

Introduction

WeatherPro®-L is an autoclaved fibre cement reinforced calcium silicate board (alias as fibre cement board in North America) that is 100% free from asbestos, sepiolite, inorganic fibres or formaldehyde. WeatherPro®-L is specially designed for use in applications where impact resistance is required in a high humid environment. It is a versatile, economic building board substitute of plywood, cement-bonded particle board, gypsum boards or magnesium boards. It is light weight, robust and moisture resistant. It will not warp, swell or decay in wet area.

WeatherPro®-L is an excellent substrate for ceramic tiles. It can be applied in direct weathering applications when used in conjunction with external grade paint finishes. The board is manufactured to ISO 9001 quality management system and ISO14001 environmental management system, and has obtained the Green Product Label Award issued by National Environment Protection Bureau.



Description

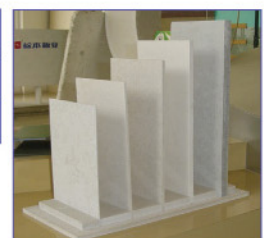
WeatherPro®-L is produced from a mixture of cement, ground sand, special cellulose fibres and selected fillers to impart durability, toughness and moisture resistance. The board is then cured by an autoclaving process whereby the ingredients are reacted together under the effects of super-heated steam and high pressure. The synthetic cement silicate binder provides exceptional dimensional stability and an unrivalled resistance to movement due to effects of moisture or heat. The board will not rot or support fungal growth and is unaffected by sunlight or steam. The board does not contain any soluble ingredients or free alkali which could be dissolved by moisture or condensation and causing unsightly marks. If exposed to moisture, the board will completely recover on drying out, with no permanent loss of strength. The board will not degrade with time and within normal applications, the life of the product is limited only by the durability of the supporting structure and materials used in fastening. WeatherPro®-L is natural off white in colour and has a smooth finish on one side and a slightly textured reverse.



Sizes

Thicknesses	6 / 9 / 12 / 15mm ~ 25mm
Widths	900 / 1200 / 1220mm
Lengths	1800 / 2400 / 2440 / 3000 / 3050 / 3600 / 3660mm

Note: Other sizes are also available and can be produced to special order.



Manufacturing Tolerances

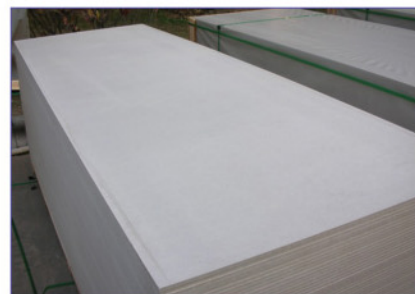
Length tolerance +/- 5mm

Width tolerance +/- 5mm

Thickness tolerance +/- 0.3mm

Diagonal tolerance +/- 5mm

* For greater board thicknesses:
Thickness tolerance is approximately +/-0.6mm



Performance

Density	1300 kg/m ³ +/-5%
Weight (approx.)	8.60 kg/m ² – 6mm 12.90 kg/m ² – 9mm 17.20 kg/m ² – 12mm
Surface alkalinity	pH 7-10
Flexural strength (along grain)	10.50 MPa
Flexural strength (across grain)	13.80 MPa
Moisture movement (ambient to saturated)	0.5 mm/m
Moisture content	Ex works - 15% In situ - 5%
Thermal conductivity	0.20 W/mK
Resistance to continuous heating	80°C
Non-combustibility	BS EN ISO 1182: 2002 BS476: Part 4 GB8624-1997, Grade A
Heat of combustion	BS EN ISO 1716: 2002
Building regulations classification	Euro Class A1
Non-permeability	ASTM C1185 : 2003, and No leakage after 6 hour of continuous water spray at 0.5litre / minute under 250pa pressure
Freezing and thawing test	No alteration or de-lamination after 25cycles of freezing / thawing (GB/T7019-1997)
Acoustic insulation	Rw 48dB / STC 48 for 88mm thick partition
Uniformly distribution load test (Clear span at 550mm)	24mm board - 35 N/m ² BS EN 1195: 1998 BS 6399 Table 1
Concentrated load test(Clear span at 550mm)	24mm board - 8 KN BS EN 1195: 1998 BS 6399 Table 1
Deflection subject to Uniformly distribution load at 3KN/m ² (Clear span at 550mm)	20mm board No visible damage BS EN 1195: 1998 BS 6399 Table 1



Facades of shop front

Specific Properties



Acoustic insulation



Decorative finishes by tiles, paint or wall paper



Easy to use



Excellent dimensional stability



Frost resistance (passed freeze / thaw test)



Good chemical resistance



Good mechanical resistance and rigidity



Lightweight but strong



Maintenance friendly



Non-combustible
BS 476: Part 4
BS EN ISO 1182
Euro Class - A1



Rot proof, anti-bacterial, resistance to insects and mould growth



Weather resistance

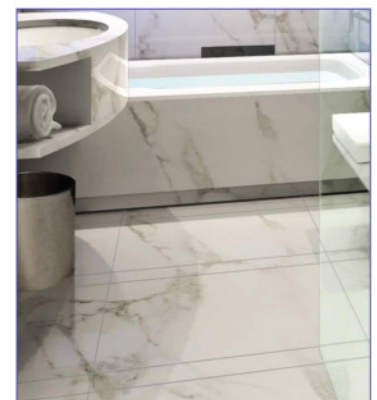
Semi-exposed concealed ceiling



Durable roof tile underlay



Casing for pipes & services



Underlay to floor tiles

Application

WeatherPro®-L can be used in a wide variety of building applications because of its easy working, fixing and decorating characteristics. Typical applications include:

- Roofing substrate panels
- Impact and acoustic wall & ceiling panels
- Internal and external wall linings
- Bathroom and shower partitions
- Kitchen and Laundries
- Ceramic tiles backing boards
- Domestic decking applications such as balconies, verandahs and pool surrounds
- Bus bar or electrical protection
- Cooling tower linings
- Facades, planking and shingles
- Parapet linings
- Sunscreens
- Floor tiles / composite floor panels
- Sanitary cubicles
- Decorative and moisture resistant ceiling



Impact and sound resistant wall

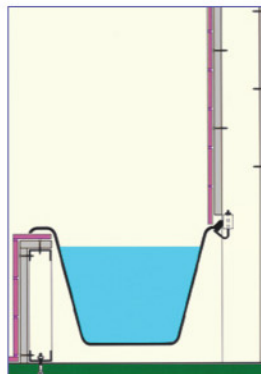


Impact resistant industrial wall lining

Wet Area Usage



WeatherPro®-L as tile backing board



Toilet partition



WeatherPro®-L vanity top with plastic laminate finish

Health
&
Safety

WeatherPro®-L is formulated without asbestos or sepiolite or any inorganic fibres. When using power saws or sanders in a confined space, dust extraction equipment is recommended to control dust levels. WeatherPro®-L is designed for non-load bearing construction. Horizontal boards or ceiling panels must not be walked on as they are not designed to take additional loads between supports; if there is a risk of this occurring, warning notices should be displayed. Fixers must ensure that they work from adequate and safe platforms where necessary.