

1. Product overview

Petrarch is a versatile, reconstituted stone cladding solution, created primarily from natural by-product materials, such as marble. A bespoke thermoset polymer and woven glass fibre rovings result in a panel with incredible strength, boasting a Class A fire rating (ASTM E84-24).

Highly durable and impact resistant, it is considerably lighter than natural stone and cement-based systems. Designed for perfection, this man-made alternative to stone cladding is extremely weather resistant - designed to withstand the most severe environmental conditions, and just like natural stone, Petrarch matures over time, giving character and depth to any architectural scheme.

Petrarch reconstituted stone panels are manufactured in the UK where the product has been supplied to the rainscreen industry for over 50 years.

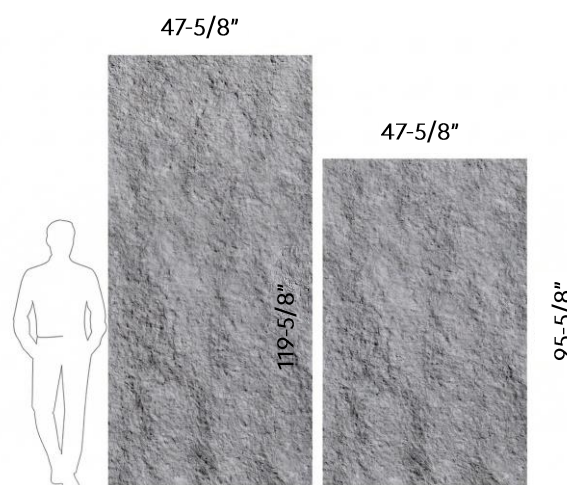
2. Features

- ICC-ES Listing Report ESL 1622
- Class A fire rating (ASTM E84-24)
 - Flame-spread index ≤ 25
 - Smoke-developed index ≤ 450
- Part of multiple NFPA 285 assemblies
- Installation by mechanical secret fix, adhesive bonded and face fixing.
- Mechanical secret fix and face fix systems CWCT Wind load and Impact tested.
- Colours and textures emulate natural stone
- Complimentary color-matching service.
- Extremely durable surface, easy to clean and maintain
- ISO 9001 & 14001 accredited
- EPD verified
- Industry leading 50-year warranty

3. Formats

Petrarch is available as standard in two nominal thicknesses and board dimensions:

- 5/16"
- 7/16"



To reduce waste and costs, we recommend designing panel layouts to optimise panel dimensions.

Please contact our team for assistance on material optimisation.

4. Technical specifications

Physical properties	Value		Reference	Comments
Thickness	5/16" (7mm)	7/16" (10mm)	Petrarch QS	
Weight	3.22 lbs/sf	4.51 lbs/sf	Petrarch QS	
Density	135 lb/ft ³ (2163 kg/m ³)		Petrarch QS	

Manufacturing tolerances				
Thickness	+1/16" / -1/32" (1.5mm/-0.5mm)		Petrarch QS	
Length and width	Max. ±5/64" (±2mm)		Petrarch QS	
Diagonal length	±1/18" (±3mm)		Petrarch QS	
Flatness	≤ lower of 0.3% of diagonal or 5/32" (4mm)		EN 15286-4.1.3	

Surface				
Surface finish defects (refer to section 5)	Not visible		EN 12206-1:2004, 4.5.2	17ft viewing distance at 90 degrees, under normal daylight conditions.
Back surface	Only one visible face		Petrarch QS	Back of the panel is not subject to visible surface quality checks.
Cut edge chipping	≤5/64" (2mm)		Petrarch QS	Untreated, saw marks might be visible. Edge sealing not required.

Fire performance				
Reaction to fire	A2-s1, d0		EN 13501-1	
	B-s2, d0		EN 13501-1	Available upon request.
Surface Burning Characteristics	Class A		ASTM E84	Flame spread index ≤25 Smoke-developed index ≤450
Façade fire testing	PASS		NFPA 285	Petrarch rivet fixed & mechanical secret fixed.

