PPG FLOORING SELF-LEVELING URETHANE CEMENT

DESCRIPTION

PPG Flooring Self-Leveling Urethane Cement provides a heavy duty seamless flooring system with higher builds that can be installed at 1/8" – 3/16" and broadcast to rejection with silica sand or quartz to achieve 3/16" – ¼" in thickness. The resulting flooring system offers high durability and resistance to impact, thermal shock, abrasion, chemical and moisture vapor transmission.

PRINCIPAL CHARACTERISTICS

- 100% solids
- Ultra-Low VOC (<5 g/L)
- Self-Leveling for medium duty environments
- Self-Leveling High Build (used with High Build Filler) for heavy duty environments
- Resistant to 12 lbs. of moisture vapor emissions (Self-Leveling) and 20 lbs. of moisture vapor emissions (Self-Leveling High Build)
- Available with Coving to connect floors and walls seamlessly
- TYPICAL USES:
- Food and beverage processing facilities
- Commercial/Food processing kitchens
- Pharmaceutical plants
- Chemical processing facilities
- Restore eroded concrete floors

COLOR AND GLOSS LEVEL

- Neutral - Must be tinted with Gray or Red Pigment Powder
- Flat

BASIC DATA AT 77°F (25°C) AND 50% RELATIVE HUMIDITY

Data for mixed product	
Number of components	Four
Volume solids	100%
VOC (Supplied)	EPA Method 24: 0.0 lb/US gal (0.0 g/l)
Theoretical spreading rate	See notes
Dry to topcoat	12 hours

PPG FLOORING SELF-LEVELING URETHANE CEMENT

Data for mixed product	
Shelf life	Base: at least 6 months when stored cool and dry Hardener: at least 6 months when stored cool and dry

Notes:
- Theoretical spread rate for Self-Leveling is 25 sq. ft./kit @ 1/8" application thickness, broadcast to refusal to achieve 3/16" finished thickness
- Theoretical spread rate for Self-Leveling High Build is 23 sq. ft./kit @ 3/16" application thickness, broadcast to refusal to achieve 1/4" finished thickness
- Self-Leveling Temperature Resistant to 180°F
- Self-Leveling High Build Temperature Resistant to 212°F
- CURING TIME at 77°F and 50% Relative Humidity: Light Foot Traffic – 12 hours, Light Wheel Traffic – 24 hours, Full Cure – 7 Days
- Shelf life is for unopened containers

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

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. Concrete should have a minimum surface tensile strength of at least 300 PSI per ASTM D-4541.
- Surface must be shot blasted to achieve CSP 3-5 profile for PPG Flooring Self-Leveling Urethane Cement and CSP 5 profile for PPG Flooring Self-Leveling High Build Urethane Cement - meeting ICRI standard guideline #03732 for coating concrete, producing a profile equal to 40-grit sandpaper or coarser.
- All concrete surface irregularities, cracks, expansion joints, control joints and terminations should be properly addressed and prepared prior to application of the flooring. Moving joints and cracks may reflect through the final installed PPG Flooring Self-Leveling Urethane Cement.
- Recognize all joints that are designed to move by saw cutting the joint after the installation and installing a joint filler designed to accommodate the structural movement of the joint.
- To prevent lifting or delamination, keyways (minimum 5/16" wide x 5/16" deep) must be cut at all terminations, joints, columns, doorways, and drains.
- NEW CONCRETE - Should be cured for a minimum of 14 days to reduce possible shrinkage cracking in the concrete. PPG Flooring Self-Leveling Urethane Cement can be installed after 14 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 Self-Leveling Urethane Cement.

Atmospheric exposure conditions

- Ambient temperatures should be between 40°F (5°C) and 85°F (29°C)
- Material temperature should be between 50°F (10°C) and 80°F (27°C)
- Maximum 85% relative humidity during application and curing
- This product is not UV stable and will discolor unless top coated with a UV stable coating.

