References
Architectural Construction
Know-how in Architectural Concrete
MEVA is research partner in investigating the interaction between facing, release agent and concrete. The “Guide to Architectural Concrete” provides the contractor with practical know-how and expertise in managing exposed concrete construction projects successfully.

Leading the way in concrete standards
MEVA has been instrumental in redefining the European DIN 18218 Standard for concrete pressure to take account of new concrete mixtures such as self-compacting and flowable concrete. A new procedure to determine how concrete pressure will develop during each pour is based on MEVA know-how and part of the new standard.

Calculation tools for determining fresh concrete pressure are freely available to contractors on the MEVA website. Go to www.meva-international.com and benefit also from the mobile application.
More than just Formwork

Know-how for your building success
From the beginning, it has been MEVA’s philosophy to offer added value in the form of know-how and expertise – beyond supplying high-quality formwork. This far-reaching promise has been redeemed impressively for many years.

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Leaders in the field
Committee and industry standards work has a high priority because it is essential to develop expertise in concrete works. This is where quality and safety standards are defined and implemented. The German quality control association (GSV) nominated MEVA to chair the technology committee; MEVA is part of the influential, internationally active American Concrete Institute and its formwork committee and we are a member of the ASCC (American Society of Concrete Contractors) to name only a few.

MEVA is acclaimed as an innovative leader in the formwork industry, underlined by several awards, distinctions and commendations for quality and service.
Architecture, exposed concrete, concrete geometries and designs
Growing demands on concrete finish require growing performance from the formwork and forming face. New concrete mixtures, additives, high concrete pressure; slim building geometries, irregular, rounded, bent, curved and slanted! As architecture discovers concrete as design material, formwork engineers are key figures in the construction team. From special designs and one-off or small series production of special formwork units know-how, experience and the love of exceptional solutions are MEVA's track record.

Specialists for special requirements
The largest concrete-touching surface in facing has the greatest impact on concrete finish. In 13 years of use, the all-plastic facing alkus has earned its merits. The facing can be welded jointlessly to form large forming surfaces. It can be bent and shaped for special geometries. It can be laid out over a lattice construction almost like a carpet, is joinable and can be mounted on panel frames. It is repairable using the identical material, allowing any blemish to be removed. No hole or scratch will disturb the finish. There are few limits to shaping concrete.
Contractor Benefit through Expertise

**Know-how and services**
- Consulting in architectural project teams
- Special formwork designs
- Tooling
- Production of single and small-series
- Production of specially shaped facing
- Support in optimising work flow and pour cycles

**On-site support**
- Assembly service and support
- Supervision and training of forming teams
- Support in supervising work flow
- Project engineers on site
- Support during critical concrete pours

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**Project management**

**Special designs**

**Logistics**
The patented all-plastic facing sheet is made of polypropylene (1 and 3), reinforced by an aluminium foil (2). The facing is resistant to UV rays, shrinking, swelling, rotting, building chemicals or fungal decay. It remains stable in any climate or temperature.

alkus: The Architect’s Facing

The all-plastic facing puts an end to plywood waste in formwork

The introduction of the world’s first 100 % wood-free facing started a new age in formwork. Replacing worn-out plywood sheets is now a thing of the past. No more waste. Get your job done without interruptions. No more unnecessary freight costs, no down-times and no hassles in work flow. No more chemical coatings that make disposal dangerous and expensive. Less waste means fewer CO2 emissions. Besides offering better quality, the all-plastic innovation saves time and money.

Your advantages

- No swelling and shrinking
- Nailable like plywood
- No re-facing – no hidden costs
- Easy and quick to clean
- Repairable using the same material
- Better concrete finish
1 More than 13 years of experience
All MEVA formwork systems come with the 100 % wood-free, all-plastic facing alkus. More than 13 years of practical experience are proven – on all continents and in all climates.

2 Flush assembly, no offset
The alkus facing is fitted into the frame with minimum tolerance, flush with the frame and without any offset. This minimises footprint in the concrete surface and is not possible with plywood.

3 Easy to clean
The facing is easy and quick to clean on site – using a rotation or high-pressure cleaner up to 1,000 bar.

4 Nailable like wood
The facing is as easily nailable as its plywood predecessor – fitting campher strips for instance is easy and fast.
A as in alkus.
Or in Architecture

1 The facing for special designs
Whenever technically feasible and economical, special forming units can be built using pre-shaped and bent alkus forming sheets fitted into specially shaped panel frames. These are manufactured industrially in MEVA’s production plant as a one-off unit or small series. This is often the most economic and quality solution when many pours are planned.

