

#### **TECHNICAL MANUAL**

**IBOARD Rigid Insulation Board** 

### **Product Description:**

IBOARD rigid insulation board is composed of a closed-cell thermoset polyisocyanurate foam core with two reflective foil facings. Tested in accordance with AS/NZ standards to comply with BCA/NCC requirements in concealed applications, IBOARD rigid insulation is manufactured using CFC/HCFC-free blowing agents that have zero Ozone Depletion Potential (ODP). Providing superior fire safety and higher R-values from less thickness. IBOARD rigid insulation gives sustained thermal performance over time and is widely used in brick cavity, frame-wall and concealed soffit applications. (\*\*\*If the insulation product is in an exposed application use IBOARD G1 in soffit applications and IBOARD F17 in internal lining applications\*\*\*)

## **Superior Fire Performance:**

IBOARD rigid insulation offers significantly better results than alternative products when tested to AS 1530.3, the relevant Australian fire standard for concealed applications.

#### 100% Non-corrosive:

Unlike some other insulation products, IBOARD core material is 100% non-corrosive and will not cause corrosion issues if it comes into contact with structural steel or fixings.

#### Zero Formaldehyde:

IBOARD rigid insulation contains zero traces of formaldehyde and it is fibre-free making it nonirritant to the skin, non-allergenic and safer compared to other products.

## Sizing & Coverage:

2270 x 1200mm Board Size (2.724m2 Coverage per Board)

### Thickness & Material R-value:

- 27mm (R1.23)
- 37mm (R1.68)
- 47mm (R2.14)
- 57mm (R2.59)
- 67mm (R3.05)
- 77mm (R3.50)
- 87mm (R3.95)
- 97mm (R4.41)

# **Accessories:**

- INSULTAPE 96mm Reinforced Foil Tape, 50m Roll
- IBOARD Universal Retainer Clip, 250 Pack
- IBOARD 27mm Hilti Fastener, 300 Pack
- IBOARD 37mm Hilti Fastener, 300 Pack
- IBOARD 47mm Hilti Fastener, 300 Pack
- IBOARD 57mm Hilti Fastener, 300 Pack
- IBOARD 67mm Hilti Fastener, 200 Pack
- IBOARD 77mm Hilti Fastener, 200 Pack IBOARD 87mm Hilti Fastener, 200 Pack
- IBOARD 97mm Hilti Fastener, 200 Pack

### **Important Information:**

IBOARD is not suitable for exposed applications. Use IBOARD G1 or IBOARD F17 instead.



# Fixing Instructions for IBOARD in Double Brick Cavity Application:

- Construct the inner leaf to at least an appropriate level to allow installation of IBOARD insulation boards to proceed.
- Remove excess mortar and mortar droppings from exposed edges of any installed IBOARD insulation boards.
- Measure and create holes in the IBOARD insulation boards as required to allow for wall ties to protrude through.
- Apply the IBOARD insulation boards to the external face of the internal leaf and secure in place using the wall ties and IBOARD universal retaining clips.
- Tape around the wall ties and along all the IBOARD insulation board joints with INSULTAPE Reinforced Foil Tape.
- When taping a stiff plastic scraper or blade must be used to apply appropriate pressure to the tape. Surfaces must be sufficiently cleaned to ensure they are dry and free from dust, oil or grease to ensure long-term tape adhesion.
- The outer leaf is then built up to the level of the top of the IBOARD insulation boards and the above process is repeated until the full height of the wall is reached.
- The insulation boards shall be installed in accordance with the latest version of the Australian NCC/BCA as well as any other government regulations or requirements at any given time and for any project.

### **Important Information:**

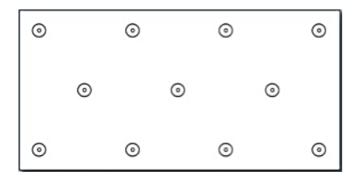
The instructions in this brochure are for illustration purposes only and are not meant to replace a licensed professional. Any construction or use of the product must be in accordance with all local zoning and/or building codes. The consumer assumes all risks and liability associated with the construction or use of this product. The consumer or contractor should take all necessary steps to ensure the safety of everyone involved in the project, including, but not limited to, wearing the appropriate safety equipment. Except as contained in a written warranty, the supplier does not provide any other warranty, either express or implied, and shall not be liable for any damages, including consequential damages. **IBOARD Must not be left as an exposed lining.** 



