



PPG Architectural Coatings

GENERAL DESCRIPTION

ACRI-SHIELD Semi-Gloss Exterior Acrylic Paint No. PP649 Series is a premium quality, 100% acrylic semi-gloss house paint. The advanced formula can be used in both normal and marginal, above freezing conditions when a low temperature cure is required to form a proper film. It can be used for all types of new or previously painted commercial, institutional and residential exterior wood and masonry surfaces such as siding, trim, eaves, facias, shutters, fences, properly prepared brick, block, stucco and concrete surfaces, vinyl, primed metals and metal siding, vinyl siding and trim, etc. It can be used over both latex and alkyd paints.

RECOMMENDED SUBSTRATES

Wood siding, trim	Concrete
Manufactured siding	Concrete block (CMU)
Vinyl siding, trim	Stucco
Brick	Fiber cement siding

FEATURES / BENEFITS

Features	Benefits
100% Acrylic	Excellent weather resistance
Application down to 35°F	Extends painting season
Resists surfactant leaching	Minimizes water spots, streaks, hazing and blistering
Fade and chalk resistant	Colors stay true
Good touch up	Maintains appearance
Easy soap and water cleanup	No solvent disposal issues
Mildew resistant*	

*This paint contains agents which inhibit the growth of mildew on the surface of the paint film.

RECOMMENDED SYSTEMS

ACRI-SHIELD Semi-Gloss Exterior Acrylic Paint No. PP649 series can be applied to a wide variety of primed substrates. Finish the following primed surfaces with one or two coats of ACRI-SHIELD Semi-Gloss Exterior Acrylic Paint No. PP649 series:

SUBSTRATE	TYPICAL PRIMERS
Wood, New:	PP335, PP515, 17-921
Wood, New Bleeding:	PP515, 17-941, 17-921
Wood, Chalky Areas:	PP515
Hardboard:	PP335
Masonry, Concrete Block:	95-217, 16-90, 4-100
Poured Concrete, Stucco, Brick:	4-898, 4-808, 4-809, 4-603
Fiber Cement:	4-603, 4-503
Metal, Steel:	90-712, 90-912, 7-852, 97-680, 6-208, 6-212
Galvanized:	90-712, 90-912, 6-209
Weathered Aluminum:	7-852, 97-680, 90-712, 90-912, 17-941, 17-921
Vinyl Siding**:	17-921

**NOTE: Do not paint vinyl with colors darker than the original vinyl color to prevent heat warping.

ACRI-SHIELD® Semi-Gloss Exterior Acrylic Paint

TINTING AND BASE INFORMATION

Refer to the appropriate color formula book, automatic tinting equipment and/or computer color matching system for color formulas and tinting instructions.

PP640	White	PP644	UD Base*
PP648	Deep Base*	PP649	Light Base*

*Must be tinted before use.

Some colors, drastic color changes, or porous substrates may require more than one coat to achieve a uniform finish.

PRODUCT DATA

Data below is based on White PP640.

Product Type: Acrylic
Gloss, 60°: Semi-Gloss (Typical range: 30 - 40)

Percent Solids:
Weight: 46 ± 2%
Volume: 35 ± 2%
VOC (untinted): 144 g/L (1.2 lbs./gal.)

Weight/Gallon: 10.3 lbs.
Viscosity (Initial): 98 - 103 Krebs Units
Thinner:

Brush/Roller: If necessary, thin sparingly with clean water up to ½ pint per gallon.
Spray: Thin with clean water up to ½ pint per gallon.

Recommended Film Thickness:

Wet: 4.0 mils
Dry: 1.4 mils

Spread Rate (Theoretical):

Smooth Surfaces: Up to 400 sq. ft./gal.
Rough Surfaces: 200-250 sq. ft./gal.

Coverage does not include variation due to application methods, surface porosity, and/or mixing.

Dry time (@ 50% R.H.):	@35°F	@70°F
To Touch	4 hours	1 hour
To Recoat:	24 hours	4 hours
Full Service:	15-30 days	15-30 days

(Drying times listed may vary depending on temperature, humidity, color, film build and air movement.)

Cleanup: Warm, soapy water
Flash Point: >200°F (>93°C)

APPLICATION INFORMATION

Application Equipment: Apply with a high quality brush, roller, or by spray equipment.

Airless Spray: Minimum 1 gallon per minute pump; .015"-.019" tip; 1800-2400 psi; 1/4" High Pressure material hose. Spray equipment must be handled with due care and in accordance with manufacturer's recommendation. High-pressure injection of coatings into the skin by airless equipment may cause serious injury.

Brush: Use nylon or polyester bristle brushes.
Roller: Use 3/16" to 3/4" synthetic roller covers.

Thinning: Thin sparingly as necessary with clean water up to ½ pint per gallon.

Cleanup: Clean tools and spray equipment with warm, soapy water immediately after use.

