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Engineered Connections for Architectural Integrity

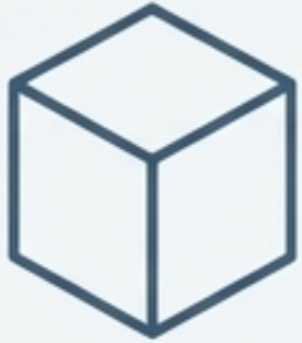
High-Performance Fixing Systems for Modern Construction

The Strength of a Structure is Defined by its Connections.

In modern structural engineering, the integrity of a building is only as strong as its connections. Ambitious designs using reinforced concrete, complex masonry, and natural stone facades demand anchoring solutions that offer an uncompromising balance of safety, durability, and installation efficiency. Our systems are the unseen heroes that make this possible.



Our Systems: A Journey from the Core to the Cladding



Chapter 1: The Structural Core

Creating robust, pre-planned attachment points within the primary concrete structure.

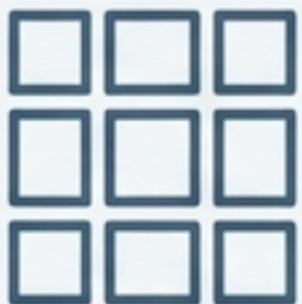
Products: Cast-in Anchor Channels, Anchor Bolts for Concrete



Chapter 2: The Support Framework

Building the adaptable skeleton for MEP services and secondary structures.

