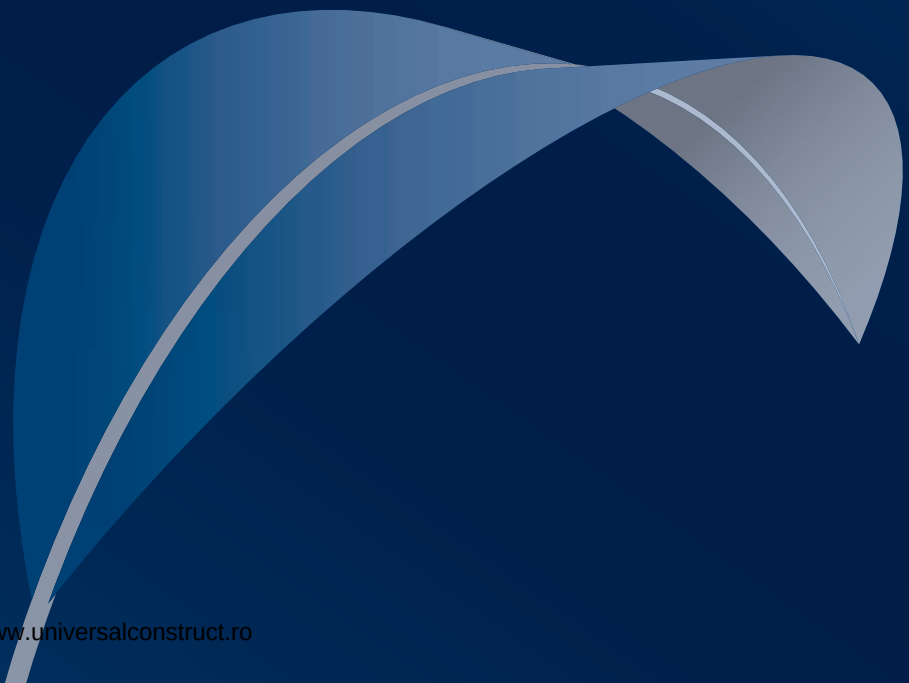
BEMO
THE SKY'S THE LIMIT

PRODUCTS AND SERVICES



ROOFS SHOULD NOT CONSTRICT. THEY SHOULD LIBERATE.

Leaves are the archetypal roof. They are the ideal shape for their environment, perfectly designed to meet the demands of very specific conditions. Leaves boast astounding natural variety, providing a source of inspiration for architects and designers.

BEMO PRODUCTS TAKE A LEAF FROM THE BOOK OF THE ALL-TIME GREATEST DESIGNER: MOTHER NATURE.

The BEMO leaf symbolizes a strong brand, committed to helping create out-of-the-ordinary buildings and exceptional solutions for roofs and façades.

When selecting materials, we consider all key criteria – not just exceptional quality, but also durability and recyclability. Our mobile production systems can be deployed anywhere in the world. This significantly cuts down on shipping, reducing emissions. We employ patented manufacturing technologies to create shapes and forms that enable planners and designers to cast off the shackles of convention.

And our unprecedented choice of materials, finishes and colors allows architects to replicate nature's great variety in their buildings.

Our proprietary 3D software offers effective support throughout your project – from initial planning, to making a precise model of the as-built building, to designing the roof substructure. This ensures exceptional quality and helps prevent unpleasant and expensive surprises. Our success is based on the very best of German technology, in terms of our production, and in terms of the systems selected for each project.

As a result, in many ways we come close to emulating the source of our inspiration: Mother Nature.

DESIGN FREEDOM

BEMO specializes in projects that appear impossible at first glance. The patented, award-winning BEMO-MONRO system enables roofing and façade shapes that, for a long time, were simply not feasible. It has heralded a revolution in freeform architecture.

Innovative finishes and materials ensure our products make an immediate and lasting impression. Our coatings are available in every conceivable hue. The panels are produced to your specifications, ensuring precise alignment with the building – no matter its shape. So the possibilities for turning your ideas into reality are endless.

COST EFFICIENCY

With BEMO, you can have the best of both worlds: highly attractive façades, and highly cost effective solutions.

Thanks to our mobile production equipment, we can manufacture cladding directly at your construction site, minimizing shipping costs. And when it comes to materials, we consider all key criteria, including quality, durability, and ease of maintenance – for example, by using finishes that require less frequent cleaning.

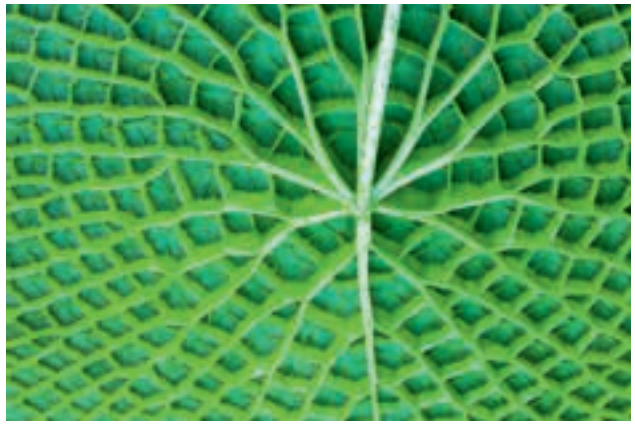
3D surveys of the building allow the creation of a precise as-built model, paving the way for simpler, safer installation. All this ensures cost-effective planning, construction and maintenance.

SUSTAINABILITY

We put a great deal of energy into ensuring that buildings require as little energy as possible – by designing and deploying innovative systems and solutions.

The state-of-the-art BEMO halter, made of fiber-glass reinforced material, prevents thermal transfer between roof and building. Our specially designed rails create continuous surfaces that are ideal for the rapid and reliable installation of photovoltaic and solar thermal systems. And we use aluminum, the ultimate eco-friendly material that's 100 percent recyclable.

Our BEMO-FLON coating is exceptionally robust and durable. It requires less frequent cleaning, reducing the need for detergents and similar products. All this and more makes BEMO's cladding solutions an environmentally friendly and sustainable choice.

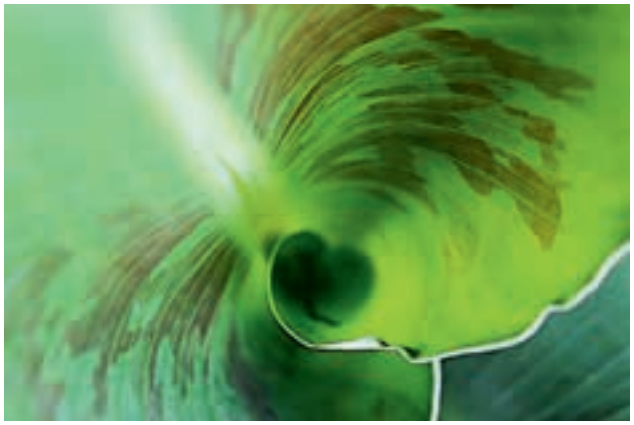


ACHIEVED EXCELLENCE

We deploy only high-quality materials from industry-leading suppliers. A wide variety of finishes and coatings are available – and these can be combined to great effect.

Our 3D design tools and flexible substructure system, BEMO-DOME, are the ideal foundation for our freeform solution BEMO-MONRO. Our patented mobile factories can be deployed anywhere in the world. And our file-to-factory software ensures a smooth translation of ideas on your drawing board to the production plant.

This means that your project will be executed to the highest quality standards.



DISTINCTIVE INDIVIDUALITY

We actively encourage taking an out-of-the-box approach to building design. Standing seam panels can be manufactured in a variety of widths, and in lengths in excess of 100 meters, granting you unprecedented architectural freedom and enabling you to create highly safe roofs. We can create concave and convex forms with extremely small radii, ensuring perfect alignment with buildings of all shapes and sizes. BEMO-MONRO is ideal for freeform architecture, and for structures that call for highly attractive panels curved in two dimensions.

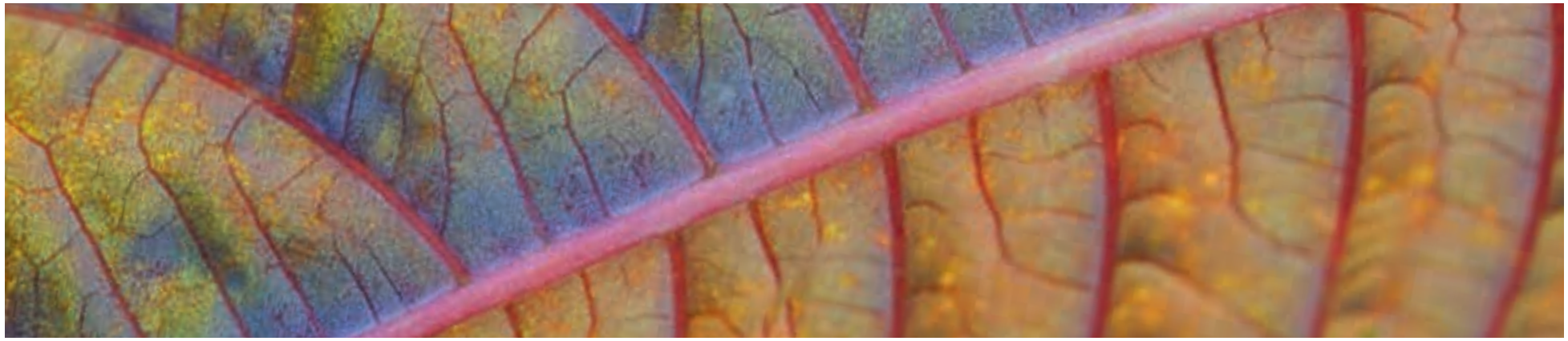
BEMO's many materials, finishes and colors can be combined to great effect – releasing you from many constraints.

GLOBAL SUCCESS

BEMO is a global brand shared by multiple industry-leading, independent companies.

With subsidiaries and partners in Europe, North and South America, the Middle East and Singapore, seven production sites around the world and our mobile factories, we are in an excellent position to offer global and local support. An international network of top-drawer construction and installation companies enables us and our customers to execute projects to the most exacting standards, anywhere in the world.

Our multilingual sales and engineering professionals have hands-on experience of a vast variety of highly demanding international projects. And no matter where your building is being constructed, we offer on-site advice and support.



RICH COLORS

BEMO's products are available in an unparalleled range of colors. This means you can have panels and sheets in any shade you want, and in any finish – from matt to high gloss.

CREATIVITY WITHOUT CONSTRAINTS. AND OF EXCEPTIONAL DURABILITY.

And you can deploy our special-effect paints for that extra-special look.

Standard polyester is a cost-effective way of adding a splash of color to your building, where resistance to chemicals and UV light is not required. All RAL and NCS colors are available.

PVDF can be used as a single-layer or multi-layer coating. It is resistant to UV light and chemicals, and comes in all RAL and NCS colors.

BEMO-FLON® is an exceptionally high-quality hydrophobic coating ideal for out-of-the-ordinary façades, low-pitch roofs and harsh climatic conditions. It is highly resistant to UV light, and is available in all finishes, from matt to high gloss. The original shade can be reapplied at any time. We can also provide the same coating in spray form for color-matching components such as windows, doors and brackets. The Teflon-like surface is easy to clean, and classified as an anti-graffiti product. We can supply over 40,000 colors as standard. And we can custom-create any tone you require.

EcoClean™ from Alcoa is a hydrophilic, durable and self-cleaning coating. When it comes into contact with UV rays and water in the air, it actively neutralizes nitrogen oxides – so it has a similar positive effect on the environment as a tree.

VARIABLE FORMS

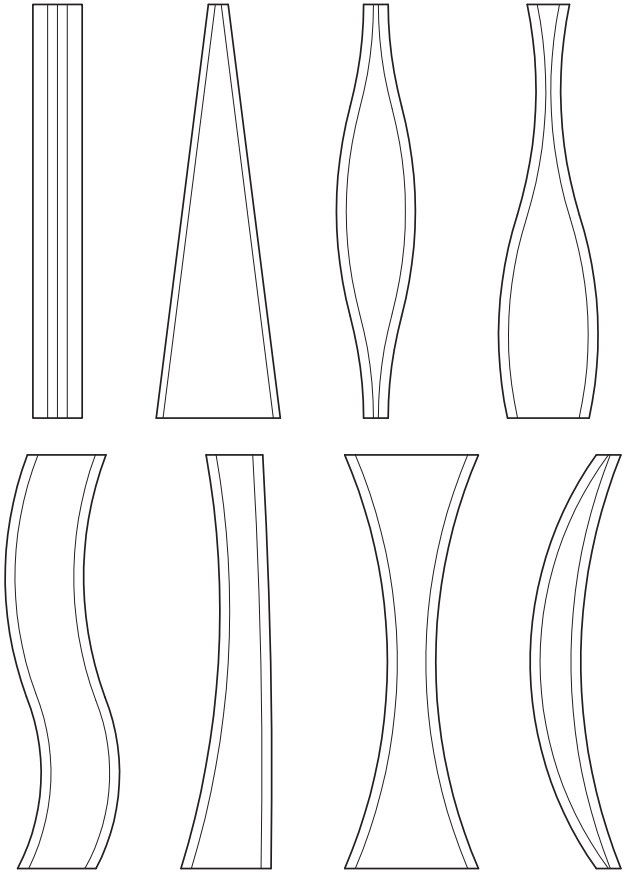
With our state-of-the-art 3D design tools, BEMO standing seam panels can meet the requirements of very complex designs, including almost all forms of freeform architecture. Our innovative patented production processes have unshackled architects from the traditional constraints of construction technology. Each panel is individually designed and manufactured. Then, it is curved to the exact shape required – enabling us to create façades and roofs for buildings of all shapes and sizes.

PLANNING AND DESIGN: EXPLORING NEW DIMENSIONS.

The patented BEMO-MONRO system is ideal for freeform and polygonal structures. Each MONRO panel is individually cut and curved to precisely fit the building. The BEMO-DOME substructure can be adjusted in three dimensions. This means you can precisely adjust the position of halters and panels to ensure perfect alignment – making our system suitable for practically all building types.

During the planning stage, we determine the most cost-effective combination of straight, tapered and freeform MONRO panels for your project. BEMO standing seam panels can be curved to form convex radii of up to 800 mm and concave radii of up to 3,000 mm. And by using crimping techniques, we can create concave and convex shapes with radii of 500 mm and upwards.

It is possible to combine concave and convex segments in a single panel. And the position and course of the central rib can be varied in line with your requirements. All in all, BEMO enables your architectural vision to become an architectural reality.



DIVERSE MATERIALS

We understand that every project has its own specific requirements when it comes to aesthetics and cost. This is why BEMO offers a broad portfolio of materials, coating systems and finishes.

When selecting materials, quality is our utmost imperative – but suitability for a particular building and climate is also vital. We consider a material cost-effective and appropriate for a project only if it can retain its function and appearance in the face of environmental influences for decades to come. Long intervals between cleaning and ease of maintenance are further considerations.

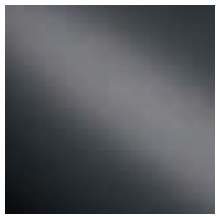
INNOVATIVE DESIGN SHOULD NOT ONLY BE HIGHLY ATTRACTIVE. IT SHOULD ALSO BE SUSTAINABLE.

Our primary materials are high-quality **aluminum** alloys. They are 100 percent recyclable, highly malleable and resistant to corrosion.

With its high strength and low thermal expansion coeficient, **steel** is a cost-effective alternative that can be combined with all BEMO coating systems. **Stainless steel** is the answer for aggressive ambient air environments, for example in industrial facilities, or for air with high chlorine or salt content. **Copper**, a durable and recyclable material, develops an attractive patina as it ages – creating a fascinating visual effect. **Titanium zinc** can be supplied with a variety of textures, making it perfect for pairing with other materials. This alloy develops a patina with time, which acts as a self-healing layer. When exposed to the elements, **COR-TEN steel** develops a very thick protective layer, preventing corrosion. And the distinctive patina adds a unique design element to the façade.

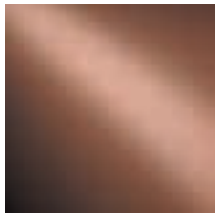
Aluminum

Stainless steel



Steel

Titanium zinc



Copper

COR-TEN steel

SMART FINISHES

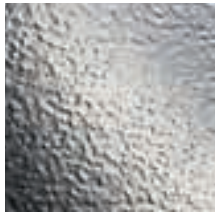
The right finish increases the visual appeal of the base material and adds a layer of protection against the weather and pollution. When exposed to the elements, non-coated metal acquires an attractive patina that also acts as a protective layer. Brushed aluminum and stainless steel, and stucco-look textures on aluminum alloys refract light, reducing glare.

FOR THE BEST FIRST IMPRESSIONS. AND THE BEST FINISHING TOUCHES.

BEMO offers an extensive range of paint systems, and we are happy to advise you on the right product for your building. In today's day and age, particular attention must be paid to protection from increased solar UV radiation.

Rooftop solar systems place special demands, as they require scratch-resistant metal surfaces.

BEMO's vast choice of finishes opens up a host of architectural possibilities. And you don't have to compromise on material quality and durability.

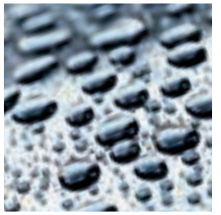


Stucco

Brushed

Aluzinc

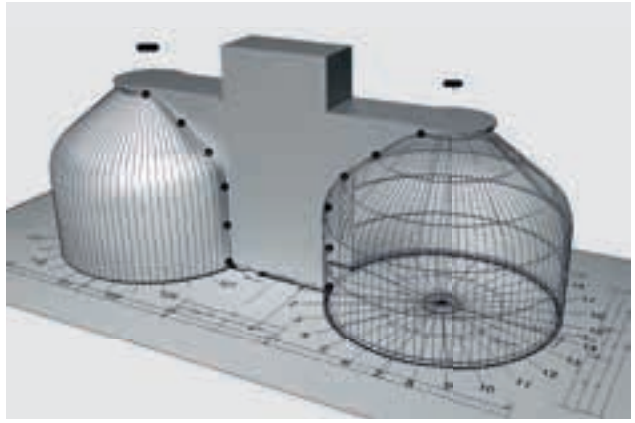
Anodized



BEMO-FLON®

EcoClean™ from Alcoa

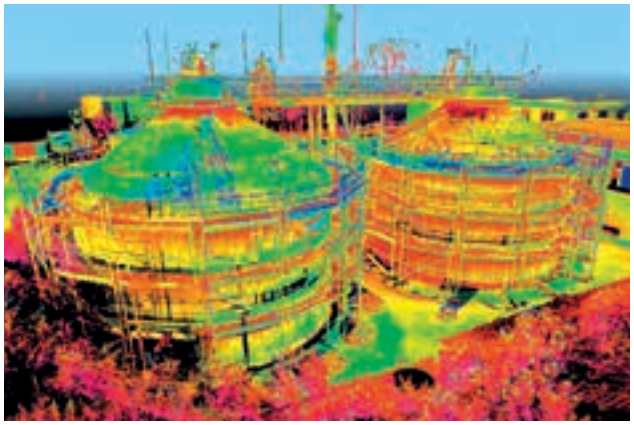
THINKING BIG DOES NOT MEAN NEGLECTING THE SMALL.



BEMO is happy to offer expert advice and assistance during all project phases.

Our multi-lingual teams of engineers can lend a helping hand from the very first steps to the very last finishing touches. For example, they can assist with design work and drawings, creating a 3D model, and costing your building.

In addition, they can support you with drafting design specifications, generating file-to-factory files for the production of custom-shaped panels, and during installation.



We can carry out a 3D survey of the as-built load-bearing structure with our state-of-the-art tools.

The resulting model can be used for exact positioning of the BEMO-DOME substructure and the BEMO halters. Once 3D design work is complete, the coordinates of the halters are projected onto the building and clearly marked.

True to its German roots, BEMO has a long track record of embracing new technologies.

This means our international customers benefit from the very best of German technology. For example, there's our patented BEMO-MONRO system, which can produce freeform panels in a single operation. Our curving machines can create concave and convex segments with radii of up to 800 mm – again in a single step. With innovative approaches like these, BEMO has repeatedly raised the bar across the roofing and cladding industry. All BEMO roll-forming and curving equipment is mobile, and can be deployed directly at the construction site.

