

Technical Data Sheet

EnduraTech™ HS (70-025)

HIGH SOLIDS SILICONE

DESCRIPTION:

EnduraTech HS (70-025) is a ready-to-use, high solids, single component, moisture cure fluid applied silicone coatings

DISTINGUISHING CHARACTERISTICS:

- Breathable membrane with superior weathering and water resistance characteristics
- Provides elemental protection for architectural surfaces such as vertical walls, masonry, concrete, metal, single ply membranes, and sprayed-in-place foam systems
- Not recommended for continuous immersion service, for use in cryogenic tank, or cold storage roofing applications without vapor barrier, or directly over modified Bitumen, asphalt, or coal tar built-up roofing systems without a sealer.

TYPICAL PHYSICAL PROPERTIES:

Properties	Typical Values
Solids by Weight	96% ± 2
Solids by Volume	96% ± 2
Temp Stability Range	-80°F to 350°F
Maximum Continuous Service Temperature	185°F
Standard Colors	White, Light Grey, Dark Grey, special colors available upon request
Shelf Life	6 months (when stored between 35°F and 75°F in unopened containers)
SRI Value	110 Initial
Specific Gravity	1.28 at 77°F

PERFORMANCE PROPERTIES:

Properties	Test Method	Typical Values
Elongation	ASTM D-2370	192% at 73°F; 216% at 0°F
Tensile Strength	ASTM D-2370	331 psi at 73°F; 432 psi at 0°F
Tear Resistance, lb f/in	ASTM D-624	37.5
Reflectively (white)	ASTM C-1549	Initial 0.87
Emissivity (white)	ASTM C-1371	Initial 0.89
Permeance	ASTM E-96 (Procedure B)	5.9±

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Properties	Test Method	Typical Values
Water Absorption	ASTM D-471	0.1 weight % after two weeks at 75°F
Weathering / UV Resistance	ASTM D-6694	No degradation (5000 hrs)
Tack Free Time	<i>Temp & Humidity Dependent</i>	1 hour
VOC	ASTM D-3960 (EPA Method 24)	< 10 Grams/Liter
Durometer Hardness	ASTM D-2240 (Shore A)	50± 5 points
Flash Point	ASTM D-92	290°F
Cure Time	<i>Temp & Humidity Dependent</i>	2-8 hours
Dry Time	<i>Temp & Humidity Dependent</i>	1 hour at 77°F

APPLICATION INSTRUCTIONS

Do Not Thin

SURFACE PREPARATION: All surfaces to be coated must be clean, dry, and paintable. It may be necessary to power wash and/or prime to enhance adhesion. See application specification for more details.

MIXING PROCEDURES: **No thinning or reducing is necessary.** Product may separate after shipping and storage, though it may still look mixed. When mixing becomes necessary we recommend the use of a 3/4 horsepower or larger air operated mixer with a blade capable of uniformly mixing the entire container. When product is in 5-gallon pails, use a 3" minimum diameter- mixing blade. Hand mixing with a suitable mixing blade is acceptable. When product is in drums, use a 6" minimum diameter-mixing blade. If thinning is necessary, please contact NCFI Technical Department.

Containers are packaged with a layer of dry argon gas, to keep latent moisture from prematurely starting the curing process. After opening a container, try to use it up as soon as possible, or reseal with a layer of argon or nitrogen gas.

WEATHER RESTRICTIONS: It is not recommended that this product be applied at temperatures below 50° F. (10° C.), or if rain is expected within 1 hours of application. Enduratech HS may be applied at lower temperatures, however the cure time will be extended.

APPLICATION EQUIPMENT: This product may be sprayed, brushed, or rolled. Due to the high viscosity of the material, a high-pressure airless paint pump capable of producing a minimum of 3500 PSI at the spray gun head should be used. The pump should have a minimum of 3 gallons per minute output and be fed by a 5:1 transfer pump to prevent cavitation. Always use components rated for pump pressure. Hoses should be BUNA-N jacketed for prevention of moisture contamination. Hoses should have a minimum I.D. of 3/4" and an adequate working pressure. The spray gun should be high pressure (5000 PSI) with reverse-a-clean spray tip, having a minimum orifice of .030 and a 50° fan tip.

SYSTEM OPTIONS: This product can be used as a topcoat over polyurethane elastomeric base coats where improved traffic and impact resistant characteristics are required.

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APPLICATION PROCEDURES: This product may be applied directly to any clean, dry surface. Polyurethane foam should be coated within 24 hours of application. Subsequent coats should be applied within 24 hours of prior applications to insure full and uniform adhesion. Coating must be applied in 2 or 3 separate applications of contrasting colors, each applied at right angles to the previous coat. Coating must be evenly applied and pinhole-free.

Before applying a subsequent coat of this product the previous coat must be completely dry and cured. If any contamination of a thoroughly cured surface occurs, it must be washed with a chemical cleaner before applying subsequent coats. Coating must be extended beyond the substrate to create a self-terminating flashing. Consult NCFI for recommended dry film thickness.

Due to the bond agent present in all coating, colors may be used as either a base or a topcoat. The coating will cure in 2-6 hours, dependent on weather conditions (such as temperature and humidity), after which another coat can be applied. A #11 ceramic roofing granule may be installed in the topcoat to improve aesthetics, traffic resistance and impact resistance.

RECOATING PROCEDURES: This product may be used to re-coat existing spray-in-place roofing systems. Surface to receive recoat must be thoroughly cleaned using power scrubber, pressure washer, chemical cleaners, or air wand. Surface must be completely dry before applying re-coat.

SAFETY PRECAUTIONS: Keep cleaning solvents away from all sources of heat, sparks, flame, lighted smoking materials, or any other ignition source. Pumping equipment should be grounded to avoid accidental ignition due to static sparks.

Avoid breathing solvent vapors. Use an appropriate MESA/NIOSH approved respirator when exposure can exceed recommended PEL. This product is not recommended for interior use. Additional care must be taken to prevent roof top HVAC equipment from introducing evaporating solvent into interior areas during application. Building occupants should be warned of spray operations in process.

Installers should exercise caution during spray processes to avoid falls caused by stepping into slippery wet coating. Installers should read and understand all technical and informational literature on this product, including the MSDS, prior to use of the product.

The information on our data sheets is to assist customers in determining whether our products are suitable for their applications. The customers must satisfy themselves as to the suitability for specific cases. NCFI Polyurethanes warrants only that the material shall meet its specifications; this warranty is in lieu of all other written or unwritten, expressed or implied warranties and NCFI Polyurethanes expressly disclaims any warranty of merchantability, fitness for a particular purpose, or freedom from patent infringement. Accordingly, buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence or other claim shall be limited to the purchase price of the material. Failure to adhere strictly to any recommended procedures shall relieve NCFI Polyurethanes of all liability with respect to the material or the use thereof.