

## **CRISTOLITETM**

Lightweight Stone Cladding Technology





## WE ARE CRISTOFOLI INTERNATIONAL

## The home of lightweight stone

## **Our History**

Tracing back to our family roots, Cristofoli International has been synonymous with stone. A family operated business, our passion for stone has lived through generation after generation and continues through today.

Our humble beginnings as early pioneers of terrazzo composites are the foundations of who we are today. 60 years later our passion for innovation and quality have not changed.

Our leading lightweight stone technologies draw from our rich past, and underpin what we do. This is why we can assure you will always receive expert advice, a professional service and quality end products.





## Product Overview

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Cristolite™

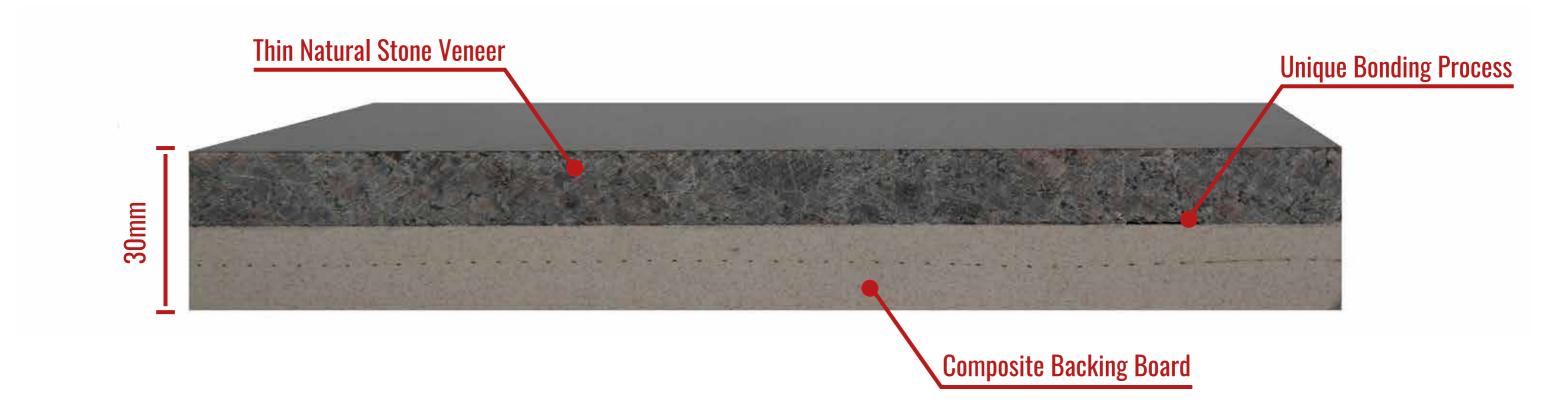
## **Panel Design**

Improving on our tried and tested honeycomb composites, Cristolite features a composite, fire resistant backing board.

Utilising a unique bonding process we combine a thin veneer of natural stone to composite backing board.

The result is a dimensionally stable, strong, lightweight and fire proof panel, with a wide choice in natural stone finishes.

Panel Weight	48 kg/m²
Panel Size	2.65m x 1.25m
Fire Class	Euroclass A2-s1-d0
Thickness	30mm



## Key Features

### Lightweight

Traditional cladding over two stories require 40mm thickness of stone. We reduce the stone to 15mm, decreasing the overall weight substantially.



## Strength

Cristolite produces higher strength values than traditional stone. This makes it suitable for high wind loadings and satisfies impact testing.



#### Fire Resistance

Our unique bonding process and composite backing board are highly fire resistant.

They exhibit almost no fire producing properties, classified Euroclass A2-s1-d0.



### Large Format

The panels strong mechanical performance allow to scale up to large sizes with panel sizes up to 2.6m x 1.25m. Their rigidity ensures no bowing or warping.



#### Green

Using over 60% less stone conserves our natural resources and reduces our carbon footprint for transport. The panel also offers fantastic BREEAM potential.



#### **Insulation & Acoustics**

Composite panels are terrific insulators of heat and sound. Cristolite performs similarly thanks to the changing densities of stone and composite.



## Standard Materials

## **Natural Stone**

We offer a selection of standard materials that are suitable for external cladding over 18m.

Our selection demonstrates a collection of modern colours and textures but are mechanically suitable for a harsh exterior environment.

Thanks to modern technology, natural stone can be finished with an abundance of textures. From classical polished or honed, to sandblasted, matte or even lasered features.

## **Colour & Style Matching**

Looking for a particular look? Not a problem! Our team can find suitable material for your needs. With our advice and guidance we can help achieve your desired look.