FREEFORM SYSTEMS

ROOF SYSTEMS

FAÇADE SYSTEMS

SPECIAL SYSTEMS

BEMO-MONRO® SYSTEMS: ENJOY A NEW DIMENSION OF FREEDOM.

The BEMO-MONRO system allows you to tailor the shape and dimensions of panels to your buildings, and create seamless, harmonious transitions between roof and façade. As almost any shape is possible, alignment with your structure's contours is always perfect – true to your architectural vision.

BEMO-MONRO® IS IDEAL FOR HIGH-QUALITY FREEFORM ROOFS AND FAÇADES THAT REQUIRE PANELS CURVED IN TWO DIMENSIONS.

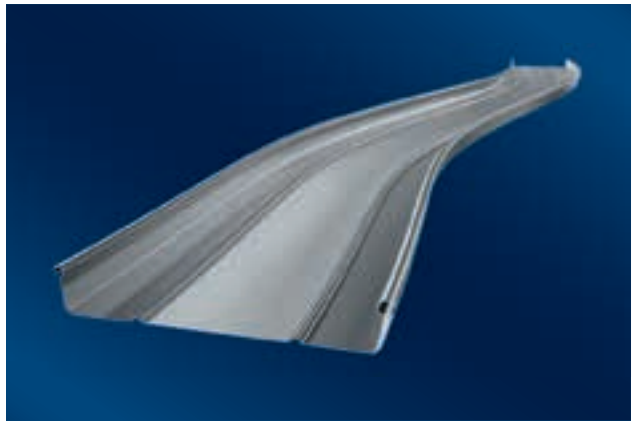
Each panel is individually shaped. Additional benefits include:

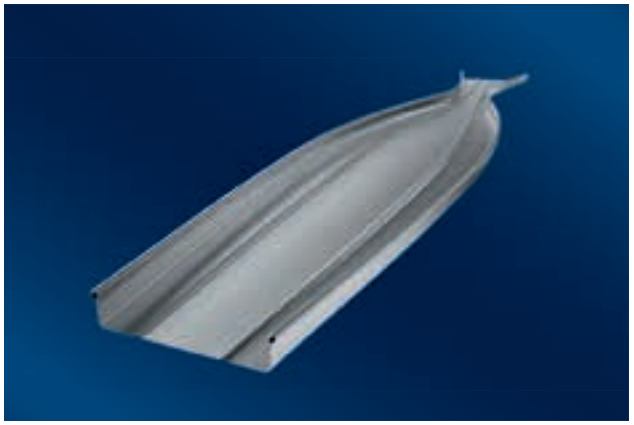
- Continuous panels of various lengths – so no overlap is required
- Standing seam panels suitable for roof pitches upwards of 1.5°
- Panels available in widths between 100 mm and 1,000 mm – for highly efficient installation
- Concave and convex shapes for round and arched forms

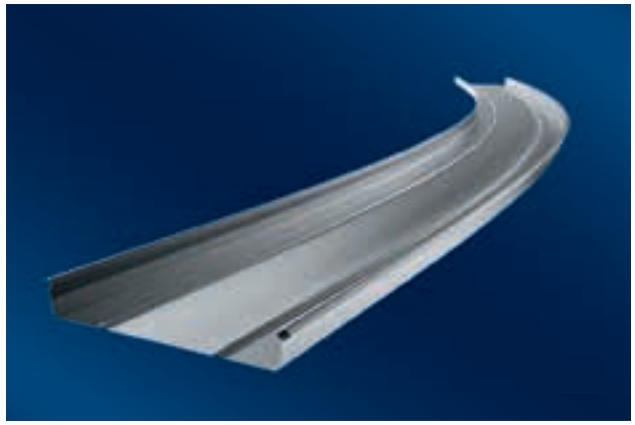
To ensure utmost quality and cost-effective installation, BEMO offers a specially designed modular substructure.

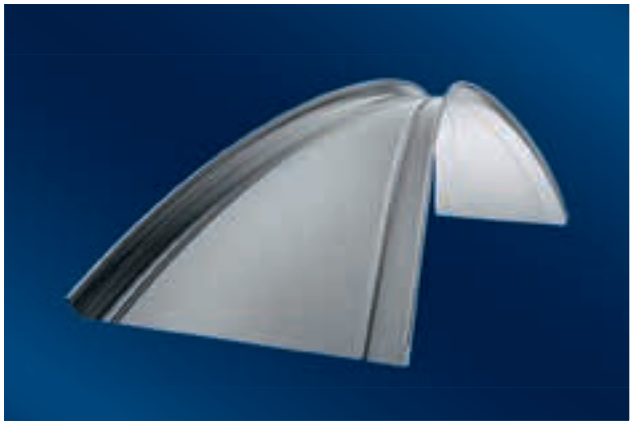
The BEMO-DOME substructure is ideal for mounting MONRO panels on polygonal buildings – precisely and cost-effectively. What's more, it accommodates tolerance in the as-built load-bearing structure.

And thanks to our tried-and-trusted installation approach, the BEMO-DOME substructure can be precisely positioned using standard tools.









BEMO-MONRO®: THE HIGHEST STANDARDS OF DESIGN AND QUALITY.

MONRO ENABLES YOU TO CLAD BUILDINGS OF ALL SHAPES AND SIZES – FLEXIBLY AND PRECISELY.

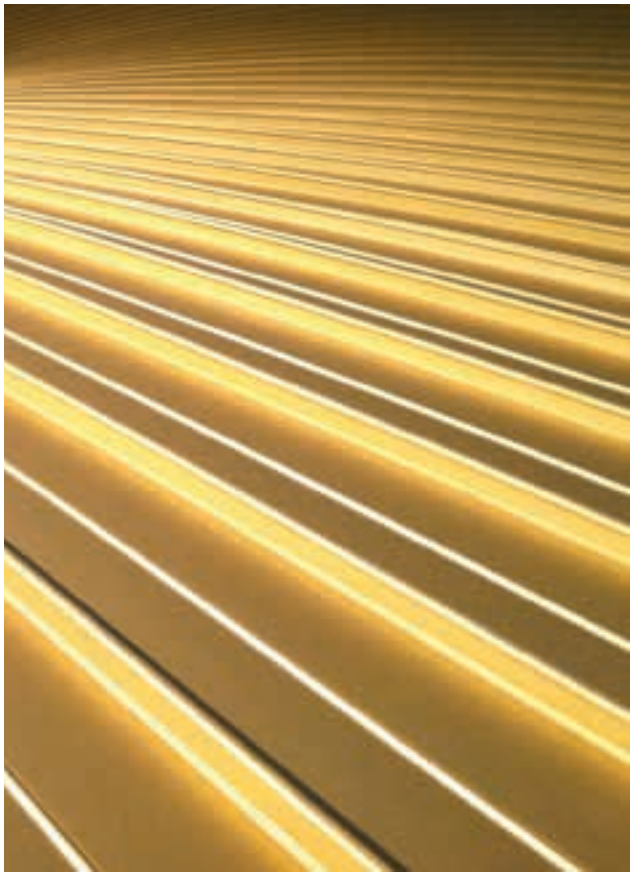
BEMO standing seam panels are ideal for secure freeform and curved roofs and façades. As we can supply very long continuous panels, no overlap is required. And our equipment can produce panels of practically any shape.

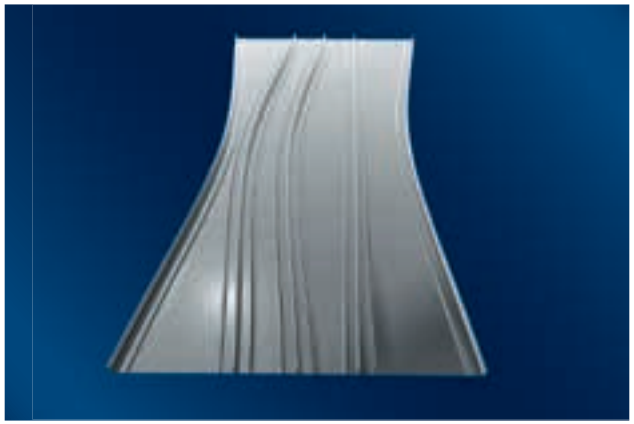
To support you during the design stage, BEMO can provide you with 3D visualizations. In addition, we can carry out a feasibility analysis on your design, and generate a cost estimate.

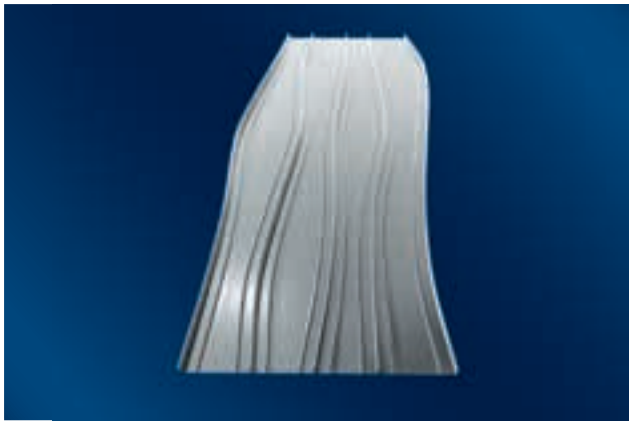
The BEMO-MONRO system includes BEMO-DOME, a modular substructure that can be adjusted in three dimensions. The substructure precisely follows the building's contours, and accommodates tolerance in the as-built load-bearing structure. It enables exact positioning of the halters, and can be installed quickly and efficiently.

This makes it possible to create roofs and façades of exceptionally attractive appearance – without additional material stresses.

The precise position and height of the halters are determined using a 3D survey of the as-built structure. The coordinates of the halters are projected onto the building and clearly marked. The contractor also receives a model depicting the positions of the halters and all information necessary for easy installation. No specialist tools are required.







MONRO FAÇADE – FOR OUT-OF-THE-ORDINARY BUILDINGS.

THE FREE-FORM BEMO-MONRO SYSTEM ALLOWS YOU TO CREATE ONE-OF-A-KIND, ATTENTION-GRABBING FAÇADES ON STRUCTURES WITH FLAT SURFACES.

This opens a host of wholly new possibilities for façade design and appearance – enabling you to realize your architectural vision.

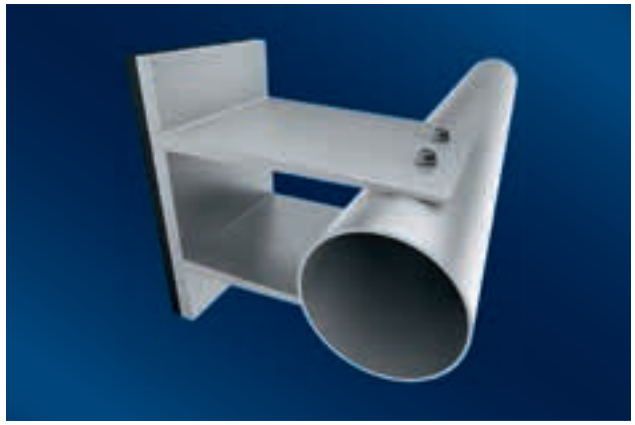
No two MONRO panels are alike. This ensures that each building has a truly unique façade. The standing seam panels can be arranged to form straight lines or curved contours. They can be manufactured in a variety of curved shapes, including straight, tapered, and free-form. And it is even possible to combine concave and convex segments in a single panel. Thanks to patented MONRO manufacturing technology, the panels are available in widths of 100 mm to 1,000 mm.

The system can be mounted vertically or horizontally, at any imaginable angle. The MONRO panels can be made in any required length – so there is no need for overlap. And thanks to the mobile MONRO roll formers, it is possible to manufacture panels directly at the construction site.

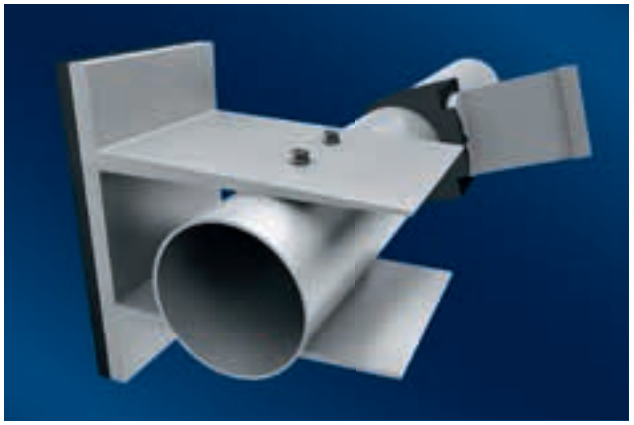
The BEMO-DOME substructure compensates for unevenness in the underlying structure, and enables fast and cost-efficient installation of MONRO panels. BEMO's team of engineers is happy to support customers from the design stage onwards. For example, they can assist with feasibility analysis and rendering. And they can help turn customers' ideas regarding contours and colors into a one-of-a-kind façade design.

BEMO-DOME
For cladding cylindrical buildings with standing seam panels and trapezoidal and corrugated sheets.

BEMO-DOME
For cladding freeform structures with BEMO-MONRO panels.



BEMO-DOME
Accommodates tolerance in the as-built structure thanks to the adjustable-placement Pi bracket.



THE BASIS FOR OUTSTANDING QUALITY: THE RIGHT SUBSTRUCTURE.

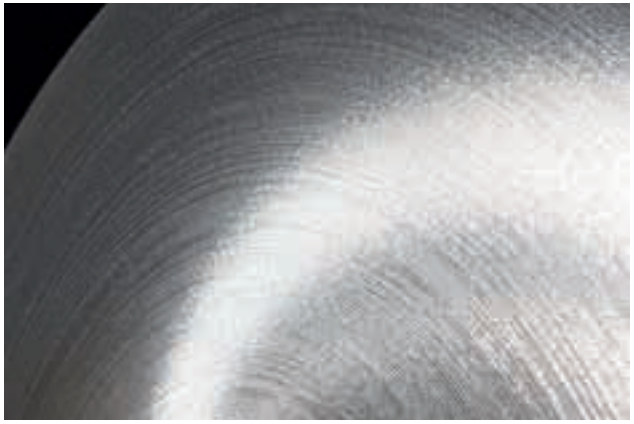
The BEMO-DOME substructure is available in a choice of versions.

BEMO-DOME VK, a rectangular tube curved to your specifications, is ideal for cladding cylindrical buildings with trapezoidal and corrugated sheets and standing seam panels. The distance between the tube and the Pi bracket can be varied to ensure precise alignment of the panels with the contours of the building. The halters are mounted directly onto the tube. To ensure efficient installation, BEMO carries out on-site surveys and generates 3D as-built models with precise dimensions.

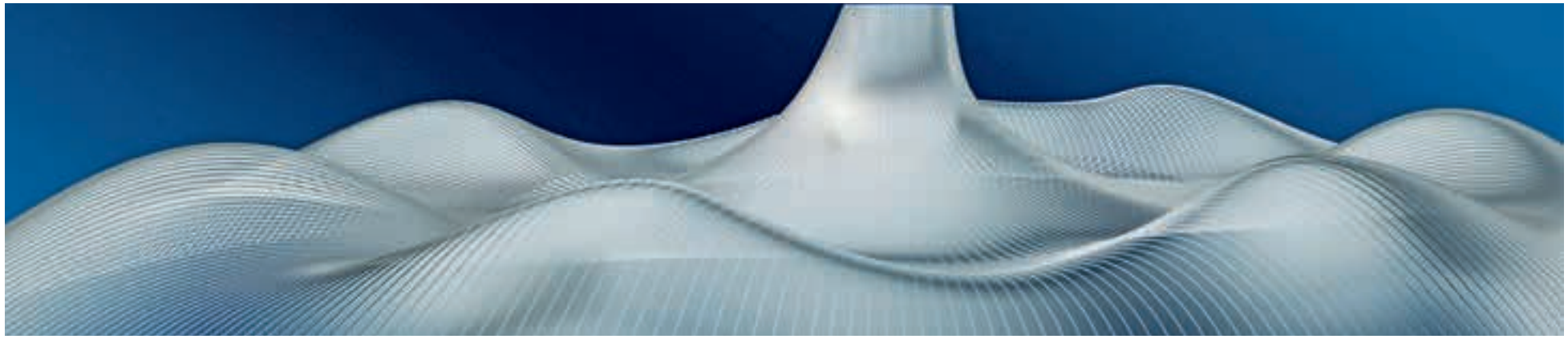
The BEMO-DOME RQ substructure, comprising the versatile Pi bracket and a custom-curved round tube, was designed for mounting BEMO-MONRO panels perpendicularly to the substructure. The halters are securely attached to thermal spacers that can be moved along the tube in either direction. The base of the BEMO halter is rectangular.

The BEMO-DOME RR substructure is ideal for projects that require MONRO panels to be mounted at an incline. Its rotating halters with a round base can be used for mounting MONRO panels at any angle. BEMO determines the positions of the brackets on-site, and clearly marks them on the building. The customer also receives a 3D model with all relevant measurements.

Production of a BEMO-MONRO panel in one of our mobile factories.



PATENTED PRODUCTION PROCESSES: FOR MOBILE DEPLOYMENT THE WORLD OVER.



MONRO panels are produced using unique patented processes.

The panels are cut to size and rolled in a single operation. The rollers are mounted on individually controlled stations, allowing the creation of freeform panels with concave and convex segments with extremely large and extremely small radii, and widths between 100 mm and 1,000 mm. And it is possible to produce panels over 100 m in length.

The number and direction of the central ribs can be varied in line with your project needs – ensuring clean lines, no matter what the building shape. Once the panels have been rolled, they can be curved to create concave and convex forms. Our specialized equipment is capable of curving very small radii. And our mobile factories can be deployed anywhere in the world.

We employ state-of-the-art 3D design technology and our proprietary file-to-factory software to determine the shape of each MONRO panel. For highly demanding projects, it is possible to custom-manufacture every single panel to ensure precise alignment with the building contours.

CONTINUOUS, PENETRATION-FREE METAL PANELS FOR GREATER SAFETY AND DURABILITY.

OUR WIDE RANGE OF MATERIALS AND SHAPES GRANTS YOU UNPRECEDENTED ARCHITECTURAL FREEDOM.

The panels can span distances of over three meters, depending upon the load criteria. And they can be installed without penetrating the standing seam.

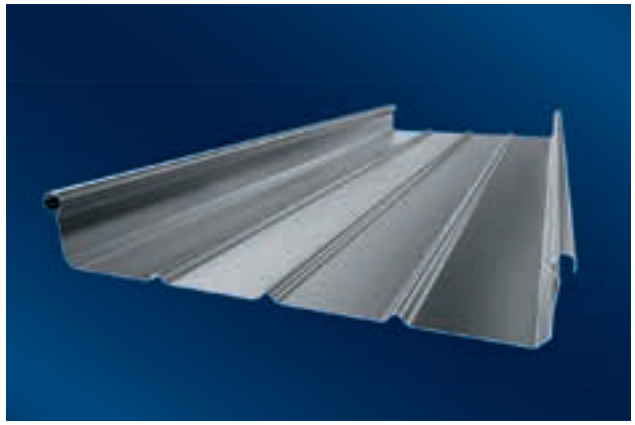
Tapered standing seam panels are ideal for cost-effectively cladding and roofing large round or conical buildings. These are produced on-site to your specifications in just a single operation using our patented mobile roll formers.

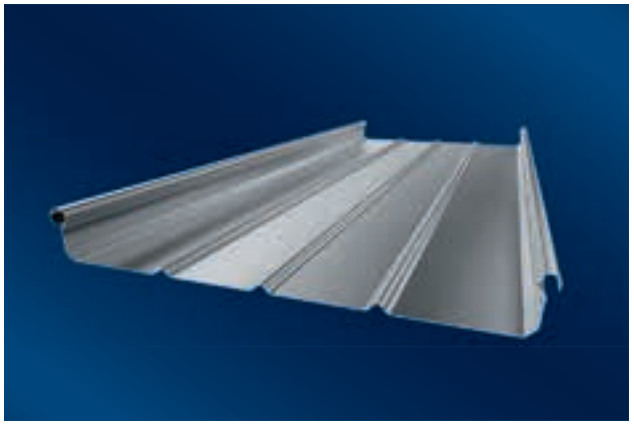
Freeform and curved shapes, and seamless transitions between façade and roof: all this and more is possible with BEMO standing seam systems. All BEMO standing seam panels, whether straight, tapered or freeform, can be curved in a separate step to create concave and convex shapes.

