

SLAB FORMING IN HIGH SPEED AT ITS BEST WITH OUR SLAB FORMWORK SYSTEMS!







COMPANY HEADQUARTERS AND MAIN YARD FACILITY, REGAU, AUSTRIA

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

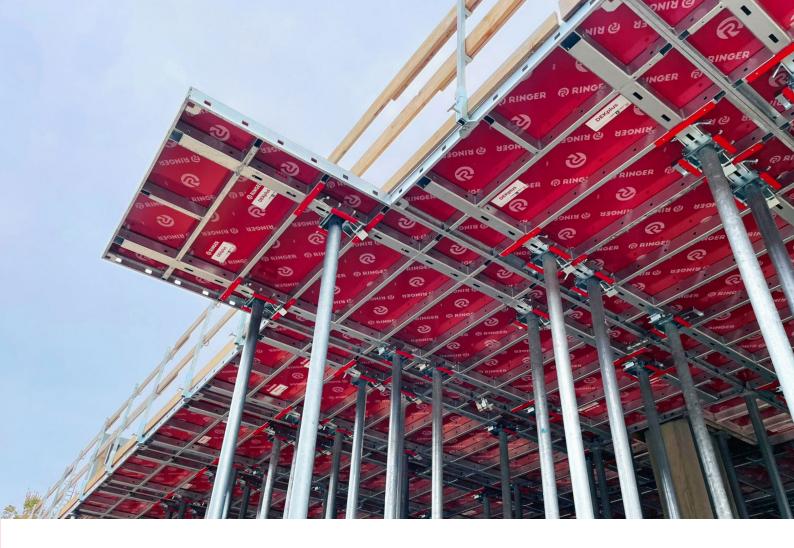
What are we waiting for? Let's build.

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 construction needs.





Slab forming in high speed at its best!

RINGER SLAB FORMWORK SYSTEMS ARE THE PER-FECT ASSIST ON YOUR PROJECT. OPTIMALLY MATCHED COMPONENTS LAY THE GROUNDWORK OF YOUR SUCCESS.

On sites large or small, for layouts simple or complex, the RINGER AluDEK and DEKplus slab-formwork system family is always the right choice.

AluDEK

- Beamless handset formwork, lightweight aluminium
- Fast, safe forming from ground level
- Extremely light and very, very fast
- Slim overall height of 10 cm, a single pallet holds panels for 36.4m²
- Formwork with a surface area up to 582 m² on a single semi-trailer

DEKplus

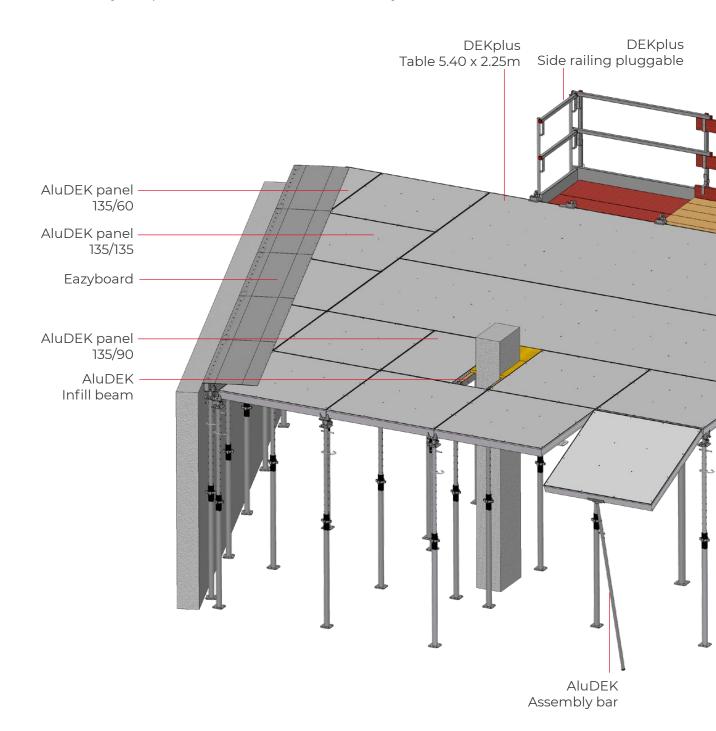
- Table sizes 5.40 x 2.25m (12.15m²) / 5.40 x 1.80m (9.72m²)
- Space-saving because overall height is a slim 12 cm
- High-performing and safe

