SUSTAINABILITY
IN EVERY LAYER

Viva®
Metal Composite Panel

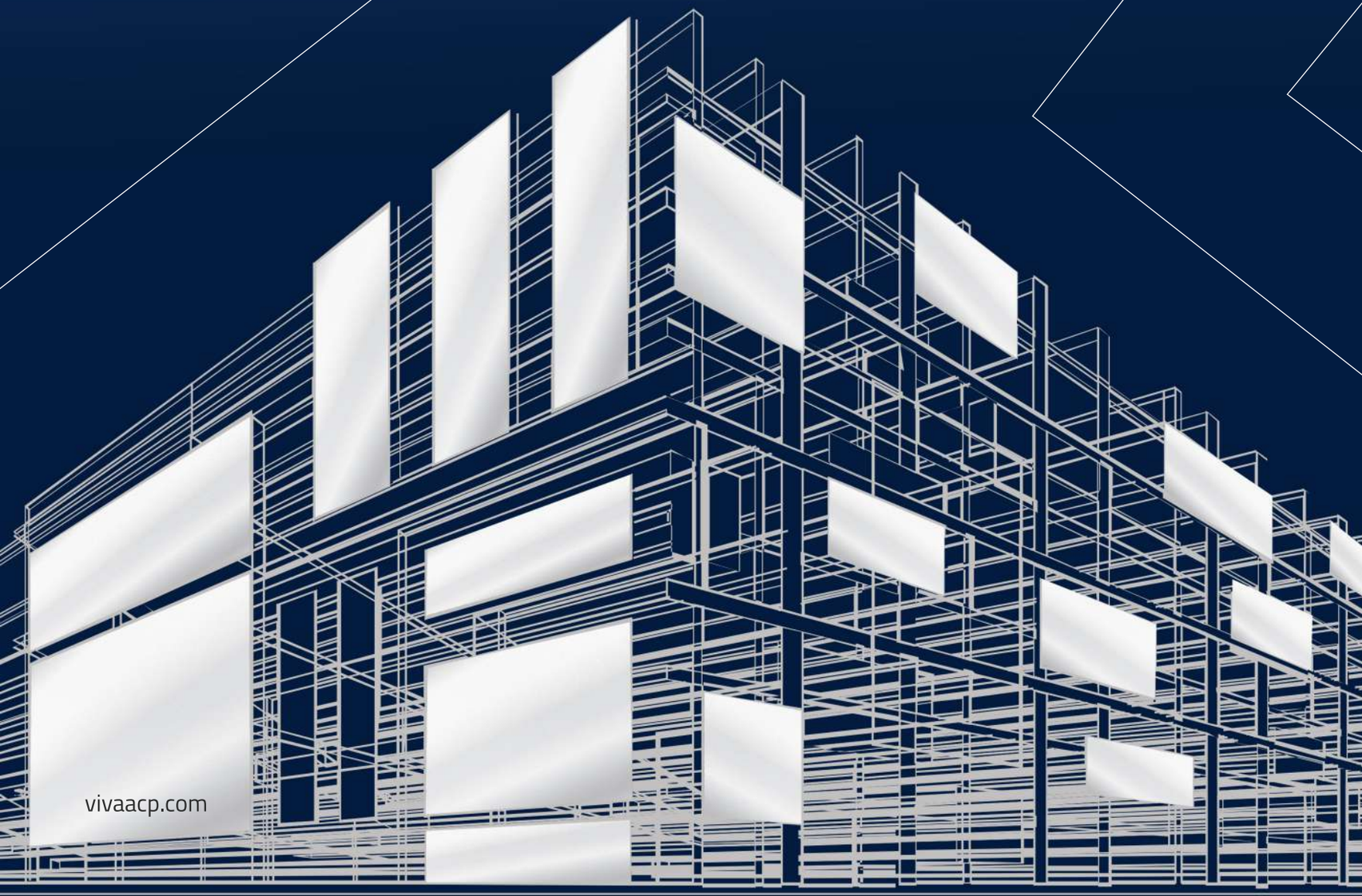
SIMPLIFIED INSTALLATION, EXCEPTIONAL RESULTS

SOLID ALUMINIUM PANELS

CRAFTING STRENGTH,
PRECISION AND STYLE

SOLID X

SX2.0 | SX3.0



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Metal Composite Panel

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ANIL KAPOOR UNVEILS

SOLID X

Where every layer speaks
strength and sophistication

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A NEW ERA
IN ARCHITECTURE

SOLID X BY VIVA

Solid Aluminium Panels are transforming the way modern architecture is designed, combining unmatched strength, versatility, and sustainability. With SOLID X, VIVA introduces India's 1st pre-coated solid aluminium panels, tailored to meet the growing demand for premium materials that redefine facades and interiors.

Backed by decades of expertise in building materials, VIVA continues to push the boundaries of innovation. SOLID X is not just a product but a promise - one that elevates durability and aesthetic appeal while championing eco-conscious manufacturing.

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AlMg 3 Alloy over AlMg 1 Alloy

REVOLUTIONIZING FACADES

AlMg 3/ AA 5754 - 2.0 MM & AlMg 3/ AA 5754 - 3.0 MM ALUMINIUM PANELS FOR LIGHTWEIGHT STRENGTH AND DURABILITY

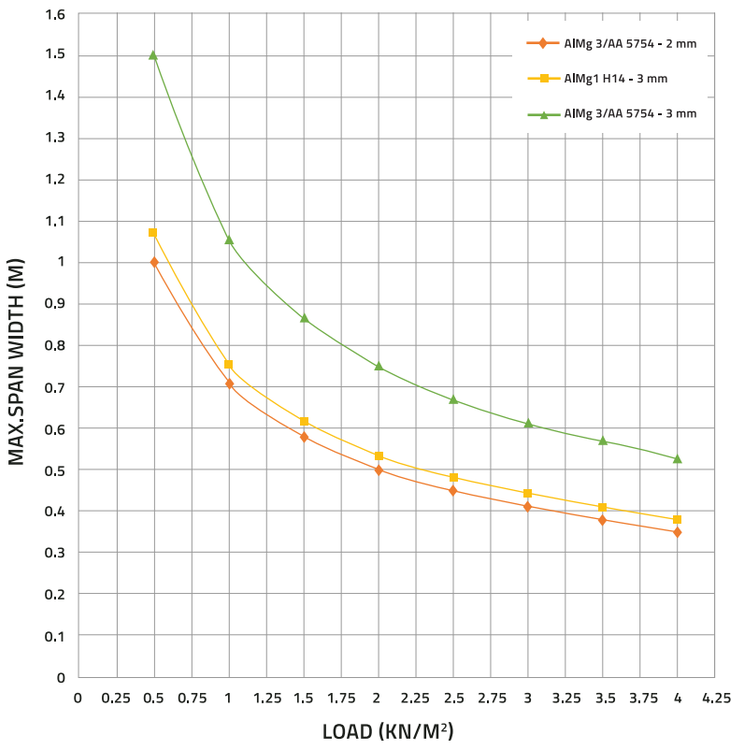
The 2.0 mm AlMg 3/ AA 5754 - 2.0 mm panel, weighs 5.4 kg/m²—one-third lighter than the 3.0 mm AlMg1 panel—offering similar performance while reducing handling, installation, and transport costs.

AlMg3, thickness 2.0 mm: 5.4 kg/m²

AlMg1, thickness 3.0 mm: 8.1 kg/m²

Perfect for high-rise buildings in extreme wind zones, AlMg 3/ AA 5754 - 2.0 mm is lightweight yet durable, adapting to building movements and temperature changes. Its marine-grade alloy makes both AlMg 3/ AA 5754 - 2.0 mm & AlMg 3/ AA 5754 - 3.0 mm ideal for harsh climates.

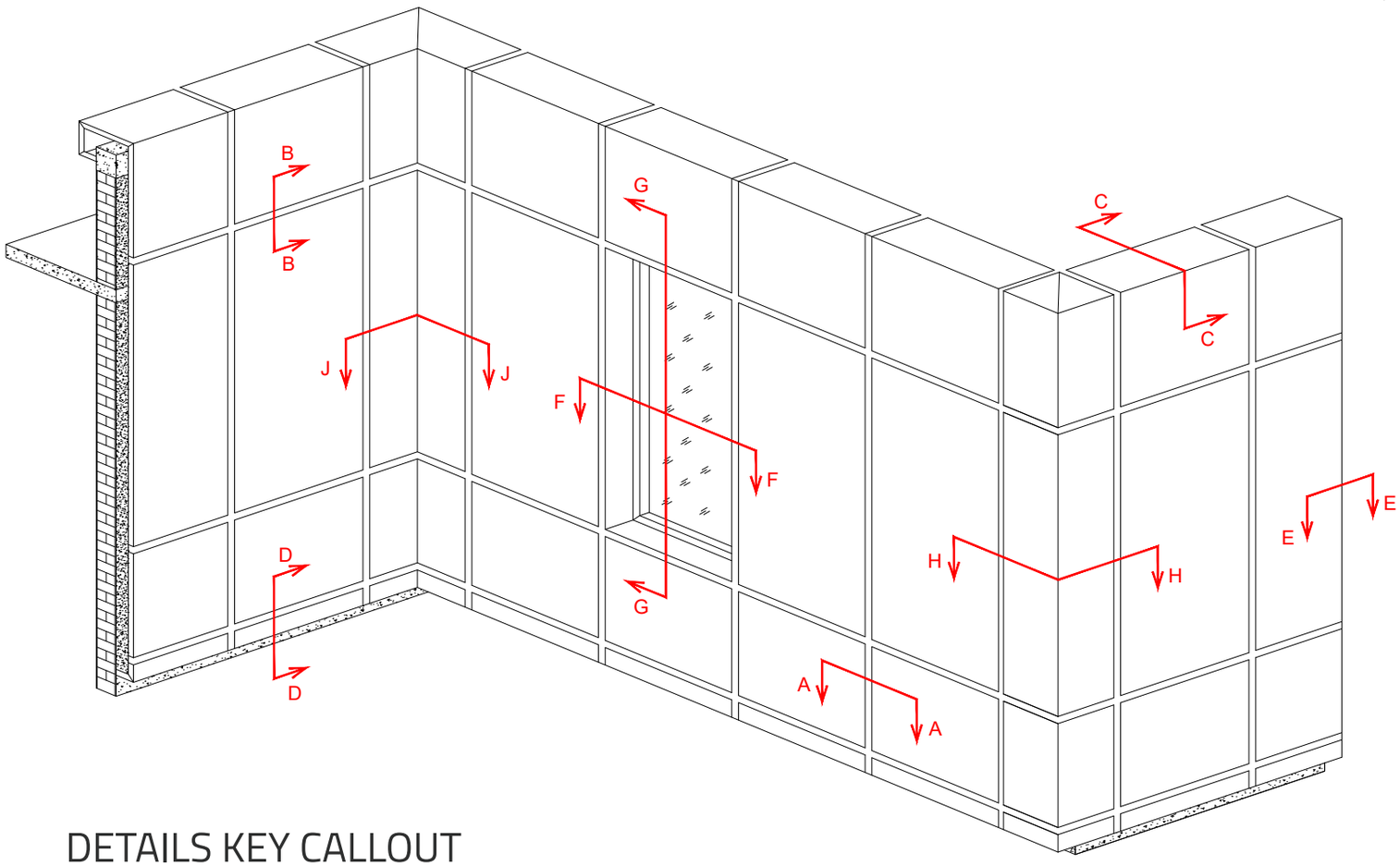
Structural Design Comparison: AlMg 3/AA 5754 - 2 mm, AlMg1 H14 - 3 mm, AlMg 3/AA 5754 - 3 mm



Load (kN/m²)	AlMg3/AA 5754 2 mm	AlMg1 H14 3 mm	AlMg3/AA 5754 3 mm
0.5	1.00	1.02	1.50
1.0	0.71	0.72	1.06
1.5	0.58	0.59	0.87
2.0	0.50	0.51	0.75
2.5	0.45	0.46	0.67
3.0	0.41	0.42	0.61
3.5	0.38	0.39	0.57
4.0	0.35	0.36	0.53

INSTALLATION
TECHNIQUES

Conventional fastening techniques for facade cladding, bonding, and stud welding are also possible installation methods for invisible fastening.



