

FORMWORK WITH ONE-SIDE TIE TECHNOLOGY







REGAU HEADQUARTERS

Your reliable partner for scaffolding and formwork. RINGER quality since 1944:

- Flexible and quick solutions
- Absolute reliability
- Personal consultation on site
- Fast customised solutions
- We keep our promises
- With absolute passion
- A real family-run company

What are we waiting for? Let's build.

Our head office and the heart of the company is the 111.000 m² manufacturing and logistic facility based in Regau, Austria. Incorporating worldwide distribution to over 50 countries and providing a centre of excellence for research and development makes RINGER a formidable formwork and scaffolding manufacturer.

With subsidiaries in Slovenia, Croatia, Hungary, Czech Republic and Germany, RINGER provides first class design solutions and on-site supervision for the most complex of projects.

Supporting international customers worldwide makes RINGER the ideal partner for all



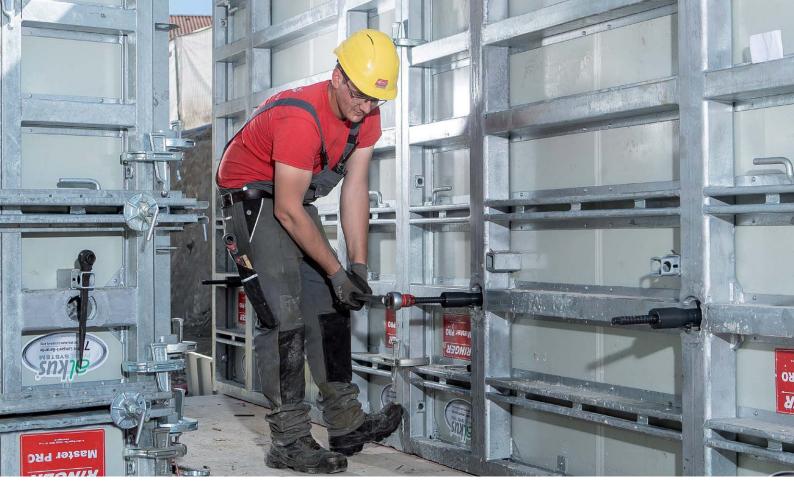


Master wall formwork for your construction site

RINGER WALL FORMWORK SYSTEMS ARE A MATCH FOR THE TOUGHEST APPLICATIONS. THE MASTER SYSTEM, AVAILABLE IN STEEL AND ALUMINIUM, SAVES RESOURCES, TIME AND MONEY ON THE CONSTRUCTION SITE.

Master PRO system

- One-side tie technology
- Sophisticated panel size increments
- Very short forming time for maximum efficiency
- Large-scale formwork using a crane
- Simple handling
- Plastic coated plyood or Alkus solid plastic plywood
- Compatible with Alu Master and Steel Master



Master PRO

THE STEEL FRAME FORMWORK WITH ONE-SIDE TIE TECHNOLOGY FOR THE HIGHEST FORMWORKING SPEEDS.

Master PRO opens a new dimension in formwork efficiency. An innovative one-side tie technology greatly accelerates formworking operations. Furthermore the system meets the rising demands on concrete surfaces.

A conical tie and the sealing system on the anchor sleeve are the most innovative features of this formwork.

3 m of formwork height demand only two rows of ties. Adjustment of wall thickness is just a flick of the wrist, and the system bears a fresh concrete pressure of up to 80 kN/m².

The reduced time required for one-sided anchoring and the large formworking area per anchor allows labour costs to be reduced by more than one third.

