

SECTION 03 54 00 / 03 54 16 / 09 80 00**HYDRAULIC-CEMENT UNDERLAYMENT PRIMER****Platform P360**

Universal Alkali-Resistant Primer
Platform Performance Flooring Systems

PART 1 – GENERAL**1.1 SUMMARY**

- A. Provide a universal, alkali-resistant acrylic copolymer primer for preparation of properly prepared substrates prior to installation of cementitious self-leveling underlayments and, where required by the underlayment or patch manufacturer's instructions, cementitious patching and skim-coat materials.
- B. Primer shall provide adhesion between the prepared substrate and subsequent cementitious underlayment or patch material and shall be suitable for use over both porous and non-porous substrates.
- C. Acceptable Primer:
 - 1. Platform Performance Flooring Systems Platform P360.

1.2 RELATED REQUIREMENTS

- A. Section 03 54 00 – Cast Underlayment.
- B. Section 03 54 16 – Hydraulic Cement Underlayment.
- C. Section 09 80 00 – Floor Finishes.
- D. Flooring manufacturers' requirements for substrate preparation and moisture testing.

1.3 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM F710 – Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
 - 2. ASTM F1869 – Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
 - 3. ASTM F2170 – Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes.
 - 4. ASTM C1708 – Standard Test Methods for Self-Leveling Mortars Containing Hydraulic Cements.

1.4 SUBMITTALS

- A. Action Submittals:
 - 1. Product Data: Current manufacturer's technical data sheet (TDS) for Platform P360.
- B. Informational Submittals:
 - 1. Safety Data Sheet (SDS).
 - 2. Manufacturer's written application instructions, including substrate preparation, dilution, application method, coverage, and drying requirements.
 - 3. Job-Specific Warranty: Sample copy of specified warranty.
 - 4. Installer's qualification data.

1.5 QUALITY ASSURANCE

- A. Product shall be manufactured for professional floor-preparation applications and shall be suitable for use beneath cementitious self-leveling underlayments and patching products where required.
- B. Installer shall be experienced in installation of primers and cementitious underlayments.
- C. Follow manufacturer's current written installation instructions. Where this specification conflicts with the manufacturer's current TDS, the more stringent requirement shall apply unless otherwise approved in writing.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in original, unopened containers bearing manufacturer's identification and product information.
- B. Store in a cool, dry location protected from direct sunlight.
- C. Protect product from freezing.
- D. Shelf life shall be 24 months from date of manufacture when properly stored.

1.7 FIELD CONDITIONS

- A. Use Platform P360 only for dry, interior applications.
- B. Substrate and ambient temperatures shall be between 50°F and 90°F (10°C and 32°C) during application.
- C. Concrete surface temperature shall be at least 5°F (3°C) above the dew point, and rising, prior to application.
- D. Before proceeding, determine allowable substrate moisture conditions based on the requirements of the finished flooring system and associated adhesive.
- E. Do not install over materials containing asbestos.
- F. Do not use over luan, plastic, fiberglass, metal, particle board, sheet vinyl, or other dimensionally unstable materials unless specifically approved in writing by Platform Technical Support.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Manufacturer: Platform Performance Flooring Systems, 2926 Chester Avenue, Cleveland, OH 44114; 877-514-5336; www.platformperformance.com.
- B. Basis-of-Design Product: Platform P360.
- C. Substitutions: Submit requests no less than 30 days prior to bid, together with independent laboratory test reports demonstrating compliance with all performance requirements of this Section.

2.2 MATERIALS

- A. Primer shall consist of an advanced acrylic copolymer technology formulated for high alkalinity resistance, providing prolonged resistance to environments having a pH of 14.
- B. Product shall be low odor, low VOC, and shall be supplied as a ready-to-use liquid requiring dilution only where specifically directed for the substrate.
- C. Physical Properties:

Property	Value
Color	Light red
Flash Point	Greater than 212°F (100°C)
Packaging	1 U.S. gallon container; 5 U.S. gallon container
Product Numbers	PP3604x1 – case of four 1-gallon containers; PP3605 – 5-gallon container

2.3 PERFORMANCE REQUIREMENTS

- A. Performance Data:

Property	Requirement
Drying Time Prior to Underlayment Installation	45–90 minutes; temperature and humidity dependent
Open Time Following Drying	Up to 48 hours, provided primed surface remains clean and uncontaminated
Porous / Absorbent Substrate Coverage	Approx. 600–1,000 sq. ft. per gallon, diluted 2:1 (water:primer). Coverage is porosity dependent - applied by soft tip broom. Typically averages 700-800 sf per gallon at 2:1
Non-Porous Substrate Coverage	Approx. 500–650 sq. ft. per gallon, applied by 3/8" roller – thin, shiny film

- B. Actual coverage shall vary according to substrate porosity, surface profile, application method, and dilution.
- C. Primer shall be suitable for use over properly prepared:
 1. Absorbent and non-absorbent concrete.
 2. Gypsum substrates.
 3. Wood substrates, where specifically permitted by the underlayment system.
 4. VCT.
 5. Ceramic tile.
 6. Cement terrazzo.

