



FIRE RESISTANT INSULATION



COOL CHAIN SOLUTIONS FOR INSULATED PANEL



XFLAM is a new generation of fire resistant insulation material that is highly suitable as a core in insulated panel systems. Manufactured in a proven lamination process XFLAM insulated panel provides outstanding fire performance, excellent structural strength and advanced thermal performance. As a syntactic foam, XFLAM is safe to work with, has low toxicity and is completely recyclable.



THERMAL

XFLAM has advanced thermal ratings that do not diminish, high 'R' values are achieved using standard insulated panel thicknesses, easily surpassing the requirements of the NZBC.



NZBC COMPLIANCE

Tested and rated under the AS1530.4 and ISO 9705 for fire resistance and flashover. XFLAM panels are easily incorporated into the designs of fire cells and internal and external walls requiring a FRR.



FIRE SAFE

In the event of a fire incident, fire does not spread in the core and the behavior of the core is limited to charring. The low generation of smoke and spread characteristics contribute to the added safety for the building occupants and property.



SEISMIC RESILIENCE

The lightweight nature of XFLAM panel ensures that in the event of an earthquake the lateral loadings are minimal. Occupant safety is high and property damage is negligible due to the high bracing capacity and inherent strength of the steel skins and XFLAM core.



STRENGTH

XFLAM panel has superior spanning capabilities in comparison to other products in the market, resulting in reduced structural requirements, faster build times and a greater usable space.



SUSTAINABLE

As the lowest density fire rated insulation core on the market, less XFLAM material is required in the panel which reduces the building mass and embodied energy. Recyclability of the panel core and steel faces ensures less waste product is sent to landfill.



VALUE FOR MONEY

XFLAM is a competitive price solution for fire resistant insulations, the speed of build and benefit of NZ manufacturing ensures BondorNZ systems are installed without delay.



INSURANCE AND PEACE OF MIND

XFLAM Insulated panel are the first panels in NZ and Australia to Achieve FM accreditation for the following standards:

- FM 4880 // Internal wall and ceilings (class 1) Unlimited heights
- FM 4881 // Exterior walls
- FM 4471 // Roof Systems

These tests for accreditation are undertaken at FM Global's testing facility in Rhode Island, New York, and determine a products Performance under various fire and environmental conditions.



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**TEMPERATURE CONTROLLED ENVIRONMENTS
INSURER APPROVED PANEL SYSTEMS
FIRE ENGINEERING COMPLIANT SOLUTIONS
MANUFACTURE INSTALLATION AND WARRANTY**



CASE STUDY - MAINFREIGHT DISTRIBUTION

FOR SUPERIOR COOLCHAIN SOLUTIONS INSIST ON....



Key Selection Issues

- Bondor NZ's supply and installation offer gave the client confidence that the installation was coordinated by one party and that back to back warranties for material and installation were covered in the one document.
- A one point of contact was available to the client with a personal guarantee of being on site within 24 hours of a meeting request. This ensured good design practices were maximised using the XFLAM panel and that during construction the agreed programme and detailing was met.
- As NZ's leading fire resistant insulated panel manufacturer Bondor NZ's staff were able to reliably and accurately make recommendation on the construction details and the XFLAM panels features specific to the requirements of the New Zealand building code and insurance industry.
- The refrigeration brief was to provide continuous lengths of panel for both walls and ceilings to ensure that the vapour barrier could not be compromised and that the finished installation would be aesthetically pleasing.
- Detailed layout schemes of each individual panel height and position were produced prior to the commencement of the construction programme to ensure that the installation was co ordinated seamlessly with the daily operations of clients' business.
- 100mm XFLAM panel was chosen to achieve the required spans for the chiller walls, and the thicker 150mm XFLAM panel was selected for the ceiling panels. At this thickness the panels were able to span between the portal frames, as there where no secondary fixings available to the roof purlins due to the prevailing loads.

When global logistics giant Mainfreight wanted to convert part of a dry store operation area to a cool store for a key account they selected Bondor NZ to carry out the supply and installation of XFLAM panel alongside one of NZ's leading refrigeration companies.

The brief was to create a chiller environment within the existing dry goods store approximately 58m square by 12m high, with a suspended ceiling hung from portal frames - all to a budget and a tight time frame.

Bondor NZ's immediate response on site at the initial stages of planning ensured that they were able to assist with design and maximise the unique properties of XFLAM panel to ensure that the process was kept as simple as possible for the client and the other construction parties involved.

XFLAM panel was selected due its approved fire resistant ratings, its ability to span significant distances, and the fact the panel would be supplied in made to order continuous lengths.

As this was an operational building with structure in place XFLAM panel was easily incorporated into the facility with minimal additional costs or rework within the premises.

Approximately 7500m² of 100mm and 150mm XFLAM panel was installed at Mainfreight's flagship site at Auckland Airport over a short time frame with no disruption to the ongoing operations of the clients business.

Client // Mainfreight
Construction // Dominion Constructors
Engineers // MSC Consulting Group
Refrigeration // McAlpine Hussman
Installer // Bondor New Zealand

Core	Profile	Thickness	Colour External	Colour Internal
XFLAM	Ribbed	100mm	Titania	Titania
XFLAM	Ribbed	150mm	Titania	Titania