Product features

Master PRO

> Performance

· 80 kN/m² fresh concrete pressure

> Versatile

- Panel height: 0.60m / 0.90m / 1.20m / 3.00m
- Panel width: 0.30m / 0.50m / 0.55m / 0.60m
 0.65m / 0.90m / 1.20m / 2.40m

> Faster forming

· Saves more than one third of forming and stripping time

> Reduced costs

- One-sided anchoring by just one person
- · No spacer tubes required
- Long service life and large numbers of cycles
- · Only two rows of ties over 3m of formwork height

> Sturdy and ergonomic geometry

- · Sturdy panels of galvanised steel
- Easy to clean

> Excellent concrete finish

- Tidy joint pattern
- · Symmetrical tie pattern
- · Various sealing methods for the tie holes

> Innovative tie system

- · Conical tie
- Wall thicknesses adjustable from 15-50cm in 1cm increments
- · No spacer tubes required
- · Self-sealing
- · No protruding parts on the standing formwork side

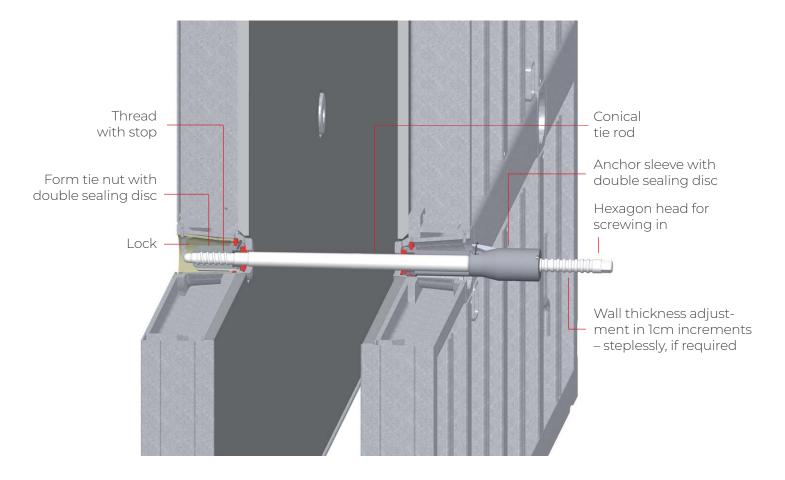
> Plywood

- Plastic coated or
- Solid-plastic plywood Alkus for >1000 cycles

> Compatible with Steel Master and Aluminium Master

One-side tie technology

Sophisticated technology



Form tie nut with lock

The form tie nut with double sealing disc is fitted and locked on the standing formwork side once before the first use. There are no protruding parts, so that the panels can be stacked even with fitted form tie nuts.



Single-sided anchoring

The preadjusted tie rod is screwed in completely on the closing formwork side. No further steps are necessary.



Smart details



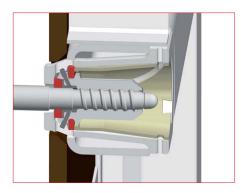
Quick, flexible wall thickness adjustment

The wall thickness can be adjusted at the flick of the wrist and without the use of tools in 1 cm increments, even steplessly, if necessary. Walls from 15 to 50cm can be formed with the three tie rod types. The middle tie rod with 20 to 35cm covers the majority of the usual wall thicknesses.



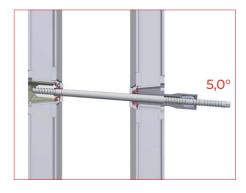
Practical tie rod storage

A storage point for the tie rod is integrated directly at the anchoring point so that it is always quickly on hand.



Perfect sealing

Thanks to the innovative plastic double sealing discs, fair-faced concrete walls can be poured without additional measures. The higher the fresh concrete pressure, the higher the sealing effect. The seal material was specifically developed for this application.



Angles up to 5°

The sophisticated anchoring point allows one or both panels to be inclined by up to 5°. That makes it easy to compensate lateral and height offsets.

Sturdy and functional



For the toughest applications

The profiles of the frame are made of rolled fine-grained steel. They are particularly dimensionally stable, torsion-resistant and durable. The hot dip galvanized panels are designed for a maximum fresh concrete pressure of 80 kN/m².



Manual connection

The robust forged steel Uni-clamp makes the perfect inter-panel connection. Due to integrated clamp wedge, it can be mounted and locked single-handedly.



Aligning clamp

With its aligning effect, the aligning clamp ensures perfekt connection of the panels. In addition it enables timber and compensation infills up to 10cm.



Effortless setup

The notched panel profile allows easy set up and stripping of the formwork using an alignment tool.

