

PFRI

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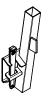
112159	
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2.120

Handrail Post Holder VARIO For assembling a guardrail with GT 24 Girder.

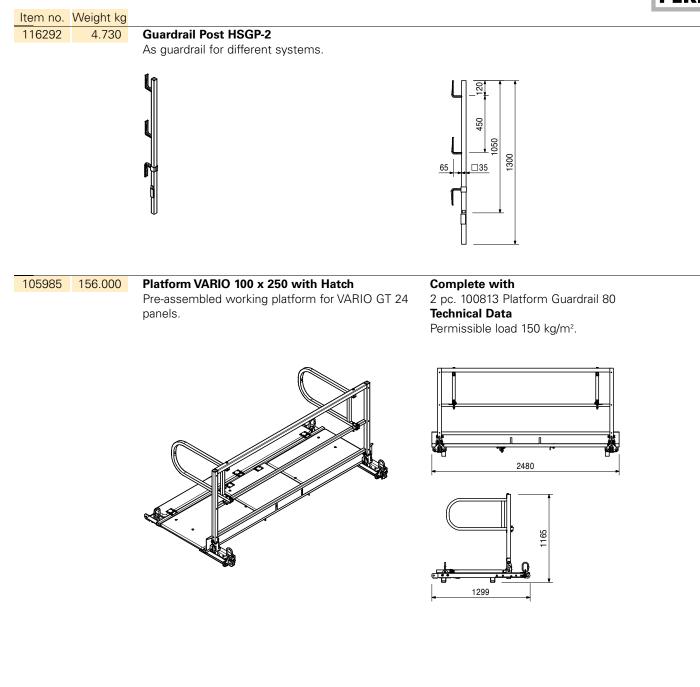
#### Complete with

1 pc. 024250 Wedge K, galv. 1 pc. 780800 Sleeve ISO 8752 8 x 20, galv. **Technical Data** Maximum width of influence 2.00 m.



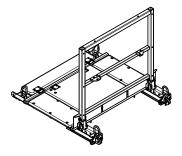
116292 4.730

Accessories Guardrail Post HSGP-2

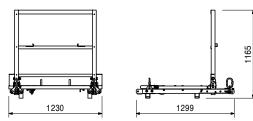


102415 98.800

**Platform VARIO 100 x 125 with Hatch** Pre-assembled working platform for VARIO GT 24 panels.



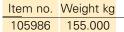
**Technical Data** Permissible load 150 kg/m<sup>2</sup>.



Accessories

 Accessories

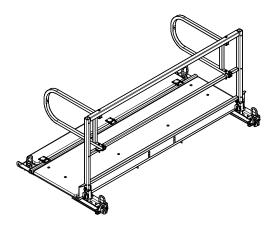
 100813
 4.980

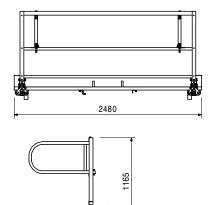


# **Platform VARIO 100 x 250 without Hatch** Pre-assembled working platform for VARIO GT 24 panels.

Complete with 2 pc. 100813 Platform Guardrail 80 Technical Data PERI

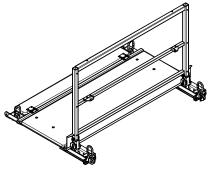
Permissible load 150 kg/m<sup>2</sup>.

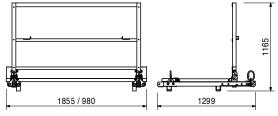




1299

		Platforms VARIO without Hatch	Technical Data
102920	115.000	Platform VARIO 100 x 187.5	Permissible load 150 kg/m <sup>2</sup> .
103203	84.900	Platform VARIO 100 x 100	
		Pre-assembled working platform for VARIO GT 24 panels.	





Accessories Platform Guardrail 80

103932	36.300	<b>End Platform VARIO</b> Pre-assembled working platform for VARIO GT 24 stopend formwork. 2 pieces per set of stopend formwork and platform level.	<b>Technical Data</b> Permissible load 150 kg/m².

100813

4.980

Accessories Guardrail for End Platform VARIO

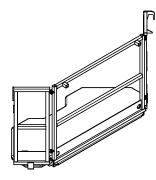
103992



044

#### Item no. Weight kg **External Corner Platform VARIO** 65.600

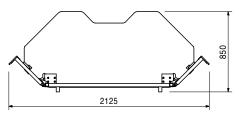
Pre-assembled working platform for VARIO GT 24 panels. Connecting platform with pivot-mounted end handrail. For external corners from 80° to 100°.



