

DISCOVER A NEW DIMENSION IN POSSIBILITIES

Advanced, lightweight
rainscreen cladding systems
with unrivalled quality, design,
and performance.

www.cladlite.net



BFG INTERNATIONAL

Specializing in composite design, engineering and manufacturing. BFG International is a global leader and pioneer in composite technology.

Over the last four decades, we've been at the cutting edge of composite innovations, utilizing the latest materials and technologies to create limitless possibilities for architects and designers.

Our expertise and market leading position in highly demanding sectors such as rail, wind energy, environmental and architectural ensures that our construction products are innovative and technically advanced.





Our people are the foundation of our success. Our workforce of 2500 dedicated employees operates from state-of-the-art R&D centres and production facilities across 15 innovation-based manufacturing facilities located across five continents. We pride ourselves on employing a talented and diverse workforce, which enables us to deliver safety, quality, and sustainability.

BFG is one of the first manufacturers to adopt and implement the concepts of Industry 4.0. This innovative approach to production ensured BFG's position as a global leader in the composite industry.

WE MAKE COMPOSITE SOLUTIONS POSSIBLE

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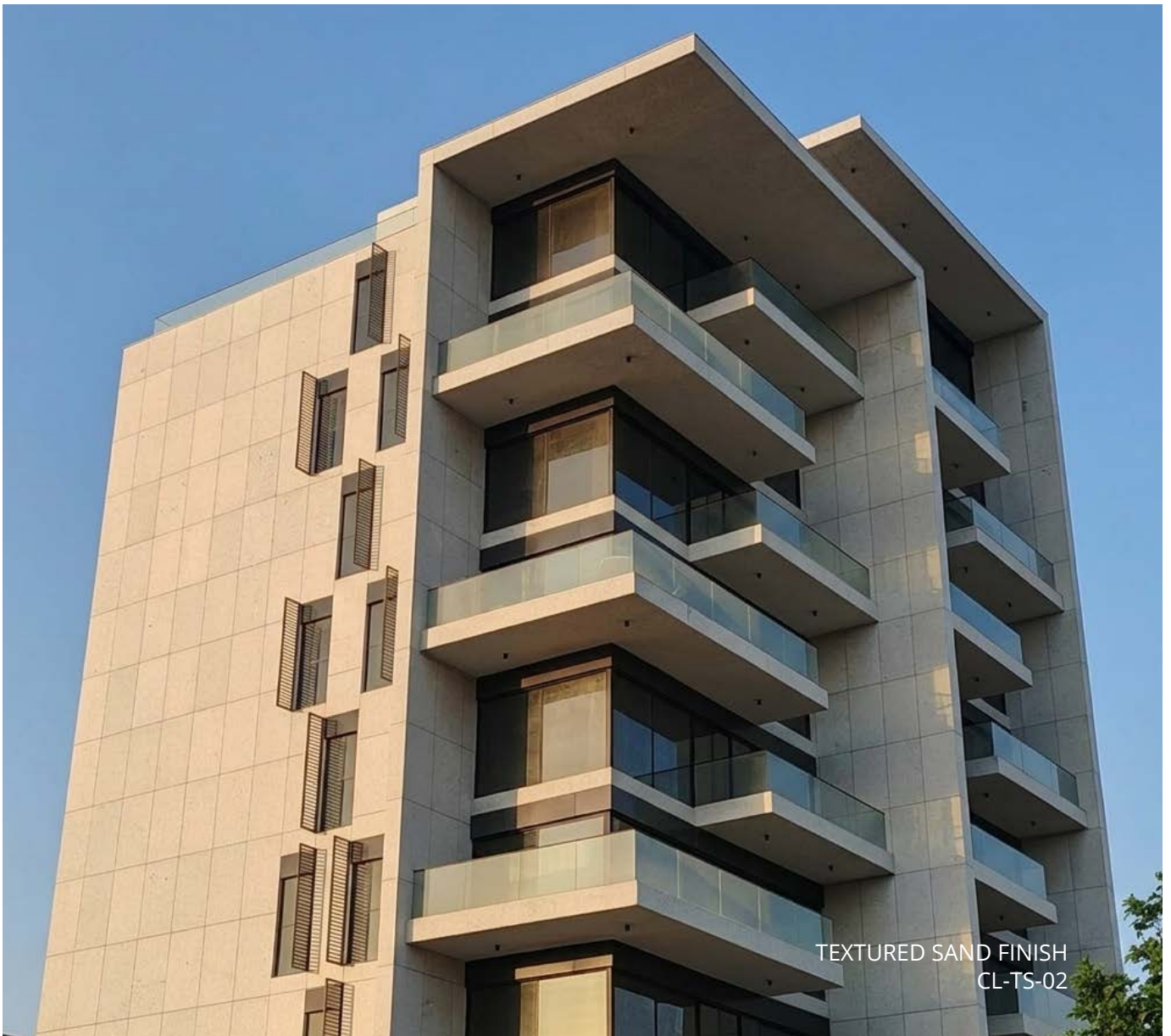
- ISO 9001:2015
- ISO 14001:2005
- OSHAS 18001:2007
- International Railway Industry Standards-IRIS
- A1 classification :
DIN 6701-2, German qualification for adhesive bonding in manufacturing
- EN15085-2 in Welding
- Several third party and vendor approvals