Products: Channel Fixing Systems, Masonry & Brickwork Support



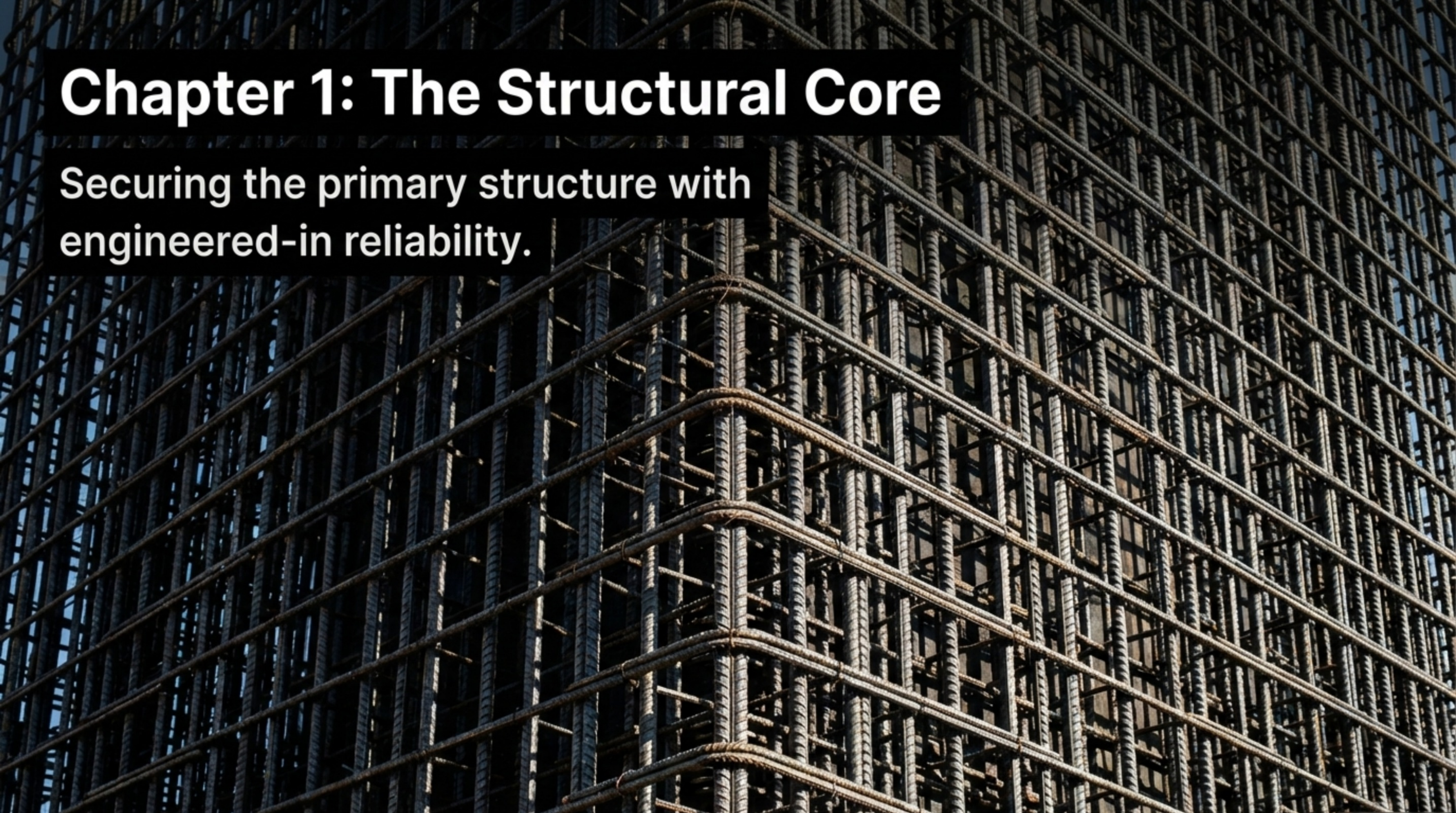
Chapter 3: The Building Envelope

Achieving precision and permanence for the building's exterior skin.

