

Installation sheet of GI All-In-One<sup>™</sup> GI All-In-One<sup>™</sup> - Permanent Insulated Safety Net the smart, safe alternative to roof spacers and wire safety mesh

greenguide



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### GI All-In-One<sup>™</sup> - the safer solution

GI All-In-One<sup>™</sup> is the latest innovation in the GI Building Sciences<sup>™</sup> range. With patent pending this innovation is available in a number of formats to suit commercial, residential and non-habitable buildings.

GI All-In-One<sup>™</sup> replaces the added cost of roof spacers that have been imposed on the market and in fact also makes the installation of wire safety mesh totally redundant.

If you want to minimize the risk of working at height to roofers, ensure faster installation and reduce the cost of your roof, you will choose GI All-In-One<sup>™</sup>.

### **Installation Process**

**Step 1** Pull GI All-In-One<sup>™</sup> over the roof, such that the material is perpendicular to the roof purlins. Fix to perimeter purlins using the fixing details below.

**Step 2** Allow the weight of the GI All-In-One<sup>™</sup> to settle such that it naturally falls to a nominal dip no greater than 150mm from the horizontal face of the top of the purlin. For most applications it is only required to allow the material to settle to a nominal depth of 40mm.

**Step 3** Overlap material along longitudinal join by 150mm. Where deemed necessary for superior condensation control a 72mm or 100mm reinforced foil tape the join.

Step 4 End joins should be overlapped by 600 mm if not taped

Step 5 Screw roof sheet through GI All-In-One<sup>™</sup> to purlins.

# We take care of each other and those we work with

### Correct Installation of GI All-In-One<sup>™</sup>

Correct installation of any fall arrest is the difference between life and death or permanent injury when working at height.

WARNING: IT IS YOUR RESPONSIBILITY TO CLOSELY FOLLOW THE INSTRUCTIONS CONTAINED WITHIN THIS DOCUMENT FOR THE CORRECT INSTALLATION OF GI ALL-IN-ONE<sup>™</sup>. IF YOU ARE UNCLEAR ON A FIXING DETAIL, PLEASE CONTACT GI BUILDING SCIENCES ON (07) 3200 6522.

PLEASE SEE OVER PAGE OF INSTALLATION METHODS.

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### Screw fixing to purlins

Use Buildex 10-24 x 40mm Wafer Teks Climaseal 3 screws with washer to suit, OD of fixing and diameter no less than 27.5 - 50mm. Fixings installed at 150 centers immediately adjacent to both a longitudinal and a transverse support reinforcing medium. The screws to be used should be in keeping with the following guidelines and properties as per the manufacturer's requirements described below.

WARNING: BUILDEX, POWERS FASTENERS AND OTHERS WARN OF THE REQUIREMENT TO NOT OVERTIGHTEN FASTENERS. IT IS <u>YOUR</u> RESPONSIBILITY TO ENSURE THE SCREW GUN OR DRILL YOU USE DOES NOT SHEER THE HEAD FROM THE SCREWS YOU ARE INSTALLING. PLEASE REFER BELOW AND TO YOUR FIXING MANUFACTURER ON CORRECT USE OF FASTENERS.

#### Installation Instructions of Screws from Buildex:

- 1. Use a Number 2 Phillips Cross Recess Driver Bit (Buildex Part 1-991-2201-9)
- 2. Use a mains powered or cordless screw driver with a 2,500 RPM speed.
- 3. Fit the Phillips Cross Recess driver bit into the screw and place at the fastening position.
- 4. Apply consistently firm pressure (end load) to the screw driver until the screw has fastened.

#### **IMPORTANT**

Special care should be taken to ensure the power drill or cordless screw driver used for installing fasteners also does not deliver forces in excess of the following:

Mechanical Properties: Single Shear Strength (N) 6,200 | Axial Tensile (N) 11,400 | Torsion Strength 8,6 N-m

Other Properties (Material): Carbon Steel SAE 1022 | Heat Treatment: To AS 3566.1 | Finish: Climaseal 3

Pullout Values (N): Steel Purlin 1,2: 2,320 | Steel Purlin 1,5: 4,280 | Steel Purlin 1,9: 5,820 | Steel Purlin 2,4: 7,680 All values are averages obtained under laboratory conditions and appropriate safety factors should be applied for design purpo ses.

These figures are applicable to Buildex head marked product only. Corrosion Performance: 10 -24 Wafer Teks Climaseal 3 Screw complies to Australian Standards AS3566.2 Class 3

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### Other Installation Methods for Installing GI All-In-One<sup>™</sup>

#### Where reinforcing medium wrapped around or passed through drilled holes in purlins

The reinforcing medium shall be passed once completely around the roof member or through a hole drilled through the upper horizontal face of the purlin. The tail of the medium should be twisted four times around the main portion of the same wire.

#### Purlins Greater Than 1200 Centres & End of Roll Joins

Where purlins are at greater than 1200cc a 1.90mm ring fastener or similar may be used to join the side lapsat every 900cc between purlins

Where purlins are at greater than 2200cc material should be side lapped by 300mm and a 1.90mm ring fasteneror similar may be used to join the side laps at every 600cc between purlins.

Where end joins are required talk to us about cut to length rolls. Alternatively material can be end joined using 3.0mm ring fasteners at 150mm centres on the longitudinal strands where overlapping with transverse wires.

### **Vapour Control Membrance**

If the product is installed and used as a vapour control membrance, Class 1 or Class 2, or as an air barrier, it shall be continuously sealed at all discontinuities, end laps, joints and penetrations by

- A pressure sensitive, heat and moisture resistant tape;
- Adhesive of equal or greater vapour resistance than the vapour control membrane;
- Heat and moisture resistant adhesive tape;
- Mechanical fixing with adhesive sealant; or
- Adhesive bond.

Please note that products are to be stored standing upright and on pallets not more than two high. Product warranty is voided for any product stored horizontally resulting in squeeze or crush. Returns of product displaying effects of deformation due to incorrect storage practices will not be accepted.