NATURAL SANDSTONE FINISH
CL-NS-01



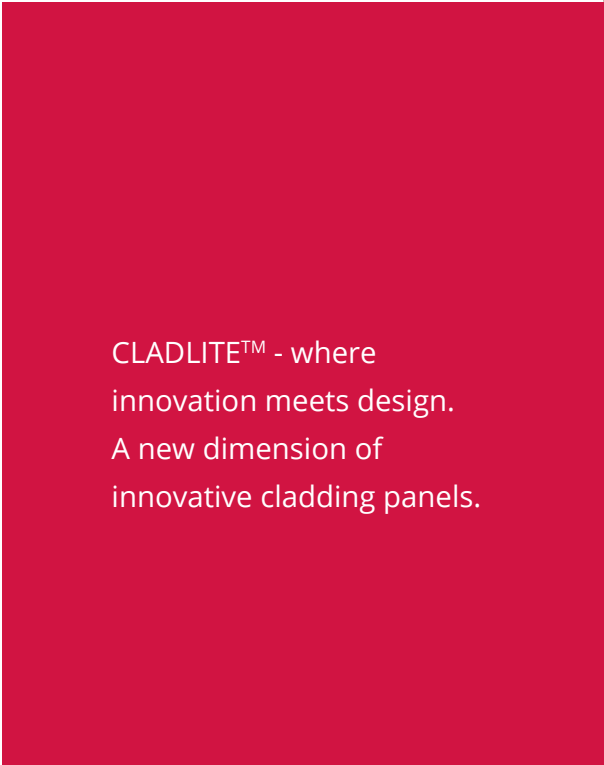
MARBLE - TRAVERTINE FINISH
CL-MT-03



TEXTURED SAND FINISH
CL-TS-02



MARBLE - TRAVERTINE FINISH
CL-MT-02



CLADLITE™ - where
innovation meets design.
A new dimension of
innovative cladding panels.

CLADLITE™

Unlimited architectural creativity, and an endless range of colours, textures and finishes.

