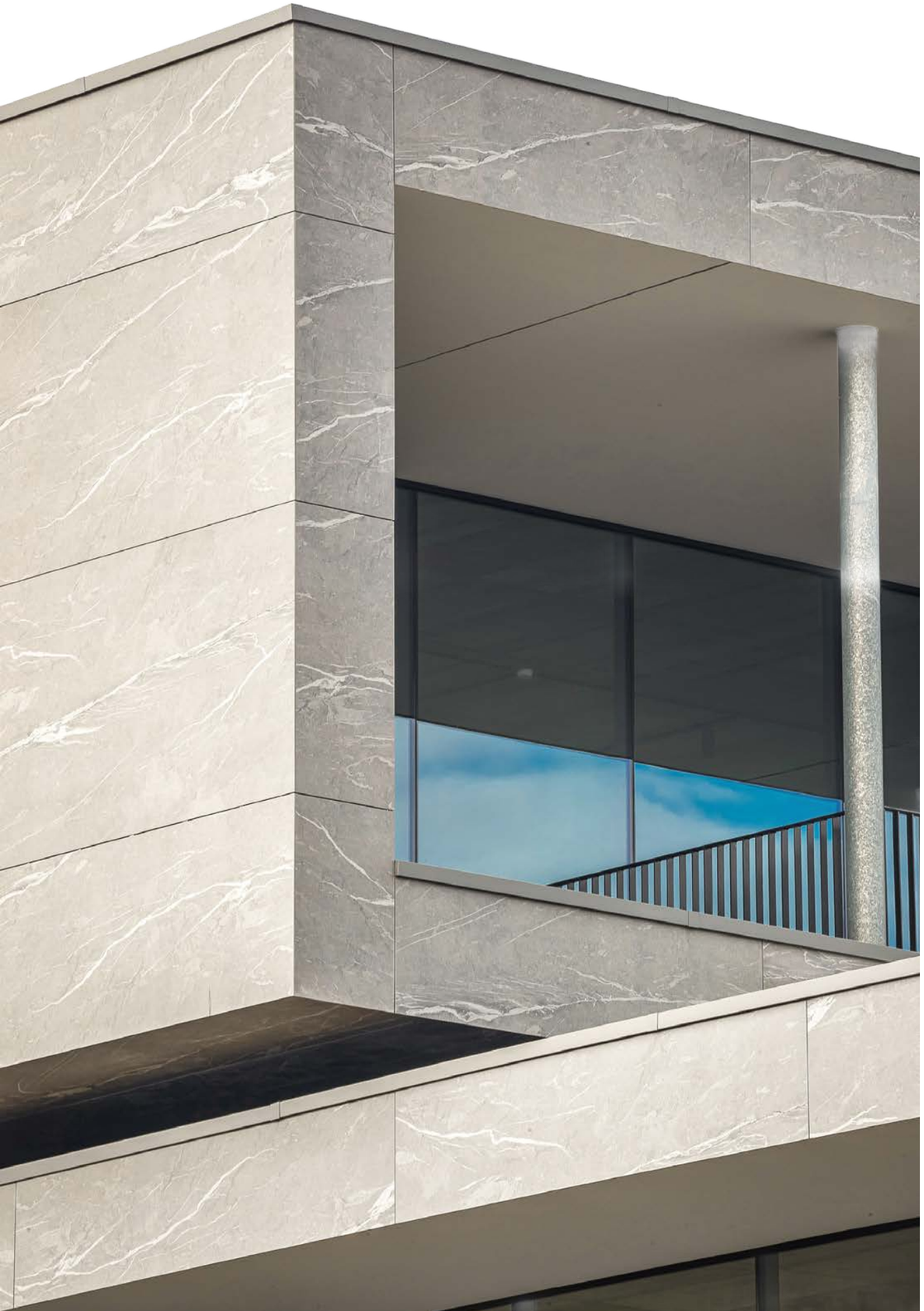
ASCALE

Ventilated façades



PRODUCT

Introduction

Pamesa Group has always been focused on the achievement of wellbeing in architectural spaces and excellence has been obtained in that regard with Ascale: an all-new multi-purpose, large-sized and lightweight material. Pamesa Group is re-inventing itself and adapting architectural spaces to new lifestyles. The value of a brand along with work, effort, innovation and quality keep the industry alive. Ascale strengthens the technical characteristics of top-of-the-line wall tile with more possibilities due to its lightness and adaptability.

