

TECH DATA

PRODUCT DESCRIPTION:

Firethane® 7140 is a one component, low modulus, gun grade, non-sag, moisture-cure polyurethane sealant with outstanding UV resistance. Firethane® is designed to cure into a **fire rated, elastic weatherproof seal**. A tack free skin is formed in 2 to 4 hours at normal conditions (24°C; 50% R. H.), and full cure takes place in 24 to 48 hours. Cure rate will vary with changes in temperature and humidity. Firethane® will accommodate 50% total joint movement while maintaining excellent weatherability.

TYPICAL USES:

Firethane® 7140 is designed for sealing joints where a high performance **fire rated** seal is required:

- Expansion and construction joints
- Tilt-wall joints
- Sealing in conjunction with fire collars or pillows
- Perimeter joints around windows and doors
- Masonry expansion joints
- Between dissimilar metals
- Between construction materials of dissimilar expansion coefficients
- Acoustical applications

ADVANTAGES:

- Superior UV resistance and durability
- Excellent adhesion with no primer
- Accommodates 50% total joint movement
- Single component
- Permanently flexible
- Non-staining
- Paintable
- Meets ASTM and Federal standards*
- VOC compliant
- Acoustic ratings (up to 45 STC)*

SPECIFICATION COMPLIANCE*:

Firethane® meets or exceeds the test requirements of:

TT-S-00230 C (Type II) Class A,
Non-Sag, One-Component
ASTM C-920 Type S,
Grade NS, Class 25, Use-NT,
Use-A, Use-M, Use-G, Use-O
AAMA 808.3-92
(Exterior Perimeter Sealing Compound)
Fire Test Certification to AS Standards (2001)

FIRE RATING PERFORMANCE

See fire rating summary data page

TYPICAL PROPERTIES

Characteristics	Result	Test Method
Peel Adhesion:	15 PLI (67 N)	ASTM C794
Maximum Tensile Strength:	325 PSI (2.24 N/mm ²)	ASTM D412
Elongation:	500-600%	ASTM D412
Sag:	None	ASTM C639
Hardness (Shore A):	47	ASTM C661
Service Temperature Range:	-40°C to 93°C (-40°F to 200°F)	
Application Temperature Range:	4°C to 40°C (40°F to 104°F)	
Water Resistance:	Passes	AAMA 800
Flash Point:	43°C (110°F)	ASTM D 56
Skin Time*	2-4 hours @ 24°C (75°F) 50% R.H.	
Cure Time*:	24-48 hours	6 mm (1/4") Diameter Bead @24°C (75°F) 50% R.H.

* Skin and cure times are dependent on temperatures, humidity and porosity of substrates. Low humidity, cooler temperatures and non-porous substrates will lengthen these times.

APPLICATION

Surfaces must be clean, dry and free of oil or grease. Concrete and masonry surfaces must be free of foreign matter and contaminants. Dust and loose particles should be blown-out of joints. A clean, sound and uncontaminated surface is mandatory. Stone surfaces must be cohesively sound, and free of contaminants. Granite, limestone, marble and sandstone must be pre-tested for adhesion before sealant installation.

Mill finish aluminum may contain an invisible oil film or oxide. Clean with a good degreasing solvent such as xylene or toluene.* Many high-performance coatings or unusual surface treatments may require abrasion of the surface with steel wool or fine emery paper during preparation. In cases where doubt exists, consult Schnee-Morehead for recommendations.

Do not use alcohol to clean surfaces of the penetration. Residual alcohol will prevent the cure of Firethane® 7140.

JOINT DESIGN:

Joint width should not exceed 40mm and joint depth should not exceed 20mm. Minimum joint depth is 10mm. For joints over 20mm wide, depth should be one half the width. Refer to fire test data for correct joint size. In order to obtain the recommended sealant mass use back up material, leaving the depth to be filled with sealant. Back up material should be selected to meet the requirements of the system.

LIMITATIONS:

Not recommended for:

- Unprimed masonry joints that will be subjected to continuous water immersion.
- Joints that are contaminated with grease, wax, corrosion, bitumens or cement laitance.
- Horizontal joints in floors or decks where physical abuse is encountered.
- Special architectural finishes without proper testing.

PRIMING:

Priming or surface preparation recommendations:

- It is expected that Firethane® 7140 will adhere and perform in uncontaminated joints with most common construction substrates. Substrates include but are not limited to concrete, marble, granite, anodized aluminum, mill finished aluminum, galvanized surfaces, glass, fiberglass reinforced plastic (FRP), wood, painted aluminum, Kynar, and polyvinyl chloride (PVC).

Due to the vast numbers and types of surface coatings and treatments available, Schnee-Morehead recommends pretesting Firethane® 7140 on the surface in question.

- Priming of masonry or other porous substrate joints is recommended only if the joints will be subjected to prolonged or continuous immersion. Joints subjected to intermittent immersion or vertical joints subjected to rain should perform without the need of a primer.

PRETEST FOR ADHESION:

Pretesting for adhesion is intended to eliminate potential field problems by testing Firethane® 7140 on samples of building materials to which it will be applied. This testing will aid in determining the proper surface preparation method.

APPLICATION LIMITATIONS:

- Firethane® 7140 must not be applied to frost-bearing surfaces if temperature will be below freezing for more than 24 hours.
- Tooling techniques using solvents or soapy solutions are not recommended.
- All surfaces must be evaluated for adhesion before product acceptance.
- The suitability of this product, for each intended use, must be determined by the purchaser before acceptance.

TOOLING:

Tooling of freshly applied sealant should be done in one continuous stroke. Tool the sealant with adequate pressure to spread the sealant against the back-up material and onto the joint surfaces. Excess sealant should be dry-wiped from all surfaces while still uncured. If joint surfaces have been masked, remove masking tape immediately after tooling. Cured sealant is very difficult to remove.

CLEAN-UP:

Immediately remove all excess sealant smears adjacent to the joint with xylene, toluene, or methyl ethyl ketone.* Tools and application equipment may also be cleaned with the same solvents.

PRECAUTIONS:

IF THIS PRODUCT IS USED IN DIRECT CONTACT OR IN CLOSE PROXIMITY WITH ANY OTHER SEALANT OR ELASTOMER, A COMPATIBILITY TEST MUST BE CONDUCTED BY PURCHASER OR USER PRIOR TO ACCEPTANCE. WHEN APPLIED IN CLOSE PROXIMITY, NEUTRAL CURE SILICONE WILL PREVENT SM7140 FROM CURING. Avoid skin and eye contact. On contact, uncured sealant could cause irritation to the skin and eyes. In case of eye contact, flush eyes with warm water for 15 minutes, call a physician. For skin contact, remove sealant with a paper towel. If swallowed, do not induce vomiting call a physician. **KEEP OUT OF REACH OF CHILDREN.** This product is manufactured for industrial use only.

PACKAGING:

Firethane® 7140 is available in gray, 600 ml. aluminum sausages.

SHELF LIFE:

Firethane® 7140 will exhibit a twelve-(12) month shelf life when stored at temperatures not exceeding 27°C (80°F).

*Should meet standards with no exception.

*The use of these solvents (or other solvents) may be hazardous to your health. Use only in well ventilated areas. **KEEP AWAY FROM OPEN FLAME.** Read all labeling before use, and follow solvent manufacturer's recommendations and instructions for safe handling.

EXCLUSION OF WARRANTIES:

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Complete technical information is available from Schnee-Morehead®, Inc. For technical assistance, customer service and general information call:

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