

CI/SfB	(31)	Zt4
CAW P10		
Uniclass L675:P91		

## Description

TP651 is an impregnated, pre-compressed multi-functional sealing tape. It is comprised of open-cell polyurethane soft foam, impregnated with flame-retardant synthetic resin. The different vapour diffusion properties are achieved through a unique, one-sided patented side impregnation. The impregnation also protects the tape against mould and fungi. TP651 utilises the property of water-vapour permeable sealing, making it less permeable inside than outside (inside tighter than outside principle).

## Colour

Anthracite. Internal face: powder coated, light grey.

## Packaging

Supplied on pre-compressed rolls, with self-adhesive on one side for initial location.

## Dimensions

Order N°	Joint Depth (tape width) (mm)	Joint Width (tape thickness range) (mm)	Roll Length (m)	Metres per Box
393802	35	3- 7	15	60
320282	35	5- 10	10	40
392934	35	7- 15	6	24

## Technical Information

Property	Test Method	Result
Building Classification	DIN 4102	B2 (normally flammable)
Grouping	DIN 18542	BG1 + BGR
Thermal Conductivity	DIN 52 612	$\lambda_{10} = 0.048 \text{ W/m.K}$
Water Vapour Diffusion, Sd Value	DIN 18542	$\alpha < 0.5 \text{ m}$
Vapour Pressure Gradient		Less permeable inside due to side surface impregnation
Joint Permeability	EN1026	$< 0.1 \text{ m}^3/[\text{h.m.}(\text{daPa})^{2/3}]$
Resistant to Driving Rain	EN 1027	600 Pa min.
Sound Insulation	EN ISO 717-1	45 dB in 10 mm joint
Compatibility with Traditional Building Materials	DIN 18542	In accordance with BG1, perform a compatibility test on products that contain solvents or plasticisers
Emission Test	AgBB/ DIBt method	Suitable for interior use
Service Temperature		-30°C to +90°C
Storage		Store in dry, shaded conditions between +1°C and +20°C.
Shelf Life		9 months when stored in cool, dry conditions in original unopened containers.

## Tools

- Tape measure, cutting shears or knife and a flat bladed tool are required for installation.



## TP651

### Trio

#### Usage / Purpose

TP651 is used for sealing the perimeter joints of windows and doors against driving rain and provides airtightness. It also offers thermal insulating properties within the perimeter gap between the window and reveal and maintains the energy rating of the window/door. An 'A' rated (WER) window can therefore be classed as having an 'A' rated installation\*.

#### Key Benefits

- Suitable for new-build and replacement installations
- Meets BS8213-4:2016 Code of Practice & GGF Guide to Good Practice – Installation of replacement windows and doors
- Maintains the energy rating of the window
- Resistance to driving rain (up to 600Pa), provides thermal and acoustic insulation and air tightness all in one product
- Meets CWCT test for site water tightness (TN41)
- Quick and easy window sealing in one application
- All-weather installation
- Breathable

\* Installation rating not included in BFRC 'WER' scheme

### Installation Method

- Select tape size from table above to suit the joint width variation and available depth (eg 35/3 – 7, tape width 35 mm / joint width variable between 3 – 7 mm).
- Remove any contamination or mortar residue from the reveal. Any areas where significant undulations or damage is present should be repaired locally using an appropriate mortar. Check presence and condition of DPC and ensure cavities are filled/closed prior to fitting the new window.
- Prior to installing the window, cut off the wedge shaped start of the roll and apply the tape to the outer edge of the window frame, recessed back from the external frame face by 1 – 2 mm, applying a separate length for each side to be sealed, bonding with the aid of the self-adhesive strip, ensuring that the light grey tape face is to the inside of the opening (See Fig. 2). Normally, the TP651 is applied to the head and two sides to allow for insertion of packers under the sill. Allow an extra 20 mm/m when cutting the tape length to allow for potential shrinkage- the dimension should be based on the opening size, not frame dimension. Make tight butt joints at the corners and between the end of one roll and start of another. Pay particular attention to the corner joints (See Fig. 3).
- The window is then immediately installed into the opening and fixed, ideally through the frame. We recommend a suitable window fixing (e.g. SFS SPTR-C type or similar) for imposed load relief, which allows lateral positioning of the frame and doesn't require frame packers, or alternatively use appropriate fixing brackets. Should the tape expand significantly before locating the frame into the opening, a flat bladed tool can be used to locally re-compress. On expansion, the tape will completely fill the joint width and provide a full seal. Any unintended small gaps at joints should be sealed with FS500 low modulus neutral cure silicone or SP525 hybrid sealant (black). FM330 Pro Foam Airseal should then be applied under the sill. Once this is cured, the ends of the window sill and the gap between the underside of the sill and structural opening should be sealed with a suitable sealant (e.g. FS500 or SP525) against the external reveal. Ensure that window sill end caps protrude for the full frame depth rather than just the projecting part of the sill.
- If required and if internal plaster finishes have been removed, air-tightness can be enhanced by applying an illbruck membrane (e.g. ME500) to the internal frame face and sealing to the internal reveal.

- Similarly, if access is possible to the internal side of the perimeter joint, it is recommended to apply illbruck FM330 Pro Foam Airseal to enhance the thermal insulation behind the TP651. The FM330 should be applied after the TP651 has fully expanded and sealed the joint.

### Please Note

High temperatures accelerate tape expansion, while low temperatures delay this. At ambient temperatures above 20°C, the tape should be stored in a cool place on the construction site away from direct sunlight. A small fridge is ideal for this. Remaining rolls in opened boxes should be maintained in a horizontal state and weighed down to prevent lateral expansion (telescoping) of the rolls. Whilst it is unnecessary to seal over the external face of the tape, the exposed edge can be plastered or painted over. The compatibility of sealants must be tested. In some cases, white sealants can be incompatible. The tape must not come into contact with chemicals containing solvents or aggressive chemicals.

### Health & Safety Precautions

Safety data sheet must be read and understood before use.

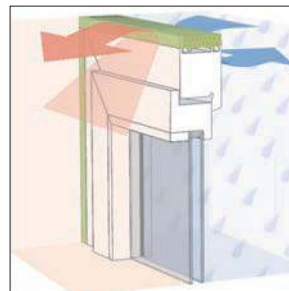


Fig. 1  
Functional principle

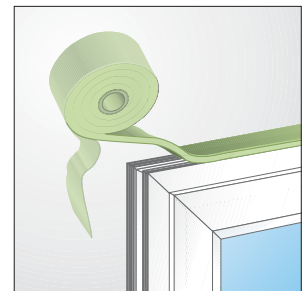


Fig. 2  
Complete perimeter sealing in a single application

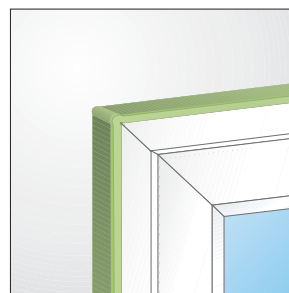


Fig. 3  
Corner jointing



Fig. 4  
TP651 installed (FM330 under sill)



### Technical Service

tremco illbruck has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

### Guarantee / Warranty

tremco illbruck products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with tremco

illbruck written instructions and (b) in any application recommended by tremco illbruck, but which is proved to be defective, will be replaced free of charge.

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