3M™ Scotchkote™ Abrasion Resistant Epoxy Coating 328

Application Guide

Product Description

3M™ Scotchkote™ Abrasion Resistant Epoxy Coating (AREC) 328 is a 100% solids, two-part epoxy system designed for directional drilling, rocky terrain, or other applications that require a rugged coating. Combining a traditional liquid epoxy with enhanced impact resistance, gouge resistance, and flexibility, an AREC coating can be used in place of a conventional Abrasion Resistant Overcoat (ARO). With strong adhesion to both metal and FBE, it is equally effective for use as a primary corrosion protection coating for applications which require high flexibility after cure, in which long-term adhesion is critical. Best of all, Scotchkote coating shows that abrasion resistant coatings can be easy to apply!

Hand Application

1. Mix part A and part B separately.
2. Pour part B into part A completely.
3. Thoroughly mix using mix stick until color consistency is achieved.

Pot Life (7 ounce/200 gram sample)	
70°F/20°C	38 minutes
100°F/38°C	8 minutes

Recommendations

- Prepare only the quantity of coating that can be applied within given pot life.
- A ¼ in (6 mm) nap, lint free roller is suggested.
- For the speed of application, and to extend the working time of the product, pour mixed product directly on to substrate/pipe, then pull the mixture down around pipe with brush or roller.
- Because of the high viscosity of this product, we suggest mixing parts A & B together at temperatures above 60°F/15°C.

Using a brush or roller, apply Scotchkote coating 328 to a minimum thickness of 20 mils/500 microns or as specified. As an ARO, apply Scotchkote coating 328 to a minimum thickness of 40 mils/1000 microns. Overlap the pipe coating no less than 1 in /25 mm. Allow coating to properly cure before handling.

General Application Steps

For use as a joint coating, a refurbishing coating or as pipe coating:

1. Remove oil, grease, and loosely adhering deposits.
2. Abrasive blast clean surface to NACE SSPC-SP10, ISO 8501:1 SA-2 1/2 near white metal.
3. With air hose, clean blasted surface of any abraded debris then verify anchor profile is 1-4 mils/25-100 microns.
4. Apply Scotchkote coating 328 as soon as possible after blasting but no more than 4 hours.
5. Allow to cure per the requirements listed in time/temperature table below.
6. Visually or electrically inspect the coating for defects.
7. Repair all defects using Scotchkote coating 328 as repair material.

3M™ Scotchkote™ Abrasion Resistant Epoxy Coating 328 Coverage per Kit Size

Kit	Material (lbs)	Estimated Coverage in Square Feet		
		25 mils	28 mils	30 mils
1.0 L Kit	3.0	17.7	15.8	14.8
3.0 L Kit	9.1	53.1	47.4	44.4
68 L Kit	207	1,203	1,074	1,006
760 L Kit	2,310	13,452	12,008	11,248

The estimations in this table are theoretical coverage areas and assumes no waste. Actual product coverages will be reduced by a waste factor that will vary by customer.

Repair Process

1. Remove oil, grease, and loosely adhering deposits.
2. Abrade the coating surface with medium grit sandpaper (80 grit). Ensure that the surrounding coating is abraded on all sides of the holiday.
3. Ensure abraded surface is cleaned of any debris with air blast or clean lint free cloth.
4. With metal above 41°F/5°C, apply Scotchkote coating 328 at minimum film of 20 mil/ 500 microns.

Cold Weather Repair

1. Follow steps 1, 2 & 3 above.
2. Heat substrate to approximately 200°F using propane torch.
3. Apply Scotchkote coating 328 at minimum thickness of 20 mils/ 500 microns.

3M Scotchkote Abrasion Resistant Epoxy Coatings 328

Multiple Coats (Recoat Window)

Scotchkote coating 328 has been formulated to achieve a coating thickness of 45 mils/1150 microns in one application. If additional thickness is required then it is to be applied within the following time in table below. If the time is exceeded then abrade existing coating by brush blast or coarse sand paper before applying second coat.

Air Temperature	Recoat Window
60°F (16°C)	6 hours
75°F (24°C)	4 hours
85°F (29°C)	2 hours
100°F (38°C)	1 hours

Pipe Surface Preparation

Scotchkote coating 328 has excellent adhesion to poorly prepped surfaces. In pipe rehabilitation, remove old coating then examine pipe surface for corrosion. If minimal corrosion (SSPC-VIS 1 Rust Grade A) is noticed on pipe surface then a power tool can be use to remove the corrosion (SSPC SP-11), then apply Scotchkote coating 328. **CAUTION!** If pipe surface has severe corrosion or pitting then a NACE #2/SSPC SP10 Near White Metal must be achieved with media blast.

3M Scotchkote Abrasion Resistant Epoxy Coatings 328

Product Handling Times* and Temperature

Product Temperature	Pot Life	Dry To Touch Time	Back Fill Time
45°F (7°C)	50 minutes	10-12 hours	18-20 hours
60°F (16°C)	35 minutes	3-4 hours	6-8 hours
75°F (24°C)	22 minutes	2-3 hours	4-5 hours
85°F (29°C)	18 minutes	60-80 minutes	2-3 hours
100°F (38°C)	10 minutes	40-60 minutes	90-120 minutes
120°F (49°C)	3 minutes	20-40 minutes	60-90 minutes

* Important! Times listed in the chart above are approximate and will vary due to ambient and substrate temperature as well as a combination of both.

Helpful Plural Component Spray Information

- Suggested tip size of 625/ 329.
- Tip pressure 2,500-3,000 psi/16-18 MPa.
- Preheat Part A to 140°-160°F/60°-70°C.
- Preheat Part B to 130°-150°F/55°-65°C.
- Mix ratio of pumps is 3:1.

Equipment Clean-up

MEK or toluene may be used to clean spray equipment, rollers, and brushes. Utilize proper safety guidelines when working with solvent.

Multiple Coats

Scotchkote coating 328 has been formulated to achieve a coating thickness of 45 mils/1150 microns in one coat. If additional thickness is required, apply the additional coats within 4 hours of the initial coat at temperature of 70°F/20°C. This coating may be applied in any thickness consistent with producing an acceptable surface finish.

Directional Drilling

Scotchkote coating 328 has outstanding gouge resistance properties therefore can be applied on girth welds for directional drilling under rivers and roads. A minimum of 40 mils/1000 microns dry film thickness is required as a stand alone coating and 30 mils/625 microns as field applied ARO.

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Handling & Safety Precautions

Read all Health Hazard, Precautionary, and First Aid statements found in the Material Safety Data Sheet, and/or product label prior to handling or use.

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