

PRODUCT BULLETIN



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Welcome to the first of what will be a regular bulletin from Australia's leading manufacturer of insulation sandwich panel construction.

If the European experience is any guide, the demand for non-combustibility in sandwich panel construction will be a large part of our future work.

In response to the growing demand for this level of performance we have developed the Econorock™ range which includes Econodeck®, Econotilt™ and our cold stores doors.

As the standards for energy efficiency, noise reduction and building integrity increase, so too will the requirement for non-combustibility in commercial and industrial buildings.

Econorock™ is manufactured from a high tech form of mineral wool and 0.6mm Colorbond® steel providing a unique combination of architectural appeal, strength and environmental performance.

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ECONOROCK™

**Fire-resistant
Mineral Wool Core
Insulated Panel**



Colorbond®
Permagard®

ECONOROCK™
Mineral Wool Core Insulated Panel

What does non-combustible mean?

A combustibility test is a very severe international test method to determine the suitability of homogenous materials that may be subjected to extreme heat or fire. Most products with high levels of organic material will be classified as combustible according to the test. The core material of Econorock™ is made from volcanic rock and has a melt temperature of well over 1100°C. Commonly used as a fire protection material in the oil and gas sector, the rockwool core material enables Econorock™ to achieve up to 180 minutes fire resistance (integrity and insulation) and is made from the only certified, non-combustible core material in common use for panel manufacture.



BCA Requirements

The requirements of the Building Code of Australia are essentially a minimum standard of required construction and reflect a basic safety of life approach in the event of fire. Sadly when fires do occur in buildings made of combustible panel materials, catastrophic losses are often the result. Add to these costs, the loss of trading for the duration of reconstruction and the real impact of fire is understood. Clearly the current standards provide little protection to the asset where fire is concerned.



Resistance to fire vs Reaction to fire

Some available panel products are currently being specified on the basis of their perceived reaction to fire. Indication of FM (Factory Mutual) Class 1 Approval has led some specifiers to believe that they have met their obligations in terms of fire and risk management.

However, many of these approvals are based on reaction to fire of panel made from combustible core material which, ultimately will burn and are capable of causing *flashover*. The FM Class 1 Approval is based on a complicated range of measures that essentially enable the use of combustible cored panels under specified conditions and fixing methods.

Econorock™ core material will simply not burn and is incapable of causing flashover in a fire.



Cold Applications

Econorock™ is a totally acceptable product for use in refrigerated buildings. While cold stores (to -30°C) are more cost-effectively built from the traditional EPS and PIR materials, applications to 0°C can effectively be built in non-combustible panel materials. All core materials have the potential to permeate water. The only difference is the time taken for the water to move through the core. The effectiveness of the design and the vapour-sealing of the building is the prime determinant of the material suitability.



Austral Insulation reserves the right at all times and without notice to make any changes, modifications or improvements to its technical data or products. Issued Sept. 2008

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