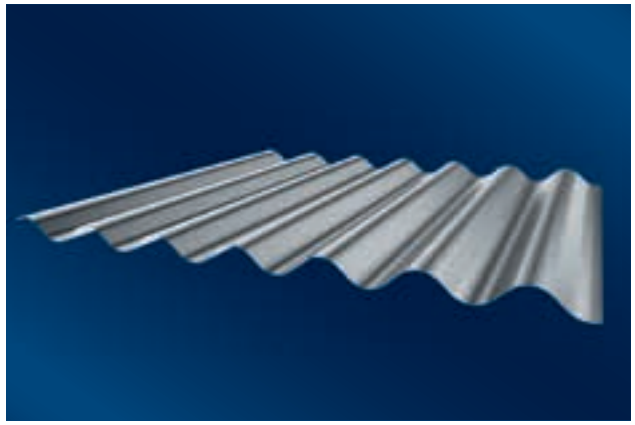
Three types of standing seam panels are available. These can be manufactured from a wide variety of materials, and painted a vast number of colors. Additional benefits for planners and investors include:

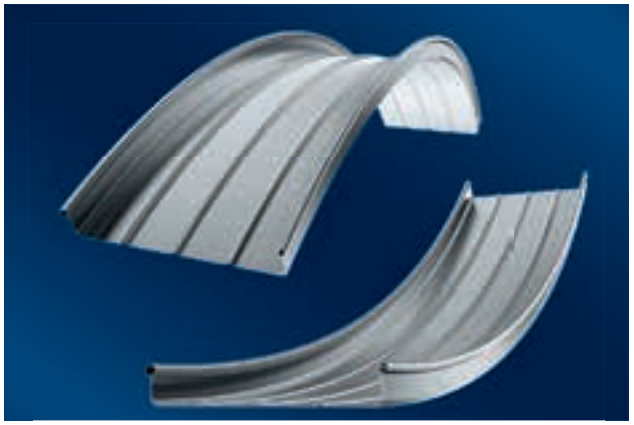
- Continuous panels over 100 meters in length – no overlap required. This creates secure large roofs
- Standing seam panels available for roof pitches upwards of 1.5°
- Panels can be manufactured in widths between 100 mm and 1,000 mm – for highly efficient installation

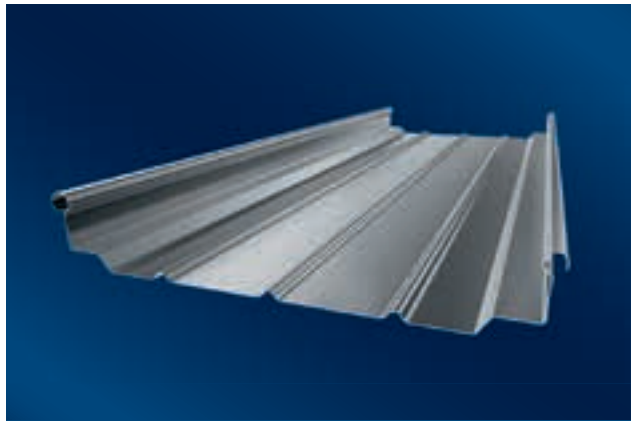
A comprehensive range of trapezoidal and corrugated sheets and sandwich elements rounds out BEMO's roofing solutions portfolio.











INTERNATIONAL CERTIFICATION AND AVAILABILITY.

We have been developing and manufacturing standing seam panels for over three decades. Our expertise is evident in the sheer variety of panels we are capable of producing. And in the extensive tests our products have undergone and certifications received. They have been approved by all the leading international bodies, including FM Approvals, BBA, GOST, CSTB (Avis Technique) and DIBt (abZ).

A SUCCESSFUL TRACK RECORD STRETCHING BACK OVER 30 YEARS.

BEMO standing seam panels can be curved to your specifications and perforated to create special visual or acoustic effects. In addition, a rubber seal can be integrated into the seam for extra protection against water ingress.

Our panels can be supplied with SILENT AC anti-condensation fleece already applied – an ideal solution for cold roofs.

We have a large number of mobile roll-forming and curving machines at our seven production facilities around the world – allowing rapid deployment at your construction site.

Our highly experienced team will help you select the right materials, coating systems and mounting components for your project, ensuring long-lasting quality.

BEMO Certifications

International

FM Approvals: BEMO 305 and BEMO 400

USA

ASTM1592: Structural performance of BEMO sheet metal roof with aluminum halter
ASTM1592: Structural performance of BEMO sheet metal roof with HOOK halter

UK

BBA certificate no. 01/3790: KeyBEMO secret fix roof system

Germany

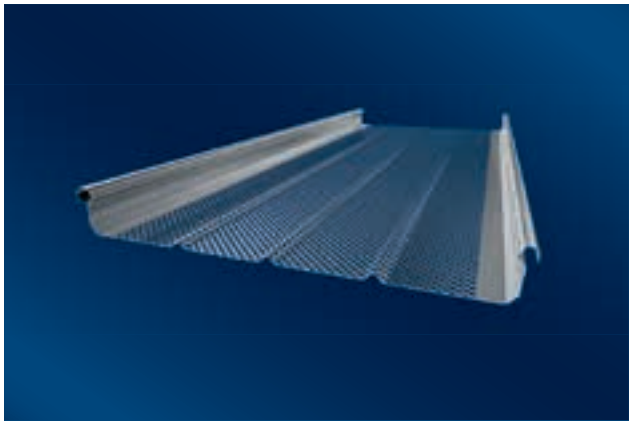
abZ certification from DIBt:
Z-14.1-182 BEMO-FLAT-ROOF aluminum standing seam roof elements
Z-14.1-640 BEMO-FLAT-ROOF steel standing seam roof elements

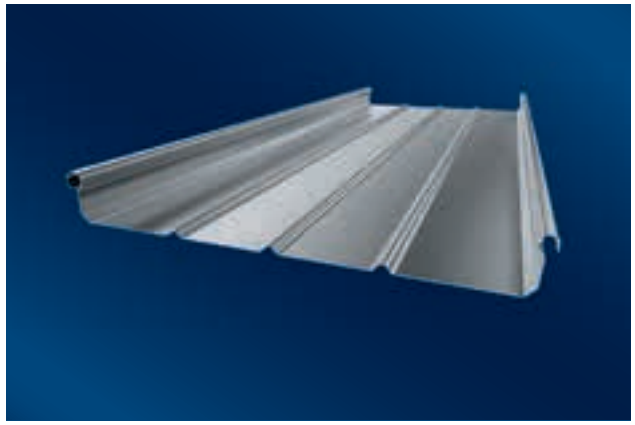
Avis Technique

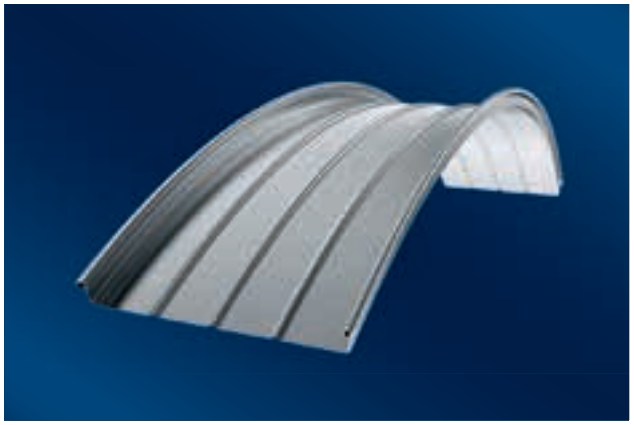
Avis Technique 5/10-2095: BEMO Acier / Acier Inox 65/305 et 65/400
Avis Technique 5/06-1886: BEMO Aluminum 65/305 et 65/400
Avis Technique 5/07-1966: BEMO Cintré

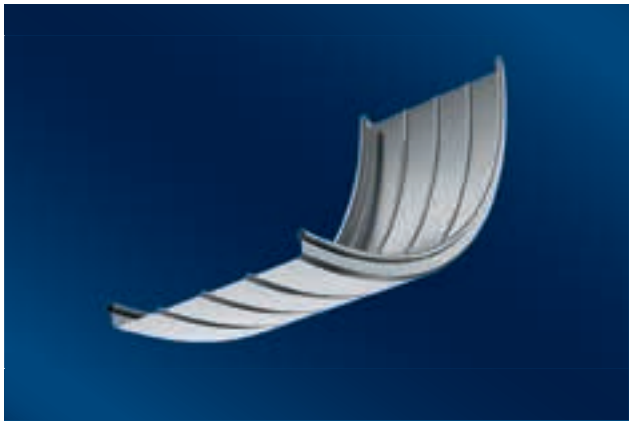
Russia

GOST certificate no. POCC DE.Al30.H15270









ELEGANT AND COST-EFFECTIVE: THE N50 PANEL.

The N50 panel has a seam height of 50 mm.

Elegant and highly attractive, these panels are ideally suited for smaller roofs such as those encountered on residential buildings.

It is also a very popular and cost-effective choice for roofs on large industrial buildings where high snow loads are not an issue.

The number and position of the ribs can be chosen in line with your specific requirements. The ribs not only make the panel stronger, but also act as a unique design element. This panel is available in a number of versions: with integrated fleece, perforated, and curved, and in all BEMO materials and finishes.

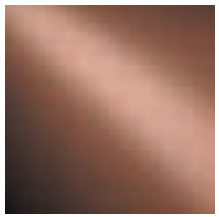
Available standard widths	333 mm, 429 mm, 529 mm and 600 mm				
Custom panel widths	100 mm – 800 mm				
Materials	Aluminum	Steel	Stainless steel	Copper	Titanium zinc
Material thickness in mm	0.8 – 1.2	0.63 – 0.75	0.5 – 0.7	0.8 – 1.0	0.7 – 1.0
Coatings	BEMO-FLON, PVDF, polyester, EcoClean™ from Alcoa				
Finishes	Stucco, brushed, anodized, aluzinc, pre-weathered, plated				
Perforation pattern	R3M5	R3.5M5	R5M8		
Material	Aluminum				
Material thickness	1.0 – 1.2 mm				
Rib	Parallel to panel curvature, centered and straight, or no ribs				
Length	Ex-works: up to 38 m; on-site: in excess of 100 m				
SILENT AC fleece	Can be attached to the underside of all panels				
Capillary groove	Integrated into all panels				
Minimum roof pitch	**Aluminum, stainless steel, copper** 1.50° (2.60%) with penetrations / overlap joints welded 2.90° (5.00%) with penetrations / overlap joints mastic sealed **Steel, titanium zinc** 3.0° (5.24%) with no penetrations / overlaps 5.0° (8.75%) with penetrations / overlap joints mastic sealed **Aluzinc** 1.50° (2.60%) with no penetrations / overlaps 2.90° (5.00%) with penetrations / overlap joints mastic sealed Minimum roof pitch does not apply to panels laid in continuous lengths over curved ridges.				

Aluminum

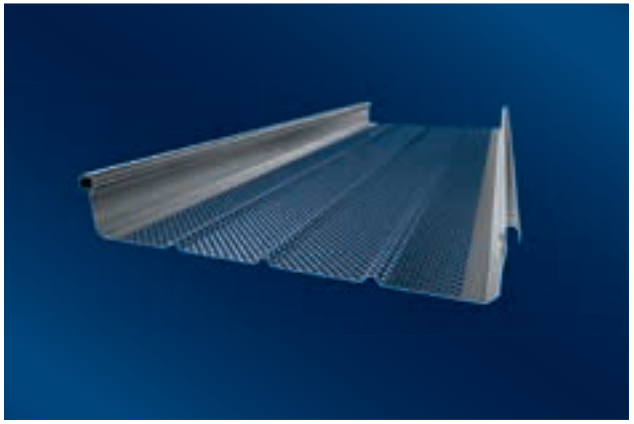
Stainless steel

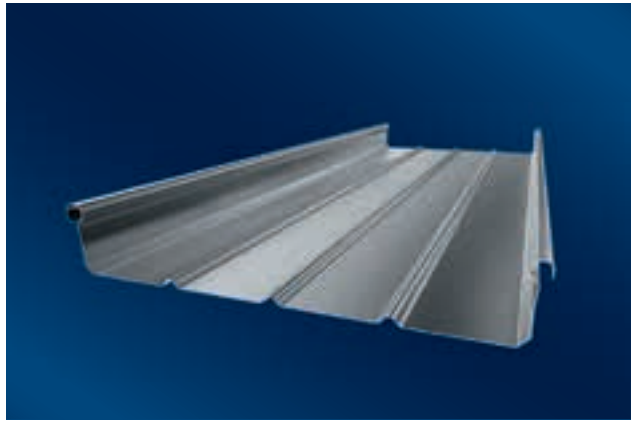
Steel

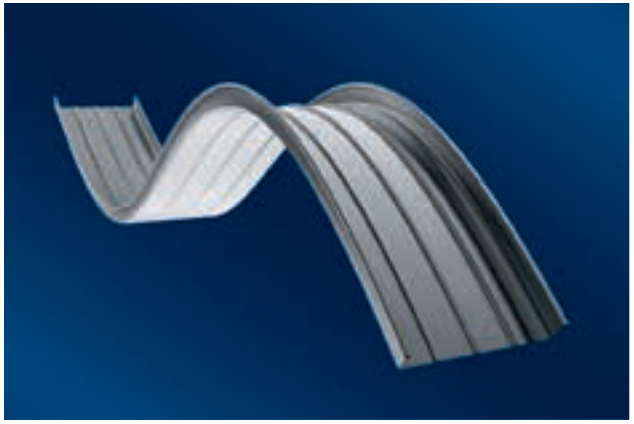
Titanium zinc



Copper







HEAVY LOADS AND LOW-PITCH ROOFS? NO PROBLEM FOR THE N65 PANEL.

With a seam height of 65 mm, the N65 panel was designed for roof pitches upwards of 1.5°.

The high seam ensures excellent load-bearing capacity. The panel can be employed in all climate zones and for all building types.

A rubber seal can be integrated into the standing seam for added protection against water ingress. This makes the panel suitable for roofs with a pitch of less than 1.5°, and for deployment in areas with extreme wind, snow and sand loads.

The number and position of the ribs can be chosen in line with your requirements. The ribs not only make the panel stronger, but also act as a unique design element. This panel is available in a number of versions: with integrated fleece, perforated, and curved, and in all BEMO materials and finishes.

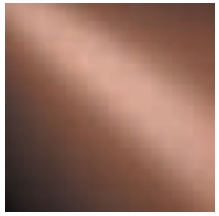
Available standard widths	305 mm, 333 mm, 400 mm, 500 mm and 600 mm				
Custom panel widths	100 mm – 1000 mm				
Materials	Aluminum	Steel	Stainless steel	Copper	Titanium zinc
Material thickness in mm	0.8 – 1.2	0.63 – 0.75	0.5 – 0.7	0.8 – 1.0	0.7 – 1.0
Coatings	BEMO-FLON, PVDF, polyester, EcoClean™ from Alcoa				
Finishes	Stucco, brushed, anodized, aluzinc, pre-weathered, plated				
Perforation pattern	R3M5	R3.5M5	R5M8		
Material	Aluminum				
Material thickness	1.0 – 1.2 mm				
Rib	Parallel to panel curvature, centered and straight, or no ribs				
Length	Ex-works: up to 38 m; on-site: in excess of 100 m				
SILENT AC fleece	Can be attached to the underside of all panels				
Capillary groove	Integrated into all panels				
Rubber seal	Can be integrated into all N65 panels				
Minimum roof pitch	**Aluminum, stainless steel, copper** 1.50° (2.60%) with penetrations / overlap joints welded 2.90° (5.00%) with penetrations / overlap joints mastic sealed **Steel, titanium zinc** 3.0° (5.24%) with no penetrations / overlaps 5.0° (8.75%) with penetrations / overlap joints mastic sealed **Aluzinc** 1.50° (2.60%) with no penetrations / overlaps 2.90° (5.00%) with penetrations / overlap joints mastic sealed Minimum roof pitch does not apply to panels laid in continuous lengths over curved ridges.				

Aluminum

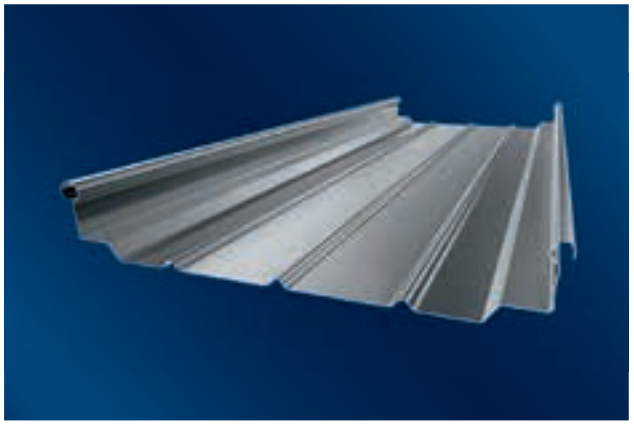
Stainless steel

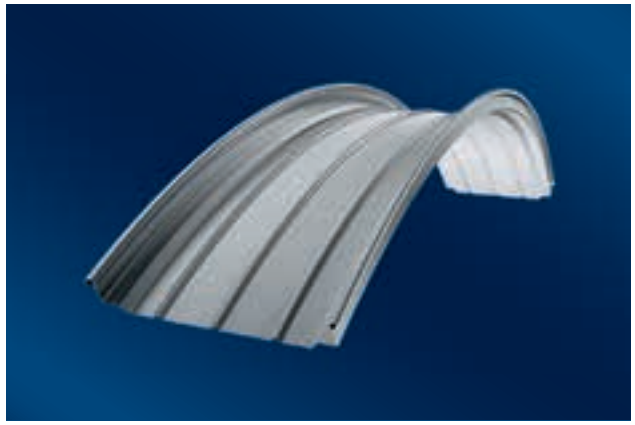
Steel

Titanium zinc



Copper





FOR ROOFS YOU CAN WALK ON: THE VF65 PANEL.

The VF65 panel is always laid directly on the surface below, such as insulation materials or timber roof decks designed to bear a person's weight.

The panels lie flat on the timber deck or insulation thanks to our specially designed panels and halters with a height of just 65 mm. The panels have a special indentation directly underneath the standing seam designed to accommodate the halter's base.

Custom versions of the panel are available upon request.

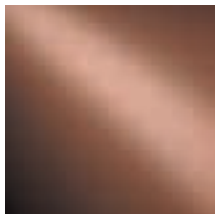
Available standard widths	305 mm, 333 mm, 400 mm, 434 mm, 500 mm and 600 mm				
Custom panel widths	120 mm – 800 mm				
Materials	Aluminum	Steel	Stainless steel	Copper	Titanium zinc
Material thickness in mm	0.8 – 1.2	0.63 – 0.75	0.5 – 0.7	0.8 – 1.0	0.7 – 1.0
Coatings	BEMO-FLON, PVDF, polyester, EcoClean™ from Alcoa				
Finishes	Stucco, brushed, anodized, aluzinc, pre-weathered, plated				
Length	Ex-works: up to 38 m; on-site: in excess of 100 m				
Capillary groove	Integrated into all panels				
Minimum roof pitch	**Aluminum, stainless steel, copper** 1.50° (2.60%) with penetrations / overlap joints welded 2.90° (5.00%) with penetrations / overlap joints mastic sealed **Steel, titanium zinc** 3.0° (5.24%) with no penetrations / overlaps 5.0° (8.75%) with penetrations / overlap joints mastic sealed **Aluzinc** 1.50° (2.60%) with no penetrations / overlaps 2.90° (5.00%) with penetrations / overlap joints mastic sealed Minimum roof pitch does not apply to panels laid in continuous lengths over curved ridges.				

