# illbruck i3 State-of-the-Art Window Sealing System.



illbruck i3 provides a state-of-the-art universal sealing system for the perimeter sealing of windows, that seals OUT weather while sealing IN comfort and energy savings.

i3 is an externally weatherproof system, which also prohibits the formation of condensation. This is a problem that can lead to a reduction in the level of thermal insulation, damage to building components and mould formation.

Below is the range of exceptional products that can be used in combination to achieve an illbruck i3 system.

# Explore the i3 BBA approved window sealing system from illbruck in action...

# Why did illbruck develop the i3 BBA approved system ?

As building regulations change, new solutions and practices are required.

The problem of unintentional air leakage from buildings has grown in recognition with the amendments to Part L in 2006 and 2010 requiring energy reduction targets to be addressed and the incorporation of mandatory air leakage testing.

The innovative "i3" system encompasses the concept of sealing out weather whilst sealing in comfort and energy savings.

By selecting the appropriate products, a simple, cost effective installation will benefit the building owner / occupier for years to come and the long-term savings can be enjoyed by many.

A typical example of the i3 system comprises of:

#### TP600 Compriband 600



<u>TP600 Compriband</u> is an impregnated joint sealing tape for use in a wide variety of movement joints including window perimeter seals and other applications. An original illbruck product, <u>TP600</u> has proven to be the best performing impregnated tape in the market and has the ability to form a vapour permeable external weather-tight seal.

Explore this product

#### ME508 Duo Membrane EW/F



The first choice for internal airtightness <u>ME508</u> is a non-woven fleece laminate which is self-adhesive across the full width of the membrane for optimised adhesion and vapour control.

<u>ME508</u> can be used for sealing window connection joints, particularly where wet plaster will be applied.

Explore this product

FM330 Pro Foam Air Seal



<u>FM330 Pro Foam Air Seal</u> is a one part, rapid, moisture-curing expanding polyurethane foam which is gun applied and has excellent elasticity, air tightness and acoustic properties. A PU Expanding Foam which insulates giving the installation improved thermal performance. Ideal for tight gap filling, with a movement accommodation factor of 50% that ensures the integrity of the seal is maintained.

Explore this product

## **Installation & Performance**

Explore the i3 system in a traditional casement window detail example by hovering over the green areas below.



## The i3 Window Sealing System How it works: "inside tighter than outside"

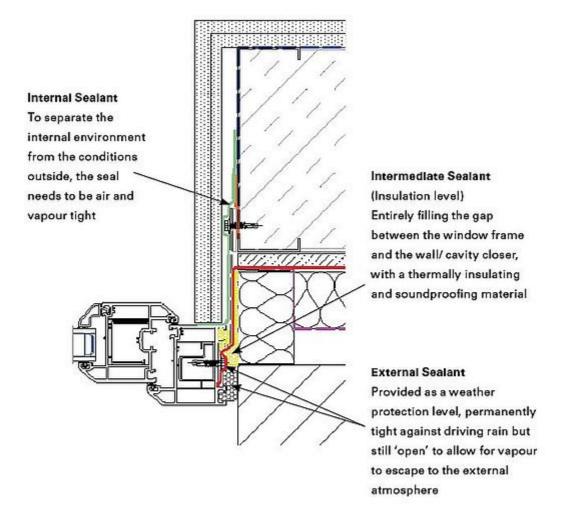
Proper sealing is an effective interaction of the outer, middle, and inner sealing levels on the principle of "inside tighter than outside." By selecting appropriate products from our seven system components, various combinations can be created to suit the installation situation. The resulting system will meet all the requirements of modern sealing conventions.

**The result:** An externally weatherproof but vapour permeable system, which also prohibits the warm internal air penetrating the joint and forming condensation, a problem which can lead to a reduction in the level of thermal insulation, damage to building components and mould formation.

**a)** Exceeds 600 Pa as per DIN EN 1027 Imperviousness to Driving Rain and DIN 18542 (testing of sealing of outside wall joints with impregnated sealing tapes).

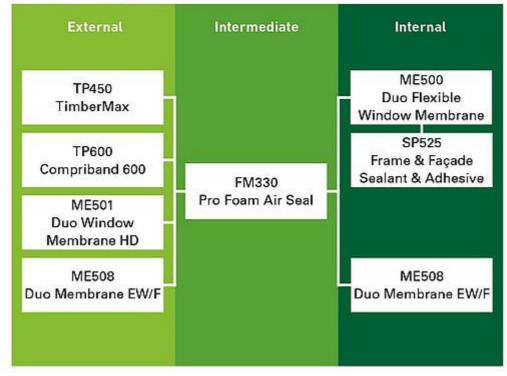
**b)** Effective filling and insulation of the window joint seal.

**c)** Airtight to UK Building Regulations Document L and DIN 18542 & DIN EN 1026 (testing window and door air permeability). Also meets Passive House airtightness requirements.

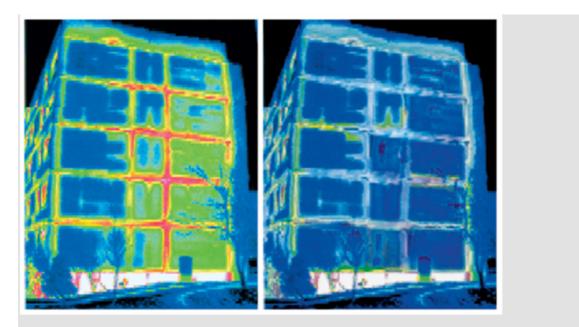


Typical Jamb Detail with 13 System Components (see table below for product options)

### **i3 System Options**



# **Sustainable Performance**



#### **Thermal Performance**

Before & After: This thermal image shows the impact of the i3 system on a building's thermal loss

# **Accreditation & Guarantee**



After installation the i3 system continues to perform thermally, acoustically, and against the elements.

#### 10-year "i3" performance guarantee\*

The "i3" Window Sealing System from illbruck comes with a 10-year guarantee\* for the performance of the joints.

#### **BBA Accreditation**

The "i3" system and its individual components are BBA approved, proving their fitness for purpose.

\* Under the conditions specified by tremco illbruck - available on request