



ben[®]
100% ACRYLIC EXTERIOR
FLAT FINISH 541



Waterborne premium quality, acrylic façade paint which creates durable and resistant to weather conditions finish. Flat.

BENEFITS & GENERAL DESCRIPTION: waterborne, latex acrylic paint intended for protection of traditional, mineral facades, wooden surfaces as well as vinyl and aluminum siding. Paint provides excellent durability and resistance to weather conditions like rain, temperature fluctuations and UV radiation, mineral salts, alkali environment, air contaminations, dirt and microorganisms. Dried paint layer indicates a high hydrophobic features (very low liquid water absorption), water-vapour permeability, elasticity and excellent color retention.

ben[®] 100% ACRYLIC EXTERIOR FLAT FINISH 541 is tinted with innovative, free of harmful VOC compounds Gennex colorants which reinforce the technical parameter of final coat.

PROPERTIES:

- *excellent façade protection against the weather conditions (rain, temperature fluctuation)*
- *high resistance to UV radiation (color retention)*
- *effective protection against moisture (hydrophobic properties)*
- *water-vapor permeability*
- *flexibility and mechanical strength*
- *high resistance to alkali, peeling and cracking*
- *excellent hiding power*

Technical information – Pastel Base 1X	
vehicle type:	waterborne acrylic dispersion
pigment type:	titanium dioxide
volume solids*:	34,5 %
coverage:	approx. 10 m ² /l for one coat depending on surface texture, porosity and absorbing properties, application method and painting tool used. Test should be perform in order to determine the coverage of the given surface.
recommended film thickness:	
- wet	96,9 µm
- dry	33,1 µm
dry time (at temp. + 25°C and relative air humidity 50%):	
- to touch:	min. 1 hours
- to recoat (the next coat application):	min. 4 hours
- full cure and final technical parameters and durability:	min. 21 days
dries by:	evaporation and coalescence
viscosity:	105 ± 3 KU
flash point:	none
gloss/sheen:	flat (0,5 – 2,5 @ 85°)
colors:	White and Bases 1X, 2X, 3X, 4X intended for tinting in the GENNEX [®] Platform system. Full range of Benjamin Moore colors. White 01 may be tinted with up to 2.0 fl. oz. (64 units) of Benjamin Moore colorants per gallon.
painting surface temperature:	min +5°C, max. +32°C
thin with:	not recommended, if needed use clean water
clean up thinner:	clean water
weight per 1 l*:	1,34 kg
storage temperature:	min. +5°C, max. +32°C
VOC:	EU VOC limit for this product (Cat. A/d): 130 g/l (2010). Max. VOC: 130 g/l.
Certification:	<ul style="list-style-type: none"> ● Product qualifies for: Master Painters Institute MPI # 10. ● Water vapor permeance ASTM D1653: 47 perms ● Wind driven rain ASTM D6904 (1 coat 608 masonry primer/1 coat 541) Early Rain Resistance: 1 ½ – 2 hours after application over wood, primed surfaces or previously painted surfaces (77 °F / 50% RH) - Other surfaces such as hardboard or vinyl may require a longer dry time ● Passes ASTM D3273 / D3274 Mildew, Mold Resistance Tests (no growth)
packaging**:	0,95l; 3,78 l; 18,9 l

* reported values are for Base for tinting and can be different in case of other Bases or colors
 **3,78 L = 1 gallon; 18,9 L = 5 gallons

RECOMMENDED FOR

Range of use: traditional mineral, cement-lime and cement plasters, thin-layered mineral and acrylic plasters in ETICS (External Thermal Insulation Composite Systems), building blocks, unglazed brick, concrete, latex (generally dispersion and emulsion paints) paints renovation, previously primed wooden, PVC and metal surfaces. It's possible to apply paint on specially prepared and primed before glass, ceramic substrates (like ceramic tiles) and glass fiber surfaces.

