



BILDA FIXING SYSTEMS

Complete solution for any rainscreen envelope

*Comprehensive System for Building envelope applications
Fixing of Ventilated Claddings, Modelling of Façade Features,
Thermal Insulation fixing, Photovoltaics and more.*



DE ZALMHAVEN
ROTTERDAM

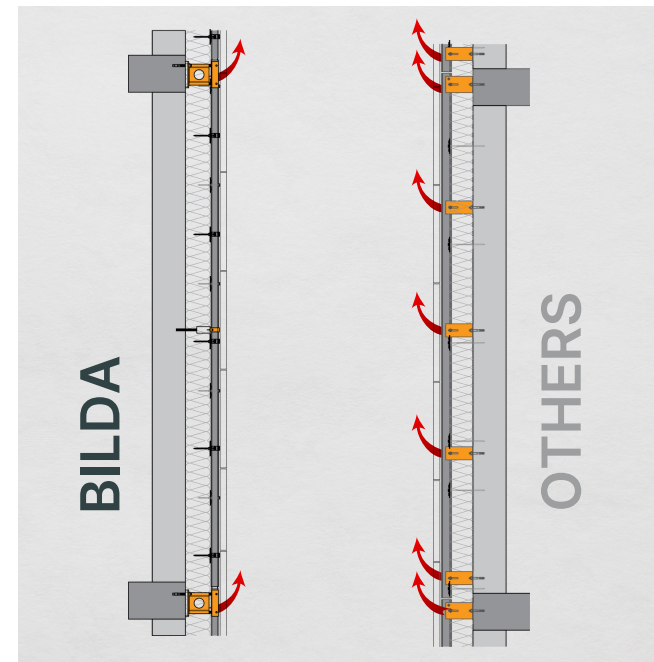


SAAF UNIVERSITY CAMPUS
KUWAIT



ADGAR 360
TEL AVIV

BILDA - Architect friendly envelope building tool



UNLEASH CREATIVITY

- design with confidence
- one concept for any material, any pattern & features
- minimize technical restriction
- keep control of your creation
- retain leadership

DESIGN SUSTAINABLY

- minimize carbon footprint
- make the best of PV energy
- provide future upgradability and reusability

SIMPLIFY YOUR TASKS

- minimize parties involved
- reduce quantity of coordination
- facilitate consistent design & building process

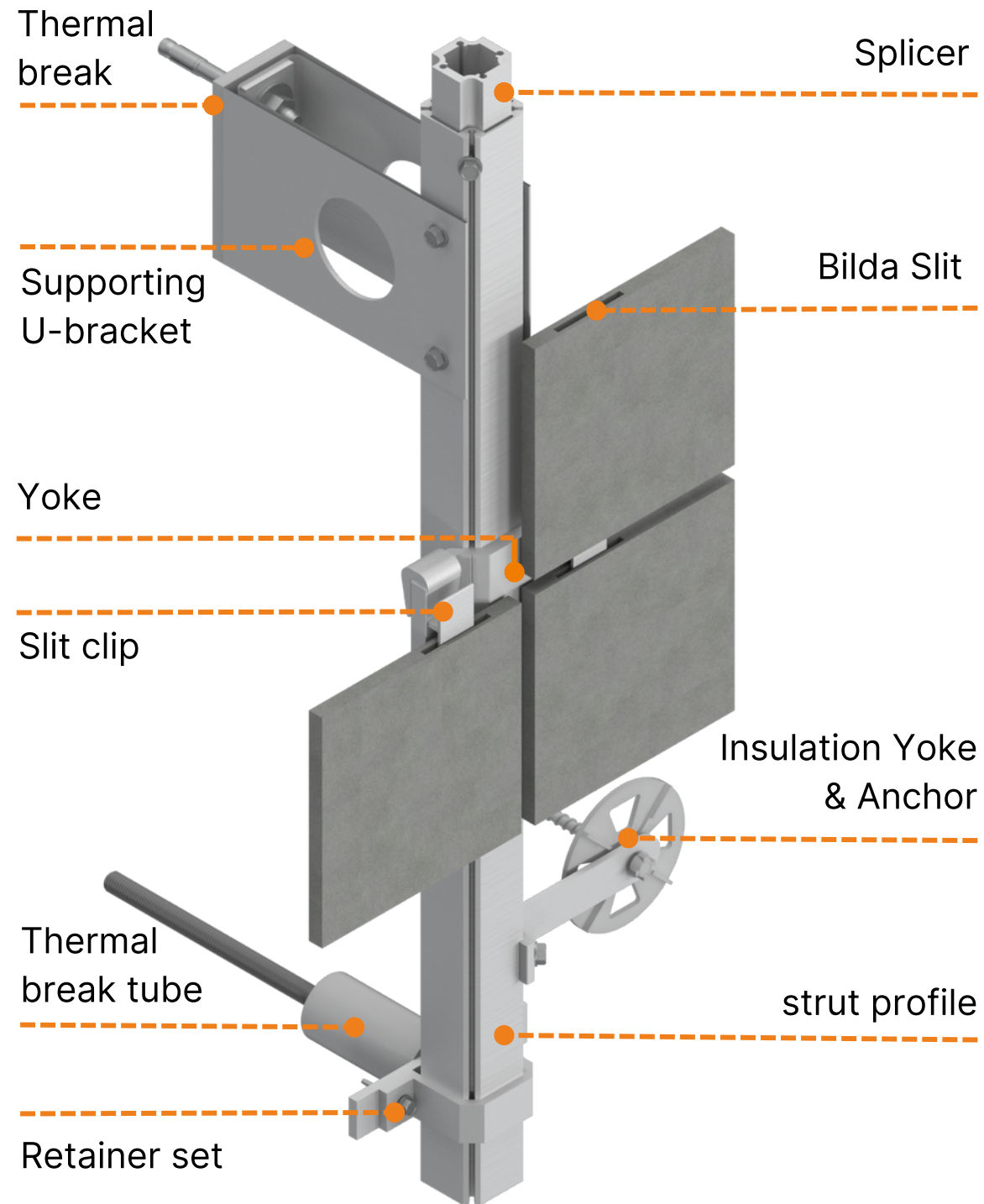
BOOST YOUR OUTPUT

- learn and explain easily
- systemize design work
- create reliable solutions
- reduce iterations
- enjoy your design

DEVELOP & INNOVATE

- rely on our envelope experience & support
- develop for better & generic solutions
- help us with your comments
- innovate with BILDA team

