

Rainspan™ ArGeTon



Part of Eurobond Laminates range of architectural facade systems

eurobond

| delivering low risk building solutions

Rainspan™ ArGeTon

Rainspan™ ArGeTon is a partnership between Eurobond Laminates and Telling Architectural for their architectural terracotta rainscreen system. The system comprises of Eurobond's Rainspan™ composite panel offering excellent fire, acoustic, thermal and structural performance behind ArGeTon's terracotta tile rainscreen. This combined system creates a unique building solution with a number of inherent benefits:

- All Rainspan™ systems utilise a non-combustible stone wool core and are fully tested to provide guaranteed fire resistance of up to two hours
- Fire rated spans of up to 7.5 metres reduce the need for secondary steelwork, lowering overall building costs
- Rainspan™ is quick and easy to install, allowing a weathertight building envelope to be created, removing the rainscreen installation from the critical path
- CWCT weather tightness testing has proven the Rainspan™ system to offer excellent structural and weather tightness performance
- All Rainspan™ systems help to reduce operational carbon and achieve BREEAM excellent rated buildings by providing U-values as low as $0.23\text{w/m}^2.\text{k}$
- The Rainspan™ system provides continuity of thermal performance and 'as tested' air tightness of $<1\text{m}^3.\text{hr/m}^2$ well in excess of the requirements of ADL2 2010
- System fasteners are available, specifically designed to eliminate over-tightening
- Rainspan™ has a high recycled content, both steel and stone wool can be recycled at end of life

Eurobond Rainspan™ Structural Support Panel

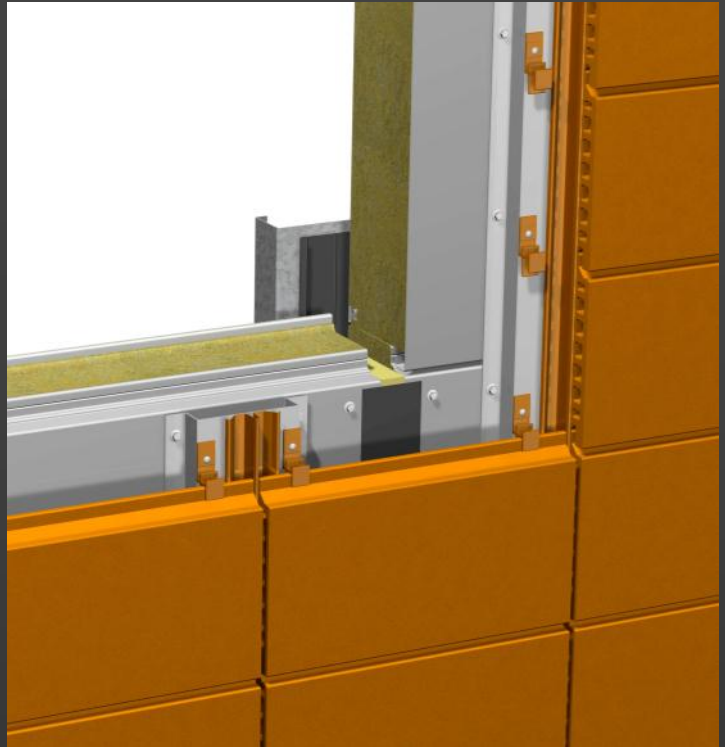
APPLICATION

The Rainspan™ system is fully tested and has been developed as a robust, interlocking, insulated panel, with long fire-rated spans of up to 6 metres and an ease of installation that creates a quick, weathertight building envelope. The Rainspan™ system provides the perfect structural support for the Telling Architectural ArGeTon facade. The system blends together the benefits of a composite panel and a rainscreen application to provide greater freedom for architectural expression. The panel is finished with an external flat profile creating an 'in-plane' surface to receive the facade carrier.

STANDARD SPECIFICATION

- Module width of 1200mm
- Rainspan™ panels have an external facing of 0.7 mm gauge steel, finished in standard white RAL9010 from the TATA Colorcoat Prisma range
- Flat external face providing a flat 'in-plane' fixing surface
- A rear air sealed panel system offering exceptionally low air permeability of $<1\text{m}^3/\text{hr}/\text{m}^2$

NOTE: other specifications/variations are available upon request



Rainspan™ System Information

Product Tolerances

Length	± 10 mm
Width	± 5 mm
Thickness	± 2 mm
Joint Gap	± 2mm

Dimensions & Weight

Core Thickness (mm)	125	150	175
Weight (kg/m ² – 0.7/0.7mm)	27	30.5	34

Thermal Performance

Core Thickness (mm)	125	150	175
U Value (W/m ² k)	0.33	0.27	0.23

Acoustic Performance

Core Thickness (mm)	125	150	175
Weighted Sound Reduction Index (Rw)	31.4	32.76	33.1

