

We support ideas

Substructure systems for suspended rear-ventilated facades



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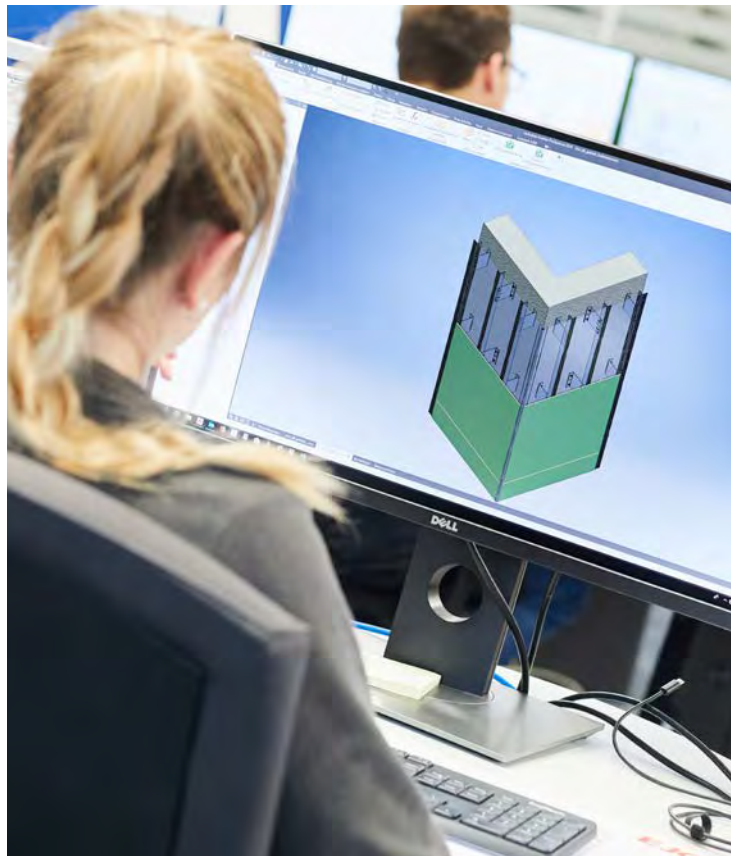
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“In a world becoming ever more complex, in everything we do our goal is to make everyday life at work easier for our business partners.”

Andreas Reinhardt, SYSTEA CEO Sales / Engineering







We support ideas

Suspended rear-ventilated facades are the optimum solution to the increased demands of modern structural building designs, thanks to the wide variety of adaptable systems, high functionality and also their safety.

When realising challenging designs, the substructure assumes a supporting role in the truest sense of the word. As the basis for every suspended rear-ventilated rainscreen facade system, it connects the cladding facade to the wall of the building and therefore is indispensable for aesthetically challenging rear-ventilated facade solutions.

For over 45 years SYSTEA has stood for innovative sub-structure systems, which provide secure support for suspended rear-ventilated facades. In collaboration with leading manufacturers of facade cladding materials, we develop and produce individual and high-quality solutions "Made in Germany" with a focus on an optimum price : performance ratio.

More than simply a supplier of systems

As experts for sub-structure systems, we employ our entire knowledge to provide our customers with tailored solutions and to reduce the increasing complexity of demanding facade designs.

Our CE certified systems as well as our extensive consultancy, planning, design and implementation services make it possible for us to realise almost any design.

Through constant communication with our partners in all spheres of the industry, from architects to contractors we are able to identify developments and trends. We stay ahead of the market by constantly adapting and increasing our portfolio so that our client's work is easier. This is what we mean by "Simplifying Facades".

Project: One World Trade Center, New York, USA
Architect: Skidmore, Owings & Merrill LLP
Facade system: POHL Europanel®
Material: Stainless steel
Surface: Stainless steel embossing "Laser"





**“If you can conceive it,
then we will make it happen.”**

Heinrich Robert Pohl,
Executive Director of the POHL Group

Senior Head of the Company Heinrich R. Pohl
with his daughter Katja Boden (Managing
Director of Pohl Administration) as well as
son-in-law Andreas Boden (Managing Director
of Christian Pohl GmbH)

Know-how and Experience

SYSTEA is a member of the family-run POHL group of companies, which is now in its 6th generation, manufacturing and selling high-quality and innovative metal products for the roofing and wall cladding facades industry.

With four subsidiary companies, seven branch offices and diverse sales offices in Germany and abroad, the POHL Group is an internationally active specialist in metal products. More than 600 employees pull together in one direction, helping to shape the success of the POHL Group on a daily basis.

Areas of Business



Suspended back-ventilated metal
facades



Sub-structure systems for
suspended back-ventilated facades



Fall safe systems for flat and
peaked roofs



Aluminium systems for the roof
and facades



Concealed - invisible and indispensable

Suspended rear-ventilated facades are amongst the most widely varied façade systems, due to their safety, security and possible design solutions.

Thanks to their systematic build-up, different requirements can easily be met without needing to make any sacrifices in functionality or aesthetics.

In this way the sub-structure takes on an inconspicuous but nevertheless essential role. As a connection between the supporting wall and cladding facade, it is responsible for safe and secure support and along with its static engineering roles

must also fulfil further requirements such as resistance to corrosion and reduced thermal conductivity as well as ensuring simple assembly and installation.

SYSTEFA sub-structure systems provide precisely the level of safety required, in order to create extraordinary facades.

Project: Indoor pool, Ried im Innkreis, Austria
Architect: Architekten Gärtner & Neururer ZT GmbH
Cladding: Moeding clay tile panels
SYSTEA solution: Profile system TC110-M with aluminium brackets
Photo: Andrew Phelps



A build-up offering endless possibilities.

The build-up of sub-structure systems is always the same and yet offers a multitude of designs. Anchoring elements, wall brackets, carrier/clinch profiles as well as connecting elements fulfil every design criteria:

With an extensive range of components, SYSTEA can offer facade professionals a customised, tailor-made solution realising even the most ambitious architects design.

1. Anchoring Elements: Elements matched to the substrate in each case fix wall brackets to the building and ensure safe and secure support from the sub-structure system.

2. Wall Brackets: Secured to the substrate and formed as either fixed or sliding points. These serve as assembly points for the support profiles and can equalise irregularities in the substrate.

3. Support/Clinch profiles: Takes up the facade cladding, either as a vertical or horizontal profile.

4. Connecting Elements: Connect individual sub-structure elements such as wall brackets and support profiles and also the facade with the support profiles.

Project: 25hours Hotel, Dusseldorf, Germany
Architect: HPP Architekten
Cladding: Alucobond composite material
SYSTEAL solution: Profile system KH35 / SZ 20 / CS 20 with aluminium brackets
Photo: Andreas Horsky



Safe and Efficient

The energy footprint of buildings has been receiving ever-greater attention for years now. Accordingly, measures are constantly being adopted to reduce CO₂ emissions. The focus here is on the building envelope and insulating characteristics, for which demands have become much more stringent in recent years.

Sub-structure systems from SYSTEA contribute to significantly reducing energy losses through insulation. Materials such as stainless-steel or glass fibre reinforced polyamide cut down on thermal bridges being formed and therefore are also suitable for meeting the highest demands for energy efficiency.

