

## 'A'-Rated Installations

For Domestic  
Window Systems



**illbruck adds perfection – to all your sealing and bonding projects. Be it windows, façades, interiors or exteriors, a major construction scheme or a minor refurbishment job. We offer the right set of products, services and expertise to lessen your workload and improve the overall appearance and efficiency of buildings. Making it perfect.**

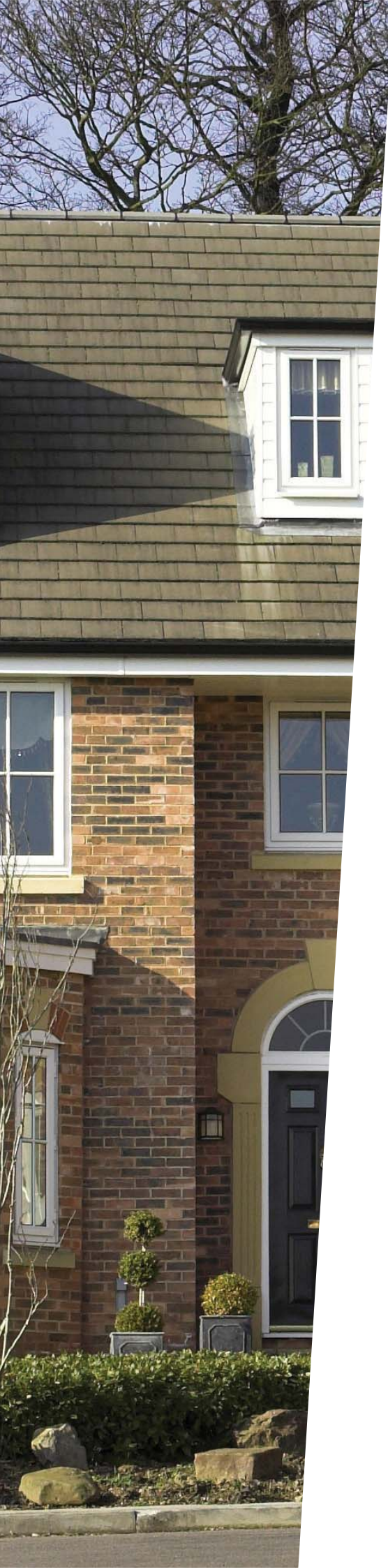
In this brochure we are examining the installation of A-Rated window systems as defined by the British Fenestration Rating Council. These windows are an investment designed to recoup more than their cost over their lifetime; however, the installer and householder must ensure that the positive benefits of installing an A-Rated window are not compromised by outdated installation methods and products.

Replacement windows represent a substantial investment to produce long-term savings on energy costs. It makes sense to spend a minimum amount, compared to the overall cost, on an effective installation system.

**A-Rated windows require 'A'-Rated installations and at illbruck we can show you how.**

illbruck is a brand of tremco illbruck, a worldwide manufacturer and service provider of high performance building materials.





## **Contents**

- 02 illbruck - Making it Perfect.
- 04 What is an A-Rated window
- 06 2 ways to install an A-Rated window

## **Installation Products**

- 08 System 1 products
- 09 System 2 products
- 09 The relationship between wind speed and pressure

## **tremco illbruck**

- 11 tremco illbruck and its strong brands

## Why You Need an 'A'-Rated Window Installation

### Maintaining the Energy Efficiency of A-Rated Windows

- Poor installation will drastically reduce the efficiency of A-Rated windows
- The window perimeter gap is a highly vulnerable area
- Valuable energy savings will be lost
- Using modern installation methods can prevent this

Given that the windows offer a high degree of thermal efficiency, warm air will automatically look for the next most vulnerable point to escape. Unless the windows have been installed to the highest standard, any gaps between the frames, cills and the walls offer a damaging alternative escape route.

Poor installation can simply negate any benefit of cost savings and can reduce the energy saving benefits which A-Rated windows will provide. This is not what the customer paid for and will reduce the overall savings that can be expected.

### The Importance of Proper Installation

A-Rated window systems incorporate the latest technological advances, including the use of Argon gas and metallic coatings; however, the leakage of heat around incorrectly sealed windows can compromise these features.

As the average semi-detached house has 16.9 m<sup>2</sup> of glazing, such a detrimental effect should be addressed by using modern sealing methods which add to the energy saving properties of the window itself.

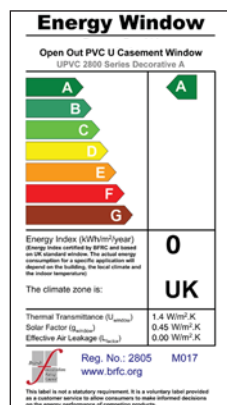
#### INSTALLATION VIDEO

To see for yourself how quick and easy installing windows is using our products, visit [www.illbruck.co.uk](http://www.illbruck.co.uk).



