TECHNICAL DOSSIER

STOP

VENFAQ

TROPICALIZATION IN THE INSTALLATION OF VERTICAL PROFILES

A FORESEEABLE TRAP

INTRODUCTION

At **VENFAQ**, we approach ventilated facades with the technical rigor they demand and deserve. This is not just an aesthetic solution, but a matter of performance, safety, and responsibility toward all users of the building.

The ventilated facade is a high-performance construction solution that provides real benefits in energy efficiency, thermal comfort, durability, and architectural quality. However, these benefits only materialize when the system is designed and executed with precision at every stage from structural calculation to final assembly.

We consistently advocate for the adoption of best practices in design, supervision, and installation. We know that ventilated facades do not allow for improvisation. Attempting to apply them through simplified adaptations, using inappropriate components or unvalidated methods, results in poorly executed tropicalization a recurring practice that compromises system performance and safety.

We have identified widespread use in the market of a generic model based on the direct installation of vertical aluminum profiles, onto which the cladding is fixed by adhesive or hidden clips. Although functional in specific cases and under well-defined criteria, this model presents significant technical limitations. Aluminum, the system's main material, has specific thermal properties, with a coefficient of expansion much higher than that of conventional materials like concrete and masonry. Without appropriate compensation mechanisms, expansion and contraction cycles can, over time, lead to accumulated stresses, deformations, and failures.

We believe that the advancement of the sector depends on the technical qualification of all involved stakeholders. For this, it is essential to have capable competitors who master the technique and contribute to its improvement. This is not about protecting a proprietary method, but about safeguarding the integrity of the system as a whole. Designing and assembling ventilated facades requires training, sound judgment, and responsibility. Poorly dimensioned adaptations put both the evolution of the technique and the safety of buildings at risk.

Given the recurring technical failures observed in some projects, **VENFAQ** decided to prepare this technical dossier. The goal is to contribute to the market's technical education by presenting visual records of solutions executed by third parties and comparing them with best practices applied in our own projects, in a clear and accessible manner even for professionals in training.

We emphasize that this document has an exclusively technical and educational purpose, aimed at promoting good construction practices. The images used were taken from public places and are not intended to expose or defame any company or professional. Our goal is to support the technical development of the sector and clarify the limits of simplified systems' application. Finally, we stress that every ventilated facade project must be accompanied by calculations and designs issued by a legally qualified professional.

BRACKETS

Brackets are the supports responsible for holding the vertical profiles of the facade. In the European standard, two models with distinct functions are used: the load-bearing bracket and the retention bracket. These are unique elements, sized according to the load, with no possibility of extension or adaptation using accessories.
Using improvised extensions compromises safety and undermines the structural function of the system.

1. Load-Bearing Bracket

The load-bearing bracket performs three essential functions: supporting the facade's weight, ensuring the stability of vertical profiles against horizontal actions such as thrust, wind suction, and inertia effects, and serving as a splice point for joining vertical profiles.

To fulfill these functions, the bracket has two types of holes:

- straight hole (fixed point): responsible for stable fixation of the vertical profile, ensuring the direct transfer of loads to the structure;
- slotted hole (sliding point): allows for movement caused by thermal expansion, preventing stress accumulation in the system.

These brackets must be fixed directly to the beams or slabs of the main structure, ensuring the correct transfer of vertical loads and the facade's integrity over time.

2. Retention Bracket

The primary function of the retention bracket is to ensure the stability of vertical profiles against horizontal actions such as thrust, wind suction, and inertia effects. It has only a slotted hole, allowing for sliding fixation necessary to accommodate the thermal expansion movements of the profile.
Their quantity and distribution along the profile should be defined by calculation and fixed directly to the closure walls.

3. Standard Bracket Dimensions

The European standard dimensions for load-bearing brackets must ensure sufficient height to provide the necessary clearance for the profile offset. Typically, these parts have a height of 150 mm, while the retention brackets vary between 50 and 60 mm, with three depth variations: 60 mm, 90 mm, and 120 mm.

In its standard line, **VENFAQ** offers models with 180 mm in height for load-bearing brackets and 60 mm for retention brackets, with five depth variations from 60 mm to 180 mm, allowing offsets of up to 210 mm relative to the main structure.

4. ATYPICAL OFFSETS

When the ventilated facade design requires offsets greater than 250 mm from the main structure, the strength requirements for the brackets increase significantly. In these cases, using larger brackets alone is not enough additional reinforcements must be planned to ensure the assembly's stability and safety.

One of the most effective technical solutions is the introduction of horizontal struts distributed along the facade surface. These elements act as bracing components, preventing slippage and lateral instability of the vertical profiles.

The presence of struts helps control horizontal displacements caused by wind loads, thermal variations, or assembly imperfections, ensuring greater system rigidity and improved structural performance.
The sizing and spacing of these struts must be defined in the project, according to the building's height, cladding type, and the magnitude of acting loads.

VERTICAL PROFILES

The structural performance of a ventilated facade depends directly on the precision with which its vertical profiles are defined, positioned, and installed. These elements act as the backbone of the system, connecting the main structure to the external cladding and efficiently distributing loads across the entire facade surface. They also serve as a reference to ensure flatness, stability, and the overall technical behavior of the assembly. Below are the technical criteria guiding their sizing, fixation, and alignment, based on consolidated practices from European systems and the demands of high-standard technical projects.

1. Shape and dimensions of the profiles

The most widely used aluminum profile in European ventilated facade systems is the “T” profile, with standard dimensions of 100×60 mm for panel junctions and 40×60 mm for intermediate profiles, both with a web thickness of 2.5 mm and flange thickness of 2 mm. These dimensions result from decades of technical standardization, ensuring strength, stability, and compatibility with mechanical and chemical fastening systems, while also facilitating inspection, maintenance, and component replacement. They also allow proper accommodation of accessories and anchoring devices, enhancing assembly reliability.

2. Installation rules

The installation of vertical profiles must always start from the support brackets, fixed directly to the beams or slabs of the main structure, spanning the full floor-to-ceiling height of the building. This solution is technically recommended for several reasons:

– Direct load transmission to the most resistant structural elements;
– Better absorption of natural deformations of the main structure, such as twisting, settling, or vibrations;
– Greater overall rigidity of the substructure system, which serves as the base for precise cladding installation.

The top fixation of the profile must be at a fixed point, respecting the structural behavior of aluminum a material with excellent tensile strength but low tolerance to compressive forces. Along the rest of the profile, fixings should be movable, made through slotted holes, allowing the material to move freely in response to thermal variations and preventing the accumulation of internal stresses that could compromise the cladding system. This precaution is essential for the durability of the facade and its safe erformance over time.

3. Profile–Bracket Connection

At the bracket connections, a minimum overlap of 30 mm is mandatory to ensure effective mechanical anchoring. This measure is essential to prevent detachment, vibrations, and instabilities throughout the facade's service life, as well as to ensure that the system maintains its performance even under adverse conditions. For large-scale projects, it is also recommended to use secondary safety devices, such as locks or counterplates, to prevent accidental displacements during installation.

4. Expansion joint

The horizontal joint between vertical profiles must have a minimum spacing of 10 mm, serving as an expansion gap. This joint absorbs dimensional variations caused by the longitudinal expansion of aluminum and prevents the appearance of contact stresses and forced deformations between profiles. In areas with high solar exposure or on large facades, intermediate joints are also recommended to ensure the elastic behavior of the system along its entire vertical development.

5. Alignment technique

The alignment of the profiles must always be done from the rear (dorsal) face, ensuring reater uniformity in the installation plane and reducing planimetric deviations. This method is the only one that ensures each piece follows a single geometric reference plane, providing both aesthetic and technical quality to the system. Alignments made based on visual references from the cladding front are imprecise and prone to variations that compromise the project's final result. .