Fire Performance

	Fire Resistance (minutes)		Max Unsupported Length (m)	
	Insulation	Integrity	LPS 1208	BS 476 Pt 22
Rainspan™ 125mm	120	120	5.5	10.5
Rainspan™ 150mm	120	120	7.5	11.5
Rainspan™ 175mm	120	120	7.5	12.0



Rainspan™ ArGeTon

Technical Overview

Technical precision and quality control

The ArGeTon process is internationally acknowledged as the pioneer of dual skinned extruded clay technology. Modern production facilities, selected clay resource and quality management systems ensure unequalled tolerances and consistency of product that are a pre-requisite to create precision, low porosity and high impact resistance in the façade

Loads and fixings

Advancements in fixings technology have enabled the trial and tested Rainspan™ ArGeTon system to be designed to withstand the highest of wind loads and to provide support to interfacing elements of glazing and cladding

Aluminium substructure with vertical 'top hat' sections

Fast and lightweight, the vertical top hat detail allows for drainage and of the wet zone, preventing potentially hazardous moisture build up and micro environment generation. The top hats, with riveted clips and compression profiles, are securely fixed to the face of the Rainspan™ panel with tested and approved stainless steel fasteners. The simple to install tiles require no unwieldy and awkward mounting tools

Buildability

The system is suitable for installation by cladding contractors providing they have undergone suitable training by Eurobond and Telling Architectural

Technical support

The system is suitable for installation by cladding Contractors with full technical services support available .

- On site or in house training by our dedicated applications Engineers
- Project specific design advice entailing bespoke CAD details and site specific load/span calculations in addition to a full suite of standard details
- Guidance in specifying the most appropriate products to meet project specific requirements.

Strength and stability

The system is has been tested to resist all wind loads normally encountered in the UK and for impact to BS8200 in categories B-F.

Durability

In normal UK conditions, the system has been assessed by to have a life expectancy in excess of 60 years.

Behaviour in relation to fire

As well as Class 0 surface spread of flame, the Rainspan™ ArGeTon system is fire resistant for up to 2 hours according to BS476pt22 & also achieves up to 2 hours for reaction to fire to LPS 1208 & LPS1181pt1. All Rainspan panels have stone wool cores which are non-combustible as defined by the Building Regulations applicable to all parts of the United Kingdom and the Republic of Ireland. This includes materials classified as Class A1 in accordance with BS EN 13501-1: 2002 Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests, when tested to BS EN 13501-1:2002.

Air and water penetration

The baffled vertical and horizontal joints between the tiles will minimise water entering the cavity. Any water collecting in the cavity will be removed by drainage and ventilation

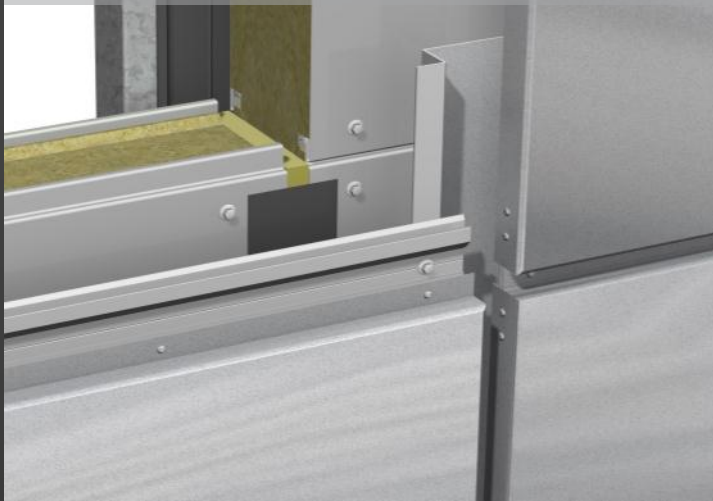
Maintenance

Damaged tiles may be replaced individually without disturbing adjacent tiles Argeton is a low maintenance façade.