Products: Specialized Stone Fixing Systems, Curtain Wall Brackets

Chapter 1: The Structural Core

Securing the primary structure with engineered-in reliability.

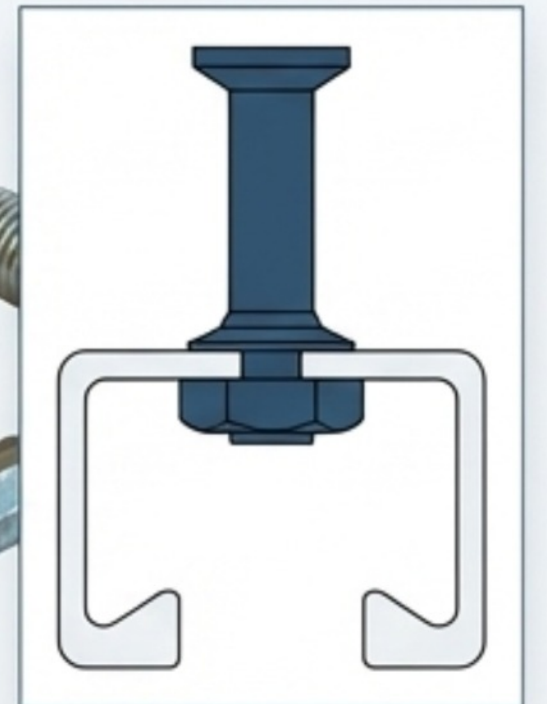
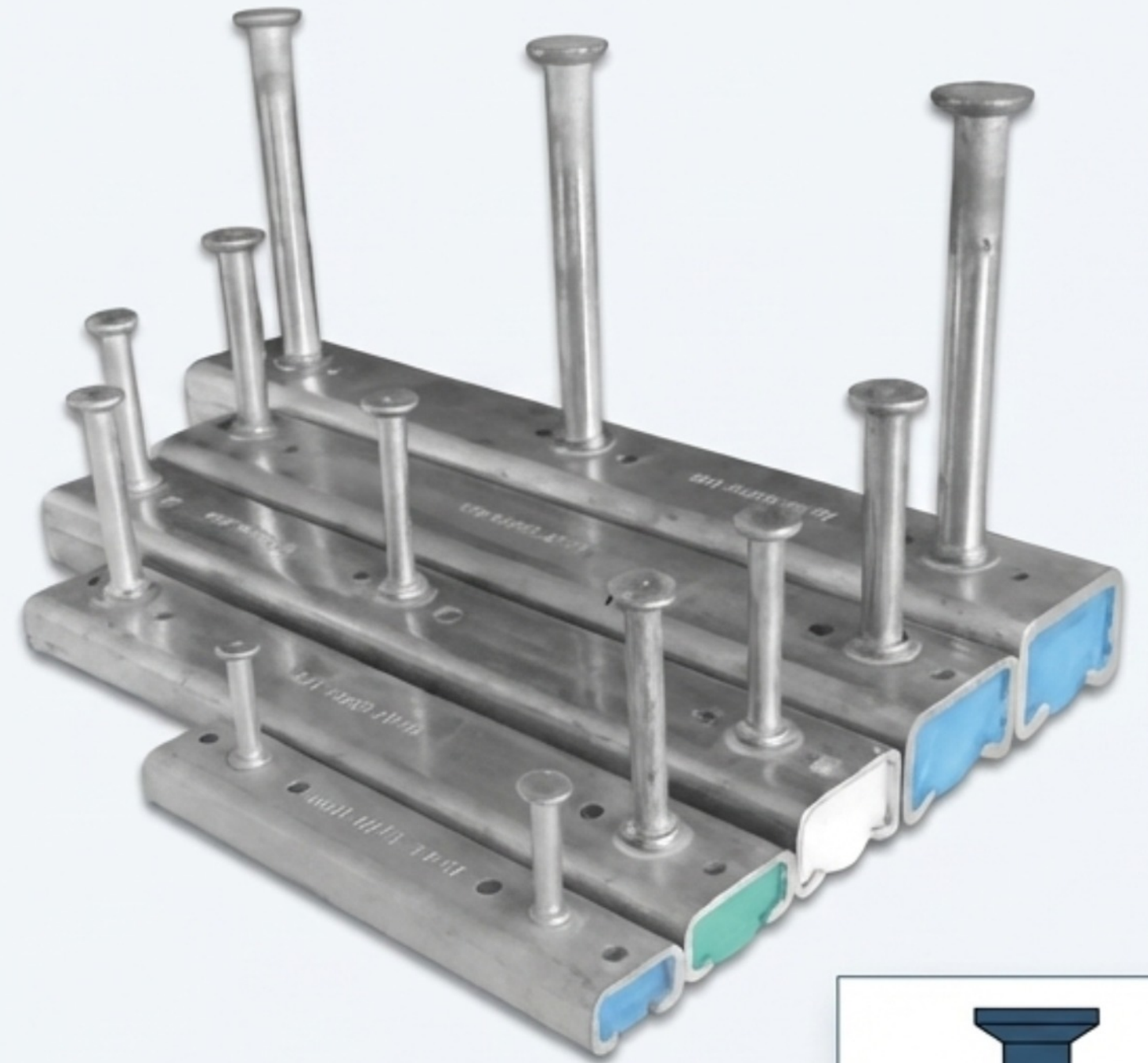


