VENTILATED FACADE

INNOWOOD Ventilated Facade is developed for the purpose of reducing the energy consumption on any building for the purpose of achieving proper ventilation.

INNOWOOD Ventilated Façade Systems can significantly improve the energy efficiency of a building by improving thermal comfort and reducing the reliance of HVAC systems, whilst improving the acoustic performance of the façade.

Also known as double-skin façades or rain-screens, ventilated façade systems can also assist in protecting buildings against the combined action of wind and rain by counterbalancing the effects of water beating on walls and keeping the building dry and can also offer acoustic control benefits.

To understand the potential benefits of a ventilated façade it is important to understand the fundamental concepts behind the system.

At its most basic, a ventilated façade system consists of two layers of different façades which are separated by an air cavity. This cavity prevents rainwater from penetrating and diffuses water vapour from the inside to the outside. While the external cladding serves to provide the majority of rain and wind protection, the air corridor between the support structure and the external cladding plays a major role in the ventilated façade system.

A naturally ventilated façade results in a temperature difference between the face of the cladding panel and the air cavity behind. This in turn creates a variation in air density and causes air to flow upwards within the cavity according to the stack effect. The airflow transports heat from the cavity out through high level exhausts, aiding convection drying of any residual amounts of moisture that have accumulated within the air cavity.

The four key elements that make up the design and construction of an effective ventilated façade system are:

1. Load bearing wall
2. Fixing system
3. Ventilation cavity
4. Façade panels

VENTILATED BOARD

INNOWOOD ventilated Facade boards are innovative, 100% recyclable composite wood panels. They are water resistant, don’t mould or decay, and are highly durable with low maintenance requirements.

INNOWOOD ventilated Façade boards are also lightweight and offer various fire rating options that make them suitable for outdoor use. INNOWOOD ventilated Façade boards provide natural wood grain finish on the product with a proprietary coating.

INNOWOOD ventilated Façade boards come in different dimensions based on the width and thickness that can be cut to any size. However, the maximum length of these boards is set to 3.2m long. The boards are available in different colours, textures and finishes and can be perforated or printed to make it more elegant for exterior applications and more decorative for interior purposes.
INNOWOOD Ventilated Facade fixing utilises rivets and anchor clips as the primary fixing method. Rivets enable fast and permanent installation of facade cladding. The system is flexible and fixed points absorb thermal expansion and contraction materials used. The anchoring clips are available in aluminium or stainless steel and can be made to match the colour of the facade elements.

**VISIBLE FIXING**

INNOWOOD Ventilated facade system helps in achieving proper ventilation in any building.

**CONCEALED FIXING**

**SHIPLAP**

INNOWOOD ventilated concealed fixing system utilises mechanical fasteners and mechanically undercut anchors as the fixing method. Concealed fixing systems are mechanically fixed by fasteners with INNOWOOD shiplap cladding panel. It is an economical, concealed and ‘installer friendly’ method of installing in vertical or horizontal facade cladding.

**UNDERCUT ANCHORS**

INNOWOOD ventilated concealed fixing system utilises mechanical fasteners and mechanically undercut anchors as the fixing method. Concealed fixing systems are mechanically fixed by fasteners with INNOWOOD shiplap cladding panel. It is an economical, concealed and ‘installer friendly’ method of installing in vertical or horizontal facade cladding.

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<th>Internal Panel Dimensions</th>
<th>External Panel Dimensions</th>
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**Panel Dimensions**

- 4500 x 205 x 25mm
- 4500 x 240 x 25mm
- 4500 x 165 x 25mm
- 4500 x 200 x 25mm
- 4500 x 105 x 25mm
- 4500 x 136 x 25mm

**Thickness:** 25mm