

# A·R·C·HITECTURAL

## ROOF COATINGS

### ● PRODUCT DATA SHEET

## DynaSHIELD SILICONE HS

### DESCRIPTION

ARC DynaSHIELD Silicone HS is a single component solvent less moisture cure elastomer, designed for use as a cure in place waterproofing roof coating system which can be sprayed, rolled or brushed onto the desired substrate. This system resists weathering, aging, oxidation and precipitation due to the silicone backbone of the cured polymer. It also, withstands high temperatures and UV radiation, reflecting the heat from the substrate which helps reduce cooling costs during periods of high outside temperatures. ARC DynaSHIELD Silicone HS is characterized as a breathable, soft, waterproofing membrane protecting the substrate from premature failure and degradation.

### RECOMMENDED USES

ARC DynaSHIELD Silicone HS is primarily used as a waterproofing roof coating system for spray in place polyurethane foam, metal, concrete, wood and most single-ply's.

### WEATHER & ENVIRONMENTAL PERFORMANCE

#### Weather ability QUV Test Data

No degradation

#### Service Temperature

-85°F to 350°F

#### Fire Resistance

Class A over foam

#### Approvals

Underwriters Laboratories ASTM E-108

#### Hydrolytic Properties

Water Vapor Permeability

@20 mils 4.5 Perms

Water Absorption

7 Days @ room temp 0.22%

### PROPERTIES

|                   |   |
|-------------------|---|
| COLOR:            | White   |
| HARDNESS:         | 4.0 Shore A ASTM D-2240   |
| TENSILE:          | 530 psi ASTM D-412  |
| ELONGATION:       | 175 % ASTM D-412  |
| PERMANENT SET:    | 1% max ASTM D-412   |
| TEAR STRENGTH:    | 23 pli ASTM D-624   |
| ADHESION:         | Excellent adhesion to polyurethane foam   |
| REFLECTANCE:      | ASTM C-1549   |
| Without Granules  | Initial: 0.82 Aged: 0.68  |
| With Granules     | Initial: 0.75 Aged: 0.51  |
| EMITTANCE:        | ASTM C-1371   |
| Without Granules  | Initial: 0.90 Aged: 0.90  |
| With Granules     | Initial: 0.94 Aged: 0.92  |
| SOLIDS:           | Weight 96.5% +/- 1%   |
| SOLIDS:           | Volume 95% +/- 1%   |
| WEIGHT:           | 11.26 lbs. per gallon   |
| SPECIFIC GRAVITY: | 1.35 Specific Gravity   |
| FLASH POINT:      | 187° F ASTM D-56  |
| VISCOSITY:        | 4,000 to 6,000 cps.   |
| VOC:              | 46 G/L  |
| COVERAGE:         | Mil/sq/ft/gal 1504  |
| STORAGE:          | 12 months from date of manufacture when stored in sealed, unopened containers between 40°F - 75°F |

*Avoid breathing fumes and prolonged contact with skin. Do not ingest. Keep containers covered when not in use. When using, provide proper ventilation. Dispose of product and container in accordance with local disposal codes.*

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# A·R·C·H·I·T·E·C·T·U·R·A·L

## ROOF COATINGS

### DynaSHIELD SILICONE HS

#### APPLICATION

##### **EQUIPMENT**

ARC DYNASHIELD SILICONE HS can be applied by brush, roller or sprayed. If sprayed, use single component spray equipment capable of maintaining a minimum constant spray pressure of 5000 psi.

##### **MIXING**

All drums must be power mixed! Mix all drums with a 1 ½ horsepower air driven mixer (do not use auger type mixer) for a minimum of 30 minutes depending upon the temperature of the product on the day of application. The shaft should have at least one set of 6" collapsible blades to fit through the bung opening in the drum and should be long enough to reach the bottom of the drum. Pails need to be power mixed with a proper mixer and a 3" minimum mixing blade.

##### **MATERIAL APPLICATION**

Mix thoroughly. For cold weather application, keep material above 65°F. Upon opening the drum for use, mix per directions and insert transfer pump, tightly sealed in the opening. A small amount of nitrogen can be directly placed under the sprayer with a nitrogen cap after mixing. Generally the material is applied in two to three coats over most substrates. ARC DynaSHIELD Silicone HS should not be left longer than 24 hours for subsequent coats. Apply in alternate direction for each coat to ensure proper coverage and to help eliminate pin holes. Each coat should be a different color. Only if the substrate is flat and smooth can it be sprayed in one coat, up to two gallons per square. A second application is needed if applying granules.

##### **PRIMERS**

None required for polyurethane foam. For other substrates.

##### **REACTIVITY**

- Tack free time: 2-3 hours @ 75°F, 50% relative humidity.
- Cure time: 3-6 hours @ 75°F, 50% relative humidity.

##### **RECOAT TIME**

: 4-24 hours. Do not exceed the recoat time or poor intercoat adhesion may result

##### **CLEAN-UP SOLVENT**

Use ARC Cleaning Solvent to clean liquid product from tools and equipment. For spray equipment, circulate solvent through lines and spray gun into a separate bucket and circulate until clean. Best to follow up by putting clean solvent in the system and sealing both ends before storing.

##### **LIMITATIONS**

Do not install in a ponding or continuous submersion service. Not for use as a roof for a cold storage application or a cryogenic tank without a vapor barrier.

##### **THINNING**

Do not thin prior to application

##### **PRECAUTIONS**

See Safety Data Sheet for complete Safety data. Do not add water to this product. Avoid prolonged breathing of vapors and prolonged or repeated skin contact. Use only with adequate ventilation.

##### **PACKAGING**

5 Gallon Pails or 50 Gallon Drums

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