- **Aluminium L-shaped wall brackets:** Non-flammable aluminium wall brackets made using alloy EN AW-6063 T66 have medium thermal conductivity (Class D to H). These are available in lengths from 40 mm to 320 mm and are used for fixing onto concrete /masonry or for wooden/metal frameworks.
- **Aluminium U-shaped wall brackets:** These non-flammable aluminium wall brackets made of alloy EN AW-6063 T66 possess medium thermal conductivity properties (Class B to F). They are available in lengths of from 40 mm to 180 mm and are used for fixing onto concrete /masonry or for wooden/metal frameworks.
- **Stainless-steel L-shaped wall brackets:** Non-flammable stainless-steel wall brackets made using alloy EN 10088-2; 1.4162 have a low thermal conductivity (Class A+ or B). These are available in lengths from 120 mm to 400 mm and are used for fixing onto concrete /masonry or for wooden/metal frameworks. These are suitable for the Passivhaus method of construction.
- **Stainless-steel U-shaped wall brackets:** these non-flammable stainless steel wall brackets made from alloy EN 10088-2; 1.4162 have a low thermal conductivity (Class A+ to B). They are available in lengths from 60 mm to 300 mm and are used for fixing onto concrete/masonry or wooden/metal frameworks. These are suitable for the Passivhaus method of construction.
- **TEKOFIX wall bracket:** The barely flammable TEKOFIX wall bracket is made of the glass-fibre reinforced plastic PA66, which makes a very low thermal conductivity (Class A+ to A). The wall bracket is available in lengths from 100 mm to 350 mm and is used for fixing onto concrete/masonry or wooden/metal frameworks. These are suitable for the Passivhaus method of construction.



Aluminium L-shaped wall brackets



Stainless-steel L-shaped wall brackets



TEKOFIX wall brackets



TEKOFIX wall brackets				Aluminium L-shaped wall brackets				
A+ 0,005	A 0,01	B 0,03	C 0,045	D 0,06	E 0,08	F 0,1	G 0,12	H 0,15
Stainless-steel brackets			Aluminium U-shaped wall brackets					



Project: Frankfurt School of Finance & Management,
Frankfurt a.M., Germany
Architect: Henning Larsen Architects
Cladding: Mosa ceramic panels
SYSTEA solution: Profile system UBE25
with stainless steel brackets
Photo: Royal Mosa

Freedom for your ideas

SYSTEA sub-structure systems offer more than just secure support.

Through our contact with the industry, our systems recognise the demands of architects and designers, planners and facade installers make and allow these recognitions to be included in our solutions. Along with our highly competent technical performance, our systems distinguish themselves in this way through efficient and economic assembly and installation.

Thanks to their flexibility, SYSTEA substructure systems allow architect's almost unbounded freedom of facade design whether using fibre cement, HPL or aluminium composite

panels, ceramic panels or natural stone, metal cassettes or plaster-faced support panels. Through our large selection of wall brackets, carrier rail and clinch rail profiles and appropriate accessories we offer a suitable solution for almost every facade design and cladding material.

Limitless Opportunities

All cladding materials can be effortlessly fixed in place using SYSTEAL profile systems. The following matrix provides an overview of the most tried and tested material/profile system combinations.

		Fastening														
Brand	Type of material	ALWI-S visible	ALKAPO visible	UKLA visible	ALHO visible	ALWI-V concealed	TC110 concealed	UBE concealed	UBEKA concealed	ALWI-V-B concealed	KH35/SZ20/CS20 concealed	KU35 NVA/VA concealed	BETA Universal II visible	BETA Universal II concealed	NASTO-N concealed	NASTO-D concealed
Agrob Buchtal	Clay tiles/terracotta			X		X				X			X	X		
Alpolic	Composite material	X	X		X	X					X	X	X	X		
Alucobond	Composite material	X	X		X	X					X	X	X	X		
Aluform	Corrugated/trapezoidal sheet metal, smooth plates, sidings	X	X		X	X										
Argeton	Clay tiles/terracotta						X						X	X		
Arpa	HPL/laminated panel	X	X		X	X		X	X				X	X		
Carea	Ceramics	X	X		X			X	X				X			
Cembrit	Fibre cement	X	X		X	X		X	X				X	X		
Ceramica Mayor	Clay tiles/terracotta	X*	X*		X*	X*							X*	X*		
Cerashield	Ceramics			X		X		X	X				X	X		
Equitone	Fibre cement	X	X		X	X		X	X				X	X		
Etalbond	Composite material	X	X		X	X					X	X	X	X		
Eternit	Fibre cement	X	X		X	X		X	X				X	X		
Eurocem	Fibre cement	X	X		X	X		X	X				X	X		
Florgres	Ceramics			X		X		X	X				X	X		
Fundermax	HPL/laminated panel	X	X		X	X		X	X				X	X		
Imola	Ceramics			X		X		X	X				X	X		
KME	Metal	X	X			X		X			X	X	X	X		
Knauf	Plaster base board					X										
Larson	Composite material	X	X		X	X					X	X	X	X		
Laukien	Corrugated/trapezoidal sheet metal, smooth plates, sidings	X	X		X	X							X	X		
Lithodecor	Plaster base board					X		X					X	X		
Maas	Corrugated/trapezoidal sheet metal, smooth plates, sidings	X	X		X	X					X	X	X	X		
Marazzi	Ceramics			X		X		X	X				X	X		
Mirage	Ceramics			X		X		X	X				X	X		
Moeding	Clay tiles/terracotta						X						X	X		
Mosa	Ceramics			X		X		X	X				X	X		
NBK	Clay tiles/terracotta						X						X	X		
Novelis	Metal	X	X		X	X					X	X	X	X		
Prefa	Corrugated/trapezoidal sheet metal, smooth plates, sidings	X	X		X	X							X	X		
Resopal	HPL/laminated panel	X	X		X	X		X	X				X	X		
Rheinzink	Corrugated/trapezoidal sheet metal, smooth plates, sidings		X		X	X							X	X		
Rieder	Fibreglass concrete	X	X		X	X		X	X				X	X		
Rockpanel	Stone wool panels	X	X		X	X		X	X				X	X		
Sto	Plaster base board					X		X	X				X	X		
Swisspearl	Fibre cement	X	X		X	X		X	X				X	X		
Taktl	Fibreglass concrete	X	X		X	X		X	X				X	X		
Terreal	Clay tiles/terracotta	X														
Tonality	Clay tiles/terracotta					X*							X*	X*		
Trespa	HPL/laminated panel	X	X		X	X		X	X				X	X		
VM Zink	Metal	X	X			X					X	X	X	X		
	Natural stone							X	X				X	X	X	X

* with system rails



From words to action

The facade requires additional attention, as the face of the building. Architects, planners and designers, tradesmen and workers are faced by new challenges throughout the entire course of the design and construction process from the first idea and inception of possibilities for implementation using different cladding materials, right through to a suitable sub-structure.

And so you can count on us at all times during this process. Here at SYSTEA we are always ready to give you reliable and dependable advice and support you on all questions concerning facades, with our Technical Support Team and our external advisers active in the field.

Complex Questions – competent responses

Advisory Services

- General advice and consultancy for systems for suspended rear-ventilated facade systems (VHF)
- Checking and designing technical master details
- Preliminary static calculations and investigations
- Advice on rules and regulations governing supervision of construction work
- Advice on structural physics and relevant fire protection aspects
- Support when preparing tender documents
- Training and seminars for customers and partners in the industry

Project: Shoe store Schüttfort, Hamburg, Germany
Architect: C. M. Römer Architekturbüro
Cladding: Prefa aluminium rhomboid façade tile 20 × 20
SYSTEAL solution: Profile systems ALWI-S und ALHO
with aluminium L-brackets
Photo: Croce & WIR



Foto: Shutterstock, Sura Nualpradid

Design Services

- Technical representation of Details
- Definition of specialist structural elements
- Static engineering for facades (facade wall cladding, sub-structure, specialist structural elements)
- Installation plans for the sub-structure
- Determining quantities required, Take-offs/Preparing parts lists

Implementation services

- Visiting building sites for technical support
- Inductions for installation works
- Solving implementation problems
- Practical training for companies completing the work

Project: Louis Vuitton Fondation, Paris, France
Architect: Frank Gehry
Cladding: Fibreglass concrete
SYSTE solution: Special construction
Photo: POHL Group



Project: The Wave, Vejle, Denmark
Architect: Henning Larsen Architects
Cladding: Creaton Tonicity facades tiles
SYSTEAsolution: Special construction
Photo: Jacob Due



Whatever is not possible, cannot be

Extraordinary facade designs often present huge challenges not only to the sub-structure but also to the installation.