6. Profile length rationality

The ideal length of the profiles should match the floor-to-ceiling height of the building, generally ranging between 3 and 4 meters. Continuous profiles over 5 meters are avoided because long spans amplify the effects of thermal expansion, complicate handling, and hinder technical control during assembly, negatively affecting the system's overall reliability.

CHEMICAL FIXING OF THE CLADDING

The application of the structural adhesive must strictly follow the manufacturer's instructions; for this reason, this document does not detail specifics about composition, curing time, or yield, as these variables are specific to each product. However, there are universal technical principles that must be respected in any application:

1. Independence between vertical profiles

The cladding should never vertically span two distinct profiles. This is because one will be fixed at a fixed point (without movement possibility), while the other will be at a sliding point (allowing thermal expansion). This condition creates opposing stresses especially shear forces that can cause detachment or even premature breakage of the panel. Therefore, each panel or module must be bonded exclusively to a single vertical profile, preserving the system's integrity.

2. 3 mm double-sided tape and structural adhesive

The use of double-sided tape with a thickness of 3 mm, applied parallel to the structural adhesive bead, is mandatory. This tape serves three essential functions:
– Ensures the proper joint thickness, which is critical for the adhesive's technical performance;
– Provides immediate adhesion, keeping the cladding in place during the curing time without the need for additional supports;
– Prevents slippage of the panel and stabilizes the adhesive bead until full cure.
During installation, firm and even pressure should be applied over the cladding, ensuring full contact with the tape and controlled compression of the adhesive bead. After this step, the panel should not be repositioned, as the adhesive cohesion process begins immediately.

3. Smooth and prepared profile surface

The profile area designated for adhesive application must be completely smooth, dry, and free of impurities. This technical requirement is justified for three main reasons:
– Facilitates cleaning and removal of contaminants (dust, oil, residues) that could compromise adhesion;
– Prevents air bubble formation, which would create failure zones and reduce bond durability;
– Ensures maximum adhesion, as the adhesive's performance depends on continuous and homogeneous contact with the surface—similar to the principle of suction cups.

4. Structural adhesive fatigue

Adhesive fatigue can be disregarded when the applied load per square centimeter represents only 1% of its maximum strength. Under these conditions, the stress transmitted to the adhesive bead is so low that there is no significant accumulation of cyclic stresses over time.
However, if the load reaches higher values even within the allowed static limits complementary use of mechanical support elements fixed to the vertical profiles is recommended, acting as auxiliary anchoring. This measure increases the system's overall stability and reduces accumulated fatigue effects, especially in situations with ibration, thermal variation, or unforeseen dynamic loads.

5. Format limitations

As this is a chemical anchoring system with limited elasticity, cladding application requires strict attention to the maximum panel dimensions. This limit is determined by a ombination of physical and mechanical factors, among which the following stand out:

1. Difference between thermal expansion coefficients.
Aluminum (support structure) has a significantly higher expansion coefficient than most ceramic or stone claddings. This creates differential stresses over time especially in large-format panels that can cause adhesive shear, delaminations, or cracks from reverse tension.

2. Low elasticity of chemical fixing
Although modern structural adhesives offer some deformation absorption capacity, their elasticity is limited. When the panel is excessively long, thermal variations cause accumulated movements that exceed the adhesive system's absorption capacity, especially at the panel ends.

3. Elastic modulus (Young's modulus) of the cladding
By its rigid nature (ceramic, technical porcelain, stone), the cladding has low deformability and limited resistance to bending. As the length increases, the risk of internal deformations and cracks also increases, especially under wind action, structural movements, or thermal expansions.

Therefore, it is necessary to limit panel sizes, respecting not only the maximum span between supports and the allowable deflection but also the characteristics of the bonded material. Non-compliance with these limits directly compromises the system's durability and safety.

6.Suitable Dimensions Table

CLADDING TYPES	THICKNESS:	MAXIMUM HEIGHT	MAXIMUM WIDTH	MAXIMUM AREA
Compact Technical Porcelain	6 mm	900 mm	1500 mm	~1,3 m
Compact Technical Porcelain	10 mm	800 mm	1500 mm	~1,2 m
Laminated Porcelain + Fiber Reinforcement	3-4 mm	1000 mm	3000 mm	~2,5 - 3,0 m
ACM Panel (Aluminum Composite)	4 mm	1200 mm	3000 mm	~3,6 m
HPL (High Pressure Laminate)	6-8 mm	1000 mm	1800 mm	~1,8 m

HIDDEN CLIP FIXING

VENFAQ completely rules out the use of the hidden clip fixing system. With the evolution of cladding materials towards increasingly thinner thicknesses, this method has become technically unfeasible in most applications. Although still used in some specific types of cladding, its adoption is not recommended due to a series of technical limitations.

1. Insufficient cladding thickness:

The minimum acceptable thickness for this type of fixing is 12 mm. However, most materials currently used are only 10 mm thick, which compromises the mechanical strength at the slot area and makes the system unsuitable and prone to failure.

2. Requirement for centralized grooves:

The grooves must maintain a 50 mm distance from the edges of the panel, which requires the use of clips approximately 150 mm long. Currently, there is only one supplier that manufactures this type of clip, and it is an imported item.

3. Clip tab geometry:

Clip tabs must not have sharp edges; they must be rounded to avoid stress concentration points that lead to cracking or breaking of the cladding. The groove itself already represents a significant weakness, as confirmed by tests and field occurrences, demanding even greater rigor in the design and finishing of these metal components.

4. Use of chemical adhesive:

The adhesive applied between the cladding and the profile does not meet the minimum criteria to be classified as chemical anchoring. Its role is merely complementary, acting as a cushion, reducing noise, and accommodating minor movements without any structural capacity. Therefore, its use as the primary fixing method is technically ruled out.

5. Independence between vertical profiles:

The system does not allow a single cladding piece to span two vertical profiles, as one will be at a fixed point and the other at a sliding point. This crossover creates opposing tresses, mainly shear forces, which can cause detachment or breakage of the panel. In addition to compromising the system's integrity, this limitation restricts facade modulation freedom.

6. Factory-made grooves required:

Grooves must be made using specific machinery in a factory setting. Even so, about 15% of the panels require adjustments and compensations on-site, which would require manual grooving a technically inadequate and economically unfeasible process.

7. Usage restrictions:

Internationally recognized European technical reports, such as the DIT (Spain) and the Avis Technique (France), establish strict criteria for the application of hidden clip systems in ventilated facades. The DIT validates this solution only for buildings up to 30 meters high, requiring specific studies for taller projects. The Avis Technique limits its se to ceramic panels in the 60x120 cm format, with fixation at 6 points and a maximum resistance of 600 Pa to wind pressure and suction—equivalent to winds of about 126 km/h.

These parameters fall below the technical requirements for large-scale projects in Brazil, both in terms of height and wind loads, compromising the system's feasibility in our context. Reviewing these references helps broaden technical understanding of the subject and reinforces the importance of adopting solutions based on consolidated scientific and normative criteria. For further technical details, the documents can be consulted at the following links:

DIT No. 530R/20 – Instituto Torroja de Ciencias de la Construcción (Spain):
https://dit.ietcc.csic.es/wp-content/uploads/2021/01/DIT530R-20_signed20201117.pdf

Avis Technique No. 2/15-1700 – CSTB – Centre Scientifique et Technique du Bâtiment (France):
https://www.cstb.fr/pdf/atec/GS02-C/AC151700.pdf

VENFAQ'S CRITICAL VIEW

The generic system of vertical profiles with direct cladding fixation is a simplified solution, used only in specific cases. For **VENFAQ**, it is not considered a true technical system but rather an empirical profile arrangement, lacking standardization and offering limited performance. Its construction logic recalls artisanal practices, with low compatibility regarding the safety, durability, and flatness requirements of contemporary facades.