DETAILS KEY CALLOUT

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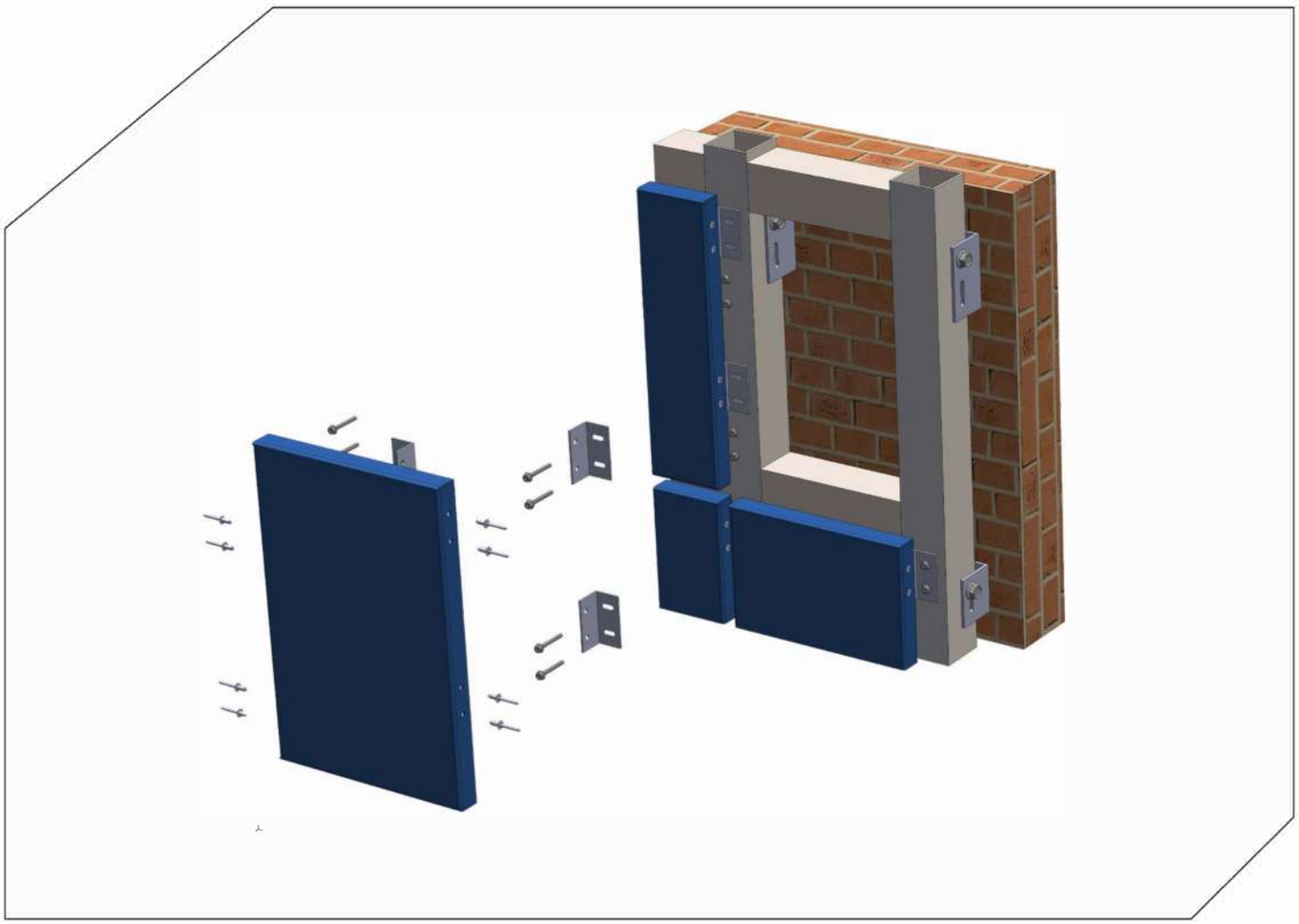
L CLEAT SYSTEM



The L Cleat system is commonly used for installation. This system involves the use of L-shaped cleats, which are brackets designed to hold and secure simple Tray panel to the subframe or supporting structure.

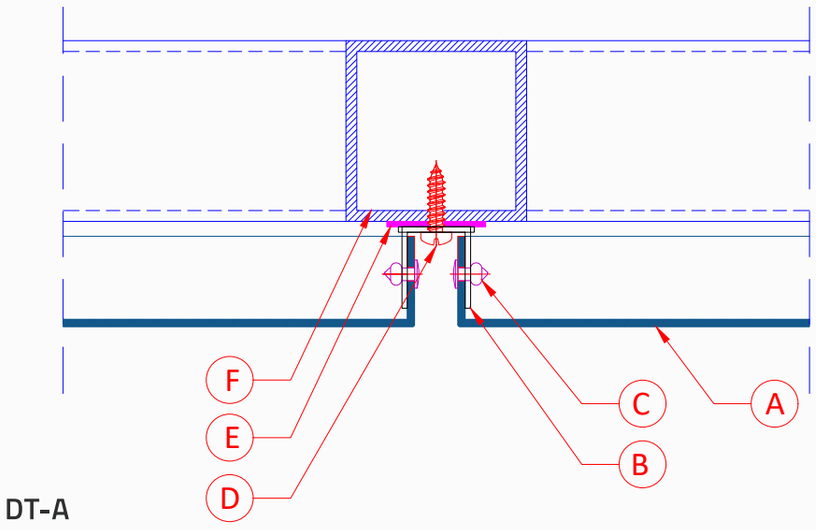
Key Features

- **Material:** The L cleats are typically made of aluminium durable metals to ensure strength and longevity.
- **Shape:** L cleats have a 90-degree angle, forming an "L" shape that provides stability when holding the panels.
- **Lightweight:** Despite their strength, the cleats are lightweight, making them easy to handle and install.

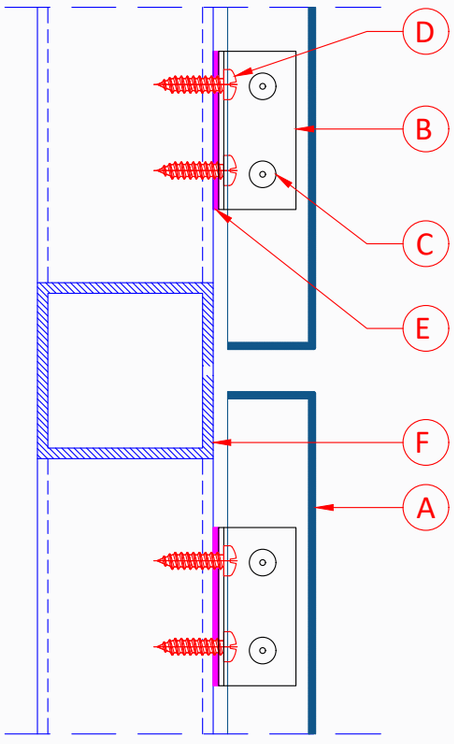
Advantages

- **Ease of Installation:** The cleat system simplifies the process of aligning and securing panel.
- **Flexibility:** Works with various customized panel designs, shape and size.
- **Cost-Effective:** Reduces installation time and labor costs.
- **Thermal Expansion Management:** Allows for minor movement to accommodate thermal expansion of panels.

L Cleat System



DT-A



DT-B

A. SX2 or SX3 Panel	D. Screw (Fastening B, E & F)
B. "L" Cleat	E. Bi-Metalic Separator
C. Blind Rivet (Fastening A & B)	F. Sub-Frame

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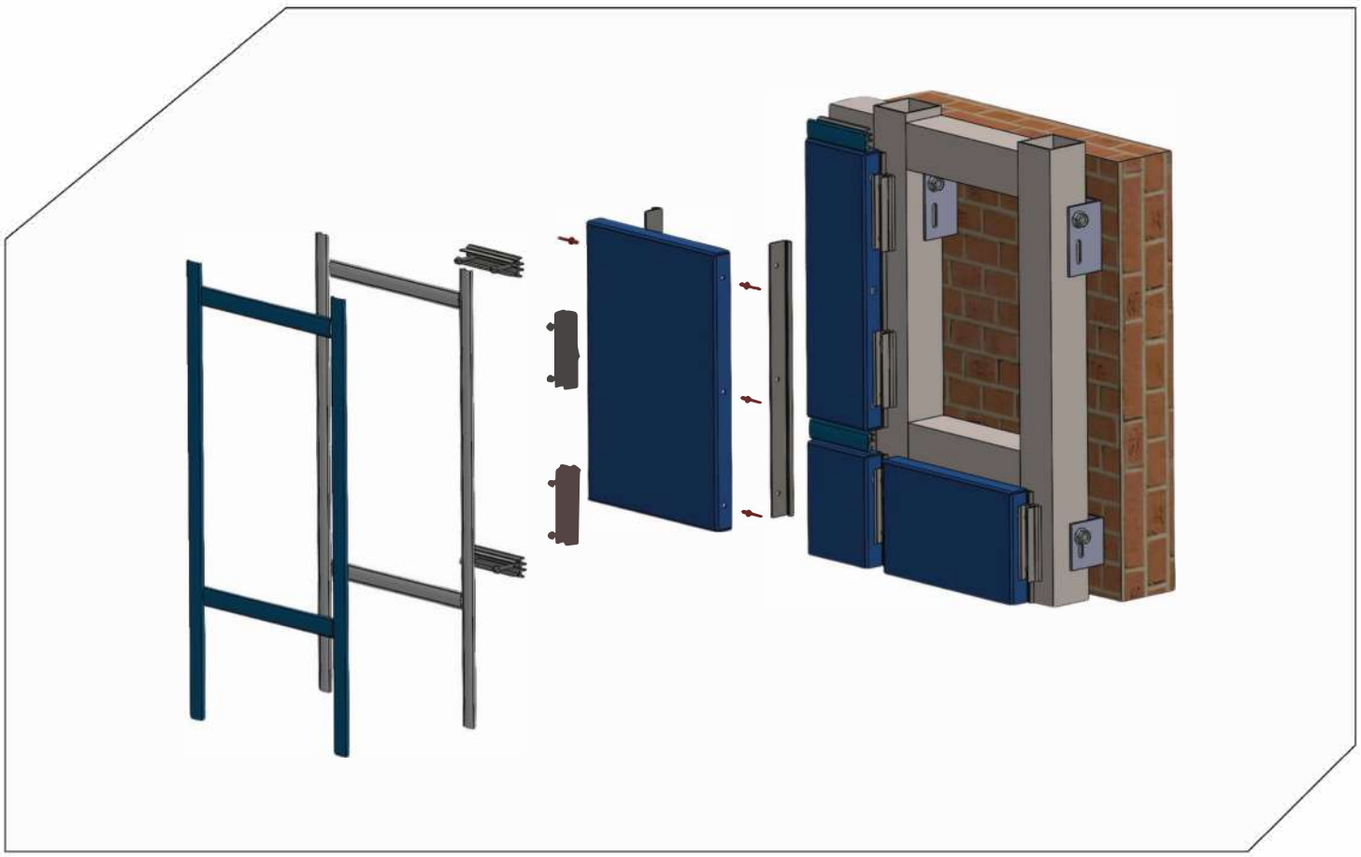
Metal Composite Panel

METAL CAP SYSTEM



The metal cap system is widely used to treat Panel Joints for protecting and sealing open joint. It provides both functional & aesthetic benefits, ensuring weatherproofing & a clean finish. Metal Cap are made by coating same paint used for panel.

