



- 100% Acrylic Elastomeric
- For Metal Roofs and Spray Polyurethane Foam.
- Carries the FM Global Approval (ASTM E108)
- Carries the FM Severe Hail Rating

## PRODUCT DESCRIPTION

AcryliShield 3553 is a high solids, technologically advanced, thixotropic, fire retardant, 100% acrylic elastomeric uniquely formulated for the preservation of spray polyurethane foam, metal, and with roofing fabric over a variety of other roof substrates. The proprietary formulation consolidates high solids elastomeric acrylic resins, reinforcing laminar pigments and non-migrating fire retardants to produce a seamless, flexible, durable membrane having extraordinary weather ability, ultraviolet and fire resistance. AcryliShield 3553 acts as a “breathing” membrane allowing trapped moisture vapor to pass through the film while remaining impervious to exterior mass water penetration.

## STORAGE

Keep well sealed containers in a cool, dry place. Avoid contact with sources of extreme hot or cold temperatures as well as direct sunlight. Containers should be stored at 45°F to 90°F. Shelf life is one (1) year if exposed to the above conditions.

## SAFETY

Prior to commencing work, carefully read and follow all SDS (formerly MSDS), Technical Data Sheets, and any instruction manuals for products and equipment used during installation. Following the safety regulations of job-site, local, state, and federal authorities is the responsibility of the installation company, general contractor, and/or facility owner.

## DISCLAIMER

This document does not purport to address all applicability and safety concerns, if any, associated with its use. It is the responsibility of the user to determine applicability of the information and products, and to establish appropriate safety practices.

## RECOMMENDED USES:

AcryliShield 3553 is the ideal choice for metal roofs and spray polyurethane foam. This product also carries the FM Global Approval (ASTM E108) and FM Severe Hail Rating. The thixotropic nature of AcryliShield 3553 permits high build coverage, even on rough, textured or vertical surfaces without pin holing or sagging. It also has excellent adhesion to metal and SPF. As with any acrylic coating, ponding water conditions are to be avoided. Please contact our Technical Service Department for primer recommendations for application over rusted surfaces.

## PHYSICAL PROPERTIES:

**WEIGHT PER GALLON:** 11.4 lbs per gallon +/- 0.2

**SHELF LIFE:** 12 Months @ 45 °F - 80 °F

**COLOR:** White, Gray or as specified

**VISCOSITY:** 8000 +/- 1500 cP

**ELONGATION:** 315% ASTM D412

**RECOVERY:** 100% ASTM D412

**IMPACT RESISTANCE:** Exceeds 160b in/lb. ASTM D-2294

**HARDNESS:** 45 Shore A ASTM D-2294

**TENSILE STRENGTH:** 400 psi; 3600 psi w/ fabric ASTM D-412

**PERMEABILITY:** 3.4 perms ASTM E-96

**ALGAE RESISTANCE:** No growth supported ASTM G29-96

**FUNGI RESISTANCE:** No growth supported ASTM G29-96

**SALT SPRAY:** No effect (3000 hours) ASTM B-117

**WEATHERABILITY:** No effect (3800 hours) ASTM G-26

**SERVICE TEMPERATURE:** -40 °F to 200 °F

**FIRE RATING:** FM Global Approved

**HAIL RATING:** FM Severe Hail Rating FM Class

**CURE TIMES:** DRY TO TOUCH: 4 Hours @ 75 °F | TACK FREE: 12 Hours | RECOAT: 12-24 Hours

**SOLAR REFLECTANCE:** .82

**THERMAL EMMITTANCE:** .90

**CRRC Listed, EPA Energy Star Approved**

**Miami-Dade and Florida Building Code Approved**

**ASTM D412** This test covers the testing of tensile properties of thermoset rubbers and thermoplastic elastomers. This test uses a Dual Column Testing Machine. First, the material is cut into a “dogbone” shaped sample, then loaded into a pair of tensile grips suitable for elastomers. The extensometer is then attached. The test can begin by separating the tensile grips at a rate specified in the standard and runs until the sample breaks (ruptures). The calculations given will be Stress at User-Specified Extension or Elongation, Tensile Yield Stress, Tensile Yield Strain, Tensile Strength at Rupture, and Elongation at rupture.

**ASTM D2294** A Tension Creep Test Apparatus is used to determine the creep properties of adhesives for bonding metals when tested on a standard specimen and subjected to certain conditions of temperature, moisture level, and tensile stress. This test method is applicable to the temperature range from -55 to +260 °C (-67 to +500 °F).

**ASTM E-96** Standard test methods for Water Vapor Transmission of Materials is used to determine the water vapor transmission (WVT) of materials. This is tested by the Desiccant Method, in which the test specimen is sealed to a test dish containing a desiccant, and the assembly is placed in a controlled atmosphere. Periodic weighings are used to assess rate of water vapor movement through the specimen into the desiccant.

**ASTM G29-96** This practice covers the determination of the susceptibility of plastic films to the attachment and proliferation of surface-growing algae. Bodies of water, such as swimming pools, artificial ponds, and irrigation ditches often are lined with plastic films. Algae tend to grow in such bodies of water under the proper atmospheric conditions, and they can produce slimy and unsightly deposits on the film. The method described herein is useful in evaluating the degree and permanency of protection against surface growth of algae afforded by various additives incorporated in the film.