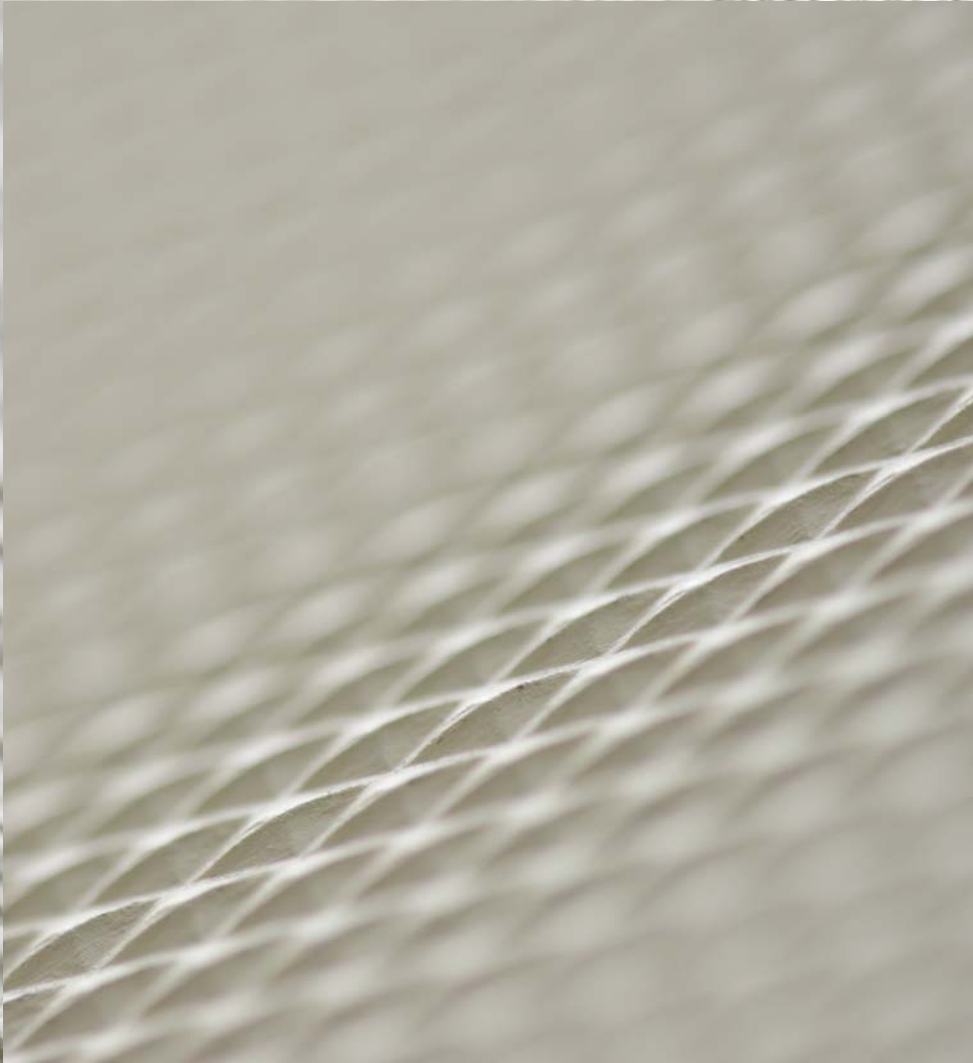
Cladlite is not only ideal for bold, contemporary new buildings but also perfectly suited for transforming existing structures - giving new life to aging buildings into a new modern era through striking cladding refurbishments. Its lightweight composition makes it significantly easier to install than traditional materials like stone, while its superior rigidity, durability and impact resistance compared to aluminum composite panels ensures long-lasting performance in demanding environments.

Cladlite offers the freedom to create three-dimensional designs that redefine the architectural envelope.





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CLADLITE™ - INNOVATION IN COMPOSITE CLADDING

CLADLITE is a fire-rated, decorative, rigid, lightweight, composite panel ideal for architectural cladding and re-cladding of building facades. CLADLITE's advanced technology offers a huge range of striking, durable finishes including, natural stone, stone effect, wood or concrete at a fraction of the weight and cost of other materials while providing better thermal insulation and sound absorption versus traditional materials.

The product is also far superior in impact and damage resistance when compared to ceramic / porcelain, natural stone, and ACM.

CLADLITE offers a wide selection of flat and three dimensional panel designs with colours that can match the design and style of any exterior - from contemporary to classic. Panels can be supplied as both standard and customized product with a range of surface finishes for use as wall, roofing, or flooring systems in residential and commercial structures.

A NEW DIMENSION OF POSSIBILITIES

CLADLITE Cladding panels are manufactured from advanced GFRP (Glass Fibre Reinforced Polymers) to provide a high performance, durable, low maintenance alternative to traditional rainscreen cladding systems. The system is ideal for use in diverse applications including residential, high-rise buildings, hotels, apartments, condominiums, educational facilities, medical facilities, retail stores and other commercial and institutional buildings.