Three Pillars of BILDA

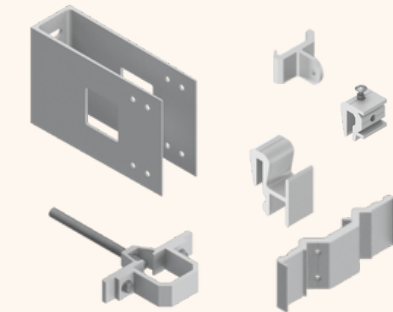


1



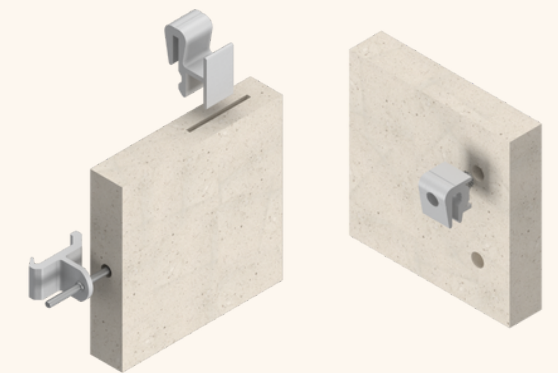
Strut of patent closed section

2



Integral, interactive and interlocking components

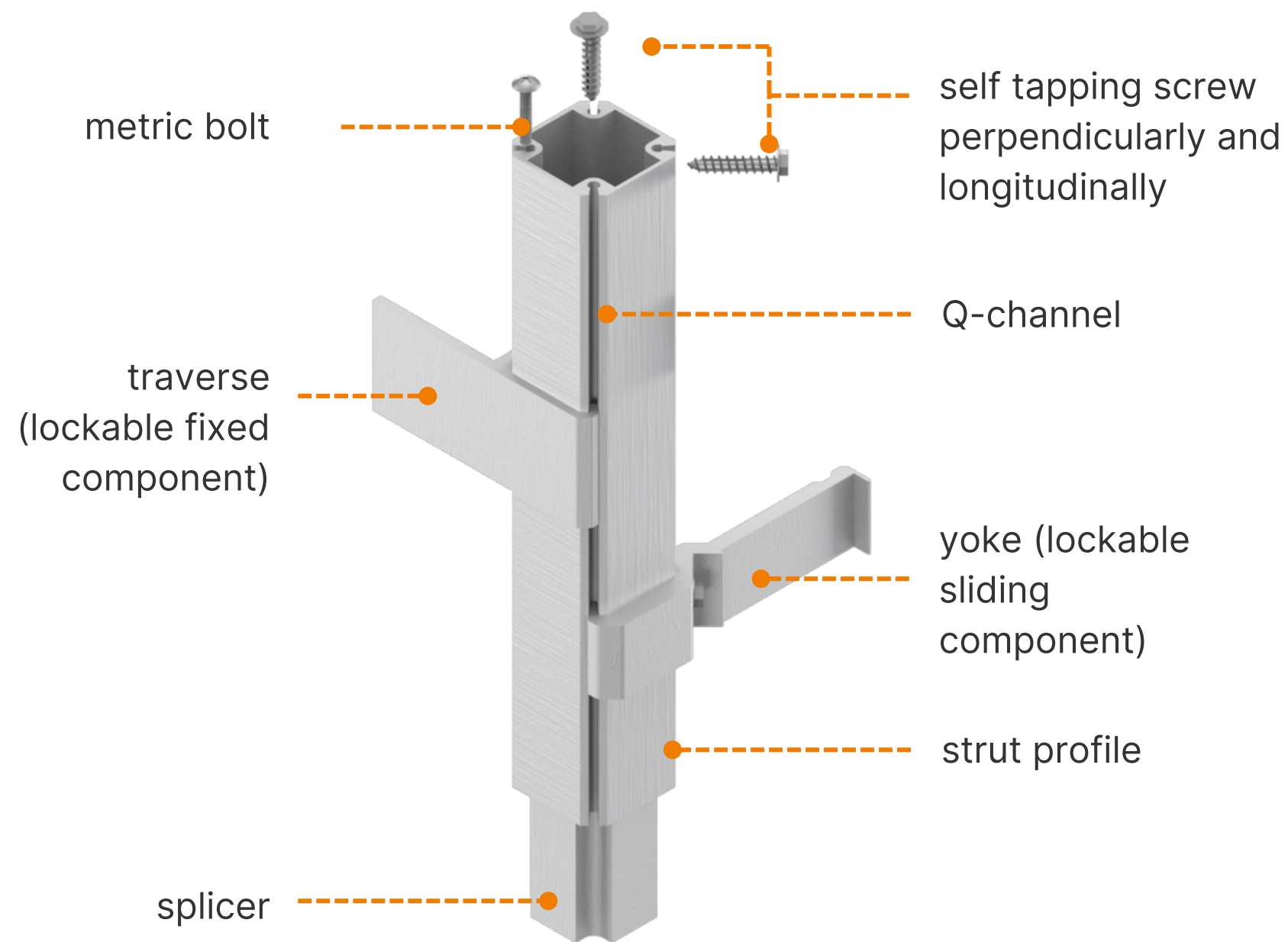
3



Clips for any panel any "socket"

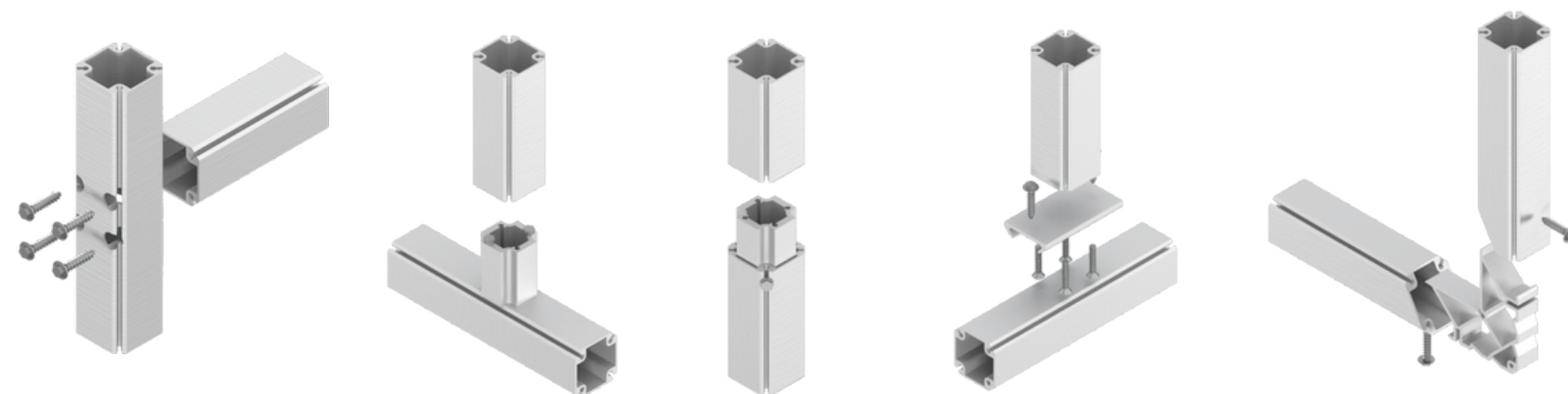
BILDA is a unique **Comprehensive System of systems** for assembly of sustainable rain-screened envelopes.

1 Strut of patent closed section

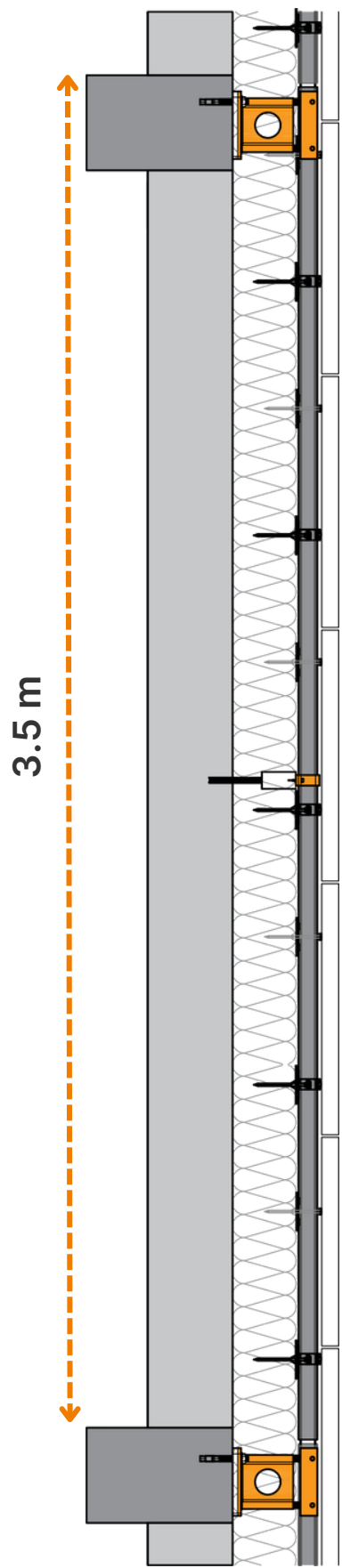


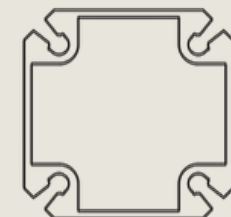

- Composes **light and resilient** substructure fixing grid - allows quick locking attachment of components with dual penetration - sliding and fixed (by screw);
- **pre-assembly of frames** and units is done by means of simple joint component + screwing without welding.
- avoids additional **form shaping structures**

