

www.ringer.at



SYSTEM 2000

**LIGHT FORMWORK SYSTEM
IN ALUMINIUM OR STEEL**

**LET'S
BUILD**



RINGER
SCAFFOLDING + FORMWORK



HEADQUARTERS IN REGAU

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.**

The head office of RINGER 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 construction needs.



AUSTRALIAN PARTNER

Safeguard Formwork
19-21 Cairns St
Loganholme Qld 4129
Ph: 1300 971 603
Email: info@safeguardformwork.com.au





RINGER quality for your construction site

THE COMPACT "SYSTEM 2000" FORMWORK SYSTEM IS THE FIRST CHOICE ON AUSTRIA'S CONSTRUCTION SITES. NOT SURPRISING - AFTER ALL, ITS PANELS ARE ESPECIALLY LIGHT, EXTREMELY RESISTANT AND VERSATILE.

System 2000

- 60 kN/m² fresh concrete pressure
- Very large selection of panels
- Crane independent thanks to low weight
- Developed in 1985, improved continuously
- Aluminium version – AL2000
- Steel version – ST2000
- Slab formwork – AluDEK

The systems are mutually compatible so they can be used in a wide variety of ways.



AL2000

THE LIGHTWEIGHT FORMWORK FROM RINGER. THE ALUMINIUM SYSTEM IMPRESSES WITH ITS LOW WEIGHT AND HIGH RESILIENCE.

The system is a genuine allrounder for every construction site deployment. The AL2000 formwork has a fresh concrete pressure capacity of 60 kN/m² and is our lightest formwork system. Closed hollow chamber profiles provide for low weight while ensuring high resilience.

Additional handles and smooth profiles enable optimum and crane independent handling. Uncomplicated and fast to use, AL2000 is Austria's most popular hand-set formwork.

The system is perfect for foundations, garden and pool construction as well as supporting walls and basements. The AL2000's low weight also makes it ideal for construction work on existing buildings and for indoor use.

Product features

AL2000

> Performance

- Low weight 21 kg/m²
- 60 kN/m² fresh concrete pressure

> Versatility

- Panel height: 1.35m / 2.70m / 3.00m
- Panel width:
25cm / 30cm / 40cm / 45cm / 50cm / 60cm / 75cm / 90cm
- Special sizes possible on request

> No crane required

> Stable and ergonomic geometry

- Closed hollow chamber profile made of aluminium
- Easy to clean
- Simple handling thanks to additional handle tubes

> Compatible with ST2000

> Wall formwork as slab formwork

- Compatible with the AluDEK modular slab formwork system

> Austria's most popular hand-set formwork system

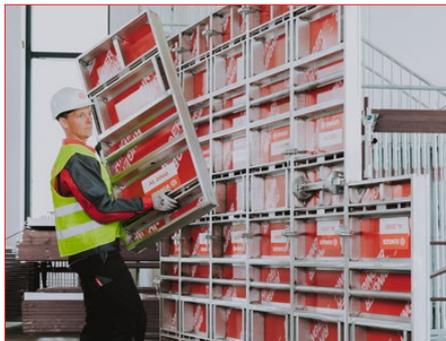
Quality is in the details

AL2000



Robust closed hollow chamber profiles made of aluminium

The frame of the AL2000 panel consists of a dimensionally stable, torsion-resistant, closed hollow chamber profile. The projecting edge protects the plywood from damage. The high-quality aluminium profiles are extremely light, durable, robust and designed for a maximum fresh concrete pressure of 60 kN/m².



Low weight – only 21 kg/m²

The sophisticated design of the formwork panels ensures highest levels of robustness, while keeping the weight as low as possible. They can therefore be set up quickly by only one person with minimum effort.



Optimum cleaning

The frame profiles are smooth and have two contact surfaces. This makes them particularly easy to clean and saves time when shuttering and stripping.



Additional handles

The AL2000 panels are equipped with practical carrying handles. This makes the panels particularly easy to handle and saves time and manpower.



AL2000 – Slab use

WALL FORMWORK AS SLAB FORMWORK

With our innovative AluDEK system, the AL2000 wall formwork can be transformed easily, quickly and inexpensively into a slab formwork.

