

# Elastuff™ 120 Coating

Product Data Sheet



# **BASIC USES & ADVANTAGES**

Elastuff™ 120 Coating is used as a sealant, caulk, filler, bonding agent and finish where hydrophobic, abrasion and chemical resistance properties are required. It is used over sealed concrete and primed metal surfaces, and also has excellent adhesion to high density polyethylene (HDPE) products when applied in conjunction with a heat treated surface. Typical applications utilizing Elastuff™ 120 Coating include interior tank lining, waste/water containment, manhole repairs, flumes, reservoirs, valves,

interior pipe, and other areas subjected to aqueous environments.

Elastuff\* 120 Coating is a non-toxic lining and can also be used in applications associated with potable water containment. It has been tested and classified by UL in accordance with ANSI/NSF 61, Section 5, Barrier Materials. Any primers or topcoats use in potable water applications should also be certified.

# PRODUCT DESCRIPTION

Elastuff™ 120 Coating is a 100% solids ASTM Type V Butyl-polyurethane elastomer in a high-build, consistency. Elastuff™ 120 Coating is a two-component, 1:1 ratio material. Part A component contains the isocyanate. Part B component contains the curative solution.

This system provides a limited workable pot life, and therefore does not require specialized application equipment. 

Elastuff 120 Coating can be applied by trowel or can be thinned slightly to create a brush/roller-grade version for use on vertical and horizontal applications requiring either heavy or light film builds. Elastuff 120 Coating is a thermosetting polymer coating, which yields a dense, slick finish. The non-porous nature and excellent hydrolytic stability, coupled with resistance to cathodic disbondment, make Elastuff 120 Coating an excellent barrier to moisture and corrosion.

Designed to protect surfaces subjected to abrasion under immersion or wet environments, **Elastuff\* 120 Coating** can be used in potable water systems, salt water, various slurry systems, and numerous acid and base solutions.

The high tensile strength of **Elastuff™ 120 Coating** contributes to its resistance to abrasion and tearing. This toughness, combined with its high elongation properties, results in outstanding flexibility and impact resistance.

#### **PACKAGING & SHELF LIFE**

Part A 5 gallon (19 liter) bucket 50 gallon (204 liter) drum

Part B

5 gallon (19 liter) bucket 50 gallon (204 liter) drum

Shelf life 12 months if unopened containers stored between 50°F and 100°F (10°C and 38°C). Do not open containers until ready to use the material.

# GAF Liquid-Applied

January 2016, supercedes March 2015

# PHYSICAL PROPERTIES

ELASTUFF™ 120 COATING	
Mixing Ratio	1 part A to 1 Part B by volume (1A:1B)
Flash Point	Part A > 200°F (93°C) Part B > 200°F (93°C)
Dry Time to Touch	4 hours tack free @ 75°F (24°C), 50% R.H.
Cure Time	90% after 24 hours @ 75°F (24°C), 50% R.H.
Mixed Usable Pot Life	20 minutes @ 75°F (24°C), 50% R.H.
Water Absorption	Less than 1% weight gain after 7 days [ASTM D570]
Tensile Strength	1,300 psi (±100) (9.0 MPa) [ASTM D412]
Elongation	150% (±20) [ASTM D412]

VOC	<25 g/L
Tear Strength	200 lbf/in (± 30) (35 N/mm) [ASTM D 1004]
Hardness	30 to 40 Shore D @ 75°F (24°C) 40 to 50 Shore D @ 35°F (2°C) [ASTM D2240]
Abrasion Resistance	20 to 30 mg weight loss with CS-17 wheel; 50 to 70 mg weights loss with H-10 wheel using 1000 gm weight at 1000 revolutions [ASTM D4060]
Low Temperature Flexibility	Passes ¼" (6 mm) mandrel bend @ -4°F (-20°C)
Low Temperature Impact Resistance	Passes 160 inch pound (18.1 Joules) direct @ -4°F (-20°C)
Standard Colors	Gray

# APPLICATION INSTRUCTIONS

Mixing: Elastuff™ 120 Coating is a two-component, 1:1 ratio material. Part A and Part B components should be thoroughly and continuously blended for a period of 2–5 minutes until a completely uniform Gray color is achieved.

### **Surface Preparation:**

#### STEEL SURFACES:

Steel must be dry and clean, free of excessive rust scale, pollution fallout, dirt, grease, surface chemicals or other foreign contaminants prior to blast cleaning. A careful examination must be made to ensure that these contaminants, along with any accumulated oil, smoke, wax, or any other material that could interfere with adhesion, have been removed. This should be accomplished by use of a solvent wash as defined in SSPC-SP1 Solvent Cleaning. Excessive rust scale shall be removed by mechanical means prior to blast cleaning.

Steel surfaces must be cleaned to Near-White (SSPC-SP10) with a minimum anchor pattern of 2.0 mils (51 microns).

