

Tips for trouble-free progress

- Spray formwork on all sides with PERI BIO Clean before every use.
- Spray back of formwork with water immediately after concreting to reduce the cleaning work.
- Always start at a corner or difficult area. Pay attention to the wall thickness. See corners.
- Only use the required number of ties. Unused tie holes must be sealed with plugs \varnothing 20/24, item no 030300.
- More information can be found in the TRIO Assembly Instructions.

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

GSV
geprüft
durch neutrales Prüfzentrum
Güteschutzverband
Betonchalungen

Since production began, TRIO has always fulfilled the highest requirements regarding the formwork evenness. 2.70 m steel elements have been certified according to GSV guidelines (German Formwork Association).
81 kN/m² uniform area load, DIN 18202, Table 3, Line 6.
675 kN/m² triangular load, DIN 18202, Table 3, Line 7.
Permissible fresh concrete pressure for aluminium elements 60 kN/m² uniform area load, DIN 18202, Table 3, Line 7.
60 kN/m² h = 2.70 m, DIN 18202, Table 3, Line 6.

Test report available on request.

TRIO

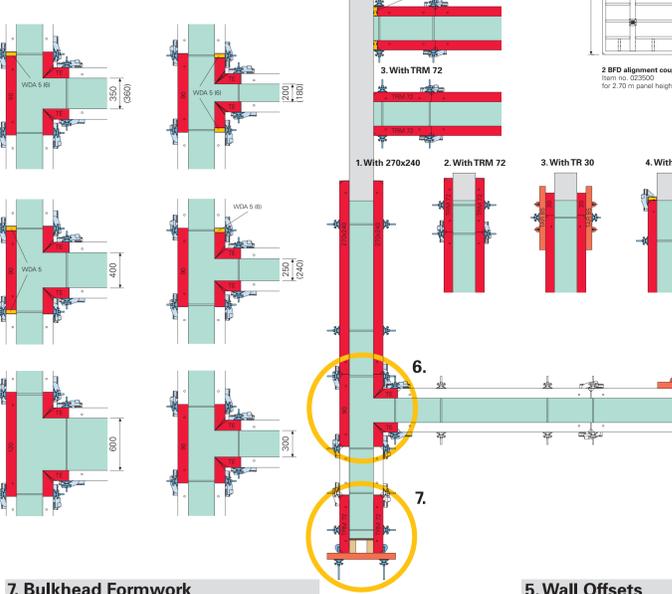
The panel formwork with the BFD coupler system



For standard element joints On external corners With filler timber up to 100 mm For timber extensions

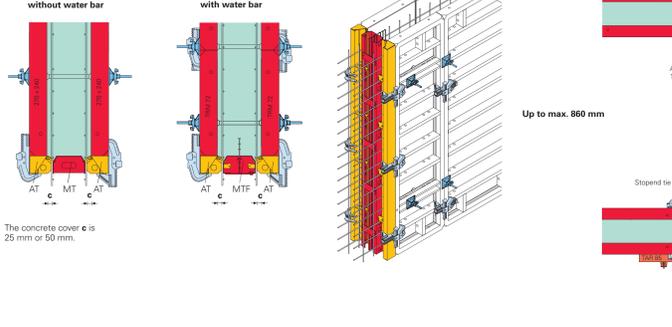
6. T-junctions

Basic rules for T-junctions
Wall thicknesses 180 - 400 mm and 600 mm
External formwork: with panel TR 90
Internal formwork: with TRIO Corner TE
Adapting to wall thicknesses using wall thickness compensation WDA 5, WDA 6 or timber infills.



7. Bulkhead Formwork

Using the TRIO MT/MTF stopend panel with continuous reinforcement, with or without water bars.



Push-Pull Props and Kicker Braces

Push-pull props and kickers to brace the formwork and bearing the windload are to be arranged as shown on the adjacent diagram and table. The first panel must always be braced with 2 push-pull props and subsequent panels according to the table. They are connected to the panel with the TRIO Brace Connector and to the slab with the appropriate base plate and the PERI anchor bolt MMS 20x130.