Aluminum

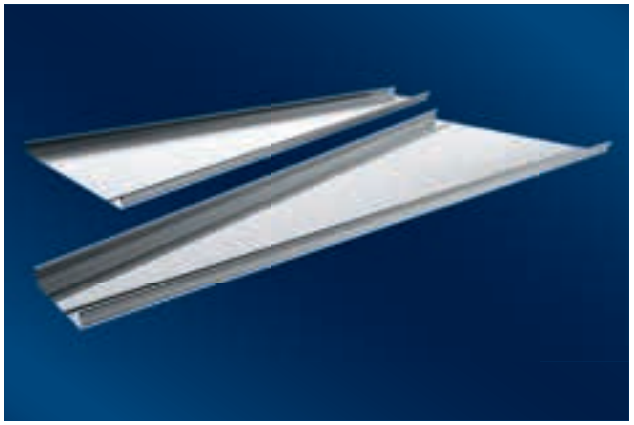
Stainless steel

Steel

Titanium zinc



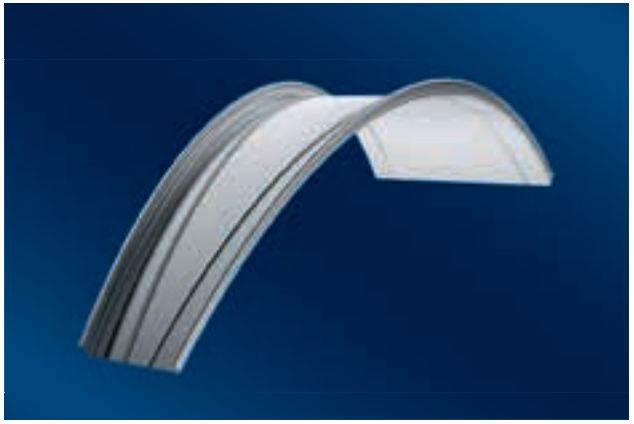
Copper



- Tapered BEMO standing seam panels.

- A tapered BEMO standing seam panel with a convex curve.

- A tapered BEMO standing seam panel with a concave curve.



BEMO STANDING SEAM PANELS: TAPERED.

Tapered panels are ideal for cost-effectively cladding large round and conical buildings.

BEMO panels are cut to size and rolled to your specifications in just one step using our patented mobile equipment.

We can produce panels to a minimum width of just 100 mm and to a maximum effective width of 1,000 mm – so even extreme tapers are possible. As with all BEMO standing seam panels, these can be installed easily, safely and without penetration points.

Installing our tapered panels is fast and efficient: no additional on-site cutting is necessary, and thanks to the panels' continuous lengths, no joints are required. The panels are available in all BEMO materials and finishes.

Panel	N50	N65	VF65
Minimum width	100 mm	100 mm	200 mm
Maximum width	800 mm	1000 mm	800 mm
Minimum length	3000 mm		

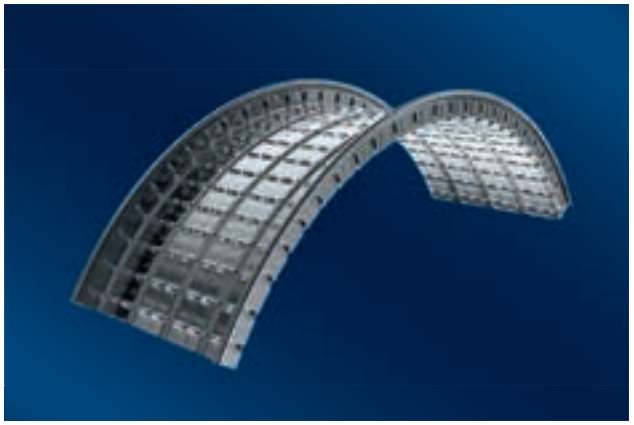
Material	Aluminum	Steel	Stainless steel	Copper	Titanium zinc
Material thickness in mm	0.9 – 1.2	0.63 – 0.75	0.5 – 0.7	0.8 – 1.0	0.7 – 1.0

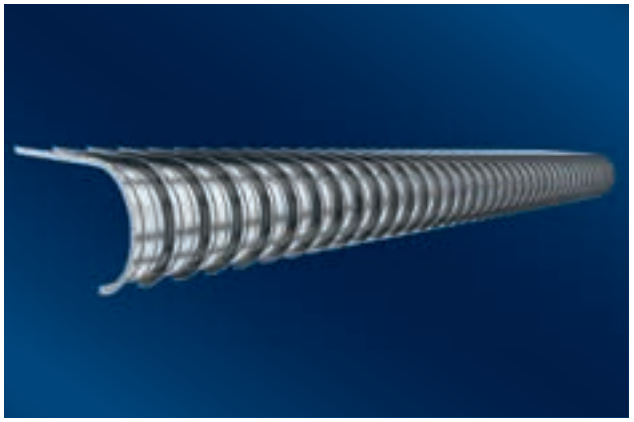
Length	Ex-works: up to 38 m; on-site: in excess of 100 m
Capillary groove	Integrated into all panels
Rib	Parallel to panel curvature, centered and straight, or no ribs

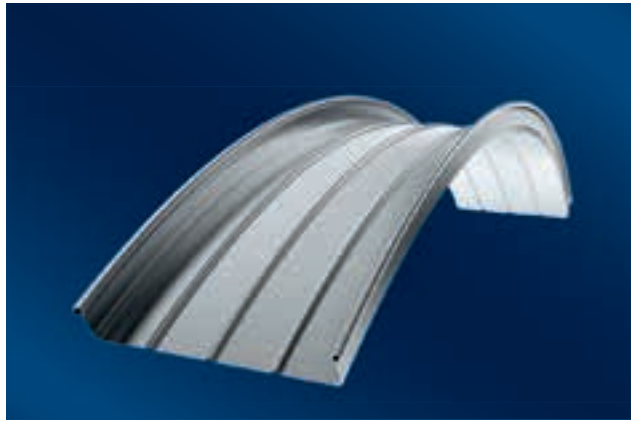
N50

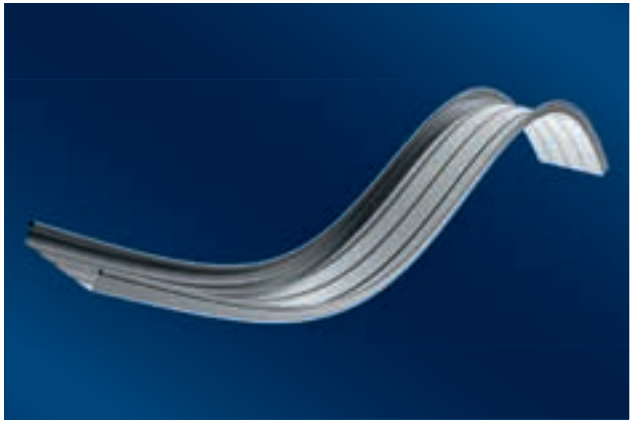
N65

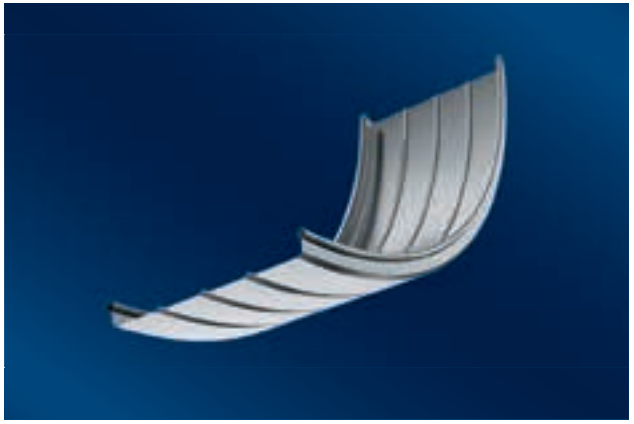
VF65











CURVED STANDING SEAM PANELS, AND CORRUGATED AND TRAPEZOIDAL SHEETS: FOR SEAMLESS TRANSITIONS BETWEEN FAÇADE AND ROOF.

We can produce panels and sheets in line with your specific project requirements directly at your construction site.

BEMO panels and sheets are ideal for freeform buildings and seamless, harmonious transitions between façade and roof.

All our cladding and roofing products – including trapezoidal and corrugated sheets, and standing seam panels – can be curved in an additional step. This does not impact the performance of the product.

Depending on the material and panel type, we can create concave and convex forms with extremely large and extremely small radii. It's possible to create both concave and convex segments in a single panel. We can also employ crimp curving to produce striking design elements.

When very long panels or very large radii are required, we recommend curving directly on site. We have a large number of mobile curving machines that we can deploy at short notice.

Smooth curving, standing seam panels, convex	N50	N65	VF65	N50, tapered	N65, tapered	VF65, tapered	MONRO
thk = 1.20 min IR in mm	800	800	2 000	3 000–5 000	3 000–5 000	3 000–5 000	2 500–3 000
thk = 1.00 min IR in mm	1 000	1 000	2 500	3 000–5 000	3 000–5 000	3 000–5 000	3 000–5 000
thk = 0.90 min IR in mm	1200	1200	3000	–	–	–	–
min lg in mm	300	300	300	300	300	300	300

Smooth curving, standing seam panels, concave	N50	N65	VF65	N50, tapered	N65, tapered	VF65, tapered	MONRO
thk = 1.20 min IR in mm	5 000	5 000	12 000	16 000–18 000	16 000–18 000	16 000–18 000	10 000–12 000
thk = 1.00 min IR in mm	5 000	5 000	14 000	16 000–18 000	16 000–18 000	16 000–18 000	12 000–14 000
thk = 0.90 min IR in mm	10 000	10 000	17 000	–	–	–	–
min lg in mm	300	300	300	300	300	300	300

Crimp curving, standing seam panels	N50	N65	VF65	N50, tapered	N65, tapered	VF65, tapered	MONRO
thk = 1.0 – 1.2 min OR in mm	500	500	500	on request	on request	on request	on request
min lg in mm	150	150	150	on request	on request	on request	on request

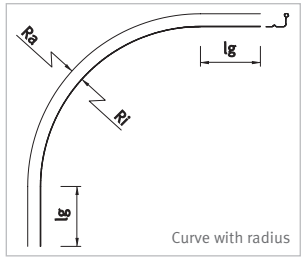
Metal profiles can increase in width by up to 20 mm during the curving process. This is why BEMO recommends determining the positions of the halters based on the final dimensions after curving. It is possible to overlap curved and uncurved panels on the horizontal joint, as BEMO can produce standing seam panels in any width. Minimum standing seam width for curving: 250 mm.

Smooth curving, corrugated sheets	18-76	27-111	42-160	55-177
min IR in mm	1 000	–	–	3 500
min lg in mm	300	–	–	300
Material thickness	Aluminum: 0.7 mm and more; steel: 0.63 mm and more			

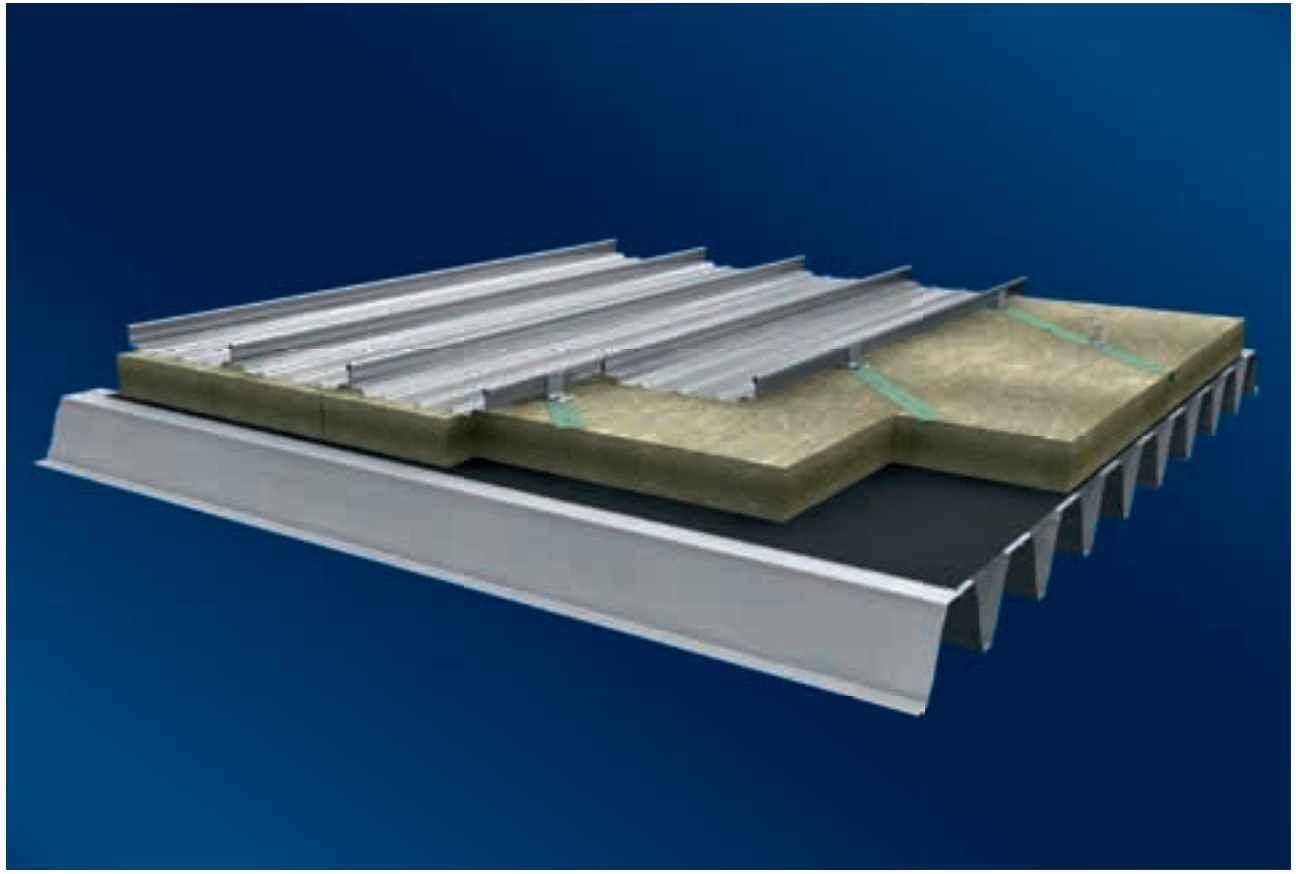
Crimp curving, corrugated sheets	18-76	27-111	42-160	55-177
min OR in mm	250	300	300	500
min lg in mm	150	150	150	150
Material thickness	Aluminum: 0.7 mm and more; steel: 0.63 mm and more			

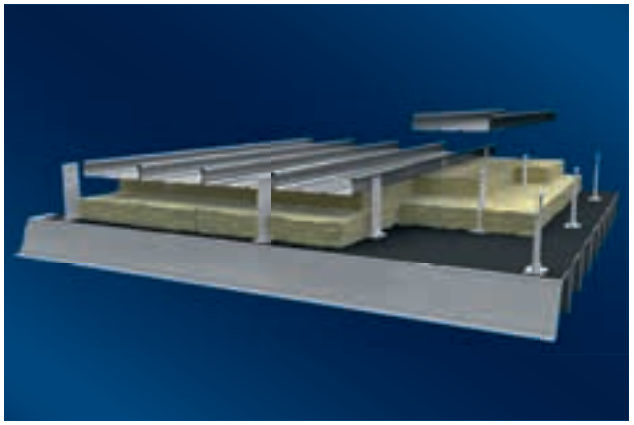
Crimp curving, trapezoidal sheets	20-75	22-214	35-207	40-100	45-333 S	45-150	50-250
min OR in mm	–	–	300	300	300	300	300
min lg in mm	–	–	150	150	150	150	150
Material thickness	Aluminum: 0.7 mm and more; steel: 0.63 mm and more						

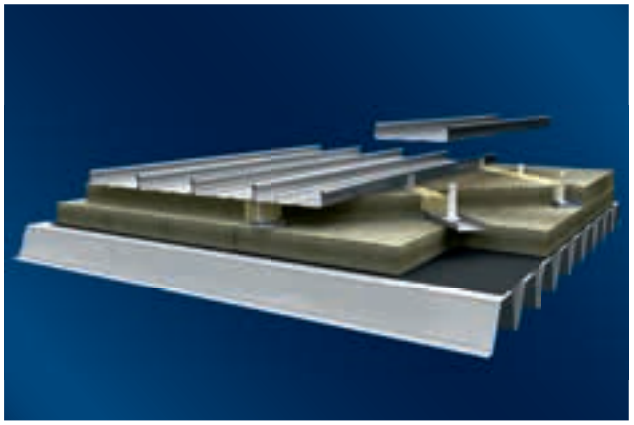
It is possible to produce concave and convex segments with radii smaller than those indicated above for specific projects. In these cases, feasibility must be analyzed beforehand. Our specialists are happy to advise you.

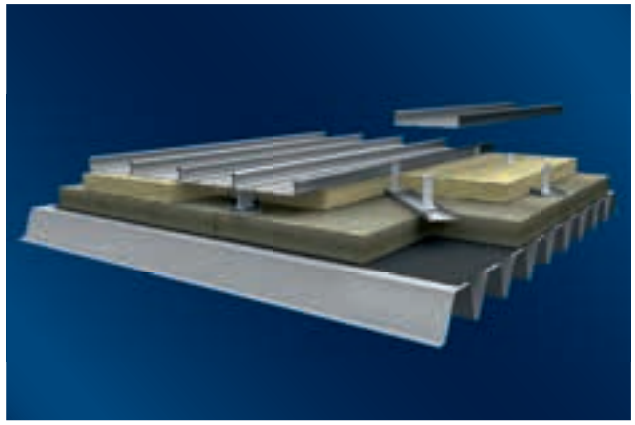


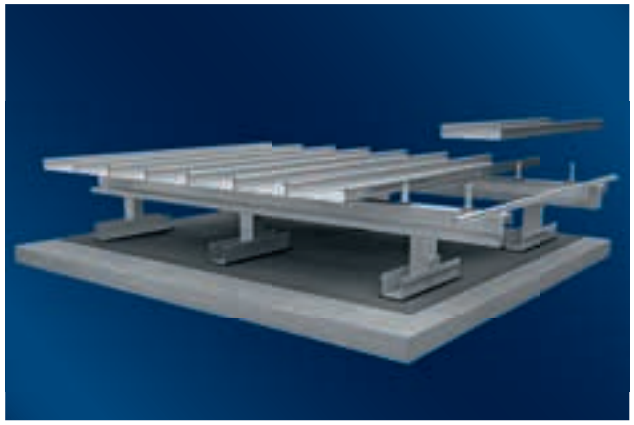
Curve with radius











Prodach® (large image)

BEMO-SOFT, BEMO-COMPACT
(from top to bottom)

BEMO-COMBI, BEMO-ELEVATE
(from left to right)

INDEPENDENTLY TESTED SYSTEMS AND COMPONENTS – WITH BEMO, YOU'RE IN SAFE HANDS.

BEMO systems, components and solution packages have been certified for a variety of countries by bodies such as FM Approvals, BBA and DIBt.

A high-quality, safe roof must meet a large number of criteria. Thermal bridges need to be avoided to prevent condensation and ensure compliance with the latest energy-efficiency standards. The insulating material must reduce heat build-up in the summer, and effectively combat noise. It's often necessary to deploy non-combustible materials that fulfill fire protection classification A1. And roof installation needs to be cost-effective and secure. The Prodach® insulation system from BEMO and Rockwool more than meets these imperatives.

The Prodach® insulation system has DIBt approval. It is almost completely free of thermal bridges, and the mineral wool boards have a thermal conductivity rating of 0.036 W/mK, meaning only a thin layer is necessary to achieve effective insulation – saving both time and money. Depending on the specific design of the roofing solution, Prodach® delivers sound insulation of between 38 and 49 dB. All BEMO products, from standing seam panels to trapezoidal and corrugated sheets, are compatible with Prodach®.

We can provide detailed designs for your project, including custom roofing solutions created using individual BEMO components. Whether you need materials that meet the highest thermal or acoustic standards, or are highly resistant to corrosion, BEMO has a broad range of tested and certified systems and components.

