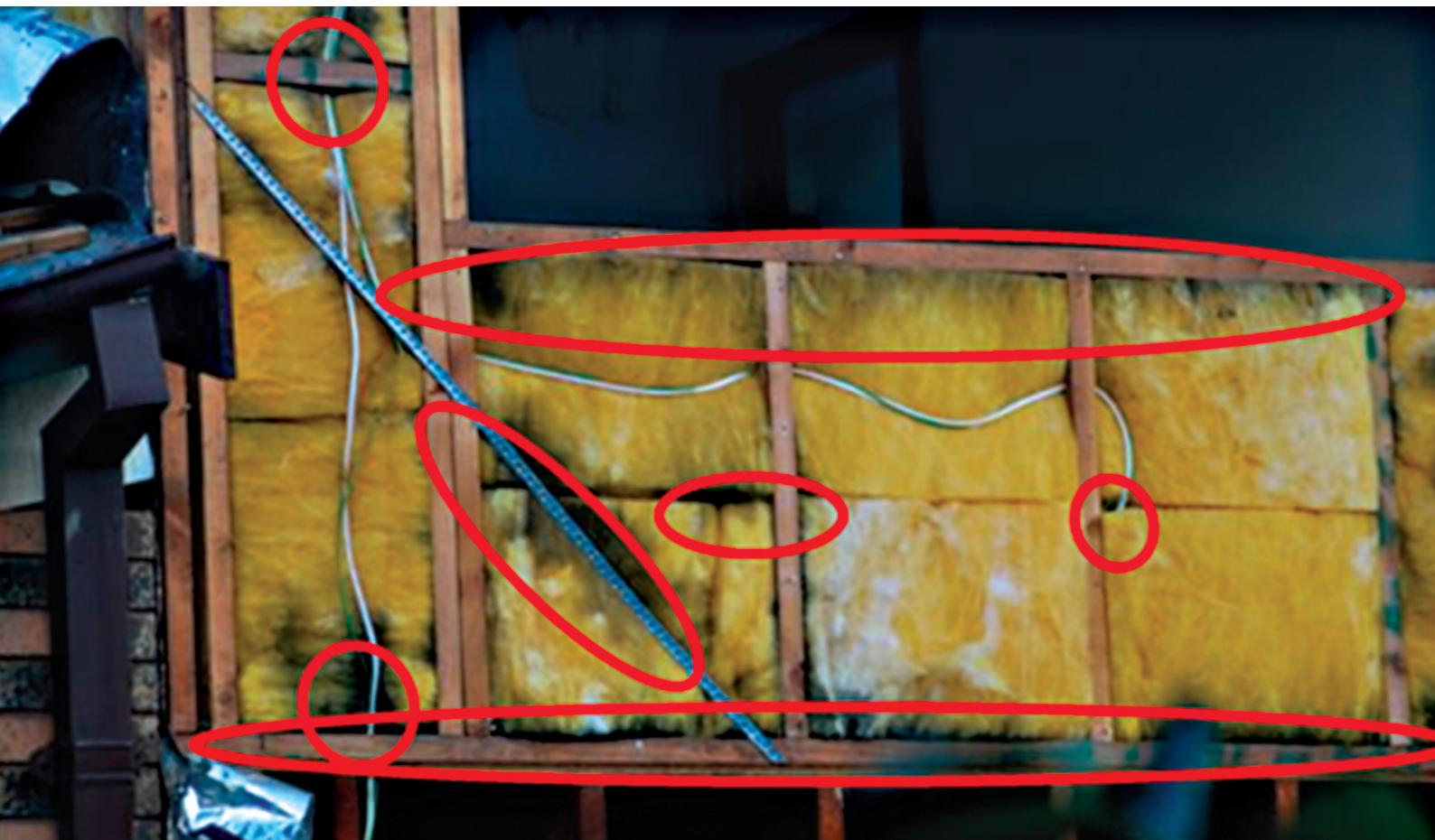


# CAVITY WALL SYSTEMS

Don't let your project or home contract the "sick house syndrome"



The effects of insulation and foil sarking. Condensation is trapped in the wall which creates an environment for mould.

# INSTALLATION

Weathertex has a simple and brilliant method on how to fix and improve cavity airflow to reduce condensation and mould build up in your home.

To provide the best protection for your wall against moisture related problems Weathertex highly recommends the use of a cavity fixing system. A cavity system creates a space within the wall that allows airflow to remove any moisture that accumulates in this space either from wind driven rain or condensation.