### UNDERSTANDING WINDOW ENERGY RATINGS

The British Fenestration Rating Council's Domestic Window Energy Rating Scheme provides a way to compare the energy performance of windows. Because it's the most thermally efficient installation system available, in 'like for like' comparisons, window sealing installations featuring TP651 or TP610 with FM330 would achieve higher ratings under the Window Energy Ratings Scheme than those which do not include insulation in the perimeter gap if the gap was included in a thermal assessment. Ref BRE report 286-070.





### Why You Need illbruck's 'A'-Rated Installation Systems

<b>Thermal Efficiency</b>	<b>Best</b> maximise window energy ratings
<b>Installation Productivity</b>	<b>Quicker</b> to install, easier to install
<b>Commercial Profitability</b>	<b>Added Value</b> fewer call-backs, additional profit opportunity
<b>Environmental Contribution</b>	<b>Optimum</b> reduces energy and no waste

### The Advantages of illbruck Products Over Silicone.

- Guaranteed weather tightness via a breathable seal
- Thermal efficiency as the products are recessed into the joint
- Air tightness
- Easy and clean to install
- Can be installed in all weather conditions
- No difficulties selecting the right product/grades, unlike silicone
- Lasts longer than silicone
- Good looking, clean lines to add definition to the window
- Protects the windows' A-Rating when installed

### Why Partner with illbruck?

- illbruck has been providing window solutions for over 80 years
- Undisputed market leader in window sealing systems
- Proven technology in the commercial market
- Hundreds of thousands of successful installations in both Europe and the UK
- Technical support always available
- Full training and backup from a UK based distribution centre





## The illbruck System Two 'A'-Rated Solutions

### System 1: TP651 Trio

35 mm wide impregnated tape

This solution is suitable for both PVC-U and timber frames.

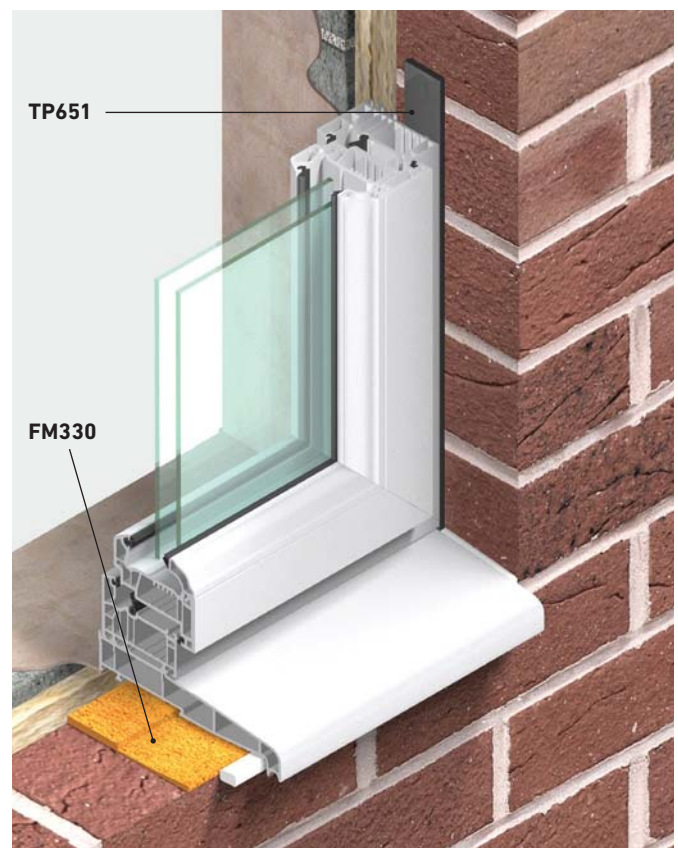
TP651 impregnated foam tape forms a weather tight external seal. The tape is applied to the outside of the window frame which is then placed into the opening in the normal way; however, once seated the TP651 compressed foam tape expands working its way into all of the recesses. Nothing is left to chance.

TP651 35 mm tape doesn't have to completely fill the joint depth between the window frame, wall and cills to outperform silicone.

### System 1 Offers:

- The easiest solution to window sealing requirements
- Thermal insulation
- Vapour permeable
- Internal airtight seal
- Acoustic insulation

As can be seen from the drawing below, the 35 mm depth is enough to fill the gap and expands to fully close the area forming a seal that comprehensively outperforms more traditional sealing methods.



