

Product Information

FlameShield is 10 X stronger than plasterboard, and contains no toxic chemicals. As a 21st century fire proof MgO board in Australia it is non-comparable to plasterboards, **FlameShield** is compliant with Australian and BCA building standards with a Fire Resistance Level (FRL) of 90/90/90. Made from a composition of Magnesium Oxide, non-organic minerals, bonders and fibre mesh composites, our MgO board in Australia is ultra-lightweight suitable for modern construction in both residential and commercial properties. **FlameShield** is completely free from harmful toxins, making it the perfect solution for hospitals and schools. With a strong MgO board in Australia, **FlameShield** is resistant to warping and deterioration when it contact with water. No replacement is required after flooding and all you need to do it simply unscrew, dry it out 48 hours in warm conditions sugar soap wash, sand and then repaint. **FlameShield** is ideal for wet area lining, dry walling, eave lining, alfresco ceiling, suspended ceiling and areas where noncombustible and moisture resistance is necessary. It is also an excellent product to receive a wide variety of finishes.

PAA FlameShield Features

- WA Based factory minimizing lead times
- No special treatments required for termite resistance
- Recyclable and Low Embodied Energy
- Asbestos Free & Non-Toxic
- Weather resistant and durable
- No special requirements for on-going maintenance
- Moisture Resistant Can be used as a substrate in wet areas
- Non-combustible material and complies with AS1530.1
- Complies with the Australian Loading Code AS 1170.1
- 25% lighter than compressed cement sheeting
- Economical



High Tensile and Impact Strength

It uses 2 layers of high tensile fiberglass meshes, which gives our **FlameShield** MgO board model bending strength more than 16Mpa and the impact strength more than 25Mpa. This maintains a good racking strength on the board application. It provides a more durable wall construction material compared to traditional drywall to help prevent surface scuffs and abrasions as well as deeper indentations that require frequent cosmetic repair.

Breathable

Our **FlameShield** magnesium oxide boards is durable and fully breathable. The boards we recommend handle exposure to moisture extremely well. It has the natural ability to get in and out moisture, giving a heavier and more durable construction building. It takes the place of oriented strand board (OSB), plywood and gypsum sheetrock for all sheathing, wallboard, subfloor, and roof decking applications.

Non-formaldehyde and Non-Toxics

FlameShield MgO board contains no nasty chemicals, no gypsum, no cement-based content, no formaldehyde. 100% sustainable, 100% compostable, Co2 negative, vapor permeable. And does, not off-gas. It is ideal for chemically sensitive people.

Moisture/Water Resistant

FlameShield MgO board is water-resistant and virtually impervious to water, not more than 0,34% weight Magnesia cement used for the production is insoluble in water and prevents delamination of the board as well as swelling after long-term exposure to water. It retains its excellent dimensional stability, even in damp and humid conditions due to it is chloride free and will have no water happens from its' inner side. It can be applied at an early stage of the construction program, even before the building is weathertight. It is suitable for semi-exposed applications and can be left undecorated.

Acoustic Performance

FlameShield is characterized by excellent acoustic and thermal insulation. It can be successfully used in combination with modern insulation materials (insulant, construction membrane) for exterior decoration of the building at quite low values of heat conductivity (0.0186 W/mK) and acoustic transmission (30 DB).

Dimensional Stability

FlameShield Magnesium Oxide board has excellent dimensional stability under heat and in severe moisture environments. It also has a small expansion rate. Boards are suitable for most industrial applications due to good impact resistance. Our board is a porous material of a sponge-like texture. Humidity does not fill completely in its pores leaving some space for expansion when being frozen. Due to this, it does not change its inner structure when being frozen. Dimensional stability of the MgO board is 50 cycles in freeze/thaw and the loss of mechanical strength is only 0.5% (at the allowable of 18%).

Efficient Cutting & Fastening Method

FlameShield is easy to install, it is simple to cut, drill, shape and fixed. It can be worked in the same way as timber products with no special tools required, and it is also maintenance-friendly. Our FlameShield MgO board will work best with carbide tools, resulting in clean square cuts that will provide higher-quality installations. Circular saws including table saws work best. The boards can be scored and snapped using disposable knives that can cut through the fiberglass mesh from the smooth side. Edges can be routed flush or to create shapes and patterns using carbide cutters. When using saws like the hand electric saw with precision depth adjustment, sheets can be cut directly off the pile without marking the sheet below, which contributes to fast and accurate work. The cuts are smooth and easy with conventional carbide-tipped circular saw blades and that ordinary bimetal jigsaw and multi-tool blades work fine for cutting around penetrations. And the crew fastened the siding with pneumatic roof nailers, and, it can also be fastened with high-quality screws (conventional black drywall screws sometimes snap off), framing nails, and siding nails. It is better than fiber cement to cut because the dust wasn't as irritating and the composition is easier on cutting tools. But as with cutting any materials that make dust, all workers should be protected from the dust by using a vacuum, blowers, breeze, or dust masks.



New Factory & Showroom. Tel: +61 8 6885 5300 www.paa.net.au
60 Belmont Avenue
Rivervale 6013 Mobile 0433 486 499 Email: enquiries@paa.net.au