Key Features

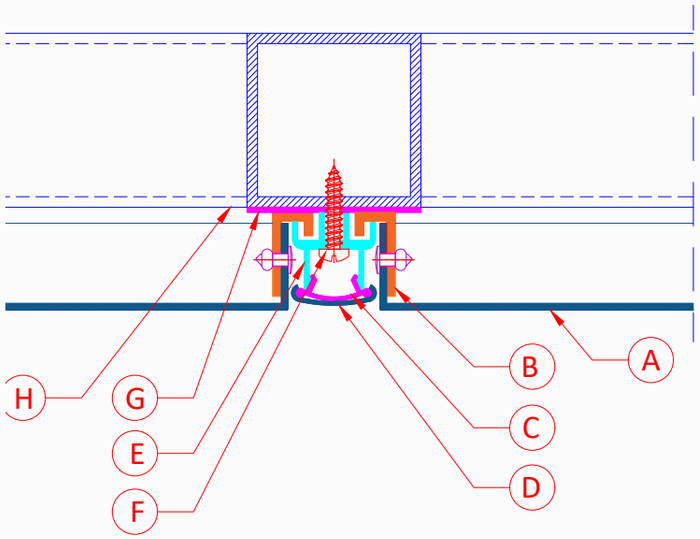
- **Customizable:** Available in various finishes to suit design and project needs.
- **Durability:** Resistant to weather, UV exposure, and mechanical damage.
- **Seamless Appearance:** Can be designed to provide a sleek, continuous look.
- **Thermal Movement Accommodation:** Many systems incorporate joints or expansion gaps to handle thermal expansion and contraction.

Advantages

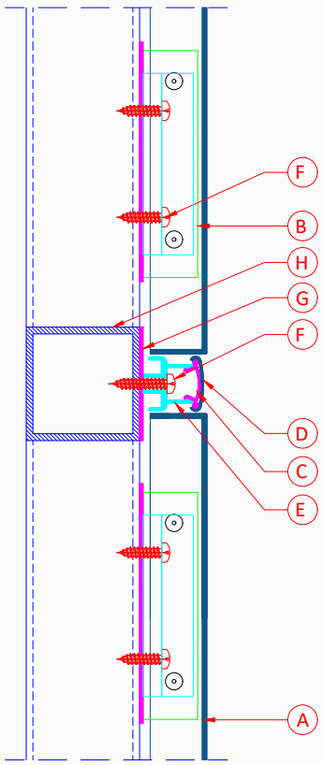
- **Weather Protection:** Prevents water ingress and protects against UV damage.
- **Low Maintenance:** Minimal upkeep required due to durability and corrosion resistance.
- **Enhanced Aesthetics:** Creates clean and visually appealing finishes.
- **Customizable Designs:** Can match architectural styles and colours.
- **Easy Installation:** Designed for straightforward installation with fasteners or adhesive systems.

System Demo Video

Metal Cap System



DT-A



DT-B

A. SX2 or SX3 Panel	D. Metal Cap	G. Bi-Metalic Separator
B. "J" Profile	E. "M" Clamp	H. Sub-Frame
C. Blind Rivet (Fastening A & B)	F. Screw (Fastening E, B, G & H)	

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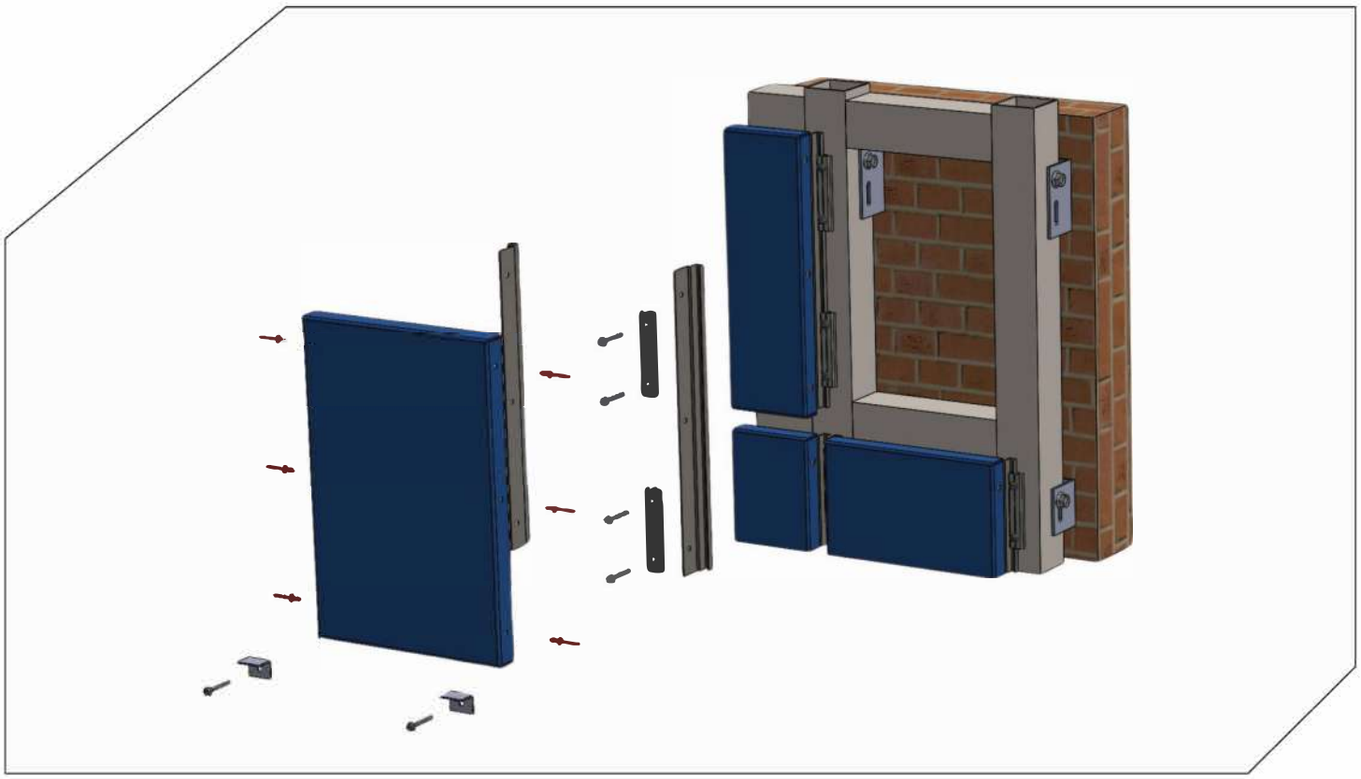
OPEN GROOVE "M" CLAMP SYSTEM



The Open Groove "M" Clamp System is used in construction for securely fixing panels. This system ensures structural stability while maintaining an aesthetic, open-jointed design. This system utilizes an "M"-shaped clamp to securely hold panels in place on a substructure. It is used in open groove cladding designs, where the panels are installed with small gaps (grooves) between them for aesthetic and functional purposes. The open groove system allows for air circulation, water drainage, and easy panel replacement while providing a modern, sleek finish.

Key Features

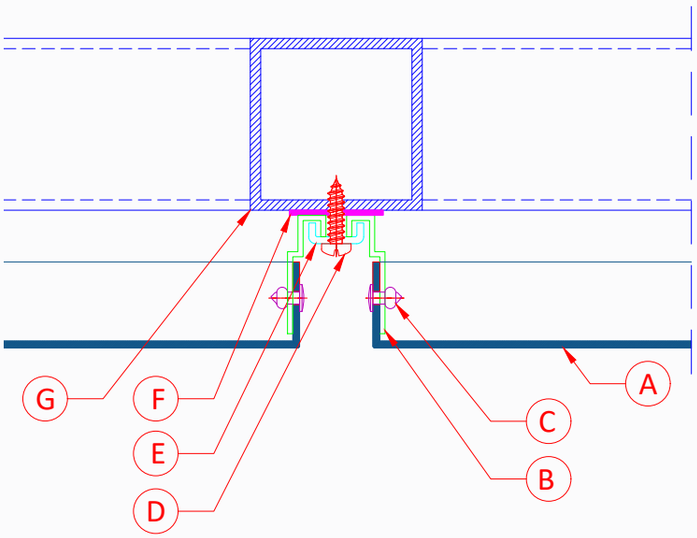
- **Clamp Design:** The "M"-shaped clamp provides multiple points of contact, offering strong grip and stability.
- **Open Groove Appearance:** Creates uniform grooves between panels for a clean, modern look.
- **Flexibility:** Works with various panel thicknesses.
- **Weather Resistance:** Designed to handle thermal expansion.

Advantages

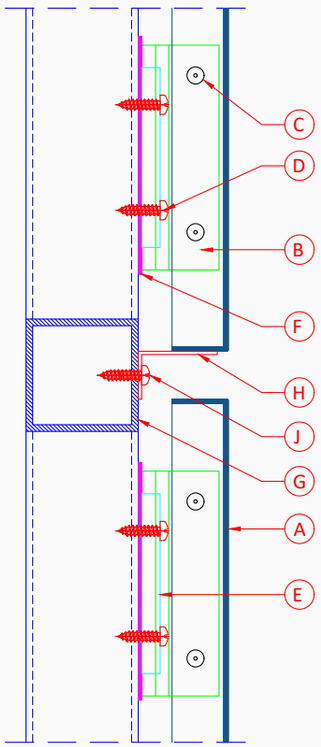
- **Easy Installation:** The clamp system simplifies alignment and panel fixing.
- **Clean Aesthetic:** Open grooves provide a seamless, ventilated appearance.
- **Efficient Drainage:** Gaps allow rainwater and condensation to drain, preventing water accumulation.
- **Durable:** Resistant to wear, UV exposure, and harsh weather conditions.
- **Replaceable Panels:** Individual panels can be easily replaced without dismantling the entire system.

System Demo Video

Open Groove “M” Clamp System



DT-A



DT-B

A. SX2 or SX3 Panel	D. Screw (Fastening E, B, F & G)	G. Sub-Frame
B. "J" Profile	E. "M" Clamp	
C. Blind Rivet (Fastening A & B)	F. Bi-Metalic Separator	

Viva®
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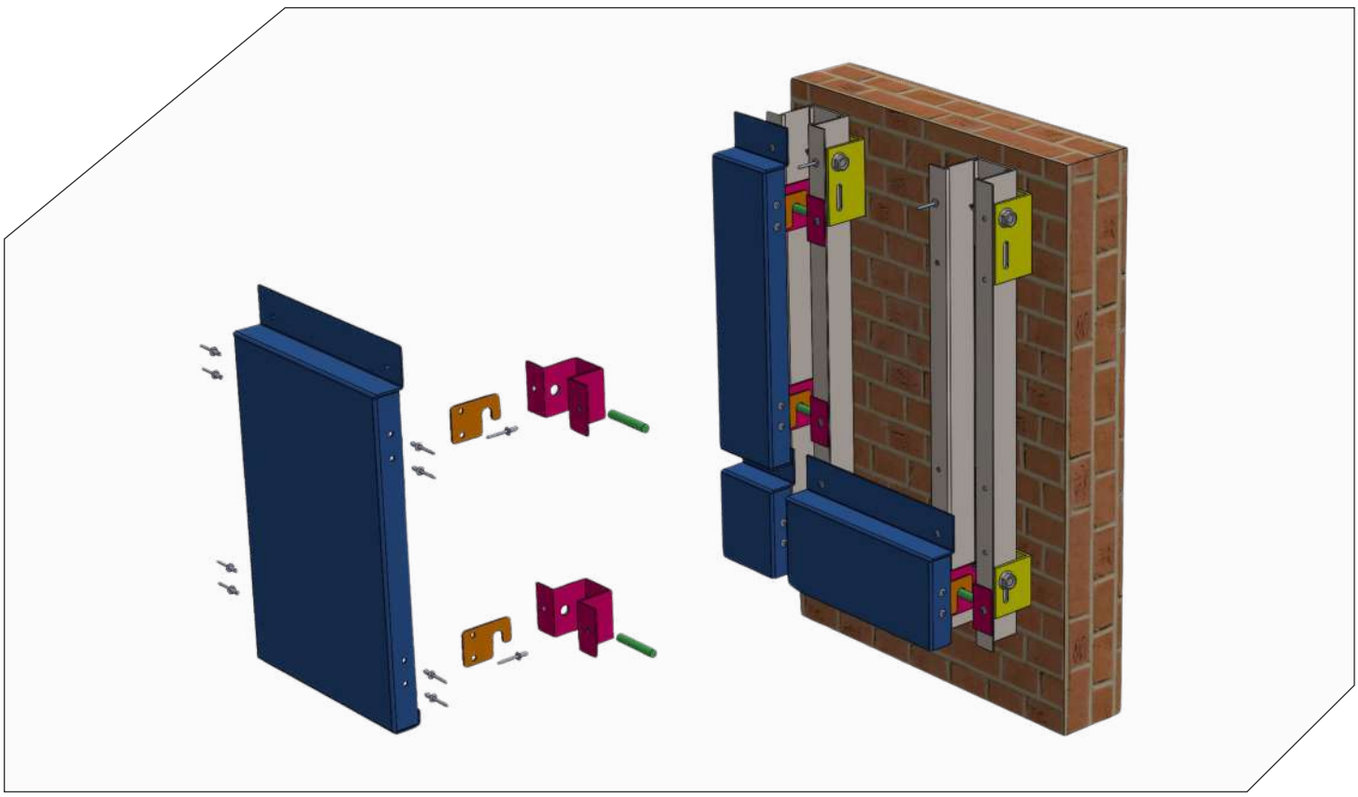
AXLES HOOK-ON SYSTEM