Cast-in Anchor Channels: The Gold Standard for Concrete Connection

Key Insight: By casting channels directly into the concrete, you create secure, adjustable attachment points without compromising the integrity of reinforcement bars.

Key Features

- **High Performance:** Engineered for extreme tension and shear loads.
- **Assured Safety:** Fully ETA-approved for critical structural applications.
- **Precision Applications:** Ideal for elevator guide rails, heavy machinery mounting, and curtain wall brackets.



Anchor Bolts: Ultimate Grip for Existing Concrete Structures

Key insight: Providing high-strength connections when securing structural steel or heavy equipment to cured concrete.



Mechanical Anchors

- Principle: Utilizes expansion and friction for rapid, high-strength hold.
- Best For: Speed of installation and immediate high-load bearing applications.

Chemical Anchors

- Principle: Resin-based adhesive systems form a stress-free bond with the concrete.
- Best For: High-vibration environments and close-to-edge applications where expansion forces must be avoided.

Chapter 2: The Support Framework

Providing the versatile and adjustable infrastructure for MEP services and masonry facades.

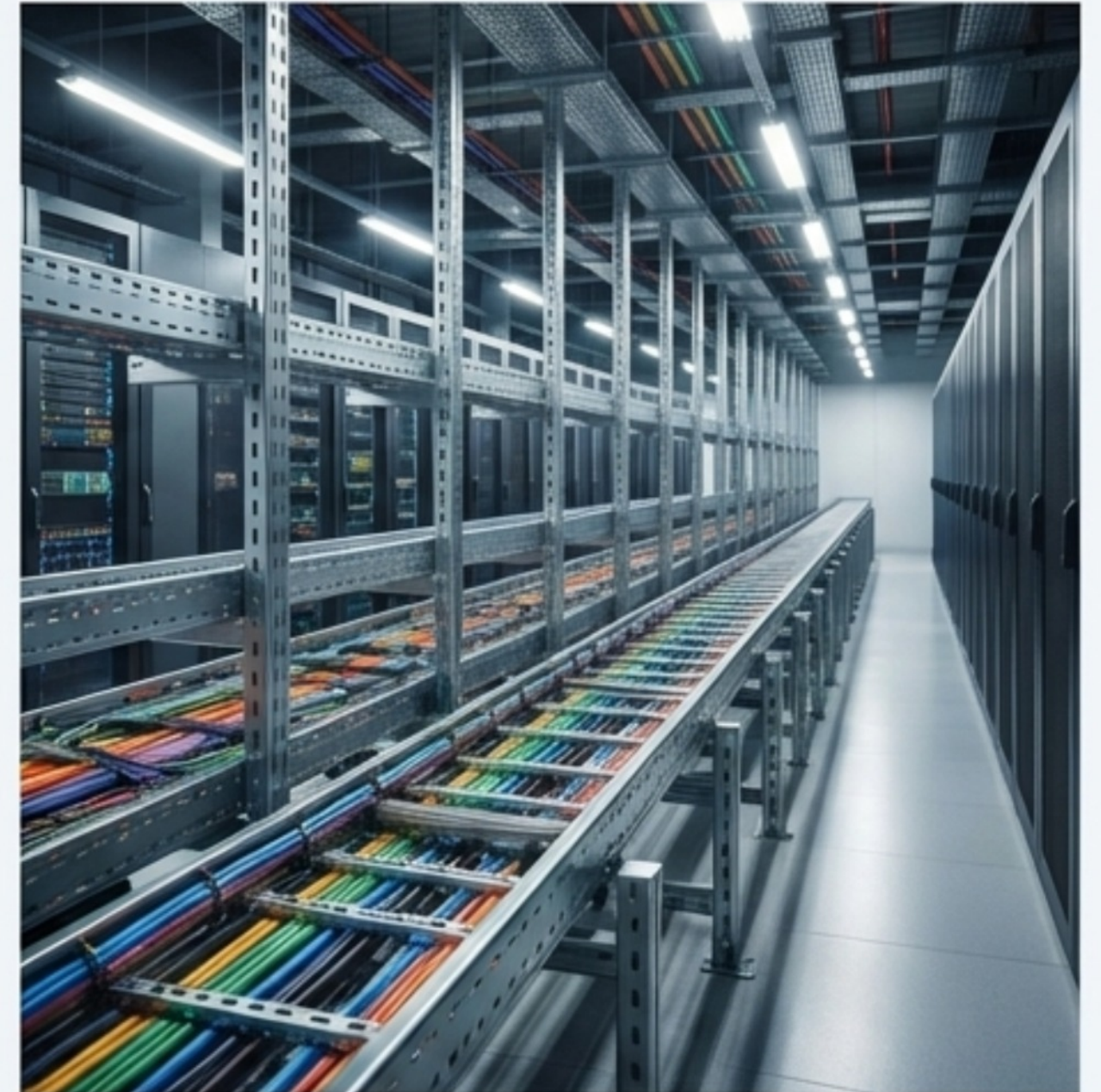


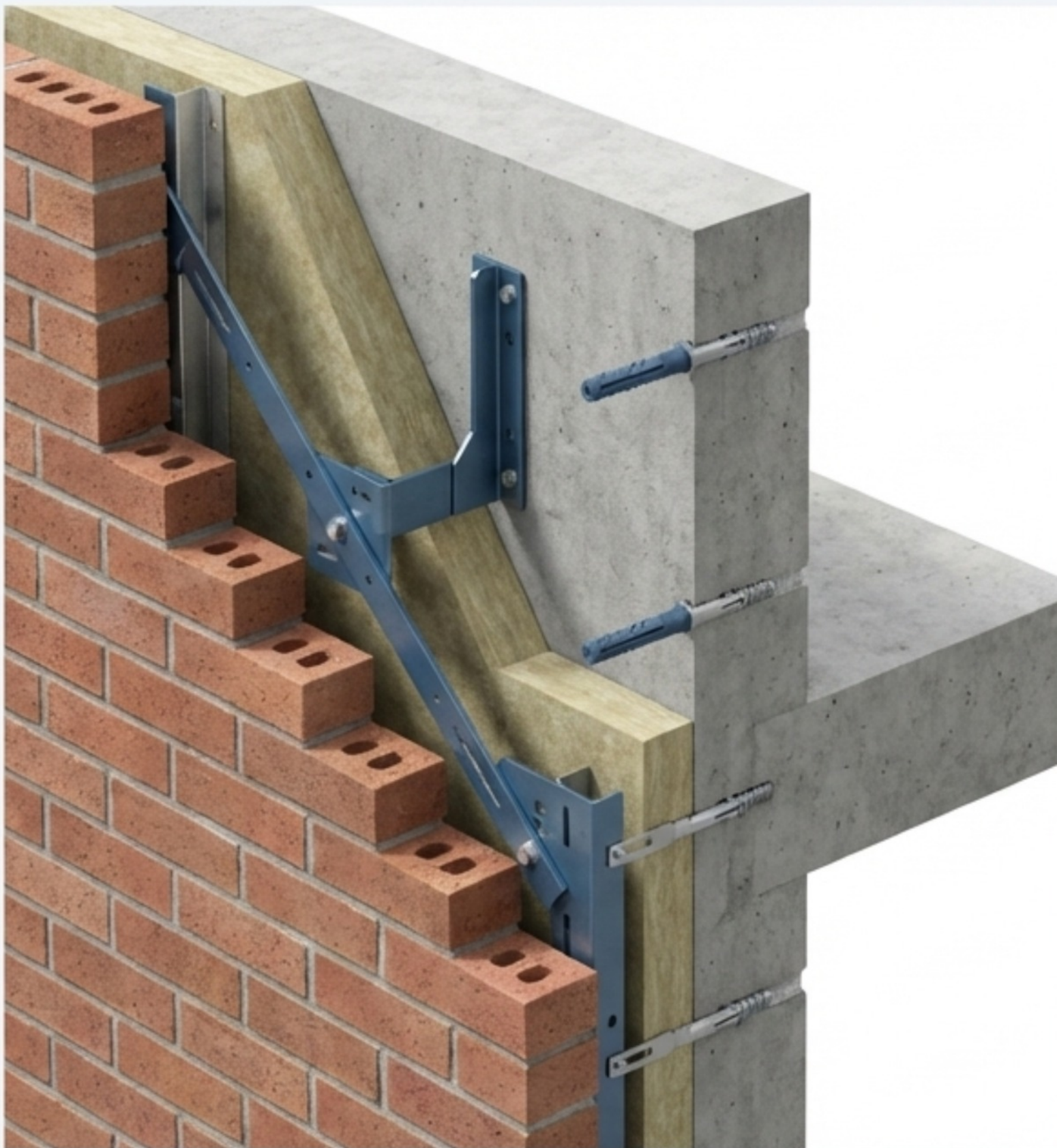
Channel Fixing Systems: The Versatile Framework for MEP Support

Key Insight: A modular 'strut' system that provides a flexible, high-capacity framework for mechanical, electrical, and plumbing services without on-site welding or drilling.

Key Features

- **Modular Design:** Easily adjustable to accommodate changing site requirements and construction tolerances.
- **Installation Efficiency:** Eliminates the need for hot works (welding) or complex drilling on-site.
- **Built to Last:** Available in hot-dip galvanized for standard environments or Grade 316 stainless steel for maximum corrosion resistance.
- **Applications:** HVAC systems, pipe supports, cable trays, and modular framing.





Masonry & Brickwork Support: Engineered Stability for Complex Facades

These systems safely transfer the dead weight of the brickwork skin back to the main structural frame, managing loads and allowing for natural thermal movement.

Key Features

- **3D Adjustability:** Crucial for compensating for construction tolerances on site, ensuring a perfect finish.
- **Thermal Management:** Intelligently designed to accommodate the natural expansion and contraction of the facade, preventing cracks and failure.
- **High-Rise Ready:** An essential safety component for ensuring the stability of masonry in multi-story developments.

Chapter 3: The Building Envelope

Delivering the precision and durability required for flawless, high-performance facades.



Specialized Stone Fixing Systems: Security for Natural Stone Cladding

Robust, corrosion-resistant systems designed to securely anchor heavy panels like marble, granite, and limestone while maintaining the necessary ventilation for a modern "breathing" facade.