Fixing your Weathertex cladding using the cavity system provides the best defence for your internal lining, frame, insulation and cladding against the damaging effects of moisture. If the cavity system is not the chosen method of construction, sufficient ventilation within the wall must be otherwise provided or warranty may be void. When designing for cold climates or buildings with a high internal vapour pressure, a vapour barrier on the interior side of the frame may be required in addition to the breather membrane on the exterior face of the frame. In such cases, the advice of the vapour barrier manufacturer should be sought.

## Breather Membrane

A breather membrane is a physical barrier between the studs and the Weathertex cladding. Specifically designed to allow water vapour to pass through, the breather membrane holds the insulation in place and provides effective protection during construction and for the life of the building against wind driven rain, snow or dust.

When installing Weathertex using the cavity installation method, in accordance with AS/NZS 4200.1, the chosen breather membrane must:

- Be a non-reflective type,
- Have medium to high vapour permeability (A vapour resistance of less than 0.5MN<sub>s</sub>/g),
- Provide a high water barrier,
- Have a flammability index of no more than 1.

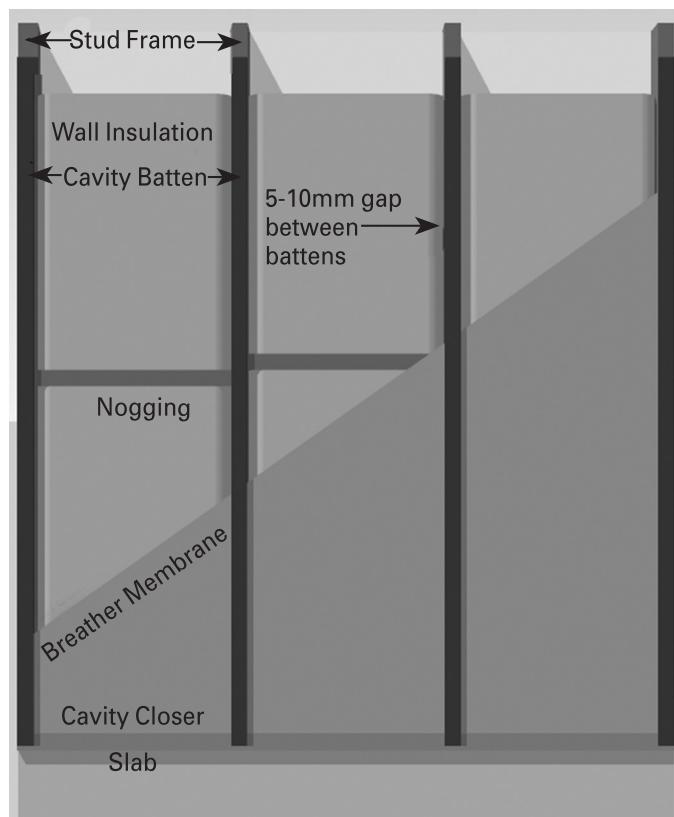
Weathertex provides and recommends Weathertex Wrapshield breather membrane. Breather foils are not suitable for use in the Cavity Wall Systems. Similarly, Breather Membrane must not be used in non cavity (traditional) wall systems.

## Cavity Battens

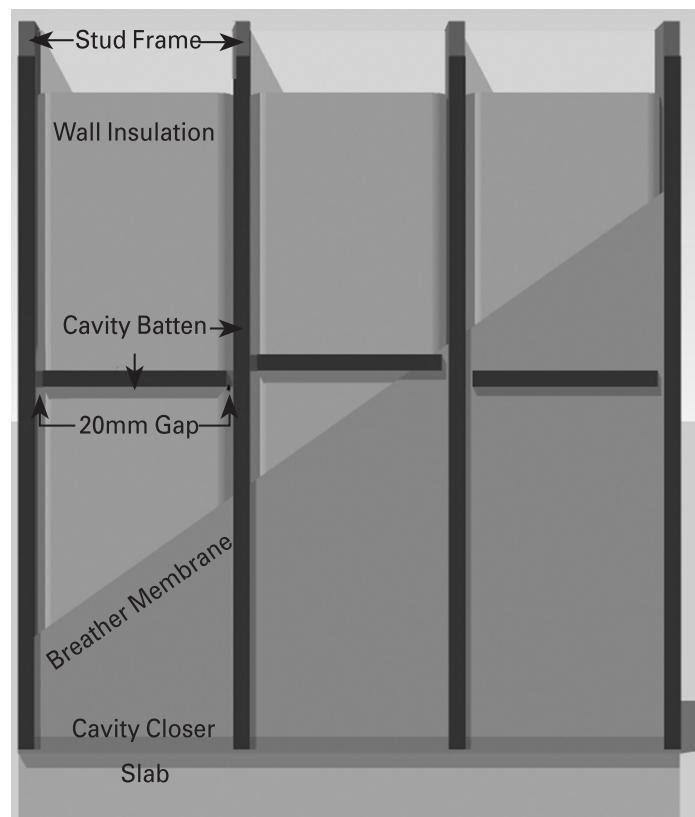
Cavity battens provide the separation between the breather membrane on the wall frame and the cladding. Cavity battens must be installed onto each stud and must be:

- A minimum of 9.5mm thick; and,
- At least as wide as the width of the studs; and,
- Fixed to the studs using a min. 30 x 2.8 countersunk head galvanised nail at 800mm centres prior to fixing cladding (this will assist in maintaining them on the frame and keeping them straight),
- Butt joined leaving a 5-10mm gap.