We calculate the load-bearing capacity in line with international norms and standards, and can support you by creating a 3D model, or by developing a plan for efficient logistics and installation in accordance with your specific project.

Independent testing of BEMO systems and components

KIT Karlsruhe:
Fire and usability tests in line with DIN 18234-2 for glass-fiber reinforced BEMO GFK thermal halters

KIT Karlsruhe:
Test report no. 123004-3, cyclic movement tests (100,000 thermal cycles)

ENCON^{SM} Consultants, Inc.:
Cyclic Movement of BEMO standing seam panel system

RWTH Aachen University:
Measurement of the thermal bridging effect of mechanical mounting elements made from glass-fiber reinforced materials for various roof designs

Frost resistance test for the glass-fiber reinforced BEMO GFK thermal halter

Fraunhofer Institut:
Measurement of the water vapor permeability of panels with standing seams, with or without integrated rubber seals, in accordance with DIN EN ISO 12572 (calculation of the Sd value of standing-seam roofing)

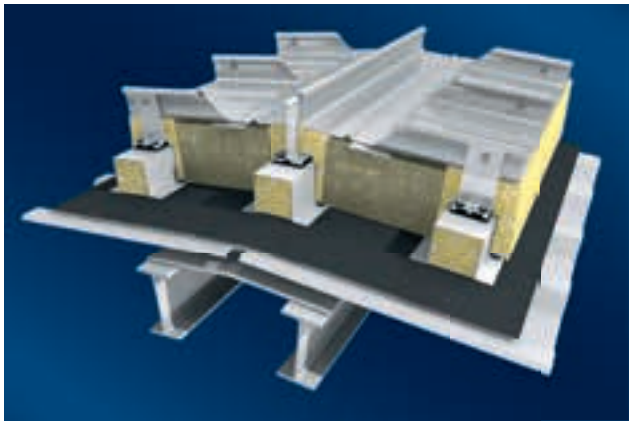
Fraunhofer Institut in partnership with GENEST:
Acoustic insulation testing for two-layer roofing with a standing seam panel in line with DIN EN ISO 140-4

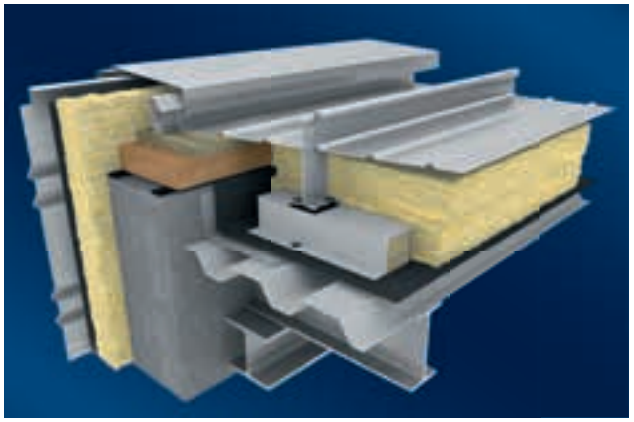
ifo, Institut für Oberflächentechnik GmbH:
Testing of the BEMO-DOME substructure's resistance to corrosion as defined by DIN EN ISO 9227 NSS

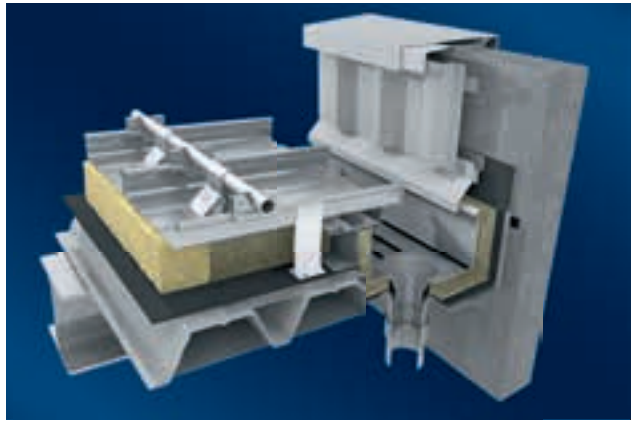
Peutz Consult:
Measurement of airborne sound insulation for two-layer metal roofing systems

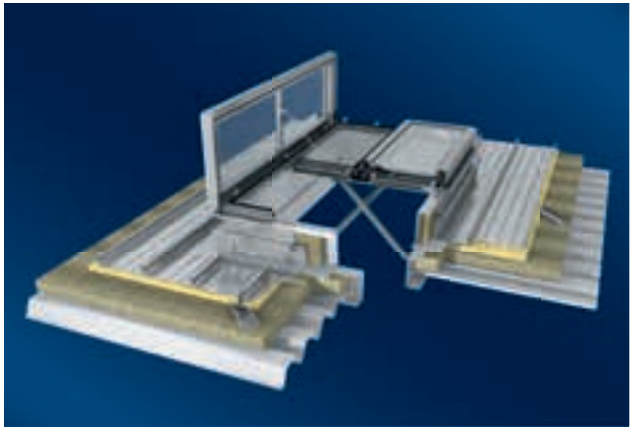
Water tightness test for rubber seals:
Test report no. 174823, Istituto Giordano S.p.a. – Campo prove di Via San Mauro 47814 Bellaria (RN)

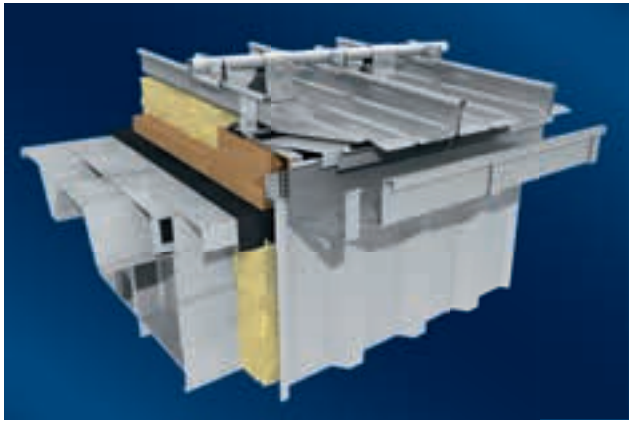
Deutsches Institut für Bautechnik (DIBt):
No. Z-14.1-523 for the Prodach® insulation system



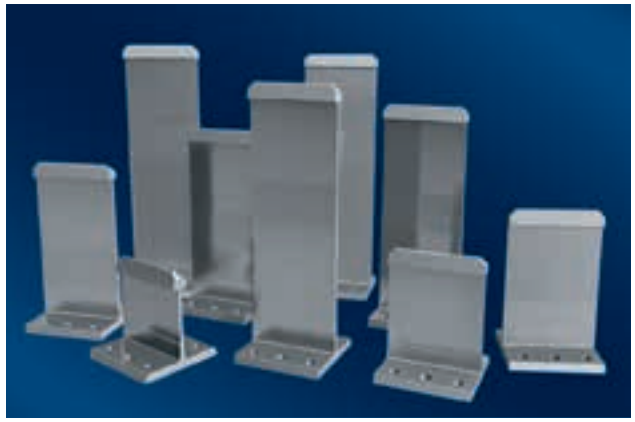








THE BEMO SYSTEM – UNRESTRICTED THERMAL MOVEMENT THANKS TO THE PENETRATION-FREE STANDING SEAM.



BEMO standard aluminum halter.
Certifications/independent tests listed on page 39

The BEMO system is designed to allow longitudinal thermal expansion. BEMO aluminum halters have rounded edges for smooth movement. And BEMO thermal spacers TK 5 and TK 15 can be attached to the base of the halter, preventing the transfer of heat from the roof to the building. BEMO aluminum halters have high load-bearing capacity.

The glass-fiber reinforced BEMO GFK thermal halter eliminates thermal bridges and cuts energy costs.
Certifications/independent tests listed on page 39

The BEMO GFK thermal halter is made exclusively of materials with low thermal conductivity to eliminate thermal bridges, and ensure lower energy costs. The halters have successfully passed fire, frost-resistance and moisture testing. They have high rigidity and load-bearing capacity. And their slim shape means insulation material can be installed without creating cavities.

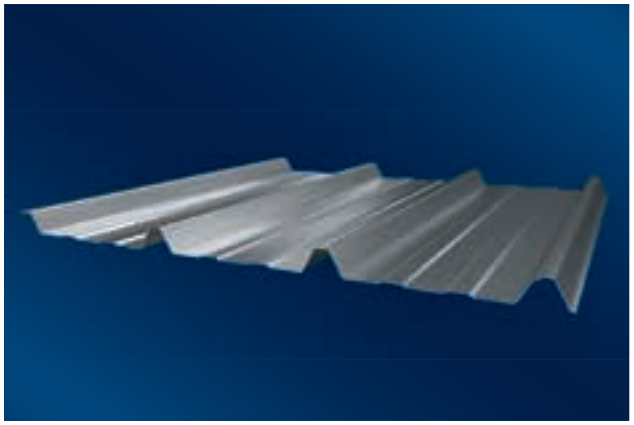
BEMO HOOK halter for deployment in extreme wind zones.
Tested in line with ASTM 1592

The HOOK halter is based on an innovative design principle. The halter is attached to the small eye, anchoring the seam in place, which is especially important for high wind uplift. The standing seam panel slides freely along the base of the halter. The BEMO HOOK halter is perfect for regions where there are strong winds and high ambient temperatures that cause thermal expansion. The halter is available with a galvanized or stainless steel base plate.

TP 22-214

Materials:	Steel	0.63 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.88 mm
	Stainless steel	0.50 mm – 0.70 mm
	Copper	0.70 mm – 1.00 mm
	Titanium zinc	0.80 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	1 070 mm	
Total width:	1 140 mm	
Special features:	Capillary groove for greater protection. Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end. Cost-effective panel with high coverage.	

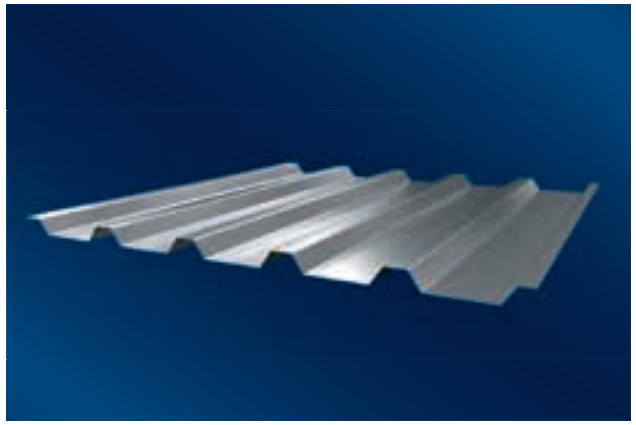
Test certificate for steel trapezoidal sheet, no. II B 6-543-160
Test certificate for aluminum trapezoidal sheet, no. TP-10/008



TP 45-333 S

Materials:	Steel	0.63 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	1 000 mm	
Total width:	1 060 mm	
Special features:	Integrated supporting side lap for safe, quick installation. Capillary groove for greater protection. Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end. High load-bearing capacity. Suitable for low-pitched roofs.	

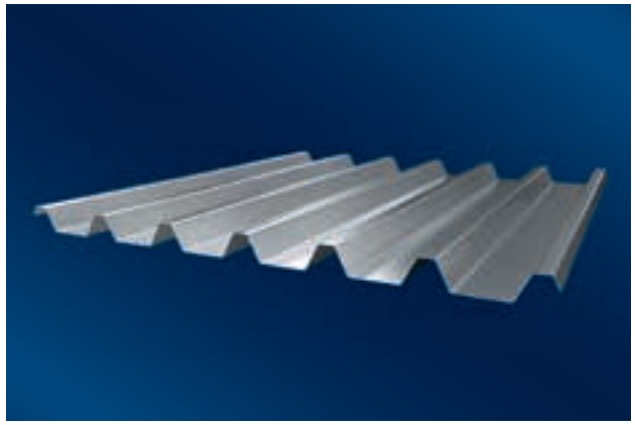
Test certificate for steel and aluminum trapezoidal and steel corrugated sheets, no. L01-007



TP 35-207

Materials:	Steel	0.50 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	1 035 mm	
Total width:	1 070 mm	
Special features:	Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end.	

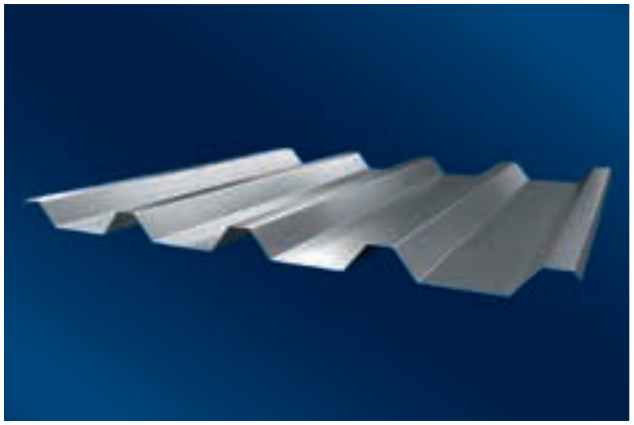
Test certificate for steel trapezoidal panels, no. II B 6-543-160
Test certificate for aluminum trapezoidal panels, no. TP-10/008



TP 45-150

Materials:	Steel	0.63 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	900 mm	
Total width:	945 mm	
Special features:	Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end. High load-bearing capacity.	

Test certificate for steel and aluminum trapezoidal and steel corrugated sheets, no. L01-007



TP 50-250

Materials:	Steel	0.63 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	1 000 mm	
Total width:	1 060 mm	
Special features:	Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end. High load-bearing capacity.	

Test certificate for steel trapezoidal sheets, no. II B 6-543-160
Test certificate for aluminum trapezoidal sheets, no.TP-10/008

Decks

We supply steel and aluminum decks for a range of load-bearing requirements. Perforated versions are also available.

Products are available with a rib height from 50 mm to 200 mm.
We can also provide assistance when calculating the load-bearing capacity.

BEMO VERSATILITY – FOR UNBEATABLE FLEXIBILITY IN FAÇADE DESIGN.

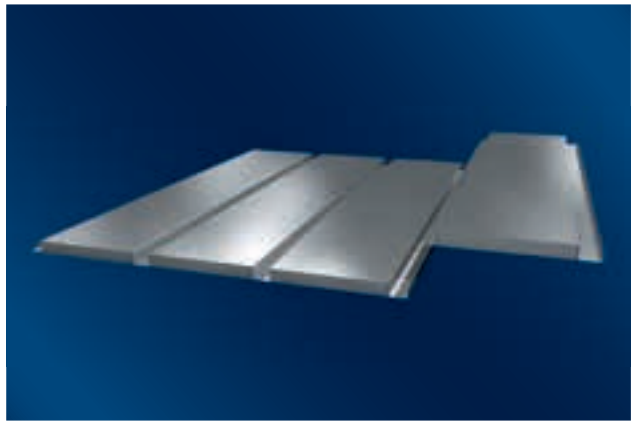
We give you complete freedom when designing a façade for your building – with panels that can be custom-manufactured to your specifications, plus a wide range of corrugated and trapezoidal sheets.

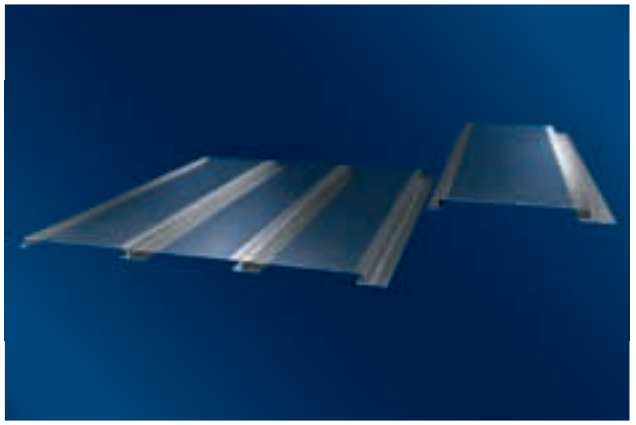
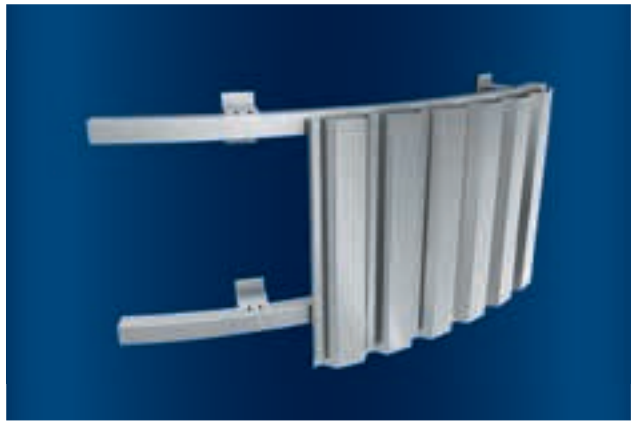
STRIKING VISUAL EFFECTS, SUCH AS LIGHT-DARK CONTRASTS, CAN BE ACHIEVED BY ADJUSTING THE HEIGHT, WIDTH, SPACING AND ANGLE OF THE RIBS.

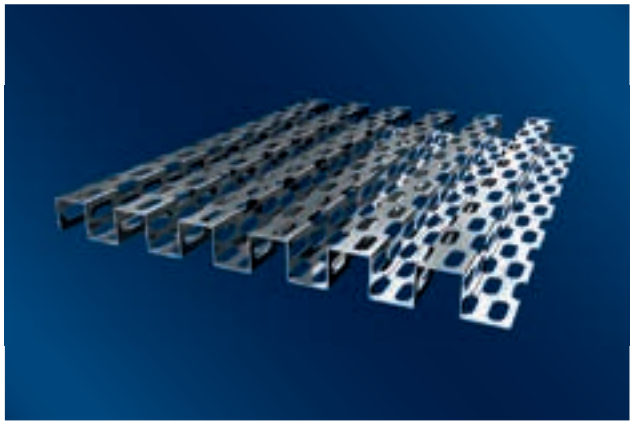
Smooth and microribbed surfaces with optional shadow gaps and panels with concealed mounts add yet more variety. They can be installed at almost any angle – horizontal, vertical or inclined – ensuring a perfect fit for your project.

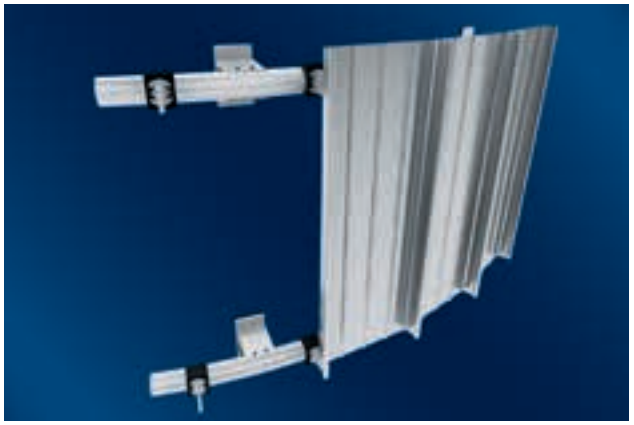
Panels are available in a choice of widths, and lengths of up to 6,000 mm. Corrugated and trapezoidal sheets can be manufactured in lengths of up to 17.50 m.

Sheets and panels are available in all BEMO materials, with many different finishes and colors.





UNRIVALLED POSSIBILITIES – FROM PLANNING TO INSTALLATION.

BEMO supports you throughout the project lifecycle – from the initial idea for your façade, through planning and installation. All façade products are custom-made to the exact dimensions required for your building.

QUITE POSSIBLY THE WORLD'S BEST COATING SYSTEM FOR METAL FAÇADES.

The BEMO-FLON coating system allows you to produce the specific color of your choice, and with any finish – from matt to high gloss. And once you have given your personal approval, we put it into production. We supply several cans of your sprayable custom paint free of charge so that any damage caused during installation can be touched up right away.

We can supply more of your custom paint where required for color-matching components such as door and window frames – ensuring a consistent look and feel.