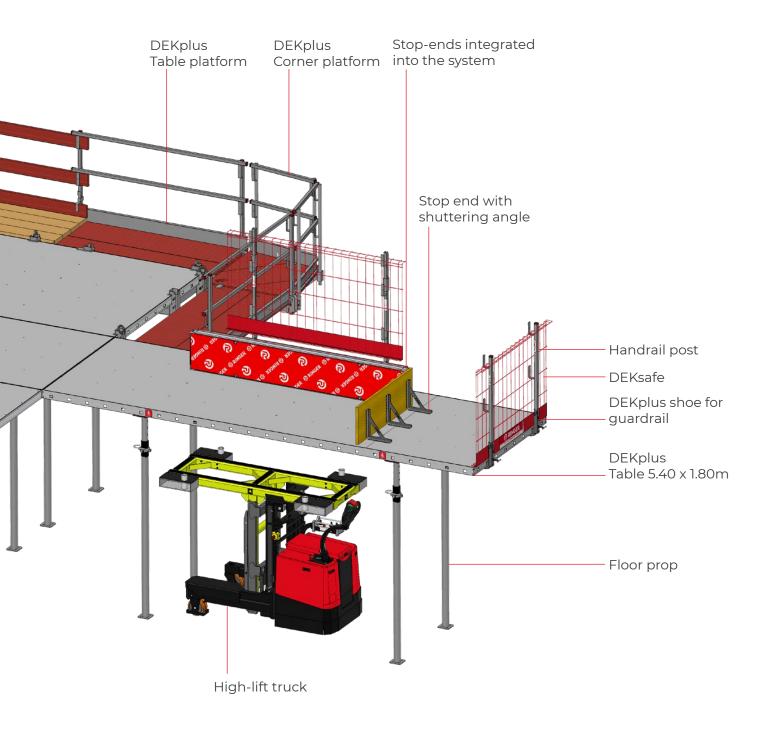
Designed for a perfect match

AluDEK & DEKplus

A slab formwork system with zero compromises

AluDEK and DEKplus combine perfectly with each other, the panels are 100% compatible. All safety components can be installed and removed without tools. The add-on components and also the safety components are all resolved within the system.







AluDEK

THE ULTRA-LIGHTWEIGHT MODULAR SLAB FORM-WORK, MADE OF ALUMINIUM, FOR FAST FORMING OF LARGE AREAS.

AluDEK is a beamless, aluminium lightweight (16.0 kg/m²) handset formwork system.

The system combines the advantages of panel slab formwork system with those of beam formwork. That means rapid forming in the typical area and flexible forming in the infill areas.

The system consists of only three main components: prop, head and panel. The AluDEK head is suitable for edge, panel-to-panel and corner areas, making handling of the system both easy and efficient.

Product features

AluDEK

> Super-fast

- Fastest floorplan formed and stripped out at rate of 0.14 h/m²
- Averaging a mere 0.19 h/m²

(Guide work times in building construction (ARH values) as quoted in the Handbook for Construction Work Organisation (Handbuch Arbeitsorganisation Bau), Formworking/system formwork, slabs 2023 (Schalarbeiten/Systemschalung Decken 2023, Zeittechnik-Verlag)

> High-performing

- · Lightweight panels only 16 kg/m²
- · Slabs up to 35 cm thick without additional propping
- Thicker slabs possible with additional propping