Surface preparation:

- **new surfaces:**

Traditional mineral, cement-lime, cement plasters and concrete : new cement-lime and cement plasters and concrete must be allowed to cure at least 4 weeks. In case of new constructions it is recommended to wait until the first

heating season in order to evaporate so called “constructional moisture”. Remove dirt, dust, wax, grease and oil spots, loose or weak parts of substrate and salt deposits. Exterior masonry must be power washed and dry. In case of chalky surfaces use a sandblasting. All imperfections and cracks must be filled with a special patching compound, similar to original used one. Remove microorganisms (e.g. fungus and mildew) using a special agent.

Prepared in described above way substrate prime with *ULTRA SPEC® MASONRY INTERIOR/EXTERIOR 100% ACRYLIC SEALER 608* (product can be use when the max. pH value of mineral substrate is 13; this value is achieved after approx. 7 days of mineral plasters drying). In case of some weak substrates in order to its reinforcement use a primer *COROTECH® CLEAR ACRYLIC SEALER V027*.

On some difficult substrates with some spots and stains use a special priming paint *FRESH START® HIGH-HIDING ALL PURPOSE PRIMER 046*.

Metal surfaces: non-ferrous like galvanized steel and aluminum - remove dirt, dust, grease, rust, oxide layer and degrease with White Spirit. It's also possible to use for this purpose water with detergent addition.

In case of galvanized steel use a special cleaning agent with ammonia. Then wash thoroughly whole cleaned surface with water and leave to dry. Steel (and exposed steel on galvanized metal surfaces) – remove dirt, dust, grease, rust and degrease with White Spirit.

Non-ferrous like galvanized steel and aluminum: prime with *STIX® WATERBORNE BONDING PRIMER SXA-110 INSL-X* brand.

Wooden substrates:

Bare wooden substrates must be dry and correct seasoned. Remove dirt, dust, wax, grease and oil spots, tree saps and loose or weak parts of substrate. All imperfections and cracks must be filled with a special patching compound for wood. Remove microorganisms (e.g. fungus and mildew) using a special agent.

Prepared in described above way substrate prime with *FRESH START® HIGH-HIDING ALL PURPOSE PRIMER 046*.

Vinyl siding and vinyl composite: *FRESH START® HIGH-HIDING ALL PURPOSE PRIMER 046* or *STIX® WATERBORNE BONDING PRIMER SXA-110 INSL-X* brand.

Warning: the priming is a technological requirement in case of not primed or not painted substrates.

● ***previously painted surfaces:***

Remove dirt, dust, wax, grease and oil spots, all paint layers and loose or weak parts of the substrate. The glossy surfaces must be dulled. Exterior masonry must be power washed and dry. In case of chalky surfaces use a sandblasting. All imperfections and cracks must be filled with a special patching compound, similar to original used one. Remove microorganisms (e.g. fungus and mildew) using a special agent.

Remove tree saps from wood and rust as well as oxides layers in case of metal surfaces.

In case of old paint renovation the test should be performed on small surface area. Positive result, decides on application of the product on the whole surface.

The priming is not necessary if existing coat is in an excellent condition.

Traditional mineral facades: surface prime with *ULTRA SPEC® MASONRY INTERIOR/EXTERIOR 100% ACRYLIC SEALER 608*. In case of some weak substrates or partially repaired, in order to its reinforcement use a primer *COROTECH® CLEAR ACRYLIC SEALER V027*. On some difficult substrates with some spots and stains use a special priming paint *FRESH START® HIGH-HIDING ALL PURPOSE PRIMER 046*.

Wooden substrates: prime with *FRESH START® HIGH-HIDING ALL PURPOSE PRIMER 046*.

Vinyl siding and vinyl composite: *FRESH START® HIGH-HIDING ALL PURPOSE PRIMER 046* or *STIX® WATERBORNE BONDING PRIMER SXA-110 INSL-X* brand.

Non-ferrous like galvanized steel and aluminum: prime with *STIX® WATERBORNE BONDING PRIMER SXA-110 INSL-X* brand.

In case of problematic and untypical surfaces like ceramic tiles, plastics, glass, glossy paint layer, etc., use adhesion priming paint *STIX® WATERBORNE BONDING PRIMER SXA-110 INSL-X* brand.