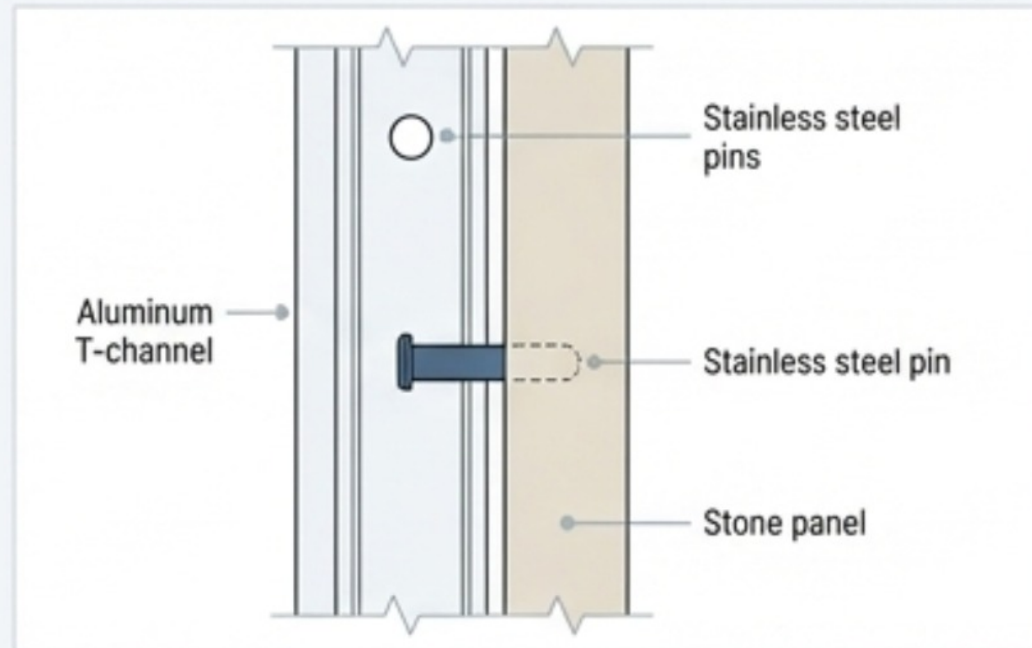
Key Features

- **Premium Materials:** Manufactured from Grade 304 or 316 stainless steel to prevent rust staining and ensure lifetime durability.
- **Ventilated Facade Design:** Systems allow for airflow behind the panels, contributing to the building's thermal performance and moisture management.
- **Complete Range:** A comprehensive portfolio of pins, cramps, clips, and sub-channel systems to suit diverse architectural designs.



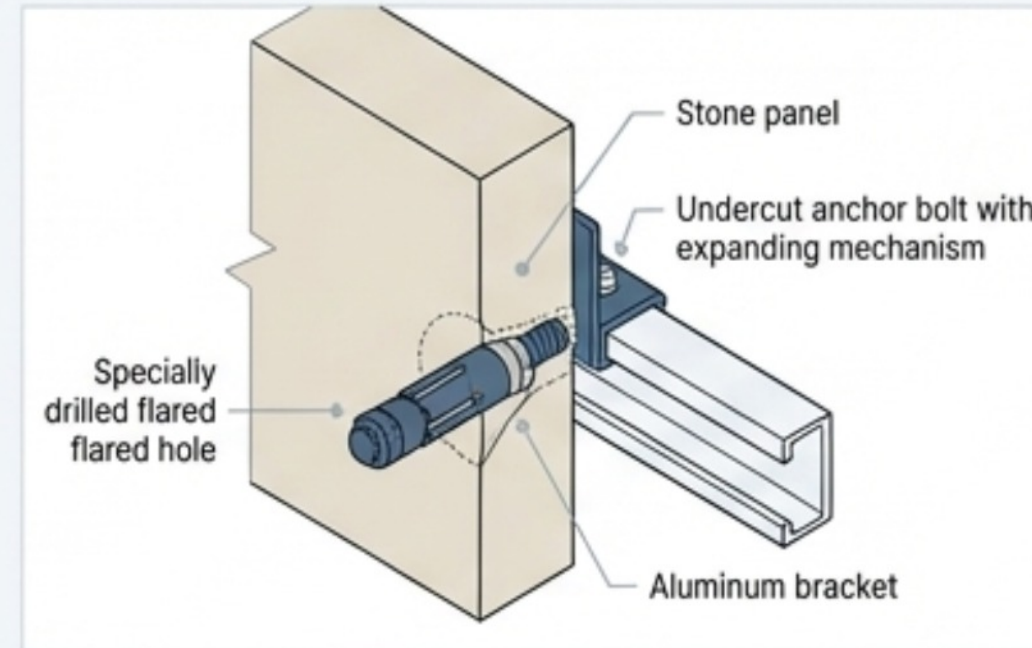
Technical Overview: Aluminium Sub-Channel & Stone Connection Methods

Our lightweight aluminium sub-channel systems (Grade EN AW 6063 T66) provide a fully adjustable framework for three primary stone fixing methods.



