GENERAL DESCRIPTION

PPG BREAK-THROUGH!® is an ultra-durable waterborne acrylic enamel with excellent flow and leveling, outstanding early block resistance and very fast dry. It can be used for interior/exterior applications and on both horizontal and vertical surfaces. Ideal for use on **doors, windows, trim & cabinetry**; shelving, fixtures, railings; concrete floors & safety markings, in residential, commercial and institutional settings. PPG *Break-Through!* offers excellent adhesion to difficult substrates, including fiberglass, ceramic tile, laminate, and architectural plastics and endures extreme bends and deformation without cracking or peeling.

RECOMMENDED SUBSTRATES

Aluminum	Galvanized Steel
Ceramic Tile	Gypsum Wallboard-Drywall
Concrete	Interior Wood
Concrete/Masonry Block	Laminate
Ferrous Metal	Plaster
Fibreglass	Vinyl and Architectural Plastics

CONFORMANCE STANDARDS

Complies with the Canadian Volatile Organic Compound Concentration Limits for Architectural Coatings Regulations requirements. Can earn LEED 2009 credit.

LIMITATIONS OF USE

Apply only when air, surface, and product temperatures are between 10°C (50°F) and 32°C (90°F) and at least 3°C (5°F) above the dew point prior to painting. Air and surface temperatures must remain above 10°C (50°F) for the next 24 hours. Avoid painting in direct sunlight or on hot surfaces. Do not apply late in the day when dew and condensation are likely to form or if rain or snow is expected within 48 hours. Wait at least 7 days after painting before cleaning the surface with a non-abrasive, mild cleaner or exposure to ponding water.

Not recommended for immersion environments.
Do not use where subject to hot tires.
Do not use on large wood structures or the bodies of homes.

PROTECT FROM FREEZING.

Permissible temperatures during the application:

Material:	10 to 32 °C	50 to 90 °F
Ambient:	10 to 32 °C	50 to 90 °F
Substrate:	10 to 32 °C	50 to 90 °F

Before use, be sure to read and follow the instructions and warnings on the label and Material Safety Data Sheet. See other cautions on the last page.

NOTE: Not recommended for use with TOP GUN® 400 Sealant. Use TOP GUN® 250 or TOP GUN® 300.

TINTING AND BASE INFORMATION

Refer to the appropriate colour formula book, automatic tinting equipment, and/or computer colour-matching system for colour formulas and tinting instructions. The bases can be tinted with PPG Formula Pro or 96/9600 line or 896 colourants.

V52-410C	White and Pastel Base
V52-420C	Midtone*
V52-440C	Ultra Deep*
V52-90C	Wrought Iron Black

*Must be tinted before use.

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

PACKAGING

3.78 L

PRODUCT DATA

PRODUCT TYPE: Water-borne Acrylic
SHEEN: Satin: 20 to 30 (60º Gloss Meter)
VOLUME SOLIDS*: 36% ± 2%
WEIGHT SOLIDS*: 49% ± 2%
VOC*: < 50 g/L
**When tinted with PPG Formula Pro, even at maximum tint load in any colour, the colourant contributes less than 8 g/L of VOC to the final tinted product.*
DENSITY*: 1.2 kg/L
*Product data calculated on product V52-410C.

SPREADING RATE PER COAT Approximately 37 square metres (400 sq. ft.) per 3.78 litres on primed, smooth, nonporous surfaces.
Wet Film Thickness: 4.0 mils (102 microns)
Dry Film Thickness: 1.4 mils (36 microns)
Coverage figures do not include loss due to surface irregularities and porosity or material loss due to application method or mixing.

DRYING TIME: Dry time @ 25 °C (77 °F); 50% relative humidity.

To Touch:	15 to 20 minutes
To Handle:	1 hour
To Recoat:	1 hour
For Foot Traffic:	12 hours
For Forklift Traffic:	24 hours
To Full Cure:	7 days

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

CLEANUP: Clean tools with warm, soapy water.