Its apparent simplicity hides a serious problem: lacking technical layers that accommodate structural movements and thermal variations, it is essentially a static system. When poorly applied, without in-depth technical knowledge, it becomes a perfect trap, with a high risk of total failure.

1. Fixing with Structural Adhesive

Chemical fixing is, without a doubt, one of the most advanced and reliable solutions for applying cladding directly onto vertical profiles. Its continuous and not pointwise application, combined with lightness and adaptability, offers significant advantages in performance and durability. However, it requires absolute technical rigor and specific precautions:

– The base structure must be correctly dimensioned and prepared to accommodate thermal expansion. The forces generated by these movements are considerable, and no adhesive can compensate for a structural design error in this aspect;

– Adhesive application requires precise control over cleaning, ambient temperature, joint thickness, application pressure, and curing time. Without these parameters, the risk of failure increases dramatically.

It is, therefore, a high-performance technology whose effectiveness is directly conditioned by technical control and execution discipline.

2. Hidden Clip Fixing

The hidden clip technique originated in Spain, where it is commonly used in low-rise buildings. Its spread in Latin America occurred more through commercial influence than through systematic technical validation. Although adopted by various manufacturers, the solution raises concerns among engineers, especially when executed without industrial control. Common practices include manual grooving, use of non-standard clips, and spanning the cladding over multiple vertical profiles, which compromises thermal expa...

In many cases, the cladding remains fixed solely thanks to the adhesive, applied as support to the hidden clip. However, this configuration does not allow for control over joint thickness, contact pressure, or base cleanliness all essential requirements for alidating chemical anchoring. Therefore, it cannot be considered as such. The system thus operates outside safety parameters and with a high risk of failure.

3. CONCLUSION

From **VENFAQ'**s perspective, simplified solutions like generic profiles with direct fixation can indeed be safely applied under certain conditions, especially in low-rise buildings or in facade zones with reduced surface area. In these specific situations, where structural demands are limited, the very simplicity can represent an advantage, provided there is technical judgment and execution rigor.

On the other hand, in large and tall facades, subjected to wind loads and significant thermal variations, static solutions reveal their limitations. The absence of mechanisms capable of accommodating structural movements and thermal expansions, combined ith field execution variability, considerably increases the risk of failures and pathologies, compromising the system's long-term performance.

Therefore, we reaffirm our position: in projects with higher technical demands, only complete, dynamic, and properly validated systems should be specified composed of independent layers capable of moving without compromising the integrity of the assembly ensuring durable performance, proven safety, and long-term stability.

VENFAQ POSITIONING

VENFAQ brings over 25 years of technical refinement and dedication to facade engineering. With large-scale projects across three continents, we reaffirm our ommitment to excellence. For us, ventilated facades are not just a business line they are part of our DNA and how we understand civil construction: as applied science, igorous technique, and responsibility for the future .

That is why we take an active role in promoting best practices, valuing technical knowledge, and advocating for engineering committed to quality, safety, and sector advancement. This dossier is purely technical and educational, aimed at promoting good construction practices. The images used are from public sources and are not intended to expose or defame any company or professional.

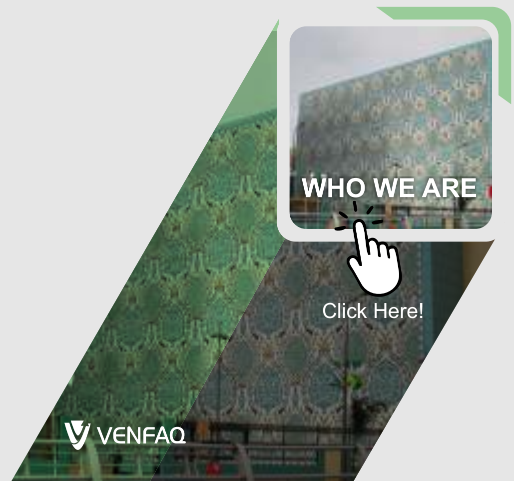
We are fully aware that certain observations may cause discomfort or disagreement. Even so, we understand that, given recurring mistakes in the market, silence would mean omission. Our goal is not to expose, accuse, or disqualify, but to alert, guide, and share experiences. The references presented here are the result of real projects and are made available to the sector for strictly technical purposes.

We believe that engineering only evolves with open access to knowledge, a critical mindset, and a commitment to continuous improvement. Ventilated facades require recise calculation, physical principles, detailed planning, applied knowledge, and technical testing. There is no room for improvisation: it operates at height, under constant action from wind, rain, and thermal variations. A mistake, in this context, can have serious consequences for public safety.

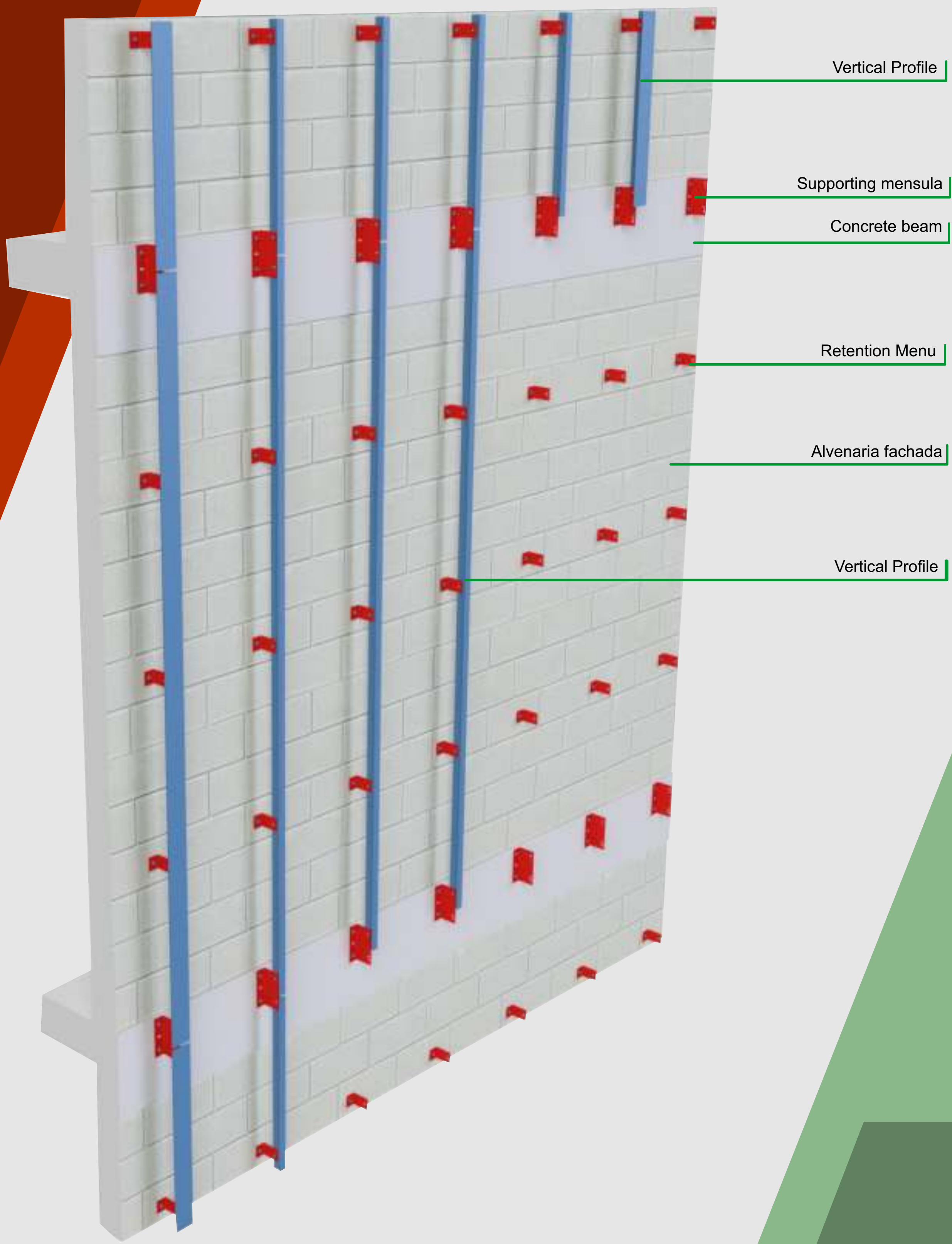
Based on our international experience, we present this dossier as a solid contribution to aising technical standards in Latin America. For **VENFAQ**, building well is not a differentiator it is an obligation.

