

# **Air Tightness Process and Specification**

## External Walls – Ground Level & Suspended Floor

1. Apply acoustic rated sealant (CSR Fire Seal or equivalent) to external wall bottom plate connection to slab and/or flooring substrate.





2. Assess air gaps surrounding window frames, between window and wall studs:



a. If gap >10mm

Insert insulation off-cuts (or foam backing rod) into gap between window jamb and wall frame, apply acoustic rated sealant (CSR Fire Seal or equivalent) to perimeter of window gap to a depth of min 10mm.

- b. If gap < 10mm Apply acoustic rated sealant (CSR Fire Seal or equivalent) to perimeter of window subframe to a depth of 5-10 mm.
- 3. Prior to wall wrap and/or external cladding being applied an inspection of external to internal wall junctions is required, where external facing cavities are present, insulation is required to be cut and packed into the cavities from the outside.
- 4. External wall wrap joints must be fully tape sealed, any penetrations through the wall wrap (for brick ties, brackets, nails etc.) must be taped to minimise air leakage.







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## Mid Floor – For 2 Storey Construction

Focus on either Carpentry or Internal Linings.

1. Install Rim boards around perimeter of mid floor to close off and provide a seal to the joist ends.

Alternate to this is to ensure plaster lining is air tight at the Cornice and ceiling, minimal ceiling penetrations required, only sealed downlights (with ceiling flange gasket) are recommended.

### **Internal Linings**

Penetrations through internal linings should be minimised and where necessary a snug fit for the service (cable, pipe or fitting) should be made and sealed upon completion.

### Walls - External & Internal

1. All wall insulation (where installed) shall fit snug into the wall frames and be cut to the shape of any penetrating service.



- 2. Where electrical cables penetrate the lining, the insulation should not be dislodged or be deformed to create air gaps.
- 3. Ensure plaster or cement sheet lining is air tight at the penetration and ceiling junction.
- 4. In wet areas apply a water proof sealant to the junction between the wall lining and flooring substrate.





5. All architraves and window reveals shall be sealed to the wall lining to prevent air flanking around window and door penetrations.

### **Ceilings**

- 1. All ceiling insulation shall adequately cover and extend across the top plate of the external wall frames, where the roof space is too tight a perimeter batt may be required.
- 2. Ensure ceiling lining is air tight at the cornice and ceiling, minimal ceiling penetrations required, only sealed downlights (with ceiling flange gasket) are recommended.