Whenever standard systems are not sufficient, SYSTEAs offers tailored special solutions in order to make even the most spectacular building envelopes and facades possible. The architectural project “The Wave” (Vejle, Denmark) has received a number of awards and is a supreme example from the well-known architects’ practice Henning Larsen. We were faced here with securing the flowing roof and facade constructions clad with tiles, which transition into one another safely and at the same time with an ambitious visual appearance.

A further prime example of outstanding architecture is “Le vaisseau de verre” designed by the star architect Frank Gehry for the Fondation Louis Vuitton (Paris, France). The extraordinary cubature of the building, with no wall being the same as the other, presents the highest demands on the sub-structure. Through close co-operation with all parties participating in this project, SYSTEAs was also able to make a contribution at the early stages of design to ideas not just remaining ideas.



ALWI-S

Profile system for visible fixing of large-format cladding panels, e.g. made of fibre cement, aluminium composite panels or HPL.

A substructure system based on ALWI-S is comprised of vertical L-shaped and T-shaped aluminium support profiles, wall brackets and optional accessories. According to their thermal load and requirements - the wall brackets are made of aluminium, stainless steel or glass fibre reinforced polyamide.

The fixing elements are fixed visibly to the support profiles using screws, bolts or rivets.

The carrier profiles are fixed to the wall brackets using screws, bolts or rivets. When doing this, sliding points accept horizontal (wind) loads and fixed points accept horizontal and vertical loads (dead load). Constraint-free installation is achieved at the sliding points in vertical longitudinal holes. One fixed point is allocated for each support profile.

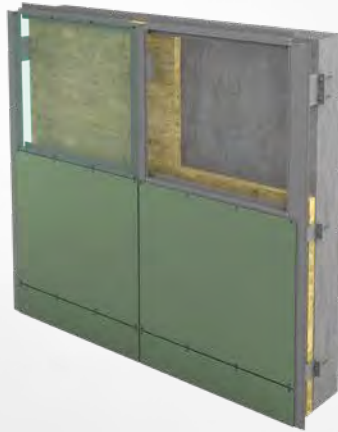
The wall brackets can optionally be fitted with an assembly aide to simplify working with them, which makes fixing and holding possible for the support profile.

Thermostop Elements are available as thermal dividers to minimise thermal bridging.

Protrusions of up to 480 mm.
Material EN AW-6063 T 66



ALWI-S with plane cladding panels



ALWI-S Ecoclad with plane cladding panels



ALWI-S with horizontally installed aluminium corrugated profile panels

Aluminium-T-shaped top hat profiles

T 100/50
T 110/45
T 110/70
T 120/50
T 160/50

Aluminium-L-shaped profiles

L 40/50
L 42/50
L 42/60
L 45/45
L 70/50

Profile for façade panels made of aluminium composite material

Aluminium-Ecoclad profile

120/50

Aluminium-Top hat profile

34/31/37,5/31/34



Technical Drawings are available at www.systea.systems

This profile system is suitable for use with cladding materials including Alpolic, Alucobond, Aluform, Arpa, Carea, Cembrit, Equitone, Etalbond, Eternit, Eurocem, Fundermax, KME, Larson, Laukien, Maas, Novelis, Prefa, Resopal, Rieder, Rockpanel, Swisspearl, Taktl, Terreal, Trespa and VM Zink.



ALKAPO

Profile system with closed overspan for visible fixing of large-format façade panels, e. g. made of fibre cement, aluminium composite panels or HPL.

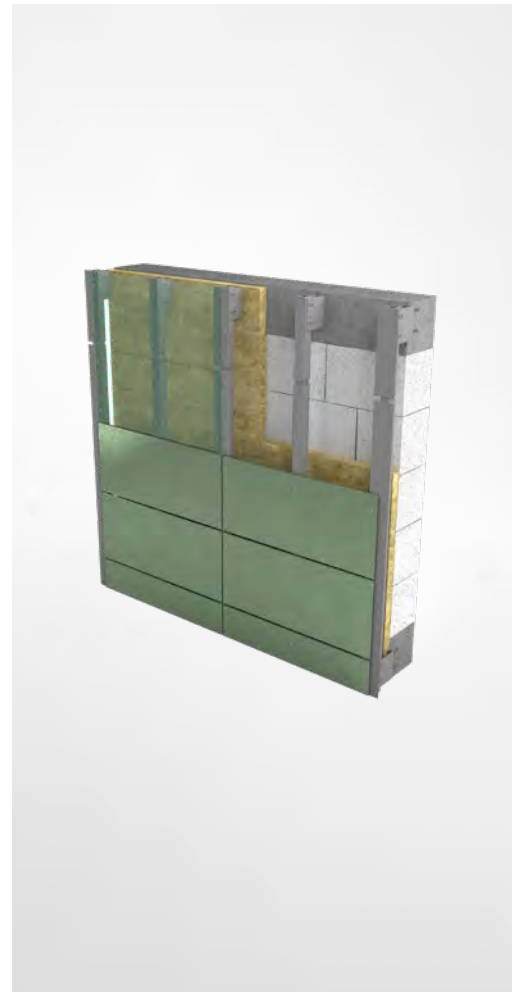
Through using box-shaped carrier profiles, ALKAPO offers a significantly higher load-bearing capacity and is used whenever anchoring is only possible into the floor deck of the respective floor of the building. A sub-structure system based on ALKAPO is comprised of vertical carrier rails, U-shaped wall brackets and optional accessories. According to their thermal load and demand - the wall brackets are made of aluminium or stainless-steel. According to the static engineering demands, we can choose between the support profiles ALKAPO 275 and ALKAPO 350.

The fixing elements are fixed to the support profiles using screws, bolts or rivets.

The carrier profiles are connected to the wall brackets using rivets, or screws. When doing this, the sliding points accept the horizontal (wind) loads and fixed points take up horizontal and vertical loads (dead load). Constraint-free assembly is completed at the sliding points in vertical longitudinal holes. One fixed point is allocated per support profile.

Thermostop Elements are available as thermal dividers in order to minimise thermal bridging.

