# INEX>RENDERBOARD™

ANY BUILDING • ANY SURFACE • ANYWHERE



# **TECHNICAL & INSTALLATION SHEET**

**DEC 2015** 



#### WEIGHT

At approx. 33kg (16mm) **INEX>RENDERBOARD** is lightweight and easy to handle on site.

## **STORAGE**

**INEX>RENDERBOARD** should be stored dry, flat and with all edges protected from damage. We recommend storage undercover and raised from the ground.

## **HANDLING**

Wear protective gloves when handling or cutting sheets.



#### **FRAMING**

**INEX>RENDERBOARD** can be fixed to timber or steel studs with spacing at maximum 600mm centres.

In all cases a cavity batten system must be installed. Choice and depth of batten is optional (see assembly drawings inside this document).

Timber framing must be in accordance with AS 1684 – 'Residential timber-framed construction'.

Steel framing must be in accordance with AS 3623 – 'Domestic metal framing'.

Ensure framing is plumbed prior to fitting.



## **ASSEMBLY**

**INEX>RENDERBOARD** must be fitted to a staggered layout. With its tongue and groove long sides it can be end match off-stud, however in this circumstance we recommend the use of backing boards at these joints as illustrated for our fire rated system.

Ensure framing and INEX>RENDERBOARD are clean and dry prior to fitting.

#### FIXINGS:

Ensure all fixings are located:

- 20mm Min. from all tongue and grooves,12mm min. from all butt joints
- 50mm Min. from all corners
- Max. 280mm centres along studs

FIXINGS - TIMBER JOISTS - Class 3 Galvanised Fixings or higher\*

Screws: 10gx50mm self-embedding countersunk head screws.

FIXINGS - STEEL JOISTS - Class 3 Galvanised Fixings or higher\*

Screws: 10gx40mm self-drilling, self-embedding, countersunk head screws. \*Class 4 or Stainless Steel screws for sea spray zone in accordance with AS 3566.

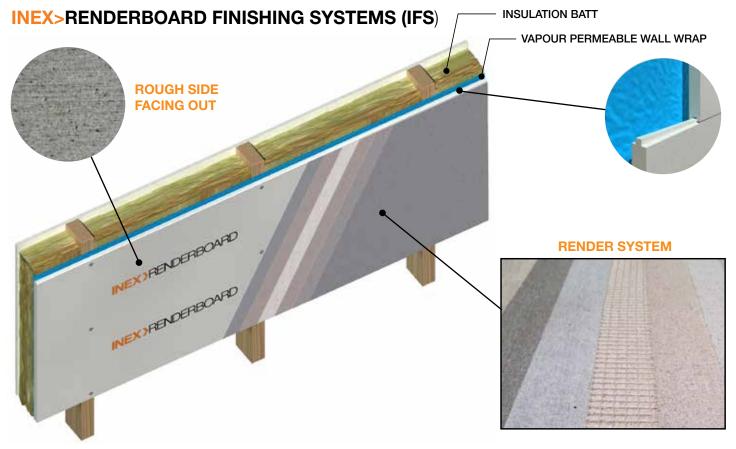


## WALL SYSTEMS

**INEX>RENDERBOARD** can be installed in conjunction with a variety of lightweight wall systems and finished with a range of coatings.

**INEX>RENDERBOARD** delivers a BAL-FZ\* and/or a Fire Resistance Level (FRL) of 60/60/60 without the need for any fire rated plasterboard. Refer to the following page for further details of this fire rated system.

\* BAL-FZ (Flame Zone) is the highest Bushfire Attack Level where there is an extremely high risk of ember attack and burning debris ignited by windborne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front. It is equivalent to FRL 30/30/30.



## **RENDER FINISH**

Install INEX>RENDERBOARD with the ROUGH SIDE FACING OUT so that the approved RENDER SYSTEM achieves optimum adhesion to the INEX>RENDERBOARD substrate.

UBIQ recommends only high quality **RENDER SYSTEMS** that offer superior performance in all Australian conditions. In combination with the approved proprietary **RENDER SYSTEM**, a performance warranty can be provided. Refer to the COATINGS menu on UBIQ's website.

