

SPECIFY AND DESIGN WISELY.

WHY ALL THAT GLITTERS IS NOT ALWAYS GOLD.





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Pre-finished fibre cement has always been architects' top façade material choice for bringing their creative design to life.

Tougher fire safety regulations and performance requirements on external walls, together with the high design flexibility offered by non-combustible and pre-finished fibre cement materials has resulted in a significant increase in the popularity of this lightweight façade solution.

Given a range of pre-finished fibre cement solutions available in the market, it is important to consider the following questions when considering specifying or using this popular façade solution.

IS LONG TERM DURABILITY AN IMPORTANT FACTOR FOR THE PROJECT?

Australian standard AS2908.2 sets minimum physical performance requirements for fibre cement materials intended to be used for external cladding. It is therefore important that as a minimum, the material is fully compliant with the performance requirements outlined in this standard.

The type of panel fixing system plays an important role in preventing panel cracking and ensuring that panels remain in good shape over the course of their service life. Most fibre cement products in the market have none or very minimal movement allowances within their fixing systems when connected to a metal support frame.

Consequently, when the metal frame thermally expands, it may become overstressed and cause the panel to crack, which is considered a common issue with standard fibre cement. This is because the thermal movement of steel is considerably more than that of fibre cement.

It is also important that the fixing system of a fibre cement panel provides a stress-free connection. This is why fibre cement should not be screw fixed to metal support frames in an external application.

The system should have a mechanism to control the depth of the connection and to prevent clamping the panel onto a metal frame which would constrain the movement allowance within the connection. Simply having an oversized hole in the panel without any mechanisms to control the connection depth and centralising the fixings within the panel hole does not ensure a stress-free connection. This may result in over stressing and cracking of the panel.

Whether a ventilated or non-ventilated façade system is selected plays a critical role in the longevity and performance of fibre cement panels in an exterior application. A ventilated façade has been proven to be the most suitable façade system for fibre cement, as the balancing of panels on both its external and internal faces ensures that they remain in good condition for many years.

Ventilation eases the temperature within the cavity and reduces the thermal movement of the cladding framing and substructure.

Project location also has a key role in the long-term durability and performance of the panels. Some fibre cement materials and their façade system have limitations on applications in coastal areas and C5 corrosion zones.

IMPORTANT QUESTIONS TO ASK THE MANUFACTURER

- Is the material compliant with AS2908.2?
- Does the proprietary panel fixing system have the required mechanism and installation accessories to ensure a stress-free connection?
- Is the movement allowance of the fixing system adequate for your project?
- What type of façade can the panels be installed on?
- What façade type has been used for weatherproof testing and compliance?
- Does the material and its fixing system suit the project location, particularly in C5 zones?

VENTILATED FACADES

Ventilated facades also provide the building and its occupants with a number of added values



Positive contribution to energy savings



Assists with condensation management



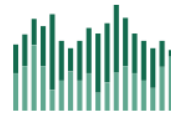
Keeps the weather barrier dry and healthy

DRAINAGE

Provides an effective drainage path for any moisture passing the cladding skin

MINIMISED THERMAL BRIDGES

Ventilated facades provide the opportunity to apply external insulation



Increases acoustic performance of the external wall

Reduces thermal movement of the structure and cladding support frame

CONCEAL SERVICES

Provides opportunities for concealing external services such as downpipes within the cavity

LOW MAINTENANCE

Eliminates the need for exposed caulking and sealant, therefore reducing maintenance requirements



Proven to be a more sustainable and healthier facade construction

Dissipates radiant heat



Architectural design flexibility



DOES THE PRODUCT REQUIRE ANY SPECIFIC MAINTENANCE SUCH AS RESEALING?

Most pre-finished fibre cement products have a clear water repellent sealer applied to the product face. This coating may require reapplication every 10 years or potentially much earlier depending on the project location.

IMPORTANT QUESTIONS TO ASK THE MANUFACTURER

- Does the panel have any sealer that requires reapplication over the course of its service life?
- How often do the panels require resealing, and what would be the potential consequences of not doing so?
- What are the consequences if the sealer deteriorates or is damaged for any reason over the course of the product service life and moisture penetrates the panel?



DOES MOISTURE INGRESS IN THE PANEL HAVE ANY ADVERSE IMPACTS ON THE PERFORMANCE AND/OR DURABILITY OF THE PRODUCT OVER TIME?

Many pre-finished fibre cement products do require sealing on their cut edges as well as over chips and scratches where the factory applied sealer has been damaged. Structurally, these materials may be moisture sensitive, and any ingress of water into the panel due to deterioration or damage of the applied sealer could have a detrimental impact on the durability and performance of the panels.

