

Cl/SfB		Yt4
CAW P22		
Uniclass L6753:P741		

## Description

PU038 is a solvent free, two component, polyurethane based adhesive.

## Colour

Resin: white-beige  
Hardener: brown-beige  
Cured film: beige

## Packaging

900 g and 550 g kits (packed 10 kits per box).

## Technical Information

Characteristic	Standard	Classification
Composition		solvent free, two part, polyurethane adhesive
Specific Gravity		1.5
Viscosity (mixed)		pasty consistency
Properties of Cured Film		tough
Hardness	DIN 53 505	85 Shore D <sup>1</sup>
Mix Ratio (Resin to Hardner)		1:1 by volume
Minimum Working Temperature		+7°C
Contact Pressure		4- 6 bar <sup>2</sup>
Open Time		about 45 minutes <sup>3</sup>
Pot Life	for a preparation of 100 g at 20°C	about 60 minutes
Functional Bond Strength	at 20°C	about 6 hours
Cure Time	at 20°C and 50% RH	75% cure after 24 hours full cure after 7 days
Shear Strength		
Aluminium/Aluminium	at + 20°C	180 kg/cm <sup>2</sup>
Aluminium/Aluminium	at + 80°C	90 kg/cm <sup>2</sup>
Wood/Wood	at + 80°C	80 kg/cm <sup>2</sup>
Temperature Resistance of Cured Adhesive		+230°C up to 30 minutes +110°C long term
Storage		Store in shaded, dry conditions between +12°C and +25°C
Shelf Life		12 months when stored as recommended in original, unopened containers

- 1) The hardness of the product is measured in Shore D as the cured adhesive exceeds the hardness to achieve a Shore A measurement.
- 2) At low temperatures, the viscosity of the mixture (polyurethane resin and hardener) will increase and affect the extrusion rate from the nozzle.
- 3) This time is reduced by half at about +30°C and doubles at +10°C.

## Protective Equipment

USE IN WELL VENTILATED CONDITIONS and ensure all recommended protective equipment is worn during handling & use of this product. For full recommendation, refer to safety data sheet.

## Surface Preparation

- Surfaces must be clean, dry and free from dust, grease and any other substances liable to impair adhesion.
- To improve adhesion of PU038, the cleaning of previously painted aluminium surfaces with AA290 PU Cleaner or acetone is recommended.
- Pre-treatment of bare aluminium surfaces is also recommended using chromate, phosphate or anodizing.



## PU038

### Two Part Corner Cleat Adhesive

#### Usage / Purpose

PU038 is mainly used for the structural bonding of corner angles of aluminium windows and doors. Bonded parts can be powder coated afterwards.

#### Key Benefits

- Solvent free
- Thixotropic- will not drip
- Good weather resistance
- Easy to apply

## Two Part Corner Cleat Adhesive

### Application

- Unscrew and remove static mixing nozzle.
  - Before placing the cartridge into the gun, make sure that the two plastic discs at the end of each part of the cartridge are in place.
  - These discs allow good distribution of pressure from the gun to the entire surface of the piston.
  - To ensure a homogeneous mixture, the first 20 g of newly mixed adhesive should be discarded.
  - The homogeneous mixture is achieved by means of pressing the gun directly to the surface where the adhesive is being applied (see Figure 1).
  - After application or if there is a long break, remove mixing nozzle on the cartridge.
  - Always use a new static nozzle when starting a new kit and ensure that the first 20 g of newly mixed material is again discarded.
  - It is essential that compatibility tests are carried out before work commences on new substrates.
  - Full cure must be achieved before the adhesive can be overpainted.
  - PU038 will withstand temperature of up to 230°C for a maximum of 30 minutes. At this temperature the film is soft and mechanical properties are lost.
  - The components must, therefore, be managed so that the bonded angles are not loaded.
  - PU038 will return to its original properties after cooling.
  - Over painting can be carried out using liquid or dry powder coatings.
- Note: PU038 is not conductive and, therefore, the adhesion of dry powder coating during the electrostatic spraying of the components can not be guaranteed.
- Subsequent anodizing can have a negative impact on the bond.
  - The bonding of materials with different linear expansion performance, particularly when loaded in applications with variable temperatures, require that their long-term behavior be assessed.

### Accessories

- 900 g Compressed Air Gun
- 900 g Manual Gun
- Static Mixing Nozzles (75 per pack)

### Cleaning

Remove uncured adhesive immediately with AA290 PU Cleaner or acetone. Once hardened, the adhesive can only be removed by mechanical means, such as razor blade, cutter or grinding.

### Notes

Staining can occur if used on natural stone. It is not recommended for application to the back of mirrors, to plastics that are sensitive to stress cracking or where lasting exposure to water is possible. Contact with bituminous or tar containing surfaces can lead to discoloration.

### Health & Safety Precautions

Safety data sheet must be read and understood before use.

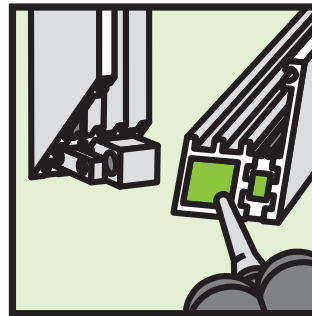


Figure 1



### 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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