São Paulo,10 de junho de 2025

Joan Colome
CEO | VENFAQ

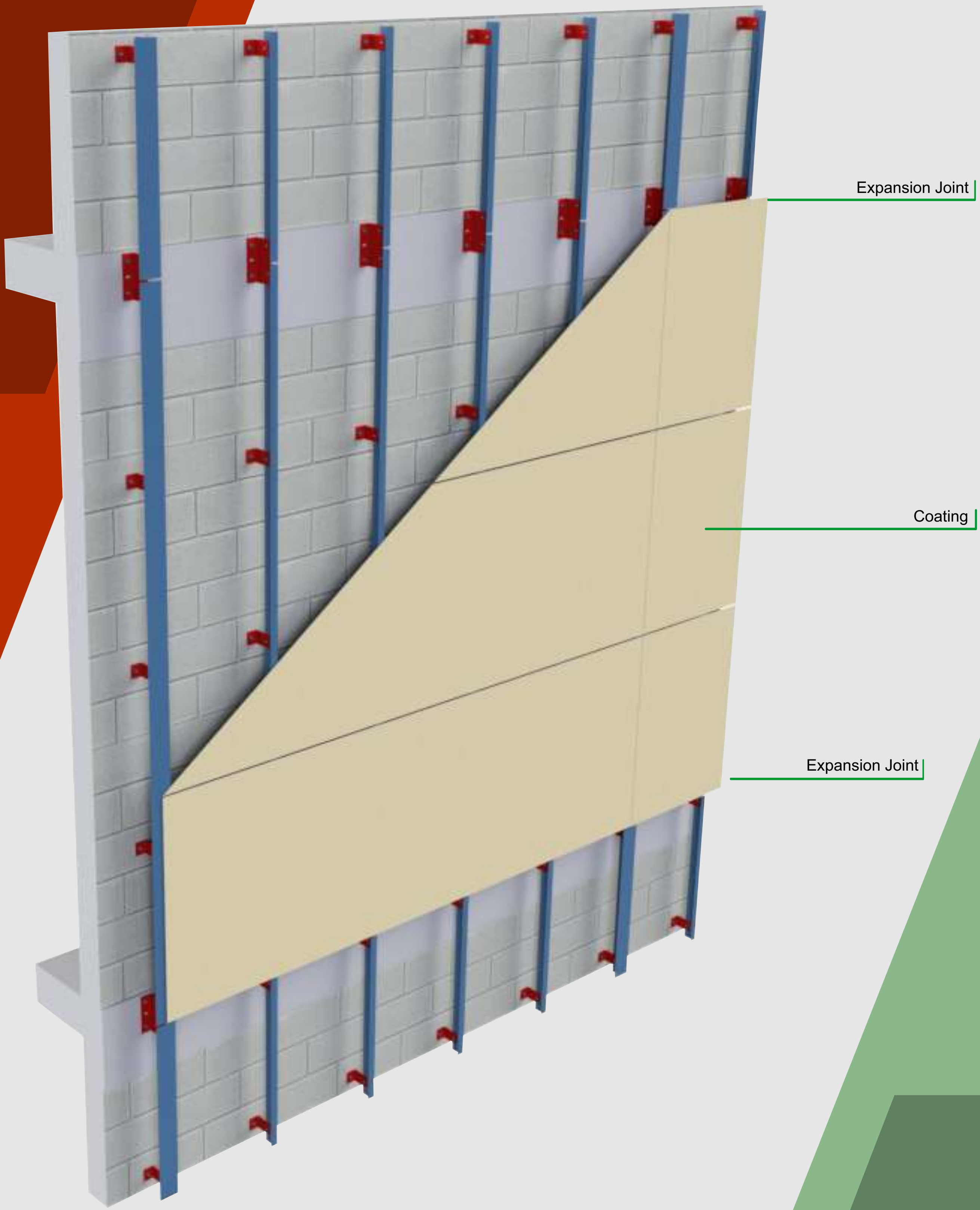


CONCEPTUAL STRUCTURE



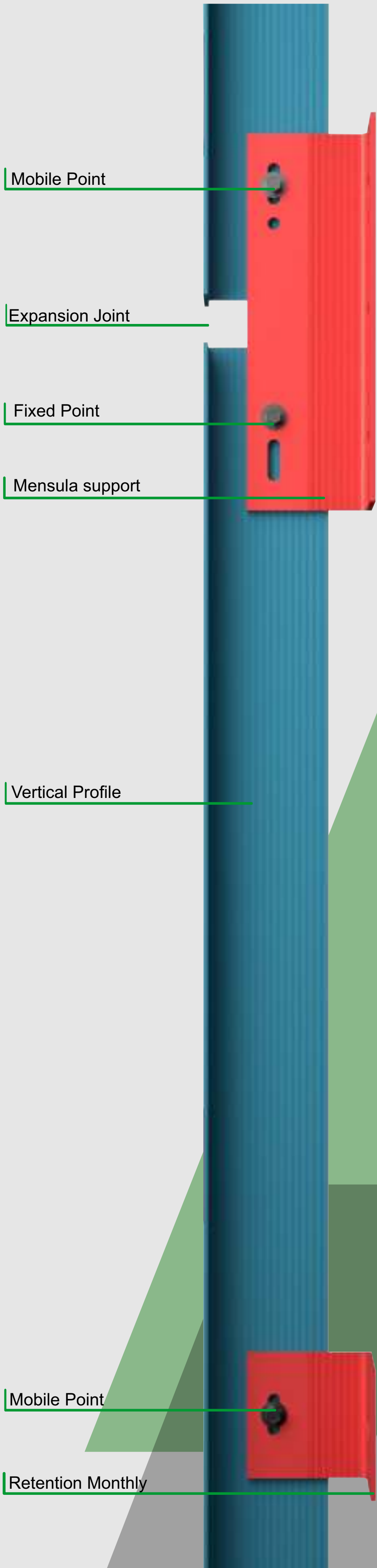
The aluminum profiles are fixed to the brackets anchored to the supporting wall, with the support brackets being on the concrete beam and the retaining brackets on the closing masonry, with profiles organized independently by façade panels.

