# **ROOF-540** TM THE ROOF PRESERVATION SYSTEM Meets ASTM D6083; ENERGY STAR® & CRRC Listed

# PRODUCT DESCRIPTION

**ROOF-540** is a water-based, high solids elastomeric coating utilizing the latest advances in acrylic technology. Highest quality 100% acrylic resins are combined with rein- forcing laminar pigments, an effective biocide package and non-migrating fire retardants, resulting in superior durability, weatherproofing, ultraviolet resistance, algae/mildew resistance and fire retardancy. ROOF-540 is a highly reflective, permanently flexible "breathing" membrane, allowing moisture vapor from the substrate or building interior to escape while remaining impervious to mass water penetration from the exterior. **ROOF-540** is also available in a high-tensile strength version for roof areas subject to heavy traffic, maintenance severe conditions, chemical fallout, etc., as well as a quick set version for use on applications where a more rapid resistance to moisture is necessary.

## BASIC USES

**ROOF-540** was especially developed for extending the life of metal, conventional built-up, modified bitumen, concrete, Hypalon, EPDM, TPO, sprayed-in- place or insulation, or ofs. **ROOF-540** board-stock composite shingle roofs. forms waterproof elastomeric seal, uniformly covering the textured profile of various substrates to form a monolithic membrane, provid- ing protection from normal weathering, aging and ultra-violet exposure.

# **COLORS**

**ROOF-540** is available in White, Light Grey and Light Tan, which are certified to meet ENERGY STAR®, Cool Roof Rating Council (CRRC) and LEED reflectance and criteria. An unlimited selection of custom colors is also available for specific applications. Color chips must be furnished to AWC for all custom colors. ROOF-540 QS (Quick Set) is available for marginal conditions when a faster set time is desired with White or Light colored Top Coats.

#### WARRANTY

**ROOF-540** warranties are available for Ten (10) years periods. The warranties guarantee the installation against leaks caused by normal weathering. Refer to

Individual documents for warranty additional information.

# TYPICAL PROPERTIES

Solids by Weight:

66% (±2) [ASTM D2369] Solids by Volume:

54% (±2) [ASTM D5201]

Weight per Gallon:

11.8 lbs.  $(\pm .2)$  (1.41 kg/l) [ASTM D1475]

**Dry Time for Water Resistance:**\* 2½ hours @ 70°F (21°C), 50% R.H. White @ 16 wet mils (406 microns)

\*Required time will increase @ higher humidity's

Tensile Strength:

250 psi (±20) (1.80 MPa) @ 75°F (24°C) 440 psi (±20) (3.17 MPa) @ 0°F (-18°C) [ASTM D412]

# Elongation:

300% (±30) @ 75°F (24°C)

340% (±30) @ 0° F (-18°C) [ASTM D412]

#### Hardness:

55-65 Shore A [ASTM D2240]

#### Permeance:

3.0 U.S. perms (1.98 metric perms) @ 20 mils (508 microns) [ASTM E96]

#### **Ultraviolet Resistance:**

No deleterious effects after 5,000 hours [ASTM D822, ASTM G23]

#### Weather Resistance:

No deleterious effects after 5,000 hours [ASTM D822, ASTM G23]

High Temperature Stability:

No age hardening up to 250°F (121°C) [ASTM D794]

## Resistance to Wind Driven Rain:

0.3% moisture result

[Federal Specification TTC-555B]

## **Bond Strength:**

Exceeds cohesive strength of coating [ASTM C297]

Temperature Limits for Service **Conditions (Surface):** -30°F to 180°F (-35°C to 82°C)

## Code Approvals:

UL 790 Class A, Factory Mutual Class I and Dade County.

# **ADVANTAGES OF ROOF-540**

The Following Advantages Combine To Make ROOF-540 The Most Effective, Low-Cost Method Of Extending The Life Of New Or Existing Roof Surfaces.