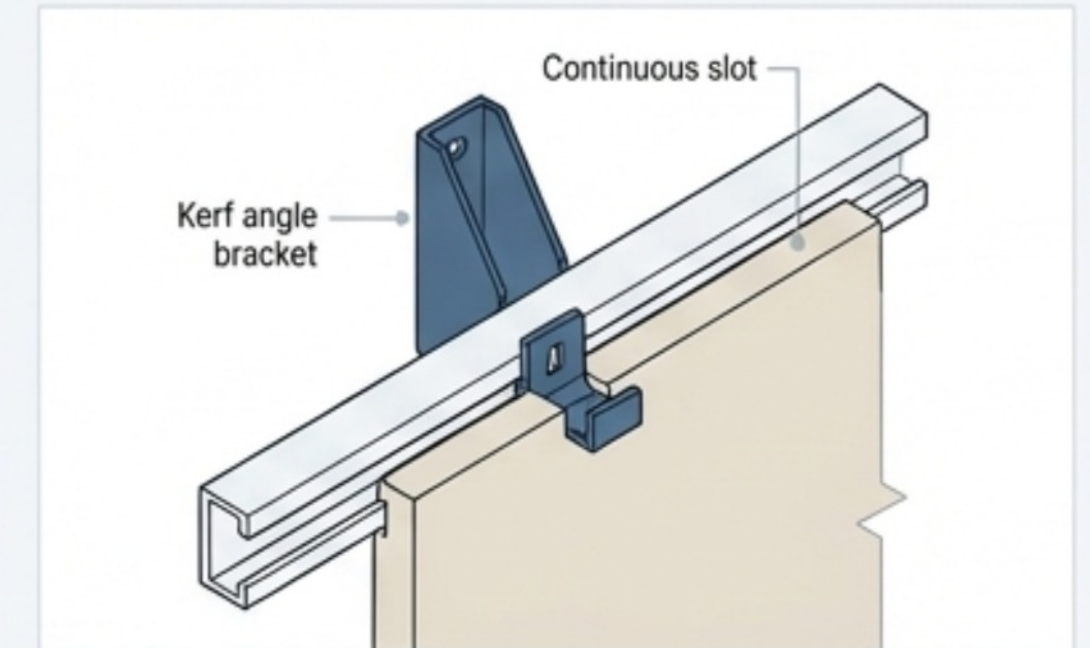
1. Pin System

Pins are set into drilled holes at the edge of the panels.



2. Undercut Anchor System

Undercut bolts are fixed into holes drilled at the rear of the panels for an invisible finish.



3. Kerf System

Kerf angles engage with continuous slots cut into the top and bottom edges of the panels.

System Specifications

- Lightweight and easy to cut/drill on site for fast, flexible installation.
- Full 3-dimensional adjustability.
- Projection sizes available up to 350 mm.
- Recommended for loads up to 3500 N.

Curtain Wall Brackets: The Critical Link for Skyscraper Facades

The vital connection point between the glass/aluminum facade system and the concrete floor slabs, engineered for precision, speed, and resilience.

Key Features

- **Dynamic Load Resistance:** Engineered to safely withstand significant wind loads and seismic activity.
- **System Integration:** Designed to work seamlessly with our cast-in anchor channels, enabling rapid, sequential facade assembly.
- **Precision Adjustment:** Allows for fine-tuning of the facade's position to achieve perfect alignment across the entire building envelope.



OneConstructionStore Advantage: Safety, Efficiency, and Durability



Safety & Compliance

Our commitment to safety is absolute. All products are rigorously tested to meet and exceed international standards, including ETA, EOTA, and ASTM, ensuring maximum structural security.



Time & Cost Efficiency

Engineered for the reality of the construction site. Systems like modular framing and pre-planned cast-in channels are proven to significantly reduce labor time and costs.



Long-Term Durability

We build for the lifetime of your structure. With high-quality coatings and premium Grade 316 stainless steel options, our hardware is designed to resist corrosion in the harshest environments.

Your Engineering Partner in Advanced Fixing Solutions

Selecting the right fixing solution is critical to project success. Our team of specialist engineers is available to provide technical support, from initial design consultation to on-site guidance. We are here to help you choose the optimal system for your specific project requirements and ensure your architectural vision is realized with uncompromising integrity.

Discuss your project with our technical team.

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