

**Foam & Coating Systems, Inc.**

# ORACR 42

**Description**

ORACR 42 is versatile, single- component, high-body, solid Emulsion polymer used over a variety of substrates including asphalt, metal roof systems, polyurethane foam, concrete, masonry, primed metal, and primed wood. ORACR42 can also be used as a base coat/top coat roof over used as a topcoat over urethane or butyl coatings.

**Features & Benefits**

ORACR42 provides excellent protection against weather as well as superior protection from deprivation caused by ultraviolet exposure. It provides a seamless waterproof system, acrylic durability, energy saving, prolonged roof life and also reduces the life cycle costs of maintaining a roof system.

**Typical Uses**

ORACR 42 can be used over a variety of substrates including asphalt, metal roof systems, polyurethane foam, concrete, masonry, primed metal, primed wood. ORACR 42 can also be used as base coat/top coat roof system, or may be used as a topcoat over urethane or butyl coatings.

**Physical Properties**

Packaging	5 gal. (19L) pail
	55 gal. (208.L) drum
Coverage Rate	3.5 gal./100 sq. ft.
Color	White and Grey
Shelf Life	6 mos. (unopened container)
Durometer Hardness, ASTM D-2240	65-75 points Shore A
Tensile Strength, ASTM D-2370	310±50psi @ 73°F
Elongation, ASTM D- 2370	200±25% @ 73°F
Tear resistance, ASTM D-624	130
Permeability, ASTM D-1653	47
Flash Point, ASTM D-1310	None to 212°F
Specific Gravity	1.44
Solids Content by Weight, ASTM D-1644	66%
Solids Content by Volume, ASTM D-2697	52
Volatile Organic Compound, ASTM D-2369-81	<50 g/l
Maximum Continuous Service Temp.	185°F (85°C)
Weathering/UV Resistance, ASTM G-53	No degradation after 6000 hrs.
Drying Time: dependent upon Temp./R.H.	3-4 hours
Cure Time: dependent upon Temp./R.H.	4-8 hours
Reflectivity (White), ASTM C-1549	84%
Emissivity(White), ASTM C-1371	90%

**Directions for Use**

This product may be applied directly to any clean, dry surface. Polyurethane foam should be coated within 24 hours of prior applications to insure full and uniform adhesion. Before applying a subsequent coat, 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. Coatings must be extended beyond the substrate to create a self-termination flashing.

**Application**

This product may be sprayed, brushed, or rolled. When using 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 45:1 Fluid to air ratio capable of delivering 2 ½ gallons or more per minute continuous is needed, as well as filter screen of 30 mesh or larger. The fluid spray hose should be high pressure with designed working pressure to handle maximum pressure delivered by the spray hose should be high pressure with designed working pressure to handle maximum pressure delivered by the pump. Inside lining or tube should be of such a material that is unaffected by the coating of soaps used for clean-up. Additionally, the following criteria should be used for hoses: 3/8 minimum I.D. up to 200ft: and ¾ minimum I.D. over 200 ft. Material temperature should be 70° or higher. The larger I.D. sections of hose should be used from the pump out in all circumstances. If a gun hose whip is used high pressure with adequate W.P. S. I 3/8 I.D x 6 feet with an appreciate lining or tube is recommended. High-pressure gun swivels are available and can reduce operator fatigue. Any Spray tip should be a reversible self-cleaning type with an orifice size of .027 to 039 with a fan angle of 40to 50 degrees. Always use components rated for pump pressures.

**Precautions**

This product is designed for professional installation. Caution should be exercised to prevent mishap due to improper handling. Any installation equipment employed for application should be designed for high-pressure use. The use of an application is important. We also recommend the use of fabric coveralls and neoprene or other resistant gloves. Installers should use caution when walking at height during spray processed to avoid falls caused by slipping on wet coatings. Installers should read and understand all technical and informational literature on this product, including the Material Safety Data Sheet, prior to using this product.

**Manufacturer of High Performance Foam/Coatings & Application Equipment**

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 575 Commercial Ave., Green Lake, WI 54941      www.oakridgepoly.com

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## Application

Drying Time – Dependent upon temperature, relative humidity and wet film thickness. Ponding Water-ORACR 42 is not to be used where ponding water and therefore has no warranty.

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 specifications for more details.

Thinning- This product is supplied ready- to – use. No thinning is needed or recommended.

## Mixing

No thinning 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 ¾ horsepower or larger electric or air operated mixer. 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.

## Weather Restrictions

This product cures by water evaporation only. It is very important that this product is not used when weather conditions are below 50° F or when there is a chance that the temperature could fall below 32° F Within a 24-hour period after application. We also do not recommend application of 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, that could cause high moisture concentration of the surface overnight. Thin coat applications will dry will dry faster for those marginal spray days when the best drying conditions are not possible, especially during cooler weather when overnight temperatures could fall below 32° F. Drying time will depend on temperature, humidity, and film thickness. If ambient temperatures drop below 65° F, it may be necessary to heat the material.

## Limitations

The following information is meant to be used as a general guideline only. Consult the project specification and you Oak Ridge Foam & coating Systems, Inc. Representative for specific installation procedures. ORACR 42 cannot be used over substrates that are saturated in moisture. Because both cold temperatures and high humidity disrupt the curing process, there cannot be any moisture present on the substrate. It is not recommended to apply on flat roofs where ponding water is present or during early mornings or late afternoon hours when conditions are conducive to high moisture condensation. In addition, this product is not recommended for use without a vapor barrier in cryogenic tank or cold storage roofing applications. ORACR 42 is also not intended to be used in any interior applications to replace a thermal barrier.

## Storage & Handling

Keep containers closed, store in a dry, cool place away from heat, sparks, open flame, and moisture. Keep material stored above 65°F (18°C). Open containers should be blanketed with dry nitrogen before resealing. Shelf life: 6 months.

## Safety

Review the Material Safety Data Sheet (MSDS) and container labels for detailed health and safety information. This product is intended for industrial use by properly trained professional applicators only.

Please read all the information in the general guidelines, technical data sheets, application guide, and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Oak Ridge Foam & Coating Systems, Inc. representative or visit our website for current technical data and instructions.

## 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 if the product for his own intended use, application and job situation and job situation and user assumes all risk and liability resulting from his use of the product. 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 procedures. Test performance results were obtained in a controlled environment and Oak Ridge Foam & Coating Systems, Inc., makes no claim that these tests or any other tests, accurately represent all environments.

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