Substrate temperature

- Substrate temperature during application should be between 40°F (5°C) and 85°F (29°C)
- Substrate temperature during application should be at least 5°F (3°C) above the dew point

PPG FLOORING SELF-LEVELING URETHANE CEMENT

SYSTEM SPECIFICATION

- SEVERE – PPG Flooring Self-Leveling Urethane Cement or PPG Flooring Self-Leveling High Build Urethane Cement / PPG Flooring Decorative Flake or 20/40 mesh silica sand or quartz aggregate - broadcast to refusal / Topcoat PPG Flooring 100% Solids Polyaspartic or PPG Flooring Polyaspartic UV85 or PPG Flooring Self-Leveling Epoxy

INSTRUCTIONS FOR USE

- NOTE: PPG Flooring Self-Leveling Urethane Cement systems should only be installed by trained persons experienced in polyurethane concrete flooring applications.
- COVING OPTION: A cove/base or 45-degree cant cove can be installed before or after the installation of the PPG Flooring Self-Leveling Urethane Cement. Use PPG Flooring Self-Leveling Urethane Cement Cove Base Filler to achieve the desired specification or result.
- MIXING: It is very important to utilize a proper mixer and paddle to ensure a complete mix and to reduce the risk of introducing excessive air into the mixture. A 1horsepower mixer with a 10 gallon pail and TR4-10 mixing arm (www.mixall.com) is recommended.
- Do not make partial mixes.
- With the mixer running, pour ½-gallon Part A into the pail. Add 1 Pigment Powder to Part A and mix about 15 seconds. Add ½-gallon Part B and mix another 15 seconds. Gradually add all contents of the Filler into the liquid mixture and blend thoroughly until all particles are wetted out, normally about two minutes.
- Mixing instructions are the same regardless of making the Self-Leveling Urethane Cement, Self-Leveling High Build Urethane Cement, or Cove Urethane Cement product.
- APPLICATION PROCEDURE:
- Immediately after mixing (within 3 minutes), spread the mixed PPG Flooring Self-Leveling Urethane Cement or PPG Flooring Self-Leveling High Build Urethane Cement onto the floor using a cam rake or trowel - approximately 1/8” for a 3/16” or 3/16” for a ¼” finished floor (after broadcasting 20/40 mesh silica sand or quartz aggregate), respectively.
- Lay abutting edges within 10 minutes to ensure a clean edge. It is imperative that a wet edge installation is maintained during large placements to avoid lines and ridges in the finished floor.
- Evenly apply to desired thickness while keeping cam rake lines to a minimum. Back-roll across slurry with spike roller to help settle aggregates and blend cam rake lines. Further roll with loop/texture roller perpendicular to cam rake lines over entire floor to even and settle slurry prior to broadcasting.
- BROADCAST: Broadcast to rejection specified broadcast media (aggregate or PPG Decorative Flakes) onto the wet slurry. Do not broadcast onto the wet edge area until settling and back-rolling is complete. Continue broadcasting until no wet areas remain. Coverage rate for quartz or silica sand is approximately .75 lbs./sq. ft. Coverage rate for ¼” decorative flake is approximately 6 sq. ft./lb. After curing (approximately 6-8 hours to withstand foot traffic), remove all excess broadcast media and scrape floor as required.
- TOPCOAT: Apply specified topcoat to lock system and achieve desired slip resistance. For a non-skid texture, remove excess aggregate and apply specified topcoat at 12-16 mils.

Mixing ratio by volume: base to hardener 50:50 (1:1)

Induction time

None

PPG FLOORING SELF-LEVELING URETHANE CEMENT

Pot life
15 minutes at 77°F (25°C)

Product Qualifications
- Compliant with USDA Incidental Food Contact Requirements

DISCLAIMER

- For industrial or professional use only

SAFETY PRECAUTIONS

- See Safety Data Sheet and product label for complete safety and precaution requirements

REFERENCES

• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411

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.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.

PPG FLOORING SELF-LEVELING URETHANE CEMENT

Product code	Description
FLR700-0	Kit
FLR700-2	Urethane Cement Self-Leveling Filler 20 lb. Bag
FLR700HB-2	Urethane Cement Self-Leveling High Build Filler 35 lb. Bag
FLR700CF-2	Urethane Cement Cove Filler 28 lb. Bag
FLR700-20	Urethane Cement Gray Pigment Powder
FLR700-78	Urethane Cement Red Pigment Powder

Notes:

- Available in 1-gallon and 10-gallon kits of Part A and Part B liquid
- For Urethane Cement Self-Leveling products - Must add 1 Pigment Powder and 1 bag of desired “Filler” for each gallon of liquid
- For Urethane Cement Cove product - Must add 1 Pigment Powder and 1 bag of Cove Filler for each half-gallon of liquid