Mechanical properties				
Bending strength Rm	2,900 psi (20 MPa)		EN 14617-2	
Freeze-thaw resistance	98.7%		EN 14617-5	Ratio of mean values against initial bending strength value.
Linear thermal expansion	12.1x10 ⁻⁶ / °F (21.8x10 ⁻⁶ / °C)		EN 14617-11	Longitudinal along length.
Water absorption Rm	1.14% weight		EN 14617-1	

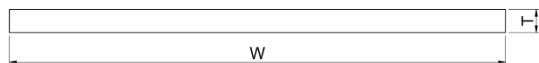
Wind load and impact resistance				
Wind load resistance	50.12 PSF (2.4 kN/m ²) - Serviceability 75.18 PSF (3.6 kN/m ²) - Safety		CWCT Standard	Petrarch rivet fixed & mechanical secret fixed (PA4 Inserts).
	79.36 PSF (3.8 kN/m ²)	75.18 PSF (3.6 kN/m ²)	EAD090062-01-0404	Petrarch rivet fixed & mechanical secret fixed (Keil anchor).
Impact resistance	Category B Soft Body - Class 1 / Moderate Risk Hard Body - Class 1 / Negligible Risk	Category B Soft Body Class 1 / Negligible Risk Hard Body Class 1 / Negligible Risk	CWCT TN 76	Category B - Readily accessible to the public and others with little incentive to exercise care. Chance of accident occurring and misuse.
	Category III* - Rivet fixed	Category I* - Mechanical secret fixed	EAD090062-01-0404	Category I: Zone readily exposed to impacts but not subject to abnormally rough use. Category III: Zone not likely to be damaged by normal impacts caused by people or by thrown or kicked objects. * Refer to ETA for further information

Environmental				
GWP-Total A1-A3	7.66 lb CO ₂ /ft ²	10.73 lb CO ₂ /ft ²	BREG EN EPD 000620	Global Warming Potential. Value: 2.38 lb CO ₂ /lb of material.

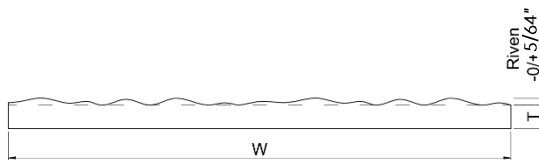
4. Colours and finishes

Petrarch is available in four standard finishes and a range of standard and custom colours.

Petrarch® Smooth.



Petrarch® Riven.

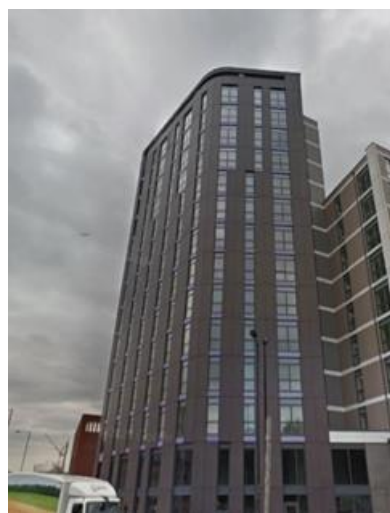


Due to the manufacturing process of Petrarch and the use of natural raw materials, there is always a small possibility that minor colour differences may occur between production batches. Good practise is to ensure all panels on the same façade/block/area come from the same batch and are ordered at the same time.

5. Colour fastness / UV resistance

Petrarch panels naturally weather, providing a dulling of the manufactured colour and gloss level especially on the dark / vivid coloured material in standard finish.

Timeframe will be dependent on facade orientation and site-specific weather conditions, particularly UV exposure.



Example of natural weathering
over a period of 10 years

Petrarch Heather Riven Standard



Petrarch panels in a matt finish (shotblasted) are less likely to suffer from the effects of weathering.

6. Surface characteristics

Petrarch panel surface is inspected following manufacturing and after each fabrication stage. Minor defects are deemed acceptable if not visible at a minimum 17ft (5m) viewing distance at 90 degrees, under normal daylight conditions.

The use of natural raw materials and unique manufacturing processes can create surface characteristics which are not detrimental to the performance of the panel.



Dent



Paper Crease



Pin hole /
Open Texture



Surface Random
Pattern



Pigment Mark



Blooming /
Mottling

7. Certifications

Reference	Country	Description
BBA Agrément Certificate 21/5873	UK	Petrarch A2 Rainscreen Cladding Panel System
ETA 25/0964	EU	Petrarch A2 RF (Rivet Fixed) and MSF (Mechanical Secret Fixed) Kits
ICC ESL 1622	US	Petrarch A2 ASTM E84 ICC ESL Listing Report
BREG EN EPD 000620	ALL	Petrarch Environmental Product Declaration
ISO 9001	ALL	Quality Management System
ISO 14001	ALL	Environmental Management System