> Versatility

- Panel sizes: 1.35 x 1.35m (1.82m²), 1.35 x 0.90m (1.215m²),
 1.35 x 0.60m (0.81m²), 1.35 x 0.45m (0.60m²)
- Any floorplan easy to form

> Save time, cut costs

- · Fewer individual components and low weight
- · A single head for all applications (edge, panel-to-panel and corner areas)
- Large-area forming with 1.82 m² of coverage per panel
- Standard floor props with 20 kN are enough

> Low transport volume

- Slim overall height of 10 cm, a single pallet holds panels for 36.4 m²
- Up to 582 m² of formwork in pallets, plus accessories, on a single semi-trailer

> Sturdy, ergonomic geometry

- Sturdy panels made of aluminium
- Closed edge profiles for easy cleaning

> Safety throughout assembly and disassembly

- From floor level
- Panels are easily hooked into place and swung up into position
- Drop head with quick-lowering function for safe stripping of the formwork

> Compatible with DEKplus slab table

> Compatible with AL2000 wall formwork panels

Fewer components

Faster working

The innovative AluDEK slab formwork system consists of only three standard main components:

- AluDEK panel
- AluDEK head
- Standard 20 kN floor props

Easier & faster Video of setup procedure:







Your benefit

One AluDEK head for all areas







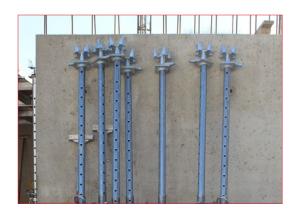
Edge area



Corner area

Design-perfect details

Efficient assembly



35 cm slab thickness with standard floor props

For forming slabs up to 35 cm in thickness, standard 20 kN floor slabs are sufficient. Thicker slabs can be casted when additional propping is provided.



Quick-lowering function for efficient stripping of the formwork

The AluDEK head features a quick-lowering function. When it's time to strip the formwork a blow with the hammer releases the lowering wedge, making the job of removing the formwork panels conveniently easy.



Wall formwork as slab formwork

AluDEK can be combined with AL2000 panels in any configuration. The profiles have the same cross-sectional geometry as AluDEK so any combination is possible, no adapters needed.



Assembly is a straightforward job for two persons

The all-aluminium profiles make the AluDEK panels extremely light. Weight is a mere 16 kg/m², so the panels are easily carried by one person on their own; assembly is a two-person job with both working from the safety of ground level.

So the system offers maximum safety because noone is working at a height. Any direction of assembly is possible.

AluDEK
High speed
forming at
its best



Faster working

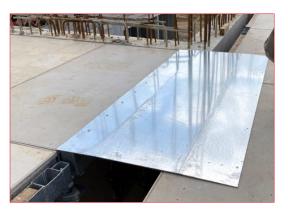
Versatile closures



Closure with suspension bracket H20

The brackets are ideal for all closures at the panel edge or slab edge, no extra floor props are needed.

A second H20 beam can carry formwork sheets 21mm or 27mm thick laid directly on top.



Eazyboard

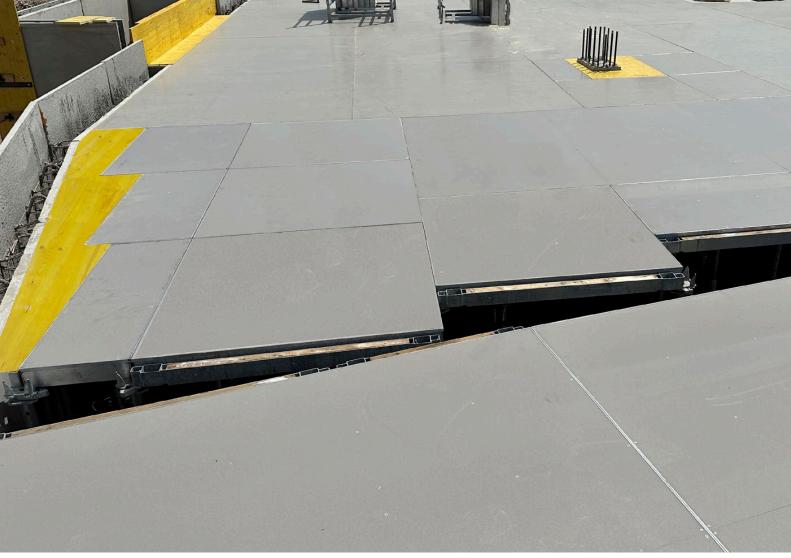
This innovative system for dealing with closures and infills can be used with all slab formwork systems. Maximum closure width is 45 cm for a slab thickness of 35 cm.