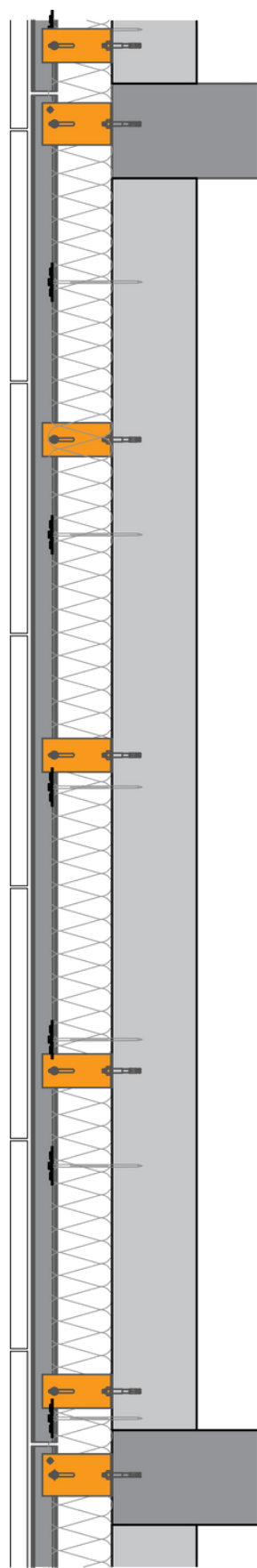
JOINT TYPES



BILDA Comparison with T-Profile - Structural



 <p>BILDA STRUT PROFILE (CLOSED SECTION)</p>	<p>PROFILE SECTION</p>	 <p>ORDINARY T-PROFILE (OPEN)</p>
<p>1100 g/m</p>	<p>Weight</p>	<p>1200 g/m</p>
<p>4.69 cm³</p>	<p>Section modulus (Resilience Indicator)</p>	<p>2.60 cm³</p>
<p>1 bracket 1 retainer brace</p>	<p>No. of connection to primary structure per floor height</p>	<p>4-5 brackets</p>

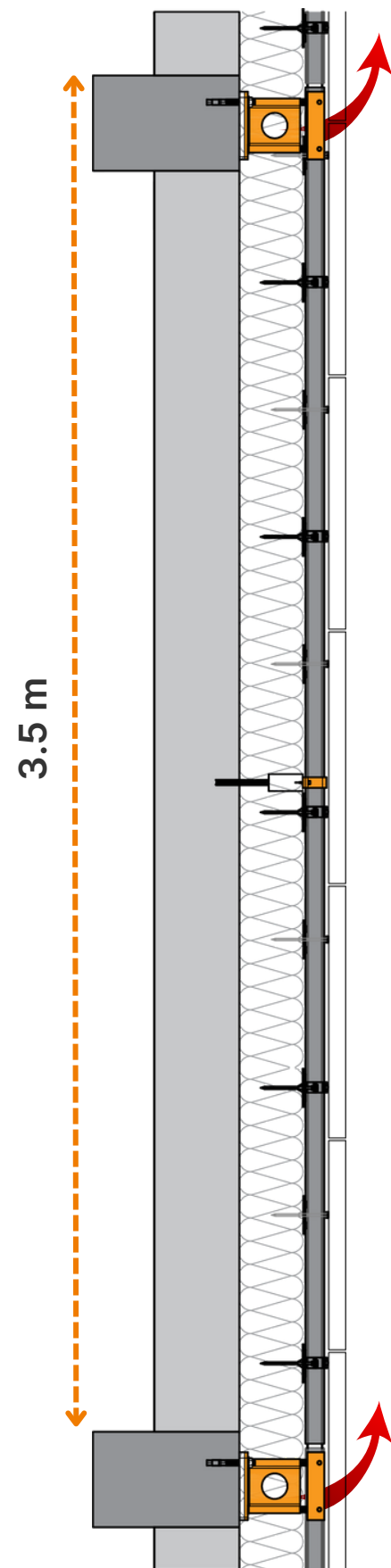


BILDA patent strut profile is lighter with higher resilience:

- creates lighter cladding assemblies
- saves envelope material
- saves installation and production time

**HIGH RESILIENCE TO PERPENDICULAR IMPACT -
SMALLER NUMBER OF BRACKETS FOR BILDA**

BILDA Comparison with T-Profile - Thermal



BILDA CLADDING ASSEMBLY		ORDINARY CLADDING ASSEMBLY
Thermal bridging per floor height		
0%	linear thermal bridges (T-profile flange)	100%
1 pc	point thermal bridges due to brackets	4-5 pcs.
0	point thermal bridges due to insulation anchors	~20 pcs.

Supporting Bracket

0.0089 W/K

Retaining Bracket

0.0022 W/K

χ

Point thermal bridge coefficient (W/K)

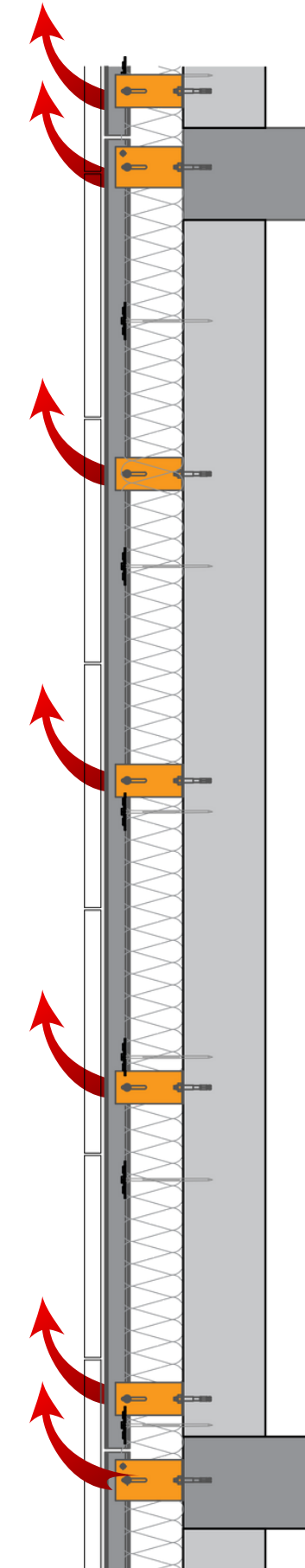
Supporting Bracket

0.0189 W/K

Retaining Bracket

0.0099 W/K

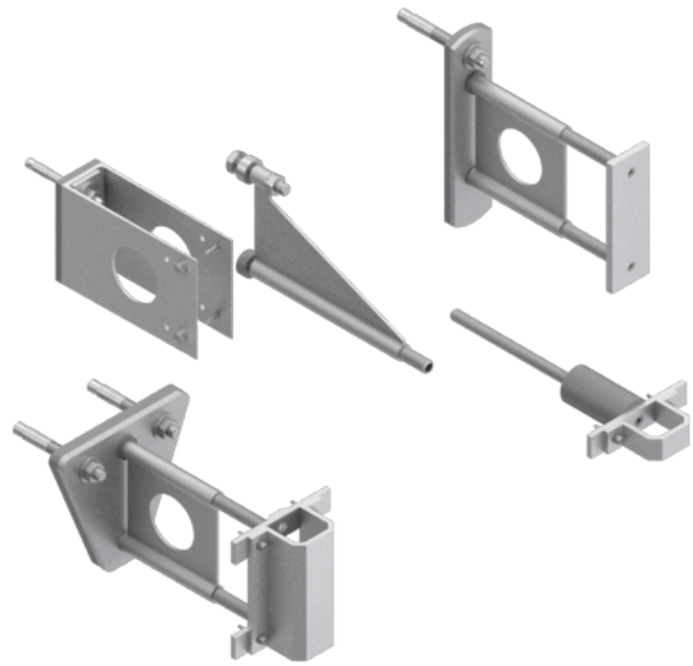
20-30% LOWER THERMAL HEAT TRANSMISSION (U-Value)



BILDA system enhances thermal and sustainability performance:

- minimizes thermal bridging of cladding envelopes
- achieves continuous insulation (CI) fit

2 Integral Interlocking Components



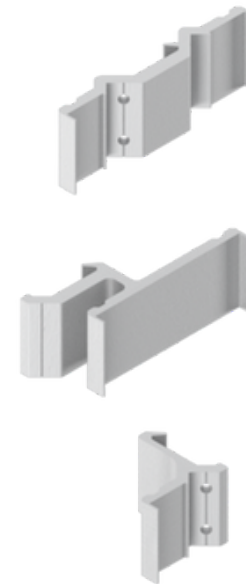
WALL BRACKETS

for any substrate, any void, any weight - high thermal performance



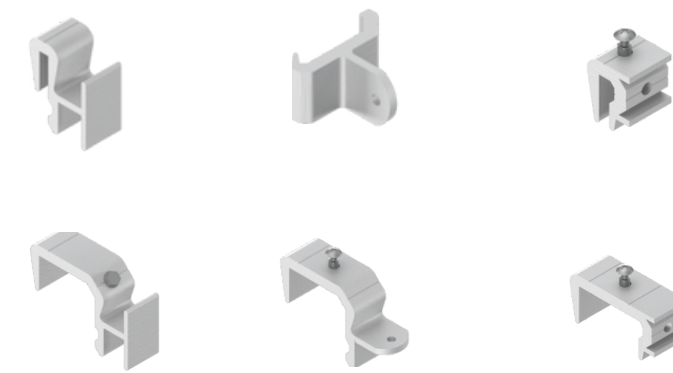
STRUT PROFILES

rigid, multifunctional, shape forming and clip attaching



YOKES

quick locking by dual tongue & screw penetration (one operation to fix)