Formwork height h [m]	3.5	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0
Allowable prop spacing [m] (max. width of rib/panel)	3.53	2.73	2.19	1.82	1.58	1.42	1.33	1.27	1.23	1.20
Actual prop load F _{prop} [kN] at maximum spacing	9.7	9.7	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Actual kicker load F _{kicker} [kN] at maximum spacing	2.1	2.3	2.2	2.2	2.3	2.6	2.6	2.6	2.6	2.6
x = Distance of base plate [m] from top of formwork	1.2	1.6	2.0	2.4	2.8	3.5	4.3	4.7	5.1	5.3
y = Top connection point [m] from top of formwork	1.0	1.2	1.5	1.8	2.0	2.0	2.0	2.0	2.0	2.0
W	4.5	5.5	6.2	6.9	7.8	8.9	10.1	11.3	12.5	13.5

Wind loads: h = 8 m → 0.5 kN/m²
h = 0 m → 0.25 m → 0.5 kN/m²

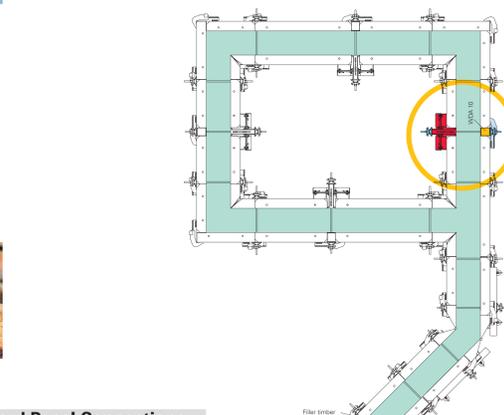
TRIO Panels

Panel	240	120	90	60	30	72	TE	TRM 72	TGE
TR 270	6.48 0.225/0 162.00 kg	3.24 0.225/0 81.00 kg	2.43 0.225/0 60.75 kg	1.62 0.225/0 40.50 kg	0.81 0.225/0 20.25 kg	1.94 0.225/0 48.50 kg	1.62 0.225/0 40.50 kg	1.94 0.225/0 48.50 kg	1.62 0.225/0 40.50 kg
TR 120	2.88 0.225/0 72.00 kg	1.44 0.225/0 36.00 kg	1.08 0.225/0 27.00 kg	0.72 0.225/0 18.00 kg	0.36 0.225/0 9.00 kg	0.86 0.225/0 21.50 kg	0.72 0.225/0 18.00 kg	0.86 0.225/0 21.50 kg	0.72 0.225/0 18.00 kg
TR 60	0.72 0.225/0 18.00 kg	0.36 0.225/0 9.00 kg	0.27 0.225/0 6.75 kg	0.18 0.225/0 4.50 kg	0.09 0.225/0 2.25 kg	0.43 0.225/0 10.75 kg	0.36 0.225/0 9.00 kg	0.43 0.225/0 10.75 kg	0.36 0.225/0 9.00 kg
TR 270	2.43 0.225/0 60.75 kg	1.62 0.225/0 40.50 kg	1.21 0.225/0 30.38 kg	0.81 0.225/0 20.25 kg	0.41 0.225/0 10.13 kg	1.62 0.225/0 40.50 kg	1.62 0.225/0 40.50 kg	1.62 0.225/0 40.50 kg	1.62 0.225/0 40.50 kg
TR 90	1.80 0.225/0 45.00 kg	1.21 0.225/0 30.38 kg	0.91 0.225/0 22.73 kg	0.61 0.225/0 15.23 kg	0.31 0.225/0 7.73 kg	0.86 0.225/0 21.50 kg	0.91 0.225/0 22.73 kg	0.91 0.225/0 22.73 kg	0.91 0.225/0 22.73 kg

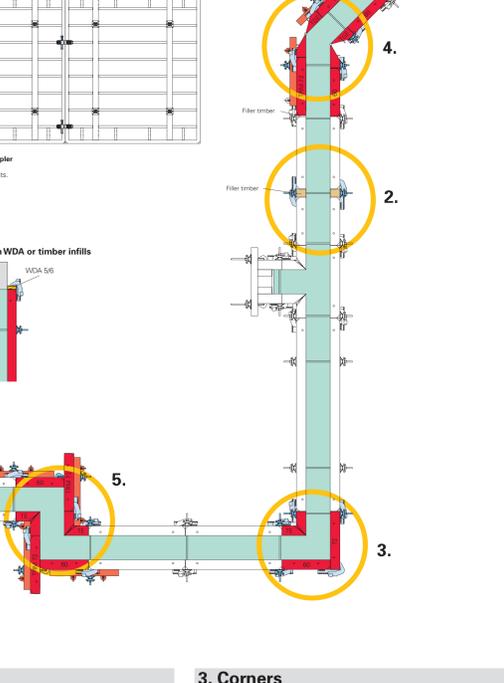
A single platform unit is only 320 mm high when folded. Each additional unit adds only 170 mm in height. 10 concreting platforms (35 m) stacked on top of each other is equal to the loading height of a truck.