Eazyboard can be re-used without restriction and causes no wastage. After being stripped out and cleaned it is immediately ready to be used again.



Infill areas

The infill beams hooked into the AluDEK head enable straightforward and fast forming at infill areas and around fixtures. The infill beam can be turned over, so it is suitable for formwork sheet thicknesses 27mm and 21mm.



This is modern slab formwork

SYSTEM SOLUTION, FEWER OFFCUTS, RE-USABLE.

Our slab formworks do not burden the environment or your budget. With innovative, practical solutions we minimise resource consumption on jobsites and so reduce costs.

High-level compatibility and versatile components mean that we have the right solution for any set of requirements. This is sustainable and efficient construction with RINGER!



Optimum handling



Space-saving, safe pallets

AluDEK formwork panels are transported in pallets for aluminium formwork with extra safety bows. So the panels can be stacked and transported safely and with no space wasted. With a footprint of only 3.4 m², each pallet can hold the panels for up to 36.4 m² of slab formwork.



Safe in the wind

With the AluDEK wind lift safety bracket, the formwork remains stable despite high wind speeds.



Easy to clean

The smooth, closed profiles are very easy to clean. Removing concrete residues is a quick, no-fuss operation.

Overview of components

AluDEK



AluDEK head with quick-lowering function



Aluminium **AluDEK assembly bar** 220 - 375cm / 245 - 425cm



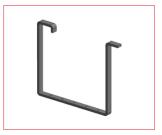
Infill beam 21+27mm 135cm / 90cm



Adjustable quick-acting clamp short for AluDEK



AluDEK adapter for guardrail clamp



H20 suspension bracket for AluDEK



AluDEK beam for H20 suspension bracket 135cm / 90cm



H20 suspension bracket for AluDEK and DEKplus



AluDEK wind lift safety bracket



Eazyboard galvanised



20 kN props



AluDEK panels 135 x 135 / 90 / 60 / 45cm



The right formwork sheeting for perfect concrete results





Phenolic-resin coated

- Robust cross-glued birchwood multi-ply formwork sheet, thickness 12mm
- Phenolic-resin sealing lacquer coat on both sides (220 g/m²)
- Edges sealed with water-resistant paint
- Smooth surface for perfect fair-faced concrete results
- Outstanding strength-to-weight ratio
- Easy recycling