All you need is the RINGER AluDEK head for edges, joints and corners.

All AL2000 panels can therefore be used for forming slabs. For faster forming and larger areas, we offer compatible modular slab panels with a size of 1.82m². The AluDEK is a beam-less slab formwork system designed as a lightweight aluminium construction (16.0 kg/m²). It is developed for quick forming of slabs by hand. Its simple handling, few individual parts and forming of up to 30cm thick slabs without additional supports make the AluDEK a highly cost-effective, flexible system. Slabs of up to 50cm are possible with additional supports.



ST2000

THE STRONGEST LIGHTWEIGHT FORMWORK SYSTEM.

VERSATILE YET ASTONISHINGLY RESILIENT.

The ST2000 system stands for flexible and particularly cost-effective use. A variety of panel sizes makes it suitable for every floor plan. The robust design of galvanized steel impresses with extra high longevity.

Thanks to their practical and compact construction, all panels can be positioned by hand.

Utilisation without the need for a crane saves time and labour costs on every construction site. Equipped with high-quality RINGER plywood, the system meets the strictest requirements for superlative concreting results.

Product features

ST2000

> Performance

- 60 kN/m² fresh concrete pressure

> Versatility

- Panel height: 1.35m / 2.70m / 3.00m
- Panel width:
25cm / 30cm / 40cm / 45cm / 50cm / 60cm / 75cm / 90cm
- Special sizes possible on request

> No crane required

> Stable and ergonomic geometry

- Closed, smooth frame profile made of steel
- Easy to clean
- Simple handling thanks to practical handles
- Robust, galvanised steel construction with premium hot-dip galvanised finish

> Compatible with AL2000

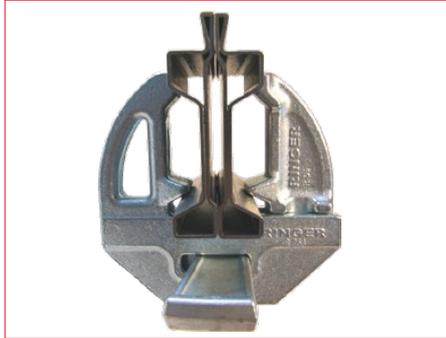
> Extremely flexible and convertible

- Wide variety of panels

> Cost-effective

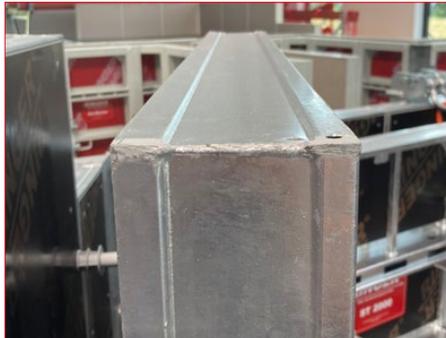
Robust and functional

ST2000



Strong profile

The frames of the panels are made of rolled fine-grained steel. The profiles are dimensionally stable, torsion-resistant and durable. The projecting edge protects the plywood from damage. The hot-dip galvanised panels are designed for a maximum fresh concrete pressure of 60 kN/m².



Optimum transport and cleaning

The frame profiles of the ST2000 are only 10cm wide, so they require less space during transport. The smooth profile design makes them particularly easy to clean, which saves time when shuttering and stripping.



Practical handles

The ST2000 panels are equipped with welded carrying handles. This makes the panels particularly easy to handle and saves time and manpower.



Forming without a crane

The reduced weight of the ST2000 panels enables forming with no need for a crane. Additional profiles make it easier to manipulate the panels.

Smart details

System 2000



One-handed connection

The robust, forged-steel quick-wedge clamps ensure that panels are connected perfectly. Thanks to the integrated clamping wedge, they can be attached and closed with only one hand.



Proven and tested anchor system

The formwork panels are anchored with tie rods and movable combi plates. This means that even slanting panels can be strongly connected at any time.