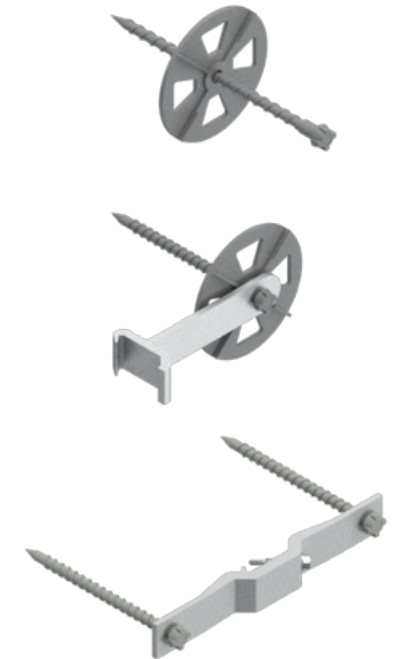
slit

side hole

rear hole

CLIPS

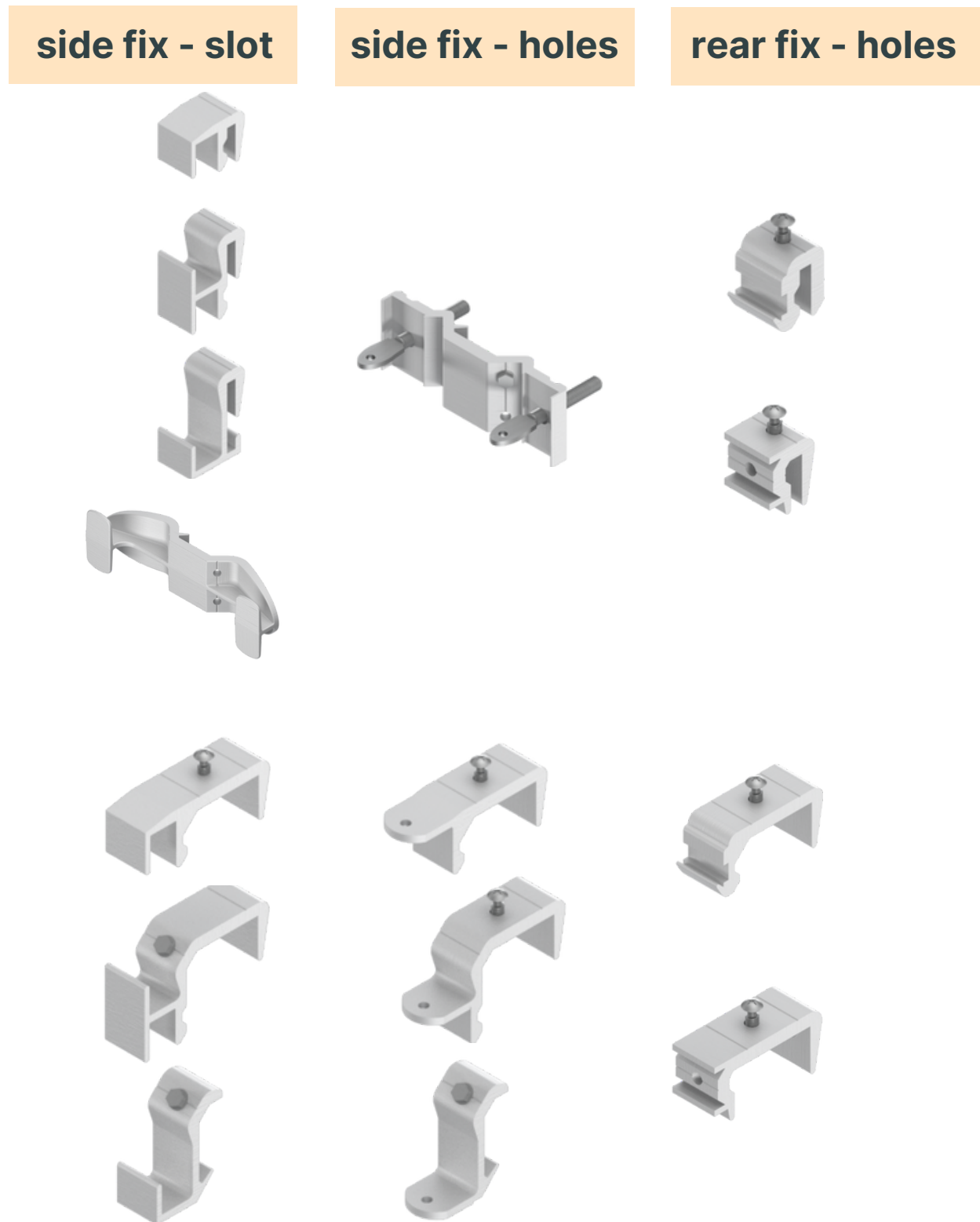
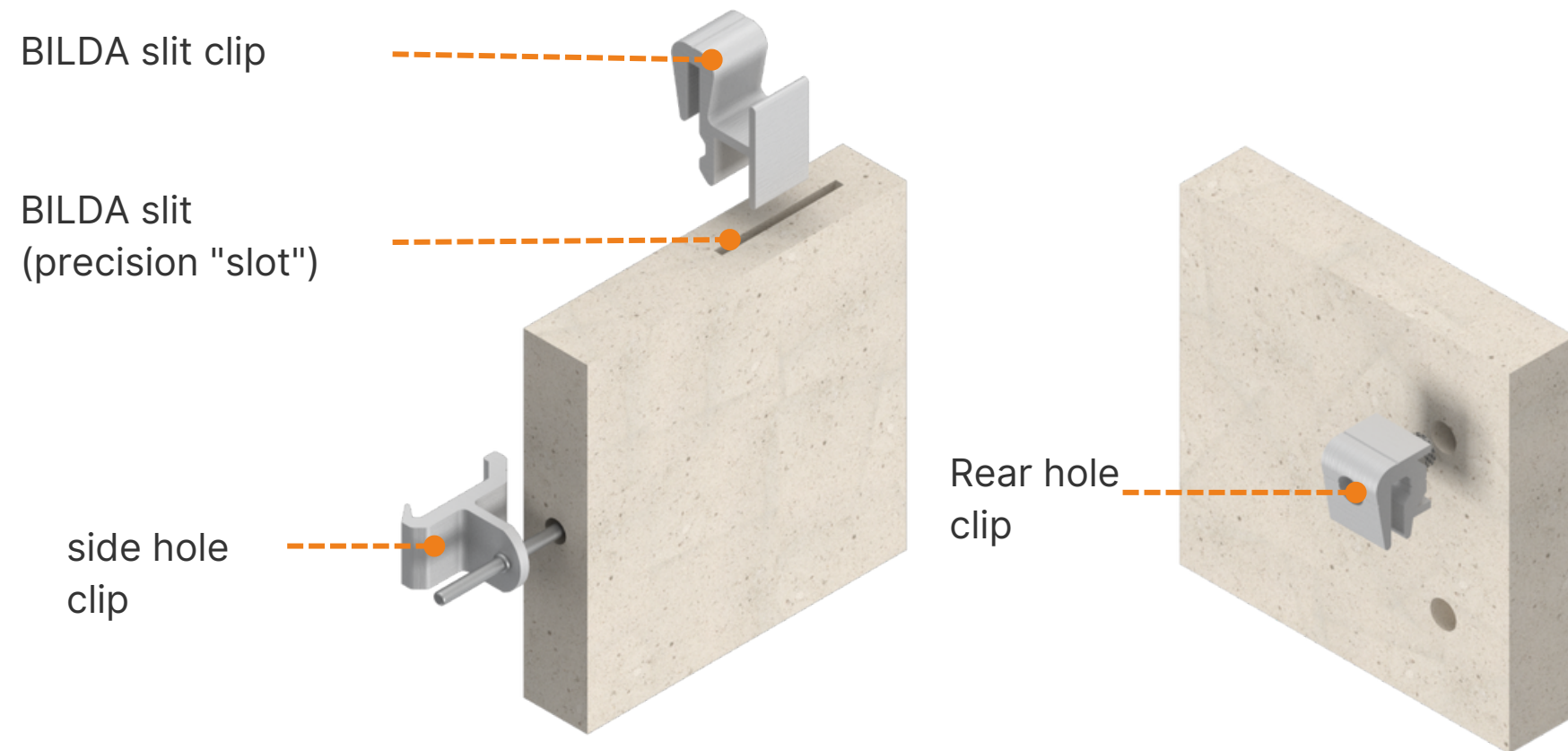
for any panel, and any fixing method - enhanced functionality