DISPOSAL: Consult your municipality about proper disposal procedure of residue in accordance with the laws and respect the environment. Do not pour down a drain or storm sewer.

FLASH POINT: Over 93 °C (200 °F)

FEATURES / BENEFITS

Features	Benefits
Excellent Flow & Leveling	Delivers smooth enamel finish when brushed, rolled or sprayed.
Very Quick Dry	Dry to touch in 15-20 minutes, re-coat in 1-hour to complete projects faster.
Outstanding Early Block Resistance	Ideal for **doors, windows, cabinets, and shelving.**
Ultra-durable	Dirt-resistant, stain-resistant and highly resistant to hand-oils.
Excellent Resistance to Household Cleaners	Ideal for use on high-touch surfaces.
Excellent Adhesion	Self-priming on a variety of difficult substrates.
Excellent Flexibility	Withstands extreme bends with no cracking or peeling .

GENERAL SURFACE PREPARATION

Surface must be clean and dry. Remove all loose, peeling paint, dirt, mildew, grease, oil, chalk, rust, and any other surface contaminants. Blistering and peeling issues are commonly caused by moisture behind the paint film. Problems leading to excessive moisture in the substrate must be repaired prior to painting. Putty all nail holes and caulk all cracks and open seams. Sand all glossy, rough, and patched surfaces. Plaster, concrete, and masonry surfaces must be completely dry, free of efflorescence, and allowed to cure for 30 days prior to painting. When applied to an uncoated substrate or to bare wood, two coats are required with the first coat acting as the primer. For exterior ferrous metal, tannin staining woods, fresh concrete or masonry (less than 30 days cure), or chalky surfaces, use of an appropriate specialty primer is recommended for best results.
PRECAUTION: Dry sanding will give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. Wear suitable respiratory protective equipment when exposure cannot be avoided by adequate local ventilation. WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. Contact a regional Health Canada office for more information.

Remove mildew with a solution of household bleach (1 part household bleach to 3 parts of water). Prime all bare and porous substrates with an appropriate primer. Before use, be sure to read and follow the instructions and warnings on the label.

Aluminum: Depending on the type of aluminum a primer may be required for proper adhesion. Any coating applied directly to aluminum should be spot applied, allowed to cure overnight, and then evaluated for adhesion. If adhesion is good, the application may proceed.

Ferrous Metal: The surface must be cleaned thoroughly to remove any dust, rust, oil and surface contaminants, and then primed. No primer is required for interior applications.

Galvanized Steel: A primer is required for proper adhesion. Caution must be used when selecting coatings for use on all galvanized metal surfaces. These substrates may have a factory-applied stabilizer, which is used to prevent white rusting during storage and shipping. Such stabilizers must be removed by either brush blasting, sanding or chemical treatment prior to priming.

Interior Wood: Unpainted wood or wood in poor condition should be sanded smooth, wiped clean, then primed. Any knots or resinous areas must be primed before painting. For non-bleeding or previously painted wood, no primer is required.

Concrete: New concrete should cure for at least 30 days and preferably 90 days prior to priming and painting. The pH of the substrate must be less than 10 before painting. If pH is greater than 10, prime with an alkali resistant primer.

Concrete/Masonry Block: Mortar should cure for at least 30 days and preferably 90 days prior to priming. Surfaces previously coated with water thinned cement-based paint must be prepared with extra care. If the material appears to be adhering tightly, a masonry sealer may be applied to seal the surface. Fill block with appropriate block filler.

Gypsum Wallboard/Drywall: Nails or screws should be countersunk, and they along with any indentations should be mudded flush with the surface, sanded smooth and cleaned to remove any dust, then prime prior to painting the substrate.

Plaster: Plaster or other alkaline surfaces should be allowed to cure for at least 30 days prior to priming with an alkali resistant primer.

Fibreglass: No primer needed; sanding or scuffing the surface is recommended. Primer and topcoat should be spot applied as directed, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed.

Laminate: No primer needed; sanding or scuffing the surface is recommended. Topcoat should be spot applied as directed, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed.