Clean storage with the pallet

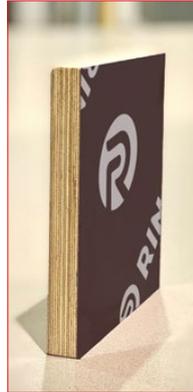
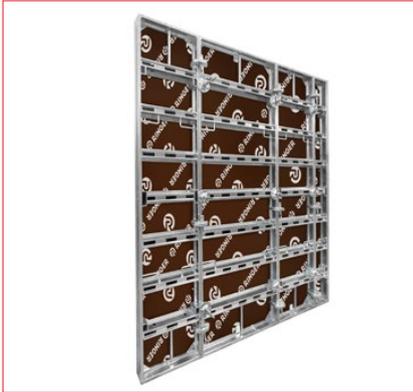
RINGER pallets ensure better logistics on the construction site, in the warehouse and during transport. The pallets are suitable for transport by crane or forklift and can be stacked. All AL2000 panels are suitable for the pallet.



Well-rounded

The combination of standard panels with circular forming plates and uni walers make it easy and economical to form curves.

Plywood for perfect concreting results



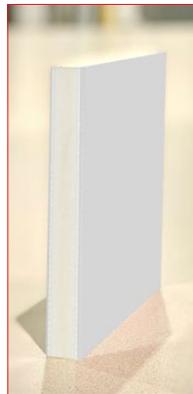
Phenolic coated plywood

- Sturdy multi-layered board of cross-glued birch wood, 15mm thick
- Double-side phenolic resin sealing [220g/m²]
- Edges sealed with water resistant varnish
- Smooth surface for superlative concret results
- Excellent strength to weight ratio
- Simple recycling



Plastic coated plywood

- Sturdy multi-layered board from cross-glued birch wood, 15mm 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
- Perfect fair-faced concrete quality
- No moisture penetration of the wood core
- Simple recycling



Solid-plastic plywood (ALKUS)

- Alkus solid plastic plywood, 15mm 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



Optimum height, high-grade plywood

PANEL HEIGHTS UP TO 300CM.
PLYWOOD SELECTABLE AS REQUIRED.

The usual panel heights of 1.35m and 2.70m have now been supplemented with a 3.0m version. This makes the formwork adaptable to any structure.

System 2000 is available with three different plywood qualities for both aluminium and steel versions. The particularly robust, high-quality Alkus solid plastic plywood enables more than 1000 uses on the construction site.

Comprehensive configuration

Product in use

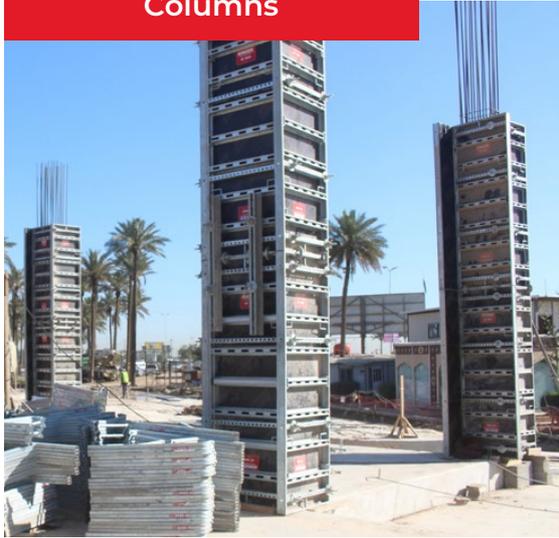




Round walls

Ideal for use with circular forming plates

Columns



Easily formed with UNI panels

Safety



Panel heights up to 3 metres

The product range is completed with concreting platforms, brackets, props and brace frames.

Article list

AL2000/ST2000

Panel height 3.00m
(plastic coated plywood)

Description	m ²	Weight
AL2000 Panel 300/75	2.25m ²	54.00 kg
AL2000 Panel 300/60	1.80m ²	46.50 kg
AL2000 Panel 300/50	1.50m ²	41.00 kg
AL2000 Panel 300/45	1.35m ²	39.00 kg
AL2000 Panel 300/40	1.20m ²	36.00 kg
AL2000 Panel 300/30	0.90m ²	30.50 kg
AL2000 Panel 300/25	0.75m ²	28.00 kg