Cantilever projections up to 480 mm.
Material EN AW-6063 T 66



Aluminium profiles

ALKAPO 275-mid rail support

ALKAPO 275-joint profile

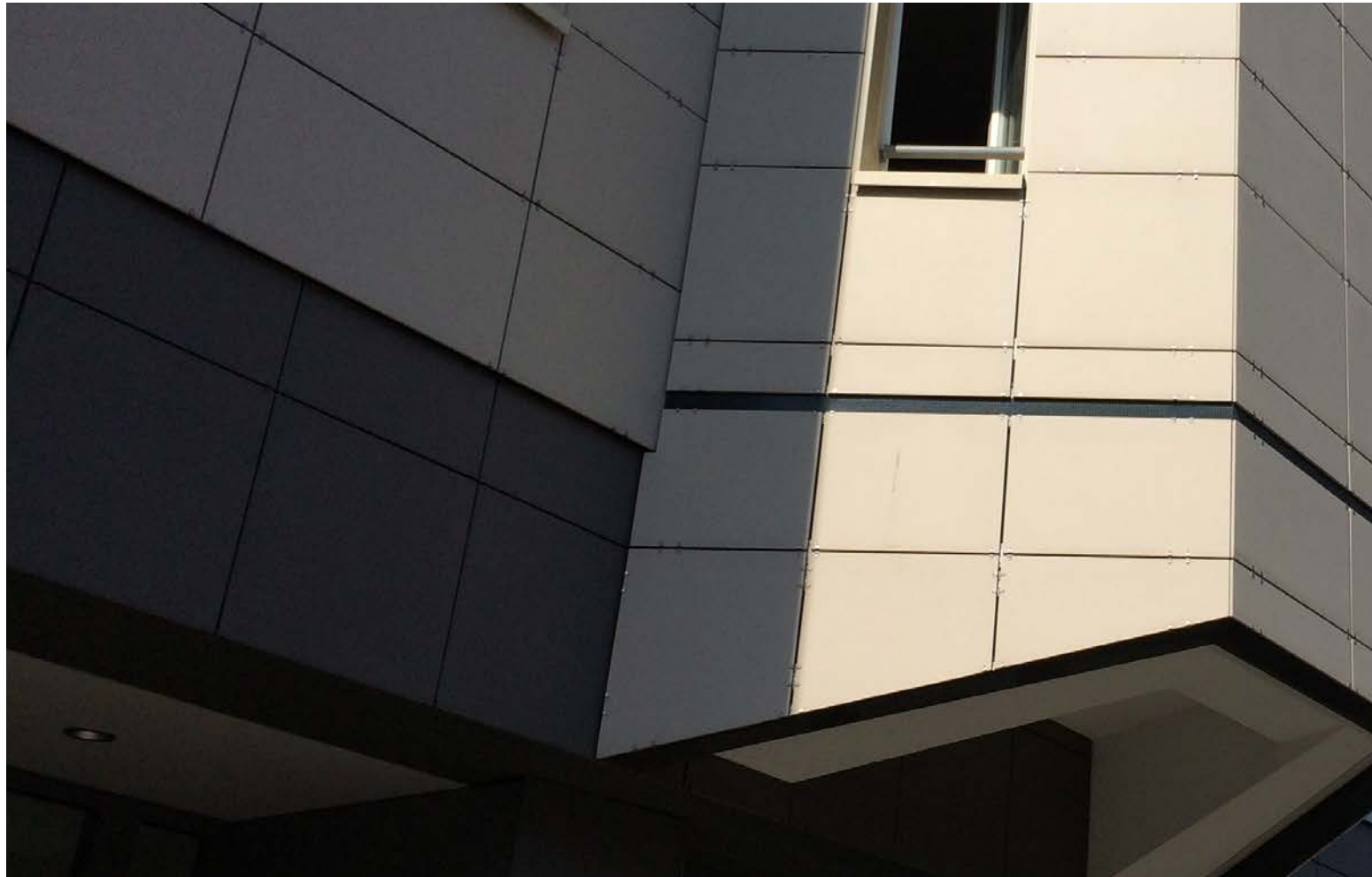
ALKAPO 350-mid rail support

ALKAPO 350-joint profile



Technical Drawings are
available at
www.systea.systems

**This profile system is suitable for use
with cladding materials including** Alpolic,
Alucobond, Aluform, Arpa, Carea, Cembrit,
Ceramica Mayor, Equitone, Etalbond, Eternit,
Eurocem, Fundermax, KME, Larson, Laukien,
Maas, Novelis, Prefa, Resopal, Rheinzink,
Rieder, Rockpanel, Swisspearl, Taktl,
Trespa and VM Zink.



UKLA

Profile system for visible fixing of large and small-format ceramic facade panels, e. g. sized 40 x 40 cm or 60 x 60 cm, with brackets.

A sub-structure system based on UKLA is comprised of vertical aluminium L-shaped support profiles, wall brackets and optional accessories. According to their thermal loading and demands - wall brackets are made of aluminium, stainless-steel or glass fibre reinforced polyamide.

The cladding elements are secured to support profiles using clamps and brackets. They are arranged in such a way, that they are located behind every vertical joint in the panels.

Carrier profiles are connected to the wall brackets using screws, bolts or rivets. When doing this, the horizontal sliding points take up horizontal (wind) loads and fixed points take up

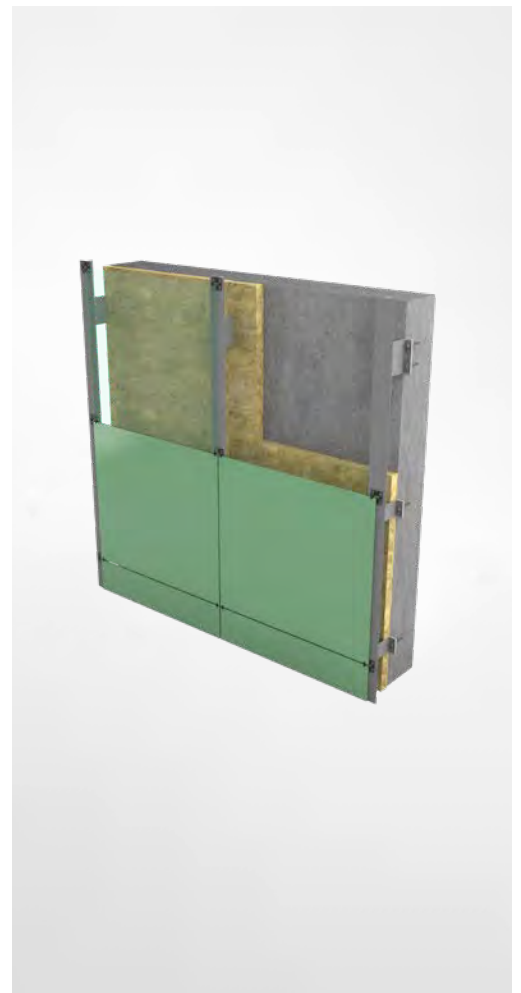
horizontal and vertical loads (dead loads). Constraint-free assembly is achieved at the sliding points in vertical longitudinal holes. One fixed point is allocated for each support profile.

Wall brackets can be fitted with an optional assembly aide, in order to simplify working with them, which makes fixing and holding possible for the support profile.

Thermostop Elements are available as thermal dividers to minimise thermal bridging effects.

Protrusions up to 480 mm.

Material EN AW-6063 T 66



Aluminium T-shaped profiles

T 65/50

T 80/50



Technical Drawings are
available at
www.systea.systems

This profile system is suitable for use with cladding materials including Agrob Buchtal, Cerashield, Florgres, Imola, Marazzi, Mirage and Mosa.



ALHO

Profile system for visible fixing of small-format and large-format cladding materials made of wood as well as façade cladding panels, e. g. made of fibre cement, aluminium composite panels or HPL, to vertical wooden supports.

A sub-structure system based on ALHO is comprised of adapters for taking up wooden lengths, wall brackets and optional accessories. According to their thermal loading and demands - the wall brackets are made of aluminium, stainless-steel or glass fibre reinforced polyamide.

The wood adapters with structural design widths of 50, 60 and 100 mm accept the vertical wooden elements, onto which cladding or counter battens (secondary construction) are secured.

The wood adapters are connected to the wall brackets using rivets, screws or bolts. When doing this, sliding points take up the horizontal (wind) loads and fixed points take up horizontal

and vertical loads (dead load). Constraint-free assembly takes place at the sliding points in vertical longitudinal holes.

One fixed point is arranged for each vertical wooden length.

The wall brackets may optionally be fitted with an installation aide, which makes fixing and holding the wood adapter possible, to simplify work.

Thermostop Elements are available as thermal dividers to minimise thermal bridging effects.

Protrusions up to 480 mm.

