



EQUITONE [inspires] Material Information Sheet

1. Product Appearance

EQUITONE [inspires] is a high-density fiber cement panel with a digital printed surface covered with a UV finishing.

The surface finish is smooth, hard, matte, and resistant to UV radiation. The UV finishing provides a hard, dirt resistant surface finish with a high abrasion resistance and a permanent and durable anti-graffiti surface.

The panels are calibrated to ensure a consistent thickness. The rear receives a UV coating.

2. Color

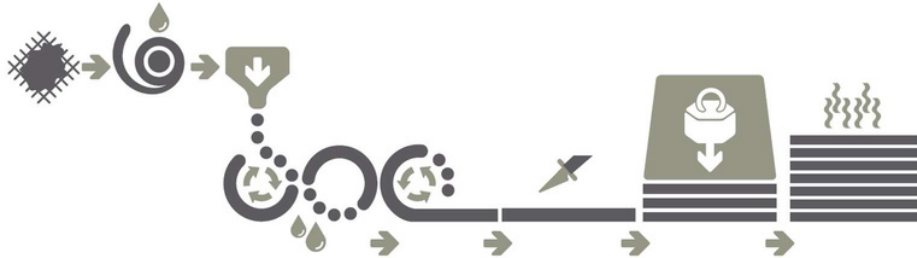
EQUITONE [inspires] is available in a wide range of designs inspired by nature including wood, concrete, stone, and rust graphics. The digital print technology also allows for custom designs and images to be printed on the panel.

3. Product Composition

EQUITONE [inspires] panels consist of cement, water, mineral fillers, cellulose, and synthetic organic reinforcing fibers. This creates an ASTM E84 Class A material with 0 flame spread and 0 smoke development. The finish consists of a digitally printed surface covered with a UV-cured topcoat.

4. Production Method

EQUITONE [inspires] is a highly compressed, air-cured fiber cement material manufactured in Poland (Europe).



EQUITONE [inspires] panels are manufactured through the Hatschek process where the base materials which are mainly cement, fibers, cellulose, water, and optional pigments are first mixed together to form a slurry. This slurry is then pumped into several vats with rotating cylindrical sieves on the surface of which a film of fiber cement is formed through a sieving mechanism as they rotate, which is then transferred to a felt belt traveling overhead. This thin layer of fiber cement is then dewatered before being transferred via the felt belt to a forming drum on which several layers of fiber cement are collected and squeezed together until the required thickness is achieved. Once this occurs, this fresh sheet of fiber cement is cut by an automatic cutting knife. A conveyor then transports the sheet to where all the sheets are stacked with an interleaving steel plate. The stacked sheets are then highly compressed, resulting in a high-density material.

This is followed by a curing process where the panels harden under ambient temperature and without vapor pressure.

The panels are calibrated for a consistent thickness.

Subsequently, EQUITONE [inspires] receives a digital print, with UV hardened topcoat offering a graffiti resistant surface on the front face. The back side is finished with a UV coating to balance the humidity of the panel.

5. Dimensions and Tolerances (Imperial)

EQUITONE [inspires] is available in a standard thickness of 5/16 in. The panels are available in trimmed (maximum usable size) formats.

Dimensions	
Nominal Thickness	5/16 in

Width	
Trimmed	49 in

Length	
Trimmed	98 in / 122 in

Tolerances ¹ (for cut and trimmed panels)	
Thickness	0.008 in
Width	0.039 in
Length	0.039 in
Squareness	0.039 in

Weight per m ² (air dry)	
	3.44 psf

Weight per panel (without pallet)	
2500 x 1250 mm (trimmed)	3100
116 lbs	
x 1250 mm (trimmed)	144 lbs

Packaging	
Number of panels on a pallet	20

Usable surface per pallet	
2500 x 1250 mm (trimmed)	672.7 ft ²
3100 x 1250 mm (trimmed)	834.2 ft ²

Gray scale discoloration according to PN-EN 201056-A2:1996	
Gray scale discoloration	4-5

¹ Factory tolerances for trimmed outperform the requirements of the EN12467 Level I and II dimensional tolerances, respectively; as well as all criteria set forth on ASTM C1185.