# Low Cost Application:

Fewer men can do the work that used to require many at a fraction of the cost of other roofing systems. No bulky or expensive materials to haul, lift, spread, cut or glue. Simply apply ROOF-540 by brush, roller or spray over the **properly prepared roof substrate.** Water Cleanup furthers simplifies the job, which also conforms to all federal and state air pollution standards and VOC regulations.

# Fast Application:

Roofs protected with **ROOF-540** can be prepared and coated significantly faster than applying conventional built-up or single-ply systems.

# High Solids and Resin Content:

The high volume solids of **ROOF-540**, along with its high hide and vertical hold characteristics, allows for higher film build in fewer coats. This enables **ROOF-540** to uniformly cover the uneven profile of textured substrates. The high ratio of 100% elastomeric acrylic polymer to filler pigment provides long-term weathering and ultra-violet resistance.

# Lightweight:

A ROOF-540 roof is lighter than conventional and single-ply systems, putting less stress on the framework of the building. No glue, fasteners or heavy ballasting is required.

# Permanent Flexibility:

ROOF-540 contains no migratory plasticizers, which may give good initial elasticity but leach out of the coating upon extended exterior exposure. ROOF-540 remains permanently flexible through the use of high grade elastomeric acrylic polymers.

# **Colorfast:**

The acrylic resins utilized in ROOF-540 crosslink under exterior exposure to lock in color and lock out dirt. The topcoat color remains true through years of weathering, while the tight, cross linked surface effectively repels dirt.

#### Low Maintenance Costs:

With a **ROOF-540** roof there is no asphalt to degrade, metal to corrode or seems to come apart. It is formulated to remain flexible to -30°F without cracking under stress, and is impervious to minor ponding water associated with most roofs. When maintenance is required, repair is accomplished with the use of an acrylic caulk or touch up with additional **ROOF-540**.

## Resists Abusive Weather:

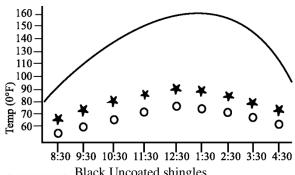
**ROOF-540** will take abusive weather conditions of all types. Ice, snow, wind driven rain and sand do not penetrate its tough, dense surface under normal conditions.

# Long Term Fire Protection:

**ROOF-540** utilizes non-migratory fire retardants that become an inseparable part of the coating to provide permanent fire retardancy.

## Reduced Energy Cost:

ROOF-540 topcoat remains white to effectively reflect the sun's heat, unlike dark-colored roofs that retain heat and are subject to ultraviolet degradation. Roof temperatures can be reduced in excess of 50°F. Exceeds ENERGY STAR® & Cool Roof Rating Council Guidelines.



Black Uncoated shingles White ROOF-540 Coated shingles Air Temperature

## Resistance to Foot Traffic:

ROOF-540'S tough finish, combined with its flexibility and bond strength characteristics, allows it to easily withstand the stresses of normal roof maintenance traffic.

## Code Approvals:

ROOF-540 is UL classified as a Class "A" Fluid Applied Coating System, and as a Class A, B or C Maintenance & Repair System as outlined in the UL Roofing Materials & Systems Directory and UL website. It is Factory Mutual Approved for recover over FMRC- rated BUR or insulated metal panels, and approved by Miami-Dade County.

## Warranty Programs:

ROOF-540 is backed by 10 years, non-prorated warranty programs. These guarantee to the Building Owner that the coating system will not leak as result of degradation from normal weathering. All warranty programs are extendable to last for the life of the structure.

Our products are guaranteed to meet established quality control standards. Information contained in our technical data is based on laboratory and field testing, but is subject to change without prior notice. No guarantees of accuracy are given or implied, nor does AWC assume any responsibility for coverage, performance or injuries resulting from storage, handling or use of our products. Liability, if any, is limited to product replacement or, if applicable, to the terms stated within the executed project warranty.