INSULATION & FIRESTOP FIXERS

non invasive, reliable good fit - minimum thermal bridges for high insulation performance

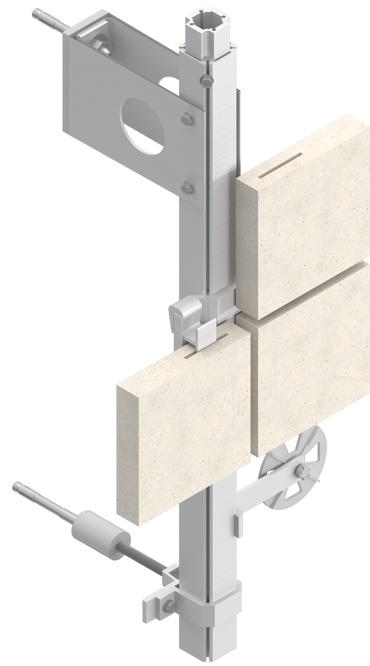
3 Clips for any panel, any "socket"



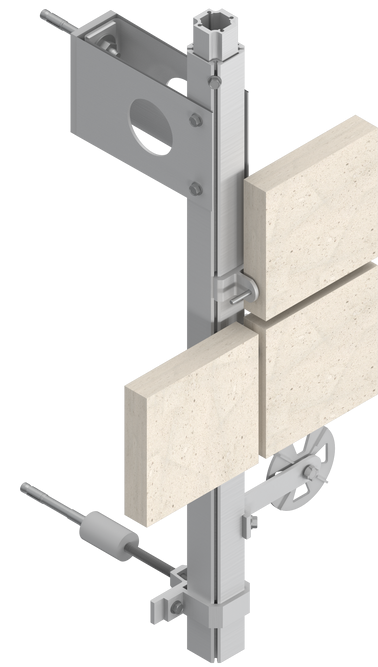
- Variety of **clips for all panel fixing methods** (slit, side and rear hole);
- stationary milling rig, handheld machine, **tools and instruments for any panel "socket"**

Cladding Assemblies

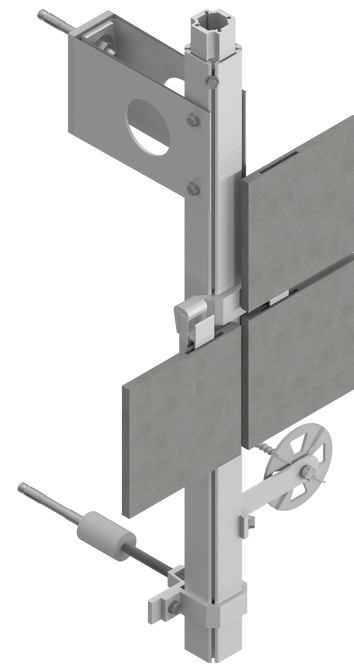
VERTICAL ASSEMBLY



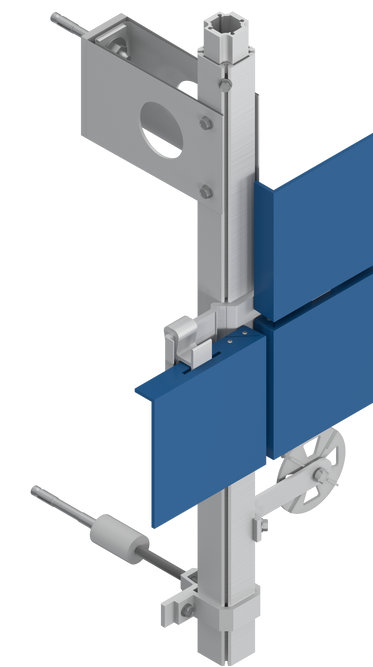
SLOT & BLADE CLIPS
Natural stone 10-40mm



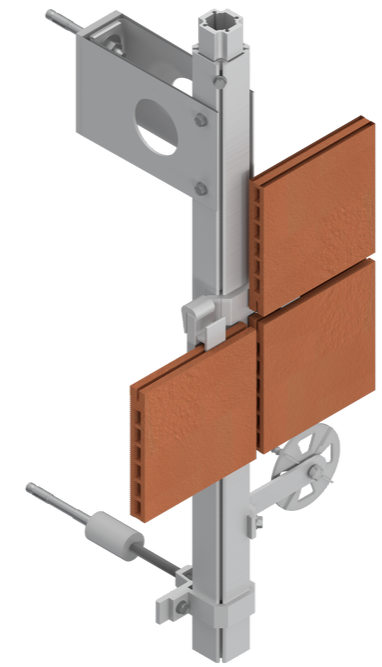
DOWEL & HOLE CLIPS
Natural stone 10-40mm



SLOT & BLADE CLIPS
Ceramic tiles 8-20mm

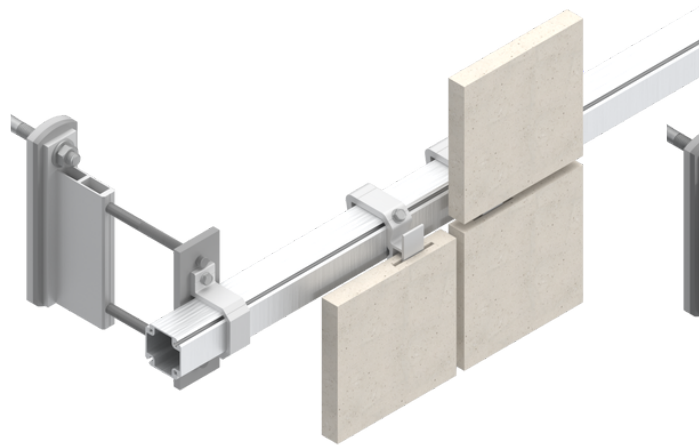


SLOT & BLADE CLIPS
Aluminum Composite Panel

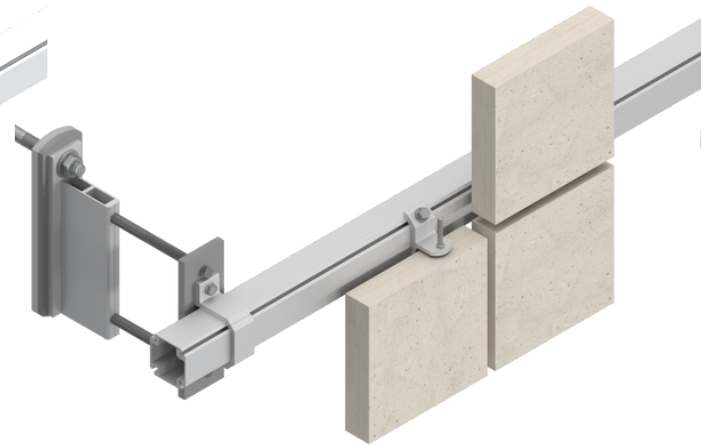


SLOT & BLADE CLIPS
Terracotta Panel

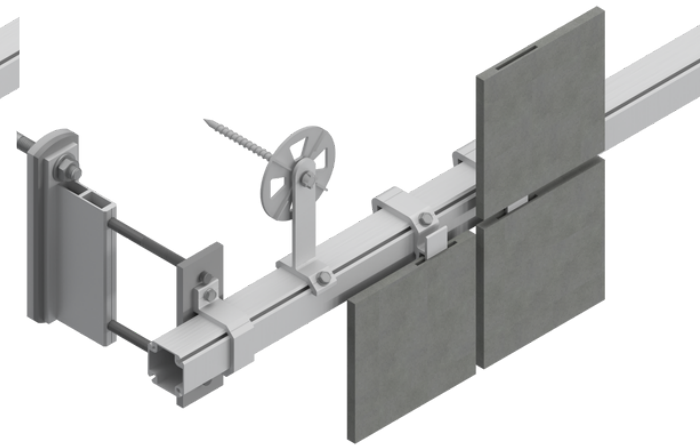
HORIZONTAL ASSEMBLY



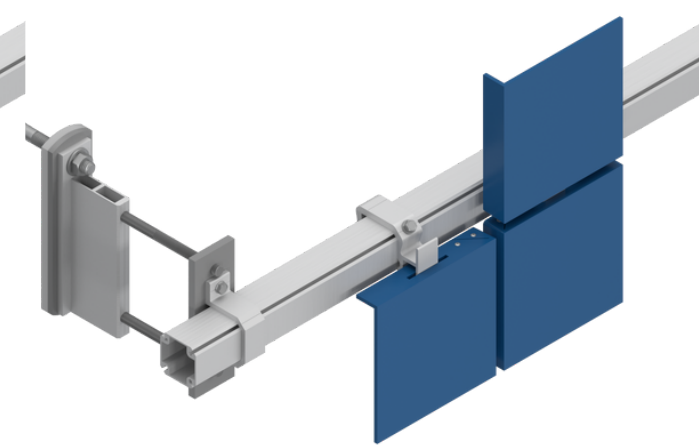
SLOT & BLADE CLIPS
Natural stone 10-40mm