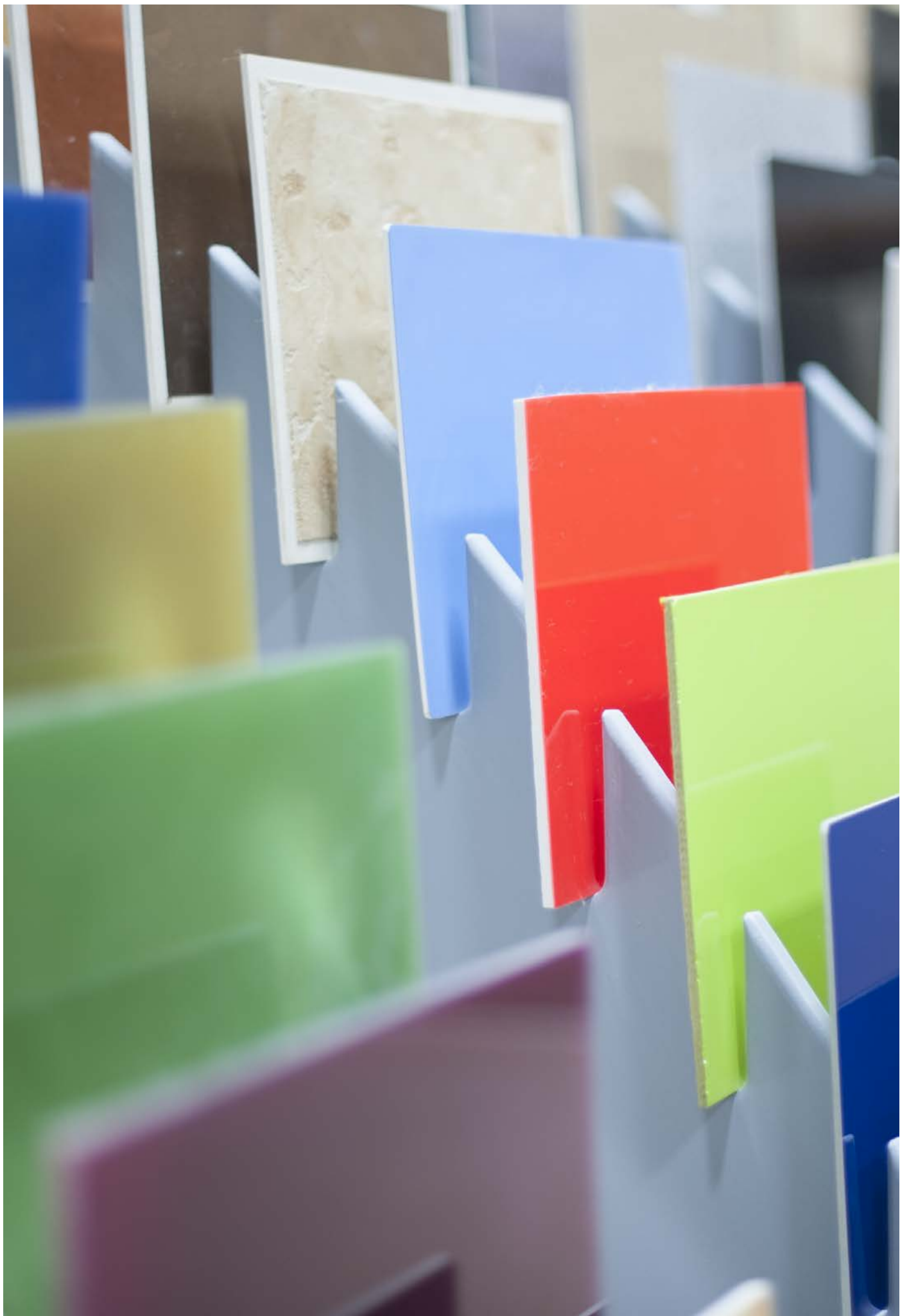
The non-combustible core of CLADLITE is an inert thermally and chemically stable material that is integrated within the FRP layers to offer superior insulation.

KEY FEATURES

- Excellent rigidity.
- High strength to weight ratio.
- Non brittle. Does not disintegrate into pieces in case of a failure.
- Does not dent – resistant to direct impacts.
- Excellent fire resistance – noncombustible & nontoxic in compliance with international standards.
- Corrosion resistant.
- Thermally insulating.
- Good thermal stability.
- Can be either flat panels or formed to a range of complex shapes, including simple and 3D curves.
- Offered in customized finishes.