COATING CONCEPTUAL

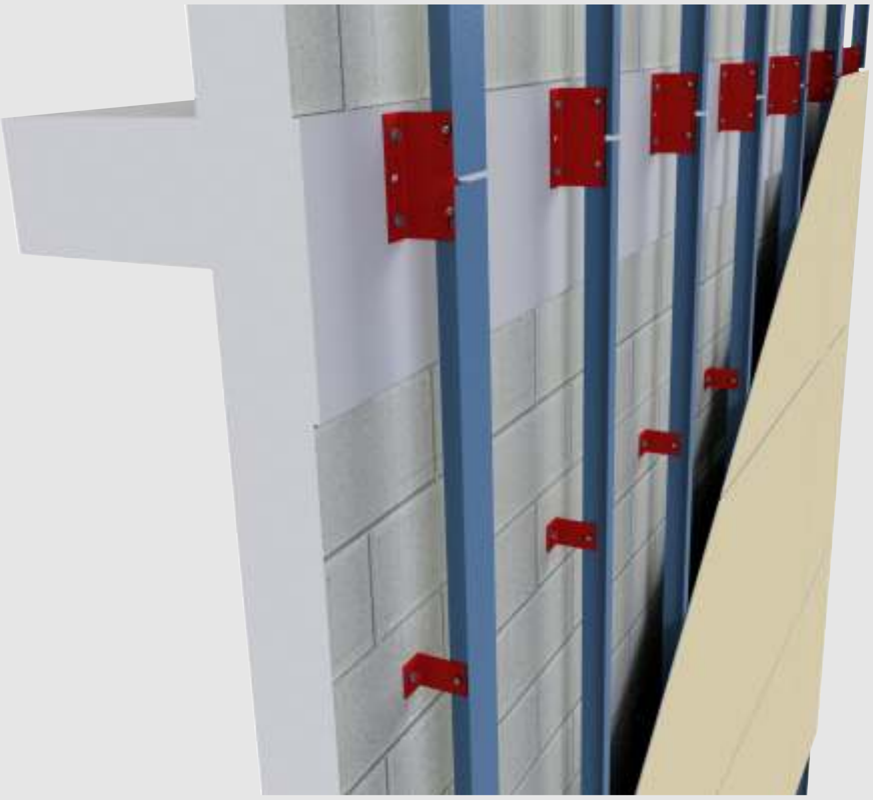


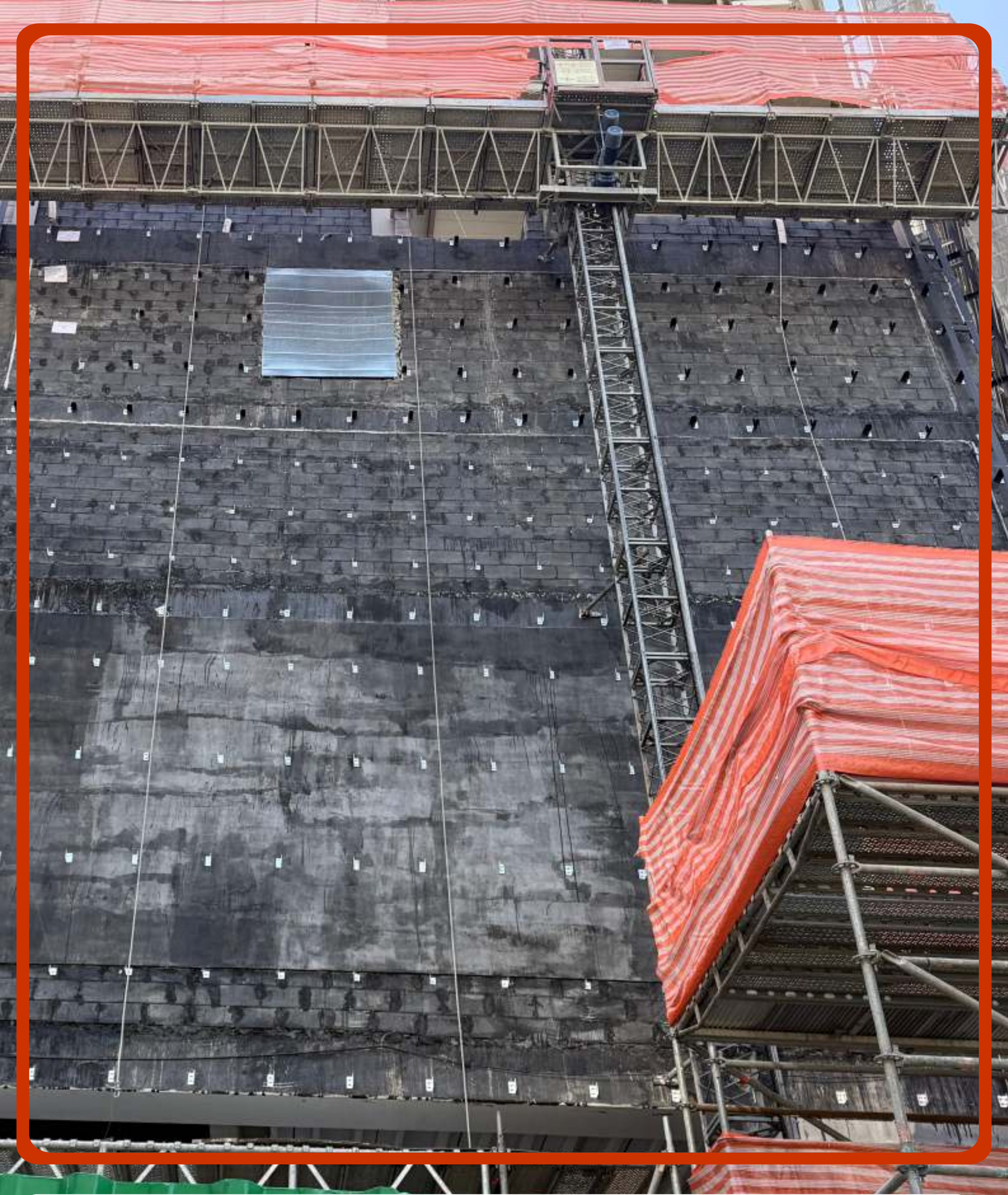
The coating must follow the dimensions of the profile, since crossing two vertical profiles results in improper transposition of the expansion joints, a practice that violates the technical principles of engineering and will inevitably result in serious pathologies over time.

CONCEPTUAL DETAIL



When glued to the profile, the coating begins to move in a solid manner. Therefore, it must strictly respect the division between panels, with expansion joints being indispensable and unquestionable. It is precisely at this point that the greatest deviations occur, due to the practical difficulty of execution..





A lack of standardization is observed in the installation of brackets, with a reduced height of 10 cm and fixation by a single anchoring point, limiting their structural capacity. Additionally, extensions are used to compensate for spacing, reusing the same vertical profile screwed onto the base bracket. This configuration goes against good design practices and may compromise the stability of the system, increasing the risk of structural failure.