You can place repeat orders for your specific paint tone at any time, even years later. BEMO-FLON is highly resistant to chalking. It retains both color intensity and finish – so even when you replace sections of the façade years later, or extend the building, there will be no visible difference.

The molecular structure of BEMO-FLON is similar to that of Teflon. This enables dirt to be cleaned away easily without the need for aggressive chemicals. Even graffiti can be removed simply and quickly – with a little help from BEMO's specially formulated cleaning product.

BEMO-FLON®: YOUR END-TO-END PACKAGE.

Intelligently designed mounting systems that fulfill the latest energy-efficiency standards complete BEMO's façade portfolio.

Independent testing of BEMO systems and components

ifo, Institut für Oberflächentechnik GmbH:
Testing of samples coated with BEMO-FLON, and with graffiti or paint on them, for ease of cleaning

ifo, Institut für Oberflächentechnik GmbH:
Testing in constant condensation-water atmosphere in line with DIN EN ISO 6270-2 (submersion of BEMO-FLON in water)

GSB premium class for BEMO-FLON

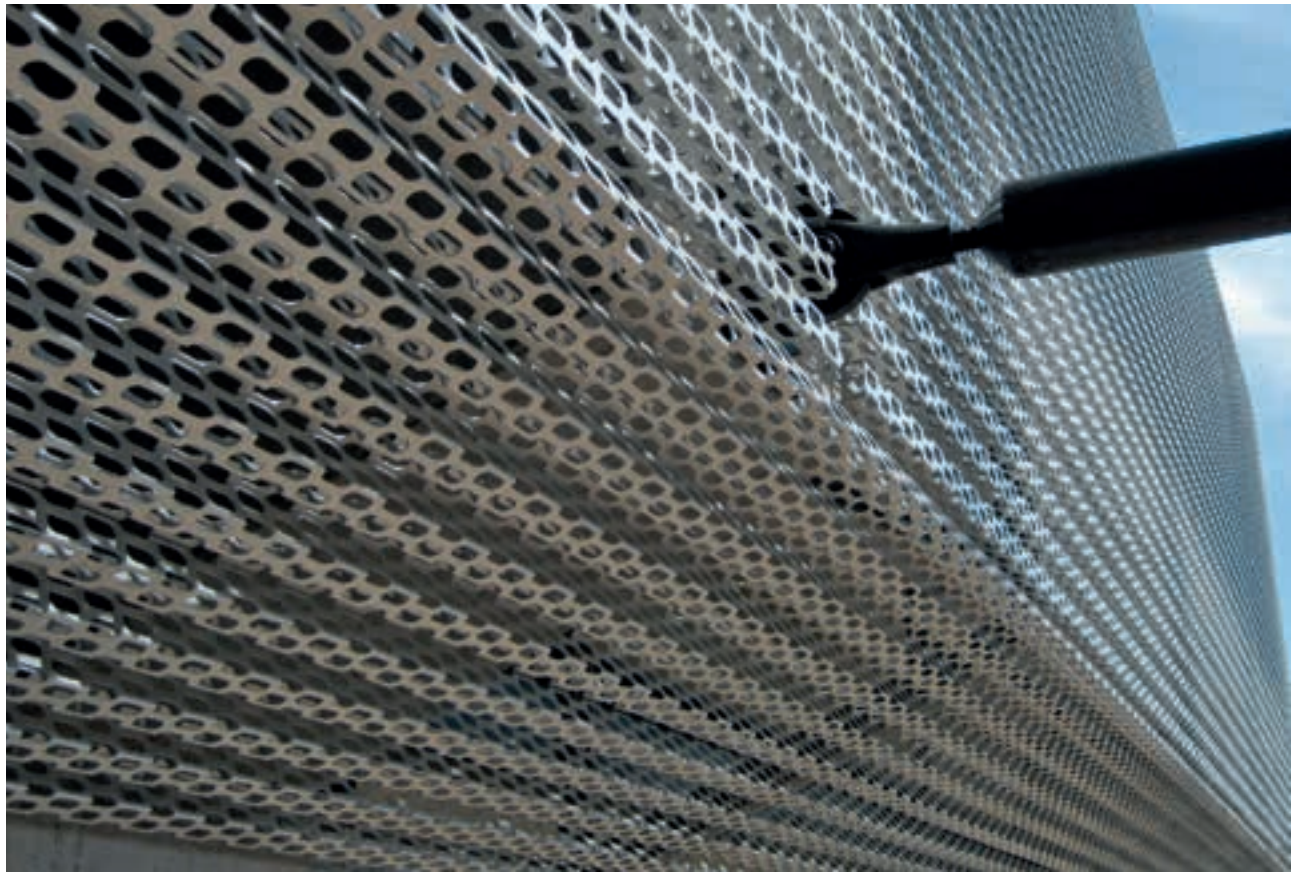
Qualicoat class III for BEMO-FLON

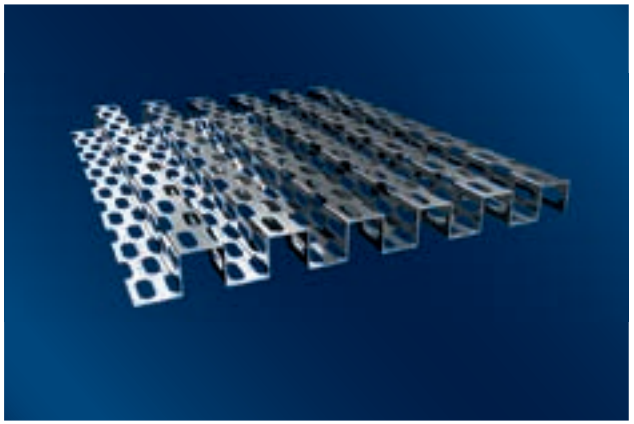
AAMA 2605 ten-year South Florida exposure test for BEMO-FLON

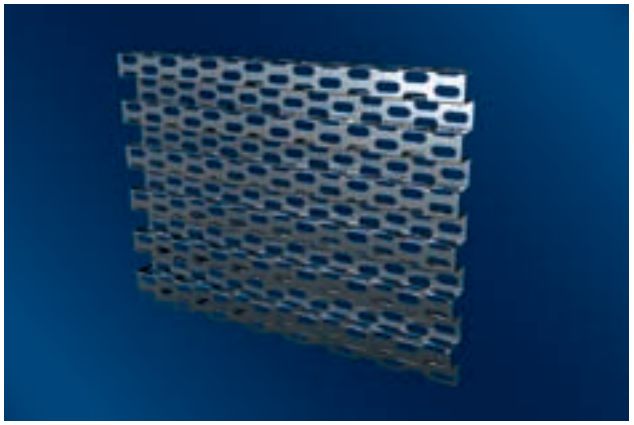
TNO Industrial Technology, Eindhoven:
TNO report 43/05.013246/sec: emission testing for BEMO-FLON in the event of fire

AQura GmbH, Hanau:
Measurement of contact angles of BEMO-FLON in accordance with AN-SAA (confirmed as hydrophobic surface, easy to clean)

SICHERHEITSINSTITUT, Zürich
Test report 201575-03-0750, assessment of the fire resistance rating of BEMO-FLON (low flammability, low smoke development)







BEMO-cladSKY – TRANSPARENT FAÇADE SYSTEM WITH INTEGRATED LIGHTING.

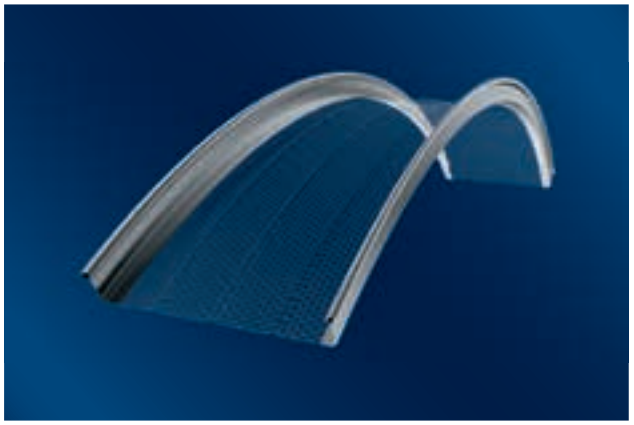
The BEMO-cladSKY façade system creates captivating contrasts between inside and outside on buildings with large glass surfaces. Mounted onto the building using a special system that eliminates stresses and penetration, it covers the structure like a protective skin. The BEMO-cladSKY penetration pattern protects against solar rays and noise, and creates an attractive design element.

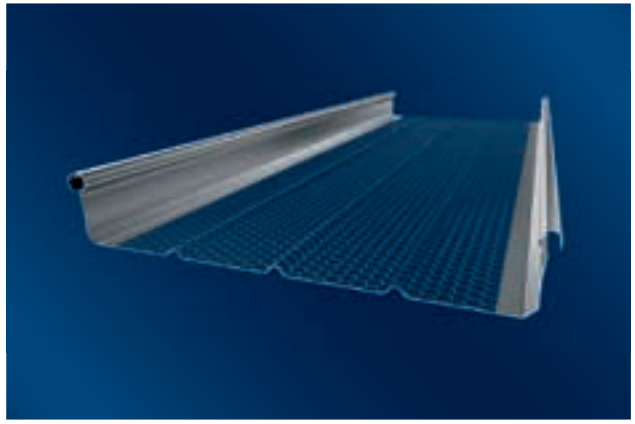
The castellated structure of the panels diffuses daylight and shields occupants from unwelcome gazes. Depending on the angle, the building appears opaque from the outside and almost completely transparent from the inside. At night, this effect is reversed.

The building's appearance changes according to the time of day, depending on the position of the sun and the resulting reflections. When night falls, integrated lighting makes it possible to create out-of-the-ordinary effects – for that extra-special touch.

The BEMO-cladSKY LED lighting system is attached to the inside of the metal panels. The system accommodates both static and automatically changing colors, and can produce strobe effects.

Available standart width	671 mm
Effective width	671 mm
Panel depth	54.75 mm
Materials	Aluminum
Material thickness	2.0 mm
Coatings	BEMO-FLON, PVDF, polyester, EcoClean™ from Alcoa
Finishes	Brushed, anodized, pre-weathered, plated
Length	Ex-works: up to 3.0 m as standard. Other lengths available on request.





BEMO TRANSLUCENT STANDING SEAM PANELS FOR FAÇADES.

PERFORATED STANDING SEAM PANELS AS A DESIGN ELEMENT – FOR FAÇADES THAT MAKE AN ARCHITECTURAL STATEMENT.

The translucent panels lend striking effects to colors and letters on surfaces behind them. From the inside, the façade appears transparent: all objects and colors outside are clearly recognizable.

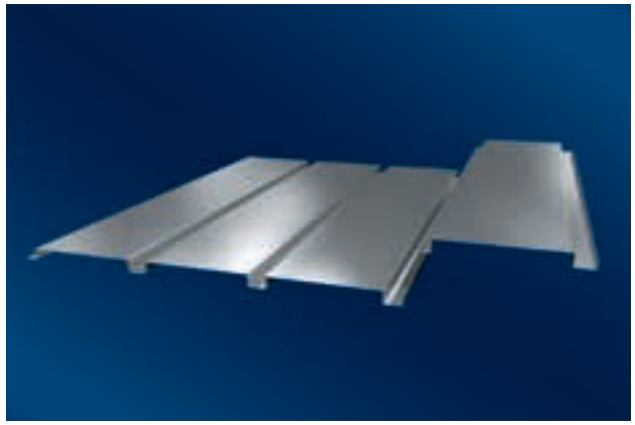
At night, when the building is illuminated from within, light shines out through the perforated panels – creating a show-stopping effect. In addition to their attractive appearance and light/dark contrasts, the perforated standing seam panels are also highly functional. They provide effective protection against harsh sunlight, and shield the interior from unwelcome gazes, especially from afar. And as sunlight is partially blocked, the building stays cooler in the summer. A choice of perforation patterns is available, and perforation can account for 30 to 85 percent of the panel. This enables architects to plan the exact degree of translucency, and to deploy light in a targeted way. The standing seam system is suitable for cladding large façades with no overlap on the horizontal seam.

The translucent standing seam panels can be curved. This makes it possible to create seamless transitions between the façade and roof. If the panels are mounted on the façade horizontally, building edges can be rounded.

Availble standard widths N65	305 mm, 333 mm, 400 mm, 500 mm and 600 mm		
Custom panel widths N65	100 mm – 1000 mm		
Availble standard widths N50	333 mm, 429 mm, 529 mm and 600 mm		
Custom panel widths Profile N50	100 mm – 800 mm		
Materials	Aluminum		
Material thickness	0.9 mm – 1.2 mm		
Coatings	BEMO-FLON, PVDF, polyester, EcoClean™ from Alcoa		
Finishes	Stucco, brushed, anodized, pre-weathered, plated		
Perforation pattern	R3M5	R5M8	SW 11-14
Rib	Parallel to panel curvature, centered and straight, or no ribs		
Length	Ex-works: up to 38 m; on-site: in excess of 100 m		

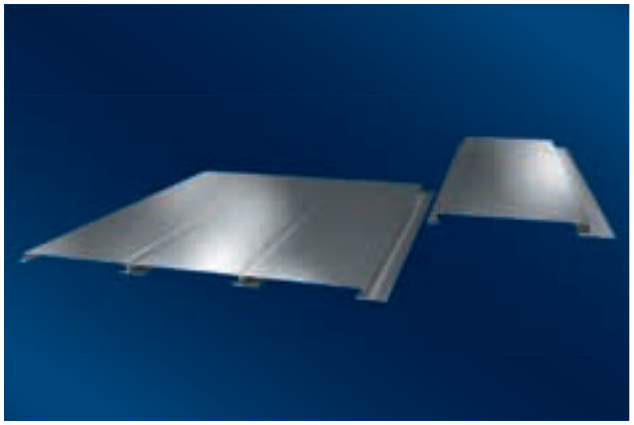
Smooth curving, standing seam panels, convex	N50	N65
t = 1.20 min IR in mm	800	800
t = 1.00 min IR in mm	1000	1000
t = 0.90 min IR in mm	1200	1200
min lg in mm	300	300

Smooth curving, standing seam panels, concave	N50	N65
t = 1.20 min IR in mm	10000	10000
t = 1.00 min IR in mm	12000	12000
t = 0.90 min IR in mm	14000	14000
min lg in mm	300	300



Shadow line cassette panel

Materials:	Steel	0.75 mm – 1.00 mm
	Aluminum	0.90 mm – 2.00 mm
	COR-TEN steel	from 1.50 mm
Coatings:	PE / PVDF / BEMO-DUR /BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	6.00 m	
Special features:	Visible fixings	

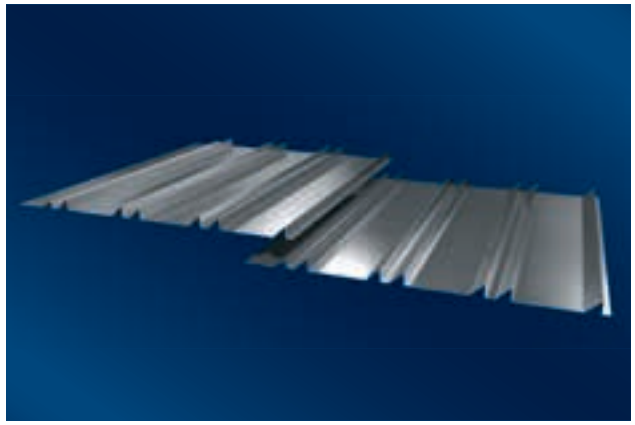


Secret fix cassette panel

Materials:	Steel	0.75 mm – 1.00 mm
	Aluminum	0.90 mm – 1.50 mm
Coatings:	PE / PVDF / BEMO-DUR /BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	6.00 m	
Special features:	Concealed fixings	

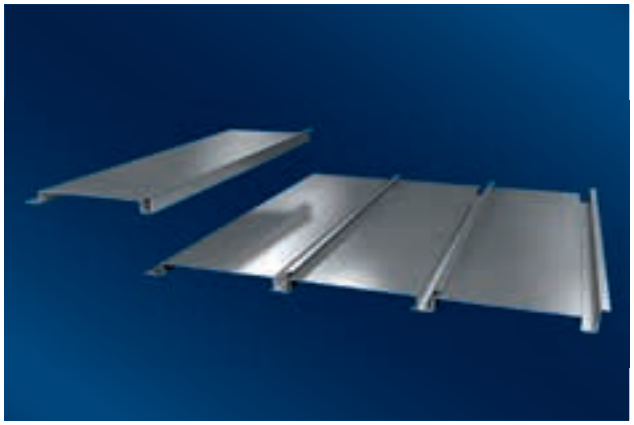
Shiplap panel

Materials:	Steel	0.75 mm – 1.00 mm
	Aluminum	0.90 mm – 1.50 mm
Coatings:	PE / PVDF / BEMO-DUR /BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	6.00 m	
Special features:	Overlap with concealed fixings	



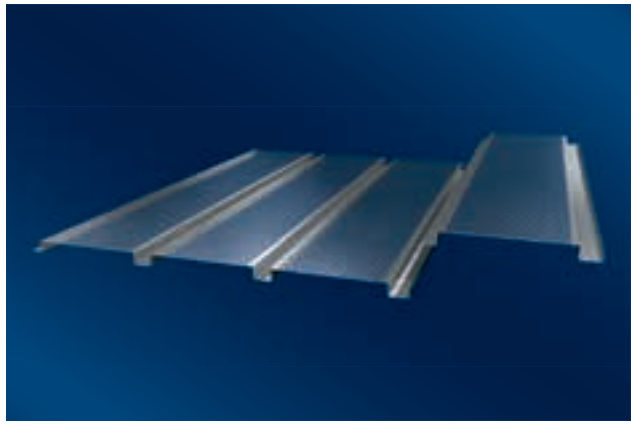
ZP 35-800

Materials:	Aluminum	0.90 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR /BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	6.00 m	
Special features:	Visible fixings.	



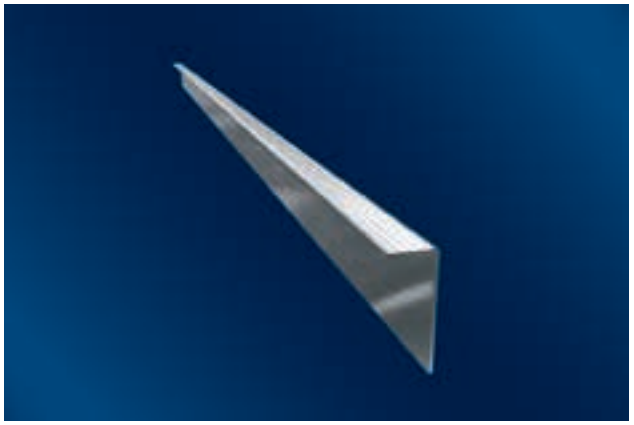
Custom panels

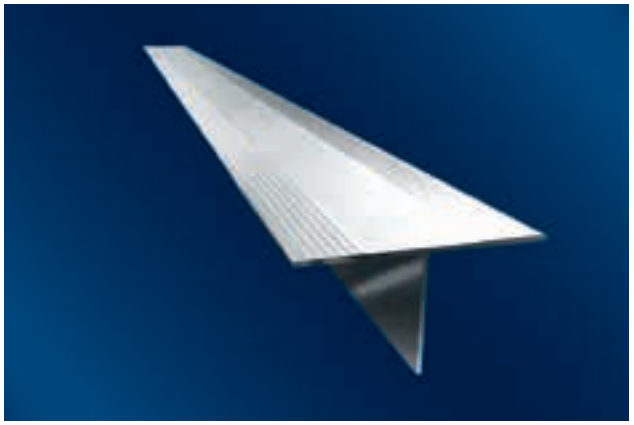
Materials:	Steel	0.75 mm – 1.00 mm
	Aluminum	0.90 mm – 1.00 mm
	COR-TEN steel	from 1.50 mm
Coatings:	PE / PVDF / BEMO-DUR /BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	6.00 m	
Special features:	We manufacture panel façades to your specifications, with concealed or visible fixings.	



Perforated panels

Materials:	Aluminum	0.90 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	6.00 m	
Perforation patterns:	R3M5 R3.5M5 R5M8	





BEMO FAÇADE SYSTEMS – THERMAL-BRIDGE-FREE SUBSTRUCTURE.