PRODUCT FEATURES

-  Structural warranty - 20 years
-  Non-combustible core
-  Panel thickness from 5-10mm
-  Option available for large format of panels
-  Rain screen panels
-  Wide range of colours and finishes
-  Fast installation
-  Accommodates cyclic loads without permanent deflection or deformation
-  Withstands wind loads up to 2.5 Kpa within the stipulated design criteria
-  Temperature tolerance from -30 deg C to 70 deg C
-  Minimizes effect of solar radiation
-  Stability, stiffness & formability
-  High strength to weight ratio
-  Corrosion resistance
-  Non brittle & Break-Resistant
-  Does not dent – resistant to direct impacts
-  No maintenance
-  Excellent thermal stability
-  Inherent UV resistant properties
-  High Impact & scratch resistance
-  Consistent finish
-  Can be formed to a range of complex acute and oblique angles, 2D/3D shapes & flat geometry



PRODUCT SPECIFICATIONS

Standard Width :	1220 mm
Standard Length :	2440mm
Standard Thickness :	7 mm
Core thickness :	3 mm (Non combustible core)
Product Tolerance	
Width :	+/- 1-2mm
Length :	+/- 2-3mm
Thickness :	+/- 1 mm
Squareness :	+/-5 mm
Bow :	Max 2 mm / M

Advanced composite engineering and in depth knowledge of individual materials has given shape to a rigid, structural, lightweight panel which can be manufactured in flat and 3D shapes with inbuilt simple assembly mechanisms for speedy installation.



- 1 1.5mm of FRP skin.
- 2 Core.

TECHNICAL SPECIFICATIONS

FRP Product Performance

PROPERTIES	STANDARD	VALUE
DENSITY	MEASUREMENT	1.8 – 1.7 KG/ M ³
TENSILE STRENGTH	ASTM D 3039	> 65 MPA
TENSILE MODULUS	ASTM D 3039	> 8 GPA
FLEXURAL STRENGTH	ASTM D 790	> 110 MPA
FLEXURAL MODULUS	ASTM D 790	> 7 GPA
COMPRESSIVE STRENGTH	ASTM D 695	> 60 MPA
WATER ABSORPTION	ASTM D 570	< 0.2%
FIRE PERFORMANCE	ASTM E 84	CLASS A

Inert Non-combustible Core Performance

PROPERTIES	VALUE
DENSITY	1.8 +/- 0.05 KG/ M ³
TENSILE STRENGTH	2.2 MPA
FLATWISE COMPRESSIVE STRENGTH	> 15 MPA
THERMAL CONDUCTIVITY	0.12 W/M.K
THERMAL RESISTANCE	0.025 M ² .K/W
TOXICITY	NON TOXIC AND RECYCLABLE
WATER CONTENT	< 1%

Cladlite™ Performance (Typical 10 mm panel)

PROPERTIES	STANDARD	VALUE
THICKNESS		7-10 MM
WEIGHT KG / M ²	MEASURED	16-17.5 KG/M ²
DENSITY		1800 KG/M ³
TENSILE STRENGTH – FLAT WISE	ASTM C 297	> 1.1 MPA
FLEXURAL STRENGTH	ASTM D 393	> 45 MPA
FLEXURAL MODULUS	ASTM D 393	> 1.7 GPA
COMPRESSIVE STRENGTH	ASTM D 695	> 30 MPA
FLATWISE COMPRESSIVE STRENGTH	ASTM C 365	> 30 MPA
SHEAR STRENGTH	ASTM C 273	> 0.6 MPA
SHEAR MODULUS	ASTM C 273	> 0.4 MPA
IMPACT	EN 438-2 : Steel Ball Dropped From Height of 1.75 m	No breakage / cracks /No dent/ no delamination
Resistance To Humid Environment Cataplasma Test	Exposure for 7 days of 100% RH @ 60 deg C	No blistering/ chalking/ delamination or deformation
Dyna Pull Strength (core + skins bonding performance)	ISO 4624, ASTM E84A, EN15501, BSID0	1.4 Mpa, failure mode - between FRP layers
THERMAL INSULATION	CALCULATION	
FIRE PERFORMANCE	ASTM E84	Class A
FIRE PERFORMANCE	EN13501	Class B S1 d0

DISCOVER CLADLITE™

One panel. Endless expression.