Using high pressure and temperature, we transform 100% all-natural mineral into slabs that combine natural beauty with resistance from the latest technologies.

Ascale is the latest generation of sintered stone, with dimensions 162 x 324 cm, which we present in 12 and 20 mm format and 160 x 320 cm, which we present in 6 mm format. Ascale offers a wide variety of 12 and 20 mm thick slabs, which allow the construction of any work surface, and complements these thicknesses with lighter slabs, 6 mm thick, which can be used to cover any vertical or horizontal paving.

The combination of both thicknesses, 6 and 12 mm, makes Ascale a powerful tool at the service of architecture, interior design and construction professionals, as it allows the creation of unique, elegant and versatile spaces, with the unbeatable technical performance offered by the material.

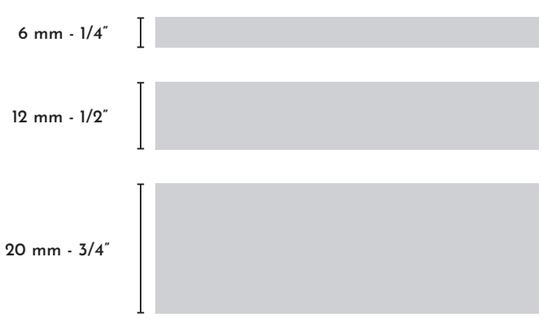
Product

Why use Ascale? Because our sintered stone offers the ideal technical characteristics for any work surface to get the same or even better aesthetic value than with any other material.

Our collections perfectly adapt to the needs of all types of people. We have all types of marble, cement, stone, wood, metal and basic colours. Our mission is to create areas that evoke feelings of comfort wherever they may be.

Thanks to Ascale, you can enjoy the most iconic natural stone finishes with the features of next-generation slabs. Moreover, our 6 and 12 mm slabs feature a fibreglass mesh reinforcement on the back so the material can attain the highest possible resistance.