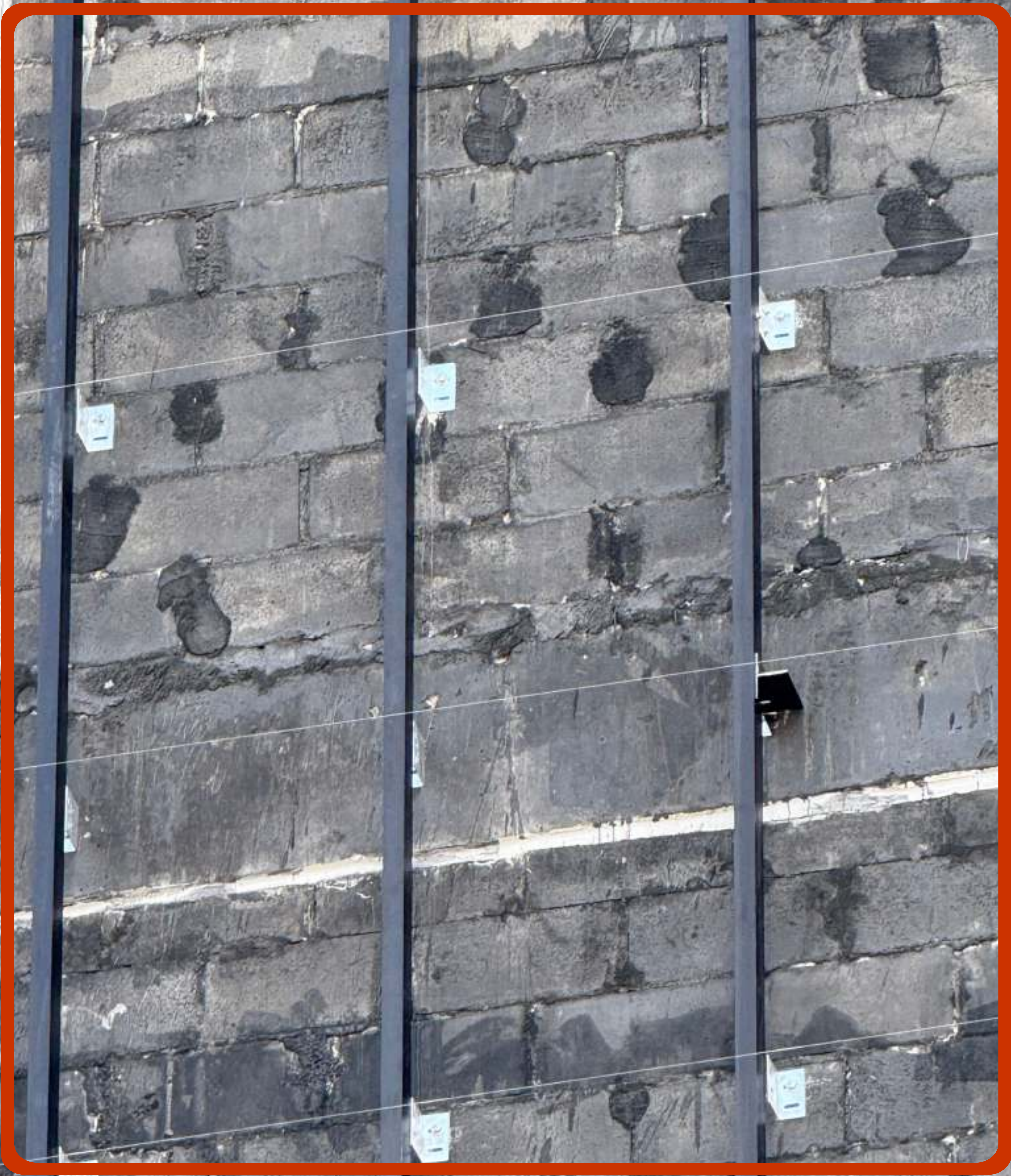
Brackets measuring 18 cm with two anchors for support and 6 cm with a single anchor for retention are used. These are single pieces, precisely positioned to match the spacing of the layout and the correct heights for fixing the vertical profiles. The execution demonstrates a defined technical design, with pre-specified anchoring points and strict dimensional control a critical condition for the system's performance and stability.

Vertical profiles measuring 6 meters long are used, a solution that accentuates the effects of thermal expansion. Moreover, they are irregularly fixed, lacking proper junctions with brackets and including cantilevered segments. Many remain attached with screws into profile T extensions, acting as rigid links. This configuration restricts the natural movement of components, favoring internal stresses that may cause deformation, detachment, or failure of the cladding.

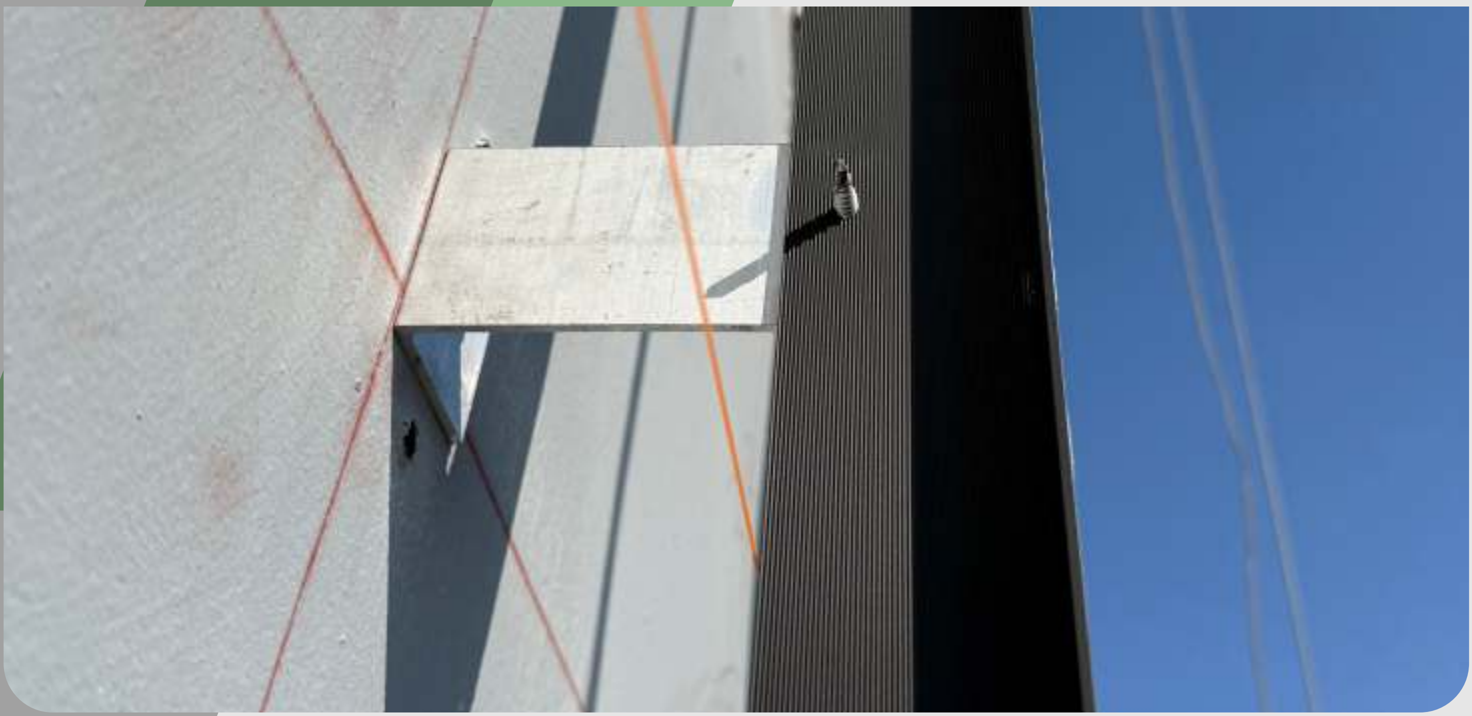
This image shows perfectly synchronized installation, with profiles custom-fabricated to match beams and align with cladding joints. Each profile starts and ends exactly at the bracket, following parameters defined in the design. This fully controlled execution demonstrates technical planning, dimensional precision, and attention to detail. Such control is essential to ensure system stability, material durability, and the final quality of the ventilated façade.

The situation observed raises serious technical concerns. Six-meter vertical profiles already a sensitive solution were joined using angle brackets to form 12-meter linear elements, with no apparent provision for thermal expansion. This practice ignores fundamental principles of thermal control and structural stability, potentially compromising system performance. The lack of proper joints can lead to irreversible deformations and risk the integrity of the façade.

