

A·R·C·HITECTURAL[®]

ROOF COATINGS



MADE IN



THE USA

• **PRODUCT DATA SHEET**

HydroSHIELD[™] CERAMIC INSULATING ROOF COAT

• **DESCRIPTION**

HydroSHIELD[™] Ceramic Insulating Roof Coat is a blend of urethane and acrylic resins. It dries by evaporation to yield a non-yellowing, water-repellent surface. HydroSHIELD[™] Ceramic Insulating Roof Coat is UV stable. Unlike other coatings, it contains an added advantage, ceramic particles. These particles are the heat dissipation element that makes this formula unique. HydroSHIELD[™] Ceramic Insulating Roof Coat is Energy Star and CRRC listed. A sustainable cool roof coating.

• **RECOMMENDED USES**

Surface to be treated must be clean. If necessary, remove all dust, grease and loose debris before applying this product. HydroSHIELD[™] Ceramic Insulating Roof Coat may be applied to metal, masonry, wood and most asphalt roof products.

• **APPLICATION**

Please see the specification manual for proper procedures for preparing surfaces prior to application. This product may be applied with a roller, squeegee, brush or sprayer. Apply at the rate of .75 gallon per 100 square feet, per pass.

• **BENEFITS**

Abrasion Resistant	UV Resistant
Non-Yellowing	Flexible
Mildew Resistant	Energy-Saving
Non-Toxic	RE-19
Nano Processed	

• **TECHNICAL DATA**

EMITTANCE:	.91 ASTM C-1371
REFLECTANCE:	.83% ASTM C-1549
FLEXIBILITY:	Passed 180° Mandrel Bend Test ASTM D-3111
HAIL RESISTANCE:	Passed with no fracture of the membrane
WEATHERABILITY:	Passed 2000 hours ASTM E-42 (G-26)
FIRE RESISTANCE:	Class "A" ASTM E-108
FUNGAL RESISTANCE:	Passed ASTM D-3273-73T
ELONGATION:	210% at 70° F ASTM D-882-75B
CLEAN UP:	Biodegradable citrus cleaning products or soap and water
VOC:	<50 grams per liter
WEIGHT:	9.6 lbs. per gallon +/- 2%
SOLIDS (WEIGHT):	56% +/- 2%
SOLIDS (VOLUME):	49% +/- 2%
PERMEABILITY:	4.0 ASTM D61653 @ 9 mils.

- **CAUTION:** High Humidity requires a longer time for water-based coatings to form a film that is rain resistant.

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.

**CONSULT ARC TECHNICAL DEPARTMENT
FOR ANSWERS TO ANY QUESTIONS
REGARDING USE OF THIS PRODUCT**

System warranty available. When sold separate from system there is no warranty given, expressed or implied, through the values or statements made here, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by our in house and independent third party labs in order to obtain approval and/or classification. Acceptance, purchase and selection of these products are the sole responsibility of the buyer, buyer's agent, or the buyer's customer. ARC assumes no responsibility for coverage, performance, or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER GUARANTY OR WARRANTY OF ANY KIND IS MADE BY ACE ROOF COATINGS, INC. OR ITS SUBSIDIARIES, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING COSMETIC APPEARANCE, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

ARCHITECTURAL ROOF COATINGS, INC.®

Product Data Sheet

APPLICATION PROCEDURES

FOR ALL HYDROSHIELD™ and HYDRO-THERM™ ROOF COATINGS

TEMPERATURE

Air and Surface: 45°F Minimum/140°F Maximum

Material: 45°F Minimum/100°F Maximum

RELATIVE HUMIDITY

Can be applied at relative humidity up to 95%

DO NOT APPLY WHEN THE TEMPERATURE CAN FALL TO WITHIN 5°F OF THE DEW POINT WITHIN 6 HOURS.

This product cures by water evaporation. It is very important that this product is not used when weather conditions are below 45°F or when there is a chance that the temperature could fall below 20°F within a 24 - hour period after application. Do not apply this product if rain or dew is likely to occur before drying of product. Late afternoon application is not recommended if high humidity conditions exist, which could cause high moisture concentration on the surface overnight.

BRUSH: No reduction necessary. Use nylon/polyester brush. Do not over-brush as material may start to pull.

ROLLER: No reduction necessary. Use 1/2" to 1-1/2" nap synthetic rollers. Keep a wet edge to avoid ripping which may change appearance. If ripping is a problem, extend lap time to after materials have skinned. Avoid rapid rolling which causes bubbling.

AIRLESS SPRAY-VOLUME:

Output: 2.0 – 3 gal. per min.

Pressure: 3,000 – 4,000 psi

Spray Gun: Graco – Contractor rated for pressure

Fan/Tip: 12/.021 -12/.039 reversible

Extension: 12" – 36" gun extension recommended

SPECIAL CONDITIONS

Mildew:

- Must be removed by power washing and broom scrubbing with a solution of bleach or liquid detergent and water. Rinse clean and allow dry.

Ponding Water:

- **ARC's Warranties do not cover damage to ARC coating caused from areas that pond water.**
- Water based coatings should not be applied on roofs that collect water and results in standing water over 48 hours after a rain. The National Roofing Contractors Association considers water ponds on any roof unacceptable. (See the NRCA Roofing and Waterproofing Manual).
- Do not use without a vapor barrier on cold storage or cryogenic tank roofing applications.

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 electric or 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. When product is in drums, use a 6" minimum diameter mixing blade.

Application Equipment: This product may be sprayed, brushed, or rolled. When using spray equipment, it is important that the following criteria are met: When using a spray pump, a 30:1 or 40:1 greater fluid to air ratio capable of delivering 2 gallons or more per minute continuous is needed, as well as an aluminum window screen. If a fluid spray hose is used, it should be high pressure with designed working pressure to handle maximum pressure delivered by the spray pump. Inside lining or tube should be of such a material so it is unaffected by the coating and any solvents used in clean up. Additionally, the following criteria should be used for hoses: 3/8" minimum I.D. up to 75 feet; 1/2" minimum I.D. up to 200 feet; and 3/4" minimum I.D. over 200 feet. The larger I.D. sections of hose should be used from the pump out in all circumstances with additional hose size reductions as necessary.

If a gun hose whip is used, high pressure with adequate W.P.S.I. 3/8" I.D. X 6 feet with an appropriate lining or tube is recommended. When using a spray gun, we recommend the Graco Hydra Max or equivalent. High-pressure gun swivels are available and can reduce operator fatigue. Spray tip should be a reversible self-cleaning type with an orifice size of .021 to .039 with a fan angle of 35 to 55 degrees. Always use components rated for pump pressures.

Cleanup Instructions: Clean up spills and spatters immediately with water. After cleaning, flush entire spray equipment with water followed by flushing propylene glycol through metal pump parts to prevent unit from rusting.

SAFETY PRECAUTIONS: Refer to the MSDS sheet before use. For Chemical emergencies, spills, leaks, exposure, or accidents CALL: INFOTRAC DAY/NIGHT 1-800-535-5053

System warranties available. When sold separately from system there is no warranty given, expressed or implied, through the values or statements made here, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by our in-house and independent third-party labs in order to obtain approval and/ or classification. Acceptance, purchase, and selection of these products are the sole responsibility of the buyer or buyer's representative. ARC assumes no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY ARCHITECTURAL ROOF COATINGS, INC. EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY, COSMETIC APPEARANCE, AND FITNESS FOR A PARTICULAR PURPOSE.