



TECHNICAL DATA SHEET

FLEX-SHIELD

ROOFING TOP COAT

DESCRIPTION

Raptor Flex-Shield Roof Coating is a premium quality high solids “Ceramic” elastomeric coating. Raptor Flex-Shield combines 100% acrylic resins and “Ceramic Spheres” to form a coating system with superior adhesion, durability, weatherproofing, heat deflection and u.v. protection. Raptor Flex-Shield Elastomeric Coating is a Class A (ASTM-E-108) Fire Rated Coating.

USES, FEATURES & BENEFITS

- Flat Build-Up Roofs
- Metal Roofs
- Concrete Tile
- Single-Ply
- Polyurethane Foam
- Mobile Homes
- Modified Bitumen

ENVIRONMENTAL ADVANTAGES/BENEFITS

Reduces interior temperatures up to 20%

- Up to 30% energy savings
- Waterproofing system
- Resists ponding water
- Extends Roof Life
- Infused with “Ceramic Spheres” to add durability and insulating value
- Class A (ASTM-E-108) Fire Rated Coating
- Easy water clean up

TECHNICAL & PHYSICAL PROPERTIES

Physical Property	ASTM Method	Result	Table 118C Requirements
Tensile Strength @73°F, psi	D2370	186	100 min
Elongation @73°F, %	D2370	231	200 min
Flexibility @ 0°F, 1" mandrel	D522B	Pass	Pass 0°F
Permeance, perms	D1653	13.5	50 max
After Accelerated Weathering, 1000 h	D4798		
Tensile Strength @73°F, psi	D2370	253	NR
Elongation @73°F, %		161	100 min
Flexibility @ 0°F, 1" mandrel	D522B	Pass	Pass 0°F
Accelerated weathering, 1000 h	D4798	Pass	no cracking or checking visible to eye
Solar Reflectance/ Thermal Emittance			Section 118: (i) 1 Requirement
Solar Reflectance	CRRC-1	0.82	0.70 min
Thermal Emittance	CRRC-1	0.91	0.75 min.
The maximum V.O.C. of this product does not exceed 50 grams/liter. WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. Contact the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead .			

See Application Specifications for additional information. An older roof in poor condition may need a new roof.



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APPLICATION PROCESS

IMPORTANT WEATHER GUIDELINES:

- Do not apply under foggy weather conditions.
- Do not apply when rain is forecast within 24 hours.
- Do not apply when temperatures are expected to drop below 50°F. within 24 hours.

DIRECTIONS:

SURFACE PREPARATION: Proper roof preparation is essential for successful coating application.

Option #1 (Recommended & Warranted)

1. Raptor Flex-Shield is designed to be used in conjunction with the Raptor Fiber-Lock coating, (eliminating the need for seam tape). However, it also can be used as a stand alone in certain situations (see below section 9).
2. Apply this product once the Raptor Fiber-Lock had dried enough to walk on.
3. Each application should be done in one complete step to form one seamless layer over the total area being covered.
4. Mix thoroughly using a power mixer prior to use!
5. Apply with roller, squeegee, brush or airless spray equipment (recommended).
6. Do not thin.
7. Apply Raptor Flex-Shield over all areas coated with Raptor Fiber-Lock, coating the surface at a rate of 2 gallons per 100 sq. ft.
 1. Additional coats may be required to achieve warranty requirements.
 1. 10 Year - 2.0 gallons per 100-sq./ft.
 2. 15 Year - 2.5 gallons per 100-sq./ft.
 3. 20 Year - 3.0 gallons per 100-sq./ft.
8. Allow to dry.

Option #2 (Not Warranted)

If used as a stand alone product, seam tape and fabric will be required.

1. POLY-FABRIC (SEAM TAPE) APPLICATION - JOINTS, SEAMS, ETC.
2. Seam tape over ALL joints, cracks, seams, around vents, over flashings, caps, pipes and skylights, etc. Cracks over 1/16 inch wide should be cleaned and caulked before reinforcing.
3. Brush a coat of Raptor Flex-Shield over the joint or seam.
4. Roll polyester seam tape into the wet Raptor Flex-Shield. While still wet, apply another coat of Raptor Flex-Shield over seam tape completely embedding tape in the coating. Allow to dry.
5. Apply 1 or 2 full coats of Raptor Flex-Shield over all seam tape applications. Allow to dry.
6. Apply 2 coats of Raptor Flex-Shield Elastomeric Coating as a finish coat at the rate of 1 gallon per 100 sq. ft. per coat. Apply a third coat if desired. Fill all cracks and crevices.
7. This is not a warranted system and is considered a repair.

MILDEW: DO NOT APPLY OVER MILDEW. A solution of 50% household bleach and 50% water will kill the mildew.

9. Mobile Home & Metal Roofs, Flat Tar Roofs & Roof Decks, Urethane Foam Roofs, Aluminum & Other Substrates:
 1. See "Tech Data Sheet" for "Raptor Fiber-Lock System"



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LIMITATIONS

1. Important Weather Guidelines:
 1. Do not apply under foggy weather conditions.
 2. Do not apply when rain is forecast within 24 hours.
 3. Do not apply when temperatures are expected to drop below 50°F within 24 hours
2. Mildew:
 1. DO NOT PAINT OVER MILDEW. Mildew is a fungus, brown, black, grey or even white in color, and will rapidly grow through any coating applied over it. A solution of 50% household bleach and 50% water will kill the mildew.
3. Thinning:
 1. DO NOT THIN.
4. Drying Time:
 1. Initial cure to touch 1 hour. Re-coat 2-4 hours. Cool or humid weather conditions will slow the drying time.
5. Clean up:
 1. Clean tools and hands with warm, soapy water and rinse thoroughly.
6. Maintenance:
 1. Clean up spilled and un-dried product immediately with water. Clean hands and skin with warm water and soap. Most Stains will clean-up with TSP, a brush, and water. We recommend a re-coat every 5 years, depending on exposure to the sun.
7. Repair:
 1. Repairs may be done by removing the damaged area and replacing the material as written in this information guide.

DISCLAIMER: All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and tests, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazards listed herein are the only ones that may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether verbal or in writing, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Raptor Roofing Systems makes no claim that these tests or any other tests, accurately represent all environments.

Warranty: When the warranted product is applied in accordance with this technical data sheet, label instructions and common sense widely accepted painting practice and procedures, Raptor Roofing Systems will warrant said product against manufacturing defects that might cause premature failure such as blistering, peeling, or unusual wear. Directions are as complete as possible but cannot encompass all conditions, applications, and/or surfaces beyond manufacturer's control. In the event of a warranted failure and upon the presentation of proof of purchase, the remedy will be the provision price for said product. This warranty does not include labor or the costs associated with labor. This warranty may not be transferred or assigned and extends specific legal rights which may vary from state-to-state. No other warrantee is expressed or implied.