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APPLICATION INSTRUCTIONS

ELASTOCRETE / ELASTOPATCH

Part No. 33336A (ElastoCrete Part A), 33338A (ElastoPatch Part A), 33338B (Elasto Part B), 33338C (Elasto Part C)

JULY 2005

READ BEFORE USING THIS PRODUCT

GENERAL: ElastoCrete (Black) and ElastoPatch (Gray) are specially formulated three component, 100% solids, chemically curing, elastomeric compounds developed for to repair potholes, bridge decks, driveways, parking decks, and as a bridge header material. ElastoCrete/Patch has the ability to absorb energy from impact loads and disperse the energy throughout the material to reduce cracks and spalls. The products have superior adhesion to asphalt, concrete, and steel surfaces. The products provide excellent resistance to moisture, surface abrasion, chemicals, oxidation, and ultra-violet damage.

SURFACE PREPARATION:

New Concrete: New concrete should cure to at least 80% of it design strength and should be a minimum of 14 days old. Grit blasting with medium grit medium is the preferred method of surface preparation. Mechanical grinding of the surface is acceptable only when grit blasting is not possible. The surface should be prepared to give a rough texture to the concrete. New concrete should be primed with ElastoPrimer (Part No. 33335) which is lightly brushed or spray applied.

Existing Concrete: Existing concrete should be cleaned of all oils, greases, dirt, waxes, existing coating, curing compounds heavy laitance and sharp edges. Grit blasting with medium grit medium is the preferred method of surface preparation. Mechanical grinding of the surface is acceptable only when grit blasting is not possible. The surface should be prepared to give a rough texture to the concrete. The surface should be primed with ElastoPrimer (Part No. 33335).

Steel: Carbon steel surfaces must be clean and sandblasted to a near white metal (SSPC-10) finish immediately before the installation of ElastoCrete/ElastoPatch. Specialized metals such as stainless, hot dipped galvanized, bronze, etc. should be mechanically etched before application. All surfaces must be clean of any coatings, curing agents, rust and dirt prior to the installation. Raw steel, stainless, and metalized steel should then be primed with ElastoPrimer (Part No, 33335).

MIXING PROCEDURE: Mix only one unit at a time and mix entire unit. Pour contents of Part A and Part B into a clean 5 gallon pail. Use a low speed high torque drill with a mixing paddle attachment. Paint mixing paddles work well for this application. Mix A and B for approximately 30 seconds until thoroughly blended and no marbling is present. Slowly pour contents of Part C into Part A/B mixture and mix approximately one minute. Part C must be completely dry before mixing otherwise expansion of the product may occur on curing. Care should be taken to ensure all aggregate is coated and no clumps of material are present once mixing is complete. The longer the product is mixed, the less time there will be to work and trowel the product.

INSTALLATION PROCEDURE:

Header for Bridge Expansion Joints: If replacing a previously installed bridge expansion joint system, care should be taken not to damage the bridge deck during the removal of the old system. Damaged expansion joint block outs should be repaired in a manner acceptable to the manufacturer and approved by the owner's system engineer. Use of ElastoCrete or ElastoPatch may be used to affect superficial repairs. After removal of the old joint system, thoroughly clean the existing joint block out by means of grit blasting and/or compressed hot air lance to remove loose material or foreign objects. The block out must be completely clean and free of moisture prior to proceeding with the installation. To test for moisture in concrete refer to test methods ASTM D 4263 and ASTM D 1869.

Lightly brush coat or spray the block out with ElastoPrimer (Part No. 33335) making certain not to allow the material to puddle. ElastoPrimer is ambient curing material. Allow the primer to become tack free before applying the repair. This will take about 5 minutes when temperatures are about 75 F. The time will be longer in cooler conditions and shorter in warmer conditions. The coverage rate for ElastoPrimer is approximately 80 square feet per unit (quart).

In preparing the joint for the placement of ElastoCrete/ElastoPatch, a forming operation will need to be carried out to provide a vertical face for the header adjacent to the bridge expansion gap. The use of a closed cell polystyrene board with a thin plastic or foil backing such as that used for insulation purposes is recommended. The backing will enable quick release of the form board from the header material after curing.

Pour the ElastoCrete/ElastoPatch into the formed and primed bridge expansion joint block out. During placement, consolidate the material well into the block out area making certain there are no voids. The product should never be cantilevered in the expansion joint block out as traffic impact loading will cause the cantilevered portion to crack and fail. Trowel the material level to the adjacent bridge deck surface. The headers on each side of the expansion just must be finished at grade with each other. The ElastoCrete/ElastoPatch material must be allowed to cure to a firm consistency (1 to 3 hours depending on ambient temperature) before removing the center form board material. Lightly grind or grit blast the vertical face of the headers to remove all residue if the form board material and to prepare the surface for the application of the primer and flexible expansion seal.

To alleviate the effects of impact loading, it is desirable to chamfer the top of the vertical edges of the ElastoCrete/ElastoPatch headers. Using a grinder, bevel the edges at an angle of approximately 45˚ by about 1/8" wide.

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General Repairs: Place the ElastoCrete/ElastoPatch into the prepared and primed void. During placement, consolidate the material well into the repair area making certain there are no internal voids. Trowel the material level to the adjacent pavement surface. The ElastoCrete/ElastoPatch material must be allowed to cure to a firm consistency (1 to 3 hours depending on ambient temperature) before opening to traffic.
Installation on Super Elevation: Due to ElastoCrete/ElastoPatch being self leveling products, installation on super elevations may be carried out by applying the product in layers or lifts to accommodate site conditions.

APPLICATION LIFE: ElastoCrete/ElastoPatch must be used within 15 minutes of mixing.

PAVEMENT TEMPERATURES: Apply product when pavement and air temperatures exceed 40°F (4°C). Lower temperatures may result in reduced adhesion due to presence of moisture or ice or extremely slow curing of the product.

STORAGE: Do not allow ElastoCrete/ElastoPatch to freeze. Store material in a dry area at temperatures of 50˚F and 95˚F. Do not allow moisture into the aggregate (Part C).

SAFETY PRECAUTIONS: Direct contact with the skin should be avoided. Protective clothing, goggles, and gloves are recommended.

ADDITIONAL INFORMATION: For additional information, refer to Product Data Sheets and Material Safety Data Sheets for these products or contact Crafco, Inc. at www.crafco.com.

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