Plastic-coated

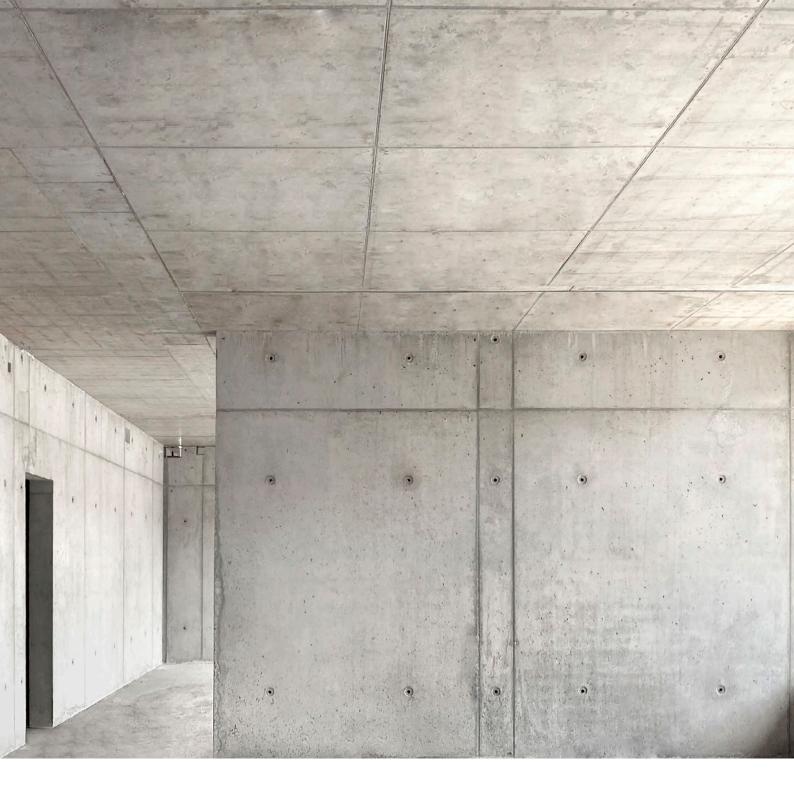
- Robust cross-glued birchwood multi-ply formwork sheet, thickness 12mm
- Plastic facing (1.6mm) on both sides
- Chemically resistant, resistant to ultraviolet light
- · No-problem nailing, no splintering
- Ultra hard-wearing, no vibrator marks
- No onion-peel effect, no embrittlement
- No moisture penetration of the wooden core
- Easy recycling





All-plastic Alkus

- Alkus all-plastic sheet, 12.9mm thick
- Zero moisture absorption
- Up to 1500 use cycles
- · No shrinkage, swelling or rotting
- No rippling or discolouration of the concrete
- High resistance to ultraviolet light & abrasion resistance
- High resistance to acids, alkalis and chemicals
- No-problem nailing & easy repairs
- Perfect fair-faced concrete quality up to class SB 4
- Quick and easy cleaning with a high-pressure washer



Quality on and in the slab

THE SQUARE SHAPE OF THE FORMWORK PANELS PRODUCES A CLEAR JOINT PATTERN ON THE SLAB.





DEKplus

DEKPLUS SETS STANDARDS FOR COMPATIBILITY, EFFICIENCY AND ECONOMY.

THE TABLEFORM IS A NO-COM-PROMISES DEVELOPMENT FOR JOBSITE EFFICIENCY.

The slimness and the scaled grid dimensions of the tableforms are perfectly matched to our AluDEK modular slab formwork. Infills can be closed quickly with infill beams and shuttering boards.

The optimum-design safety accessories such as platforms and edge protection ensure maximum safety in every phase of the build.

Product features

DEKplus

> High-performing

- Table sizes 5.40 x 2.25 m (12.15 m²) / 5.40 x 1.80 m (9.72 m²)
- Up to 50 cm slab thickness, flatness is compliant with DIN 18202
 Table 3 Group 7 requirements
- Maximum slab thickness according to the instructions for assembly and use is 70 cm; up to 110 cm possible with project-specific planning

> Space-saving

- · Overall height is slim 12 cm
- Formwork with a surface area up to 480 m² transported on a single semi-trailer
- · Crane hooks are sized for up to 5 tables to be crane-lifted at once

> Economical

- > 33 % faster forming than with H20 tableforms
- > 50 % lower refurbishment costs than with H20 tableforms
- > 60 % lower transport costs than with H20 tableforms

> Robust and durable

- Frame fully galvanised with all-round edge protection
- Plastic coated plywood, 15 mm thick
- Integral plastic plates protect the plywood when the tables are being stacked, also with prop heads installed