² Color tolerance are only to be measured on dry surfaces. The color deviation may differ depending on the angle of light incidence and the angle of view.

5.1 Dimensions and Tolerances (Metric)

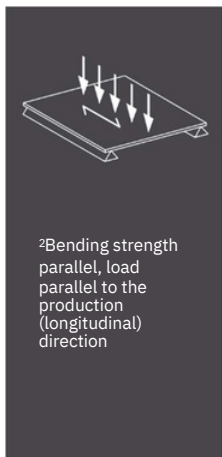
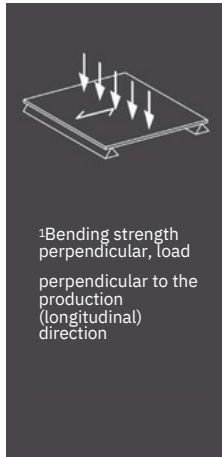
EQUITONE [inspires] is available in a standard thickness of 8 mm. The panels are available in trimmed (maximum usable size) formats.

Dimensions	
Nominal Thickness	8 mm
Width	
Trimmed	1250 mm
Length	
Trimmed	2500 mm / 3100 mm
Tolerances ¹ (for cut and trimmed panels)	
Thickness	± 0.2 mm
Width	± 1 mm
Length	± 1 mm
Squareness	± 1.0 mm/m
Weight per m ² (air dry)	
	16.8 kg/m ²
Weight per panel (without pallet)	
2500 x 1250 mm (trimmed) 3100 x 1250 mm (trimmed)	52.5 kg 65.1 kg
Packaging	
Number of panels on pallet	20
Usable surface per pallet	
2500 x 1250 mm (trimmed) 3100 x 1250 mm (trimmed)	62.5 m ² 77.5 m ²
Gray scale discoloration according to PN-EN 201056-A2:1996	
Gray scale discoloration	4-5

¹ Factory tolerances for trimmed and untrimmed panels outperform the requirements of the EN12467 Level I and II dimensional tolerances, respectively.

6. Material Properties (EN)

EQUITONE [inspires] cladding panels conform to the requirements of EN 12467:2012+A2:2018 “Fiber cement flat sheets – Product specification and test methods.” The results below are presented as defined by the standard.



Classification				
Type of product		EN 12467	NT	
Durability classification		EN 12467	Category A	
Strength classification		EN 12467	Class 4	
Dimensional tolerances for trimmed panels		EN 12467	Level I	
Dimensional tolerances for untrimmed panels		EN 12467	Level II	
Characteristics				
Mean density		EN 12467	1750 kg/m ³	
Characteristic dead load g _k (8 mm)	dry	-	0.17 kN/m ²	
Characteristic dead load g _k (12 mm)	-	-	-	
Moisture movement	-	-	0.26 kN/ m ²	
Characteristic bending strength perp. ¹ ambient	30 or 90°	EN 12467	0.1	%
Characteristic bending strength par. ² ambient		EN 12467	24.0	MPa
		EN 12467	18.5	MPa
Partial safety factor γ _m ³	ambient	-	2.0	-
Mean module of elasticity	ambient	EN 12647	12,000	MPa
Water impermeability	-	EN 12647	No Drops /Pass	
³ Recommendation for the safety concept according to the Eurocode standard if no national regulation exists.				
Durability requirements				
Freeze-thaw test for Category A panel		EN 12467	Pass	
Heat-rain tests for Category A panel		EN 12467	Pass	
Warm water test		EN 12467	Pass	
Soak-dry test		EN 12467	Pass	
Fire Classification				
Flame spread rating				
Smoke development classification				
		EN 13501	A2-s1,d0	
		ULC S102	0	
		ULC S102	0	
Other characteristics				
Thermal movement	□	-	0.01 mm/mK	
Thermal conductivity	□	ASTM C518	0.407 W/mK	
Moisture content at 20°C, 65 % humidity		-	< 10% M. - %	
Poisson's ratio	□	-	0.2	-

Note to the units: 1 K (degree Kelvin) = 1°C, 1 MPa (Mega Pascal) = 1 N/mm², M.-% = mass percentage

Note: EQUITONE [inspires] panels also comply with the requirements of ISO8336:2017 “Fiber-cement flat sheets – Product specification and test methods.”

