

## **ULTIMATE SEALANT & ADHESIVE**



Version: 0.1

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### **DESCRIPTION**

GRAFT® ULTIMATE SEALANT & ADHESIVE has excellent adhesion to non-porous surfaces, will bond to damp surfaces, seals under water and is paintable with most paints. This product is odourless, neutral and free of isocyanates. Conforms to ISO 11.600 F25 HM, EC No. 1935/2004 for materials intended to come into contact with food.

### **FEATURES**

GRAFT® ULTIMATE SEALANT & ADHESIVE is suitable for sealing joints around sanitary fixtures, weatherproofing joints around windows and doors, glazing systems, joints and assemblies in coach body work. For gluing panels, skirting boards, windows, thresholds, mirrors and insulation materials. Will seal and bond glass, porcelain, coated metal, epoxy and polyester panels, polystyrene, UPVC, stainless steel, anodised aluminium and finished wood. May be used safely in the food preparation areas. The solid colours have excellent anti pick qualities and therefore make this product suitable for use in correctional institutions and areas where vandalism of the sealant may occur.

- Can be used for internal and external applications
- Bonds to damp surfaces
- Seals under water
- · Contains fungicide
- Paintable with most paints
- Seals and bonds most substrates
- Excellent anti pick qualities
- Non staining





- · Adhesives and sealant in one
- Can be used in food preparation areas
- FDA Approved
- Available in a range of colours
- CE Marked for glazing
- CE Marked sanitary applications
- CE Marked for pedestrian walkways
- Has an 18 month shelf life

### **USAGE**

Width x depth of joint x length (in linear metres) of joint, divide this by the volume of tube in ml equal number of cartridges required.

### **APPLICATION INSTRUCTIONS**

All surfaces must be clean and sound, free from dirt, grease and other contamination.

Cut the cartridge seal and screw on the nozzle which should be cut to your required size. Using a skeleton gun, apply the sealant into the gap or joint to provide a good solid fill. If required place masking tape along edges, removing within 10 minutes of application.

For gluing applications, apply adhesive in vertical lines at a distance of 30cm. Support the item that is being fixed for 24 hours until full curing occurs.

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Remark: As a part of our policy of on-going product development and testing, we reserve the right to modify, alter or change product specifications without giving notice. All information contained in this document is given in good faith and is provided for guidance only. Any drawings provided are for illustrative purposes only. As Polyseam has no control over the methods or competence of installation and of prevailing site conditions, no warranties, expressed or implied, are intended to be given as to the actual performance



## **ULTIMATE SEALANT & ADHESIVE**

# APPLICATION CHART A = FXCFLLENT B = GOOD C = FAIR

| A = EXCELLENT B = GOOD C = F              | AIN  |
|---|------|
| INTERNAL GENERAL AREAS                    | RATE |
| MASONY                                    |      |
| Cementitious fibre                        | В    |
| Concrete / Cellular concrete / Brick work | В    |
| Granite / Marble / Natural stone          | В    |
| Plaster                                   | В    |
| WOOD                                      |      |
| Fibre board / veneer                      | В    |
| Solid and untreated wood                  | A    |
| GLASS / CERAMICS                          |      |
| Ceramics / Porcelain                      | A    |
| Glass                                     | А    |
| Layered glass                             | A    |
| Reflective glass                          | A    |
| METALS                                    |      |
| Copper and copper alloys                  | В    |
| Iron                                      | В    |
| Lead                                      | В    |
| Stainless Steel                           | В    |
| Untreated and anodised aluminium          | В    |
| Zinc                                      | В    |
| SYNTHETIC MATERIALS                       |      |
| Acrylic / Fibreglass                      | А    |
| PMMA (Plexiglass / Perspex)               | В    |
| Polycarbonate                             | В    |
| Polyester                                 | В    |
| PVC and PVCu                              | Α    |
| OTHERS                                    |      |
| Acoustic sealing                          | А    |
| Dry lining                                | В    |
| Ductwork                                  | В    |
| Expansion joints                          | А    |
| Frame fixing                              | В    |
| Internal frame sealing                    | В    |
| Low emission zones                        | В    |
| Mirror Fixing                             | С    |
| Plumbing                                  | В    |
| Polystyrene                               | В    |
| Skirting & architraves                    | С    |
| Stonework                                 | В    |
| Woodwork                                  | В    |
|   |      |

