

# ULTRA-PRIME 165

## TWO-COMPONENT, LIQUID APPLIED, EPOXY-POLYAMINE PRIMER APPLIED OVER METAL, CONCRETE AND PLYWOOD SURFACES

**ULTRA-PRIME 165** is a two-component, liquid applied, epoxy-polyamine primer with unique penetrating characteristics.

### **FEATURES & TYPICAL USES**

- Excellent adhesion
- Metal
- Concrete
- Plywood

### **COLORS**

Side-A: Black, Side-B: White

### **PACKAGING**

**2 gallon kit:** One 1 gallon (3.78 liters) can of Side-A and one 1 gallon (3.78) can of Side-B.

**10 gallon kit:** One 5 gallon (18.9 liter) pails of Side-A and one 5 gallon (18.9 liter) pail of Side-B.

### **SURFACE PREPARATION**

Metal, concrete or plywood substrates must be free of all contamination that may impair proper bonding. Substrates must be sloped a minimum of 4" per foot for drainage, and must be primed with the applicable primer prior to application of the membrane and surface protection materials.

#### **Metal**

Wire brush or sand steel surfaces until the metal is bright. Solvent wipe after cleaning.

#### **Concrete**

The surface of concrete substrates must be clean and free of standing water. All holes, joints and cracks must be pointed flush with Portland Cement mortar and all high spots cut or ground off to provide a smooth, even surface. Before the material is applied, the substrate must be clean and free of dust or foreign material. Paint, grease and oil must be removed either by grinding or sandblasting and concrete surfaces must be shot-blasted or water-blasted. Control joints should be cut per standard concrete construction

practices and caulked. Concrete must exhibit 3000-psi minimum. Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles, and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function.

#### **New and Old Concrete**

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shot-blasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely.

#### **Surface Preparation Reference**

ASTM D4258

Standard practice for cleaning concrete

ASTM D4259

Standard practice for abrading concrete

ASTM D4260

Standard practice for etching concrete

ASTM F1869

Standard test method for measuring moisture vapor emission rate of concrete

ICRI 03732

Concrete surface preparation

#### **Plywood**

Plywood should be new or cleaned and sanded. Plywood must be exterior grade plywood, having either tongue-and-groove edges and ends perpendicular to supports. The plywood will be 19/32" or 21/32" thick. Plywood should be installed with a maximum of 1/16" space between

the plywood sheets and laid over joists on 16" centers. Plywood sheets must be screwed down securely or nailed with coated annular ring or screw shank nails. If the underside of the joists is covered, the floor/ceiling cavity must be vented to aid in drying and to minimize moisture buildup in the deck structure. Damaged panels will be repaired/replaced before coating. Old plywood must be cleaned and sanded before priming with Ultra-Prime 165 at a rate of 3 gallon per 100 square feet prior to coating application. The only acceptable grade of plywood is APA rated, exterior grade with exterior glue or better. The appearance and physical characteristics of the plywood and grade should be considered.

**Note:** The above plywood grade is called out in compliance with the American Plywood Association's Standard. Plywood grading which does not reference APA markings may not be a suitable grade. No liability is assumed by Umaco for defects in the substrate.

### **MIXING**

The volume mixing ratio is 1 part Side-A to 1 part Side-B (1A:1B). Side-A and Side-B should be thoroughly mixed individually prior to combining to ensure a homogeneous material. Ultra-Prime 165 must always be mixed with one part Side-A and one part Side-B (1A:1B). The combined components should be thoroughly mixed using a mechanical mixer at a slow speed. Do mix in an up and down motion

### **APPLICATION**

Ultra-Prime 165 can be applied with a airless sprayer, brush or phenolic resin core roller. Allow Ultra-Prime 165 to become tack free before applying the coating. Approximate tack free time is 3 to 5 hours at 75°F (24°C) and 50% relative humidity. Recommended surface temperature should be greater than 50°F



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(10°C) and at least 5°F (3°C) above the dew point. Ultra-Prime 165 is very sensitive to heat and moisture. Higher temperatures and/or humidity will significantly accelerate the cure time and pot life. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extend the cure time.

#### **COVERAGE**

The approximate coverage is 1 gallon/300 sq. ft. (0.14 l/sqm) or 300 sq. ft./gallon. Coverage rate will depend on surface roughness and porosity.

#### **EQUIPMENT CLEANUP**

Equipment should be cleaned with an environmentally safe solvent as permitted under local regulations immediately after use.

#### **STORAGE**

Ultra-Prime 165 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

#### **LIMITATIONS**

- Ultra-Prime 165 should be coated within 12-16 hours after it has become tack free
- Not UV stable
- Surfaces must be dry, clean and free of foreign matter
- Containers that have been opened must be used as soon as possible
- Ultra-Prime 165 is difficult to clean up after it has cured
- Do not dilute Ultra-Prime 165
- Mix only enough material than can be used within 45 minutes

#### **TECHNICAL DATA**

##### **Coverage Rate**

1 gal/300 sq. ft. (0.14 l/sqm)

##### **Dry Film Thickness per Coat**

4 ± 1 mils (102 ± 3 microns)

##### **Mix Ratio by Volume**

1A:1B

##### **Pot Life at 75°F (24°C), 50% R.H.**

60-90 minutes

##### **Specific Gravity**

Side A = 1.27 ± 0.1

Side B = 1.85 ± 0.1

##### **Total Solids by Weight, ASTM D-2369**

90 ± 2%

##### **Total Solids (Volume), ASTM D-2697**

84 ± 2%

##### **Viscosity at 75°F (24°C)**

600 ± 200 cps

##### **VOC's, ASTM D-2369-81**

1.17 lbs/gal (140 gm/liter)

#### **WARNING**

This product contains Epoxy Resin and Curatives.

**For technical assistance call  
978-453-8881.**

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#### **LIMITED WARRANTY**

*The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective. Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied. (2021)*

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