2 Can be shaped for any geometry
The alkus facing is easy to shape and bend to achieve almost any concrete geometry.
3 **Flexible almost like a carpet**
The alkus facing can be laid almost like a carpet on a wooden lattice construction and mounted to build forming units.

4 **Welded together for large areas**
The alkus sheet can be welded together to form a stable, large forming face.

5 **Jointless and seamless facing**
The facing can be welded together to create a forming face that leaves no imprints such as joints or seams in the concrete.
The symmetrical tie hole and joint pattern predestines the Mammut 350 wall formwork for architectural projects.
Technology in Architectural Construction

Technically Premium

The leading product programme
MEVA offers a leading product programme for architectural building projects. The Mammut 350 panelised wall system with its alkus facing and symmetrical tie hole and joint pattern – both horizontally and vertically – is predestined for demanding architectural concrete. This is enhanced by the 250 cm width grid. The MevaDec slab formwork, equipped with the all-plastic facing, achieves superior concrete finish, too. The same applies to the column formwork CaroFalt and the circular column formwork Circo. Whenever a jointless finish is required, the facing can be welded together and mounted on panel frames.

1. Mammut 350: The architectural formwork system at its best. Symmetrical tie hole and joint pattern, 250 cm width grid and a vertical/horizontal symmetry.
2. MevaDec slab formwork
3. Wall formwork StarTec frame with alkus facing welded together
4. Mobile column formwork CaroFalt
5. Circular column formwork Circo combined with wall formwork panels
**Airbus 380 Testbed, Arnstadt, Germany**

Exceptional pore-free finish on 32 m high walls with very high concrete pressure.

**Project**
Turbine testbed for the Airbus A 380: 32 m high walls, very fast, high pours and high concrete pressure (100 kN/m²). High demands on a pore-free concrete surface. This site was used to test the measuring technique developed by MEVA to determine fresh concrete pressure on wall formwork. The method is part of the German standard DIN 18218 that governs concrete pressure on wall formwork.

**MEVA Systems**
- Wall formwork Mammut 350 with alkus all-plastic facing
- Shoring tower MEP
- Triplex push-pull props

**Consortium Testbed Arnstadt**
- Oevermann GmbH
- Wiebe GmbH & Co. KG

**Formwork engineering**
MEVA Schalungs-Systeme, Haterbach
Exposed Concrete Walls

School Centre, Lenzing, Austria

Project
Municipal school centre. Special demands on superior concrete finish; smooth, homogenous concrete surface. The wall formwork was ganged to 100 m² forming units with alkus all-plastic facing to achieve cost-effective pours and a superior concrete finish.

MEVA Systems
- Wall formwork Mammut 350 with alkus all-plastic facing
- Wall formwork AluStar and StarTec with alkus all-plastic facing
- Triplex braces
- CaroFalt column formwork

MEVA Partner
Alzner Baumaschinen Ges. mbH, Obertrum

Contractor
Kreuzberger Bau Ges. mbH, Salzburg

Mammut 350 in 100 m² gangs for economic pours; exceptional concrete finish.
Gmeiner Baumhaus, St. Gallen, Switzerland

**Project**
Architect’s house “Gmeiner Baumhaus” with special demands on concrete finish, untreated as poured, using concrete with a black dye; special imprint required.

**MEVA System**
Wall formwork Mammut 350 with all-plastic facing alkus

**Contractor**
Haeusle and Koller, Gossau, Switzerland

**Formwork engineering**
MEVA Schalungs-Systeme AG, Seon, Switzerland

Untreated dyed black concrete. Smooth, even surface finish achieved with alkus.
Exposed Concrete Walls

Christian Wagner Library, Rutesheim, Germany

Project
Library complex with exceptional demands on architectural concrete finish achieved with wall formwork Mammut 350 panels with their 250 cm width grid and 350 cm height. Panels cleaned with high pressure before every pour for better results.

MEVA System
Wall formwork Mammut 350 with alkus all-plastic facing

Contractor
Staebler, Weil der Stadt, Germany

Formwork engineering
MEVA Schalungs-Systeme, Hailerbach
Doctors’ Centre, Heinrich Braun Clinic, Zwickau, Germany

Architectural finish achieved with rental formwork. High demands, superb concrete result.