| BATHROOMS/SANITARY/PUBLIC BAT HOUSES      | RATE |
|---|------|
| MASONRY                                   |      |
| Cementitious fibre                        | В    |
| Concrete / Cellular concrete / Brick work | В    |
| Granite / Marble / Natural stone          | В    |
| Plaster                                   | В    |
| GLASS / CERAMICS                          |      |
| Ceramics / Porcelain                      | В    |
| Glass                                     | В    |
| Layered glass                             | В    |
| Reflective glass                          | В    |
| METALS                                    |      |
| Copper and copper alloys                  | В    |
| Stainless Steel                           | В    |
| Untreated and anodised aluminum           | В    |
| Zinc                                      | В    |
| SYNTHETIC MATERIALS                       |      |
| Acrylic / Fibreglass                      | В    |
| PMMA (Plexiglass / Perspex)               | В    |
| Polycarbonate                             | В    |
| Polyester                                 | В    |
| PVC and PVCu                              | В    |
| OTHERS                                    |      |
| Acoustic sealing                          | В    |
| Dry lining                                | В    |
| Ductwork                                  | В    |
| Expansion joints                          | В    |
| Frame fixing                              | В    |
| Internal frame sealing                    | В    |
| Low emission zones                        | В    |
| Mirror fixing                             | В    |
| Plumbing                                  | В    |
| Polyseyrene                               | В    |
| Skirting & architraves                    | В    |
| Stonework                                 | В    |
| Woodwork                                  | В    |



# **ULTIMATE SEALANT & ADHESIVE**

| KITCHENS                                  | RATE |
|---|------|
| 1000000                                   |      |
| Acoustic sealing                          | В    |
| Concrete / Cellular concrete / Brick work | В    |
| Dry Lining                                | В    |
| Ductwork                                  | В    |
| Fibre board / veneer                      | В    |
| Glass                                     | В    |
| Granite / Marble / Natural stone          | В    |
| Internal frame sealing                    | В    |
| Plumbing                                  | В    |
| Professional food preparation areas       | А    |
| Skirting & architraves                    | В    |
| Solid and untreated wood                  | В    |
| Stainless steel                           | В    |
| Untreated and anodised aluminum           | В    |
| Woodwork                                  | В    |
| EXTERNAL FACADES                          | RATE |
| MASONRY                                   |      |
| Concrete / Cellular concrete / Brick work | В    |
| Granite / Marble / Natural stone          | В    |
| WOOD                                      |      |
| Fibre board / veneer                      | В    |
| Solid and untreated wood                  | В    |
| GLASS / CERAMICS                          | -    |
| Glass                                     | Α    |
| Layered glass                             | A    |
| Reflective glass                          | A    |
| METALS                                    | A    |
| Copper and copper alloys                  | В    |
|   | В    |
| Iron                                      | +    |
| Lead                                      | В    |
| Stainless steel                           | В    |
| Untreated and anodised aluminum           | В    |
| Zinc                                      | В    |
| SYNTHETIC MATERIALS                       |      |
| Acrylic / Fibreglass                      | Α    |
| PMMA (Plexiglass / Perspex)               | Α    |
| Polycarbonate                             | Α    |
| PVC and PVCu                              | А    |
| OTHERS                                    |      |
| Expansion joints                          | В    |
| Leadwork                                  | А    |
| Plumbing                                  | В    |
| Polystyrene                               | А    |
| Stonework                                 | Α    |

| ROOFS                           | RATE |
|---------------------------------|------|
| Bitumen                         | С    |
| Copper and copper alloys        | В    |
| Expansion joints                | В    |
| Glass                           | А    |
| Guttering                       | А    |
| Layered glass                   | А    |
| Lead                            | В    |
| Leadwork                        | А    |
| Plumbing                        | В    |
| PMMA (plexiglass / perspex)     | А    |
| Polycarbonate                   | А    |
| Polystyrene                     | А    |
| Reflective glass                | А    |
| Stainless steel                 | В    |
| Stonework                       | А    |
| Untreated and anodised aluminum | В    |
| Woodwork                        | В    |
| Zinc                            | В    |

Due to the diversity of applications and substrates Polyseam cannot accept responsibility for results obtained using this chart.