Material EN AW-6063 T 66



Aluminium U-shaped wood adapters

For accepting wood 50, 60 or 100 mm thick

UH ALHO 50, L = 85 mm

UH ALHO 50, L = 160 mm

UH ALHO 50, L = 250 mm

UH ALHO 60, L = 85 mm

UH ALHO 60, L = 160 mm

UH ALHO 60, L = 250 mm

UH ALHO 100, L = 85 mm

UH ALHO 100, L = 160 mm

UH ALHO 100, L = 250 mm



Technical Drawings are
available at
www.systea.systems

**This profile system is suitable for use
with cladding materials including** Alpolic,
Alucobond, Aluform, Arpa, Carea, Cembrit,
Equitone, Etalbond, Eurocem, Fundermax,
Larson, Laukien, Maas, Novelis, Prefa,
Resopal, Rheinzink, Rieder, Rockpanel,
Swisspearl, Taktl and Trespa.



ALWI-V

Profile system for concealed fixing of sidings or large-format façade panels, e. g. made of fibre cement, aluminium composite panels, ceramics or HPL.

A sub-structure system based on ALWI-V is comprised of vertical L-shaped and T-shaped aluminium support profiles, wall brackets and optional accessories. According to thermal loading and demands - the wall brackets are made of aluminium, stainless-steel or glass fibre reinforced polyamide.

The cladding elements are glued on (adhered) to the support profiles or are screwed on as concealed (secret-fix) sidings.

The carrier profiles are connected to the wall brackets using rivets, bolts or screws. When doing this, the sliding points take up the horizontal (wind) loads and fixed points take up horizontal and vertical loads (dead loads). Constraint-free assembly is

achieved at the sliding points in vertical longitudinal holes. One fixed point is allocated per support profile.

The wall brackets can optionally be fitted with an installation aide, which makes fixing and holding the carrier profile possible and makes it easier to work with them.

Thermostop Elements are available as thermal dividers to minimise thermal bridging.

Protrusions of up to 480 mm.

Material EN AW-6063 T 66



Aluminium T-profiles

T 40/55
T 65/50
T 80/50
T 110/45
T 110/70

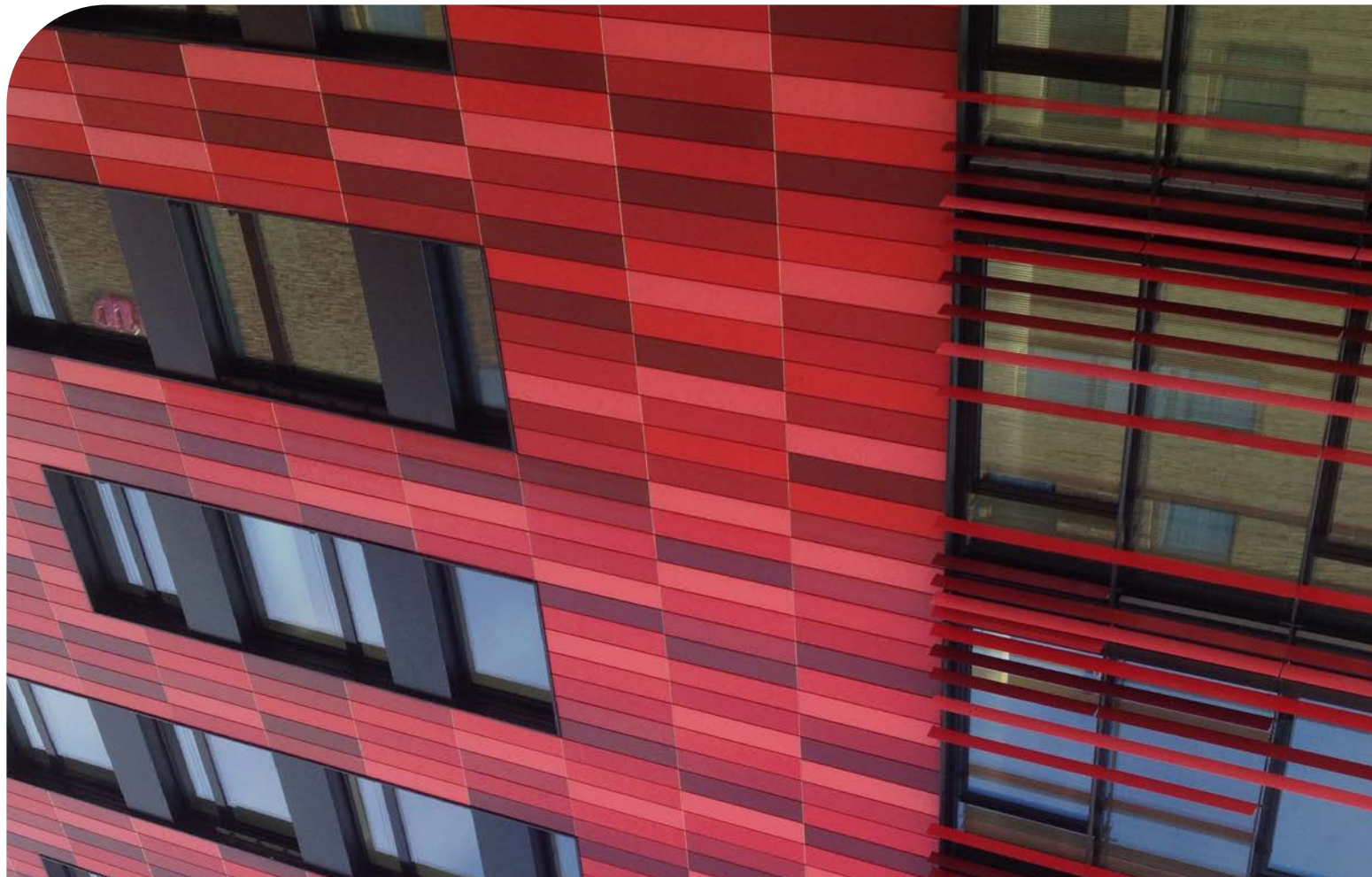
Aluminium L-profiles

L 40/50
L 42/50
L 42/60
L 45/45
L 70/50



Technical Drawings are available at www.systea.systems

This profile system is suitable for use with cladding materials including Agrob Buchtal, Alpolic, Alucobond, Aluform, Arpa, Cembrit, Ceramica Mayor, Cerashield, Equitone, Etalbond, Eternit, Eurocem, Florgres, Fundermax, Imola, KME, Knauf, Larson, Laukien, Lithodecor, Maas, Marazzi, Mirage, Mosa, Novelis, Prefa, Resopal, Rheinzink, Rieder, Rockpanel, Sto, Swisspearl, Taktl, Tonality, Trespa and VM Zink.



TC110

Profile system for concealed fixing of Argeton façade panels, Moeding clay-tile panels or NBK terracotta panels using clamp brackets.

A sub-structure system based on TC110 is comprised of vertical L-shaped and T-shaped aluminium support profiles, wall brackets and optional accessories. According to thermal loading and demands - the wall brackets are made of aluminium, stainless-steel or glass fibre reinforced polyamide. The cladding elements are fixed using bracket clamps or a system of rails and brackets clamps for these to the carrier profiles.

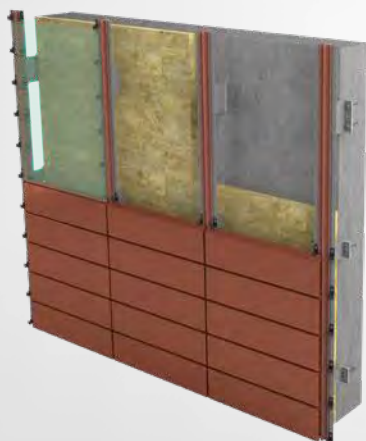
The carrier profiles are connected to the wall brackets using screws or rivets. When doing this, sliding points take up horizontal (wind) loads and fixed points take up horizontal and vertical loads (dead load). Constraint-free assembly is com-

pleted at the fixed points in vertical longitudinal holes. One fixed point is arranged for each carrier profile .