Weathertex provides and recommends the use of Weathertex cavity battens which are 1200 x 45 x 9.5mm.



Cavity system diagram for **Weatherboards**



Cavity system diagram for **sheets and panels**

When installing Weathertex Weatherboards, cavity battens must be installed onto all studs.

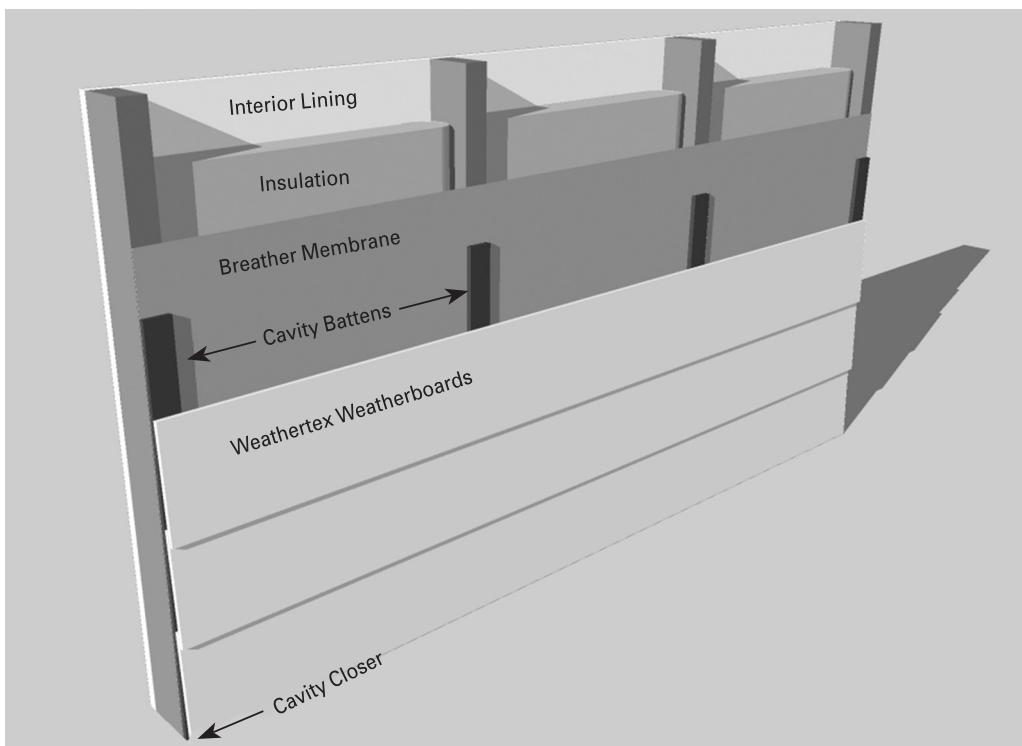
When installing Weathertex Sheets or Architectural Panels, cavity battens must be installed onto all studs and noggings. Ensure a 20mm gap between nogging battens and stud battens to allow for drainage of any moisture.

## Cavity Closer

To stop vermin and other material entering the cavity, the base of the cavity must be sealed using the Weathertex cavity closer. Designed to not interrupt airflow in the cavity, a cavity closer strip must be installed at the base of the wall and above window heads and inter-storey flashings. Fix the cavity closer to the base plate at 300mm centres along the closer with 30 x 2.8 flat head galvanised nails. Butt-join cavity closer ends and ensure the closers are fixed in a straight, level line. It is important that the openings in the cavity closer are kept clear and unobstructed to allow free drainage and ventilation of the cavity. The cavity closer is also used as the starter strip in the case of Primelok Weatherboards.

For Classic 300 and 200mm Weatherboards, and Primelok Weatherboards use 20mm Cavity Closer.

For Selflok Weatherboards, Weathergroove, ExteriorBoard and ImpactBoard use 10mm Cavity Closer.



