

Lock-Down Primer

Product Data Sheet



PRODUCT DESCRIPTION

Lock-Down Primer is a single-component, moisture-cured, low viscosity polyurethane primer containing aluminum pigment. **Lock-Down Primer** exhibits superior resistance to rust and corrosion caused by chemicals, solvents, saltwater, and humidity. **Lock-Down Primer** cures by reacting with moisture in the air to form a high molecular weight polymer, resulting in a tough, chemical and abrasion resistant finish.

Lock-Down Primer is manufactured with a low viscosity resin designed to maximize "wetting" of the surface. This allows for rapid, thorough penetration of porous substrates and enhances adhesion to clean or sound rusted metal surfaces.

PACKAGING & SHELF LIFE

Lock-Down Primer is a single-component material available in:

1-gallon (3.8 liter) buckets 5-gallon (19 liter) pails

Shelf life in unopened containers is 1 year from date of manufacture. Store at temperatures between 50°F and 100°F (10°C and 38°C).

BASIC USES & ADVANTAGES

Lock-Down Primer is designed to provide maximum corrosion protection, rust inhibition, and adhesion over steel, aluminum, and galvanized metal surfaces. It is an excellent choice for use over sound rust on metal surfaces when sandblasting is not possible or practical.

Lock-Down Primer exhibits the unique ability to "wet" into weathered substrates, developing superior adhesion while resisting corrosive conditions, even when sound surface rust is present. Loose, flaking, or unsound rusted metal must be brought into sound condition or replaced.

Lock-Down Primer is an excellent primer for use under acrylic or solvent-based roof coatings and industrial finishes. Refer to the GAF chart entitled Primer Recommendations for ease in making a determination as to which primer to use under a specific set of conditions.

Advantages:

- Adhesion: Lock-Down Primer's low viscosity allows it to penetrate and "wet" into weathered or sound rusted surfaces, imparting a tenacious chemical and physical bond between the substrate and subsequent top coat.
- Weathering: Rusted metal panels were wirebrushed, coated with Lock-Down Primer, and "X" scribed to expose the metal. After 2,000 hours of accelerated weathering exposure, the coated panels showed no rust bleed, creeping, undercutting, or any deterioration of the Lock-Down Primer along the scribe lines.
- Salt Spray Resistance: Rusted metal panels were wire-brushed, coated with Lock-Down Primer, and "X" scribed to expose the metal. After 500 hours exposure to salt spray, the sample showed only minimal blistering and slight rusting along the scribe lines.

PHYSICAL PROPERTIES

LOCK-DOWN PRIMER	
Solids by Weight	60% (±2) [ASTM D2369]
Solids by Volume	55% (±2) [ASTM D2697]
Weight per Gallon	8.9 lb (4.1 kg) (±.3) [ASTM D1475]
Dry Time to Touch	1 hour @ 75°F (24°C), 50% R.H. [ASTM D1640]
VOC	Less than 420g/L (calculated)
Flash Point	80°F (26°C) [ASTM D3278]

Cure Time	12 hours @ 75°F (24°C), 50% R.H. [ASTM D1640]
Flexibility	Passes 1/8" (3 mm) mandrel flex @ 0°F (-18°C)
Temperature Limits for Service Conditions	-30°F to 200°F (-34°C to 93°C)

APPLICATION INSTRUCTIONS

Application: Lock-Down Primer may be applied by brush, roller, or conventional or airless spray. Airless spray is the preferred method. Any airless spray equipment capable of 1,000 psi (6,890 kPa) and 1/2 gallon per minute (1.9 L/minute) delivery can be used. A reversible, self cleaning spray tip with orifice size of .015" to .021" (.39 to .53 mm) and minimum 40° fan angle is recommended. Before spraying, flush Xylol solvent through the pump, hoses, and spray gun to prevent contamination. One coat of **Lock-Down Primer** is sufficient for priming most metal surfaces. Coverage rate will depend upon the surface profile of the metal substrate and jobsite conditions at the time of application. Typical application rate is 250 to 300 ft² per gallon (6.1 to 7.3 m²/L) to achieve a minimum dry

film thickness of 3 mils. **Lock-Down Primer** should be topcoated within 24 hours of application, or less in high humidity areas. If topcoating cannot be accomplished within 24 hours, contact the GAF Technical Service Department for recommendations. **Lock-Down Primer** can be used on its own if an aluminized finish is all that is required. If this is the case, apply a second coat of **Lock-Down Primer**, perpendicular to the first coat, at the same coverage rate stated above. Use Xylol to thoroughly flush equipment.

GAF Liquid-Applied



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LIMITATIONS & PRECAUTIONS

Lock-Down Primer is affected by moisture 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.

Solvents are flammable. Use only in a well-ventilated area. Keep away from heat, sparks, open flame, and lighted cigarettes. Use explosion-proof application equipment that has been grounded and bonded.

Avoid prolonged or repeated breathing of vapor or spray mist.

SAFETY & HANDLING

For specific information regarding safe handling of this material, please refer to OSHA guidelines and product Safety Data Sheet (SDS).

If personal exposure concentrations cannot be maintained below the appropriate OSHA/NIOSH exposure limits using engineering controls or natural ventilation, an approved respirator may be appropriate based on employer-determined exposure levels.

CLEAN UP

Use water and UCC to thoroughly flush the equipment. Purge the water from the system using a mild solvent, leaving the solvent in the lines until next use.