Description	m ²	Weight
ST2000 Panel 300/90	2.70m ²	91.30 kg
ST2000 Panel 300/75	2.25m ²	80.50 kg
ST2000 Panel 300/60	1.80m ²	72.60 kg
ST2000 Panel 300/50	1.50m ²	61.60 kg
ST2000 Panel 300/45	1.35m ²	56.10 kg
ST2000 Panel 300/40	1.20m ²	51.70 kg
ST2000 Panel 300/30	0.90m ²	46.20 kg
ST2000 Panel 300/25	0.75m ²	41.80 kg
ST2000 Uni Panel 300/90	2.70m ²	95.70 kg

Description	Weight
Outside corner 300cm, galvanised	28.50 kg
Inside corner 300/20/20cm, galvanised	59.00 kg
Hinged outside corner, galvanised	44.50 kg
Hinged inside corner, galvanised	67.00 kg
Compensation panel 300/10cm, galvanised	19.00 kg
Compensation panel 300/5cm, galvanised	13.30 kg
Compensation panel 300/3cm, galvanised	12.30 kg
Compensation panel 300/2cm, galvanised	11.10 kg

Panel height 2.70m
(plastic coated plywood)

Description	m ²	Weight
AL2000 Panel 270/90	2.43m ²	54.00 kg
AL2000 Panel 270/60	1.62m ²	42.00 kg
AL2000 Panel 270/50	1.35m ²	37.00 kg
AL2000 Panel 270/45	1.22m ²	34.00 kg
AL2000 Panel 270/40	1.08m ²	32.00 kg
AL2000 Panel 270/30	0.81m ²	26.00 kg
AL2000 Panel 270/25	0.68m ²	24.00 kg
AL2000 Uni Panel 270/90	2.43m ²	60.00 kg

Description	m ²	Weight
ST2000 Panel 270/90	2.43m ²	83.00 kg
ST2000 Panel 270/60	1.62m ²	66.00 kg
ST2000 Panel 270/50	1.35m ²	57.00 kg
ST2000 Panel 270/45	1.22m ²	51.00 kg
ST2000 Panel 270/40	1.08m ²	47.00 kg
ST2000 Panel 270/30	0.81m ²	42.00 kg
ST2000 Panel 270/25	0.68m ²	38.00 kg
ST2000 Uni Panel 270/90	2.43m ²	87.00 kg

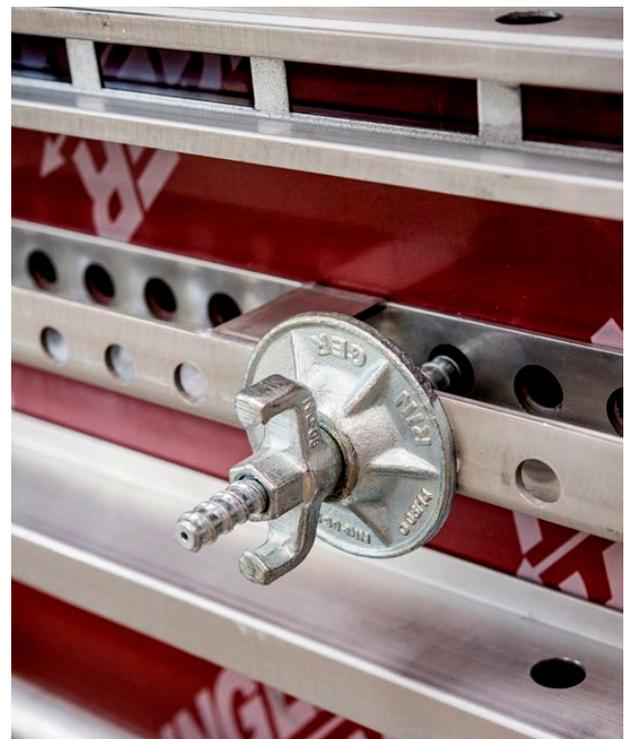
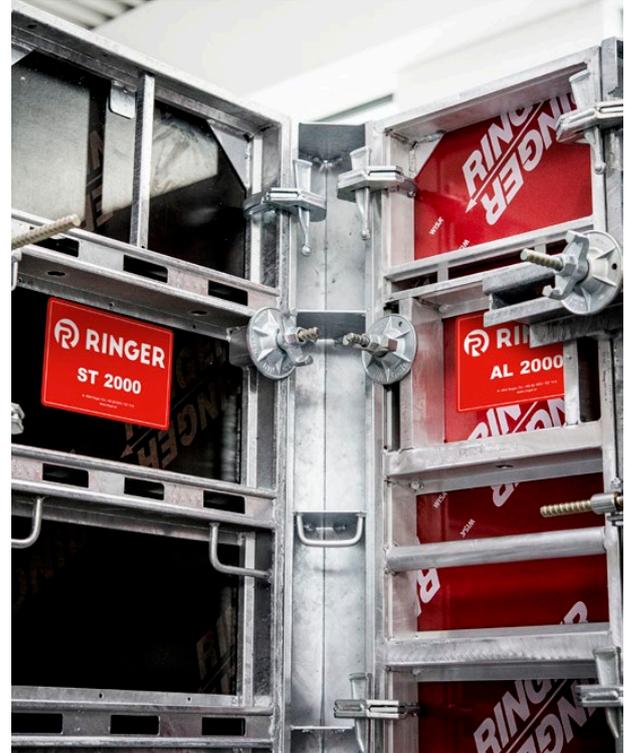
Description	Weight
Outside corner 270cm, galvanised	27.50 kg
Inside corner 270/20/20 cm, galvanised	53.00 kg
Hinged outside corner, galvanised	40.00 kg
Hinged inside corner, galvanised	60.00 kg
Compensation panel 270/10cm, galvanised	17.00 kg
Compensation panel 270/5cm, galvanised	12.00 kg
Compensation panel 270/3cm, galvanised	11.00 kg
Compensation panel 270/2cm, galvanised	10.00 kg
Circular forming plate 270/25cm, galvanised	56.00 kg
Circular forming plate 270/20cm, galvanised	54.00 kg
Stripping panel 270/10cm, galvanised	46.00 kg