GENERAL SURFACE PREPARATION

Paint only clean, dry (may be damp, but not dripping), deglossed and profiled surfaces. Remove dirt, oils, grease, wax, form oils, release agents, sanding dust, paint remover, etc. with PREP125 DURAPREP® WB Cleaner & Degreaser, Dirtex and water, PPG Paint Thinner No. 5132 or other appropriate cleaners, or by vacuuming as necessary. Remove mildew by washing with PPG MILDEW CHECK® Multi-Purpose Wash 18-1 or a mix of 1 part chlorine bleach to 3 parts clean water (rinse thoroughly after 15 minutes).

WARNING! If you scrape, sand, or remove old paint, you may release lead dust or fumes. LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a properly fitted NIOSH-approved respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

NEW WOOD: Repair construction defects, sand as necessary and prime new wood. After primer is dry, fill openings and nail holes with TOP GUN® 200 Siliconized Acrylic Caulk No. 1414, or other suitable sealant. Spot prime the caulk when well set, usually 1-4 hours. Spot prime knots and sap streaks with SEAL GRIP® Premium Quick Dry Primer/Sealer No. 17-964 or shellac.

REPAINT: Remove loose and failing paint by power washing, hand scraping or power tool cleaning and sand edges smooth when applicable. Fill holes and gouges in wood and other substrates with wood patch or filler, etc. as appropriate. Sand patched areas smooth as necessary before priming bare areas and patches. **NOTE:** Always prime chalky paints and surfaces with an appropriate PPG penetrating primer.

NEW CONCRETE/MASONRY/STUCCO: Let new concrete, masonry and stucco cure 28 days before painting. (NOTE: Polymer modified thin coat stucco can usually be painted within 7-14 days depending upon drying conditions and surface pH. Follow stucco manufacturer's instructions.) Remove any remaining deeply embedded contaminants such as curing compounds by abrasive blasting. Remove efflorescence by pressure washing or with a dilute muriatic acid solution following manufacturer's instructions. (CAUTION: When mixing and using, always add acid to water, and wear appropriate eye and skin protection.) Fill cracks and holes with appropriate filler. For new concrete block (CMU), apply an appropriate PPG block filler (SEE RECOMMENDED SYSTEMS) before painting.

ALUMINUM AND VINYL SIDING: Siding may present potential adhesion problems. Siding must be properly aged and cleaned prior to painting. Topcoat should be spot applied, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed. One way to check adhesion is by applying a piece of masking tape to test the topcoat. If the topcoat peels off easily, the surface must be scuff sanded prior to proceeding to ensure mechanical adhesion. For vinyl, do not paint with a color darker than the original vinyl siding due to potential warping.

DIRECTIONS FOR USE

Stir thoroughly before using and occasionally during use. Read all label and Material Safety Data Sheet (MSDS) information prior to use. MSDS are available through our website or by calling 1-800-441-9695. USE WITH ADEQUATE VENTILATION. KEEP OUT OF REACH OF CHILDREN.

Permissible temperatures during application:

Temperature Range: 35°F to 110°F (air, surface, paint)
(Optimum paint temperature 65-85°F)

Dew Point: Surface temperature must be at least 5°F above the dew point.

Relative Humidity: Maximum 85%

New Work: Apply a uniform coat of appropriate primer or block filler per primer data sheet instructions (SEE RECOMMENDED SYSTEMS) at the millage specified for the application. Finish with one or more coats of ACRI-SHIELD Semi-Gloss Exterior Acrylic Paint No. PP649 series.

Repaint: Spot prime bare areas as required with an appropriate primer (SEE RECOMMENDED SYSTEMS), then apply one or more coats of ACRI-SHIELD Semi-Gloss Exterior Acrylic Paint No. PP649 series.

LIMITATIONS OF USE

Apply only when air, product and surface temperatures are above 35°F, and will remain above 35°F for 24 hours after application. Do not apply in direct sunlight in hot weather, or when air or surface temperature is above 110°F. Surface temperature must be at least 5°F above dew point. Do not apply in late afternoon if condensation, fog, rain or snow is likely to occur within 4 hours at higher curing temperatures or 8-24 hours at low curing temperatures. For optimum application properties, bring material to 65 - 85°F temperature range prior to application. Use for service below 150°F. Do not use on floors or deck walking surfaces. PROTECT FROM FREEZING. While this product provides a mildew resistant coating, growth may still occur if the substrate is not properly prepared prior to painting and/or if the substrate is consistently exposed to conditions conducive to mold, mildew, and algae. Examples of these conditions include, but are not limited to, under eaves, behind shrubbery and trees, and in areas that are consistently damp with little to no direct sunlight.

SHIPPING

Freight Classification: PAINT OR PAINT RELATED MATERIAL

Packaging: 6 Quarts per carton; 4 Gallons per carton; 5-Gallon Pail

PPGAF believes the technical data presented is currently accurate; however, no guarantee of accuracy, comprehensiveness, or performance is given or implied. Improvements in coatings technology may cause future technical data to vary from what is in this bulletin. For complete, up-to-date technical information, visit our web site or call 1-800-441-9695.