CLADLITE is a single, versatile cladding panel engineered to adapt to any vision. Available in four standard board sizes (1200 x 2400, 1200 x 1200, 1200 x 600 and 600 x 600 mm) with a flat profile, it can be precision-cut to any 2D shape or dimension, up to the full 1200 x 2400 mm board. This freedom makes it equally at home in clean, minimalist facades and intricate, dynamic patterns.

Choose a flat finish for a sleek, continuous surface, or specify a 25mm return edge for added depth and a tactile, architectural richness. With a curated selection of premium finishes, colours and fully bespoke options, CLADLITE shapes itself around your design rather than the other way round, all while remaining impressively lightweight.

Every CLADLITE panel is complemented by precision-engineered corners and copings, ensuring a flawless, high-end finish from every angle.

CLADLITE PANELS

Flat Panel
(Thickness dependant on pattern)



Board sizes

1200 x 2400 / 1200 x 1200 / 1200 x 600 / 600 x 600

METALLIC COLOURS

Flat or Hammered Finish



CL-SM-04



CL-GM-05



CL-CM-06



CL-SMH-04



CL-GMH-05

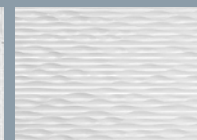


CL-GMH-06

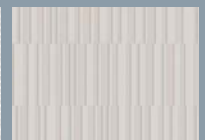
2D / 3D GELCOAT MOULDS



CL-3D-01



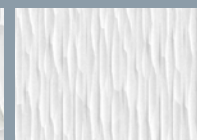
CL-3D-02



CL-3D-03



CL-3D-04



CL-3D-05



CL-3D-06



CL-3D-07



CL-3D-08