The Axles Hook-on System is an installation technique used in modern building facades. It provides a reliable and aesthetic way to mount panels securely while allowing flexibility in design and maintenance. The Axles Hook-on System involves panels that are designed with hooks or grooves at their edges. These hooks engage with axles to ensuring secure placement. The panels can be installed or removed individually, making this system ideal for both initial installations and future maintenance.

Key Features

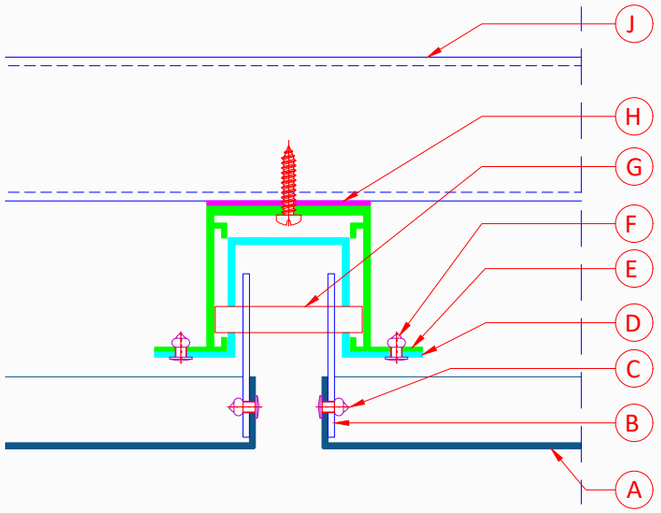
- **Hook-on Mechanism:** Panels are equipped with hooks that attach directly to the mounting rails.
- **Secure Fixing:** The system ensures a firm grip, even under high wind loads or thermal expansion.
- **Ease of Maintenance:** Panels can be individually removed and replaced without disturbing adjacent panels.
- **Hidden Fasteners:** Provides a clean, seamless appearance with no visible screws or rivets.

Advantages

- **Quick Installation:** Simplifies panel alignment and fixing.
- **Aesthetic Finish:** Creates a seamless, modern appearance.
- **Durability:** Designed to withstand environmental stressors such as wind, and UV exposure.
- **Flexibility:** Allows for thermal expansion and contraction without compromising the panel's placement.
- **Low Maintenance:** Panels can be replaced individually, reducing labor and material costs.

System Demo Video

Axles Hook-on System



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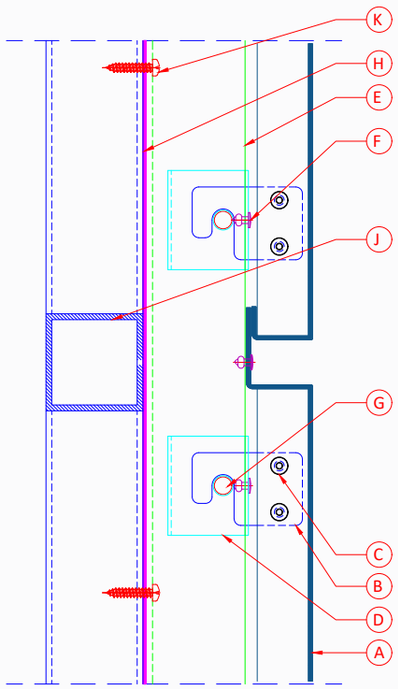

DT-B

A. SX2 or SX3 Panel	E. Mullion	J. Sub-Frame
B. Hook Plate	F. Blind Rivet (Fastening E & D)	K. Screw (Fastening E, H & J)
C. Blind Rivet (Fastening A & B)	G. Axles	
D. Sliding Bracket	H. Bi-Metalic Separator	

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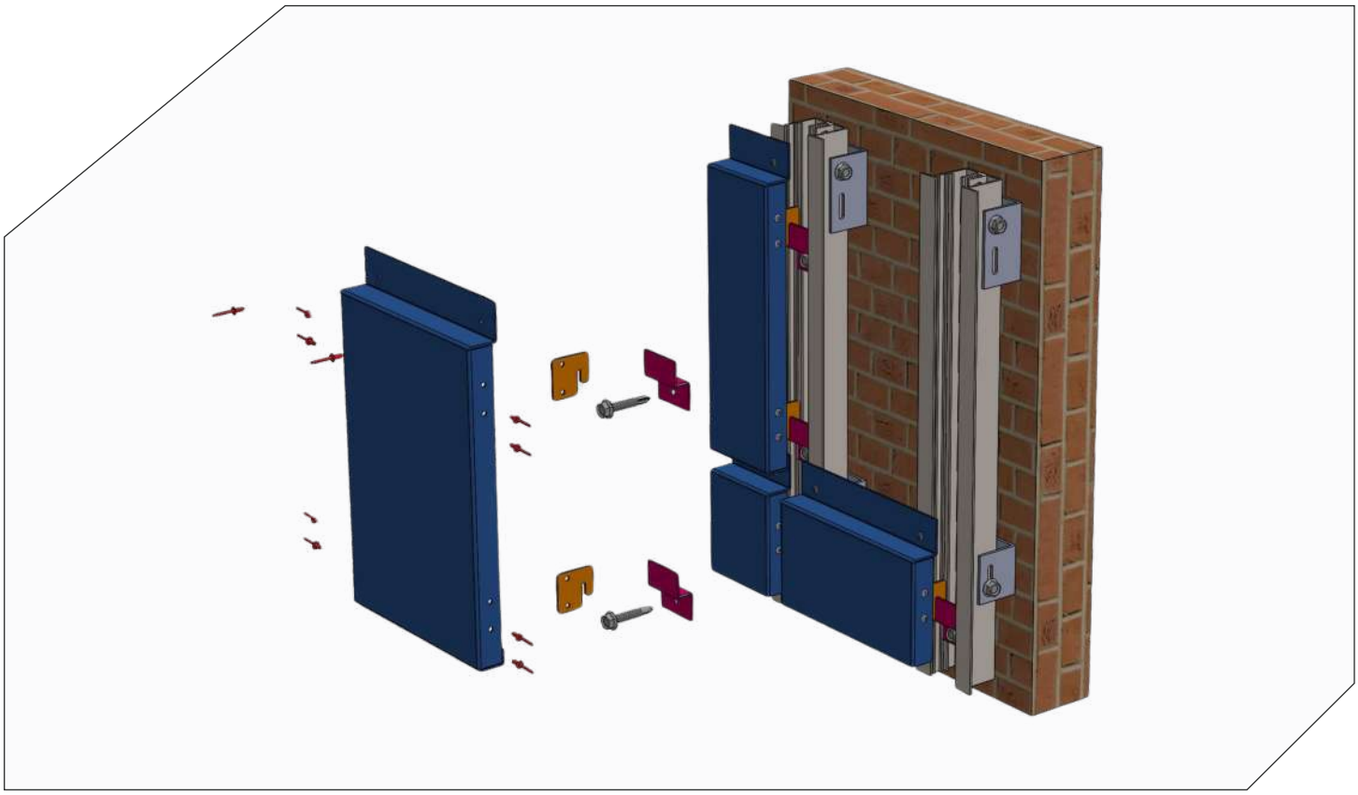
SLIDING PROFILE HOOK-ON SYSTEM



The Sliding profile Hook-on System is an installation technique used in modern building facades. It provides a reliable and aesthetic way to mount panels securely while allowing flexibility in design and maintenance. The sliding Hook-on System involves panels that are designed with hooks or grooves at their edges. These hooks engage with a sliding profile to ensuring secure placement. The panels can be installed or removed individually, making this system ideal for both initial installations and future maintenance.

Key Features

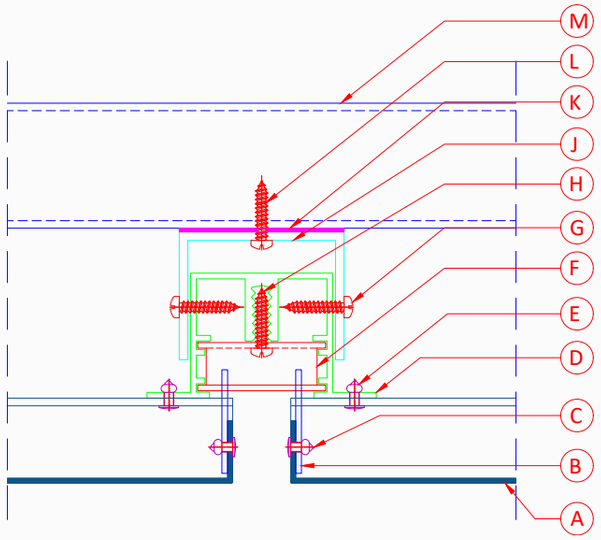
- **Hook-on Mechanism:** Panels are equipped with hooks that attach directly to the mounting rails.
- **Secure Fixing:** The system ensures a firm grip, even under high wind loads or thermal expansion.
- **Ease of Maintenance:** Panels can be individually removed and replaced without disturbing adjacent panels.
- **Hidden Fasteners:** Provides a clean, seamless appearance with no visible screws or rivets.

Advantages

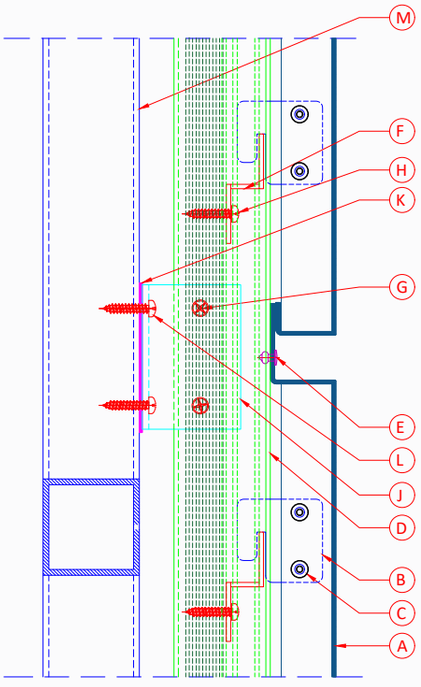
- **Quick Installation:** Simplifies panel alignment and fixing.
- **Aesthetic Finish:** Creates a seamless, modern appearance.
- **Durability:** Designed to withstand environmental stressors such as wind, and UV exposure.
- **Flexibility:** Allows for thermal expansion and contraction without compromising the panel's placement.
- **Low Maintenance:** Panels can be replaced individually, reducing labor and material costs.