Warning: for best hiding results, tint the primer to approximate shade of the finish coat, especially when a significant color change is desired.

APPLICATION

The substrate must be solid, completely dry, clean and free of dust. The product is in ready to use form.

Stir thoroughly before and occasionally during use.

Apply two coats after min. 12 hours from priming with *COROTECH® CLEAR ACRYLIC SEALER V027*, *ULTRA SPEC® MASONRY INTERIOR/EXTERIOR 100% ACRYLIC SEALER 608* and min. 24 hours in case of use *FRESH START® HIGH-HIDING ALL PURPOSE PRIMER 046*.

In case of use *STIX SXA-110* provide the min. time interval 24 hours. to 7 days (see the details in TDS of mentioned primer) before *ben® 100% ACRYLIC EXTERIOR FLAT FINISH 541* application. Apply with brush, roller or spraying gun.

For airless method provide the following parameters: pressure 103÷172 bar and tip 0.013-0.017.

When painting job is conducted in high temperature, the relative air humidity below 50%, in direct sunlight or windy conditions add *518 EXTENDER* to paint in the amount of max. 235 ml to 3,78 l paint. It's possible also to add some clean water in the same amount. Never add other paints or solvents.

Work using „wet in wet” system, avoiding creating overlaps. The next coat apply after min. 4 hours. Technological breaks must be planned at the wall corners, building edges and other elements.

Do not apply on the substrates painted previously with limewash. Do not use on horizontal surfaces with long-lasting effects of snow and moisture.

It is recommended to use BENJAMIN MOORE or PREMIER painting tools and Frogtape® (with PaintBlock Technology®), Kip® or Painter's Matte Green® masking tapes.

Weather conditions during and after application: carry out the painting work at the air and substrate temperature min. +10°C and max. +32°C. The optimal conditions: + 20°C and relative air humidity 50%. Do not apply in direct sunlight or on a hot surface, avoid rain, moisture, low temperatures or high humidity for the first 48 hours of curing. High humidity or cooler temperatures will prolong mentioned time, even up to 7 days.

Drying time:

At the temperature of +25°C and relative air humidity 50% the paint dries approx. 1 hour. At mentioned weather conditions the next coat apply after min. 4 hours. The coat achieves the final parameters and resistance after min. 21 days after application.

Clean up: wash painting tools in warm soapy water immediately after use.

Warning: use system: paint *ben 100% ACRYLIC EXTERIOR FLAT FINISH 541* and primers from Benjamin Moore & Co. offer. Ensure enough amount of paint from one production batch in order to avoid some color differences. Do not use Bases 1X, 2X, 3X i 4X not tinted in GENNEX® Platform system. Only GENNEX® Waterborne Colorants can be added to paint. Do not use on horizontal surfaces with long-lasting effects of snow and moisture.

The coat achieves the final parameters and resistance after min. 21 days after application. Producer is not responsible for bad quality of the painted surface if the above instructions aren't obeyed. Producer is not responsible for the damages appeared in results of use over 3,78 l of paint, because to this quantity any defects of product should be demonstrated and notified in the proper point of sale.

ENVIRONMENTAL: Do not pour liquid residues into sewerage systems. They should be referred to specialized companies with appropriate authorization for disposal.

Empty cans and liquid waste should be recycled or disposed of in accordance with local regulations.

HEALTH & SAFETY INFORMATION: Do not eat. Keep out of reach of children. Avoid contact with eyes and prolonged contact with skin. In case of eye contact, flush immediately with plenty of water. In case of ingestion clean mouth with water and afterwards drink plenty of water. Consult a physician; show this container or label. Do not breathe spray mist or sanding dust. Use only with adequate ventilation. Ensure fresh air entry during application and drying. During application in closed spaces, wear the protective clothing, gloves and eye/face protection. In case of spraying method wear approved respirator. MSDS available on demand of consumer.

EXPIRE DATE: 4 years from the production date in the factory-sealed package The expire date is indicated on the packaging.



This specification is effective from: 03.2022.

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