CL-3D-09

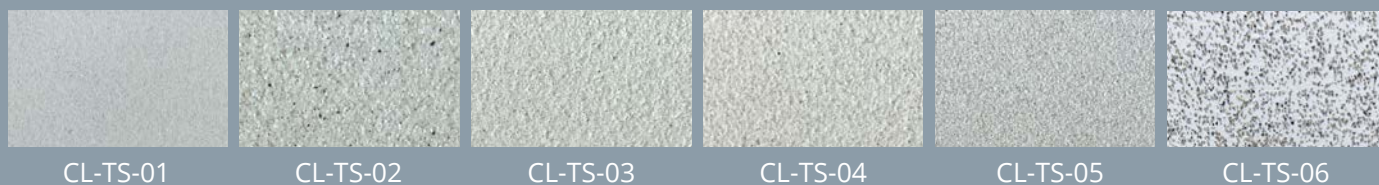
PAINT/GEL COATED COLOURS

Full range of smooth RAL colours



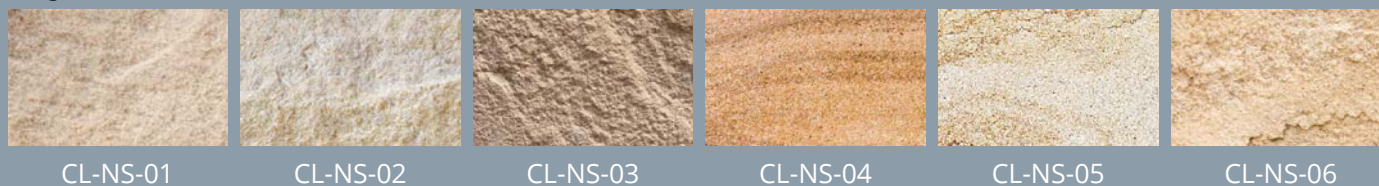
TEXTURED SAND FINISH

Range of smooth to coarse finishes with natural or coloured Sand



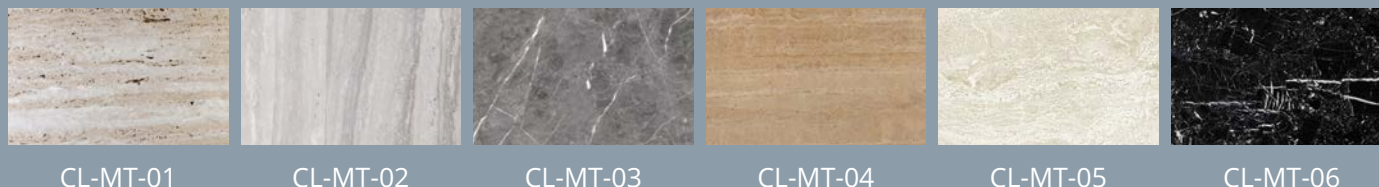
NATURAL SANDSTONE FINISH

Single and Two Tone Colour



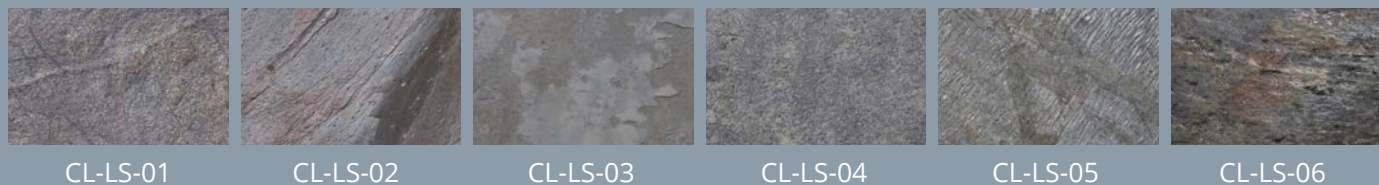
MARBLE - TRAVERTINE FINISH

Smooth or Textured Finish



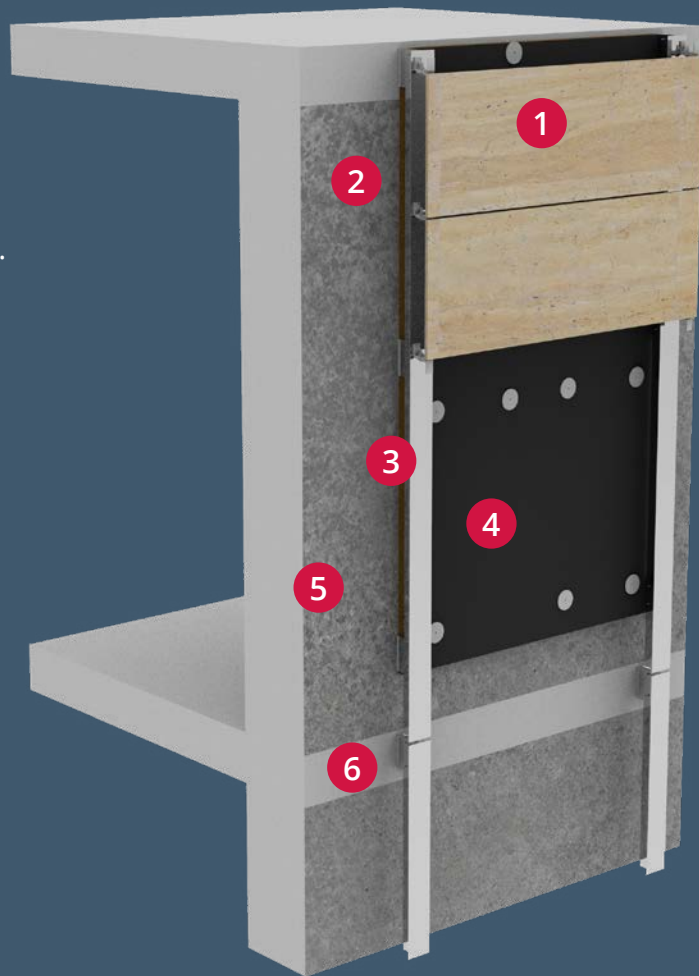
LAMINATED SLATE FINISH

Real Slate/Stone Laminated to GRP



Our skilled engineers are able to assist in design for unique or complex applications. Please contact our sales team for further information and support

1. CLADLITE™ Cladding panel
2. Patented L Angle panel connectors.
3. Sub framing system
4. Insulation material
5. Fixation substrate (concrete)
6. L angle connector



SUPPLIES CHECKLIST



Drill



Clamp



Screws



Level



Pry bar



Spacers



Requires
2 workers

LIGHTWEIGHT CLADDING SYSTEMS

For refurbishment, cladding or recladding
existing buildings

Cladlite is the ideal solution for breathing new life into tired or outdated buildings. Its lightweight yet rigid, high performance construction enables stunning aesthetic transformations without the need for extensive structural modification, offering a practical and cost-effective route to modernisation.