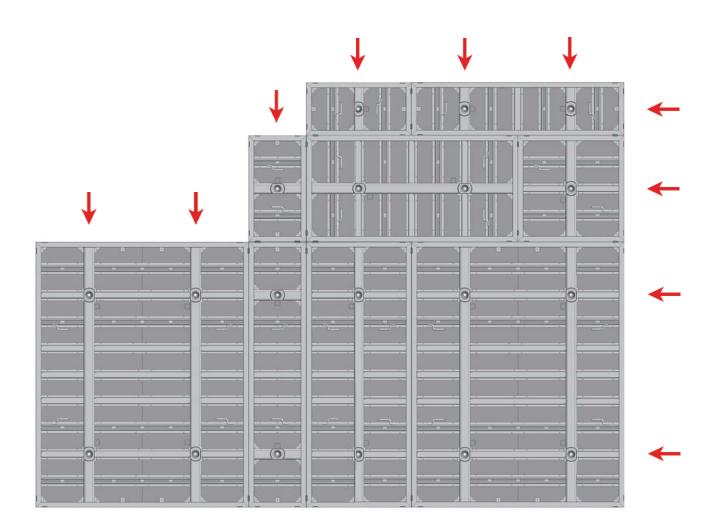
Sophisticated panel size increments

Symmetrically attractive

horizontally or vertically

The tie points are arranged at 60cm intervals. That allows a flexible combination of horizontal and vertical panels as well as panels of different sizes.

The tie points are exactly aligned.











Quality in fair-faced concrete

THE SYMMETRICAL ANCHOR HOLES AND THE SOPHISTICATED PANEL GEOMETRY ENSURE PERFECT FAIR-FACED CONCRETING RESULTS

The inside tie points make the system the best choice for jobs with fair-faced concrete. The special sealing system prevents runners on the concrete surface. The anchor holes are sealed with either exposed concrete plates or exposed concrete plugs.

The right plywood for perfect concreting results





Plastic coated plywood

- Sturdy multi-layered board from cross-glued birch wood. 18mm thick
- Double-side plastic coating [1.8mm]
- Resistant to chemicals and UV
- Easy nailing, no fragmentation
- Maximum abrasion resistance, no jolting marks
- No onion effect & no embrittlement
- No moisture penetration of the wood core
- Simple recycling





Solid-plastic plywood (ALKUS)

- Alkus solid plastic plywood, 19mm thick
- No moisture absorption
- More than 1000 applications
- No shrinking, swelling or rotting
- No rippling or discolouration of the concrete
- High UV resistance and abrasion resistance
- High resistance to acids, alkalis and chemicals
- Easy nailing & simple repairs
- Perfect fair-faced concrete quality
- Easy and fast cleaning using the high pressure cleaner

Article list

Master PRO

Symmetrical panels

The formwork panels are symmetrical and can be combined at random as required. Thanks to the panel height of 300 cm, many construction projects can be formed with just two rows of ties.

All formwork applications can be covered with just 20 different panel types.



Panel height 3.00m (Alkus plywood solid-plastic)

Art. No.	Description	m²	Weight	Art. No.	Description	Weight
10002536	Panel 300/240	1.35m ²	539.0 kg	10002735	Outside corner 300	43.5 kg
10000413	Panel 300/120	1.13m²	292.0 kg	10000509	Inside corner 300/30/30	120.0 kg
10002532	Panel 300/90	0.90m ²	206.0 kg	10002074	Hinged outside corner 300/6/6	65.5 kg
10002538	Panel 300/65	0.83m ²	162.0 kg	10003119	Hinged inside corner 300/30/30	141.0 kg
10002531	Panel 300/60	0.75m ²	154.0 kg	10002277	Compensation panel 300/10	17.0 kg
10002533	Panel 300/55	0.68m ²	145.0 kg	10002276	Compensation panel 300/5	16.0 kg
10000411	Panel 300/50	0.45m ²	136.0 kg	10002275	Compensation panel 300/3	13.5 kg
10000412	Panel 300/30	0.38m ²	98.0 kg	10002081	Compensation panel 300/2	11.8kg
10000414	UNI panel 300/120	1.13m²	243.0 kg	10002051	Stripping corner 300/30/30	225.0 kg