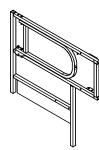
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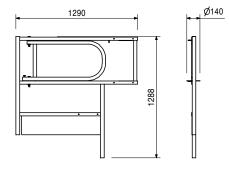
**Technical Data** 

Permissible load 150 kg/m<sup>2</sup>.



#### 103865 22.000 **Guardrail for End Platform VARIO** For assembly on VARIO End Platform with wall thicknesses up to 0.50 m. With foldable VARIO Platform Handrail 80.





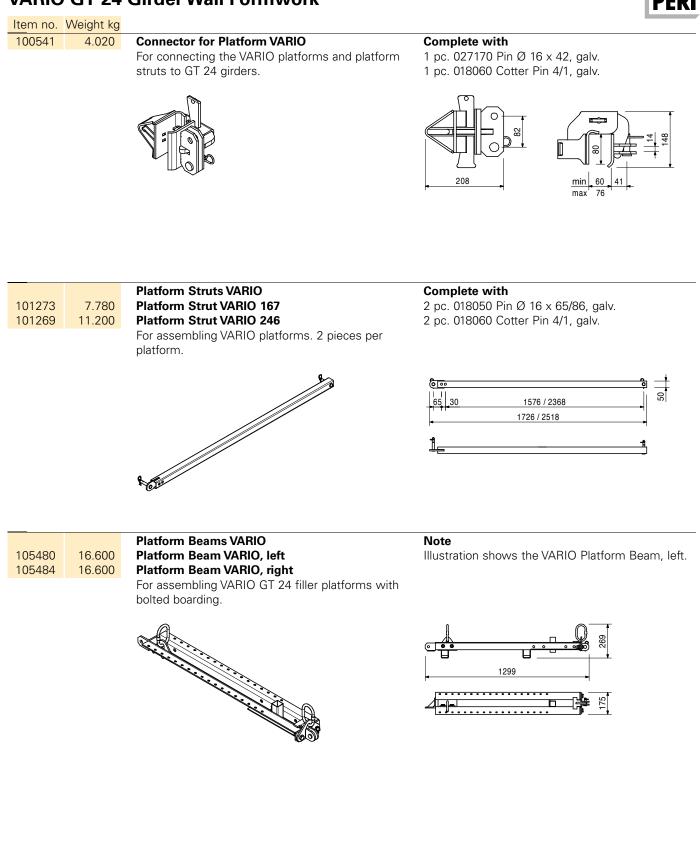
#### 100813 4.980 **Platform Guardrail 80 Complete with** End handrail for various platforms. Pivot-mounted.



2 pc. 102414 Bolt Ø 12 x 105 x 5 x 95-ST, galv. 2 pc. 018060 Cotter Pin 4/1, galv.

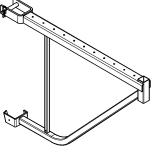


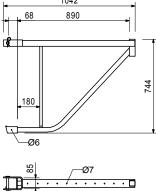






#### Item no. Weight kg Platform Bracket VARIO VBK 90 105823 9.310 **Complete with** For assembly of a working and concreting scaffold 1 pc. 106336 Bolt Ø 20 x 120, galv. on elements with GT 24 girders. With safety pins 1 pc. 018060 Cotter Pin 4/1, galv. and cotter pins. **Technical Data** Permissible load 150 kg/m<sup>2</sup> with a maximum width of influence 1.25 m. 1042 68 890 ¢ 744 180





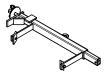
116292	4.730	Accessories Guardrail Post HSGP-2	
107738	24.100	<b>Ladder 240 – 360</b> Adjustable from 2.40 m to 3.60 m.	



		422
	N x 300	
•	min 2360 max 3710 🔒	

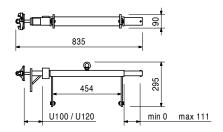
111165 6.080

Ladder Connector VARIO, adjustable For connecting ladders to Steel Walers SRZ and SRU, Profile U100 - U120.