> Zero-compromises compatibility

- Compatible with AluDEK
- With appropriate adapters, AluDEK can also be installed directly on the tables, no additional floor props needed
- Simple infills with shuttering boards 21 and 27mm on AluDEK infill beams

> Utmost safety

- · Almost entirely toolless installation of the safety components
- Table platforms with integral edge protection can be installed all round, also corner platforms
- Even more safety thanks to gapless edge protection systems

Design-perfect details

Optimum handling



Spacing-saving because slim in height

The slim overall height of only 12 cm means that a single semi-trailer can transport the tables for 480 m² of concrete floor slab. In the majority of cases this is enough for an entire construction jobsite.



Functional crane hook

The special DEKplus crane hook is sized so that up to 5 tables can be lifted at once. It is self-locking and needs very little space at either side of the table or stack. This enables fast and efficient installation of the table on site.



Manoeuvrable high-lift truck

The manoeuvrable high-lift truck makes the job of stripping out the tableforms quick and easy. It can move forward/back and sideways. The high-lift truck fits neatly between the rows of floor props and can turn in its own length.

Versatility and durability



Prop heads swivel to either side

The DEKplus prop head is designed as the safe attachment for floor props with head plates up to 150 x 150 mm.

It can be installed anywhere and for maximum working convenience it swivels in both directions, can be operated from floor level and self-latches securely when swivelled back into position. At only 6 kg it is truly lightweight; a single pin is all that is needed for installation.



Robust and durable

The frame of the DEKplus is fully galvanised and has all-round edge protection. Integral plastic plates protect the plywood of the next table down in the stack.



Slab thicknesses up to 70 cm

The DEKplus table is supported on either 4 or 6 floor props, depending on slab thickness and floor-to-ceiling height. DIN 18202 Table 3 Group 7 flatness maintained up to a slab thickness of 50 cm. The maximum slab thickness is 70 cm but thicker slabs are possible in special cases.

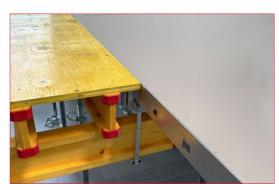
Design-perfect details

Closures made easy



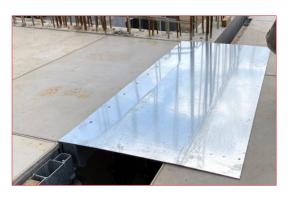
Straightforward infills

Closures are made with AluDEK infill beams and strips of 21/27 mm shuttering boards. Infill-beam adapters make installing the infill beams a no-tools operation.



Closure with suspension bracket H20

The brackets are ideal for all closures at the table edge or slab edge, no extra floor props are needed. The bracket hooks directly into the assembly holes in the DEKplus table. A second H20 beam can carry shuttering boards 21 mm or 27 mm thick laid directly on top.



Eazyboard

This innovative system for dealing with closures and infills can be used with all slab formwork systems. Maximum closure width is 45 cm for a slab thickness of 35 cm.

Eazyboard can be re-used without restriction and causes no wastage. After being stripped out and cleaned it is immediately ready to be used again.



Zero-compromises compatibility, ideal with AluDEK

The DEKplus tableform is designed for maximum versatility. Adapters ensure combinability with AluDEK panels.

Safety and convenience



No-tools installation of the safety components

The frame of the DEKplus table is designed so that add-on parts and accessories can be installed without the use of tools. So safety gear, stop-ends and extensions are quickly installed and removed at any time. It adds up to zero-compromises safety and convenience on the job.



All-round edge protection

Safety at the slab edge with table platforms that can be installed all round and corner platforms with integral edge protection railings. The handrail-post shoe for the side protection grid slots into any of the side holes along the edge profile, no tools required.



Platforms

The platforms can be hooked in with the railings already upright and lock automatically in place at the edge of the table. The table platforms have integral edge protection railings that only have to be raised to the vertical. No further work from below is required.