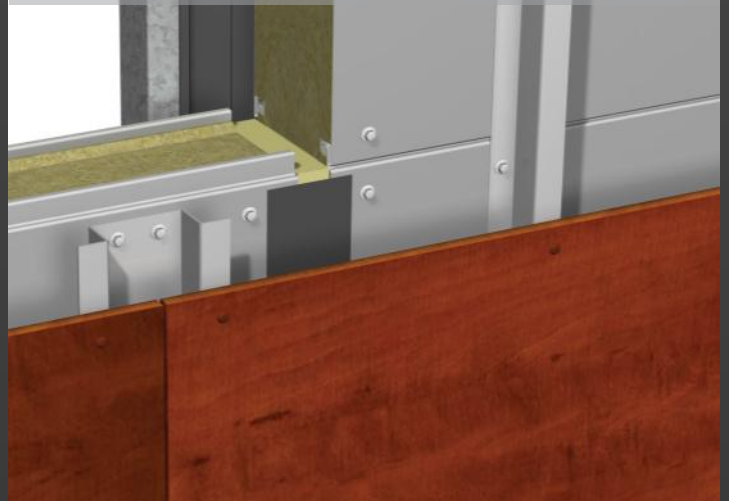
Damaged tiles may be replaced individually without disturbing adjacent tiles, the maintenance manager should be briefed to look out for any cracked or broken tiles which should be replaced without delay.

Rainspan™ Systems

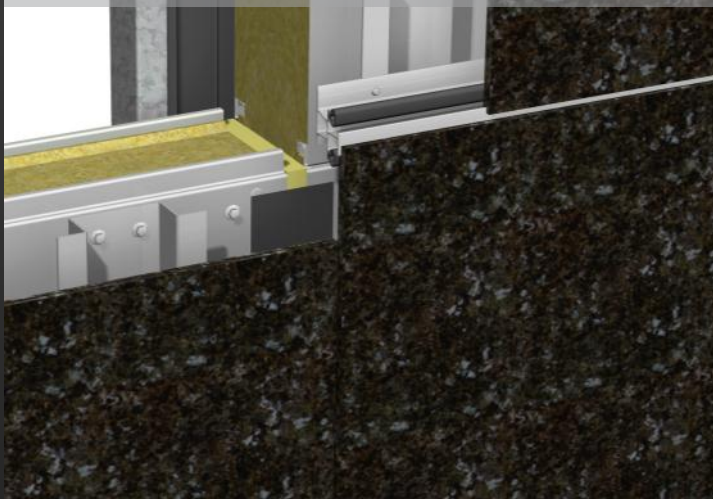
Rainspan™ ACM



Rainspan™ Parklex



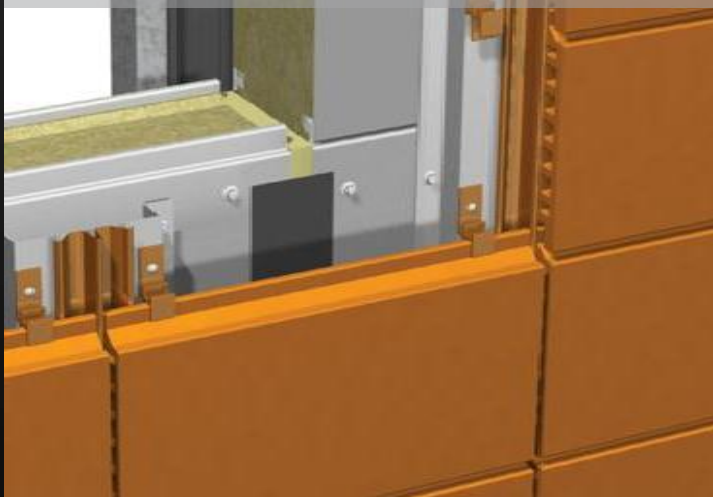
Rainspan™ Aerolite



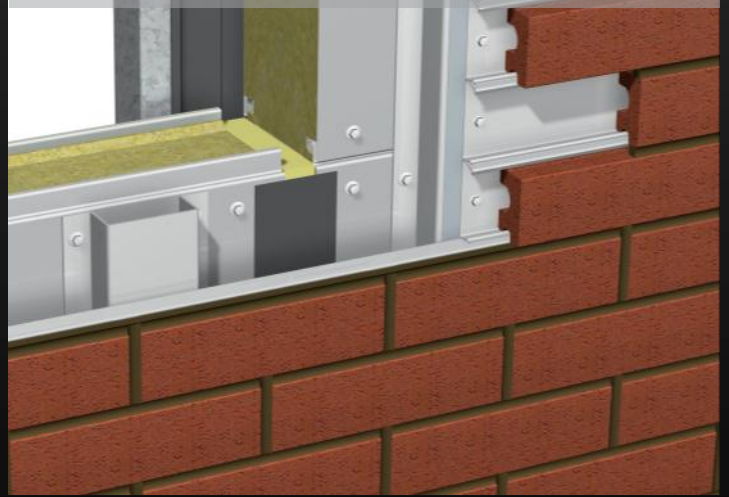
Rainspan™ Timber



Rainspan™ ArGeTon



Rainspan™ Corium



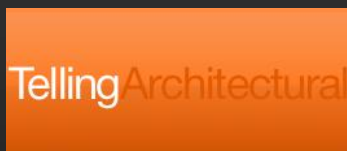


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