**ASTM B117** This is a salt spray test used to produce relative corrosion resistance information for specimens of metals and coated metals exposed in a standardized corrosive environment. This test outlines the standard practice for operating salt spray (fog) apparatus. B117 is a document establishing the parameters and requirements for operating a salt spray test chamber. It specifies how to create and maintain the salt fog test environment so that results can be achieved consistently from lab to lab and chamber to chamber. ASTM B117 does not specify anything about the type of test specimen, dimensions, shape or exposure periods to be used for a specific product, nor does it have any requirements or guidance for the interpretation of the results.

**ASTM G26** This practice covers the basic principles and operating procedure for water - or light - exposure apparatus, or both, employing a xenon-arc light source. This practice does not specify the exposure conditions best suited for the material to be tested, but is limited to the method of obtaining, measuring, and controlling the conditions and procedures of the exposure. Sample preparation, test conditions, and evaluation of results are covered in ASTM methods or specifications for specific materials. This practice includes four test methods: Method 1 - Continuous exposure to light and intermittent exposure to water spray. Method 2 - Alternate exposure to light and darkness and intermittent exposure to water spray. Method 3 - Continuous exposure to light without water spray. Exposure conditions are characteristic of those specified by AATCC Test Method 16E 1976. Method 4 - Alternate exposure to light and darkness without water spray. Exposure conditions characteristic of those natural conditions experienced when exposing are in accordance with Practice G24.

**SURFACE PREPARATION**

Bond strength is directly dependent upon the preparation, strength, and conditions of the substrate. Concrete surfaces should be clean, porous, and textured. Consult WCC TIB: Preparing Concrete to Receive Coatings or Linings. An appropriate primer, typically BondTite 1101, should be used, particularly on uncoated concrete. Steel surfaces should be blasted near white and protected from rusting prior to application. Substrate must be between 40°F and 95°F and at least 5°F above the dew point during installation and cure. Moisture vapor transmission will likely cause coating failure. Always prepare the substrate to receive a coating according to published good painting practices and according to Wolverine Coatings guidelines. Always consult Wolverine Coatings Corporation for other substrates and for specific recommendations for your project.

**MIXING**

Consult WCC TIB: Mixing Guide. Review "Liquid Phase Physical Data" for mix ratios, pot life, re-coat window, etc. Premix Part A and Part B before use. In a clean container, Pour Part B into Part A, taking care to keep material off the side of the bucket. Slowly begin mixing material with a low speed drill and mixing paddle. Increase speed and mix for 2-3 minutes, being careful to avoid whipping air in the material. Transfer the mixed material into a transport bucket, taking care to keep material off the side of the bucket. Mix for an additional minute. Pour material out of the transport bucket as soon as possible.

**APPLICATION**

Consult WCC TIB Guide for Applying Resinous Coatings with squeegee and roller. Material may be applied by the squeegee and backroll method. Use high quality, lint free, solvent resistant roller covers. Use throw away chip brushes for cutting in edges. Avoid puddles and missed spots.

**RE-COAT**

Consult WCC TIB: Guide for Over-Coating Existing Coatings. Material may be re-coated as soon as it can be walked on without damage. Sanding may be required if coating gets too hard to accept another coat. Consult "Re-coat Time" in "Liquid Phase Physical Data" for guidelines. Be advised that project conditions (including air temperature, substrate temperature, and relative humidity) will influence the "Re-coat Time".

**CLEANING AND MAINTENANCE**

Consult WCC TIB: Cleaning and Maintenance

**SAFETY**

For your safety, all required personal protection equipment should be used when operating machinery or handling chemicals. Concrete dust is a source of silica particles and other hazardous materials that can cause silicosis and other illnesses. Proper safety equipment and methods are the responsibility of the installation company, general contractor, and/or facility owner.

**WARRANTY**

Wolverine Coatings Corporation warrants its products to be free from defects in material and workmanship. Wolverine Coatings Corporation's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Wolverine Coatings option, to either replacement of products not conforming to this Warranty or credit to the Buyer's account in the invoiced amount of the nonconforming products. Any claim under this warranty must be made by the Buyer to Wolverine Coatings in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the ship date, whichever is earlier. Buyer's failure to notify Wolverine Coatings of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

Wolverine Coatings makes no other warranties about the product. No other warranties, whether expressed, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply.

Any recommendation or suggestion relating to the use of the products made by Wolverine Coatings, whether in its technical literature, or in response to specific inquiry or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedure of use, or extrapolation of data may cause unsatisfactory results.

**LIMITATION OF LIABILITY**

Wolverine Coatings Corporation's liability on any claims based upon Wolverine Coatings Corporation's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or parts thereof which give rise to the claim. In no event shall Wolverine Coatings Corporation be liable for consequential or incidental damages.

**LITERATURE REVISION - TDS: AcryliShield 3553 - Rev. 191203**

Published literature is subject to change without notice. Wolverine Coatings Corporation is constantly engaged in the testing of existing formulations, the development of new innovative technologies, and the evaluation of the latest practices. The latest literature should always be consulted at [www.wolverinecoatings.com](http://www.wolverinecoatings.com).

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