Panel height 1,35m
(plastic coated plywood)

Description		m ²	Weight
AL2000	Panel 135/90	1,22m ²	28,50 kg
AL2000	Panel 135/60	0,81m ²	21,00 kg
AL2000	Panel 135/50	0,68m ²	18,50 kg
AL2000	Panel 135/45	0,61m ²	16,50 kg
AL2000	Panel 135/40	0,54m ²	15,00 kg
AL2000	Panel 135/30	0,41m ²	12,00 kg
AL2000	Panel 135/25	0,34m ²	11,00 kg
AL2000	Uni Panel 135/90	1,22m ²	28,50 kg

Description		m ²	Weight
ST2000	Panel 135/90	1,22m ²	43,00 kg
ST2000	Panel 135/60	0,81m ²	32,00 kg
ST2000	Panel 135/50	0,68m ²	30,00 kg
ST2000	Panel 135/45	0,61m ²	28,00 kg
ST2000	Panel 135/40	0,54m ²	26,00 kg
ST2000	Panel 135/30	0,41m ²	23,00 kg
ST2000	Panel 135/25	0,34m ²	20,00 kg
ST2000	Uni Panel 135/90	1,22m ²	44,00 kg

Description	Weight
Outside corner 135cm, galvanised	13,50 kg
Inside corner 135/20/20cm, galvanised	27,00 kg
Hinged outside corner, galvanised	21,00 kg
Hinged inside corner, galvanised	32,00 kg
Compensation panel 135/5cm, galvanised	7,20 kg



Accessories

System 2000



Quick wedge clamp
forged



Adjustable clamp
Adjustment range 20cm



Foundation clamp
Perforated tape



Master stop end coupler
up to 45cm wall thickness



Combi plate DW15



Tie rod DW15



Spacer tube
watertight



Crane hook
load-bearing capacity up to 1.600 kg



Push-pull prop and push-pull prop "G"



Scaffolding bracket
for System 2000



Concreting platform "L"
for System 2000



Brace frame "S"
up to 4.5m; up to 6m with
attachable frame



Water 100 or 150



**Uni fixing bolt
RS-clamp**



UNI container
stackable, with or without
flap (800x1200mm)



Brace frame "M"
up to 3.3m



Brace frame "L"
up to 2.7m



Accessory box
stackable, e.g. also with
pallet for formwork



Compensation panel
2/3/5/10cm



Hinged corners
inside and outside



Circular forming plate



Stacking frame
for up to four pallets, one
above the other

Reference projects

Housing
Ljubljana



The ST2000 panels can be used vertically or horizontally, as required.