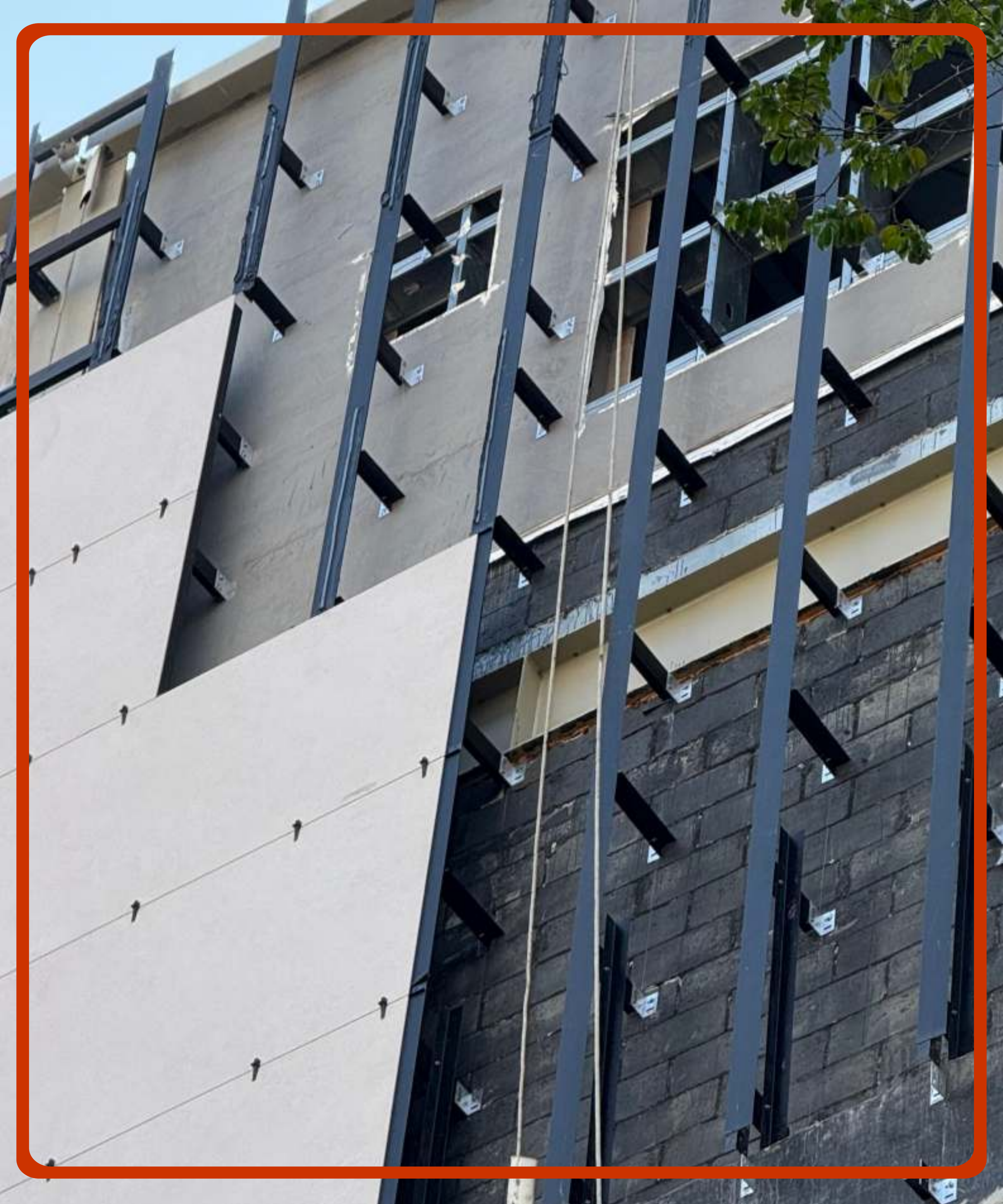
The 10 mm joint was correctly applied, in compliance with technical expansion standards. The vertical profile was fixed as a rigid point at the top and as a sliding point at the bottom, allowing the system to properly respond to thermal and structural movement. This is a clear example of well-planned technical execution, aligned with engineering best practices and optimization of anchoring and fixing elements, ensuring safety and durability.



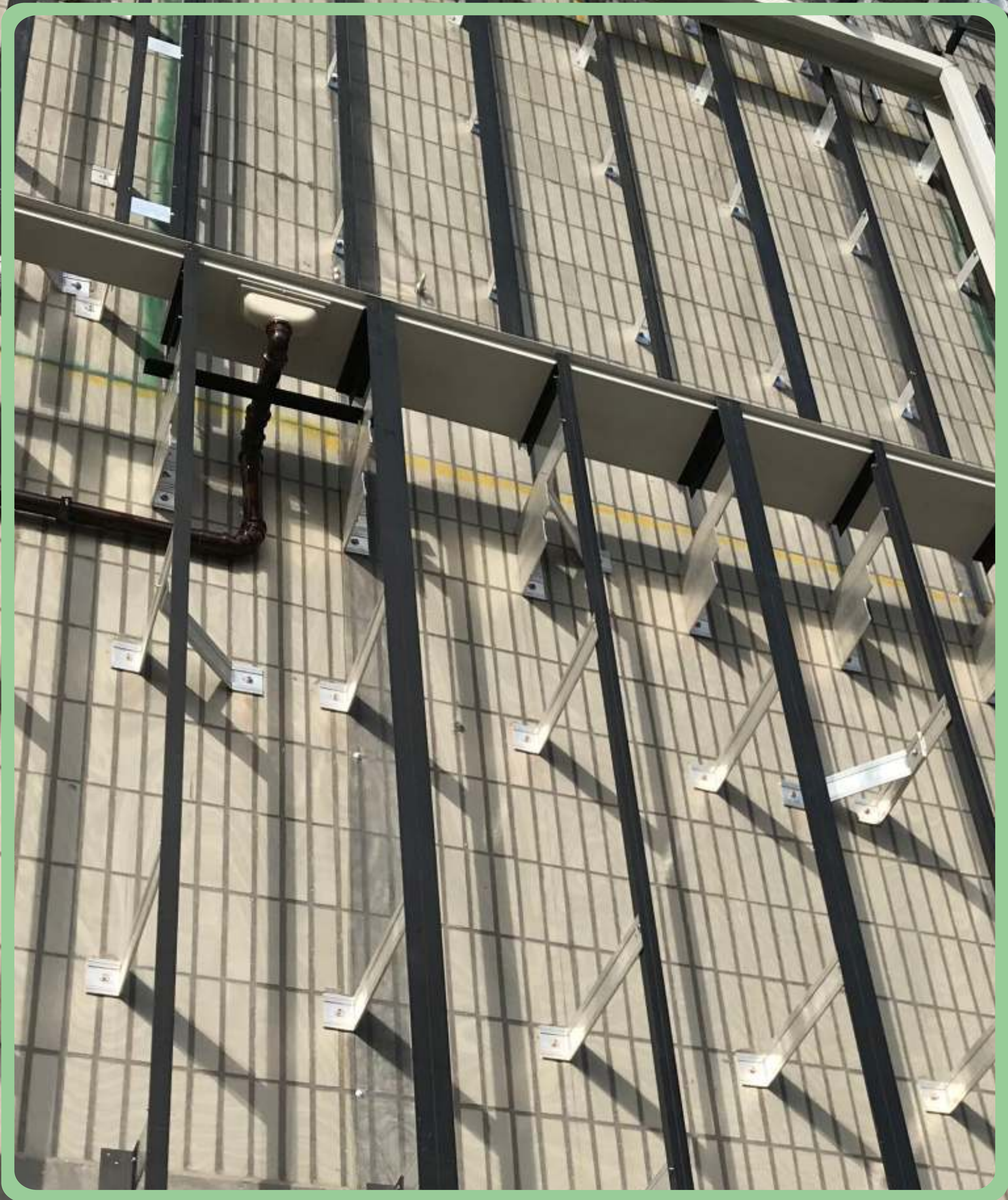
Correct alignment of vertical profiles is essential during installation, as it serves as the base for cladding attachment. Plumb control must be precise from the start. In profiles with 10 cm flanges, using the front face as a guide may cause millimetric deviations which, when accumulated, compromise the geometry, flatness, and finish of the façade.