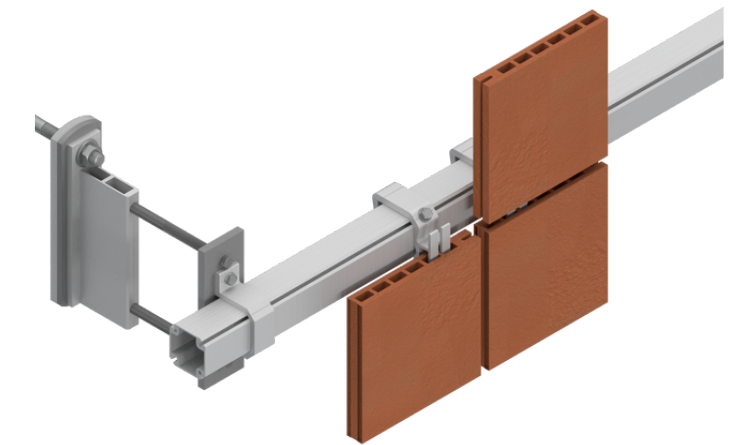
DOWEL & HOLE CLIPS
Natural stone 10-40mm



SLOT & BLADE CLIPS
Ceramic tiles 8-20mm

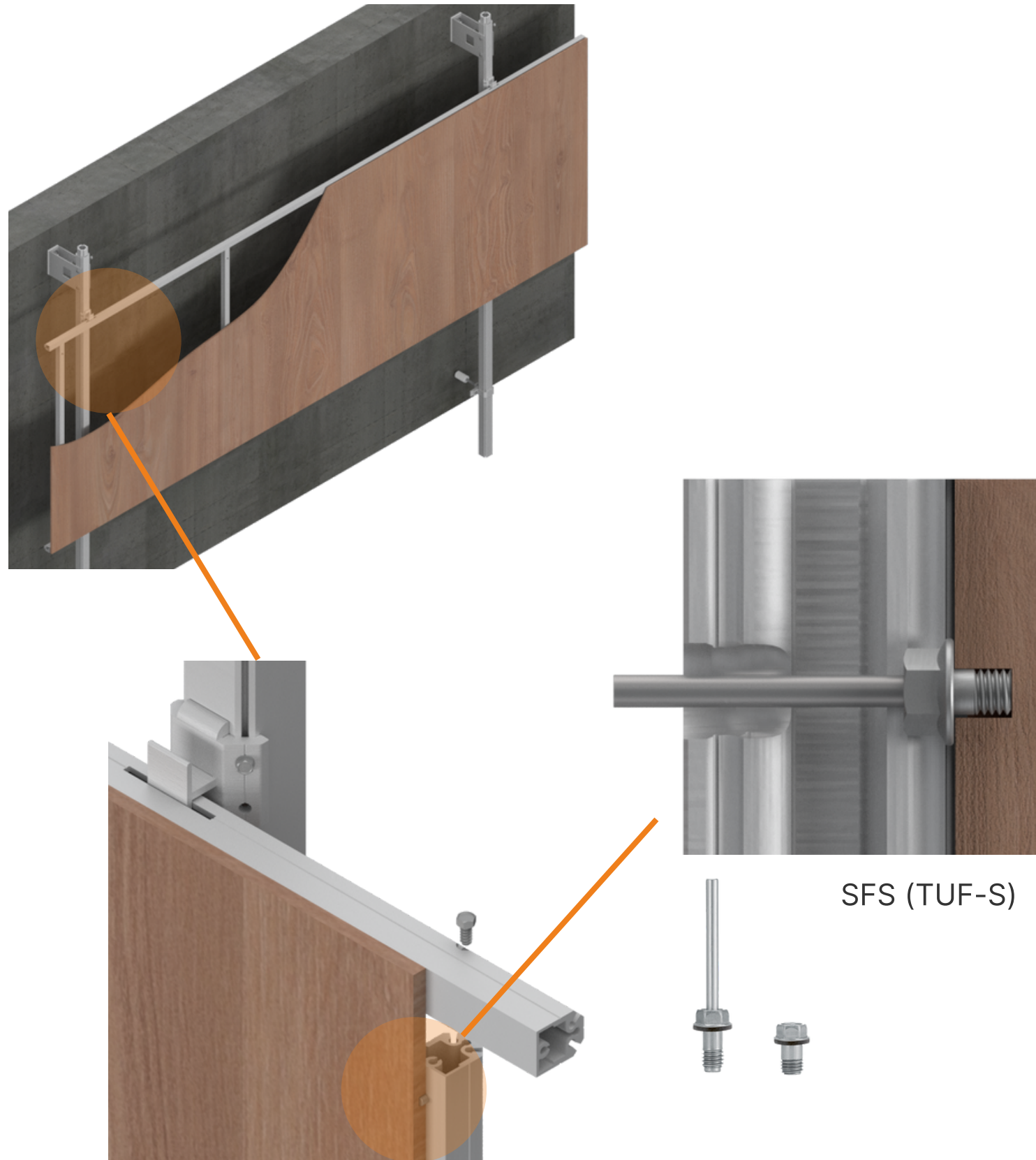


SLOT & BLADE CLIPS
Aluminum Composite Panel



SLOT & BLADE CLIPS
Terracotta Panel

BILDA back frame furring - for thin & large format panels

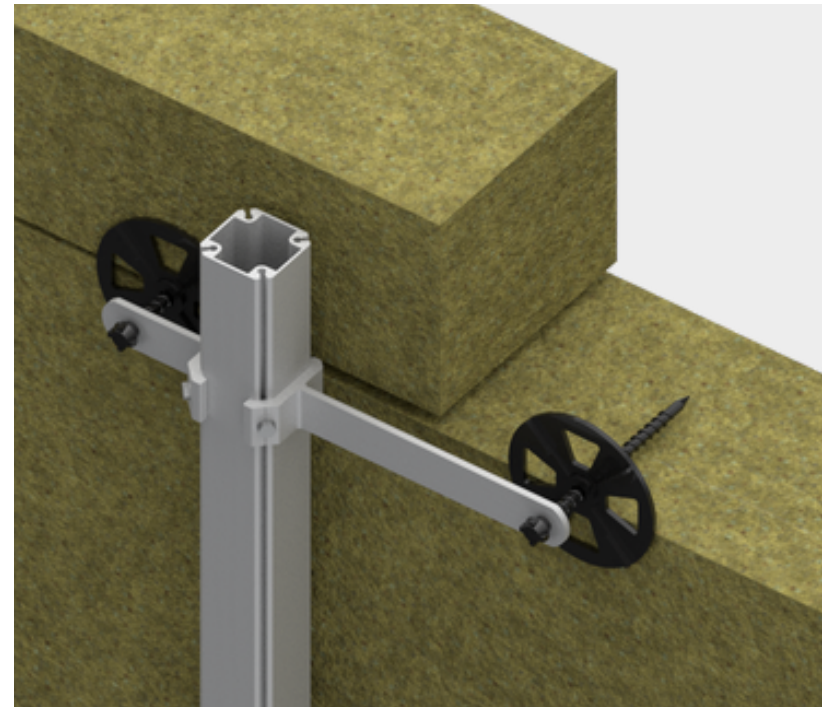


- Allows efficient fixing of large-sized, thin, brittle & non-rigid materials by initially pre-assembled furring frame to form a rigid panel
- Consists of lightweight elements forming frames - For panels of thickness - 8mm to 15mm - Max panel dimension 4100mm X 1854 mm