The wall brackets can optionally be fitted with an installation aide, which makes fixing and holding the carrier profile possible in order to simply working with them.

Thermostop Elements are available as thermal dividers to minimise thermal bridging.

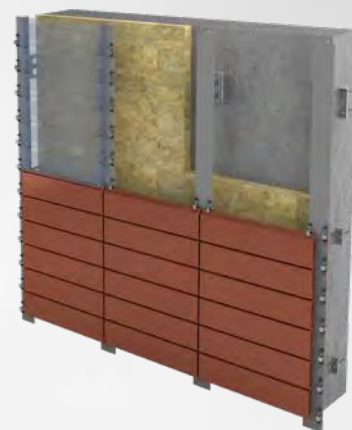
Protrusions of up to 480 mm
Material EN AW-6063 T 66



TC110-A for Argeton
facade tiles



TC110-M for Moeding
clay tiles



TC110-N for NBK terracotta
facades

Aluminium T-profiles for Argeton

T 80/50
T 110/45
T 110/50

Aluminium L-profiles for Argeton

L 42/50



Technical Drawings are
available at
www.systea.systems

Aluminium T-profiles for Moeding

T 40/55
T 65/50
T 80/50
T 110/45
T 160/50

Aluminium L-profiles for Moeding

L 42/50
L 45/45

This profile system is suitable for use with
cladding materials including Argeton,
Moeding and NBK.

Aluminium T-profiles for NBK

T 110/45
T 160/50

Special accessories for NBK:

Clamp brackets NBK Terrart Light 24
Clamp brackets NBK Terrart Light 28
Clamp brackets NBK Terrart Mid
Clamp brackets NBK Terrart Large



UBE

Profile system for concealed fastening of large-format façade panels and natural stone with clinches reverse of the panel.

A sub-structure system based on UBE is comprised of vertical T-shaped aluminium carrier profiles, wall brackets, optional accessories and horizontal support rails, arranged with the same separation distance as the cladding grid. According to thermal loading and demands - the wall brackets are made of aluminium, stainless-steel or glass fibre reinforced polyamide.

We can use ALKAPO as the base profile system for buildings whose outer walls are not suitable as anchoring substrates.

The carrier profiles are connected to the wall brackets using rivets, screws or bolts. When doing this, the sliding points take up the horizontal (wind) loads and fixed points take up the horizontal and vertical loads (dead load). Constraint-free installation is achieved in the sliding points in vertical longitudinal holes. One fixed point is allocated for each support profile.

At least two horizontal carrier rails are required for each cladding element, which must be fixed to the support profiles using screws, bolts or rivets.

We suspend the cladding elements in places using clinches, which are fixed and secured to the reverse of the cladding elements using special dowels or undercut rivets and anchors. Height adjustment is possible for cladding using a setting screw.

The wall brackets can optionally be fitted with an installation aide, which makes fixing and holding the carrier profile possible, to simplify working with them.

Thermostop Elements are available as thermal dividers to minimise thermal bridging.

Protrusions of up to 480 mm
Material EN AW-6063 T 66



UBE DUO



UBE NG

Aluminium T-profiles

T 40/55
T 40/70
T 65/50
T 80/50
T 110/70

Aluminium support profiles

UBE DUO
UBE Tergo
UBE Tergo S
UBE NG
UBE Natural stone

Aluminium clinches

Type I,II,III for UBE DUO
Type I,II,III for UBE Tergo
Type I,II,III for UB NG
Type I,II,III for UBE Natural stone

Versions:

UBE DUO: for HPL, ceramics, fine stone-ware and fibre cement panels, also for for low construction depths and indoor applications
UBE Tergo: for Eternit and other fibre cement panels
UBE Tergo S: for low build depths and indoor applications
UBE NG: for large and/or especially heavy cladding facades
UBE Natural stone: especially for natural stone



Technical Drawings are available at www.systema.systems

This profile system is suitable for use with cladding materials including Arpa, Carea, Cembrit, Cerashield, Equitone, Eternit, Eurocem, Florgres, Fundermax, Imola, KME, Lithodecor, Marazzi, Mirage, Mosa, Resopal, Rieder, Rockpanel, Sto, Swisspearl, Taktil and Trespa.



UBEKA

A profile system for concealed fixing of large-format facade panels, e. g. made of fibre cement, HPL , ceramics, natural stone or glass, by means of panel support profiles on the reverse.

A sub-structure system based on UBEKA is comprised of vertical aluminium T-support profiles, wall brackets, optional accessories, horizontal lug profiles, which are arranged with the same separation distances as the cladding grid, and vertical panel carrier profiles. According to their thermal loading and demands - the wall brackets are made of aluminium, stainless-steel or glass fibre reinforced polyamide.

UBEKA permits exchanging, replacing or subsequent insertion of individual cladding elements, without the adjacent element needing to be displaced from its previously installed position.

ALKAPO can be used as the base system for buildings whose outer walls are not suitable for use as anchoring substrates.

The aluminium T-carrier profiles are connected to the wall brackets using rivets, screws or bolts. When doing this, the sliding points take up the horizontal (wind) loads and fixed

points take up the horizontal and vertical loads (dead loads). Constraint-free installation is achieved in the vertical sliding holes. One fixed point is allocated per support profile.

At least two vertical panel support profiles are required for each fixing element, which are connected to the lug profiles.

Wall brackets can optionally be equipped with an assembly aide, which makes fixing and holding the support profile possible, to simplify working with it.

Thermostop Elements are available as thermal dividers to minimise thermal bridging.

Protrusions of up to 480 mm
Material EN AW-6063 T 66



Aluminium system profiles

Lug profile 99.5/35.1 mm bi-lateral
Lug profile 70/35.1 mm bi-lateral
Lug profile 46/23 mm one-sided
Base profile 89.2/35.25 mm
Support profile 61/34 mm

System accessories:

Lugs 25/8-100 Type 1F, 2, 2R

Aluminium T-profiles

T 40/55
T 65/50
T 80/50
T 110/45
T 110/70



Technical Drawings are available at www.systea.systems

This profile system is suitable for use with cladding materials including Arpa, Carea, Cembrit, Cerashield, Equitone, Eternit, Eurocem, Florgres, Fundermax, Imola, Lithodecor, Marazzi, Mirage, Mosa, Resopal, Rieder, Rockpanel, Sto, Swisspearl, Taktil and Trespa.



ALWI-V-B

Profile system for concealed fastening of Agrob Buchtal KeraTwin K20 facade panels.

A sub-structure system based on ALWI-V-B is comprised of vertical aluminium carrier profiles, wall brackets and optional accessories. According to the thermal loading and requirements - wall brackets are made out of aluminium, stainless-steel or glass fibre reinforced polyamide.

The cladding elements are fixed to the support profiles using brackets or a system rail.

The support profiles are connected to the wall brackets using rivets or screws. When doing this, the sliding points take up horizontal (wind) loads and fixed points take up horizontal and vertical loads (dead load). Constraint-free assembly is com-

pleted at sliding points in vertical longitudinal holes. One fixed point is allocated for each support profile.

The wall brackets can optionally be fitted with an installation aide, which makes fixing and holding possible for the wall profile, which makes it easier to work with.

Thermostop Elements are available as thermal dividers to minimise the risk of thermal bridging.

Protrusions of up to 480 mm.
Material EN AW-6063 T 66



ALWI-V-B with clamps



ALWI-V-B with profile system rails

Aluminium T-profiles

T 65/50

T 80/50

T 100/50



Technical Drawings are available at www.systea.systems

This profile system is suitable for use with Agrob Buchtal facade panels.