Jura Beige









Standard Materials

Jura Limestone



Moleanos



Moonstone



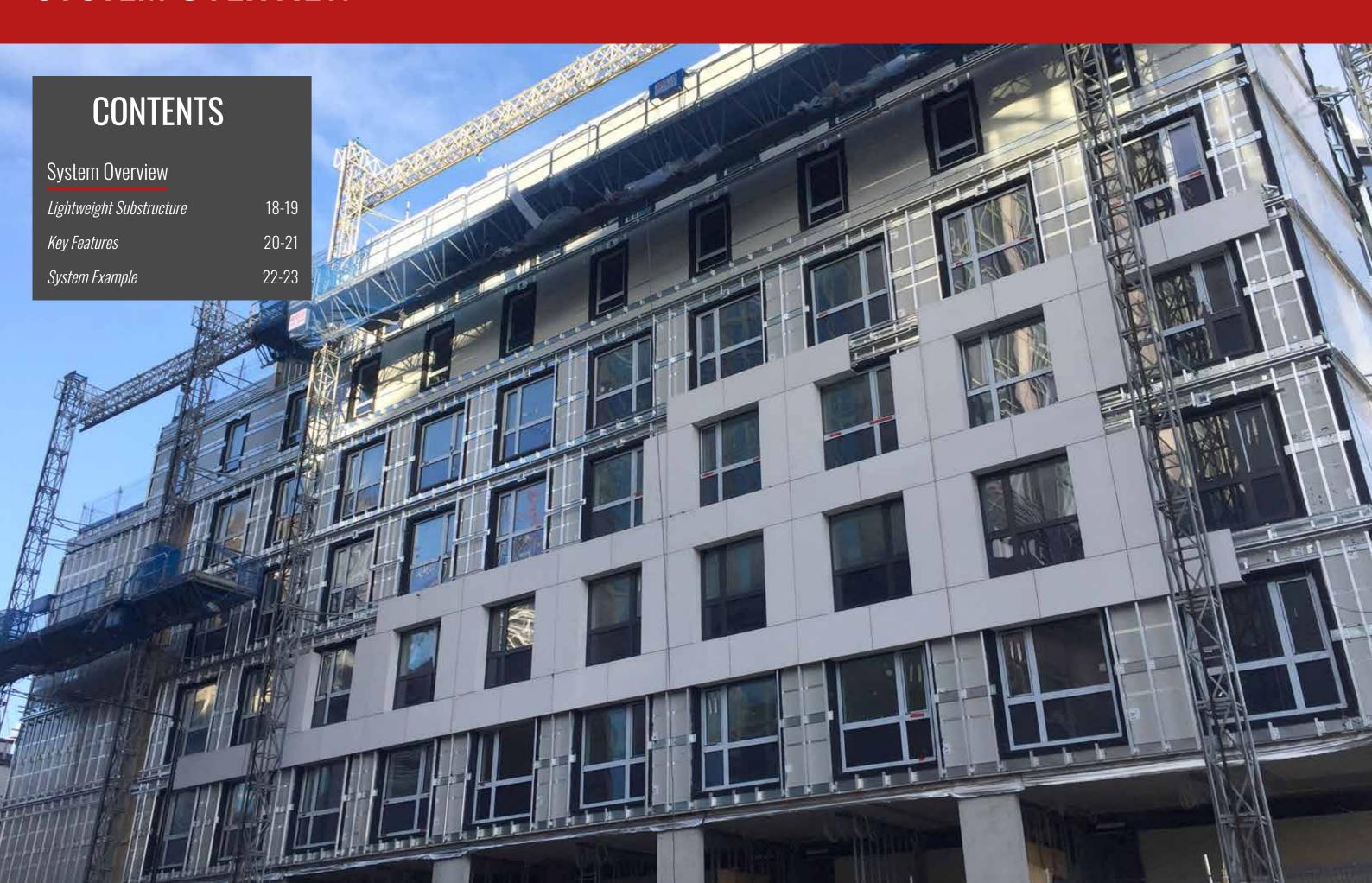
Steel Grey



Greenstone



Rosso Multicolour



## Lightweight Substructure

### **Aluminium Framing System**

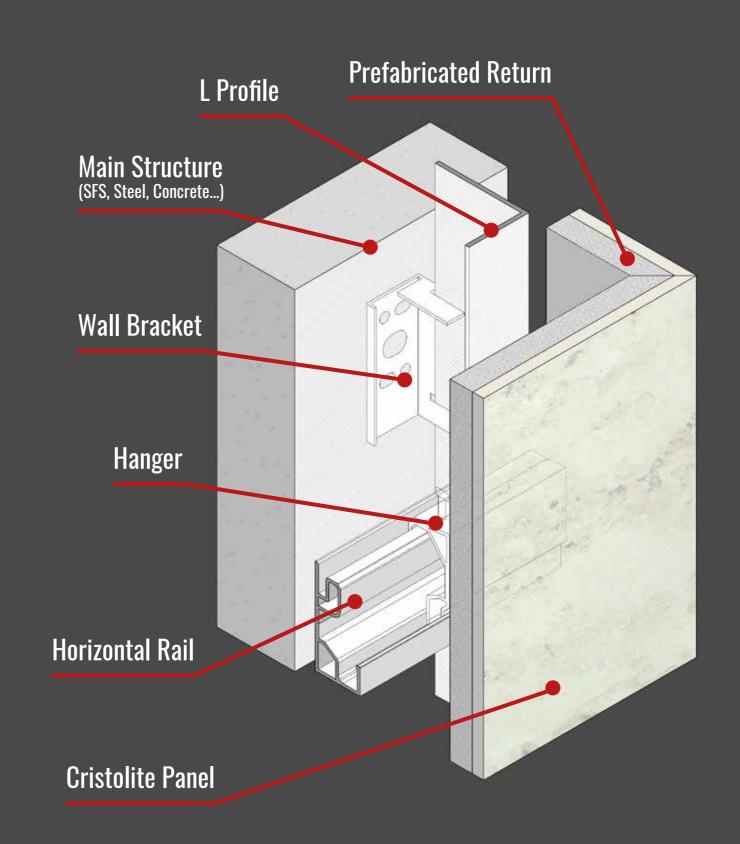
We utilise an aluminium subframe system to support our lightweight stone panels. Designed in-house and suitable for both internal and external structures, this system removes the need for wet installation of stone.

Cristolite panels are cut to size, supporting fixings and hangers attached and simply hung onto the rail system.

Thanks to the stone panels low weight, the supporting structure can be reduced. This substantially impacts the overall construction of the building.

A lightweight cladding system saves on overall installation time and building cost!

Less deadweight = less costly structure



## Key Features

### **Large Format**

Large panel sizes reduce joints to improve overall asthetics. Combined with a wide variety of materials and finishes we can create a truly unique look.



## Speed

Utilising large panel sizes and lightweight framing systems is 50% quicker than traditional stonemasonry, significantly reducing site impact.



#### Fire Resistance

Cristolite panels are highly fire resistant. They exhibit almost no fire producing properties, and are Euroclass A2-s1-d0 classified. Perfect for buildings over 18m.



### **Easy Installation**

The frameworks simple construction requires only semi-skilled labour. All parts are sent pre-fabricated negating any onsite assembly.



#### Green

Our ventilated facade is an excellent way to create a highly energy efficient wall, contributing significantly for BREEAM potential.



### **Insulation & Acoustics**

Combined with suitable insulation, our ventillated facade can produce fantastic insulating and noise cancelling advantages.



## System Example

### Subframe Installation

This example features a stone monolith fixed onto the buildings' steel superstructure.

SFS framing is the secondary structure between the aluminium framing system which transfers the stone panels dead weight to the superstructure.

The entire system is pre-designed incorporating vital structural calculations. Assembly takes a matter of days.

This example was completed by a two man team.

7-10 Days
Installation Time



### **Stone Installation**

Cristolite panels are delivered to site cut to size and with required hangers fitted. Corner pieces are already premanufactured and finished.

