

PPG Flooring™ 700 HDR

DESCRIPTION

Rake and trowel applied, heavy-duty polyurethane concrete

PRINCIPAL CHARACTERISTICS

- Seamless, hygienic finish with no grout joints
- Excellent abrasion and impact resistance
- Low odor
- Fast curing
- Excellent corrosion resistance
- Excellent chemical resistance
- High temperature resistant to 250°F (121°C)
- Excellent resistance to thermal shock
- Resistant to moisture vapor transmission (MVT)
- Anti-slip surface, meets ADA recommendations
- Resistant to fungi growth per ASTM G-21
- TYPICAL USES:
- Food and beverage processing facilities
- Chemical processing facilities
- Pulp and paper mills
- Commercial/Food processing kitchens
- Freezers and coolers
- Battery charging areas
- Truck unloading areas

COLOR AND GLOSS LEVEL

- Dark Gray, Medium Gray, Red, Green, Blue, Black, Tan, Khaki, & Safety Yellow

Notes:

- Color is approximate and will be subject to some degree of drift over time
- Color changes can occur under UV-exposure without negative impact on the product performance

BASIC DATA AT 70°F (21°C)

Data for mixed product	
Number of components	Four
VOC (Supplied)	max. 0.0 lb/US gal (approx. 5 g/l)
Recommended dry film thickness	1/4" (6350 µm) - 3/8" (9525 µm)
Theoretical spreading rate	20 ft²/kit for 1/4" (1.9 m²/kit for 6350 µm)
Dry to walk on	12 hours
Full cure after	7 days
Shelf life	Part A: at least 12 months when stored cool and dry

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Data for mixed product

Part B: at least 12 months when stored cool and dry Part C: at least 6 months when stored cool and dry Part D: at least 24 months when stored cool and dry
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RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Ambient temperatures should be between 40°F (5°C) and 85°F (29°C)

Concrete

- Apply only to properly prepared, clean, dry and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants. Neutralize or remove these and any laitance or weak surface layers such as broom finished concrete surfaces
- NEW CONCRETE - Should be cured for a minimum of 14 days to reduce possible shrinkage cracking in the concrete. PPG Flooring 700 polyurethane concrete can be installed after 7 days or when concrete reaches a minimum 3,500 PSI compressive strength which will allow for proper surface preparation. However, early curing movement, shrinkage or cracking that may occur in the concrete will be reflected through the final PPG Flooring 700 polyurethane concrete.
- Remove all surface contaminants such as oil, grease, and embedded chemicals
- Prepare surface by mechanical means to achieve a minimum CSP of 4-5 to meet ICRI standard guideline #03732 for coating concrete
- Expansion joints, control joints, and moving cracks should be filled with appropriate PPG JOINT FILL sealants or fillers then isolated with bond breaker

Note:

- Do not install over damp, wet or saturated substrates

INSTRUCTIONS FOR USE

Kit consists of 1 container Part A, 1 container Part B, 1 Part C Fill Material, & 1 Part D Powder Pigment

- To prevent lifting or delamination, keyways (minimum 5/16" (7938 µm) wide x 5/16" (7938 µm) deep) must be cut at all terminations, joints, columns, doorways, and drains.
- Optionally, PPG FLR 700 VS Cove Base material can be used to install a cove and/or base as required. The cove/ base can be installed before or after the installation of the polyurethane concrete depending on the specification and or the desired result. The Cove Base can be used to create a simple cant cove as well.
- Pour Part A into a mixing pail with the mixer running. Add Powder Pigment bag to the Part A and mix for 15 seconds. Add Part B and mix for an additional 15 seconds. Gradually add the contents of the Part C Fill Material into the liquid mixture and blend thoroughly until all particles are wetted out (approximately 2 minutes).
- Apply immediately after mixing

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Application

- Immediately after mixing (within 3 minutes), spread the mixed product onto the floor at a thickness slightly greater than the desired finish, using a screed box or move by hand trowel.
- Trowel the surface lightly, using a steel finish trowel to smooth the surface. Finish trowel strokes should all be in the same direction. Do not overwork the mortar. The material should be troweled to a finished thickness of at least 1/4" (6350 µm) to 3/8" (9525 µm). For thicknesses greater than 1" (25400 µm) add 25 lbs. (11.3 kg) of clean, dry 3/8" (9525 µm) pea gravel to the mixture to help reduce the heat generated during cure.
- Immediately roll the surface lightly in no more than two passes with a 3/8" nap roller
- Lay abutting edges within 10 minutes to ensure a clean edge. A "wet edge" installation is imperative during large placements to avoid lines and ridges in the finished floor.

Material temperature

- Material temperature during application should be between 50°F (10°C) and 80°F (27°C)

Pot life

15 minutes at 77°F (25°C)

Cleaning procedure

- Clean tools and equipment with acetone or other solvent based cleaners
- Fully cured material can only be removed from equipment or surfaces through mechanical methods

ADDITIONAL DATA

Physical data of cured material	
Characteristic	Value
Compressive strength (ASTM C579)	7,800 psi (53,779 kPa)
Tensile Strength (ASTM C307)	975 psi (6,722 kPa)
Flexural Strength (ASTM C580)	1,900 psi (13,100 kPa)
Bond strength (ASTM D4541)	100% Concrete Failure
Impact Strength (ASTM D4226)	>160 in-lb (18.1 Nm)
Resistance to Fungi Growth (ASTM G21)	Passes, Rating of 1

Note:

- The value ranges stated in this Product Data Sheet are based on system processing under laboratory conditions. Equipment configurations and/or field application conditions may produce variances in final system values.

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Curing Time			
Substrate temperature	Open to Foot Traffic	Return to Service	Full cure
77°F (25°C)	12 hours	24 hours	7 days

DISCLAIMER

- This product is specifically suitable for use on the substrates mentioned in this document. For application on any other substrates, please always contact your PPG representative for specific instructions and in order to make sure that the product performance can be safeguarded.
- For industrial or professional use only

SAFETY PRECAUTIONS

- Read all label and Safety Data Sheet (SDS) information prior to use

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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AVAILABILITY OF PACKAGING

Packaging

- 1/2-gallon containers
- 5-gallon containers
- 250-gallon containers