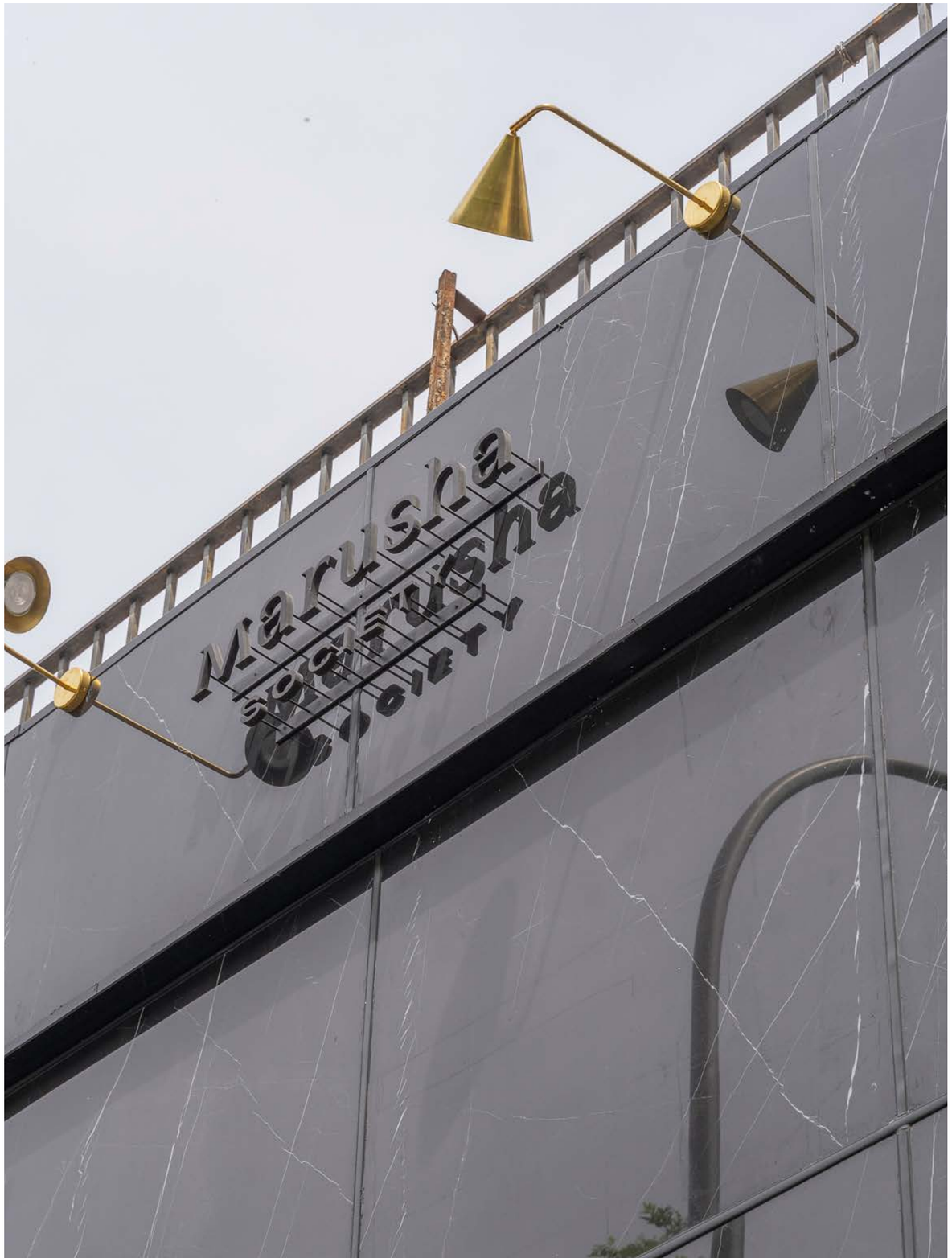
Formats and Thicknesses



	6 mm	12 mm	20 mm
Indoor wall tile	•		
Indoor floor tile	•	•	•
Outdoor floor tile	•	•	•
Façade	•	•	
Exposed anchorage ventilated façade	•	•	
Concealed anchorage ventilated façade	•	•	
Countertop		•	•
High-traffic floor tile	•	•	•
Indoor wall tile over material	•		
Indoor floor tile over material	•		
Furniture	•	•	

Finishes

POLISHED • VELVET • FEEL • MATT



FORMAT

162 x 324 / 64” x 128”

6mm 12mm 20mm

6mm	**WALL TILE:** Interior and outdoor. **FAÇADES. FLOORING:** Interior and outdoor **FURNITURE.**
12mm	**COUNTERTOPS:** Kitchen and bath. **FLOORING:** Outdoor.
20mm	**COUNTERTOPS:** Kitchen and bath. **FLOORING:** Outdoor.

GRUPO BIa (GL) / GROUP BIa (GL)

PROPIEDADES FÍSICO -QUÍMICAS PHYSICAL-CHEMICAL PROPERTIES	NORMA DE ENSAYO STANDARD TEST	VALOR REQUERIDO REQUIRED VALUE	VALOR MEDIO AVERAGE VALUE
Espesor Thickness	ISO 10545-3	Cumple/Complies	Cumple/Complies
Absorción de agua Water absorption	ISO 10545-3	≤ 0.5%	≤ 0.1%
Fuerza de rotura Breaking strength	ISO 10545-4	≥ 700 N e<7.5 mm ≥ 1300 N e≥7.5 mm	≥ 1000 N e=6 mm ≥ 3000 N e=8 mm ≥ 5000 N e=12 mm ≥ 11000 N e=20 mm
Resistencia a la flexión Modulus of rupture	ISO 10545-4	R ≥ 35 N/mm2	≥ 50 N/mm2
Resistencia al impacto Impact resistance	ISO 10545-5	Valor declarado Declared value	>0.8 sin defectos visibles / no visible defects
Resistencia a la abrasión superficial Resistance to surface abrasion	ISO 10545-7	Valor declarado Declared value	Valor declarado Declared value
Dilatación térmica lineal Linear thermal expansion	ISO 10545-8	Valor declarado Declared value	5.7.10-6.°C
Resistencia al choque térmico Thermal shock resistance	ISO 10545-9	Resistente Resistant	Resistente Resistant
Expansión por humedad Moisture expansion	ISO 10545-10	Valor declarado Declared value	<0.1 mm/m
Resistencia al cuarteo Crazing resistance	ISO 10545-11	Resistente Resistant	Resistente Resistant
Resistente a la helada Frost resistance	ISO 10545-12	Resistente Resistant	Resistente Resistant
Resistencia química: Productos de limpieza Chemical resistance: Cleaning products	ISO-10545-13	B	A
Resistencia química: Aditivos piscinas Chemical resistance: Swimming pool salts	ISO-10545-13	B	A
Resistencia química: Ácidos de baja concentración Chemical resistance: Low concentration acids	ISO-10545-13	Valor declarado Declared value	LA matte finish LB polished finish
Chemical resistance: Low concentration bases	ISO-10545-13	Valor declarado Declared value	LA matte finish LB polished finish
Resistencia a las manchas Resistance to stains	ISO 10545-14	Min.3	Min. 5 matte finish Min. 4 polished finish
Emisión de plomo y cadmio Determination of lead and cadmium	ISO 10545-15	Valor declarado Declared value	Cadmium < 0.01 mg/l Lead < 0.1 mg/l
Resistencia al calor seco Dry heat resistance	EN 13310	Declared value	Resistente Resistant
Resistencia UV UV Resistance	DIN 51094	Declared value	Sin cambios No change