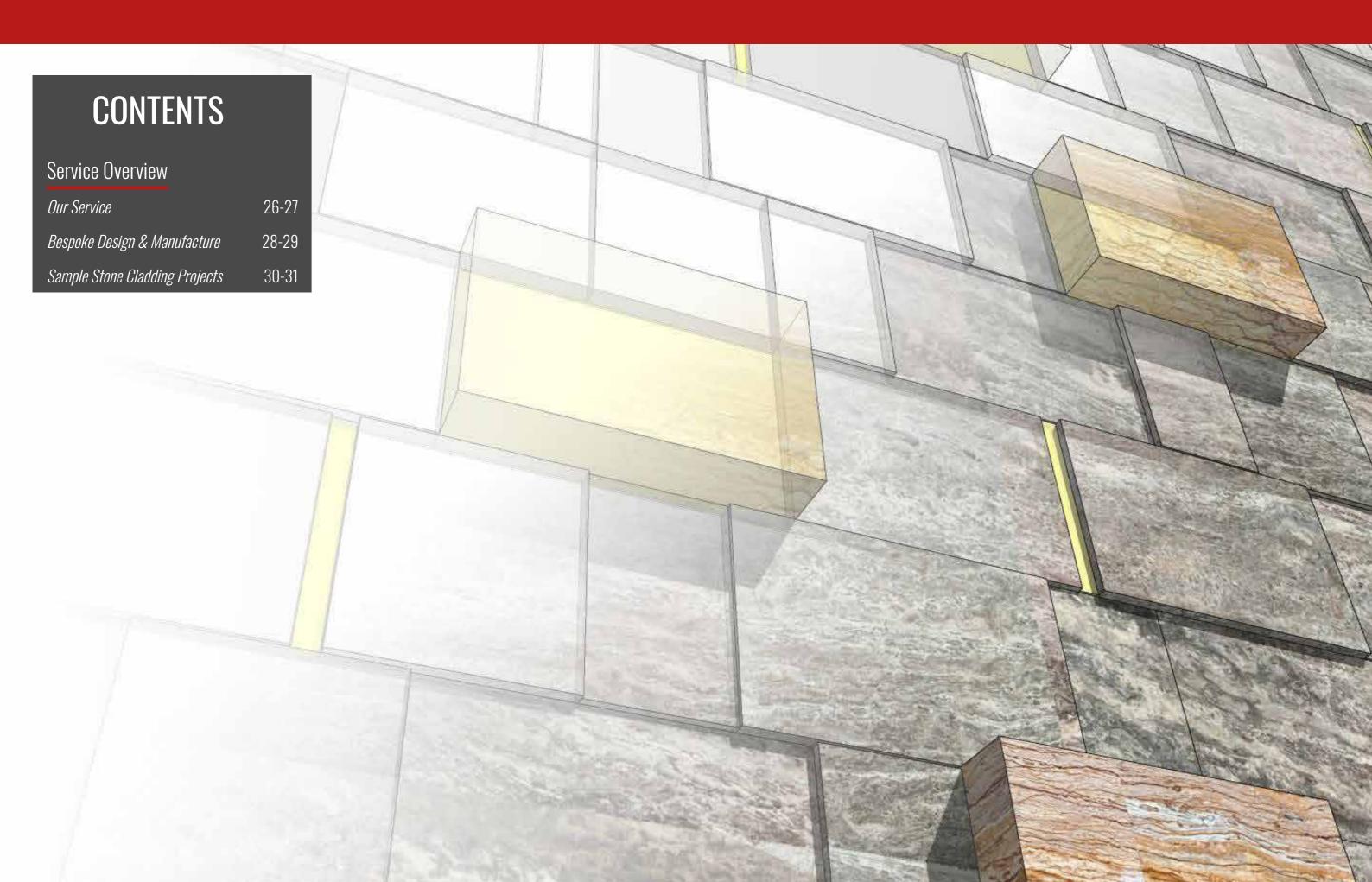
The installation procedure is simplified, as no onsite fabrication or cutting is required.

The wall can be installed in a matter of days, thanks to the simple "hang and fix" method. All joints are sealed to create a monolithic look.

This example was completed by a two man team.

3-5 Days
Installation Time





## Our Service

### **Turnkey Facades**

With evolving building regulations and building designs pushing the boundries of what is possible, Cristolite is our solution to the changing landscape of construction.

We offer a complete natural stone cladding turnkey service. Encompassing all aspects of supply, design, manufacture & fabrication.

The Cristolite system is the benchmark in external stone facades. Our precision engineering and quality designs push the limits of possibility.

Based near the port of Southampton UK, our manufacturing plant is quick to serve both international and domestic markets.

### **Material Manufacture**

We responsibly source materials from across the globe and process them at our UK base. Cristolite panels are produced in-house.



In-house architects, engineers and designers create to the latest building regulations, whilst ensuring optimum cost and project managing the process.

### Manufacture & Fabrication

Complete fabrication and assembly at our UK plant using the latest in CNC machining. This ensures precision engineering to a millimetric degree. We pride ourselves on achieving a zero nonconformance delivery.







## Bespoke Design & Manufacture

### **Challenging Solutions**

Our in-house design and manufacture capabilities allow us to push what's possible using Cristolite panels.

Architectural challenges such as three dimensional fins are possible.

## **Design & Engineering**

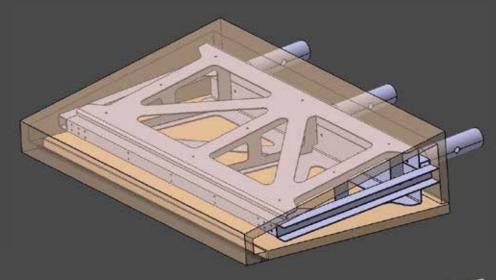
Our in-house team of designers, architects and engineers can tackle challenging design ideas. Using the latest technology we can create suitable designs on a subcontracting basis.

## Manufacturing & Fabrication

Investment in the latest CNC machinery allow us to form Cristolite into intricate shapes. Everything is fabricated in-house guaranteeing quality and cost.



**Architect Concept** 



**Technical Solution** 



**Fabrication** 

Sample Stone Cladding Projects











Our Cristolite cladding service is proven to shorten building programmes, reduce costs and simplify construction as we know it. Contact us today!