In this case, the alignment string was properly placed at the rear of the profile, where the support point is minimal just 2.5 mm and free from interference caused by possible flange inclinations. Once the cladding is applied, flatness will be naturally preserved, since alignment was based on the spine of the profile. This mounting technique exemplifies good construction practices and reflects a technical rigor that directly supports system performance and durability.



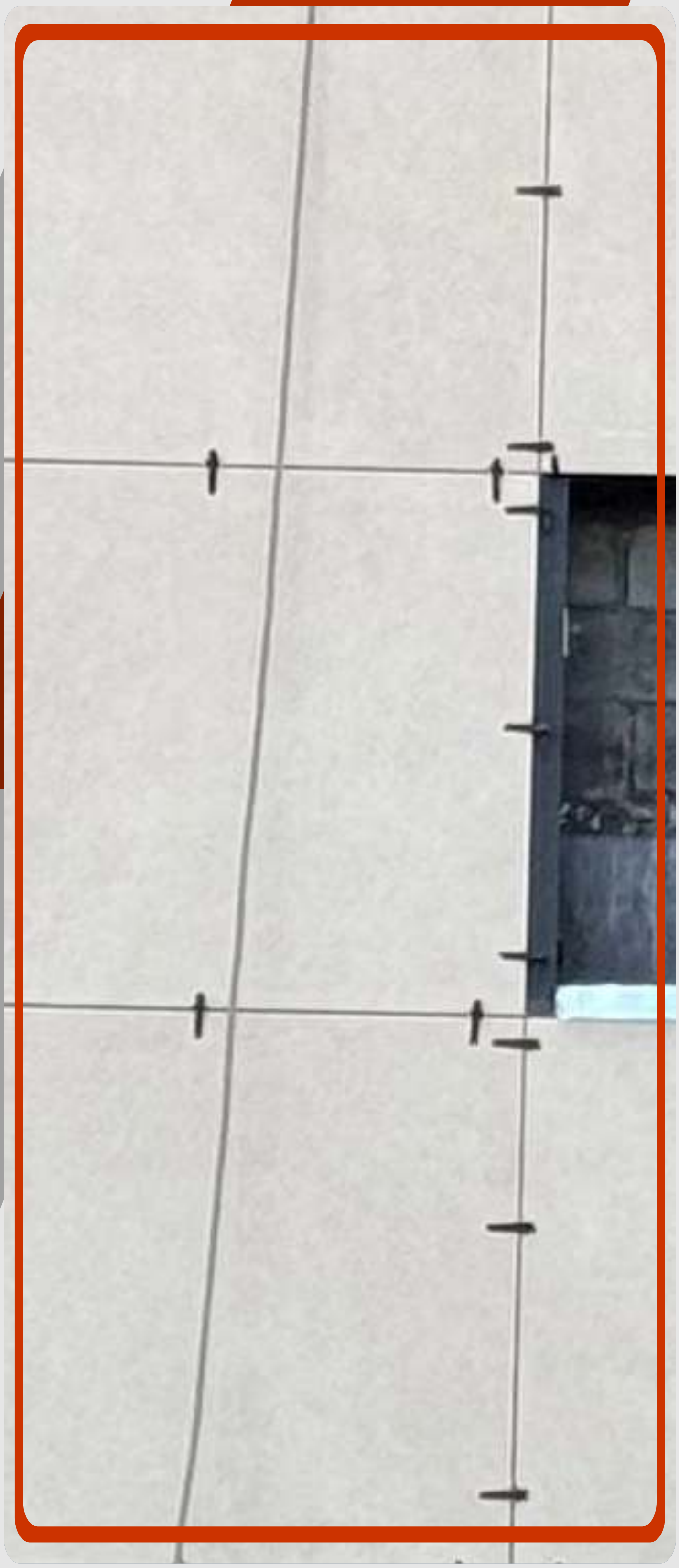
A combination of solutions contrary to established technical principles is seen. Significant bracket extensions with T-profiles are present, apparently without structural calculation support. Furthermore, the lack of bracing and the presence of fixations acting as rigid joints generate unwanted tensions. These conditions reveal critical weaknesses and, in our view, may represent risks to the stability of the façade and the safety of the building.



This illustrates the technical solution adopted for irregular spacing, using custom elements and brackets dimensioned according to their function. All include slotted holes; support brackets are combined in threes to form a diagonal brace, and bracing bars ensure structural stability. This demonstrates a high-performance technical solution, reflecting solid engineering, sound judgment, and a commitment to the quality and safety of ventilated façades.

Grooves were designed to increase the contact surface between the MS polymer and the substrate. However, technical studies and field observations show this method may complicate application. The adhesive often fails to fill the grooves uniformly, promoting voids and air bubbles. This compromises the regularity of the adhesive bead and makes cleaning more difficult. As a result, this practice is gradually being phased out in technically demanding applications.

A smooth surface offers ideal conditions for MS polymer application. Being regular and continuous, it allows the adhesive to spread uniformly, forming a cohesive layer without internal defects. This ensures a consistent bead thickness, essential for proper curing and structural performance. It also improves cleaning by eliminating dust and debris, and enhances the micro-suction effect, contributing to better adhesion.



The use of shims indicates that vertical profile flatness is not properly adjusted. This practice is not recommended for bonded systems, which rely on constant, uniform pressure from the double-sided tape for effective adhesion. Shims introduce opposing stresses that may weaken the joint. A panel is also seen crossing two vertical profiles, which hinders movement control and violates well-established principles of façade segmentation.

This shows cladding installation perfectly aligned with the profile face, while properly respecting expansion joints. This step is fundamental to absorbing thermal movement and ensuring system durability. Ventilated façade execution demands refined technique, strict dimensional control, and full compliance with construction standards. It is a system that does not allow improvisation and requires precision in every detail to ensure performance and stability.

Applying a 1200×2800×6 mm cladding panel highly rigid and resistant to flexing directly onto profiles is technically critical. Being a large-format piece with low deformation tolerance, its installation requires continuous support and tension relief mechanisms. Failing to meet these criteria can undermine performance and significantly increase the risk of failure by breakage or detachment over time.

In this case, a 300×1200×10 mm cladding panel was installed. Despite its high flexural strength, its smaller size prevents it from being affected by system-induced tensions. We also use 1000×3000×3 mm panels in our portfolio, which due to their low flexural stiffness can absorb deformations and accommodate movements. Each format behaves differently and must be evaluated according to the project demands and façade dynamics.

At **VENFAQ**, we value aesthetics and finish this is evident in the success of our portfolio. However, what truly defines us is our commitment to the technique behind every cladding solution. Our essence and responsibility lie in this technical rigor: delivering safe, durable, and well-executed solutions. Every detail follows engineering criteria and established best practices because we believe beauty without technique cannot sustain performance and a façade is not decoration, it is a building system.

VENFAQ

venfaq.com

CARRER D'ARIBAU Nº170 1-2 08036 - BARCELONA ESPAÑA
europa@venfaq.eu
+34 689 60 75 22

RUA RANCHO FUNDO Nº497 - 13283-182 VINHEDO - SÃO PAULO BRASIL
brasil@venfaq.com.br.
+55 (19) 3030-5280