



Z-TEC 752-753

Fast Curing Brushable Ceramic Epoxy Coating System

100% Solids

PRODUCT DESCRIPTION:

BASIC USES: Z-TEC 753-752 is a high performance, brushable, ceramic filled epoxy coating system for the repair, protection and re-lining of pumps and process equipment.

Rapid cure and an easy-to-use mix ratio (1:1 by volume), combined with excellent chemical, impact and wear resistance, make Z-TEC an extremely versatile, protective, high build system for pump casings, fan blades, impeller blades, valves and other water circulating equipment.

This material may also be poured as a casting and then machined, sanded, drilled and tapped as required, for general equipment repair. Extremely high build equipment repair may also be accomplished with Z-TEC 751, the putty version of this ceramic Z-TEC.

Z-TEC comes in two colors. The base or prime coat, Z-TEC 752 is white when mixed, and the top or finish coat, Z-TEC 753 is brick red. The color contrast is provided to help assure that two uniform coats are applied to all surfaces.

LIMITATIONS: Surfaces which are to be bonded to must: a) be at least 50° F, b) be structurally sound, c) be free from grease, oil, moisture or other contaminants and d) contain no more than 40 p.p.m. soluble salts.

COLOR: Top Coat: Z-TEC 753 Component A: Brick red Component B: Light Grey
Mixed: Uniform Brick red
Base Coat: Z-TEC 752 Component A: White Component B: Light Grey
Mixed: White

COVERAGE: A 2 lb. Kit yields approximately 1 pint of mixed material or approximately 29 cubic inches.
10 mil thickness = 2.01 sq. ft. / 15 mil thickness = 1.34 sq. ft. / 20 mil thickness = 1.01 sq. ft.

TECHNICAL DATA:

PHYSICAL PROPERTIES: RTC - 7 day cure @ 70° F

Specific Gravity	1.75 ± .1
Viscosity, Parts A & B mixed	14,000 - 16,000 cps
Solids	100%
Pot Life @ 75° F	30 - 60 minutes
Shore D Hardness	90
Tensile Strength, (unfilled resin) ASTM D-638	10,200
Compressive Strength, ASTM D-695	20,000 p.s.i.
Dielectric Strength Volt/Mil ASTM 9-149	558
Cured Shrinkage, ASTM D-2566	.0022 in. / in. ± .0002
Typical Thickness	15 mils
Temperature Resistance	Up to 350° F

CHEMICAL RESISTANCE: RTC —7 days @ 70° F (30 day immersion)

H2O	No effect
10 wt non-detergent transformer oil	No effect
30 wt non-detergent oil	No effect
Kerosene	No effect
Fuel Oil	No effect
Salt Spray (1000 hours exposure)	No effect
10% HNO3	No effect
10% H2SO4	No effect
10% HCL	No effect
50% Caustic Soda	No effect
50% Sodium Hypochlorite	No effect
5% Trisodium Phosphate	No effect

In general, the resistance of Z-TEC 752-753 is good for alkali and water, fair for acids and poor for solvents and concentrated acids.

INSTALLATION:

PREPARATORY WORK: All surfaces to which Z-TEC 753-752 is to be applied must be free of all dirt, grease, oil and other contaminants. Grease and oil removal may be accomplished by wiping with Acetone. Surfaces should then be grit-blasted or abrasive ground and air-blown clean. Air supply for blasting or grinding should be oil and moisture-free. Surfaces should be blasted to “white metal”. Z-TEC 753-752 should not be feathered edged and minimum application of 5 to 10 mils is required. Heating of the work area up to 100° F to 110° F is recommended for low temperature applications to drive off moisture and increase surface adhesion. Deeply pitted or worn areas should be repaired with Z-TEC 751 putty prior to application of coating system. Metals contaminated by salt solutions should be grit and water blasted, allowed to stand over-night, re-blasted and air blown dry.

METHODS: Z-TEC 753-752 is normally applied, while wearing protective gloves, with a short bristle brush.

MIXING: Z-TEC 753 and Z-TEC 752 are mixed one part Component A to one part Component B by volume. Mix each component separately before combining. Mix thoroughly with a mixing blade and drill, taking care to scrape sides and bottom of mixing container. Mix three to five minutes until uniform white (base coat) or uniform red (top coat) color is achieved.

APPLICATION: Z-TEC 752-753 should be stored, mixed, and applied at room temperature, approximately 75° F. Lower temperatures will increase pot life and cure time, while higher temperatures will accelerate both. Z-TEC 752-753 is to be applied in a two-coat application for best results. This eliminates pin holing. Maximum re-coat time between coats is four to six hours, without abrading surface of first coat. Recommended thickness of each coat is 15 – 20 mils.

Heat may be used to accelerate functional cure after initial tack-free cure is achieved at room temperature. Additional heat should not exceed 110° F to 120° F when accelerating cure.

CLEAN-UP: Clean tools and equipment immediately with Acetone. Do not allow epoxy to cure on tools or equipment. Hands should be cleaned with commercial hand cleaner.

PRECAUTIONS: Z-TEC 752-753 is not flammable: however, the cleaning solvent may be. Keep solvent away from heat, open flames or ignition sources. Avoid contact with skin and breathing of fumes from either epoxy or cleaning solvent. Consult material safety data sheet.

GUARANTEE:

The manufacturer warrants that the material meets specifications listed and limits any warranty to the replacement of material only.

The information contained in this specification sheet is based on data obtained by our own research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use of this data or product. This information is furnished and the product Z-TEC 752-753 sold upon the condition that the person receiving it shall make his own test to determine the suitability of the material for his particular purpose.

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