It is suggested a preliminary test be carried out first to check bond and seal.



## **ULTIMATE SEALANT & ADHESIVE**



### **SOUND INSULATION**

GRAFT® ULTIMATE SEALANT & ADHESIVE has been tested at BM Trada (UKAS accredited); according to EN ISO 10140-2:2010. Usage of any backing material is optional, due to the tests being conducted with sealant only.

| Description                   | Sound Reduction |
|-------------------------------|-----------------|
| Single sided seal ≥12mm depth | 62dB            |
| Double sided seal ≥12mm depth | >62dB           |

### **EMISSION DATA INDOOR AIR QUALITY**

| COMPOUND           | EMISSION RATE<br>AFTER 3 DAYS | EMISSION RATE<br>AFTER 4 WEEKS |
|--------------------|-------------------------------|--------------------------------|
| TVOC               | 40 μg/m³                      | < 5 μg/m³                      |
| TSVOC              | n.d                           | n.d. (< 5 μg/m³)               |
| VOC w/o NIK        | n.d                           | n.d. (< 5 μg/m³)               |
| R Value            | < 1                           | < 1                            |
| Formaldehyde       | < 3 μg/m³                     | < 3 μg/m³                      |
| Acetaldehyde       | < 3 μg/m³                     | < 3 μg/m³                      |
| Sum for+ace        | < 0.002 ppm                   | -                              |
| Carcinogenic       | n.d. (< 1 μg/m³)              | n.d. (< 1 μg/m³)               |
| n.d. = not detecte | d                             | _                              |

GRAFT® ULTIMATE SEALANT & ADHESIVE complies with the requirements of GEV and the results correspond to the EMICODE emission class EC 1PLUS which is the best possible environmental and indoor hygiene health protection mark.

Tested by Eurofins Product Testing, report number 392-2014-00011601 B.

### **PACKAGING**

GRAFT® ULTIMATE SEALANT & ADHESIVE is supplied in 290ml cartridges, 12 cartridges per carton.

### **LIMITATIONS**

GRAFT® ULTIMATE SEALANT & ADHESIVE is not recommended for application on PE, PP, Teflon, wax, neoprene and bituminous surfaces. Not paintable with alkyd resin based paint. Not suitable for vertical joints. Not suitable for applications in direct contact with sealing of insulation glass or in direct contact with PVB foil or coat glass.

On porous surfaces such as concrete a primer is recommended. Yellowing can occur in the dark. Clear sealant is not UV resistant or suitable for use on natural stone. It is the user's responsibility to determine suitability. Adhesion tests prior to application are recommended. Store between +5°C and +25°C in cool dry conditions.

### **HEALTH AND SAFETY**

Wash the material from the skin while still wet. Material in contact with eyes should be washed out immediately with water. Seek medical advice if discomfort persists.

More detailed information can be found in the relevant GRAFT® ULTIMATE SEALANT & ADHESIVE Material Safety Data Sheet



# **ULTIMATE SEALANT & ADHESIVE**

### **THECNICAL DATA**

|                                     |      | WHITE            | CLEAR            |
|-------------------------------------|------|------------------|------------------|
| Slump ISO 7390                      | mm   | <2               | <2               |
| Density                             | g/ml | 1,53             | 1,06             |
| Skin forming time<br>23°C/55%RH     | min  | 10               | 10               |
| Max movement allowed ISO 9040       | %    | 20               | 20               |
| Temperature resistance after curing | °C   | -30 to<br>100 °C | -30 to<br>100 °C |
| Shrinkage                           |      | nil              | nil              |
| Curing (24 hours)<br>23°C/55%RH     | mm   | 02/03            | 2                |
| Mechanical properties, 2mm film     |      |                  |                  |
| Hardness, Shore A DIN<br>53505      |      | 60               | 45               |
| Modulus, 100% DIN 53504             | MPa  | 1,35             | 1,15             |
| Tensile strength DIN 53504          | MPa  | 2,20             | 2,40             |
| Elongation at break DIN<br>53504    | %    | 300              | 250              |