Only one component is required for all connections. The TRIO BFD alignment coupler ensures that all panel joints are: flush aligned tight in only one step!

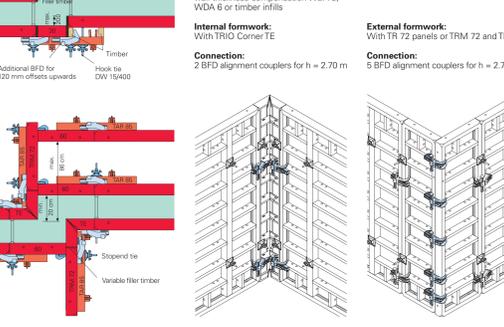


1. Standard Panel Connections



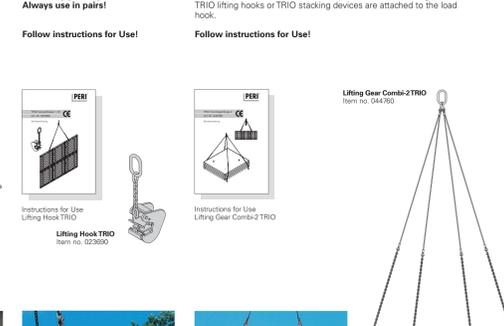
2. Length Adjustment

Simple and fast solution. With timber, or timber and formlining, and BFD alignment coupler up to 100 mm.



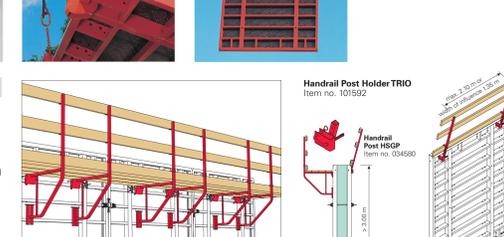
3. Corners

Basic rules for corners. Wall thicknesses 180 - 400 mm. Adaptation to wall thickness using wall thickness compensation WDA 5, WDA 6 or timber infills.



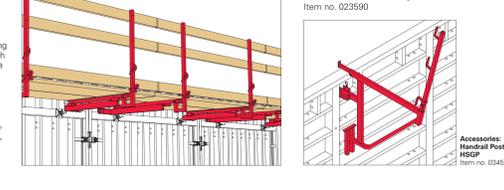
5. Wall Offsets

Up to max. 200 mm. Lower TAR 85 to be fixed from below.



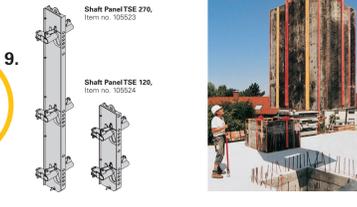
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9. Shafts

The TRIO shaft element allows complete shaft formwork units to be moved as one unit.



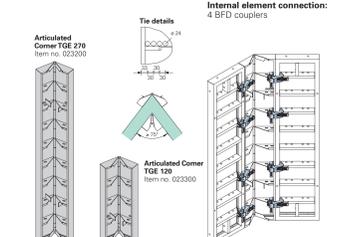
4. Oblique Angles

TRIO articulated corner TGE - for internal and external corners alike.



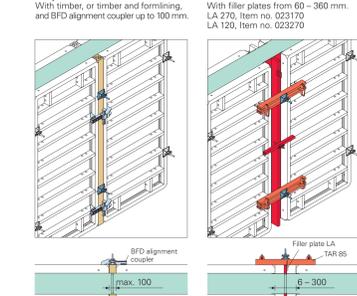
2. Length Adjustment

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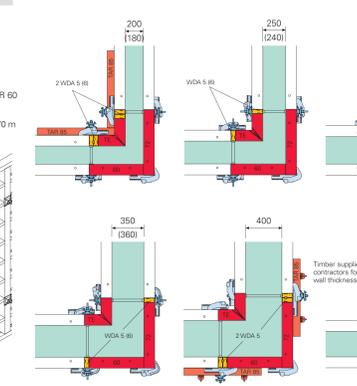
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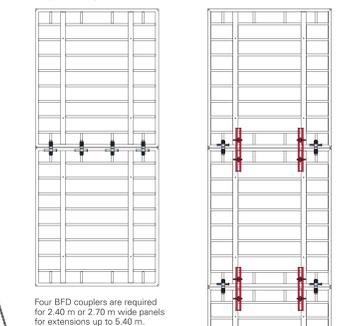
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Extensions

Alignment couplers and all-round struts ensure that extensions with TRIO are simple and easy.