## FRAMING SYSTEMS

**INEX>RENDERBOARD** must be fixed to either timber or light gauge steel framing at a maximum of 600mm centres, and in all cases a cavity batten system must be installed.

**INEX>RENDERBOARD** is ideally suited for lightweight construction providing a fast-track cladding system during construction, resulting in both cost and time saving benefits.

For home alterations or additions, **INEX>RENDERBOARD** can be erected easily and fitted efficiently to achieve a masonry appearance without getting bricklayers involved.

# FRL 60/60/60 & BAL-FZ WALL SYSTEMS

INEX>RENDERBOARD wall system, when used with a minimum 16mm steel furring channel or batten on either a timber or steel frame has achieved an FRL of 60/60/60 when tested against the Australian Standard AS1530.4-2005 and therefore is suitable for BAL-FZ\* construction in accordance with AS3958-2009. There is no fire rated plasterboard required for these systems, details of which are provided in this



BAL-FZ SYSTEM IN TIMBER STUD FRAME AS 3959-2009 AS 1530.4-2005



BAL-FZ SYSTEM IN STEEL STUD FRAME AS 3959-2009 AS 1530.4-2005

## LAYING PATTERN

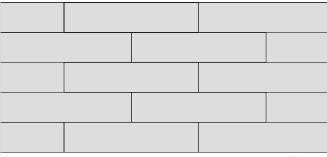


Figure 1

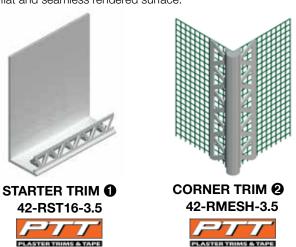
**INEX>RENDERBOARD** must be fitted in a staggered pattern to achieve the best surface and finish. Vertical butt joint locations are subject to stud spacing. Refer to Figure 1.

For render application, **INEX>RENDERBOARD** must be fitted with rough side facing out for best adhesion.



# STARTER & CORNER TRIMS

When applying render to **INEX>RENDERBOARD**, starter trims and corner trims must be fixed in accordance with trim or render manufacturer's instructions. To achieve best adhesion between trim and render, ensure that the render fully covers both **INEX>RENDERBOARD** and the trim, thus resulting in a perfectly flat and seamless rendered surface.





# **MOVEMENT CONTROL JOINT**

Despite the fact that **INEX>RENDERBOARD** is dimensionally stable, movement control joints must be installed to relieve any stress on building materials due to temperature changes, sway caused by wind, seismic events and etc.

Vertical movement control joints are to be provided where wall lengths exceed 8m, at changes of wall direction and at openings such as windows and doorways or where existing structural joints are located. Refer to Figure 2.

Horizontal movement control joints must also be provided at each floor level, subject to designer's detailing.

Control joints should be installed evenly and symmetrically for large size walls.

FOAM BACKER ROD / AIR SEAL

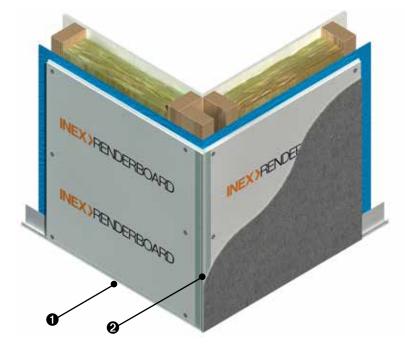
INEX>RENDERBOARD

INEX>RENDERBOARD

INEX>RENDERBOARD

INEX>BOND OR PAINTABLE POLYURETHANE FLEXIBLE SEALANT

Figure 2



## INSTALLATION EQUIPMENT

UBIQ recommends the following equipment and accessories for the installation of INEX>RENDERBOARD:

GENERAL: INEX>RENDERBOARD can be machined and worked in same way as comparable fibre cement wall sheeting.

CUTTING: INEX>RENDERBOARD should be cut using a mechanical dust reducing circular saw with a diamond

edge blade, similar to that used to cut softer brick or stone or the ones specifically used to cut fibre cement

sheet. See also Health & Safety section below.