Ceramic Tile: No primer needed; sanding or etching with phosphoric acid is necessary. Topcoat should be spot applied as directed, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed.

Vinyl & Architectural Plastics: No primer needed. Consult the manufacturer's guidelines prior to painting. Primer and Topcoat should be spot applied, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed. Do not paint vinyl or plastic with a color darker than the original to prevent potential warping due to heat absorption.

RECOMMENDED PRIMERS

Aluminum	Self-priming or Dulux Weatherguard 1535
Ceramic Tile	Self-priming
Concrete	Self-priming, *Perma-Crete* 4-809C
Concrete/Masonry Block	*SpeedHide* 6-7C, Dulux X-pert 36250
Fibreglass	Self-priming
Galvanized Steel	Dulux Weatherguard 1535
Gypsum Wallboard/Drywall	*SpeedHide* 6-2C, 6-4C, *Pure Performance* 9-900C, *SpeedHide* Pro EV 12-900XIC, Glidden Ultra 36600, Dulux X-Pert 11000, Dulux Lifemaster 59113
Laminate	Self-priming
Plaster	Self-priming, *Pure Performance* 9-900C, *SealGrip* 17-921XIC, *Dulux Gripper* 60000A
Vinyl & Architectural Plastics	Self-priming
Interior Wood	Self-priming, *SpeedHide* 6-2C, *Pure Performance* 9-900C, *SealGrip* 17-921XIC, *Dulux Gripper 60000A, SpeedHide* Pro EV 12-900XIC.

APPLICATION INFORMATION

Stir thoroughly. When using more than one container of the same colour, intermix to ensure colour uniformity. During application, it is important to maintain a wet edge due to the quick dry of the product. Rinse brush with warm water periodically during extended brush application.
Two coats are recommended for maximum durability.

Application Equipment: Apply with a high-quality brush, roller, paint pad, or by spray equipment.
Brush: High quality polyester/nylon brush.
Roller: 5 mm à 10 mm (3/16—3/8”) nap synthetic roller cover.
Airless Spray: Use tip size .009" to .013" and pressure range of 1500 to 2000 psi. Best results are achieved using a fine finish tip. Spray equipment must be handled with due care and in accordance with the manufacturer’s recommendation. High-pressure injection of coatings into the skin by airless equipment may cause serious injury.

Thinning: Thinning may be required. If necessary, thin 5 to 10% (up to 355 mL or 12 oz.) with water per 3.78 litres of paint. No thinning required for airless spray application.

PRECAUTIONS

MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE AND SKIN IRRITATION. Avoid breathing vapours, spray, or mists. Avoid contact with skin and eyes. Wear protective gloves/clothing and eye/face protection. Keep out of reach of children. **Note: These warnings encompass the product series. Prior to use, read and follow product-specific SDS and label information. FIRST AID TREATMENT:** If swallowed, call a Poison Control Centre or doctor immediately. If in eyes or on skin, rinse well with water. If breathed in, move person to fresh air. Contains: titanium dioxide; nepheline syenite; 1-(2-butoxy-1-methylethoxy) propan-2-ol; carbon black, respirable powder. Contains isothiazolinones. May cause allergic reaction. Keep container tightly closed and sealed until ready for use. For workplace use, an SDS is available from your retailer or by calling 1-800-463-7426. EMERGENCY SPILL INFORMATION: 514-645-1320.
LIMITED WARRANTY: PPG Architectural Coatings Canada, Inc. warrants performance of its products to its intended use if properly applied in accordance with the label directions and the specifications of the technical data sheet. Having no control over the application methods and conditions or the circumstances related to its use, no other warranty, expressed or implied, statutory or otherwise is given. This limited warranty extends only to the original purchaser of the product and is not transferable or assignable. If the product fails to conform to this limited warranty, we will, at your option, furnish replacement product or refund the purchase price. This limited warranty excludes (1) labour or costs of labour for the application or removal of any product and (2) all other direct, indirect, incidental, special, or consequential damages.

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