Abrasive blast cleaning shall not be performed when surface temperature of the steel is less than 5°F (3°C) above the dew point of the ambient air, or when there is a possibility that the blasted surface will become wet before the primer can be applied.

The blast cleaned surface shall be primed by the end of the same work day, but in any event before any visible rusting occurs. If rusting occurs after blast cleaning, the surfaces shall be reblasted before priming.

Steel surfaces shall be primed with Lockdown Primer to a thickness of 1.0 to 2.0 dry mils (25 to 51 microns), depending upon surface profile. For details of application, refer to separate literature entitled Lockdown Technical Data and Application Instructions.

# CONCRETE SURFACES:

Concrete shall be dry and clean, free from any dirt, grease, oil, pollution fallout, smoke, wax, form release agents, surface chemicals, or other foreign contaminants that could interfere with proper adhesion. Surfaces shall be free of



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# APPLICATION INSTRUCTIONS, CONT'D

**APPROVALS** 

Underwriters aboratories (UL) Classified by Underwriters Laboratories Inc. in Accordance with ANSI/NSF Standard 61



sharp projections, ridges and loose aggregate.

New concrete shall be cleaned and etched with 10% Muriatic Acid Solution. Surfaces shall then be rinsed with liberal amounts of fresh water to assure complete acid removal.

Concrete surfaces contaminated with oil, grease, dirt, etc. shall be cleaned prior to acid etching with United Cleaning Concentrate (UCC) and water. High pressure power washing may be necessary to remove strongly adhering contaminants.

Sandblasting of concrete will be required if the surfaces have been previously coated or if surfaces are contaminated to the point that acid, chemical cleaning or power washing is not sufficient for removal. Sandblasting must produce an even profile with a minimum surface height of 5–8 mils (127–203 microns).

Prior to sealer application, all loose material, foreign objects, dirt and dust shall be removed by use of a power vacuum. Concrete surfaces shall be completely dry.

Immediately after vacuuming, concrete surfaces shall be sealed with one (1) coat of UniTile LV Sealer. Sealer shall be reduced by up to 100% by volume using M.E.K, Xylol or Acetone and applied at the rate of 250–500 ft² per gallon (6.1–12.2  $\mbox{m}^2\mbox{l})$ . For details of application, refer to literature entitled UniTile LV Sealer Technical Data and Application Instructions.

HIGH DENSITY POLYETHYLENE (HDPE) SURFACES: HDPE surfaces to be coated with **Elastuff** 120 **Coating** require application of heat by means of an acetylene or propane torch to achieve flame ionization. Torch should be held to the HDPE surface until it is heated to just below the melting point. For approximately 2 minutes, the heat treated area will be acceptable for bonding **Elastuff** 120 **Coating**.

Application: Elastuff™ 120 Coating can be applied using a trowel, putty knife, brush or bulk caulking equipment. Coverage rates and dry film thickness are determined by specific project requirements. The versatility of Elastuff™ 120 Coating allows the specifying engineer to solve a multitude of protection problems using one product system at a wide range of dry film thicknesses. Contact GAF's Technical Service Department for specific recommendations

**Elastuff™ 120 Coating** applied at the coverage rate of one gallon per 100 ft² (.4 l/m²) of the combined Part A and Part B will theoretically yield 16.0 dry mils (406 dry microns). Film thicknesses is virtually unlimited. Care should be taken to avoid air entrapment within the material during application.

Consult GAF's product specifications for specific film thickness requirements to qualify for GAF's product warranty.

# **LIMITATIONS & PRECAUTIONS**

Elastuff\* 120 Coating components are affected by moisture prior to catalyzation and must be protected from moisture contamination. Keep all containers tightly closed during storage. Containers are factory sealed with an inert gas to prevent contamination. After opening and if all components are not to be used, containers must be purged with nitrogen gas or dry air and tightly sealed to protect the components from moisture contamination.

Only Elastuff™ 120 Spray Grade, Elastuff™ 120 Roller Grade, Elastuff™ 120 Coating are classified in

accordance with ANSI/NSF 61. Other components, such as primers and topcoats that may be required as part of a potable water application, should also be certified. In addition ANSI/NSF 61 certification includes application parameters regarding minimum tank size, maximum film thickness and minimum temperature (@ 50% RH). No solvents may be used as a thinner, and if used as a solvent purge, it must not be discharged onto the lining.

Refer to UL Directory or contact GAF's Technical Service Department for additional information.

# **SAFETY & HANDLING**

For exterior applications, approved (MSHA/NIOSH) certified supplied air respirator must be worn by applicator personnel. If use indoors, provide mechanical exhaust ventilation in addition to respirator use. This material is a skin, eye and respiratory sensitizer and irritation. Review Safety Data Sheet (SDS) for this material before use.

# **CLEAN UP**

Clean equipment with Methylene Chloride or M.E.K. Do not leave Methylene Chloride in fluid hoses or pumps for prolonged periods. It can cause swelling and deterioration of hoses and corrosion in the pump.