Project
New building for medical practitioners as part of the Heinrich Braun clinic complex. Architectural concrete finish demands achieved with rental formwork inventory.

MEVA Systems
- Wall formwork StarTec
- Wall formwork Mammut 350

Contractor
VSTR, Rodewisch

Formwork engineering
MEVA Schalungs-Systeme, Dresden
National Stadium Lia Manoliu, Bucharest, Romania

Project
The new Romanian national stadium Lia Manoliu for 50,000 football fans.

MEVA Systems
- Shoring tower Space
- Wall formwork StarTec

Contractor
JV Max Boegl – Astaldi

Formwork engineering
MEVA Sisteme de Cofraje, Bucharest

120 columns, 27.5 m high, poured in 2 days per column, exposed concrete finish.
Open Air Pavillion, Grafenegg Park, Austria

Project

Open-air pavillon in the Grafenegg Park with highest demands on concrete finish.

MEVA Systems

- Wall formwork Mammut 350
- Triplex braces
- Shoring system MEP

Contractor: Alpine-Mayreder Bau GmbH

Formwork engineering

MEVA Schalungs-Systeme Ges. m.b.H, Pfaffstaetten

Complete formwork engineering and design, on-site support and special logisticts.
Project
Railway complex in Tullner Feld, Austria, including 52 columns with homogenous concrete finish.

MEVA Solution
Special design with pre-bent alkus facing on support frame STB 450

Contractor: AST Baugesellschaft, Wolff & Mueller

Formwork engineering
MEVA Schalungs-Systeme Ges.m.b.H., Pfaffstaetten
Spectacular concrete design with changing bent, slanted and rounded geometries in architectural finish.
Vienna, Austria

Project
New campus with spectacular Library and Learning Center. Many inclined and rounded walls with different angles and radii. Architectural concrete surface walls with board pattern and smooth surface inlays. Achieved using standard panelised formwork combined with custom-made special design formwork.

MEVA Systems & Solutions
- Special formwork with pre-bent alkus all-plastic facing in shaped Mammut 350 panel frames
- All-plastic facing sheet pre-bent and curved to achieve unconventional geometries
- Wall formwork Mammut 350
- Special designs using the circular column forms Circo with pre-bent alkus facing
- Push-pull props Triplex
- Shoring system MEP

Contractor
Bauunternehmung Granit, Ges.m.b.H., Graz

Formwork engineering
MEVA Schalungs-Systeme, Haiterbach and Pfaffstaetten
Project
Large-area forming sheet made from pre-bent, shaped and welded alkus facing mounted on wooden lattice construction to shape the tapered concrete cone in architectural finish — homogenous, smooth concrete surface achieved with every pour.

MEVA Solution
All-plastic facing alkus pre-bent and welded to form large forming surface

Contractor
Goebel-Bau, Wuerzburg, Germany

Formwork engineering
MEVA Schalungs-Systeme, Haiterbach

Perfectly smooth concrete finish with pre-shaped and welded alkus facing.
S70 Motorway Bridge, Budapest, Hungary

Project
Bridge for the S70 motorway in Budapest, bridge columns in exposed concrete.

MEVA Systems
- Circular formwork Rundfix
- Shoring tower MEP
- Wall formwork Mammut
- Climbing scaffold KLK 230
- Pre-shaped alkus plastic facing

Contractor
Mahid 2000 Zrt.

Formwork engineering
MEVA Zsalurendszer, Budapest

Special geometry of bridge columns poured with pre-bent alkus facing sheet.
Bus Terminal
Project
New bus terminal with 760 m² of M-shaped concrete roof poured in architectural concrete of highest demands without any joints, seams or imprints.

MEVA Solution
All-plastic facing alkus welded on site to form a completely seamless large forming area; edge form achieved by welding in alkus strips to avoid any seams.

Contractor
Kramer GmbH + Co KG, Merseburg

Formwork engineering
MEVA Schaulings-Systeme, Dresden

Merseburg, Germany

760 m² concrete roof poured without any seam or joint using welded alkus facing.
Haiterbach in the Black Forest, Germany is home to the MEVA group of companies with its 40 locations in around 30 countries and 10 logistics centers all over the world. The headquarters are also home to research and development, engineering, production, rental logistics, detailing and sales. Cost-effective, lean logistics, transparent work flow, cost-saving rental concepts, technical support for better concrete results: client benefit is in focus, everywhere. All the time. All over the world.