6.1 Equivalent Material Properties (ASTM)

Classification

Minimum strength classification	ASTMC1186	Grade III
Dimensional tolerances for trimmed panels	ASTMC1186	Pass

Physical requirements and characteristics

Mean density	dry	ASTMC1185	≥106	lb /ft ³
Moisture movement	30-90 %	ASTMC1185	≤0.12%	%
Characteristic flexural strength	dry	ASTMC1185	≥2320	psi
Characteristic flexural strength	wet	ASTMC1185	≥2160	psi
Water tightness		ASTMC1186	Pass	
Moisture content		ASTMC1185	≤12%	%

Durability requirements

Frost resistance (freeze/thaw)		ASTMC1186	Pass	
Warm water resistance test		ASTMC1186	s	
Mean water absorption		ASTMC1185	Pass	%

Fire and safety

Material burning characteristics	ASTME84	Class A	≤8	
Flame spread index			0	
Smoke development index			0	

Other characteristics

Thermal movement	α	-	5.5e -6	in/in°F
Thermal conductivity	λ	ASTMC518	≤ 0.25	BTU/h ft°F

Notes:

1. EQUITONE [inspires] cladding panels meet the minimum requirements of the International Building Code (IBC).

7. Advantages

Providing the application guidelines are followed, EQUITONE [inspires] fiber-cement panels have the following superior mix of properties compared to other materials:

- Reusable according to Environmental Product Declaration (EPD)
- Expected average reference service life of 50 years (based on EPD)
- Improved sound dampening of the façade
- UV-resistant
- Resistant to extreme temperatures and frost
- Weather resistant
- Resistant to many living organisms (fungi, bacteria, insects, vermin, etc.)
- Resistant to many chemicals
- Strong, rigid panels
- Permanent and durable graffiti protection.

Working with the material:

- The material is easy to drill, cut, and install with the proper tools

8. Applications

EQUITONE [inspires] can be used in several ventilated applications, including, but not limited to:

- Ventilated facade or rainscreen cladding
- Window and door reveal
- Exterior ceiling: decorative cladding of ceiling
- Soffits, eaves, and verge boards
- Interior wall and ceiling lining (subject to local regulations)

For restrictions on the above-mentioned applications read the specific application guidelines.

The panels may be face or concealed-fixed with Etex proprietary or recommended fixing solutions.

EQUITONE [inspires] cannot be used in the following applications, but not limited to: Internal applications exposed to direct moisture e.g. wet areas, situations with direct contact with standing snow or ice, and applications where exposed to long-term temperatures exceeding 80°C/176°F.

9. Health and Safety Aspects

During the mechanical machining of panels, dust can be released which can irritate the airways and eyes. Depending on the working conditions, adequate machinery with dust extraction and/or ventilation should be foreseen. The inhalation of fine (respirable size) quartz-containing dust, particularly when in high concentrations or over prolonged periods of time can lead to lung disease and an increased risk of lung cancer. For more information, please visit www.equitone.com for the most recent Safety Information Sheet.

10. Maintenance and Cleaning

Refer to the relevant "EQUITONE Cleaning Information" Guide.

11. Certification



EQUITONE [inspires] is certified with an Environmental Product Declaration according to ISO 14025 or EN 15804. The life cycle assessment includes raw material and energy production, the actual manufacturing phase, and the use phase of the fiber cement panels. More information is available in the Material Sustainability Datasheet.

12. Information



Please visit www.equitone.com for contact details, further information, and technical documents.

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