The lightweight aluminium formwork is ideal for small-scale construction uses. In this case, a support wall was created for a residential project.



Supporting wall
Gmunden



**Schönbrunn/Vienna
Zoo**

The Barbary sheep and Barbary macaques at Schönbrunn Zoo are getting a new enclosure. AL2000 was used as formwork for the buildings and other structures.



**Karpfenstein
concrete plant**

Use over several storeys is no problem at all with System 2000. The variety of panels allows any floor plan to be implemented with ease.

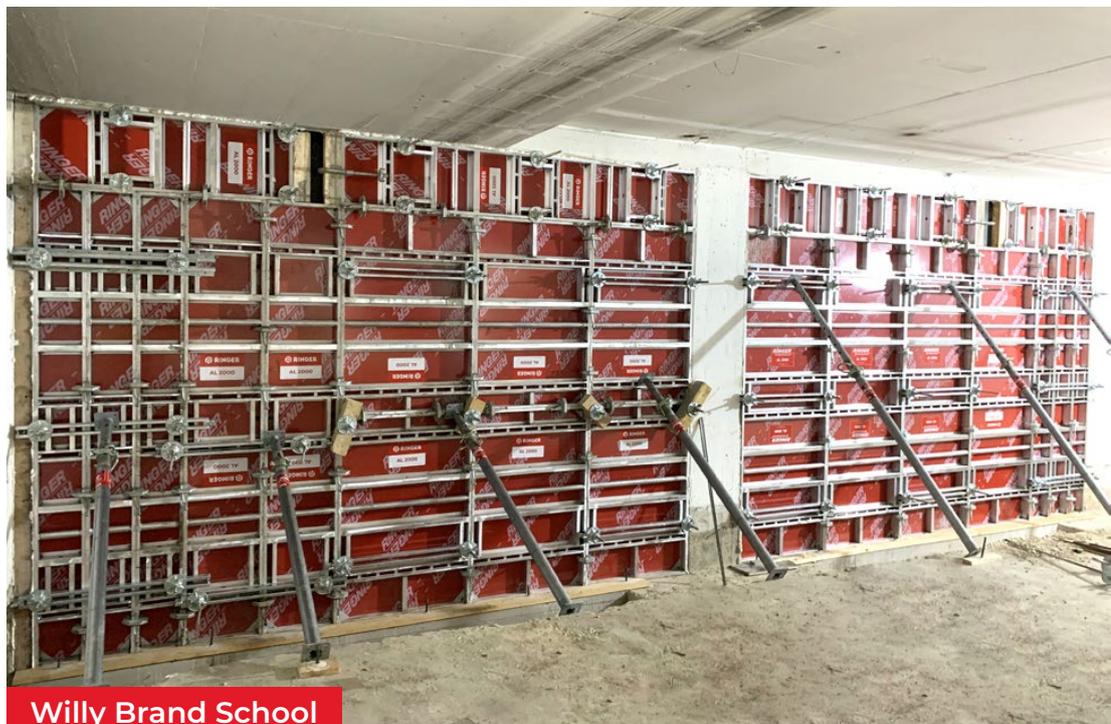
Reference projects

**Basement construction
St. Marien**



System 2000 with 3m panel height and Alkus solid plastic plywood.

Thanks to its lightweight panels, System 2000 is also ideal for use indoors, in backyards and in cramped inner city areas.



**Willy Brand School
Munich**



**Machine hall
Wagrain**

Thanks to perfectly coordinated accessories, such as corners, hinged corners and compensation panels, even complicated floor plans can be implemented quickly.



**Training centre
Frankenburg**

AL2000 in combination with AluDEK is ideal as slab formwork. This minimises infill zones with formwork panels.

LET'S BUILD



AUSTRALIAN PARTNER
Safeguard Formwork
19-21 Cairns St
Loganholme Qld 4129
Ph: 1300 971 603
Email: info@safeguardformwork.com.au