Extension Units (Steel)

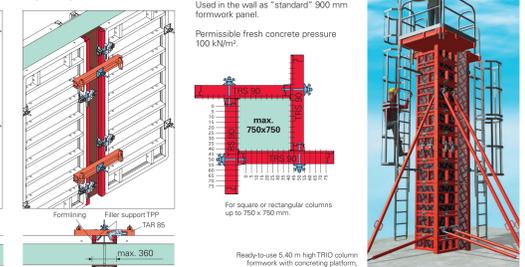
Formwork should be assembled to its full height on the ground!

Height [m]	270	240	120	90	72	60	30	TE	TGE	TGE	TE
240 / 270											
300											
330											
360											
390											
450											
480											
540											

Four BFD couplers are required for 2.40 m or 2.70 m wide panels for extensions up to 5.40 m.

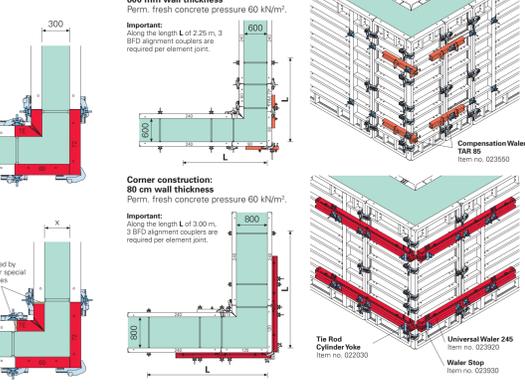
TRIO Column

With elements for walls and columns. Can be used as column panels for cross-sections of up to 750 x 750 mm. Used in the wall as "standard" 900 mm formwork panel.



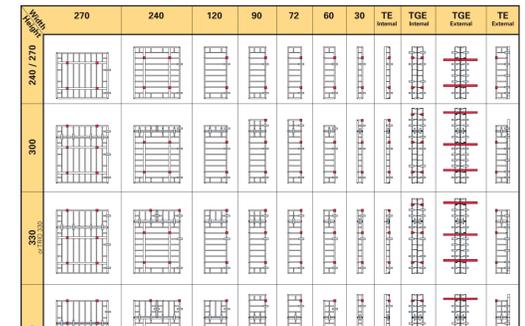
Corner construction: 600 mm wall thickness

Perm. fresh concrete pressure 60 kN/m². Important: Along the length L of 2.25 m, 3 BFD alignment couplers are required per element joint.



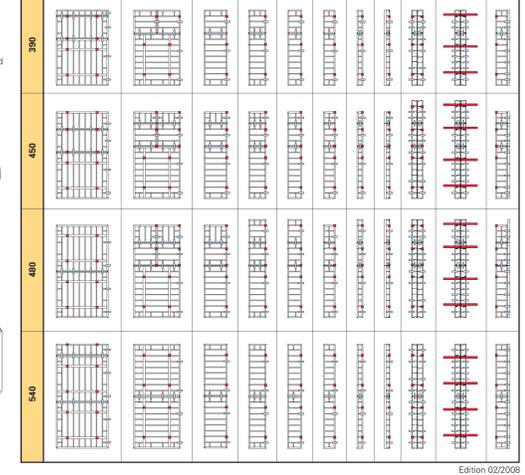
Corner construction: 80 cm wall thickness

Perm. fresh concrete pressure 60 kN/m². Important: Along the length L of 3.00 m, 3 BFD alignment couplers are required per element joint.



Foundations

Individual foundations with TRIO Foundation strap. Item no. 023500.



Two TAR 85 compensation wallers and two BFD alignment couplers are required for extensions up to 8.10 m.

TRIO Panel Formwork

Poster



PERI Product Range



Wall Formwork

Panel Formwork
Girder Formwork
Circular Formwork
Facade Formwork
Brace Frame



Climbing Systems

Climbing Scaffold
Self-Climbing System
Climbing Protection Panel
Platform Systems



Column Formwork

Square
Rectangular
Circular



Scaffold, Stairways, Working Platforms

Facade Scaffold
Working Platform
Weather Protection Roof
Stairway Access



Slab Formwork

Panel Formwork
Beam Grid Formwork
Girder Formwork
Slab Table
Beam Formwork



Bridge and Tunnel Formwork

Cantilevered Parapet Carriage
Cantilevered Parapet Platform
Engineer's Construction Kit



Shoring Systems

Steel Slab Props
Aluminium Slab Props
Tower Systems
Heavy-Duty Props



Services

Formwork Assembly
Cleaning / Repairs
Formwork Planning
Software
Statics
Special Constructions

Additional Systems
Plywood
Formwork Girders
Stopend Systems
Pallets
Transportation Containers



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