SCREW FIXING: INEX>RENDERBOARD must be screw fixed only. Use a cordless power drill.

DUST LIMITATION: Always limit dust with a vacuum dust extraction system with a suitable filter.

CONTROL JOINT: When installing INEX>RENDERBOARD in situation where wall height is more than one storey, horizontal

movement control joints are required at each level. Standard V-joints, starter trims or shadowline trims can be

used, subject to designer's detailing.

Movement control joints are to be provided where wall dimensions exceed 8m in the long sheet direction, at changes of wall direction and at openings such as windows and doorways or where existing structural joints are

located.

BACKING ROD: Where movement control joints are needed in any INEX>RENDERBOARD application, use a closed cell

PE foam backing rod of 10–12mm diameter to control the design depth of INEX>BOND adhesive/sealant used to

seal the joint. For more details refer to the **INEX>BOND** product data sheet.

#### Important Notes:

Ensure all components are compatible with each other and suitable for **INEX>RENDERBOARD** and/or the intended surface finish. Failure to install, finish or maintain this product in accordance with relevant building codes, regulations, standards and UBIQ's current published instructions may lead to personal injury, affect system performance, violate local building codes, and possibly void the product warranty.

## **MATERIAL PROPERTIES**

INEX>RENDERBOARD is an advanced high strength, low carbon fibre reinforced Engineered Cementitious Composite (ECC) product,

containing 60% of post industrial recycled materials.

INEX>RENDERBOARD conforms to the requirements of AS/NZS 2908.2 2000 'Cellulose-cement products Part 2: Flat sheets', other

than the optional 'Warm Water' test item 6.4. In this test, INEX>RENDERBOARD performs to a mean

MPa of >10.

**INEX>RENDERBOARD** conforms to AS 4964 2004 as containing no asbestos. It is toxin free and is 100% recyclable.

INEX>RENDERBOARD itself is deemed non-combustible when tested in accordance with AS/NZS 1530.1 and is therefore a

non-combustible material suitable for **Bushfire BAL-40** under AS3959-2009.

**INEX>RENDERBOARD** when tested in accordance with the Australian Standards displayed the following fire hazard indices:

AS/NZS 1530.2 - Flammability: 0 and AS/NZS 1530.3 - Ignitability: 0; Spread of Flame: 0;

Heat Evolved: 0 and Smoke Developed: 1.

INEX>RENDERBOARD when tested in accordance with AS/NZS 3837-1998 for heat and smoke release rates is classified Group 1 for

Specification A2.4 of the BCA.

INEX>RENDERBOARD wall system conforms to the requirements of AS 3959-2009 when tested against all bush fire

zones and bush fire attack levels. **INEX>RENDERBOARD** wall system has achieved a fire resistance level (FRL) of **60/60/60** in accordance with AS 1530.4-2005 and therefore is

suitable for BAL-FZ construction\*.

**INEX>RENDERBOARD** is not susceptible to Termite Attack.

\*Details of BAL-FZ and FRL 60/60/60 wall systems are provided in this document.

## **HEALTH & SAFETY**

UBIQ advises that **INEX>RENDERBOARD** contains fiberglass reinforcing and causes fine dust when cutting or machining. Continuous or excessive inhalation of fine dust containing fiberglass particles can cause irritation and may cause lung scarring (silicosis). This dust could be carcinogenic as all dust may be. Exposure to such dust may cause irritation to the skin or other body surfaces.

When cutting INEX>RENDERBOARD use methods recommended in this brochure to minimise dust production, and in addition:

LOCATION: Do not cut INEX>RENDERBOARD indoors. Cut in a well ventilated outdoor location.

CLOTHING, MASK & GOGGLES: Always wear protective clothing and properly fitted and approved mask (respirator) and eye protective goggles.

**DUST LIMITATION:** Always use a mechanical circular saw equipped with a fitted dust extraction system. When cutting is finished always vacuum up residual dust. Maintain the work area as a dust free environment.

Note: Due to the cementitious nature of INEX>BOARDS some superficial pin-holing may occur.

The smooth side of INEX>RENDERBOARD is characterised as a Class 2 concrete finish.