

U-SEAL 907

LOW MODULUS CONSTRUCTION SEALANT

DIN 18540/F – BS - ISO 11600 /F/25LM CERTIFIED

Product Description:

U-Seal 907 is a permanently elastic, one component, gun grade polyurethane construction sealant. It cures under the influence of atmospheric moisture to form a low modulus sealant with excellent adhesive properties and resistance to ageing and weathering.

Certified according to: ISO 11600/F/25LM and DIN 18540/F

The main typical applications are:

- Sealing expansion and construction joints in vertical and horizontal applications
- Joints in precast elements
- External walling and cladding joints.
- Weatherproofing of joints between brickwork, block-work, masonry, wood and concrete or metal frames.
- Joints in walls, floors, balconies, around window or door frames
- Bridge and balcony parapets.
- Retaining walls
- Roofing

Main features and properties

- Permanently elastic over a wide range of temperatures
- Non-sag consistency
- Non-sticky / does not pick up dirt
- Short cut-off string
- Easy to gun, can be easily smoothed and levelled out
- Good adhesion on all typical construction materials
- Excellent resistance to aging, weathering.
- Over-paintable with many water, solvent based paints (preliminary tests recommended)

Technical data:

- Chemical basis	Polyurethane
- Cure mechanism	Moisture curing
- Specific weight	1.30 ± 0,02 gr/cc
- Tack free time at 23°C and 50% r.h.	≈ 120 minutes
- Curing at 23°C and 50% r.h.	≥ 2,0 mm/24h
- Hardness Shore A (DIN 53505)	≈ 20
- Elongation at break (DIN 53504)	≥ 600%
- Elastic modulus at 100% (DIN 52455)	≤ 0,4 N/mm ²
- Elastic recovery (DIN 52458)	85%
- Admissible joint movement	25 % total movement capacity
- Application temperature	+5°C to +35°C
- Temperature resistance	- 40°C / +80°C



Instructions:

Surface preparation: Joint surfaces must be dry, clean and free of all contamination. Glass, metal and other non-porous surfaces must be free of any coatings and wiped clean with solvent. Precast panels using form-release agents other than polyethylene film must be sandblasted or mechanically abraded and dust free.

Priming: U-Seal 907 has general good adhesion properties even without the use of primer on most common building materials. However, varieties of brick, natural stone, plastics, paints, coatings and other treatments of surfaces often presents a difficult surface to which to adhere. Due to the number of unpredictable natures of these substrates, a preliminary test is recommended.

Apply a coating of primer on the joint walls (U-Primer 110 for porous surfaces and U-Primer 120 for non-porous surfaces).

Application: Recommended application temperatures: 5°-30°C. For easier use or cold weather application we recommend the material is stored at approximately 25°C prior to use.

In order to guarantee free movement of sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint, therefore for correct joint making a closed-cell polyethylene bead (joint backing rod) is to be placed at the proper depth.

Apply appropriate primer to joint sides and observe waiting time to avoid that trapped solvent, in condition of rising temperature, can blow bubbles in the uncured sealant.

For best performance, sealant should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction.

Firmly extrude sealant into the joint making sure that it is in full contact with the sides of the joint and with the backing rod at the bottom. Keep the nozzle in the sealant, continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air.

Sealant should be tooled to a smooth finish ensuring a full contact to the sides and back up material into the joint, this will also contribute in breaking the air bubbles which may be formed inside the sealant. Masking tape should be used where sharp exact joint lines or exceptionally neat lines are required. Remove the tape whilst the sealant is still soft.

Colour Range - Packing :

Standard Colours:	White/Grey/Black (special colours on request)
Aluminium cartridges 310 ml.:	12 cartridges per box
Alu-PE sausages 600 ml.:	20 bags per box

Limitations:

- U-Seal 907 may be painted. However some coatings may crack if movement occurs, preliminary tests recommended.
- Avoid exposure to high levels of chlorine (avoid to seal joints in chlorinated swimming pools).
- Do not cure in the presence of curing silicone sealants.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Do not apply when moisture-vapour-transmission condition exists from the substrate as this can cause bubbling within the sealant.
- When applying sealant, avoid air-entrapment.
- Since system is moisture-cured, permit sufficient exposure to air.
- White colour tends to yellow slightly when exposed to ultraviolet rays.
- The ultimate performance of U-Seal 907 depends on good joint design and proper application with joint surfaces properly prepared.
- U-Seal 907 should not be used for structural glazing



Storage:

U-Seal 907 can be stored for 12 months in its original packing (unopened container) at 5°- 25°C in a cool, dry place. The storage temperature should not exceed 25°C for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

General Information:

The information contained in this technical data sheet is to the best of our knowledge correct. However, by no means can it be considered a guarantee, as usage, working area and application of the product in accordance with the instructions given and their success in application is beyond our control and is dependent on a number of factors. We decline any responsibility for the improper use of the product as the application recommendations contained herein are to be considered as a general guideline. If at all in doubt, preliminary tests should be carried out.

N.P.T. srl reserves the right to modify and up-date said data sheets without prior notice. Clients are kindly requested to verify that they are in possession of the current edition.

ALWAYS CONSULT THE SAFETY DATA SHEETS BEFORE USING THE PRODUCT.

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