ADVANTAGES

- DIMENSION AND APPERANCE
- N/mm² — FLEXURAL STRENGTH
- WATERPROOF
- tc° — THERMAL RESISTANCE
- mm³ — RESISTANCE TO DEEP ABRASION
- FROST RESISTANCE
- RESISTANCE TO SUPERFICIAL ABRASION
- CRAZING RESISTANCE
- CHEMICAL RESISTANCE
- MOHS — SCRATCH RESISTANCE
- STAIN RESISTANCE
- FIREPROOF

ASCALE PRODUCT


BORGOGNA SILVER


ARIZONA SAND


ETNA BLACK

URBAN WHITE


CARDOSO GRAY

TIVOLI WHITE


ALLURE BLACK


PALOMASTONE LINEN


MOON BLACK

COSMOPOLITA IVORY


COSMOPOLITA SILVER


COSMOPOLITA GRAY


BOREAL UMBER


BOREAL SAND

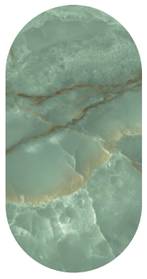

MILLENIUM COPPER


LABRADORITE ROYALBLUE


AMAZONITE SEAGREEN


PATAGONIA GOLD


ONICE BLUE


ONICE SEAGREEN


ONICE BLACK

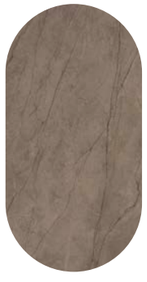
ONICE LUX WHITE


ANTALYA SAND


CEPPO DI GRE


DUNE GRAY


PIERRE BLUE


NEBULA BROWN

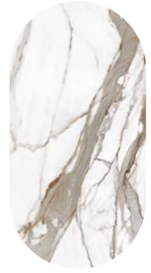

LAURENT BLACK

ASCALE PRODUCT


MONTBLANC WHITE


ARMANI SILVER


BELVEDERE BLACK


MACCHIA-VECCHIA GOLD


CROTONE PULPIS

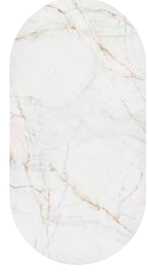

ARABESCATTO WHITE


ALTO STATUARIO


MARQUINA BLACK


GRASSI WHITE


TAJ MAHAL ALMOND


LUCCA GOLD


TORANO STATUARIO


VAGLI GOLD


DUCAL GOLD


CRYSTAL LUX WHITE

LASA WHITE

ALPI WHITE


GRUM BLACK


Van Hulle

Sustainable development

Ascale has an environmental management system to identify and minimize the impact of its operations on air emissions, wastewater, waste and noise pollution. Integrated Management System (SIG), designed by Ecoembes and aimed at the selective collection and recovery of packaging waste for treatment, recycling and assessment.

The company has Environmental Product Declarations (EPDs) for all the product families it markets. A declaration granted in 2014 and extended in 2015 that highlights environmentally friendly products.

Green Facts

Regulation (EC) 66/2010: certification granted for products that respect environmental criteria and characteristics established on a European level concerning: the extraction of raw materials, supplier selection, production processes, packaging, distribution and the use and management of waste.

To properly monitor the degree of sustainability for a project, the USGBC has developed a certification process for the development of sustainable buildings which assesses and certifies the sustainability of a building as a whole.

ASCALE materials help earn “LEED” points in various areas. Issued by the American entity UL Environment, this certification system aims to reduce environmental pollution caused by construction systems and materials used indoors. UL Environment therefore seeks to protect people’s health by enhancing air quality and reducing exposure to chemicals and other contaminants. ASCALE products have even earned Greenguard Gold Certification which, with even stricter requirements, ensures the use of a certain product is acceptable in schools and healthcare centres as well.