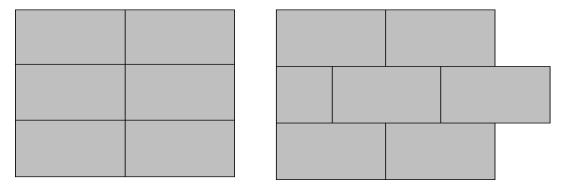


## Fixing Instructions for IBOARD in Concealed Soffit Applications (Suspended Ceiling):

- IBOARD insulation boards can be fully restrained to a concrete soffit by the use of a minimum number of 11 appropriate fasteners with a minimum head diameter of 35 mm.
- The fasteners should be evenly distributed over the whole area of the board and must offer a minimum 40 mm penetration into a solid substrate. Alternatively, a designer can calculate the required design strength to identify a suitable embedment for the design loading of a project and/or application.
- Standard fastener layout is 4 x fasteners along each length (no less than 50mm and no more than 150 mm from edge of board) with additional 3 x fasteners along the middle of the board length-wise for total 11 fasteners. (See below detail).



- Where the board may be subject to external wind pressure, the requirement for additional fixings should be assessed in accordance with appropriate Australian standards.
- Consideration should be given to the material the fixing is made from and should be deemed appropriate for the application, exposure and required fire rating by the fixing manufacturer.
- Board joints can be either staggered or squared (See below detail).



- Cutting should be carried out by using a fine-toothed saw or by scoring with a sharp knife, snapping the board over a straight edge and then cutting the facing on the other side. Ensure accurate trimming to achieve close-butting joints and continuity of insulation.
- For all fixing methods board joints should be taped with a minimum 96 mm wide foil tape carefully following all taping specific instructions below (See next page).



# Fixing Instructions for IBOARD in Concealed Soffit Applications (Continued):

- Firstly, ensure that the climate conditions are suitable for the tape being used as well as the product the tape is being applied too.
- The surface of the IBOARD insulation boards must be sufficiently cleaned to ensure that it is dry and free from dust, oil or grease to ensure long-term tape adhesion.
- The release liner on the tape should be removed 300 600 mm at a time and the adhesive face pressed firmly onto the insulation facing. Care should be taken not to stretch the tape tightly as this will create buckles and voids in the contact area.
- Care must also be taken to apply the tape over the centre of the join so that there is
  adequate area on both sides of the joint for the tape to bond. Uneven width distribution
  also puts additional shear stress on the smaller side of the butt joint.
- When taping a stiff plastic scraper or blade must be used to apply appropriate pressure
  to the tape. The tape should be wiped firmly from the centre out (like wallpaper) and the
  more pressure that is applied, the more surface contact will be reached, therefore, the
  greater the bond will be.
- The tape should then be cut and fitted with a knife and scissors. The same wiping
  instructions should then be used as above. In the absence of other protection, it is best
  practice to cover exposed board edges by a suitable foil tape with a minimum 48 mm
  wide overlap onto the board face.
- The insulation boards shall be installed in accordance with the latest version of the Australian NCC/BCA as well as any other government regulations or requirements at any given time and for any project.

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# Fixing Instructions for IBOARD in Frame Wall Lining Applications:

- Install suitable furring channel clips at required spacings for chosen lining.
- Fit the IBOARD insulation boards over furring channel clips by pushing over the clips to touch the wall, and so that the wings of the clips penetrate the internal side of the insulation board. Care should be taken to avoid the foil facing of the IBOARD insulation boards separating from the insulation core by neatly trimming the foil face where the furring channel clip will penetrate the insulation.
- Butt join the IBOARD insulation boards to provide a continuous insulation layer tight against the internal side of the wall.
- It is considered best practice to tape around the channel clips and along all the IBOARD insulation board joints with INSULTAPE Reinforced Foil Tape.
- When taping a stiff plastic scraper or blade must be used to apply appropriate pressure to the tape. Surfaces must be sufficiently cleaned to ensure they are dry and free from dust, oil or grease to ensure long-term tape adhesion.
- Install furring channels by clipping into channel clips. Furring channels should be tight against the internal face of the IBOARD insulation boards.
- Install the chosen lining to the furring channels as per manufacturer's instructions.
- The insulation boards shall be installed in accordance with the latest version of the Australian NCC/BCA as well as any other government regulations or requirements at any given time and for any project.

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