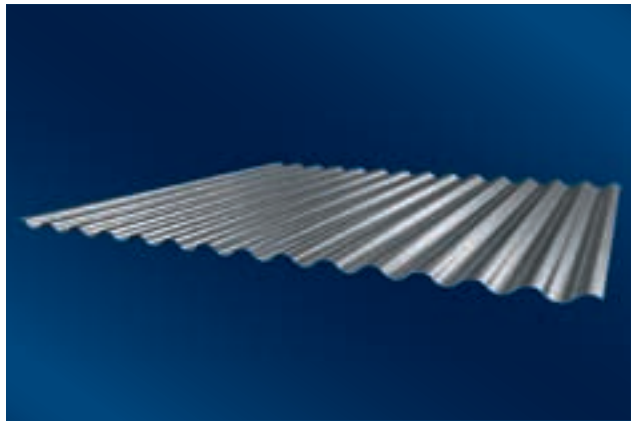
Thermal bracket material:	Ultramid A3WG10, glass-fiber reinforced
Material, ZeLa:	Aluminum or stainless steel
Testing performed on thermal bracket:	**IBF, Ingolf Kotthoff (MFPA, Leipzig Institute for Materials Research and Testing):** Fire protection testing in line with DIN 18516-1 for thermal brackets deployed as wall-mounted devices for vertical substructures for ventilated curtain walls.
ZeLa:	**IFBT, Leipzig:** Testing of load-bearing capacity of ZeLa façade substructure, tensile strength testing, including eccentric-loaded tensile stress, compression strength testing, including eccentric-loaded compression stress, and long-term testing; tentative abZ certification secured, number Z.14-4-657

Thermal bracket: eliminating thermal bridges, cutting energy costs.

The thermal bracket is a right-angle fixture free from highly conductive materials, eliminating thermal bridges. It is made of highly robust glass-fiber reinforced Ultramid A3WG10. The brackets have been tested and certified for resistance to fire, frost, and moisture. The thermal bracket is mounted directly onto the building structure, and features an integrated tension spring. This ensures simple and efficient installation.

ZeLa façade substructure for effective load transfer.

The ZeLa façade substructure effectively transfers load from the center of the panel to the underlying structure, improving load distribution and minimizing the need for brackets. In addition, it speeds up installation. In the event of significant unevenness in the façade, the transfer plate can be easily replaced – without having to replace the anchors. The ZeLa system allows controlled thermal expansion of +/- 4 mm. The ZeLa transfer plate is positioned to prevent thermal bridges, reducing heating and air conditioning costs.



WP 18-76

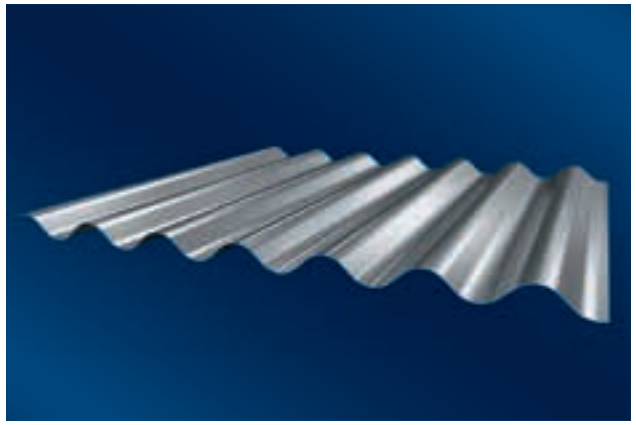
Materials:	Steel	0.50 mm – 0.88 mm
	Aluminum	0.50 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.88 mm
	Stainless steel	0.50 mm – 0.70 mm
	Copper	0.70 mm – 1.00 mm
	Titanium zinc	0.80 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	Aluminum	1 068 mm
	Steel	1 068 mm
	Stainless steel	1 068 mm
	Titanium zinc	858 mm
	Copper	858 mm
Total width:	Aluminum	1 100 mm
	Steel	1 100 mm
	Stainless steel	1 100 mm
	Titanium zinc	890 mm
	Copper	890 mm
Special features:	Capillary groove for greater protection. Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end.	

Test certificate for steel and aluminum trapezoidal and steel corrugated sheets, no. L01-007
DIBt no. Z-14.1-548 for aluminum corrugated sheets and connecting elements

WP 27-111

Materials:	Steel	0.63 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
	Titanium zinc	0.80 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	Aluminum	1 000 mm
	Steel	1 000 mm
	Stainless steel	1 000 mm
	Titanium zinc	890 mm
	Copper	890 mm
Total width:	Aluminum	1 105 mm
	Steel	1 105 mm
	Stainless steel	1 105 mm
	Titanium zinc	995 mm
	Copper	995 mm
Special features:	Capillary groove for greater protection. Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end.	

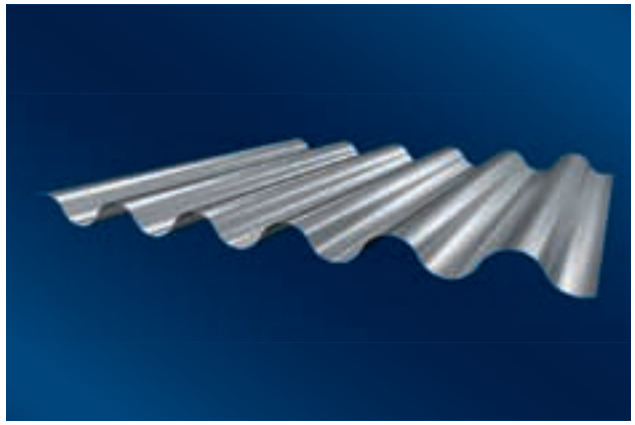
Test certificate for steel and aluminum trapezoidal and steel corrugated sheets, no. L01-007
DIBt no. Z-14.1-548 for aluminum corrugated sheets and connecting elements



WP 42-160

Materials:	Steel	0.75 mm – 0.88 mm
	Aluminum	0.80 mm – 1.00 mm
	Aluzinc	0.75 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	960 mm	
Total width:	1 080 mm	
Special features:	Capillary groove for greater protection. Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end.	

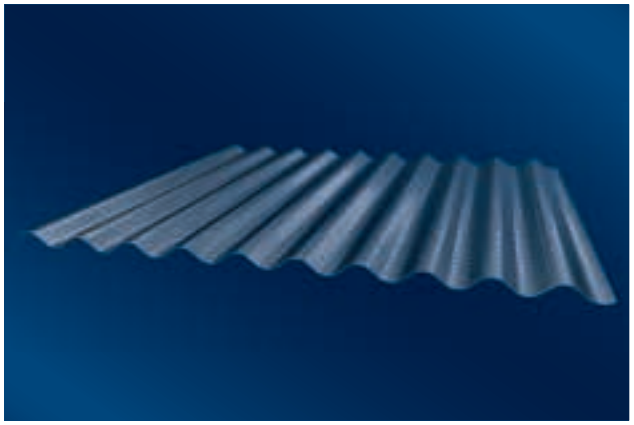
Test certificate for steel and aluminum trapezoidal and steel corrugated sheets, no. L01-007
DIBt no. Z-14.1-548 for aluminum corrugated sheets and connecting elements



WP 55-177

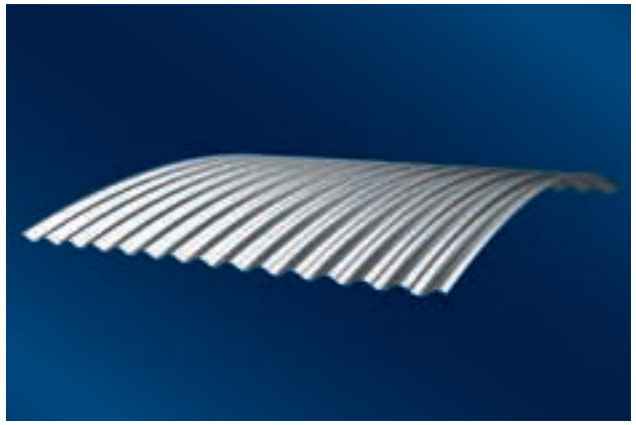
Materials:	Steel	0.75 mm – 0.88 mm
	Aluminum	0.80 mm – 1.00 mm
	Aluzinc	0.75 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / BEMO-DUR / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	885 mm	
Total width:	1 015 mm	
Special features:	Capillary groove for greater protection. Available with SILENT AC fleece with anti-condensation coating and double fused cut at each sheet end.	

Test certificate for steel and aluminum trapezoidal and steel corrugated sheets, no. L01-007
DIBt no. Z-14.1-548 for aluminum corrugated sheets and connecting elements



Perforated corrugated sheets

Materials:	Aluminum	0.90 mm – 1.00 mm
Coatings:	PE / PVDF / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Perforation patterns:	R3M5 R3.5M5 R5M8	



Curved corrugated sheets

Materials:	Aluminum	0.70 mm – 1.00 mm
	Steel	0.63 mm – 0.88 mm

Smooth curving, corrugated sheets	18 - 76	27 - 111	42 - 160	55 - 177
min IR in mm	1 000	–	–	3 500
min lg in mm	300	–	–	300
Crimp curving, corrugated sheets	18 - 76	27 - 111	42 - 160	55 - 177
min OR in mm	250	300	300	500
min lg in mm	150	150	150	150

TP 20-75

Materials:	Steel	0.63 mm
	Aluminum	0.70 mm – 0.90 mm
	Aluzinc	0.63 mm
	Copper	0.70 mm
	Titanium zinc	0.80 mm – 1.00 mm
Coatings:	PE / PVDF / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	900 mm	
Total width:	980 mm	
Special features:	Symmetrical sheet.	
Perforation patterns:	Aluminum (Thickness: 0.9 mm)	R3M5 R3.5M5 R5M8

Test certificate for steel trapezoidal sheets, no. II B 6-543-160
Test certificate for aluminum trapezoidal sheets, no. TP-10/008

TP 20-100

Materials:	Steel	0.63 mm
	Aluminum	0.70 mm
	Aluzinc	0.63 mm
	Copper	0.70 mm
Coatings:	PE / PVDF / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	1 000 mm	
Total width:	1 055 mm	
Special features:	Integrated capillary groove and supporting side lap.	

TP 35-207

Materials:	Steel	0.75 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	1 035 mm	
Total width:	1 070 mm	
Special features:	Large effective area of ventilation. Cost-effective panel with high effective coverage.	
Perforation patterns:	Aluminum (Thickness: 0.9 – 1.0 mm)	R3M5 R3.5M5 R5M8

Test certificate for steel trapezoidal sheets, no. II B 6-543-160
Test certificate for aluminum trapezoidal sheets, no. TP-10/008

TP 40-100

Materials:	Steel	0.63 mm – 0.75 mm
	Aluminum	0,70 mm – 1.00 mm
	Aluzinc	0.63 mm – 0.75 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	800 mm	
Total width:	900 mm	
Special features:	Symmetrical sheet. High load-bearing capacity.	
Perforation patterns:	Aluminum (Thickness: 0.9 – 1.0 mm)	R3M5 R3.5M5 R5M8

Test certificate for steel trapezoidal sheets, no. II B 6-543-160
Test certificate for aluminum trapezoidal sheets, no. TP-10/008

TP 45-150

Materials:	Steel	0.75 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.75 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	900 mm	
Total width:	945 mm	
Special features:	Large effective area of ventilation. High load-bearing capacity.	
Perforation patterns:	Aluminum (Thickness: 0.9 – 1.0 mm)	R3M5 R3.5M5 R5M8

Test certificate for steel and aluminum trapezoidal and steel corrugated sheets, no. L01-007

TP 50-250

Materials:	Steel	0.75 mm – 0.88 mm
	Aluminum	0.70 mm – 1.00 mm
	Aluzinc	0.75 mm – 0.88 mm
	Stainless steel	0.70 mm
	Copper	0.70 mm – 1.00 mm
Coatings:	PE / PVDF / ML / BEMO-FLON	
Finishes:	Stucco, brushed, anodized, aluzinc, pre-weathered, plated	
Maximum length:	17.50 m	
Effective width:	1 000 mm	
Total width:	1 060 mm	
Special features:	Large effective area of ventilation. High load-bearing capacity.	
Perforation patterns:	Aluminum (Thickness: 0.9 – 1.0 mm)	R3M5 R3.5M5 R5M8

Test certificate for steel trapezoidal sheets, no. II B 6-543-160
Test certificate for aluminum trapezoidal sheets, no. TP-10/008

ARCHITECTURE MEETS ECOLOGY – A COST-EFFICIENT AND SAFE SOLUTION.

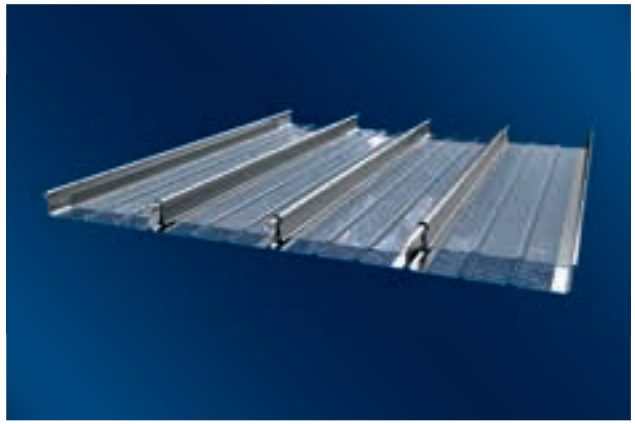
PLEASANT, DIFFUSED DAYLIGHT. ROOFS THAT MAKE IT POSSIBLE TO LOOK UP AT THE SKY. STUNNING LIGHTING EFFECTS AT NIGHT.

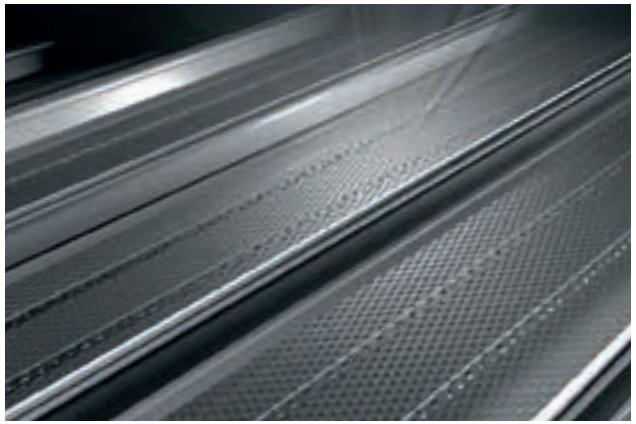
BEMO's new monoSKY® roof system enables a myriad of out-of-the-ordinary design possibilities.

The BEMO-RAINSCREEN system allows architects to create highly attractive flat, sleek surfaces on roofs and façades made of BEMO standing seam panels – easily, efficiently, and with absolutely no penetration points.

BEMO-SOL is a highly cost-effective low-temperature rooftop solar thermal collector. It is ideal for heating swimming pools, and delivers a rapid return on your investment.

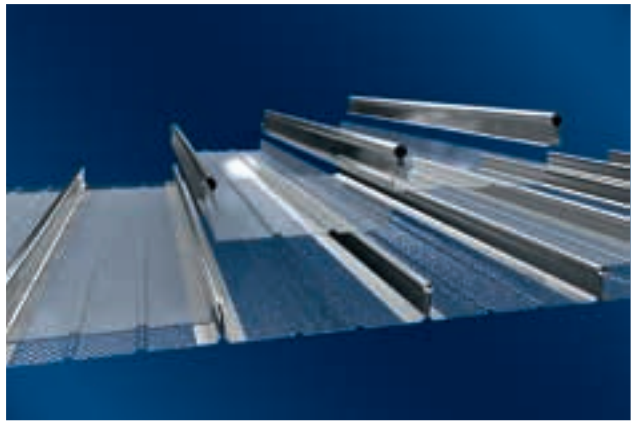
BEMO-AKKORD and BEMO-TOP rails are used for mounting rooftop photovoltaic modules without penetrating the standing seam. The standing seam panels are available in any width, so they can be deployed with photovoltaic systems of any size.











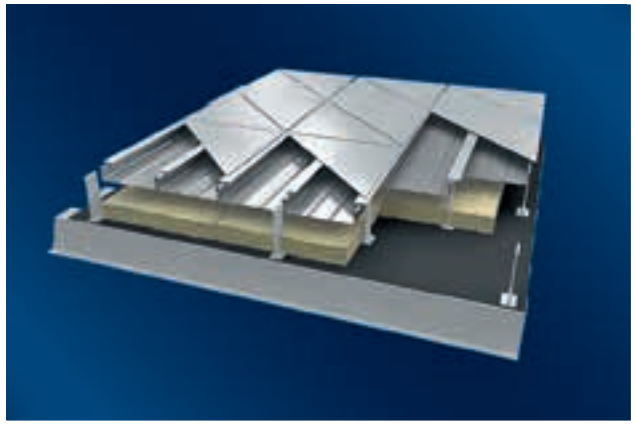
monoSKY® – NEW WAYS OF USING DAYLIGHT AS A DESIGN ELEMENT.

The translucent monoSKY® roof system is not only highly cost-effective – it also opens a world of new possibilities for architects. The system brings together the best of both worlds: perforated standing seam panels with excellent load-bearing properties, and a transparent layer that makes up the outermost waterproof cover. When the sun is shining, the translucent monoSKY® roof system, available with a range of perforation patterns, lets in pleasant, diffused light into the space below. At night, the building appears to glow. This effect can be accentuated by deploying colored lighting under the roof. And in inclement weather, the roof provides effective protection against wind and rain.

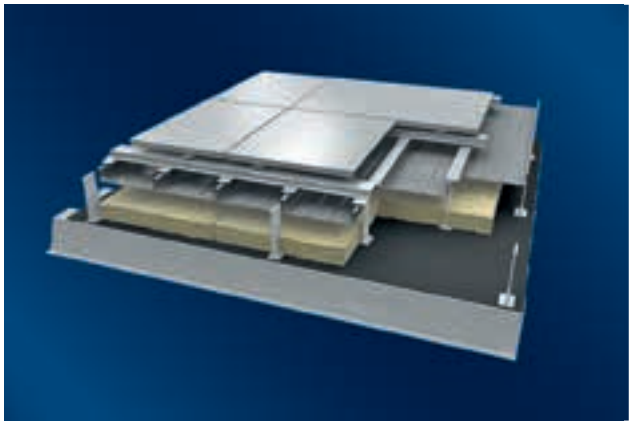
The first step is to mount the tried-and-trusted standing seam panels on movable halters. Then, the transparent layer is inserted into the standing seam panels from above, and attached with a special mounting profile. The transparent cover and the mounting profile mirror the shape of the underlying panels – creating the look and feel of a traditional standing seam roof. The entire roof lets through light with wavelengths between 435 nm und 660 nm – the spectrum required for plant growth. This makes it ideal for stadium roofs, for example. In addition, the monoSKY® layer blocks dangerous ultraviolet radiation (wavelengths between 1 nm and 380 nm) – providing protection against sunburn.

Because the outermost layer of the monoSKY® system is as transparent as glass and not simply translucent, architects have great freedom in using light and dark as design elements, both inside and outside the building.