IMPORTANT QUESTIONS TO ASK THE MANUFACTURER

- Do the panel cut edges need to be sealed?
- What would be the implications of any water ingress in the panel if the edges are not properly sealed, or if the applied sealer deteriorates or is damaged during manual handling and installation?
- Does the sealant need to be reapplied to the edges of the panel at any stage over the course of the service life of the product?

DOES THE PRODUCT MEET THE REQUIREMENTS OF THE NCC AND COMPLY WITH ALL THE APPLICABLE STANDARDS?

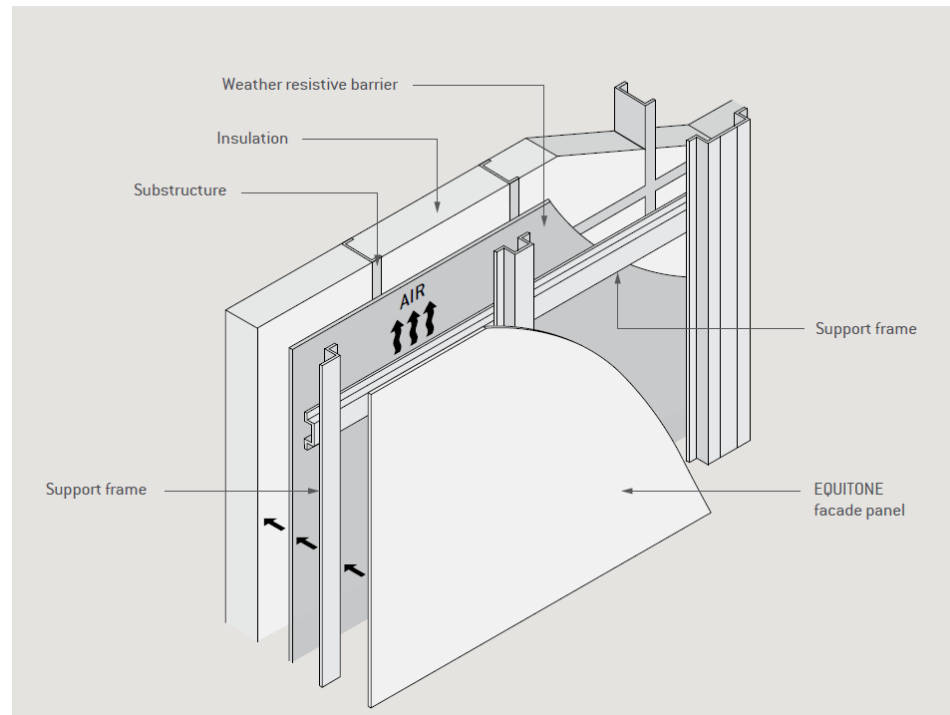
In the current climate where quality and compliance of build have come under increasing scrutiny, ensuring that the product and its façade system fully comply with the NCC is paramount.

Compliance with FP1.4 & P2.2.2 of the NCC is particularly important in the context of weatherproofing.

WHY CHOOSE EQUITONE?

All EQUITONE materials are manufactured in full compliance with EN2467, AS2908.2 and ISO8336 in state-of-the-art facilities in Belgium and Germany by the Etex Group, the world's largest manufacturer of fibre cement façade materials and leader in innovative architectural fibre cement materials.

The materials are water resistant, and any water ingress has no adverse impact on durability and structural performance of the boards. A maintenance free and through colour material, the panels do not require resealing over the course of its service life or any post installation treatments. *



EQUITONE's ventilated façade systems have been independently tested and certified for the purpose of weathertightness compliance in accordance with NCC regulations.

Offering multiple framing, weather barrier (rigid or flexible) and panel fixing options, the system gives designers the flexibility to bring their ideas to life.

The intelligent, stress free proprietary UNI Rivet fixing system allows for a 2.25mm three-dimensional movement allowance in the fixing connections, which can eliminate the risk of cracking. The panels may also be concealed fixed using the SFS concealed fixing solution, which allows for high degree of movement.

With the independently assessed expected service life of 40 to 60 years, EQUITONE provides a long lasting, durable, high performing architectural façade for your projects.

* Only EQUITONE [natura] requires sealing to prevent picture framing, which is only a visual and temporary phenomenon when the panel is wet. The sealer does not require reapplication.



Etex Exteriors ANZ
Suite 201
198 Harbour Esplanade
Docklands VIC 3008
Australia
+61 (0)3 9988 2290
info.australia@equitone.com
www.equitone.com