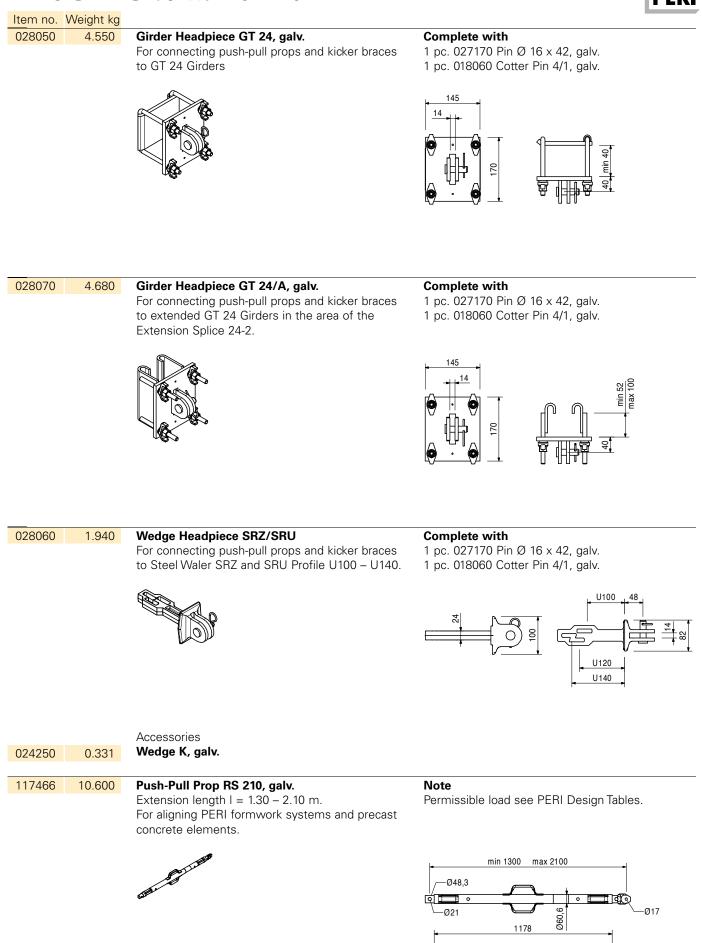
#### **Complete with**

2 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv. 2 pc. 701763 Clamping Plate Fl 25 x 10 x 90



# PERI

# VARIO GT 24 Girder Wall Formwork



Item no. Weight kg

12.200

15.500

118238

117467



Note

Permissible load see PERI Design Tables.

Push-Pull Prop RS 260, galv. Extension length I = 2.30 - 2.60 m. For aligning PERI formwork systems and precast concrete elements.



min 2300 max 2600 Ø48,3 Q Ø60,6 Ø17 Ø21 2178 <u></u> Σ D 0 Σ

#### Note

Permissible load see PERI Design Tables.

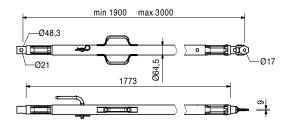


concrete elements.

Push-Pull Prop RS 300, galv.

Extension length I = 1.90 - 3.00 m.

For aligning PERI formwork systems and precast

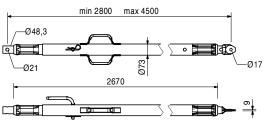


#### 117468 23.000 Push-Pull Prop RS 450, galv. Extension length I = 2.80 - 4.50 m. For aligning PERI formwork systems and precast concrete elements.



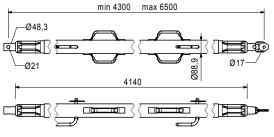
Note

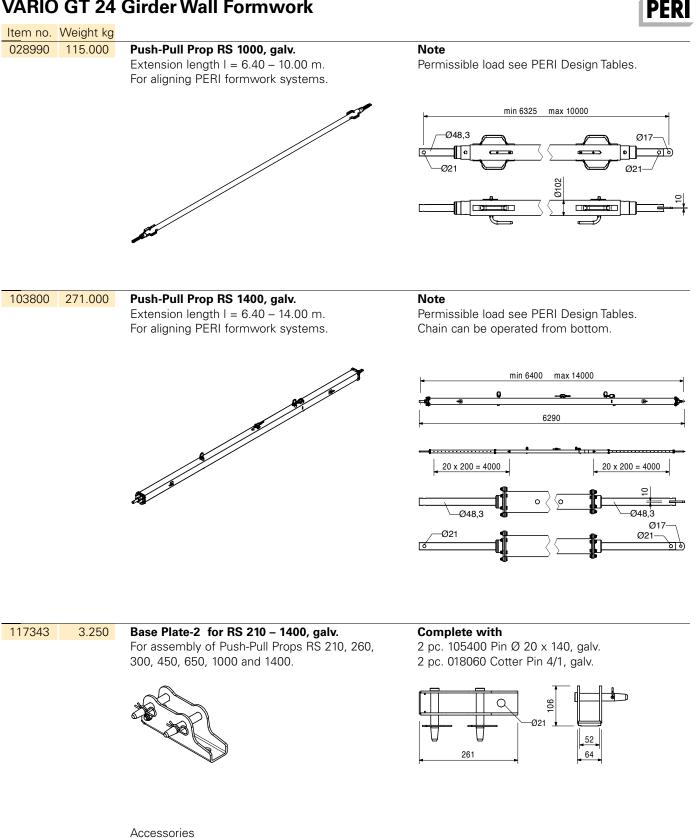
Permissible load see PERI Design Tables.