The EPD (Environmental Product Declaration) is a document describing the environmental impacts from production. ASCALE products are covered by the ceramic sector study assessing the international excellence of the environmental characteristics.

ASCALE products are certified as NSF (National Sanitation Foundation – Food Equipment Materials) and are, therefore, ideal for use in direct contact with food.

This Environmental Management System (EMS) standard allows companies to prove they are responsible and committed to protecting the environment. This certification held by TAU Cerámica is achieved by managing the environmental risks that may arise in business.

Ventilated façades

A ventilated façade is an exterior enclosure construction system comprised by an inner leaf, an insulating layer and an outer leaf. This system creates a vacuum space or air chamber which forces air to circulate through convection, thus causing a ventilation effect and providing the building incredible thermal features.

When properly built, this system also mitigates the effects of thermal bridges and enhances acoustic insulation meaning ASCALE slabs may be used to clad the outside of buildings due to their extraordinary properties, thus creating a second skin for the building combining aesthetic and functional benefits like no other material.

Protection against water

It provides a barrier against rain and ice with the resulting reduction in inner façade degradation.

Energy saving

It guarantees good thermal insulation with less heat dispersion in cold periods and less heat absorption during warm months.

Imperturbable design

UV resistance and non-absorption mean ASCALE ventilated façades maintain their look over time without absorbing any impurities and with low maintenance.

Lightness

Along with a substructure (normally aluminium), ASCALE slabs provide a light and resistant façade cladding solution.

Perfect for renovation

Being able to install a second skin on a façade without destroying the existing enclosure makes this system ideal for renovation projects.

Healthier

It ventilates, disperses inner moisture and offers better acoustic insulation which leads to better health and comfort.

Chemically-fixed hidden system

A simple ventilated façade system which consists of an aluminium “T” or “L” section beam substructure anchored to the building with support squares over which the ASCALE slabs are placed using structure adhesive beads. The distribution of the vertical beams is based on the size of the slabs designed in the project and the loads to be supported by the system.

This adhesive has been tested and resists extreme changes in temperature. Moreover, the fixing system is supplemented by double-sided adhesive tape which keeps the panels in place while the adhesive acquires its final resistance and ensures the thickness of the adhesive between the profile and back of the slab is correct.

This system achieves hidden, reliable fixing without any limitations on the slab format and with a clean finish.

Visible mechanical fixing

A ventilated façade system where ASCALE slabs are mechanically secured to the substructure with clips or staples. These staples are secured to the vertical aluminium beams which are anchored to the building structure using support squares. In addition to the staples and depending on the size of the slabs and exposure requirements, polyurethane reinforcement sealant may be used. It has no structural purpose but prevents vibrations and buckling.

The exposed staple fixing system is designed for 6 mm thick ASCALE slabs although there is a variant for 12 mm ASCALE slabs and the same substructure and fixing elements where the staples are hidden in grooves created for this purpose in the edge of the slabs.

This system is ideal for horizontal façades and false ceilings where the panels are horizontally suspended.

Hidden mechanical fixing

This system offers unbeatable performance and is designed to achieve hidden mechanical fixing with 6 mm ASCALE slabs.

The substructure is comprised of a grid of vertical and horizontal aluminium profiles, the latter in “J” sections. On the other hand, 45º dovetail grooves are made in the back of the ASCALE slabs. Additional aluminium profiles known as “hook and close” are installed in these grooves and they are embedded in the back so they “bite” the connecting piece to ensure fixing. The grooved panel and hook/close profile (hook-shaped) ensemble is then hung on the horizontal profiles of the substructure already installed on the wall so the panel is supported without any possibility of falling.

Besides the advantage of being both mechanical and hidden, this system can be used to hide cables which is useful when a panel must be removed and replaced to do system maintenance work, for example.

Keil invisible fixing

Compatible with 12 mm thick ASCALE slabs, they are mechanized with drill holes to insert plugs that secure the aluminium hanging staples.

When the plugs are tightened, the ASCALE panels become mechanically secured to offer high resistance and cutting force. Along with the pre-secured hanging staples, the panels are placed over the aluminium substructure previously installed on the support. It is an extremely high-performance system which has been tested in Europe and around the world as ideal for fixing ASCALE panels on all types of façades.


ASCALE