Design-perfect details

Practical and versatile



Stop-end with integral edge protection

The DEKplus shoe for guardrail with stop ends combines easy stop-end shuttering with maximum safety. The shoe for guardrail can be installed anywhere along the edge profile. The slider for the stop-end can be extended to any position in the range from 1 cm to 37 cm.



DEKplus ideal as balcony table

The DEKplus support head for cross beam makes forming balconies a simple job. The procedure is versatile, so if space is restricted the floor props can be set up securely at any point.



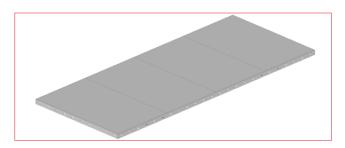
Unloading platform 5000 kg

The RINGER unloading platform 5000 kg is the ideal solution for materials storage and transport on the exterior of the structure. Inside usable width is 2.58 m and usable platform area is 13 m², so this platform offers ample space for shifting DEKplus tables out of the structure.



Overview of components

DEKplus



DEKplus tableform 540 x 225cm / 540 x 180cm

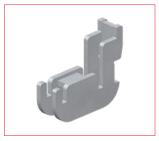


DEKplus head with protective caps



DEKplus head for secondary beam





DEKplus adapter for AluDEK DEKplus adapter for infill beam



Infill beam 21+27mm 135cm / 90cm



DEKplus connection rail



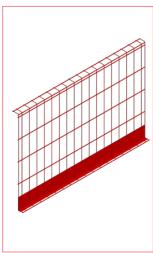
DEKplus table platform 220cm / 175cm



DEKplus corner platform



DEKplus side railing pluggable for corner platforms and for the short side of the table platforms



Side protection grid/DEKsafe 2.70m / 2.20m / 1.75m / 1.45m



Shoe for guardrail with stop ends



Shoe for guardrail for edge protection



DEKplus handrail post 35cm



Guardrail post for side protection grid 112cm



DEKplus crane hook Load-bearing capacity 780 kg



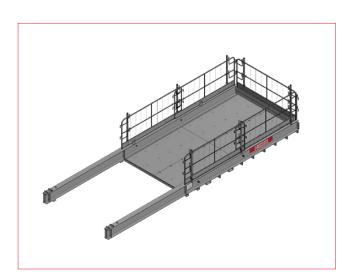
Rubber-headed hammer No-bounce



Wooden batten 7.5 x 10 x 190 cm



Shifting fork 1.3t



Unloading platform 5000 kg



Electric high-lift truck



DEKplus high-lift truck manual

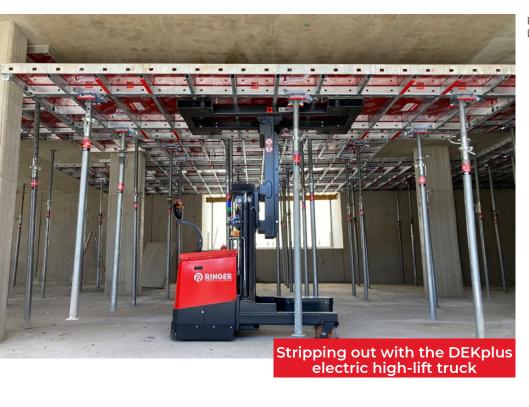
Reference projects



Pouring sections up to 700 m² in size and speedy assembly of the formwork kept progress fast on this build.

Only 12 % closures thanks to AluDEK and the AluDEK infill beam.





Perfect on-site handling with DEKplus electric high-lift truck.

The 45,000 m² headquarters building commissioned by the Etzi Group was formed using DEKplus and AluDEK.



Reference projects



AluDEK & DEKplus in perfect combination. Typical zone formed with DEKplus, closures, curved walls, etc. with AluDEK.

The lightweight AluDEK slab formwork panels were installed smoothly by crew members working at floor level.





DEKplus with 7-metre floor props. AluDEK panels as closures at columns.



LET'S BUILD





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