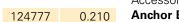


117469 40.000 Push-Pull Prop RS 650, galv. Note Extension length I = 4.30 - 6.50 m. Permissible load see PERI Design Tables. For aligning PERI formwork systems and precast concrete elements.







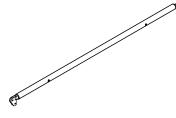


Anchor Bolt PERI 14/20 x 130



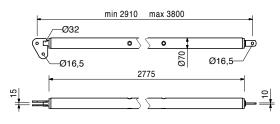
	24 Girder Wall Formwork	PER
Item no. Weight 126666 3.0		<b>Complete with</b> 2 pc. 105400 Pin Ø 20 x 140, galv. 2 pc. 018060 Cotter Pin 4/1, galv. 1 pc. 113063 Bolt ISO 4014 M12 x 80-8.8, galv. 1 pc. 113064 Hex Nut ISO7042-M12-8-G, galv.
	A Contraction of the contraction	
124777 0.2	Accessories Anchor Bolt PERI 14/20 x 130	
028010 17.90	<ul> <li>Push-Pull Prop RSS I</li> <li>Extension length I = 2.05 – 2.94 m.</li> <li>For aligning PERI formwork systems.</li> </ul>	<b>Note</b> Permissible load see PERI Design Tables.
	Contraction of the second seco	min 2050 max 2940
113397 1.60	<ul> <li>Spindle Handle RSS / AV</li> <li>Spindle Handle for screwing on Push-Pull-Props</li> <li>RSS I, RSS II, RSS III and Kickers AV 210 and AV</li> <li>190 complete with 2 bolts and nuts M8.</li> </ul>	

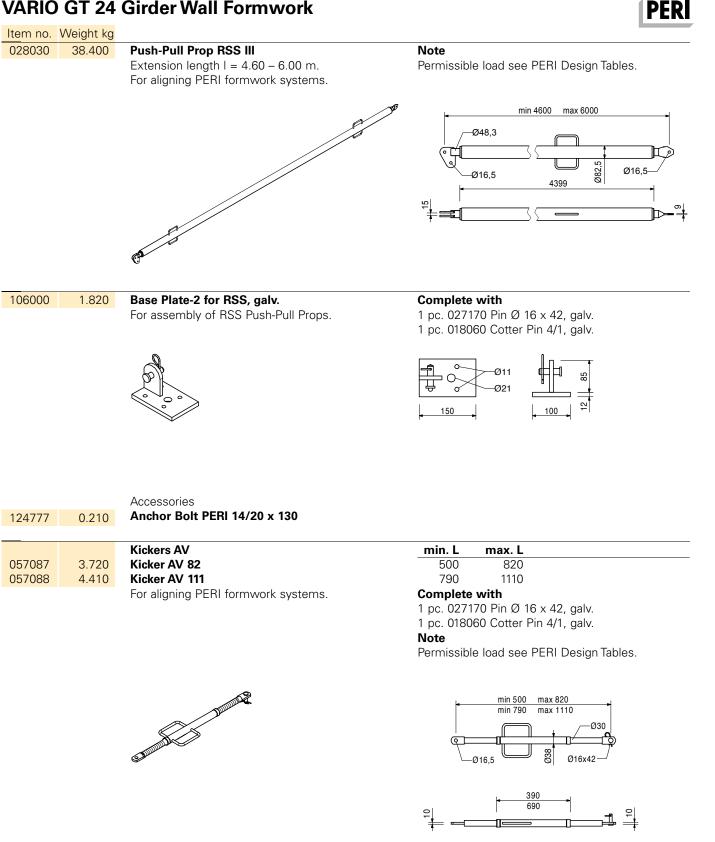
028020 22.000 Push-Pull Prop RSS II Extension length I = 2.91 – 3.80 m. For aligning PERI formwork systems.