System Demo Video

Sliding Profile Hook-on System



DT-A



DT-B

A. SX2 or SX3 Panel	E. Blind Rivet (Fastening A & E)	J. Mounting Bracket
B. Hook Plate	F. Sliding Profile	K. Bi-Metalic Separator
C. Blind Rivet (Fastening A & B)	G. Screw (Fastening D & J)	L. Screw (Fastening J, K & M)
D. Mullion	H. Screw (Fastening F & D)	M.Sub-Frame

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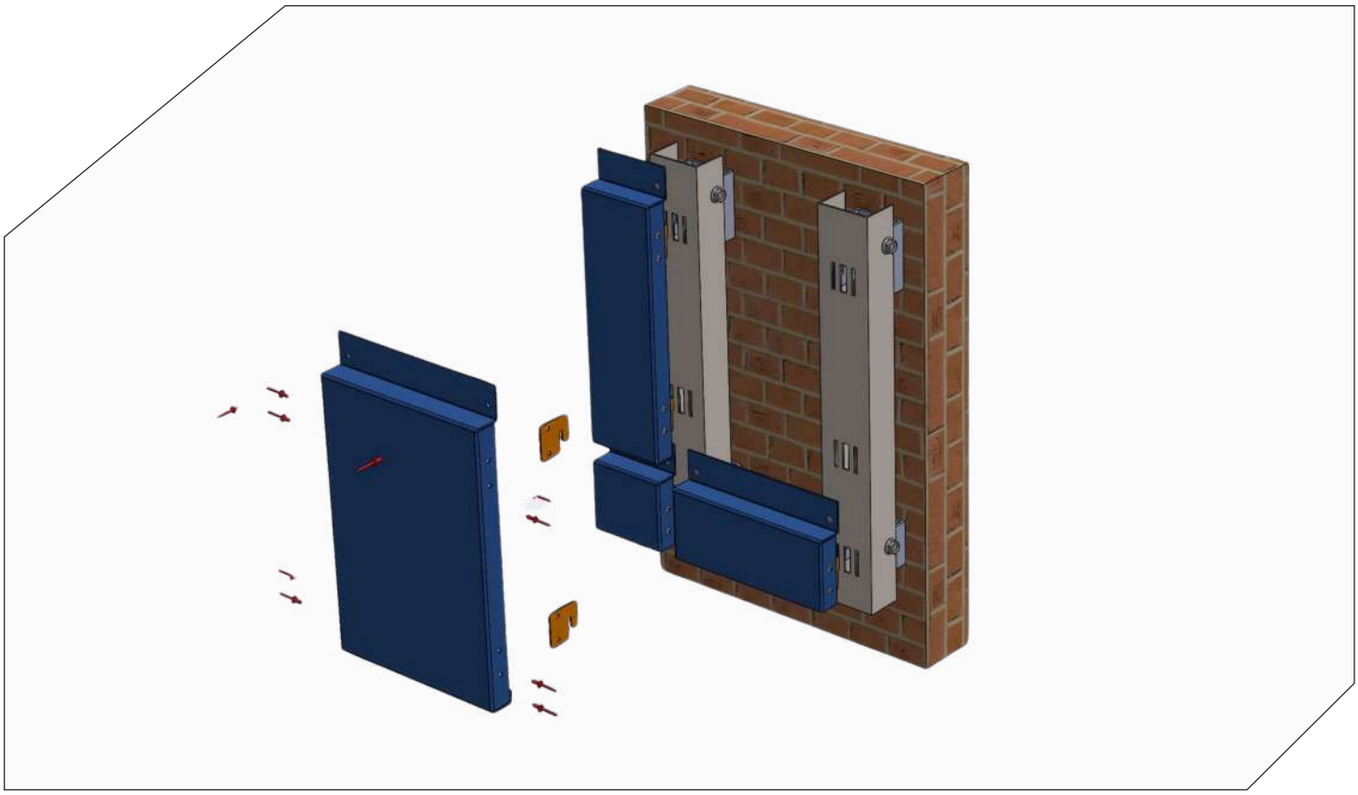
SLOTTED MULLION HOOK-ON SYSTEM



The Slotted mullion Hook-on System is an installation technique used in modern building facades. It provides a reliable and aesthetic way to mount panels securely while allowing flexibility in design and maintenance. The slotted mullion Hook-on System involves mullion that are designed with slot spaced as per design requirement on their face. The panel hooks engage with the slot provided on the mullion for secure placement. The panels can be installed or removed individually, making this system ideal for both initial installations and future maintenance.

Key Features

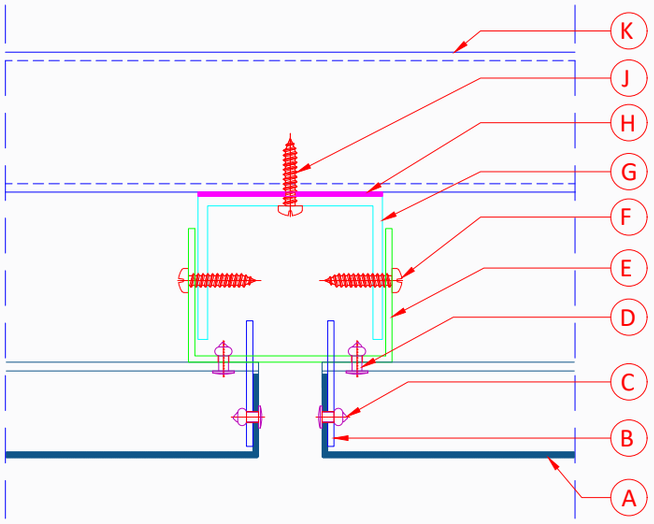
- **Hook-on Mechanism:** Panels are equipped with hooks that attach directly to the mounting slotted rails.
- **Secure Fixing:** The system ensures a firm grip, even under high wind loads or thermal expansion.
- **Ease of Maintenance:** Panels can be individually removed and replaced without disturbing adjacent panels.
- **Hidden Fasteners:** Provides a clean, seamless appearance with no visible screws or rivets.

System Demo Video

Advantages

- **Quick Installation:** Simplifies panel alignment and fixing.
- **Aesthetic Finish:** Creates a seamless, modern appearance.
- **Durability:** Designed to withstand environmental stressors such as wind, and UV exposure.
- **Flexibility:** Allows for thermal expansion and contraction without compromising the panel's placement.
- **Low Maintenance:** Panels can be replaced individually, reducing labor and material costs.

Slotted Mullion Hook-on System



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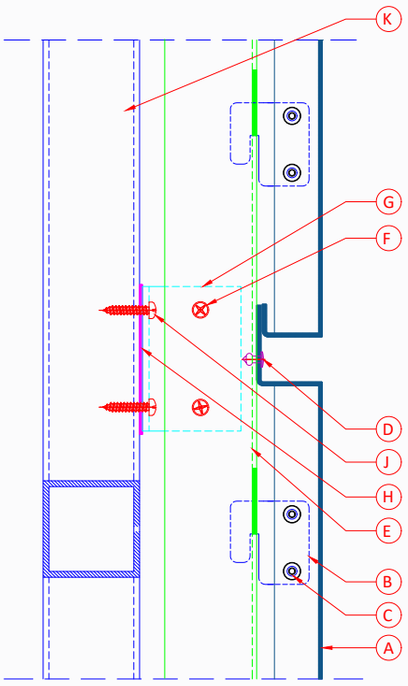

DT-B

A. SX2 or SX3 Panel	E. Slotted Mullion	J. Screw (Fastening G, H & K)
B. Hook Plate	F. Screw (Fastening E & G)	K. Sub-Frame
C. Blind Rivet (Fastening A & B)	G. Mounting Bracket	
D. Blind Rivet (Fastening A & E)	H. Bi-Metalic Separator	

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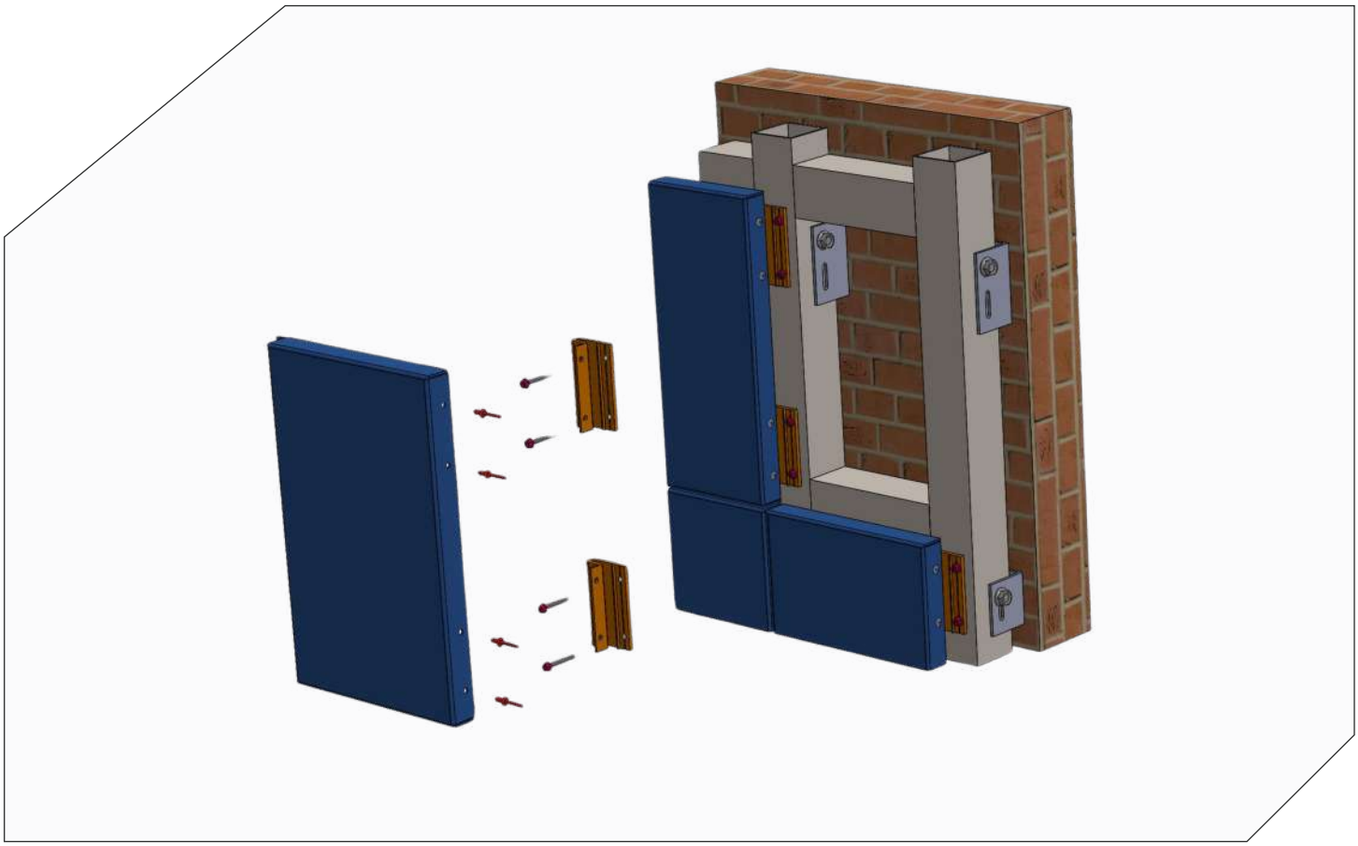
TONGUE AND GROOVE SYSTEM



The Tongue and Groove (TG) System is a popular method for joining panels. This system ensures a seamless, secure fit between panels by using a protruding edge (the tongue) on one piece and a corresponding slot (the groove) on another. The Tongue and Groove system connects two materials by fitting the tongue of one panel into the groove of the adjoining panel. This interlocking mechanism provides structural integrity and a smooth, finished surface.

