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Proglaze II

Structural Glazing Silicone for In-Plant Use

KEY BENEFITS SUMMARY

- Excellent unprimed adhesion to most common glazing substrates: glass, aluminium, etc.
- Excellent movement capability: $\pm 25\%$
- Fast cure independent of joint depth
- Non-sag
- Excellent durability
- Dry tools easily to a smooth, attractive finish
- Excellent resistance to UV light, ozone and extreme temperatures
- Wide service temperature range
- Passes the requirements for silicone structural glazing as laid down in ETAG n°002 Part 1

PRODUCT INFORMATION

Description

Proglaze II is a high performance, two component, neutral curing silicone sealant, developed specifically for in-plant structural glazing applications.

Usage / Purpose

Proglaze II is ideally suited for both two and four sided structural glazing applications. It is designed specifically for in-plant glazing and curtain wall applications where fast cure time reduces production time. Structural glazing operations should only be carried out after consultation with a Tremco illbruck Technical Representative.

LIMITATIONS

Proglaze II is **NOT** recommended:

- for continuous water immersion
- on surfaces which may exude oils, resins, plasticisers, tars or solvents
- on unfinished or untreated surfaces, impregnated wood, oil-based caulks and some vulcanized rubber or plastic gaskets
- on surfaces to which paint will be applied after application of the sealant
- on substrates such as copper, lead and brass without prior written approval from TREMCO
- on porous substrates.

Colour

STANDARD GRADE

Part A: White
Part B: Black
Mixed Sealant: Dark Grey

BLACK GRADE

Part A: White
Part B: Black
Mixed Sealant: Black

Packaging

STANDARD GRADE

190 litre drum of base and a 17 litre pail of curing agent.

BLACK GRADE

190 litre drum of base and a 18 litre pail of curing agent.

Availability

Direct from Tremco illbruck (see back of leaflet for address and telephone details).



Proglaze II

TECHNICAL INFORMATION

Composition

Neutral cure, high modulus, silicone sealant.

Characteristics (Typical Values when used in mix ratios as supplied)

SPECIFIC GRAVITY

Standard Grade

Base	1.33
Curative	1.38
Mix	1.34

Black Grade

Base	1.33
Curative	1.05
Mix	1.31

Performance (Typical Values when used in mix ratios as supplied)

MODULUS AT 100% ELONGATION

0.8 MPa	(ISO 8339; +23°C conditioning)
1.02 MPa	(ISO 8339; +100°C conditioning)
0.72 - 0.79 MPa	(105 - 115 psi (ASTM C-1135; H-Block))

ELONGATION AT BREAK

275% - 300%	(ISO 8339)
275% - 300%	(ASTM D-412; Dumbell Die C)
175% - 200%	(ASTM C-1135; H-Block)

ELASTIC RECOVERY (ISO 7389)

100%

EXTRUSION RATE (ASTM C-603)

3 seconds

FLOW, SAG OR SLUMP (ASTM C-639)

None

HARDNESS SHORE 'A' (ASTM C-661)

31-35

TACK FREE TIME (ASTM C-679)

<4 hours (typically 2 hours)

EFFECT OF HEAT AGEING

(ASTM C-792)

Pass - no change

EFFECT OF ACCELERATED WEATHERING (ASTM C793)

Pass - no change

ADHESION IN PEEL (21 days at +23°C, 50% RH (ASTM C-794))

Glass	3.85kN/m
Glass	3.85kN/m (+ 7 days water immersion)
Aluminium	4.55kN/m
Aluminium	3.50kN/m (+ 7 days water immersion)
All failures cohesive	

RESISTANCE TO CYCLIC MOVEMENT (ASTM C-719)

Glass	Pass
Aluminium	Pass

TEAR STRENGTH (ASTM D-624; Dumbell Die C)

7.88 - 8.76 kN/m

TENSILE STRENGTH

1.37 - 1.44 MPa	(200 - 210 psi (ASTM D-412; Dumbell Die C))
0.89 - 1.03 MPa	(130 - 150 psi (ASTM C-1135; H-Block))

MOVEMENT ACCOMMODATION (ASTM C-719)

±25%

SERVICE TEMPERATURE RANGE

-54°C to +149°C

MIX RATIO (as supplied)

Standard Grade	
Volume	11.70 : 1
Weight	10.68 : 1 (for info only)

Black Grade

Volume	10 : 1
Weight	13 : 1 (for info only)

PERMISSABLE RANGE

Standard Grade
10:1 to 13:1 (volume)

Black Grade

9:1 to 12:1 (volume)

USAGE GUIDELINES

Design Considerations

- For structural glazing applications (i.e. tensile bead), a minimum 6mm (¼") face clearance created by a compatible structural spacer, such as Tremco SGT 920 Tape, is required for the proper installation of Proglaze II.
- The depth of the sealant bead or the surface contact depth (SCD) must be calculated based on glass size and the specified design wind pressure. It is Tremco illbruck's recommendation that the minimum SCD is 6mm (¼"). Please contact Tremco illbruck for specific advice.
- The industry standard 4:1 joint design factor, to which Tremco illbruck prescribes, accommodates thermal movement. Construction fabrication and erection tolerances must be included in calculating the nominal joint size.

Surface Preparation

- Substrates for every structural silicone glazed project must be submitted for adhesion testing by Tremco illbruck prior to commencement of glazing. Components likely to be in contact with the tensile bead should be submitted for compatibility testing prior to commencement of any works.
- The surface preparation (cleaning method or primer if required) for each structural glazing project will be recommended based on testing of production run sample substrates supplied by the customer and based on laboratory testing performed by Tremco illbruck.
- Joint interfaces must be clean, dry and free from any foreign matter prior to sealant application.

Proglaze II

- Metal, glass and other non-porous surfaces should be wiped clean with a solvent dampened clean cloth, followed immediately by a dry wipe with a clean, lint free cloth before the solvent evaporates (i.e. 2 rag method). Preferred solvent is MEK or IPA. Follow all precautions on label during handling of solvent. A trial application of the solvent is recommended to ensure there is no adverse reaction with the substrate.

Priming

- Some substrates with special surface characteristics, finishes, or coatings may require a primer to optimise adhesion performance.
- The priming requirement will be established by Tremco illbruck during laboratory testing.

Method of Application

- Proglaze II can easily be applied with Tremco illbruck approved multi-component metered dispensing equipment. Hand or mechanical mixing of the base and curing agent is not acceptable. Contact your local Tremco illbruck Representative for proper equipment specifications.
- The sealant should be applied in a continuous operation with adequate pressure to wet out both sides of the joint and entirely fill the joint to its proper width and depth.
- Dry tool the sealant immediately after its application to ensure positive and complete contact of the sealant to joint interfaces.
- Should masking be required to prevent contamination of adjacent surfaces, it is recommended that the masking tape be removed immediately after tooling and before the sealant sets.

- Adhesion of Proglaze II to the glazing substrates and overall performance of the multi-component metered dispensing equipment should be verified on a periodic basis (i.e. minimum once per shift). This will ensure trouble free installation and prevent costly and unnecessary site inspection to confirm adhesion.

Cleaning

Cleaning of all tools can be accomplished with solvents such as isopropanol or MEK. On non-porous surfaces, immediately remove all sealant and smears adjacent to the joint with one of the above solvents.

Health & Safety Precautions

Product Health and Safety Data Sheet must be read and understood before use.

Storage

Store in shaded dry conditions between +5°C and +25°C.

Shelf Life

BASE

12 months when stored as recommended in original unopened containers.

CURING AGENT

9 months when stored as recommended in original unopened containers.

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.

No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco illbruck Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

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