Note

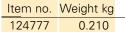
Permissible load see PERI Design Tables.







em no. Weight k	g	
28110 5.180	<b>Kicker AV 140</b> Extension length I = 1.08 – 1.40 m. For aligning PERI formwork systems.	<b>Complete with</b> 1 pc. 027170 Pin Ø 16 x 42, galv. 1 pc. 018060 Cotter Pin 4/1, galv. <b>Note</b> Permissible load see PERI Design Tables.
		min 1080 max 1400 Ø30 Ø16,5 Ø16x42 980
28120 17.000	<b>Kicker AV RSS III</b> Extension length I = 2.03 – 2.92 m. For aligning PERI formwork systems.	<b>Complete with</b> 1 pc. 027170 Pin Ø 16 x 42, galv. 1 pc. 018060 Cotter Pin 4/1, galv. <b>Note</b> Permissible load see PERI Design Tables.
	8	min 2030 max 2920
08135 12.900	<b>Kicker AV 210</b> Extension length I = 1.28 – 2.10 m. For aligning PERI formwork systems.	<b>Complete with</b> 1 pc. 027170 Pin Ø 16 x 42, galv. 1 pc. 018060 Cotter Pin 4/1, galv. <b>Note</b> Permissible load see PERI Design Tables.
	8	min 1280 max 2100



#### Anchor Bolt PERI 14/20 x 130

For temporary fixation to reinforced concrete structures.



Note
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See PERI data sheet! Drilling Ø 14 mm.

-SW 24 Ø14-130

# **PERI International**



# North America

- CA Canada PERI Formwork Systems, Inc. www.peri.ca
- MX Mexico PERI Cimbras y Andamios, S.A. de C.V. www.peri.com.mx
- PA Panama PERI Panama Inc. www.peri.com.pa
- US USA PERI Formwork Systems, Inc. www.peri-usa.com

# **South America**

- AR Argentina PERI S.A. www.peri.com.ar
- BR Brazil PERI Formas e Escoramentos Ltda. www.peribrasil.com.br
- CL Chile PERI Chile Ltda. www.peri.cl
- CO Colombia PERI S.A.S. www.peri.com.co
- PE Peru PERI Peruana S.A.C. www.peri.com.pe

### Africa

- AO Angola Pericofragens, Lda. www.peri.pt
- DZ Algeria S.A.R.L. PERI www.peri.dz
- BW Botswana PERI (Proprietary) Limited www.peri.co.bw
- EG Egypt Egypt Branch Office www.peri.com.eg
- MA Morocco PERI S.A. www.peri.ma
- MZ Mozambique PERI (Pty.) Ltd. www.peri.co.mz
- NA Namibia PERI (Pty.) Ltd. www.peri.na
- NG Nigeria PERI Nigeria Ltd. www.peri.ng
- TN Tunesia PERI S.A.U. www.peri.es
- TZ Tanzania PERI Formwork and Scaffolding Ltd www.peritanzania.com
- ZA South Africa PERI Formwork Scaffolding (Pty) Ltd www.peri.co.za

## Asia

IL.

- AE United Arab Emirates PERI (L.L.C.) www.perime.com
- AZ Azerbaijan PERI Repesentative Office www.peri.com.tr
- HK Hong Kong PERI (Hong Kong) Limited www.perihk.com
  - ID Indonesia PT Beton Perkasa Wijaksana www.betonperkasa.com
    - Israel PERI F.E. Ltd. www.peri.co.il
  - IN India PERI (India) Pvt Ltd www.peri.in
  - IR Iran PERI Persa. Ltd. www.peri.ir
  - JO Jordan PERI GmbH – Jordan www.peri.com
  - JP Japan PERI Japan K.K. www.perijapan.jp
- KR Korea Ltd PERI (Korea) Ltd. www.perikorea.com
  - KW Kuwait d PERI Kuwait W.L.L. www.peri.com.kw

- KZ Kazakhstan TOO PERI Kazakhstan www.peri.kz
- LB Lebanon PERI Lebanon Sarl lebanon@peri.de
- MY Malaysia PERI Formwork Malaysia Sdn. Bhd. www.perimalaysia.com
- OM Oman PERI (L.L.C.) www.perime.com
- PH Philippines PERI-Asia Philippines, INC. www.peri.com.ph
- QA Qatar PERI Qatar LLC www.peri.qa
- SA Saudi Arabia PERI Saudi Arabia Ltd. www.peri.com.sa
- SG Singapore PERI Asia Pte Ltd www.periasia.com
- TM Turkmenistan PERI Sanayi www.peri.com.tr
- TH Thailand Peri (Thailand) Co., Ltd. www.peri.co.th
- VN Vietnam PERI ASIA PTE LTD www.peri.com.vn



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# Oceania

- AU Australia PERI Australia Pty. Ltd. www.periaus.com.au
- NZ New Zealand PERI Australia Pty. Limited www.peri.co.nz

# Europe

- AL Albania PERI Kalıp ve İskeleleri www.peri.com.tr
- AT Austria PERI Ges.mbH www.peri.at
- BA Bosnia and Herzegovina PERI oplate i skele d.o.o www.peri.com.hr
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