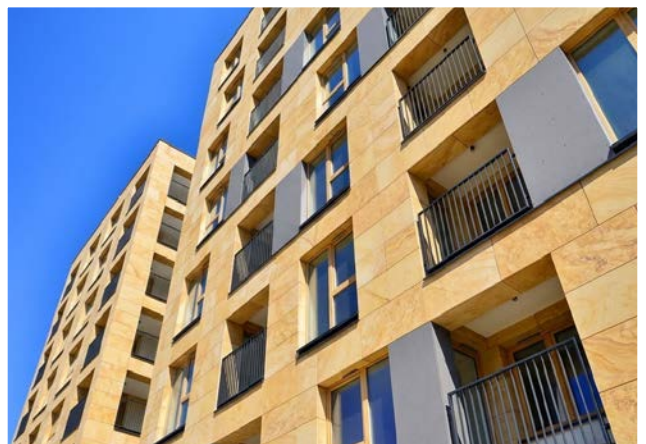
Refurbishment projects often face the challenge of integrating contemporary materials with existing structures. Unlike heavy stone or bulky facade systems, Cladlite delivers an infinitely versatile appearance without overloading the original framework. This eliminates the need for structural upgrades while still achieving a premium finish.

With a vast library of finishes and the ability to create custom textures and profiles, Cladlite can mirror existing architectural elements or introduce a bold new design language. Whether you're reimagining a dated commercial facade or upgrading your facade to meet modern energy, fire and acoustic standards, Cladlite provides a powerful, flexible tool for transformation.

Designed for rapid installation, Cladlite is compatible with a range of fixing solutions offering more flexibility than other cladding materials. Our team works closely with architects and contractors to tailor the panel format and mounting approach to suit the unique demands of refurbishment environments — ensuring minimum disruption and maximum visual impact.

Cladlite: Advanced cladding systems delivering:

- **Enhanced aesthetics** – Instantly refresh and modernise outdated facades with contemporary finishes and textures.
- **Improved fire safety** – non-combustible or fire-resistant systems that meet the latest regulations.
- **Better insulation and efficiency** – Incorporate ventilated systems and modern insulation to improve thermal performance and reduce energy costs.
- **Minimal structural disruption** – Lightweight systems utilising the latest materials technology that can be easily retrofitted without major structural changes.
- **Increased property value** – A modern, compliant exterior can enhance performance, market appeal and investment potential.



SUSTAINABILITY AT THE HEART OF INNOVATION



At BFG, sustainability is a foundational principle that drives our design philosophy and product development. We believe that environmental responsibility and high-performance engineering can and must go hand in hand. That belief is embodied in Cladlite, our advanced cladding solution that delivers measurable environmental benefits across its entire lifecycle.

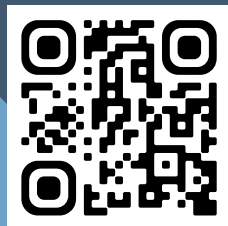
Cladlite is engineered to significantly reduce carbon emissions when compared to traditional cladding materials. From the sourcing of raw materials through to manufacturing, transportation, and installation, every stage of its production is optimized to minimize environmental impact. Its lightweight composition not only lowers fuel consumption during transport but also simplifies installation, reducing energy use and labour requirements on-site.

Beyond its initial environmental advantages, Cladlite's long-term sustainability is equally compelling. The product's unique durability and nonporous surface make it highly resistant to weathering and degradation, requiring virtually no maintenance over its lifespan. In the rare event of damage, Cladlite is easily repairable, further extending its usability and reducing waste. These qualities contribute to lower whole-life costs and a reduced need for replacement, aligning with circular economy principles.

By choosing Cladlite, architects, developers, and contractors are making a conscious decision to support sustainable construction practices, without compromising on quality, aesthetics, or performance. It's a smart investment in the future of our built environment.



Cladlite
Visualiser app



CLADLITE™

A new dimension of possibilities

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