Panel height 2.40m (Alkus plywood solid-plastic)

Art. No.	Description	m²	Weight
10002537	Panel 240/120	1.35m²	229.0 kg
10000416	Panel 240/90	1.13m²	172.0 kg
10000415	Panel 240/60	0.90m ²	128.0 kg

Panel height 1.20m (Alkus plywood solid-plastic)

Art. No.	Description	m²	Weight	Art. No.	Description	Weight
10002545	Panel 120/120	1.35m ²	123.0 kg	10002651	Outside corner 120	18.0 kg
10002544	Panel 120/90	1.13m²	94.0 kg	10000510	Inside corner 120/30/30	52.0 kg
10002543	Panel 120/65	0.90m ²	74.0 kg	10000697	Hinged outside corner	26.0 kg
10002542	Panel 120/60	0.83m ²	70.0 kg	10000428	Hinged inside corner 120/30/30	59.0 kg
10002541	Panel 120/55	0.75m ²	66.0 kg	10001397	Compensation panel 135/10	8.5 kg
10002540	Panel 120/50	0.68m ²	62.0 kg	10001396	Compensation panel 135/5	7.5 kg
10002539	Panel 120/30	0.45m ²	45.0 kg	10004357	Stripping corner 135/30/30	107.0 kg
10000513	UNI panel 120/120	1.13 m²	109.0 kg			

Accessories

Master PRO



Complete tie set 15-30 cm / 20-35 cm / 35-50 cm



Form tie nut set incl. double sealing disc



Master PRO lock Locking wrench



Adapter plug DW15/DW20 for conventional anchoring with tie rod



Fair-faced concrete accessories Cone wrench, exposed concrete plug, exposed concrete plate



Filler plugs for closing anchor sleeves in corner panels



Closing plug 24/38mm for anchor holes in the concrete



RiveStop for watertight sealing of the anchor holes



Push-pull prop size 1 / size 2 / "G" with extension up to 10m formwork height



Push-pull prop with spindle



3S concreting platform



Concreting platform "L" Lenght 2.70m



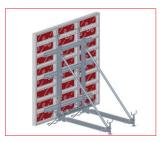
Uni clampfriction locked connection
with a hammer blow



Master aligning clamp friction locked connection up to 10cm opening width



Master clamp, adjustable Adjustment range up to 20cm



Brace frame "L" up to 2.7m



Stop end coupler up to 40cm wall thickness



100 or **150** waler



Uni fixing bolt RS clamp



Brace frame "M" up to 3.3m



Compensation panels 2/3/5/10cm



Hinged corners for inside and outside



Stripping corner for rational internal forming of shafts



Brace frame "S" incl. attachable frame up to 6m

Reference projects



Thanks to the tie rod storage space, the tie rods are always where they should be.



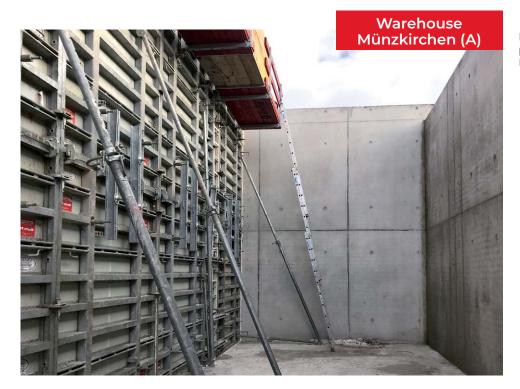


Horizontal and vertical panels are symmetrical, the tie pattern remains harmonious.



The project was oriented to the form of the old state hospital of the Ludwig-Hatschek Foundation that was located next door.

Reference projects



Rapid construction progress thanks to large Master PRO panels.



Optimum formwork for fairfaced concrete results with the Master PRO.



The eight-metre-high walls for the gymnasium were formed with the Master PRO.



LET'S BUILD



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