

Water Reducible
Polyurethane

Product Description

405 is a water reducible, two-component, high gloss aliphatic polyurethane. This coating may be used for interior or exterior applications where a weather, chemical and abrasion resistant coating is desired. 405 is a low V.O.C., fast drying coating with excellent gloss and color retention. This is a two-component system designed for professional application.

Performance Features

- **Excellent Durability**
- **Excellent Abrasion Resistance**
- **Chemical Resistant**
- **Flexible Film**
- **Direct to Metal**
- **USDA Acceptable**

Product Specifications

Resin Type	Aliphatic Polyurethane
Color Range	103 White, 019 Med. Gray, 562 Safety Red, 563 Safety Yellow, 564 Safety Blue, 568 Black, 101 Clear, & custom colors
Finish	High Gloss
Drying Time (75° F. & 50% R.H.)	To touch: 2 hours To recoat: 8 hours
Practical Coverage	Approx. 200-400 sq. ft./gallon
Recommended Dry Film Thickness	2.4 - 3.0 mils (vertical surfaces) 3.6 - 4.8 mils (horizontal surf.)
Solids By Volume	Clear: 48% (mixed) White: 65% (mixed)
Pencil Hardness	Scratch: H ; Gouge: 4H
Shelf Life	1 year unopened, unopened containers
Sizes	One gallon kits
V.O.C.	<30 grams per liter (mixed)
Clean Up	Water or water & isopropyl alcohol (1:1)

Surface Preparation

WARNING! If you scrape, sand or remove old paint from any surface, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Carefully clean up with a wet mop or HEPA vacuum. Before you start, find out how to protect yourself and your family by contacting the U.S. EPA/Lead Information Hotline at 1-800-424-LEAD (5323) or log on to www.epa.gov/lead.

General:

All surfaces must be cured, firm, dry and cleaned free of dust, dirt, oil, grease, wax, chalky or loose paint, rust, loose mill scale, bond breakers and curing compounds, efflorescence, asphalt stains, mildew or any other contamination or condition that would adversely affect the performance of the coating. Sand glossy, glazed or dense surfaces. Fill holes and surfaces irregularities with a suitable patching compound to match the surface profile.

Previously Painted Surfaces:

Properly clean the surface of all dust, dirt, grease and foreign matter. Apply a test patch of 405 to ensure adhesion to the previous coating and to ensure there will be no delamination of the existing coating to the substrate. **Note:** To insure optimum performance Kelly-Moore recommends removing existing coatings to the bare substrate before applying the 405 system.

Steel:

Remove all loose rust, dirt, grease or other contaminants per SSPC-SP1, SSPC-SP2 and/or SSPC-SP3.

Non-Ferrous Metal (Aluminum, Galvanized):

Remove all oil, grease or soap film with a neutral biodegradable detergent or emulsion detergent.

Concrete, Masonry, Concrete Blocks: Allow concrete to cure for at least thirty (30) days before coating. Clean masonry substrates with a neutral biodegradable detergent or emulsion cleaner. Remove any laitance using a pressure washer.

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Wood:

Sand new wood to remove any surface contaminant and to remove loose wood fibers. Test patches are recommended.

MIXING: This is a two (2) component system. Both components must be mixed together in order for the coating to dry and cure.

Mixing Instructions: Stir each component thoroughly then mix the pre-measured Part A with the Part B. Mix thoroughly, ensuring Parts A & B are blended together. Then allow the combined Parts A & B time to "sweat in" for 2 minutes. You must reduce the mixed A & B components with Clean Tap Water, at a recommended level of 5% to 20%. Reducer water should be added while agitating the product. The volume of Part A will vary based on pigments and colors. In some cases total volume after combining Parts A & B, plus water may exceed a gallon. Use separate containers larger than one gallon for mixing. Once the clean tap water is mixed into the combined Parts A & B you may start to apply the coating. No further sweat in time is required.

Pot Life: 1.5 hours at 75° F & 50% R.H.

PRODUCT MUST BE THINNED FOR PROPER CURING AND FILM BUILD: For smooth vertical surfaces: thin 15% with clean tap water. For rough vertical surfaces: thin 10% to 15% with clean tap water. For horizontal surfaces: thin 20% to 25% with clean tap water. For spray applications: thin to proper consistency for application equipment and surface profile.

Application

Temperature of the air, substrate and material is recommended to be between 50° F and 95° F, and at least 5° F above the dew point. Relative humidity should not be above 80%. Clean spray equipment thoroughly before using the 405. Use the appropriate solvent or cleaner that will adequately remove any residue from the previous coating that was used in the spray equipment. Then flush equipment.

Equipment:

Airless Spray: 2000-2400 psi. Tip: .015 - .017.
Hose: 1/4 to 3/8 inch.

Air-Assist Sprayer: Unit: 500-650 psi. Tip: .015 - .017

Conventional: DeVilbiss pressure pot with GA 503 gun and FF needle assembly with 777 air cap.

Roller: For vertical surfaces use a 1/4" woven nap, Phenolic core Horizontal Surfaces: use a 3/8" woven nap, Phenolic core.

Precautions

Read each component's Material Safety Data Sheet before use. Mixed materials may have hazards of each component. Safety precautions must be strictly followed during storage, handling and use.

**USE ONLY WITH ADEQUATE VENTILATION.
KEEP OUT OF REACH OF CHILDREN.
FOR PROFESSIONAL USE ONLY**

Proper Disposal

For proper disposal of excess material, please contact your local city or county waste management agency.

Limited Warranty: The statements made on this bulletin, product labels or by any of our agents concerning this material are given for information only. They are believed to be true and accurate and are intended to provide a guide to approved construction practices and materials. As workmanship, weather, construction equipment, quality of other materials and other variables affecting results are all beyond our control, Kelly-Moore Paint Company, Inc., does not make nor does it authorize any agent or representative to make any warranty of MERCHANTABILITY OR FITNESS for any purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material except that it conforms to Kelly-Moore's quality control standards. Any liability whatsoever of Kelly-Moore Paint Company, Inc. to the buyer or user of this product is limited to the purchaser's cost of the product itself.