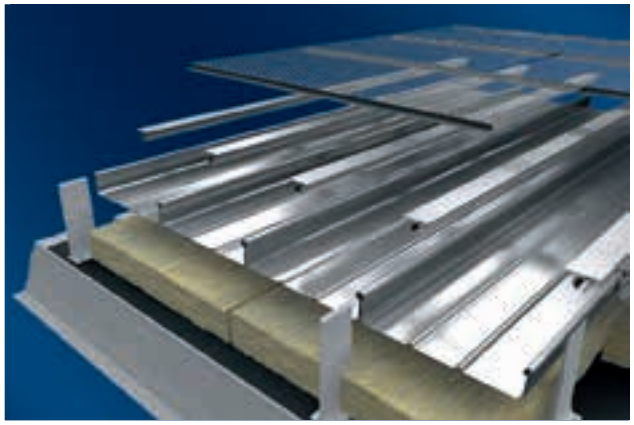
Materials:	Standing seam:	Aluminum	1.0 mm
	Transparent layer:	Polycarbonate	
	Mono mounting profiles:	Aluminum	
Coatings:	Standing seam:	BEMO-FLON, PVDF, polyester	
	Mono mounting profiles:	blank, BEMO-FLON	
Panel:	N65-333		
Perforation pattern:	R5M8	SW11-14	
Length:	Standing seam:	Ex-works: up to 38 m; on-site: in excess of 100 m	
	Transparent layer:	up to 38 m	
	Mono mounting profiles:	up to 6 m	

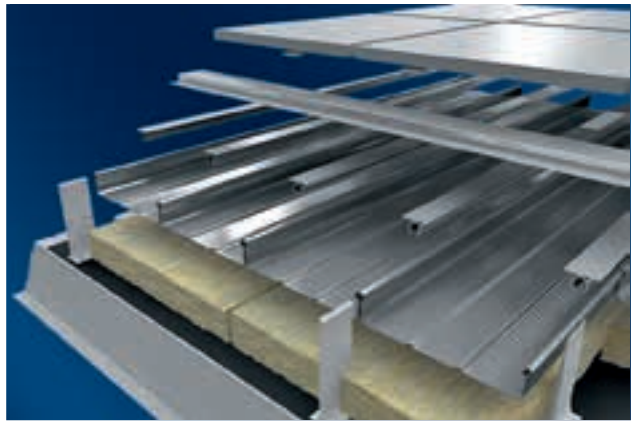


Panels installed on BEMO-TOP mounting profiles.



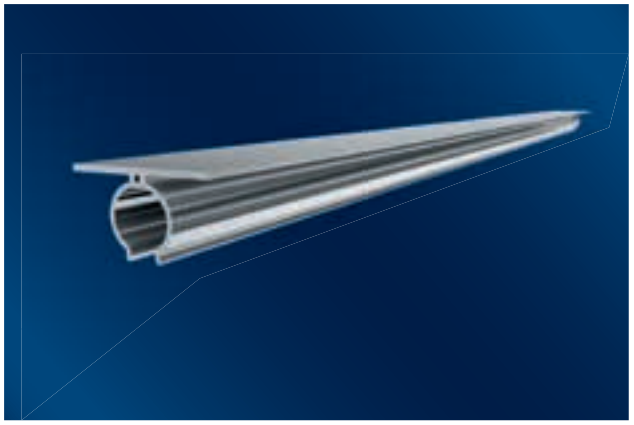
Panels mounted on secondary rail system; secondary rails attached to BEMO-TOP mounting profiles.





Panels mounted on secondary rail system; secondary rails attached to BEMO-TOP mounting profiles.

BEMO-TOP mounting profiles



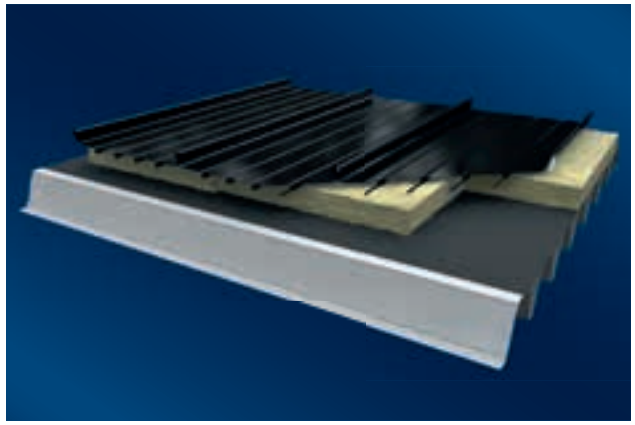
BEMO-RAINSCREEN – FLAT, SLEEK ROOF SECURELY MOUNTED WITH ZERO PENETRATION POINTS.

Today's architects increasingly demand flat, sleek metal roofs and façades. BEMO-RAINSCREEN makes it possible to mount flat panels on top of BEMO standing seam roofs safely, efficiently, and with absolutely no penetration points.

BEMO-TOP mounting rails are attached to the underlying panels without penetrating the seam – meaning the roof remains fully functional. The robust standing seam roof requires virtually no maintenance, and can support a person's weight. No additional seals or plugs are required. The TOP mounting rails do not prevent the standing seam panels from sliding as designed in the event of thermal expansion. The flat roof and façade panels are attached to the flange of the mounting rail.

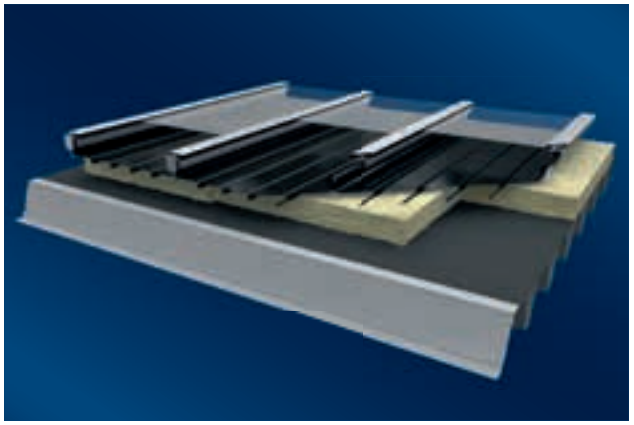
The combination of curved standing seam panels and BEMO-RAINSCREEN makes it possible to create sleek, flat façades that seamlessly transition into sleek, flat roofs. In addition, the system can be used with BEMO-MONRO to clad free-form buildings. In short, the BEMO-RAINSCREEN system is a safe and reliable solution for nearly all types of architecturally challenging roofs and façades.

Materials:	Aluminum	0.80 mm – 1.2 mm
	Steel	0.63 mm – 0.75 mm
Available standard widths N50, N65, VF65:	up to 600 mm	
Custom panel widths N50, VF65:	from 100 mm up to 800 mm	
Custom panel widths N65:	from 100 mm up to 1 000 mm	
Testing:	**Research Center for Steel, Timber and Masonry, Karlsruhe Institute of Technology (KIT)** Report no. 074261: pull-out tests on round rails with flanges when connected to BEMO standing seam panels	

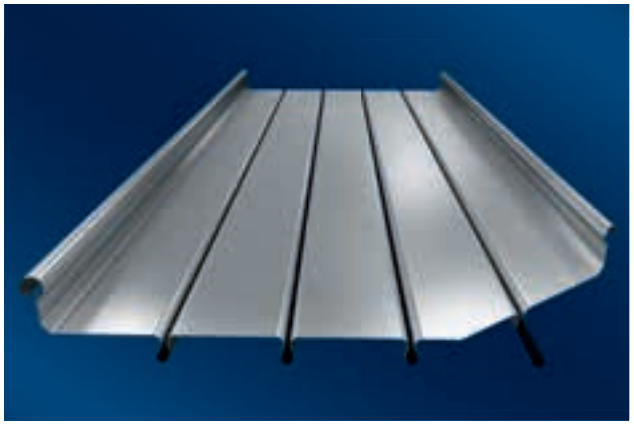


BEMO-SOL
Solar thermal collector
and roof in one.

BEMO-SOL Glass
Roof-integrated solar
water heating system.



BEMO-SOL standing seam panel
with integrated elastomer tubes.
For use with both roofs and façades.



BEMO Manifold connections
transfer heat from the roof or façade
to the point of use.

BEMO-SOL: COST-EFFECTIVE SOLAR COLLECTOR AND PENETRATION-FREE ROOF IN ONE.

The roof-integrated BEMO-SOL solar thermal collector combines sustainability, cost-effectiveness and aesthetics with the safety of BEMO technology.

BEMO-SOL can be used to generate process heat for agriculture and aquaculture, and for heating swimming pools. In addition, it can be employed to drive heat pumps. BEMO-SOL can produce temperatures of up to 40°C.

BEMO-SOL is a cost-effective year-round means of producing solar energy for heating and cooling buildings. It combines two functions in one: solar thermal collector and roof or façade. The tubes integrated into the standing seam panels are filled with water or a saline solution. The liquid absorbs solar heat and transfers it to the point of use. BEMO-SOL can generate heat 5 to 7°C above ambient temperature.

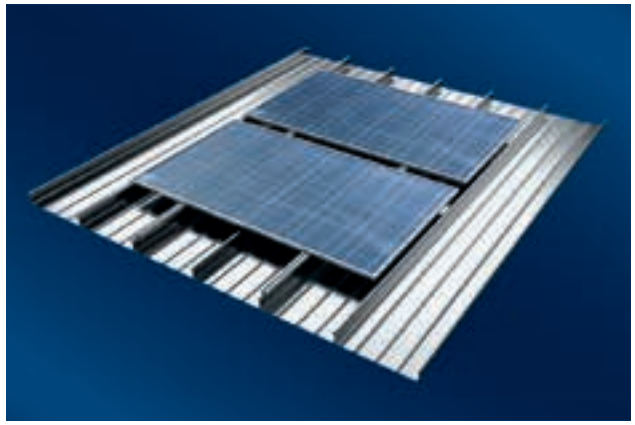
BEMO-SOL is also ideal for passive cooling. It allows excess heat produced by industrial equipment, commercial kitchens and other sources to be transferred to the roof, where it can be vented to the exterior.

With a layer of glass installed above the panel, BEMO-SOL Glass traps heat radiated by the roof surface. This means it can generate the temperatures typically required for process water.

The individual tubes in the panels meet at the ridge, feeding through the BEMO Manifold into larger diameter tubes. All materials have been specially developed and tested for the BEMO-SOL solar thermal collector, ensuring they are robust and long-lasting.

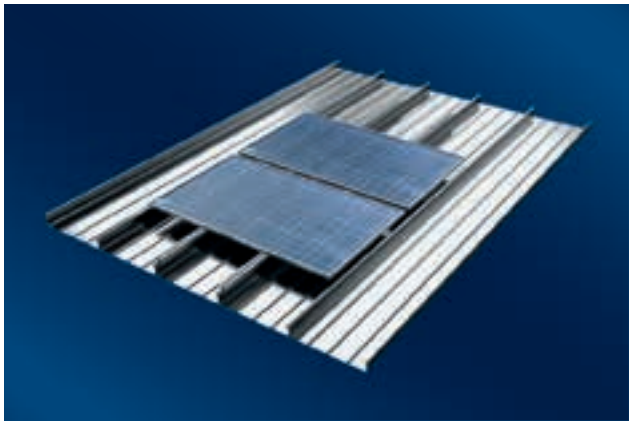
The BEMO panels are coated in dark colors using BEMO-FLON. BEMO-FLON is highly resistant to high temperatures, and is very durable. Our experts can help you determine the heat requirements for your project. And in association with selected installation partners, we can assist with creating detailed plans and drawings.

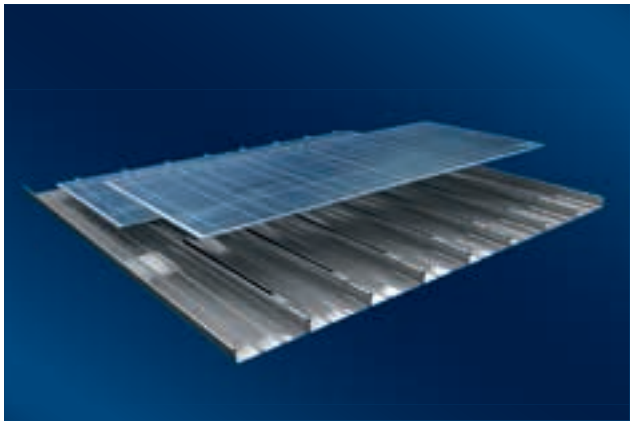
Material:	Aluminum 1.0 mm
Coating:	BEMO-FLON
Panel:	N50-500, N65-500
Glass layer:	ESG, 4.0 mm thick
Tube:	elastomer, highly resistant to UV radiation
Operating pressure:	1.0 bar – 2.0 bar
Testing:	**SPF Institute for Solar Technology, Rapperswil University of Technology** Test certificate no. C1117LPEN: BEMO-SOL Glass tested in line with EN 12975-2: 2006, section 6 Test certificate no. C1117QPEN: BEMO-SOL Glass tested in line with EN 12975-2: 2006, section 5 Test certificate no. C1116LPEN: BEMO-SOL tested in line with EN 12975-2: 2006, section 6 Test certificate no. C1116QPEN: BEMO-SOL tested in line with EN 12975-2: 2006, section 5



Option 1
One photovoltaic module installed
across four standing seam panels;
modules meet over the standing seam.

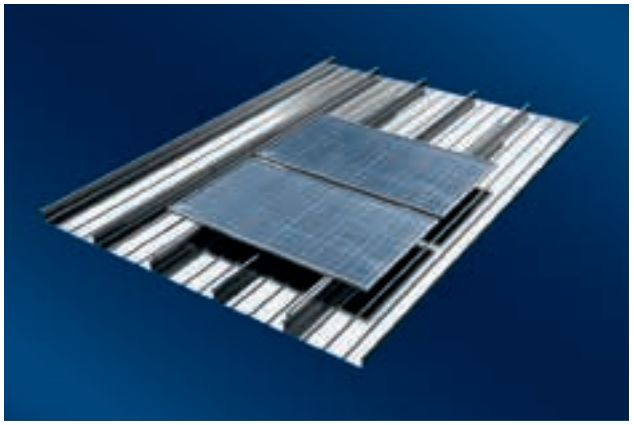
Option 2
One photovoltaic module installed
across three standing seam panels;
modules meet over the standing seam.





BEMO-AKKORD components
BEMO-AKKORD rail, sliding block,
clamping bracket with bolts,
retaining bracket for eaves.

Option 3
One photovoltaic module installed
across three standing seam panels;
modules meet over the center of the panel.



NO BOLTS, NO DRILLING, NO DAMAGE – FOR HIGHLY DURABLE SOLAR ROOFS.

Rooftop solutions for all leading solar modules, mounted at the same angle as the pitch of the roof.

No matter what make of photovoltaic module you choose, you can rest assured that it will be compatible with substructures comprising BEMO-AKKORD and BEMO-TOP mounting profiles. The effective width of BEMO's standing seam panels can be varied in line with your chosen modules' dimensions. Generally, a BEMO-AKKORD rail is installed on every other standing seam.

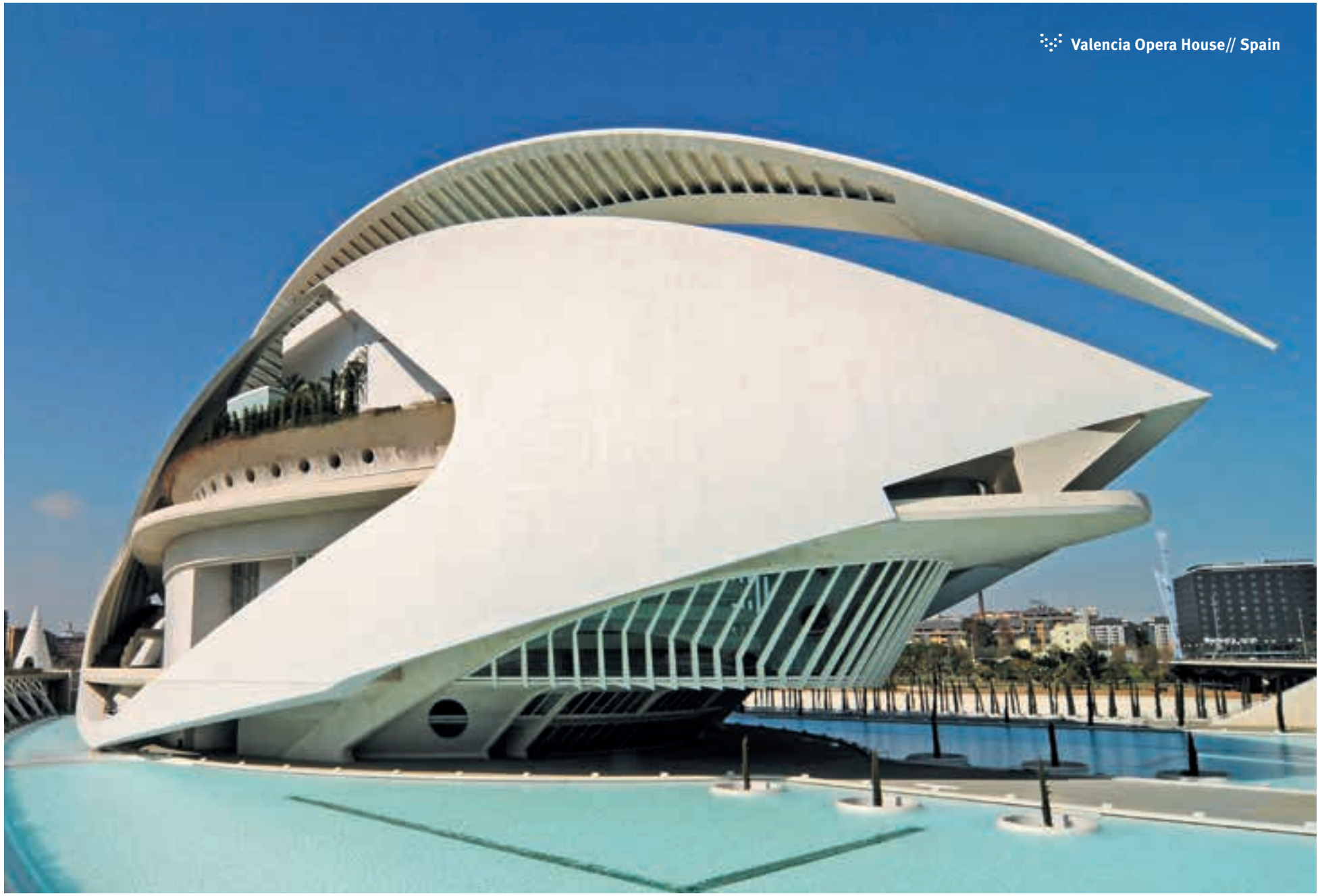
BEMO mounting rails are made of aluminum, and are attached to omega profiles, that are themselves secured to the standing seams, using a roll former. No bolts or drilling are required, so there are no penetration points – with the exception of retaining brackets on the eaves. This protects your roof from corrosion, and eliminates the risk of leaks via hole elongation.

BEMO-AKKORD rails comprise a specially designed extruded mount and a sliding block. The sliding block can be inserted anywhere on the rail. The modules are held in place by clamping brackets attached to the sliding block using metric bolts. Cable clips attached to BEMO-AKKORD rails keep cables organized and away from rainwater.

The height of the standing seam, combined with the height of BEMO rails, ensures ample air circulation behind the solar modules. And a wide flange on the upper side of the BEMO-TOP mounting profiles allows you to mount secondary systems using self-drilling screws.

The standing seam panels are manufactured in continuous lengths, so no overlap is required. This ensures high safety, even for low-pitch roofs.

Material:	Aluminum	0.80 mm – 1.2 mm
	Steel	0.63 mm – 0.75 mm
Panels:	N50, N65, VF65 in widths up to 600 mm	
BEMO-AKKORD installation options:	Option 1: One photovoltaic module installed across four standing seam panels; modules meet over the standing seam. Option 2: One photovoltaic module installed across three standing seam panels; modules meet over the standing seam. Option 3: One photovoltaic module installed across three standing seam panels; modules meet over the center of the panel.	
Test certificate:	**Research Center for Steel, Timber & Masonry at the Karlsruhe Institute of Technology (KIT)** Test certificate no. 074261: Strength testing for round rails with flange on BEMO standing seam panels	



1 Shopping Center // Spain
2 Railway Station // Germany
3 Cultural Center // Netherlands

4 Silo // Germany
5 Clifford Pier // Singapore
6 Formula 1 Grandstand // Spain
7 Center Court // Greece

1 New Doha International Airport // Qatar
2 Dubai Flower Center // UAE
3 University // Netherlands

4 University // USA
5 Velodrom // Greece
6 Office Building // Germany
7 Events Center // USA

1 Multi-purpose Hall // Germany
2 Airport Building // USA
3 Multi-purpose Hall // France

4 Apartments // England
5 Airport Building // USA
6 Office Building // USA
7 Kindergarten // Germany

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