

CEILCOTE® 282 FLAKELINE®

Spray applied vinyl ester lining

DESCRIPTION:

CEILCOTE 282 FLAKELINE lining is a flake-filled, corrosion resistant lining system. The lining consists of two base coats and a topcoat, spray applied to produce a dry film thickness of 45 to 75 mils.

The lining was developed specifically for flue gas desulfurization environments. It has proven performance in scrubber outlet ducts (130°F (54°C) saturated gas) and unscrubbed gas at approximately 350°F (177°C).

TYPICAL USES:

- Application on steel ducts or chimney liners where scrubbed flue gas is mixed with by-pass or reheated gas causing relatively high concentrations of sulfuric acid.
- As a barrier coat applied to a steel substrate before installation of castable inorganic linings for outlet duct or stacks.

ADVANTAGES:

- Non-stick properties reduce build-up and maintenance costs.
- Outstanding chemical resistance.
- Excellent high temperature resistance.
- Low permeation rate for longer, trouble free service.
- Proven performance in aggressive environments combining acid & high temperature

COLORS:

Available in Gray and Off White.

PHYSICAL PROPERTIES:

Tensile Bond Strength

ASTM D 4541-85 1,200 to 1,500 psi (8 to 10 MPa)

Moisture Permeability

ASTM E 96 Procedure E 0.0011 perm in.

Tensile Strength

ASTM D 638 5,700 psi (39 MPa)

Abrasion Resistance

Tabor Coeff (CS-17 Wheel,
1000 gm, 1000 cycles) 91 mg

Density (wt/gal) 10.3 + 0.2 lbs/gal

Flash Point

Pensky-Martens
Closed Cup 89°F (32°C)

Volatile Organic Compound (VOC)

Lab 23 Method of Reg. 8-4-111
of California Code 0.098 lbs/gal

Service Temperature Limits (Continuous)

Immersion/Condensing Fumes 150°F (66°C)
Atmospheric/Noncondensing Fumes 400°F (204°C)

Shelf Life (Expiration dates printed on labels)

- 2 months @ 70°F to 80°F (21°C to 27°C)
- 30 days or less @ 80°F to 90°F (27°C to 32°C)

COVERAGE:

Actual coverage is 50 to 60 ft²/gal (1.2 to 1.5 m²/litre) @ 17.5 mils (one coat) which includes approximately 20% loss due to waste and over spray.

HANDLING PROPERTIES:

	50 °F (10 °C)	73 °F (23 °C)	90 °F (32 °C)
Working Time	1-1/2 hrs	1 hr	20 min
Recoat Time	6 hrs	3 hrs	2 hrs
Curing Time	48 hrs	24 hrs	16 hrs

PACKAGING:

3/4 gal and 4 gal units of CEILCOTE 222HT/282BC
FLAKELINE Base Coat and 4 gal units of CEILCOTE
282 FLAKELINE Topcoat.

LIMITATIONS:

- Store in a cool, dry place away from fire hazards.
- Due to limited shelf life, Master Builders Inc. will not warranty the shelf life of CEILCOTE 282 FLAKELINE lining and will not accept return of this material.
- CEILCOTE 282 FLAKELINE lining 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 inter-coat adhesion.

APPLICATION: (abbreviated)

Surface Preparation:

Steel:

For immersion or high temperature service, a "White Metal" abrasive blast (SSPC #5-89 or NACE #1) is required with a minimum anchor pattern profile of 3 mils. For atmospheric service, use a "Near White" abrasive blast (SSPC #10-89 or NACE #2).

Concrete:

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

Primers:

For Steel Surfaces:

CEILCOTE CEILCOTE 370 PRIMER

APPLICATION (Abbreviated), continued:

For Concrete:

- CEILCOTE 380 PRIMER
- CEILCOTE 380C (Conductive) PRIMER
- Mechanically premix CEILCOTE 282 FLAKELINE Base Coat Liquid component (i.e. Part A) individually prior to blending with hardener. After initial mixing, add 2-1/2 oz. of #2C/2R Hardener per gallon of CEILCOTE 282 FLAKELINE Base Coat Liquid and mix three to five additional minutes.
- Mechanically premix CEILCOTE 282 FLAKELINE Topcoat Liquid component (i.e. Part A) individually prior to blending with hardener. After initial mixing, add 2-1/2 oz. of #2C/2R Hardener per gallon of CEILCOTE 282 FLAKELINE Topcoat Liquid and mix three to five additional minutes.

Placement:

Spray application is recommended. Small areas may be coated by brush or roller.

• **Base Coat:**

Apply CEILCOTE 282 FLAKELINE Base Coat at 20 to 32 mils WFT to yield 15 to 20 mils DFT. Allow to harden. Repeat for second base coat application.

• **Topcoat:**

Apply CEILCOTE 282 FLAKELINE Topcoat at 20 to 32 mils WFT to yield 15 to 20 mils DFT.

• **Thinning:**

None required. DO NOT THIN.

Application Equipment:

• **Conventional Spray:**

Use Binks 18 or 62 Spray Gun, 66 Spray Tip and Needle with 63 PM, 63 PB or 63 PK Aircap or other manufacturer's equivalent. Use pressure pot with 3/8 inch fluid line (maximum 30 feet length) or 1/2 inch ID fluid line when spraying at heights or where 50 feet hose length is required.

For high volume or long distance applications, a 4:1 or 8:1 ratio pump can be used to provide material to the spray gun and use a minimum atomization pressure to break up and flow out with minimum overspray.

• **Airless Spray:**

Not recommended.

• **Brush or Roller Apply:**

When rolling or brushing, additional will be required to achieve recommended film thickness.

CLEAN UP:

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

SAFETY:

- CEILCOTE 282 FLAKELINE Base Coat and Topcoat contain vinyl ester resins, styrene monomer and inert flake filler. The hardener is an organic peroxide. The product's components have been formulated to optimize physical lining 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 282 FLAKELINE lining materials, always wear gloves and appropriate work clothing to minimize contact. Ventilation is required with special consideration for enclosed or confined area. Air movement must be designed to insure turn over at all locations in work area and adjacent areas to avoid build up of heavy vapors. Use caution when handling flammable liquids, 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 chemical 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 Bulletins are available and should be consulted when handling products.
- These products are for industrial and professional use only. Application directions must be followed.

MAINTENANCE:

Periodically inspect the applied material and repair localized areas as needed. Consult your Master Builders, Inc. representative for additional information.

For more information, contact your local Master Builders Representative.

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