KH35 / SZ20 / CS20

Profile system for concealed fastening of metal cassettes and aluminium composite panels in horizontal direction of lay.

A sub-structure system based on KH35, SZ20 or CS20 is comprised of vertical T- profiles or top hat profiles, horizontal system rails, U-shaped or L-shaped wall brackets and optional accessories. According to thermal loading and requirements - the L-shaped wall brackets are made of aluminium, stainless steel or glass fibre reinforced polyamide, U-shaped wall brackets out of aluminium or stainless-steel.

Horizontal system rails are pre-installed in the cassettes at the top and bottom edge using rivets. In the plug-in system, the cassettes are then installed on building sites using cassette clips. When doing this, different horizontal joint widths are possible.

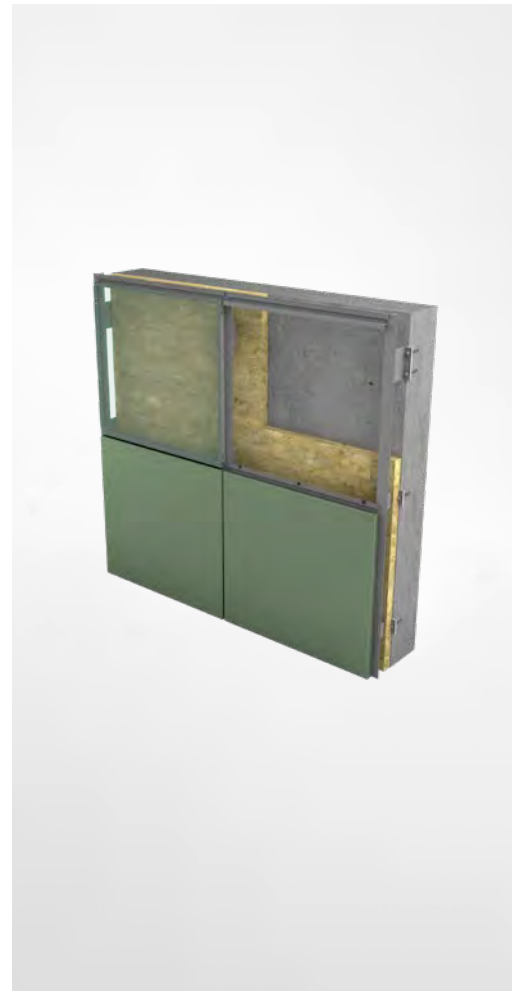
The carrier profiles are connected to the wall brackets using rivets or screws. When doing this, sliding points take up

horizontal (wind) loads and fixed points take up horizontal and vertical loads (dead load). Constraint-free assembly is achieved in the sliding points in vertical longitudinal holes. One fixed point is allocated per support profile.

Wall brackets can be optionally fitted with an installation aide, making fixing and holding possible for the support profile, to simplify working with them.

Thermostop Elements are available as thermal dividers to minimise thermal bridging.

Protrusions of up to 480 mm
Material EN AW-6063 T 66



Aluminium T-profiles

T 65/50

T 80/50

Aluminium top hat profiles

30/50/50/50/30 (Profile No. 781)

40/50/50/50/40 (Flange thickness 3 mm)



Technical Drawings are available at www.systea.systems

Aluminium system profiles

S Profile

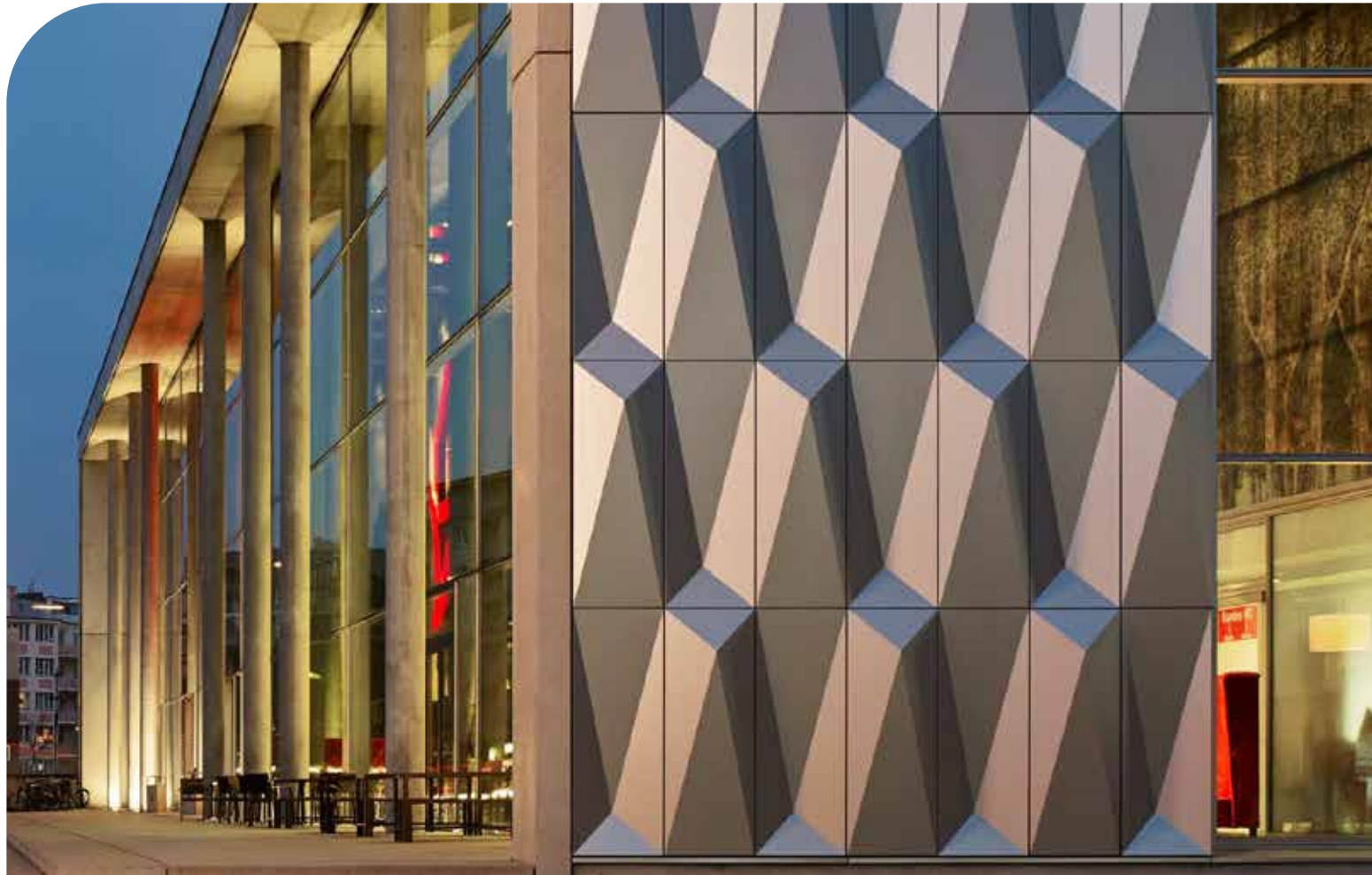
Z Profile

Starter Profile

Window sill connector profile

Plastic Clip

This profile system is suitable for use with cladding materials including Alpolic, Alucobond, Etalbond, KME, Larson, Maas, Novelis and VM Zink.



KU35 NVA / VA

Profile system for concealed fastening of metal cassettes and aluminium composite panels in a vertical direction.

A sub-structure system based on KU35 NVA/VA is comprised of vertical T or top hat profiles, wall brackets and optional accessories. According to their thermal loading - the L-shaped wall brackets are made of aluminium, stainless-steel or glass fibre reinforced polyamide, U-shaped wall brackets out of aluminium or stainless-steel.