## For the Installation of A-Rated Windows

### System 2: TP610 Duo

15 mm / 20 mm wide impregnated tape and FM330 foam

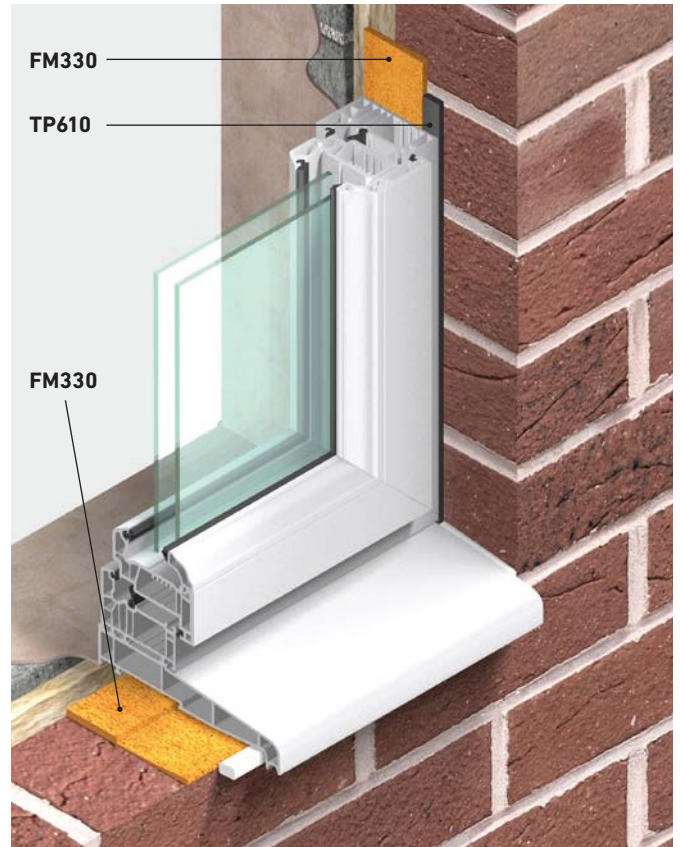
This solution is particularly appropriate when sealing windows installed into check reveals, where the TP610 is applied to the external face of the frame. The TP610 tape provides a weather seal and prevents heat loss when coupled with the FM330 foam, which is inserted to insulate the window to wall junction.

The combination of products is also suitable for when the internal plaster line remains intact and there is a very tight gap between the new windows and the existing walls and plaster line.

FM330 is a highly elastic polyurethane based expanding foam and, unlike silicone, offers both thermal and sound insulation. When applied at the rear of the window interface with the plaster line, it offers the perfect filling material.

### System 2 Offers:

- Adaptable for on-site conditions
- Ideal for check reveal details
- Suitable for a wide number of profiles
- Thermal insulation / vapour permeable
- Internal airtight seal
- Acoustic insulation



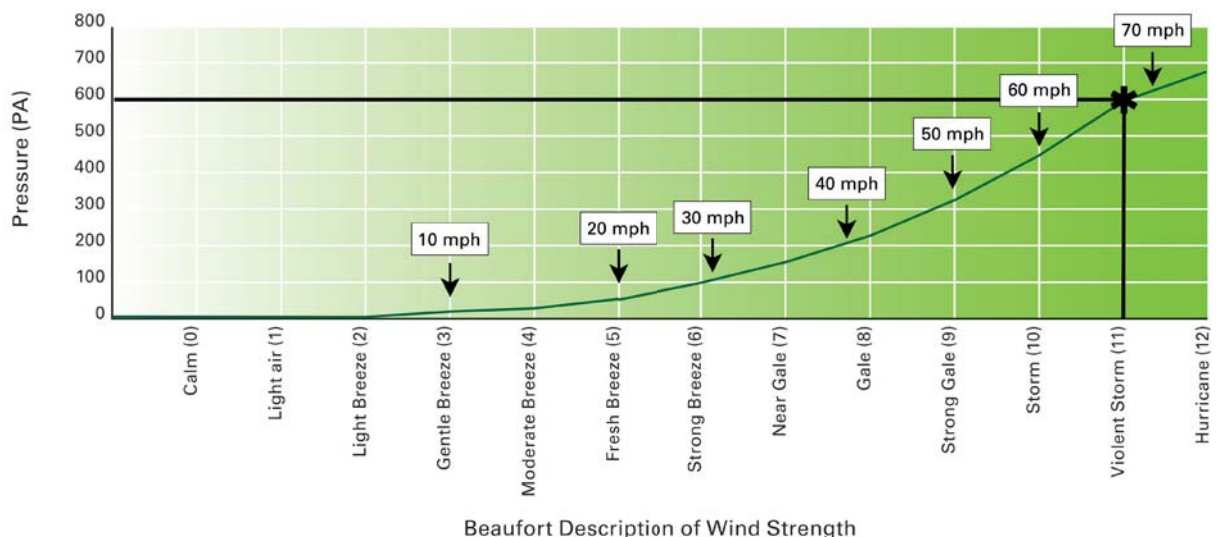
Full details on the products used to create these solutions can be found overleaf.