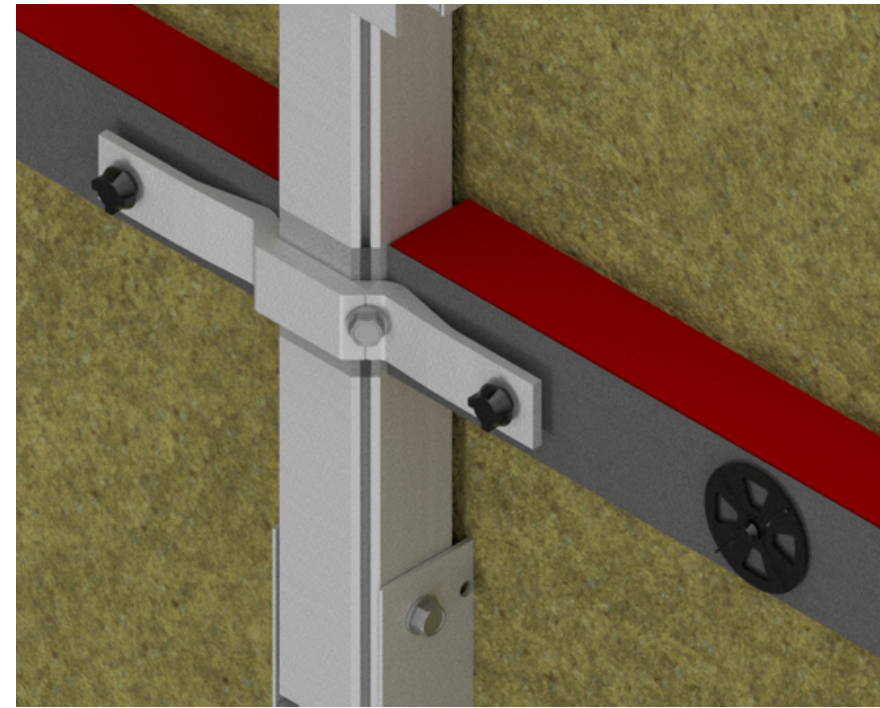
APPLICATIONS

- Fibrecement (FCP)
- Composite mineral material
- Glass fibre reinforced concrete (GFRC)
- Porcelain Gres
- High Pressure Laminates (HPL)

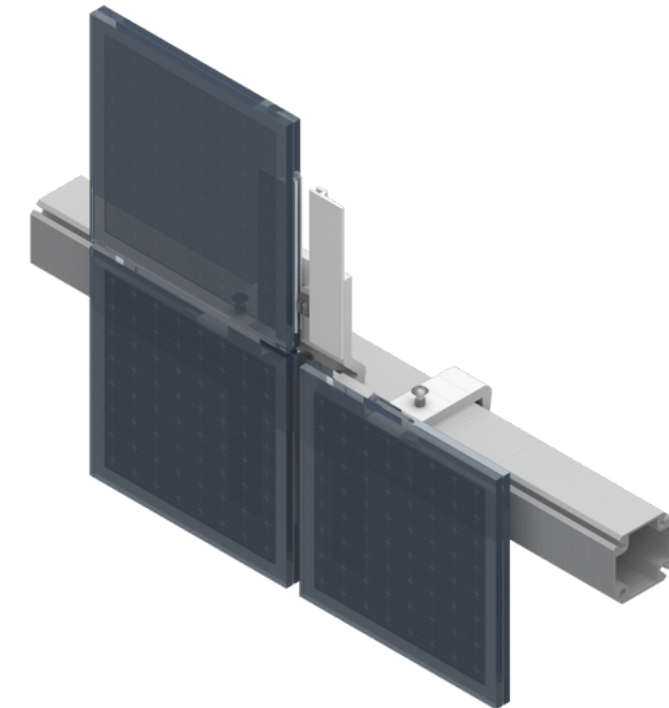
Overall Envelope Fixing, Modelling and Support