Key Features

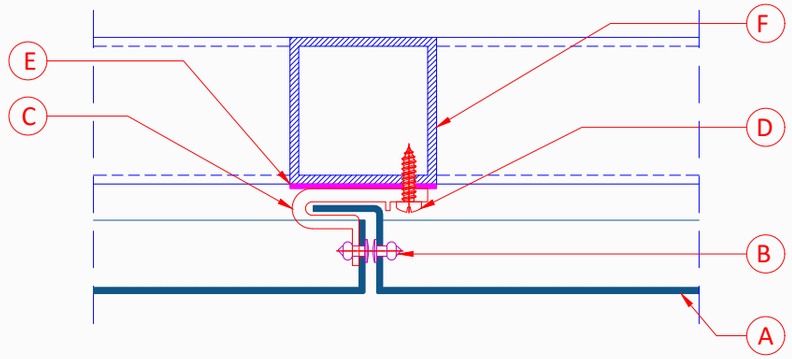
- **Interlocking Joint:** Provides a tight, precise fit between adjacent pieces.
- **Durability:** The interlocking mechanism strengthens the overall structure.
- **Smooth Surface:** Results in a flush finish, with minimal visible seams.
- **Ease of Installation:** Panels are designed to slide or fit together without additional tools or adhesives in most cases.

Advantages

- **Aesthetic Appeal:** The joints are almost invisible, creating a sleek and polished look.
- **Structural Strength:** The interlocking design adds rigidity and stability to the assembly.
- **Ease of Maintenance:** Individual boards can often be replaced without affecting the entire system.
- **Flexibility:** Accommodates expansion and contraction due to temperature.

System Demo Video

Tongue and Groove System



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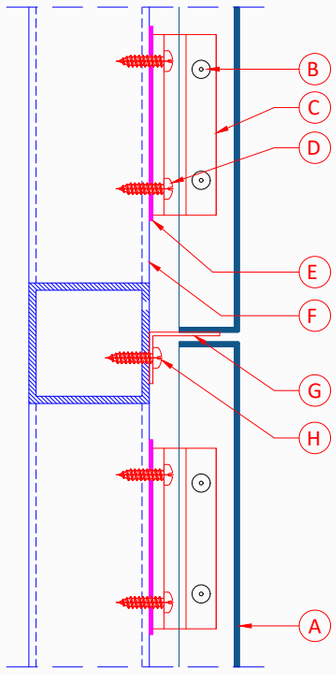

DT-B

A. SX2 or SX3 Panel	E. Bi-Metalic Separator
B. Blind Rivet (Fastening A & B)	F. Sub-Frame
C. Inter Locking Clamp	G. Anti- Sliding Clamp
D. Screw (Fastening C, E & F)	H. Screw (Fastening G & F)

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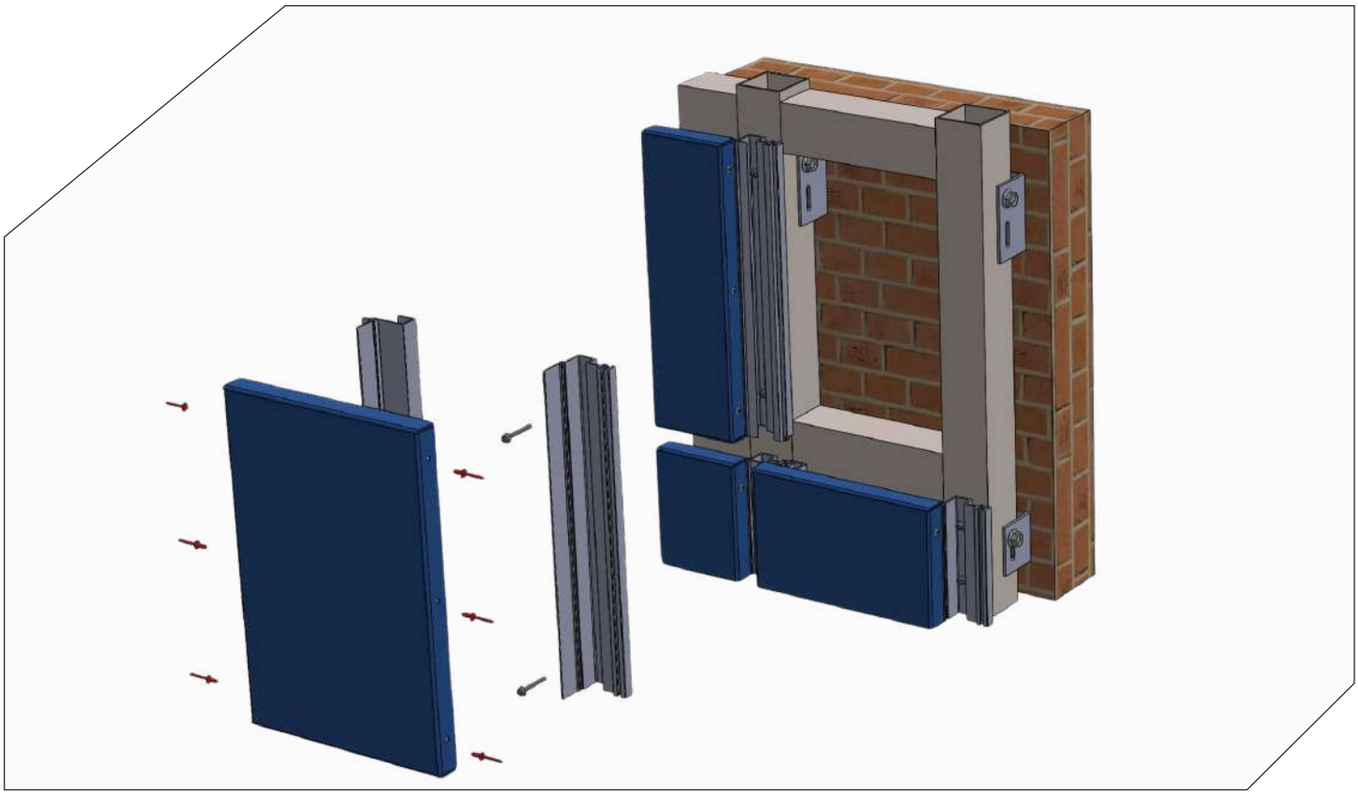
UNITIZED SYSTEM



The Unitized System is a modern cladding solution used in large-scale construction projects. It involves prefabricated panels that are manufactured off-site and installed as complete sections on-site. This system offers speed, precision, and high performance for facades.

Key Features

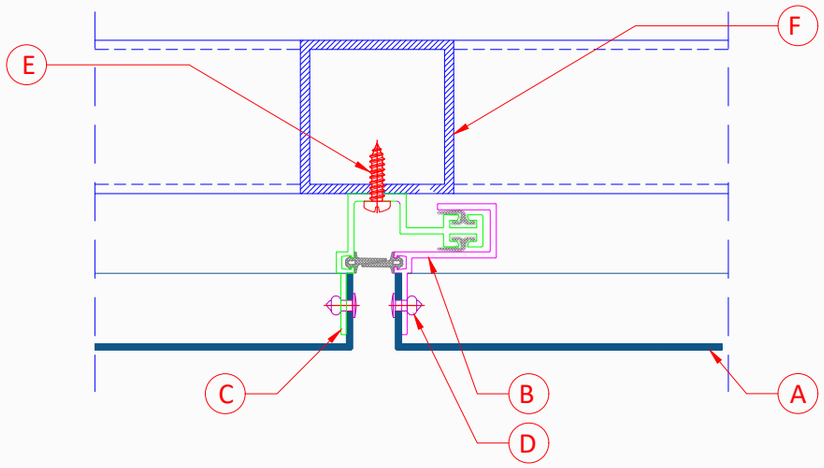
- **Prefabrication:** Panels are fully assembled in a factory-controlled environment for precision.
- **Modular Design:** Units are designed to fit seamlessly together, creating a continuous facade.
- **Weatherproofing:** Pre-installed gaskets and seals ensure excellent resistance to water, air, and thermal ingress .

Advantages

- **Speed of Installation:** pre-assembled units reduce the on-site construction time significantly. Ideal for projects with tight deadlines.
- **Quality Control:** Factory assembly ensures precise alignment, proper sealing, and consistent quality.
- **Weather Performance:** Pre-installed seals and gaskets enhance water and air tightness.
- **Thermal and Acoustic Efficiency:** Units often include insulation, improving energy efficiency and noise reduction.
- **Aesthetic Appeal:** Offers a seamless and modern facade with fewer visible joints.

System DemoVideo

Unitized System



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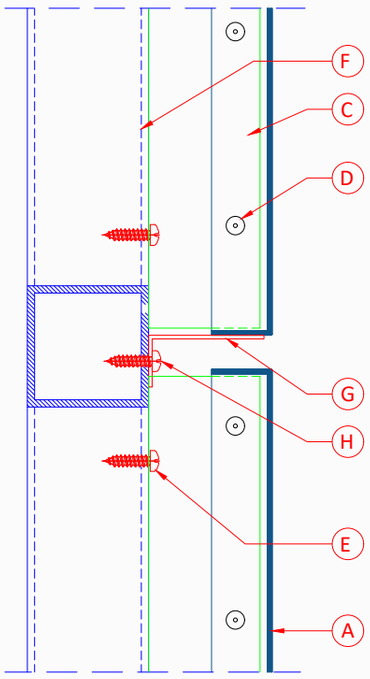

DT-B

A. SX2 or SX3 Panel	D. Blind Rivet (Fastening A & B , A & C)
B. Female Profile	E. Screw (Fastening C, E & F)
C. Male Profile	F. Sub-Frame

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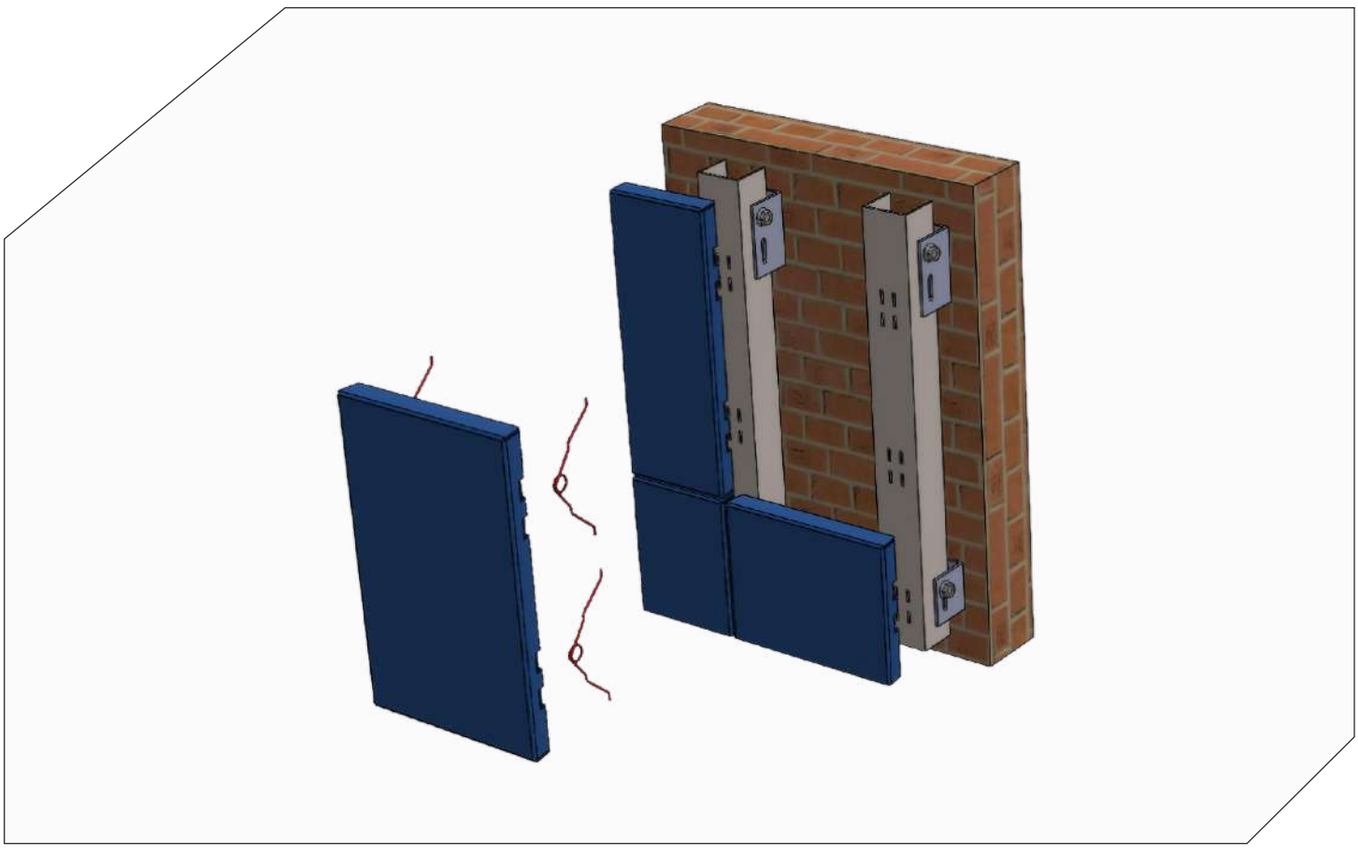
TORSION SPRING SYSTEM



The Torsion Spring Cladding System is an advanced architectural solution used in facades. This system integrates torsion springs with cladding panels to allow flexibility, and ease of access for maintenance. It is often used in modern architectural designs to achieve a combination of functionality, aesthetics, and innovation. A torsion spring cladding system employs torsion springs to attach cladding panels to mullion. This system allows movement while maintaining structural integrity and is particularly useful in applications where need to access space between cladding and wall is required.