The carrier profile is formed in such a way that it has a guide rail for taking up a slider with or without bolts, which is not finally fitted until after installation of the cassette.

The exact position of the bolt/hanging it in place can still be determined on the building site during installation of the cassette. By so doing, there is no need for tiresome lining up of support profiles.

Support profiles are connected with wall brackets using rivets or screws. When doing this, sliding points take up horizontal

(wind) loads and fixed points take up horizontal and vertical loads (dead load). Constraint-free assembly is achieved at the sliding points in vertical longitudinal holes. One fixed point is allocated per carrier profile.

Wall brackets can be optionally fitted with an assembly aid which makes fixing and holding possible for the support profile, in order to make it easier to work with them.

Thermostop Elements are available as thermal dividers to minimise thermal bridging.

Cantilever protrusions of up to 480 mm
Material EN AW-6063 T 66



KU35 NVA



KU35 VA

Aluminium T-Profile

T 90/60 (Profile No. 782-T)

Aluminium top hat profile

22/60/50/60/22 (Profile No. 782)

Sliding brackets

Sliding brackets with bolts (aluminium)

Sliding brackets without bolts (aluminium)

Q rail hanging



Technical Drawings are available at www.systea.systems

This profile system is suitable for use with cladding materials including Alpolic, Alucobond, Etalbond, Eternit, KME, Larson, Maas, Novelis and VM Zink.



BETA Universal II

Sub-structure system free of thermal bridges for visible and concealed fastening of large-format façade panels.

The BETA Universal II sub-structure system, free of thermal bridging is comprised of stainless-steel rods, which can be adjusted up to 30 mm, aluminium support profiles and optional accessories. The fixed points consist of horizontal and diagonal stainless-steel rods, which take up the horizontal and vertical loads. The sliding points consist of horizontal rods and only take up horizontal loads. The support profiles are pre-assembled and drilled and are available in different construction widths.

Horizontal strengthening is completed via perforated ventilation profiles.

BETA Universal II is suitable for use with all cladding materials and for visible as well as concealed fastening.

Protrusions of up to 600 mm.

Material: EN 1.45.71; 1.4404 and EN AW 6063 T 66



BETA Universal II with UBE DUO

Vertical aluminium support profiles

Beta T-shaped profile 60/40

Beta T-shaped profile 100/40

Beta T-shaped profile 120/40

Horizontal stainless-steel rod

Horizontal rod A4 BU 2 "H"

Cross rod A4 BU 2 "S"

Diagonal A4 BU 2 "Z"

Horizontal aluminium profile

Beta T 58/35 perforated profile



Technical Drawings are
available at
www.systea.systems

This profile system is suitable for use with cladding materials including Agrob Buchtal, Alpolic, Alucobond, Argeton, Arpa, Cembrit, Ceramica Mayor, Cerashield, Equitone, Etalbond, Eternit, Eurocem, Florgres, Fundermax, Imola, KME, Larson, Laukien, Lithodecor, Maas, Marazzi, Mirage, Moeding, Mosa, NBK, Novelis, Prefa, Resopal, Rheinzink, Rieder, Rockpanel, Sto, Swisspearl, Taktl, Tonality, Trespa and VM Zink.





NASTO-N

Profile system for concealed fixing of natural stone panels by means of a milled groove.

A sub-structure system based on NASTO-N is comprised of vertical L-shaped and T-shaped aluminium support profiles, wall brackets and optional accessories. According to thermal loading and demands - wall brackets are made out of aluminium, stainless-steel or glass fibre reinforced polyamide.

The cladding elements require a groove at the upper and lower edges of the panel.

This construction is especially well suited for panel sizes up to 1500 mm in height. The advantages arise thanks to the horizontal support profile above all things when laying them in cross bond, as cladding can be effortlessly arranged offset on the support profiles.

The support profiles are connected to the wall brackets using screws or rivets. When doing this, sliding points take up horizontal (wind) loads and fixed points take up horizontal and vertical loads (dead load). Constraint-free assembly is achieved at the sliding points in the vertical longitudinal holes. One fixed point is allocated per support profile.

Wall brackets can be optionally fitted with an installation aide, which makes fixing and holding the support profile possible, to make working with them easier.

Thermostop Elements are available as thermal dividers, to minimise thermal bridging.

Protrusions of up to 480 mm
Material EN AW-6063 T 66



Aluminium T-profiles

T 40/55
T 65/50
T 80/50
T 110/45
T 110/70

Horizontal aluminium support profiles

Starter profile / End profile
Middle profile



Technical Drawings are
available at
www.systea.systems



NASTO-D

Profile system for concealed fastening of natural stone panels using pin bearings.

A sub-structure system based on NASTO-D is comprised of vertical T-shaped aluminium support profiles, wall brackets and optional accessories. According to their thermal loading and demands - the wall brackets are made of aluminium, stainless-steel or glass fibre reinforced polyamide.

The system consists of a vertical basic substructure, onto which the classic screw-in pin support is installed. Through the combination of the pin support with a substructure, the need to drill into the structure of the building is reduced and large loads can be realised in the Passivhaus standard with high thicknesses of insulation material.

The cladding elements are secured by means of pin bearings in the panel joints.

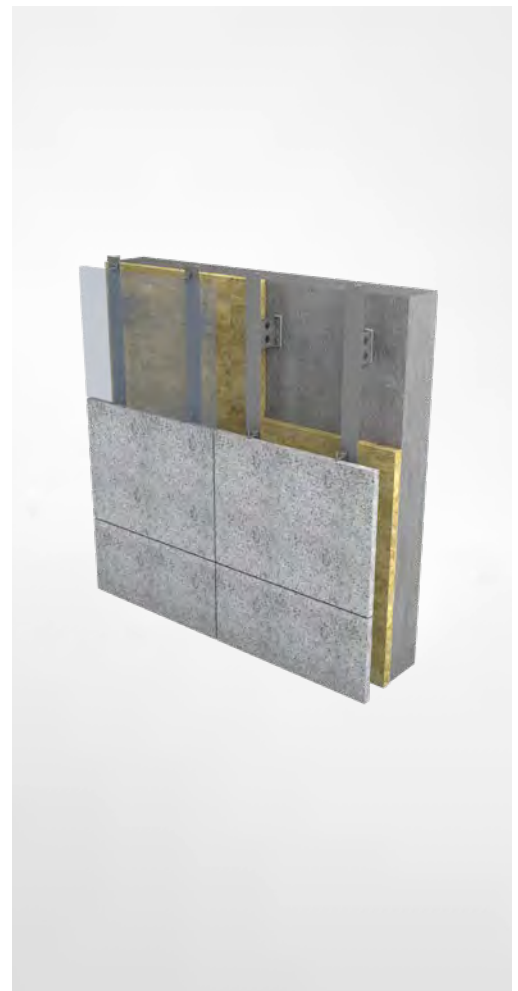
The support profiles are connected to the wall brackets using rivets or screws. When doing this, the sliding points take up

horizontal (wind) loads and the fixed points take up the horizontal and vertical loads (dead load). Constraint free installation occurs at the sliding points in vertical longitudinal holes. One fixed point is allocated per support profile.

The wall bracket can optionally be fitted with installation aides, which make fixing and holding the support profile possible, and make it easier to work with them.

Thermostop Elements are available as thermal dividers to minimise thermal bridging.

Cantilevers and protrusions of up to 480 mm
Material EN AW-6063 T 66



Aluminium T-profiles

T 40/55
T 65/50
T 80/50
T 110/70

Aluminium support profiles

Pin bearing 8
Pin bearing 10



Technical Drawings are
available at
www.systea.systems



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