INSULATION FIXING SET



FIRE STOP FIXING SET



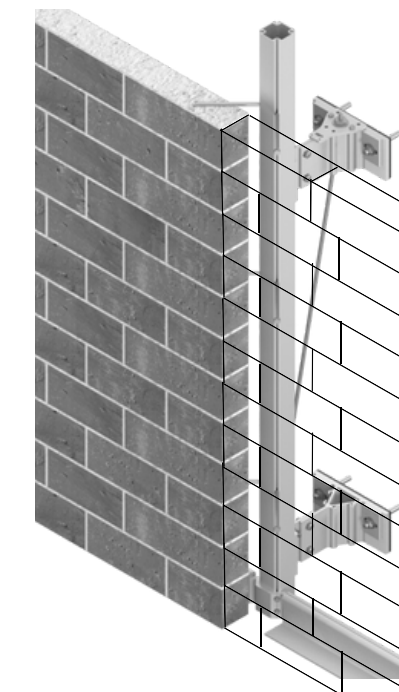
BIPV PANEL FIXING SYSTEM



FRAMED APPLICATION



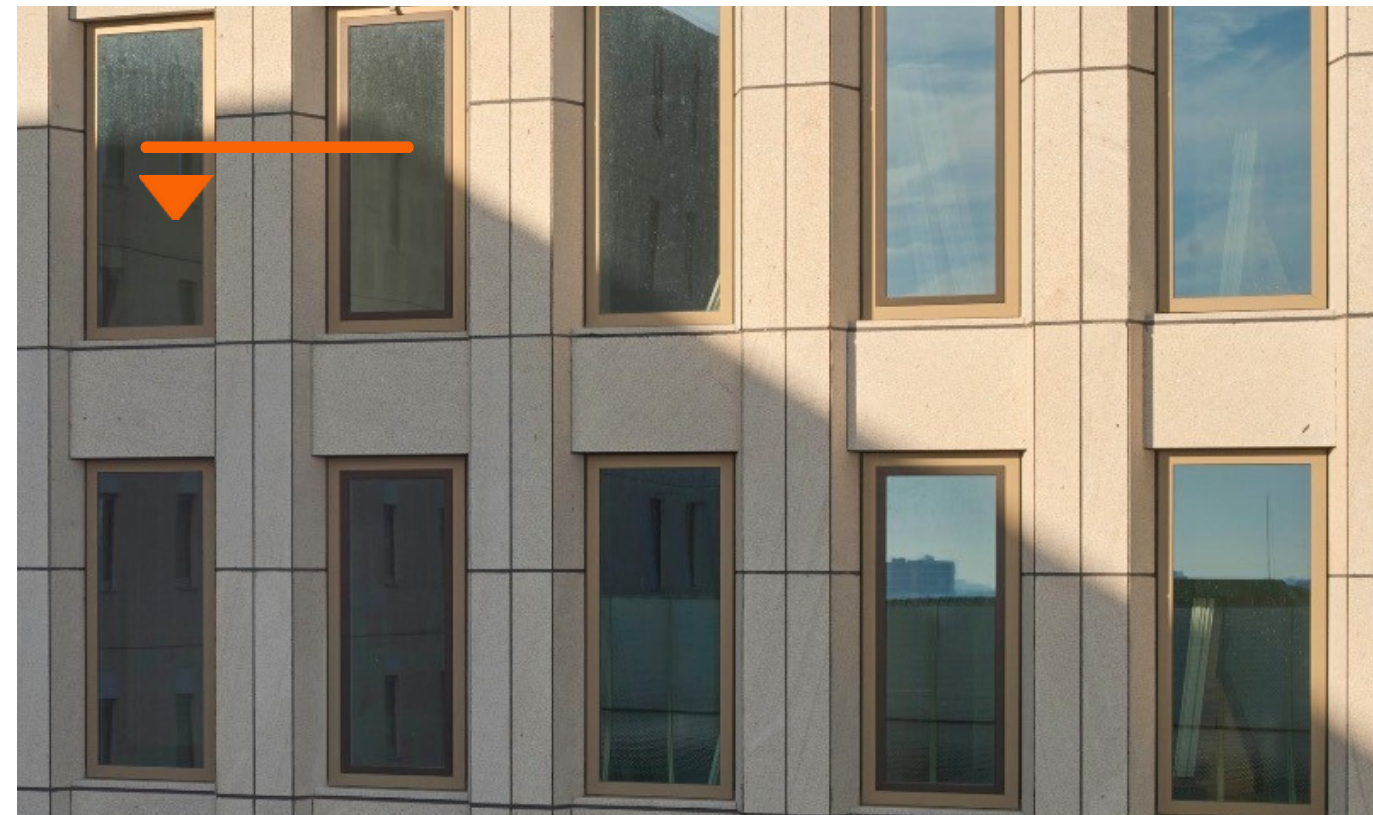
NICHED PATTERN FIXING APPLICATION



BRICKWORK CLADDING SYSTEM

Case Study - Compatible with any type of construction method

PRECAST SUBSTRATE



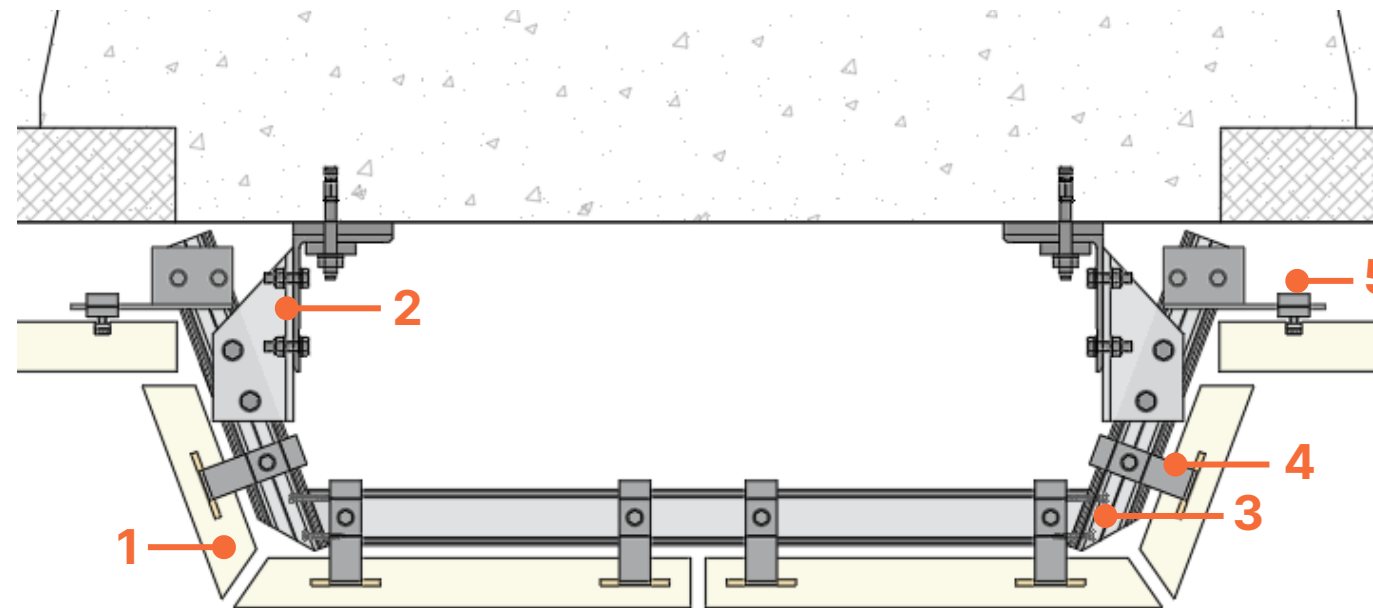
BILDA's contribution

- Saved costs up to 20%
- 2x faster installation
- Bespoke fixing solution
- Compatible for prefabrication

PROJECT FACTS

Height: 215 m
Cladding Panel: 40-45 mm thick Granite
Cladding system: BILDA Rainscreen system - Prefabricated Assembly
Installation Efficiency Rate: C. 248 m²/week

Architect: Dam & Partners
Main contractor: BAM Bouw en Techniek
Prefabricated wall producer: Senta International
Year of construction: 2021



- 1 Granite 40-45 mm thick
- 2 Heavy Duty Wall Bracket
- 3 BILDA Strut Profile - Preassembled elements
- 4 Slot-blade panel fixing
- 5 Undercut panel fixing

45%
Savings in materials

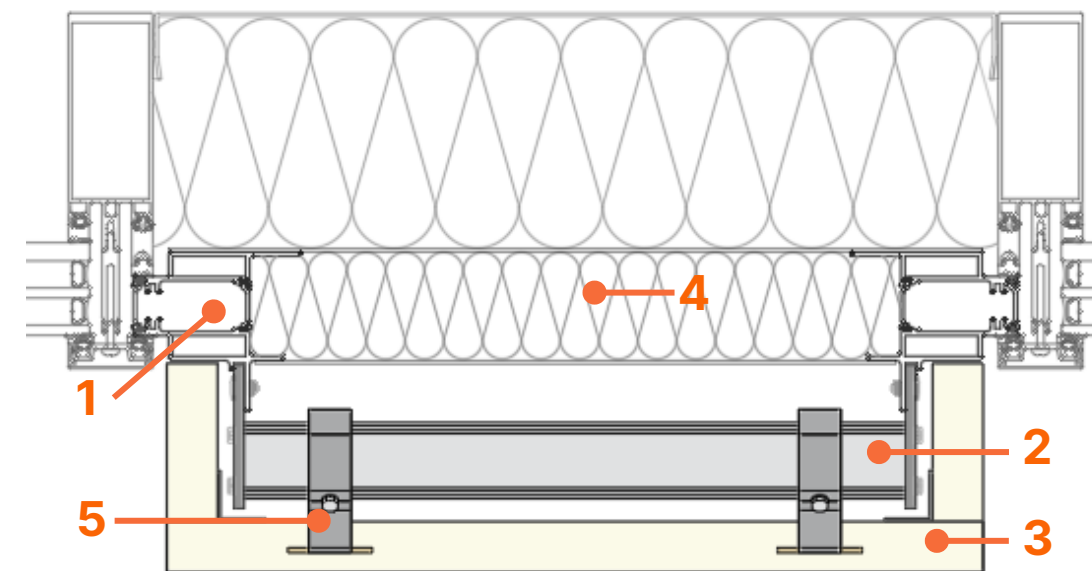
Case Study - Integration with Curtain Wall

COMPOSITE WALL SUBSTRATE



PROJECT FACTS

Height:	30 m
Cladding Panel:	30 mm thick Granite and Limestone
Cladding system:	BILDA Rainscreen system - Preassembled units
Covered façade area:	2600 m ²
Architect:	ProArch architects Ltd
Facade engineering:	Facade Detail
Cladding installer:	Alumina Elit
Year of construction:	2022



- 1 Bespoke framing profile
- 2 BILDA strut profile
- 3 Pre-assembled stone element
- 4 Composite panel
- 5 Slot - blade fixing clips

Challenge

composite wall panel substrate - not structurally admissible for fixing the substructure

Solution

BILDA fixed the cladding system to the mullions of the CW units through a bespoke framing profile.

Negligible Thermal Impact

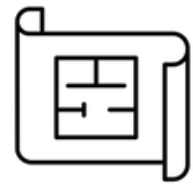
30% Cost Reduction

Why BILDA?



User-friendliness

- Simple to use
- Intuitive



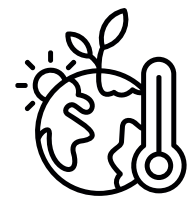
Versatility

- Supports simple cladding shells
- Models volume & relief features



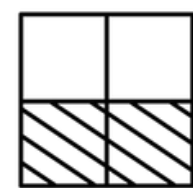
Speed

- Reduces manual operations at site
- Pre-assemblable in factory



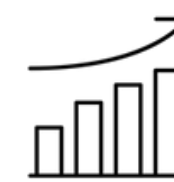
Climate-friendliness

- lower carbon footprint
- enhance thermal performance



Universality

- Fixes panels of all types
- Accommodates all fixing methods



Cost efficiency

- Excellent strength-to-cost ratio
- Labour saved via quick connections
- Panel thickness may be reduced

Game-changing user centered, enhanced functionality system for fixing of opaque/rainscreen building envelopes (cladding and insulation) - **advantages for all stakeholders in the envelope process**



Key Partners & Clients

ARCHITECTS	ENVELOPE DESIGNERS	GENERAL CONTRACTORS	CLADDING INSTALLERS
			
			
			
			
			
			
			

- BILDA is a mature, wholesome and universal product that addresses all the requirements of the cladding trade, at lower cost and with enhanced functionality
- Optimized inventory, Easy to manage, promote, explain, install & sell

Visit [BILDA website](#) to discover more about our system



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