### Our Systems are Secure - The Relationship Between Wind Speed and Pressure

Our systems are proven to 600 Pascals (Pa) wind pressure.

(Tested to the CWCT (Centre for Window & Cladding Technology) TN41 - Site Testing for Water Tightness)

Traditionally, 300 Pa is accepted as the required level of protection in UK housing.



## Installation Products

### TP651

#### Trio Impregnated Tape



TP651 is an impregnated, pre-compressed multi-functional sealing tape. It is used for sealing the joints of windows and doors against driving rain and provides airtightness. It also offers thermal insulating properties within the perimeter gap between window and reveal and maintains the energy rating of the window/door.

#### Key Benefits (as part of a system)

- Maintains the energy rating of the window
- Resistance to driving rain (600 Pa minimum), provides thermal and acoustic insulation and air tightness all in one product
- Quick and easy window sealing in one application
- All-weather installation
- Breathable
- Meets the requirements of RAL-quality-assured installation

Joint Depth (tape width) - mm	Joint Width (tape thickness range) ( mm)	Roll Length (m)
35	3 - 7	15.0
35	5 - 10	10.0
35	7 - 15	6.0



**TP610**

**Duo Impregnated Tape**



TP610 Duo is an impregnated foam tape which can be used for weather tight sealing of perimeter joints around windows and doors. In order to provide thermal insulation within the perimeter joint and maintain the energy rating of the window, it is recommended to also use FM330 Pro Foam Air Seal.

**Key Benefits (as part of a system)**

- Driving rain tightness 600 Pa
- EMICODE<sup>®</sup>-certified EC1Plus very low emission, BG1 according to DIN 18 542
- Vapour diffusion open
- UV-resistant

Joint Depth (tape width) - mm	Joint Width (tape thickness range) (mm)	Roll Length (m)
15	3 - 6	8.0
15	5 - 9	5.6
15	7 - 12	4.3
20	9 - 15	3.3

**FM330**

**Pro Foam Air Seal**



FM330 is ideal for use as an air tight gap filler for general construction joints.

It is suitable for applications such as sealing floor to wall and wall to ceiling joints and pipe & service penetrations. The movement accommodation factor (MAF) of 35% ensures that the integrity of the seal is maintained in the event of movement and settlement.

**Key Benefits (as part of a system)**

- A high performance PU foam with excellent acoustic and airtight performance
- Airtight formulation - tested to ISO 6589
- Acoustic dampening - up to 60 dB joint insulation index
- Elastic performance - up to 35% movement accommodation ensures integrity of the seal in the event of movement
- Sub-zero formulation - can still be used at temperatures as low as -3°C

**Colour**

White

**Packaging**

750 ml gun grade pressurised canister (12 per carton)



**In both the UK and Europe, illbruck is the undisputed market leader in window sealing solutions. Our proven systems are now available for domestic replacement windows.**

**illbruck has sold more than 100,000 km of tape - that's enough to go around the world 2½ times.**



**Trusted Sealing Solutions**



tremco illbruck is a European manufacturer and service provider of high-performance sealing, bonding, flooring, waterproofing and passive fire protection products for the construction and manufacturing industries. We ensure that your processes become faster, smarter and more efficient.



illbruck adds perfection to all your sealing and bonding projects, be it windows, façades, interiors or exteriors, a major construction scheme or a minor refurbishment job. We offer the right set of products, services and expertise to lessen your workload and improve the overall environment within buildings - making it perfect.



Nullifire helps reduce the complexities of passive fire protection. Fire safety regulations can be complicated and potentially involve the threat of liability. To cope with these challenges we deliver a focused range of rigorously tested products that cover a wide array of passive fire protection applications. Nullifire's expert advice, support and training make for smart and simple solutions in passive fire protection.



TREMCO delivers lasting results when it comes to flooring, waterproofing, insulating glass or structural glazing. The building envelope is faced with ever more exacting requirements – technologically, legally and in terms of sustainability. With more than 85 years of experience, TREMCO offers products that have been tested for decades and under extreme environmental conditions – for buildings that are made to last.



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