Key Features

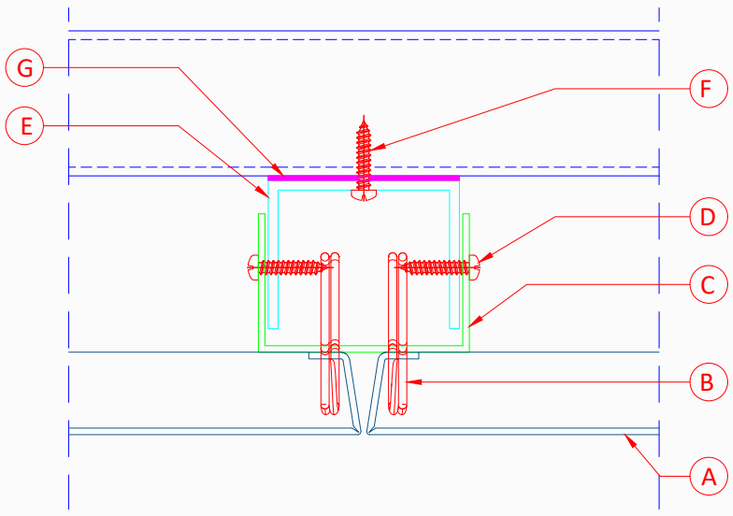
- **Dynamic Movement:** Panels can rotate, open, or adjust their angle using the stored energy in torsion springs.
- **Secure Attachment:** Torsion springs hold the panels firmly in place while allowing flexibility.
- **Low Maintenance:** Designed for durability, with minimal wear.
- **Aesthetic Versatility:** Offers a clean, modern look while adding functional movement to building facades.

Advantages

- **Flexibility:** Allows panels to move or rotate, offering dynamic functionality.
- **Aesthetic Appeal:** Adds a modern, innovative touch to building designs.
- **Ease of Maintenance:** Movable panels allow easy access to the building's substructure or systems.

System Demo Video

Torsion Spring System



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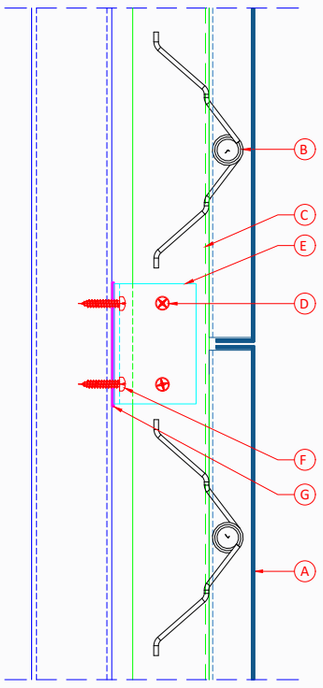

DT-B

A. SX2 or SX3 Panel	E. Mounting Bracket
B. Torsion Spring	F. Screw (Fastening E, G & H)
C. Slotted Mullion	G. Bi-Metalic Separator
D. Screw (Fastening C, E & F)	H. Sub-Frame

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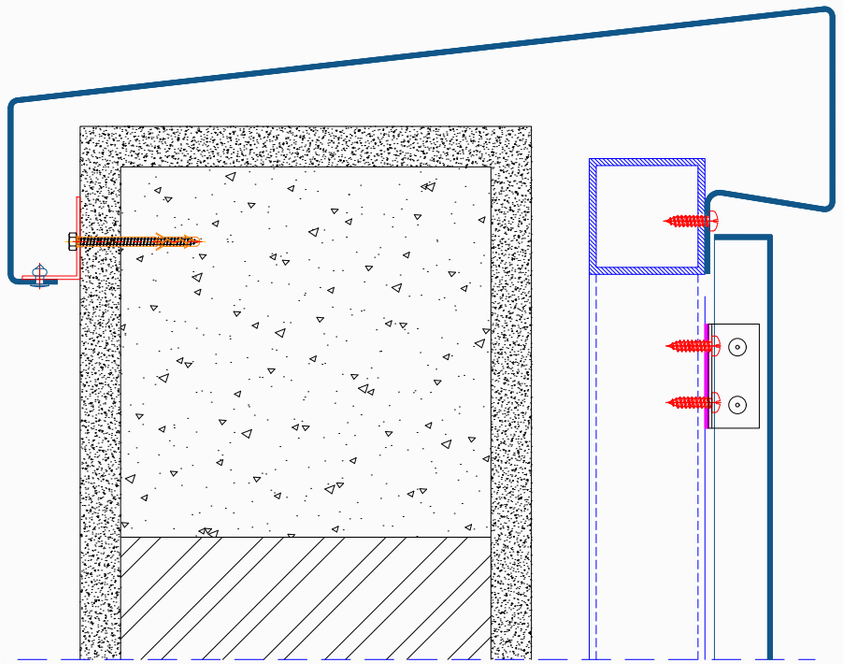
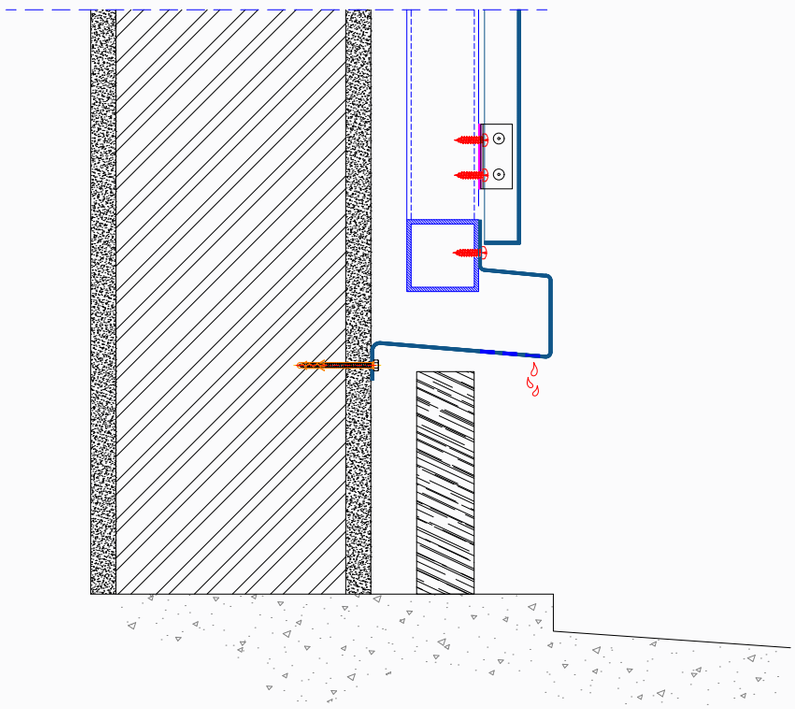
PARAPET COPING