7. Qualified non-soluble adhesive residue.
8. Epoxy moisture-vapor membranes free of amine blush.
9. Other substrates specifically approved by Platform Performance Flooring Systems.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates before application of primer.
- B. Substrates shall be sound, stable, clean, dry, free of dust and dirt, and free of oils, silicates, curing compounds, and other bond-breaking materials.
- C. Verify substrate conditions are suitable for the specified underlayment or patch product.
- D. Do not proceed until unsuitable conditions have been corrected.

3.2 SURFACE PREPARATION

- A. Mechanically remove weak surface materials and contaminants to expose sound substrate.
- B. Remove bond-breaking materials, including curing compounds, silicates, oils, dirt, laitance, and other contaminants.
- C. Water-soluble and pressure-sensitive adhesives shall not remain beneath Platform P360. Remove such adhesives mechanically to the substrate.
- D. Non-soluble adhesive residue shall be firmly bonded and properly prepared before priming.
- E. Finish substrate preparation by thoroughly vacuuming the surface to remove dust and debris.

3.3 MIXING

- A. If settled, mix Platform P360 thoroughly until homogeneous.
- B. When dilution is required, add clean water at the specified ratio and remix until uniform.
- C. Remix diluted material if it has remained unused for more than 24 hours.

3.4 APPLICATION – ABSORBENT SUBSTRATES

- A. Determine substrate absorbency prior to application by placing a small amount of clean water on the substrate. If water readily disappears into the substrate, treat the substrate as absorbent.
- B. Dilution Ratios:

Substrate Condition	Dilution (Water : Primer)
Standard absorbent substrate	2:1 and let dry for a minimum of 1 hour.
Highly absorbent gypsum (where required to maintain wetting period)	3:1 first coat, let dry, then apply a 2:1 second coat. <i>See Platform P360 TDS for more information.</i>

- C. After dilution, apply Platform P360 using a fine-tip or soft-tip push broom. Work primer into the surface to promote penetration into substrate pores.
- D. Maintain the substrate wet with primer for approximately 5 to 8 minutes. Do not allow primer to puddle; spread puddled material uniformly over the substrate to a thin film. Avoid leaving bare spots.
- E. Substrates or areas that rapidly absorb Platform P360 may require additional dilution or other corrective measures. *See Platform P360 TDS for more information.*
- F. Highly porous surfaces may require additional application(s) of primer.

3.5 APPLICATION – NON-ABSORBENT SUBSTRATES

- A. Apply Platform P360 undiluted, using a 3/8-inch nap roller.

- B. Spread to ensure the entire surface is covered with a thin, even film, avoiding puddling. If material puddles, spread uniformly across substrate.
- C. Suitable non-absorbent substrates may include VCT, properly prepared adhesive residue, cement terrazzo, moisture-vapor membranes, and epoxy surfaces.
- D. Do not apply over water-soluble or pressure-sensitive adhesives.

3.6 APPLICATION – WOOD SUBSTRATES

- A. Where the specified underlayment system permits installation over wood, apply a single coat of Platform P360 undiluted using a 3/8-inch nap roller.
- B. Work Platform P360 into the wood substrate pores thoroughly with the roller to fully penetrate evenly.
- C. Follow Platform Performance Flooring System's requirements regarding reinforcing lath, fastening, and wood-subfloor construction where instructed.

3.7 DRYING

- A. Allow Platform P360 to dry before placement of self-leveling underlayment, patching compound, or other subsequent cementitious material.
- B. Typical drying time is 45 to 90 minutes, depending on temperature, humidity, and air movement.
- C. Primer shall be dry and free of wet, tacky, or pooled areas prior to placement of subsequent material.
- D. Ensure the primed surface remains clean and protected following drying.
- E. If more than 48 hours have elapsed since application, re-prime the affected area prior to installation of subsequent material.
- F. Re-prime areas contaminated by dust, dirt, or other foreign material.

3.8 APPLICATION OF SELF-LEVELING UNDERLAYMENT OR PATCH

- A. Install self-leveling underlayment or cementitious patch product only after Platform P360 has properly dried.
- B. Subsequent material shall be installed in accordance with Platform Performance Flooring System's current written instructions.
- C. Where Platform Performance Flooring System's underlayment or cementitious patch requires priming, use Platform P360 in accordance with its published substrate-specific requirements.
- D. Do not install subsequent material over Platform P360 that is wet, contaminated, damaged, or outside the allowable application window.

3.9 FIELD QUALITY CONTROL

- A. Inspect primed substrate for:
 - 1. Complete and uniform coverage.
 - 2. Absence of puddles.
 - 3. Absence of ridges or excessive film build.
 - 4. Proper drying.
 - 5. Absence of contamination.
- B. Correct areas exhibiting inadequate coverage or excessive substrate absorption before proceeding.
- C. Obtain approval from Platform Performance Flooring System where substrate conditions or proposed applications fall outside published requirements.

3.10 CLEANING

- A. Clean tools and equipment with water before primer dries to a film.
- B. Dispose of unused material and waste in accordance with applicable local, state, and federal regulations.

3.11 PROTECTION

- A. Protect primed surfaces from dust, dirt, moisture, traffic, and other contamination until installation of the subsequent cementitious product.
- B. Do not permit traffic or construction activity to contaminate or damage the primed surface.
- C. Re-prime contaminated areas prior to installation of underlayment or patch material.

END OF SECTION 03 54 00 / 03 54 16 / 09 80 00