

CEILCOTE® 232 FLAKELINE®

Vinyl ester coating

DESCRIPTION:

CEILCOTE® 232 FLAKELINE® coating is a flake filled, catalyzed novolac vinyl ester system which exhibits excellent resistance to both aliphatic and aromatic organic solvents and concentrated organic and inorganic acids. The coating system consists of a primer, and two topcoats, with a nominal dry film thickness of 30 to 40 mils. It can be applied on concrete and metal surfaces with proper surface preparation.

TYPICAL USES:

- Tanks, nozzles, pipes & structural steel.
- Trenches & pits.
- Vaults & dikes.
- Secondary containments.
- Floors.

ADVANTAGES:

- Outstanding chemical resistance.
- Can be used on concrete or steel.
- Flake filled, providing high resistance to permeation.
- Quick turn around for service.
- Can be applied by spray, brush or roller.

COLORS:

Gray. Consult Master Builders for information regarding special colors.

PHYSICAL PROPERTIES:

Generic Type	Catalyzed vinyl ester
Tabor Abrasion <i>CS 17 wheel, 1,000 gm, 1,000 revolutions</i>	78 mg
Moisture Permeability <i>ASTM E 96 Proc. E</i>	0.0016 perm in.
Tensile Strength <i>ASTM D 638</i>	2,500 to 3,000 psi (17 to 20 MPa)
Flash Point <i>PENSKY-MARTENS CLOSED CUP</i>	89°F (32°C)
Service Temperature Limits (Continuous)	
• Immersion/Condensing Fumes	130°F (54°C)
• Occasional Splash & Spill	180°F (82°C)
• Continuous Dry	350°F (177°C)
Shelf Life (Expiration dates printed on labels)	
• 2 months at 70°F to 80°F (21°C to 27°C);	
• 30 days or less at 80°F to 90°F (27°C to 32°C).	

MIXING RATIO:

Add 2-1/2 oz. of #2C/2R Hardener per 1 gal of CEILCOTE 232 resin.

COVERAGE:

Actual coverage is 25 to 35 ft²/gal (.6 to .86 m²/litre) @ 35 mils which depends on loss due to waste and overspray.

HANDLING PROPERTIES:

	Working Time	To Recoat/ Handle	To Cure
Temperature @ 50°F (10°C)	1-1/2 hrs	12 to 24 hrs	48 hrs
@ 73°F(23°C)	1 hr	4 to 8 hrs	24 hrs
@ 90°F(32°C)	45 min.	3 to 4 hrs	16 hrs

PACKAGING:

3/4 & 4 gal units

LIMITATIONS:

Store in a cool, dry place away from fire hazards. Do not apply CEILCOTE 232 FLAKELINE coating when the surface temperature is below 50°F (10°C) or over 110°F (43°C). CEILCOTE 232 FLAKELINE coating must be recoated within 7 days when shaded from sunlight. If the coating is applied in sunlight (even on cloudy days) it must be recoated within 4 hours to obtain proper intercoat adhesion.

Due to the limited shelf life Master Builders will not warranty the shelf life of CEILCOTE 232 FLAKELINE coating and will not accept return of this material.

APPLICATION: (abbreviated)

(For complete details, refer to Installation Procedure #2.21 for CEILCOTE 200 FLAKELINE Series.)

Surface Preparation:

Steel:

Blast with sharp abrasive. A "White Metal" surface (SSPC #5-89 or NACE #1) is required with a minimum anchor pattern profile of 3 mils.

Concrete:

Abrasive blasting or scarification to remove laitance and surface contaminants is required. Concrete must be thoroughly cured, free of oils, curing solutions and mold release agents, dust and must be dry at time of application. Refer to ASTM D 4263.

Primers:

For Steel Surfaces:

CEILCOTE 370 primer

For Concrete Surfaces:

- CEILCOTE 380 primer

- CEILCOTE 380C (Conductive) primer

[Use when sparktesting (high voltage holiday testing) will be conducted on concrete.]

APPLICATION (Abbreviated), continued:

- Mechanically premix CEILCOTE 232 resin (i.e. Part A) 2 minutes individually prior to adding hardener. After initial mixing, add 2-1/2 oz. of **#2C/2R Hardener per gallon** of CEILCOTE 232 resin and mix well approximately three additional minutes.
- Apply CEILCOTE 232 resin and hardener at 20 to 32 mils WFT to yield 15 to 25 mils DFT, target of 18 mils DFT. Allow to harden. Repeat for second coat application.

Thinning:

None required. DO NOT THIN.

Application Equipment:

- **Conventional Spray:**
For equipment recommendation, please reference Installation Procedure 2.2I.
- **Air Assisted Airless:**
For equipment recommendation refer to Installation Procedure #2.2I (Special Catalyst Spray Equipment section).
- **Airless Spray:**
Normally not recommended. Consult Master Builders, Inc.
- **Brush or Roller:**
When rolling or brushing three coats may be required to achieve recommended film thicknesses.

CLEAN UP:

Use T-410 solvent, methyl ethyl ketone or lacquer thinner.
DO NOT USE ACETONE SOLVENT.

SAFETY:

- CEILCOTE 232 FLAKELINE coating contains vinyl ester resins, styrene monomer and inert flake filler. The hardener is an organic peroxide. CEILCOTE 232 FLAKELINE coating components have been formulated to optimize physical coating characteristics while minimizing hazardous physical and health factors encountered during application. A concerted effort is made to be aware of the latest chemical toxicological information and to apply this knowledge in a responsible manner to insure product safety.
- During application of CEILCOTE 232 FLAKELINE coating materials, always wear gloves and appropriate work clothing to minimize contact. Ventilation is required with special consideration for an enclosed or confined area. Air movement must be designed to insure turnover at all locations in work area and adjacent areas to avoid buildup of heavy vapors. Use caution when handling flammable liquids and eliminate sources of ignition from work area and containers with residues.
- Observe safe storage practices by separating resins from hardeners, by keeping solvents and hardeners in a cool area free of sources of ignitions and by observing a special warning on **RED** and **YELLOW** labeled products. The **RED** label represents amine type chemicals and the **YELLOW** label represents organic peroxide type chemicals which should not be stored adjacent or mixed together because of the possible violent reaction between them.
- Product Material Safety Data Sheets (MSDS) and Installation Procedures are available and should be consulted when handling products. These products are for industrial and professional use only. Application directions must be followed.

For more information, contact your local Master Builders Representative.

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