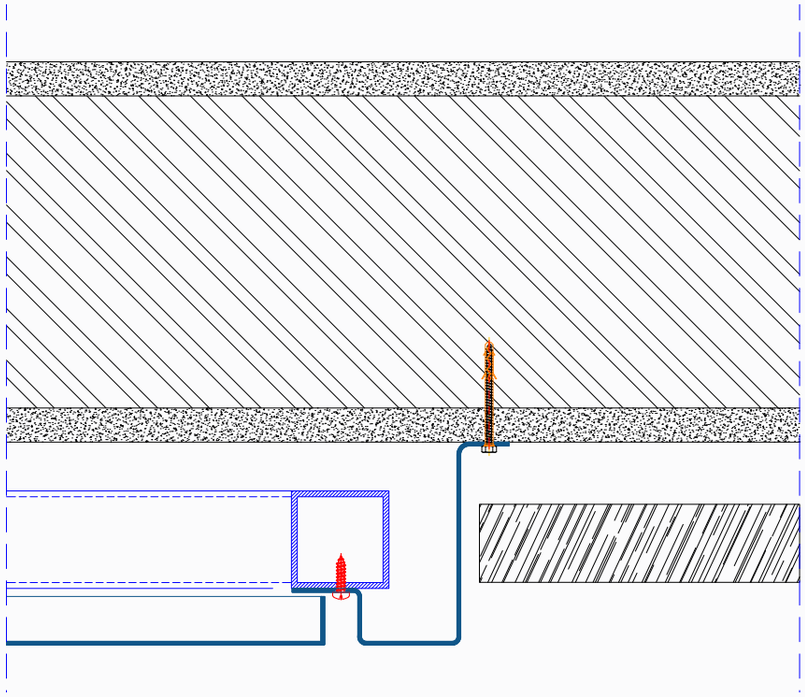
DT-C

CLADDING BOTTOM



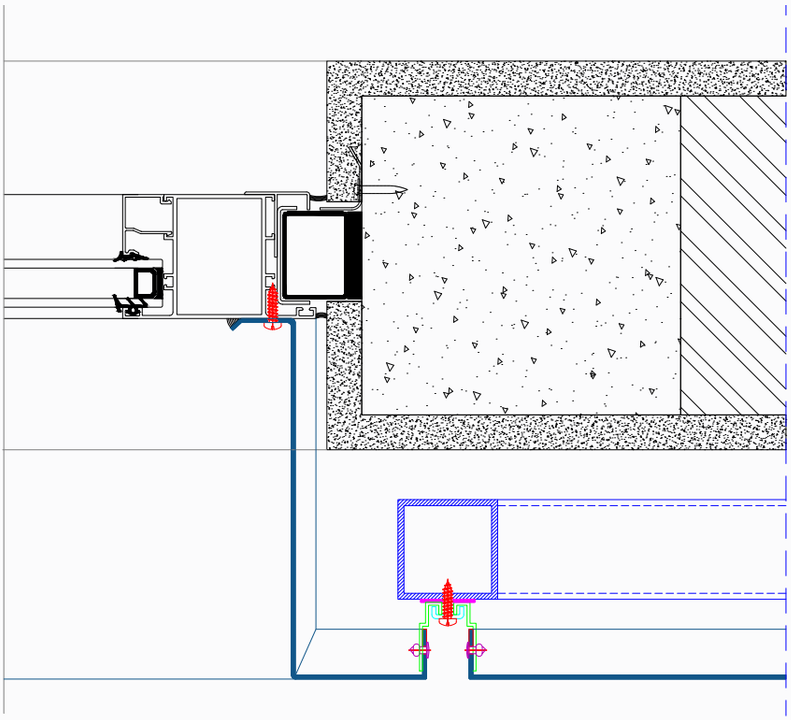
DT-D

FACADE END DETAIL



DT-E

WINDOW LATERAL FLASHING



DT-F

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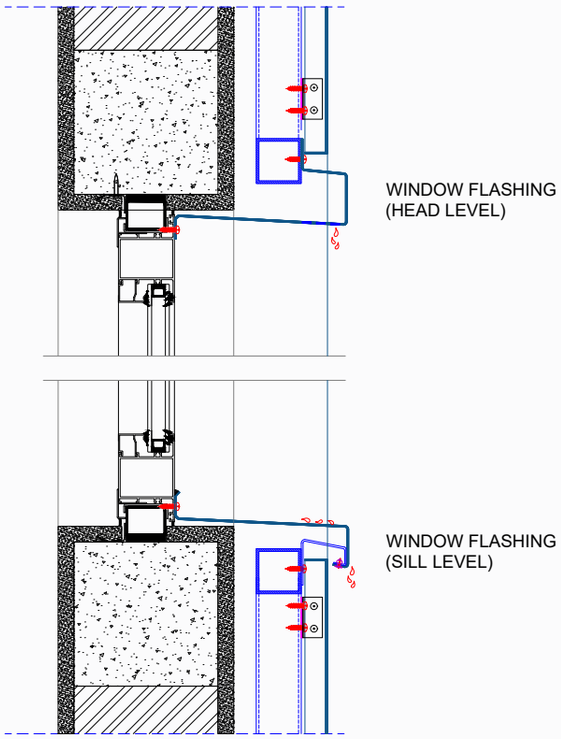
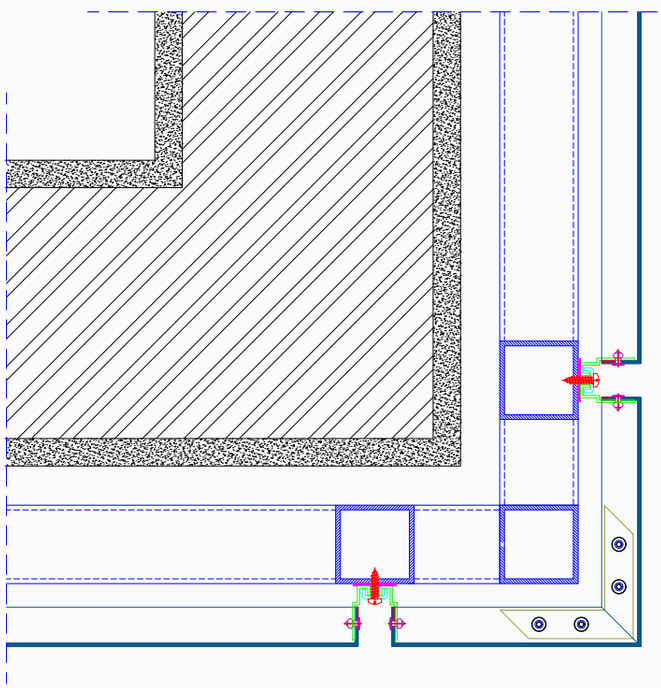
WINDOW VERTICAL SECTION



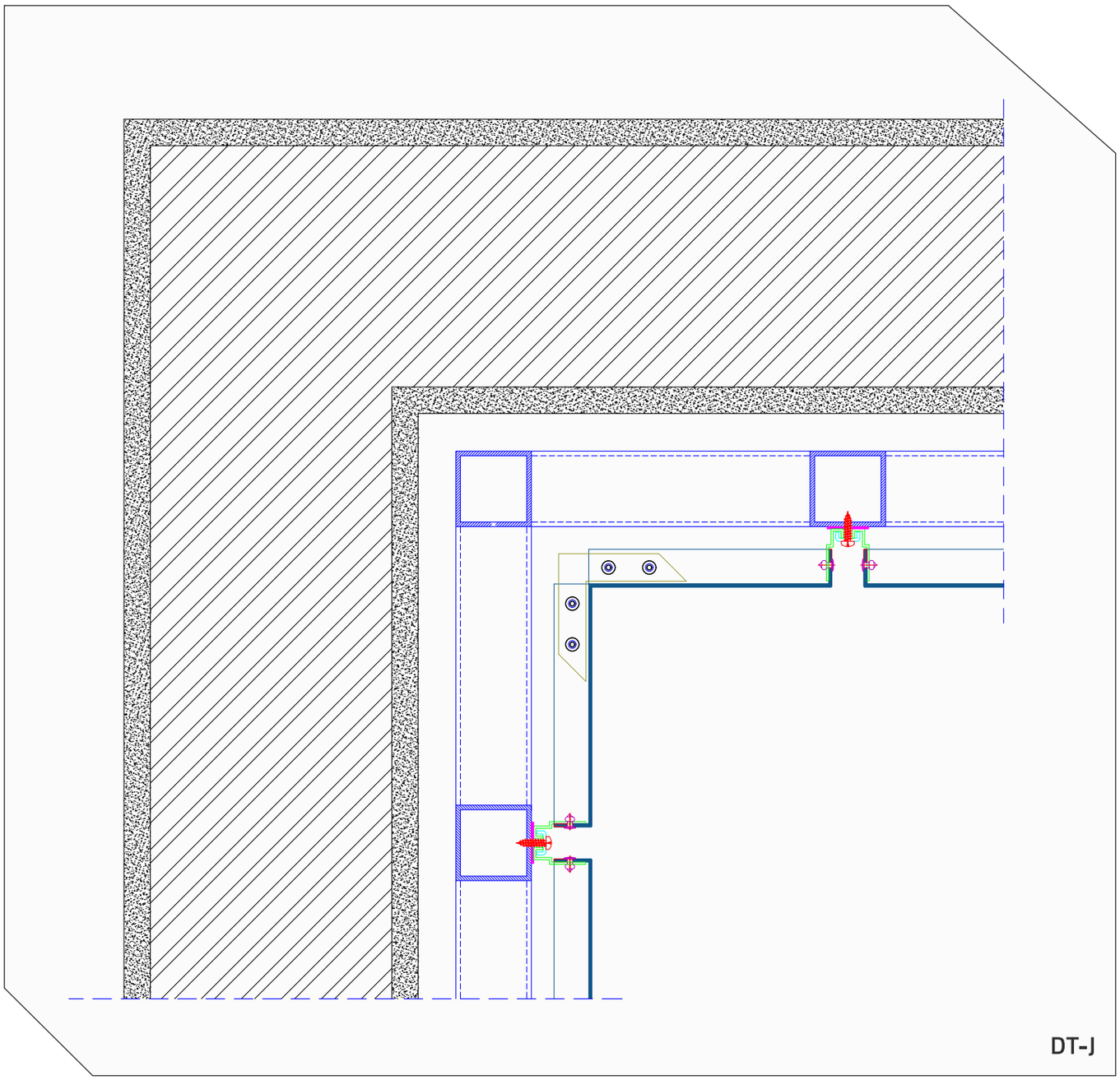
DT-G

FACADE OUTER CORNER



DT-H

FACADE INNER CORNER



Viva®
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EFFORTLESS MAINTENANCE

LASTING PERFORMANCE

VIVA Solid Aluminium Panels are crafted for durability and minimal upkeep, ensuring long-term performance and aesthetic integrity. Follow these straightforward maintenance tips to keep your panels in top condition:

Routine Care

- **Regular Cleaning:** Clean with mild, non-abrasive detergents and a soft cloth to preserve the surface.
- **Avoid Harsh Tools:** Never use abrasive materials like steel wool or scrapers to prevent surface damage.
- **Pressure Washing:** For deeper cleaning, a pressure washer on low settings is safe, but keep the nozzle at a distance.

Cleaning Recommendations

- **Light Dirt & Dust:** Warm water with a mild detergent is all you need to remove everyday dirt.
- **Tough Stains:** Use a neutral detergent with a soft cloth for stubborn stains. For grease or oil, try a diluted solution of alcohol or acetone.
- **Graffiti Removal:** Use specialized graffiti removers designed for aluminium to safely clean without damaging the finish.

Durable Coatings

- VIVA panels feature advanced PVDF coatings that resist dirt and environmental pollutants, reducing the frequency of cleaning and ensuring the panels maintain their aesthetic appeal.

Long-Term Care

- **Weather Resistance:** Periodically inspect panels in harsh climates to ensure they maintain their integrity.
- **Pollution Areas:** Clean more often in regions with higher pollution to prevent dirt buildup.

With these simple steps, VIVA Solid Aluminium Panels will continue to deliver outstanding performance and visual appeal for years to come.

Viva®
Metal Composite Panel

TECHNICAL DETAILS

	TECHNICAL PROPERTIES	STANDARDS	ALLOY 3XXX	ALLOY 5005	ALLOY 5754
Sheet Specifications	**Alloy**	EN 573-3	AA 3003	AA 5005	AA 5754
	Temper	EN 515	H44	H44	H 42
	Density		2.73 g/cm³	2.70 g/cm³	2.66 g/cm³
	Tensile Strength	EN 485-2	95 - 135 MPa	120 - 230 Mpa	220 - 260 MPa
	Modulus of Elasticity	EN 485-2	69,500 Mpa	69,500 Mpa	70,000 Mpa
	Yield Strength Rp0.2	EN 485-2	≥115Mpa	≥103Mpa	≥165MPa
	Elongation	EN 485-2	A 50 ≥ 5%	A 50 ≥ 5%	A 50 ≥ 9%
	Linear Expansion	EN 1999 1-1	0.024 mm/m/oC	0.024 mm/m/oC	0.024 mm/m/oC
	Fire Classification	EN 13501-1	A1		
	Electrical Resistivity		70.7 μΩ.m @20°C		
	Electrical Conductivity		67 MS/m @20°C		
	Sound Absorption		0.05 NRC		
	Sound Reflection		95%		
Coating Specifications	**Surface Coating Technology**		PVDF - Kynar 500 / Hylar 5000 (70/30) FEVE - Lumiflon		
	Colour Difference	ASTM D 2244	ΔE ≤2.0		
	Colour Matching Cabinet	ASTM D 1729	Visual Inspection		
	Dry Film Thickness (DFT)	ASTM D7091	**Front Side** 2-Coat: ≥ 25μm 3-Coat:≥ 33μm	**Reverse Side** ≥05μm	
	Specular Gloss @60	ASTM D 523- 89	In reference with Master Sample ±5GU		
	Pencil Hardness Test	ASTM D3363	F-H		
	Adhesion Test (Cross # Test)	ASTM D3359	Rating 5B		
	Film Adhesion Test by Boiling Water	AAMA 2605	No Blistring and No Removal of paint		
	Solvent Resistance Test	ASTM D 4752	No removal of paint @ 100 DBR		
	Coating Flexibility		90° Pass (NCNTO)		
	Reverse Impact	ASTM D2794	No Tape off		
	Salt Spray Resistance	ASTM B 117	Rating 8		
	Humidity Resistance	ASTM D 2247	Rating 8		
	Gloss Retention**	ASTM D 523	Min 50%		
	Colour Retention**	ASTM D 2244	Colour change ≤5 DE (Depend on Colours to Colours)		
	Chalking Resistance**	ASTM D 4214	Rating 6		

* Other thicknesses available on request.

** Custom widths available on request.

*** Coating thicknesses varies for different surface finishes.

**** Based on Warranty Period

Viva®
Metal Composite Panel

VIVA COMPOSITE PANEL PVT. LTD.

Head Office:

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Factory Address:

Viva 1.0 - Survey No. 85/8,85/9,85/10,68/1,70/14

Viva 2.0 - Survey No. 46/2, 46/3 (New Survey No. 5280/P1, 5281)

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Overseas Branch

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Vivere Star Panel Trading L.L.C.
Dubai, U.A.E.

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Viva Composite Panels Trading W.L.L.
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