## Infill Insulation

Care should be taken when installing bulk insulation to ensure the stud cavity is not over-filled. Over filling the stud cavity with bulk insulation will impinge in the cavity created by the cavity battens and hence reduce its effectiveness, and may void warranty.

## Fixings

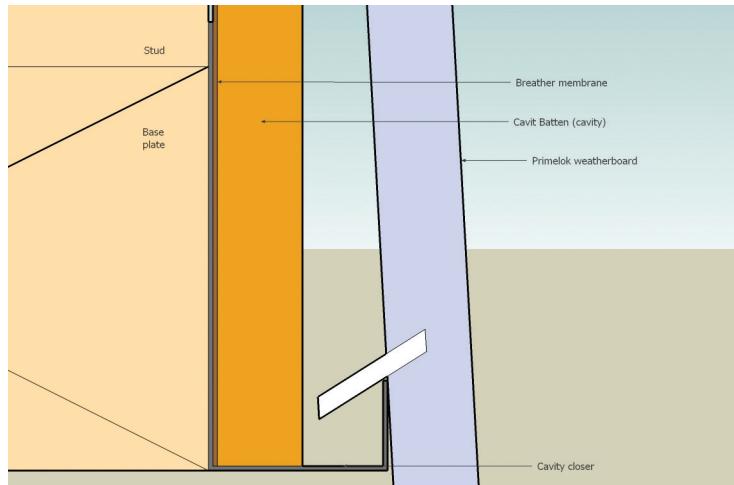
When installing Weathertex using the cavity installation system, fixing lengths must be increased to 60mm.

## Installation of Weathertex Weatherboards and Architectural Panels using the Cavity Fixing System

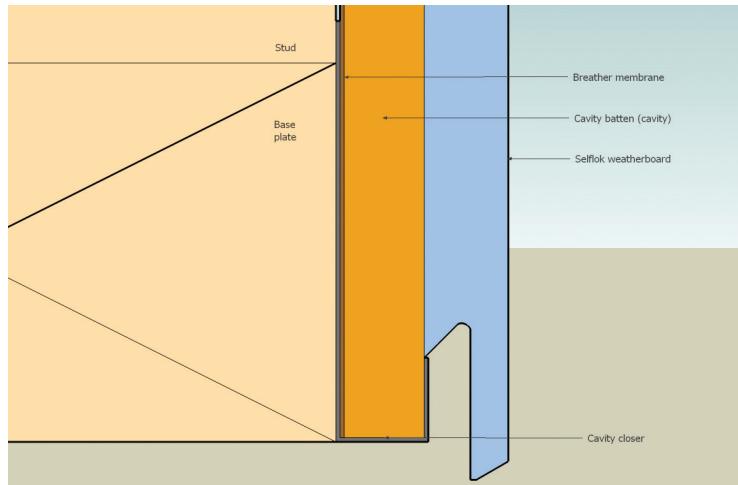
Once the cavity system is established on the frame, follow Weathertex's direct fix instructions to fix the cladding to the battens.

## Cavity Wall System Accessories

PRODUCT	SIZE	SUITED TO:	PRODUCT CODE:
Weathertex Wrapshield (Pack Qty - 1)	60m x 1350mm	All Weathertex Weatherboards and Architectural Panels	 149300
Cavity Closer (Pack Qty - 10)	1830 Large 20mm 1830 Small 10mm	Classic 300 and 200mm Weatherboards Primelok Weatherboards, Selflok Weatherboards, Weathergroove, ExteriorBoard, ImpactBoard	 149450 (Large) 149400 (Small)
Cavity Battens (Pack Qty - 24)	1220mm x 45mm	All cavity fixings	 149350



Cavity closer detail - Weatherboards Classic and Primelok



Cavity closer detail - Selflok and Architectural Panels

System*	Unvented reflective air space in stud wall Km <sup>2</sup> /w	R.2 bulk insulation Km <sup>2</sup> /w	Vented air space behind Weatherboards Km <sup>2</sup> /w	Total R-Value Km <sup>2</sup> /w
	0.47	0.43	0	0.9
	0.3	0	2	2.3
	0.3	0	2	2.44

\* BCA Volume 1 (2009) Figure 3.12.1.3. Explanatory information 1. Figure 3.12.1.3 provides examples of typical types of wall construction. The total R-Value required is achieved by adding the R-Value of the basic wall and the R-Value of any additional insulation incorporated. The Total R-Value of the basic typical wall construction has been arrived at by adding together the R-Values for outdoor air film, wall cladding or veneer, wall cavity or airspace, internal lining and internal air film. Where a cavity or airspace is filled the Total R-Value should be reduced by 0.17 to take account of the loss of the cavity or air space.



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\*Refer to the Weathertex Manufacturer's Warranty Conditions