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APPLICATION INSTRUCTIONS
SUPERSEAL 200E
TYPE M
PART NO. 34660 AND 34661

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READ BEFORE USING THIS PRODUCT

GENERAL: Superseal 200E is a liquid, two-component, cold-applied chemically curing sealant which when properly mixed and applied forms a resilient, adhesive, fuel and blast resistant seal for joints and cracks in portland cement concrete pavements. The sealant parts are supplied in equal volume containers which are mixed by an appropriate applicator device at a 1 to 1 ratio. Since Superseal 200E contains coal tar, which is not compatible with asphalts, it should not be used in any application where it could come into contact with asphalt products or residues.

SEALANT PREPARATION: Superseal 200E Part A (activator, Part Number 34660), and Part B (base, Part No. 34661) must be thoroughly mixed at a 1 to 1 ± 5% volume ratio by the mixing and applicator device. It is essential for appropriate curing that the sealant parts be blended at a 1 to 1 ± 5% volume ratio. During application, product volume usage, mixing ratios and curing should be continuously monitored to verify that correct volume delivery, mixing and consistent curing are achieved. If inconsistencies in curing, viscosity, color or other problems are noted, sealing should be immediately stopped and the problem corrected. It is noted that each component of Superseal 200E experiences different viscosity changes with temperature. As temperatures increase, viscosities decrease, and as temperatures drop, viscosities increase. **Sealant temperature during application should be maintained between 60°F (15°C) and 100°F (38°C) for best mixing characteristics.** Superseal 200E, Part A (activator) is supplied in a black pail and the product is black in color. Part B (base) is supplied in a light grey pail and the product is brown in color. **If the two parts are not mixed at the correct ratio, or insufficiently, lack of curing or other field performance problems may occur.**

APPLICATOR: All product delivery lines must be free from contamination prior to starting. Pails of product are opened and then shall be stirred thoroughly to assure product uniformity. The dispenser must deliver Part A and B to the mixing nozzle at a 1 to 1 ± 5% volume ratio. The mixing nozzle should be a tubular static mixing nozzle which is a minimum of 10 inches long with a minimum of 24 mixing elements. **Prior to placing sealant in joints, a test sample of mixed material must be extruded to verify that appropriate mixing and curing is being achieved.** It is also noted that when beginning extrusion of material through the nozzle, that a volume of sealant equivalent to at least twice the capacity of the nozzle should be wasted prior to applying sealant into joints. **If Part A and Part B positions are reversed, the sealant will cure in the lines of the dispenser.** The user must assure themselves that correct metering, volume ratios, and uniform mixing are being achieved while using this product.

JOINT DESIGN AND PREPARATION FOR SEALING:
Joints shall be sawed to meet size requirements shown in Table 1 for various joint widths to provide adequate space for the recess, sealant bead, backer rod, and vertical expansion during joint compression. Prior to sealing the joint, surfaces should be cleaned of all dirt, curing compound residue, laitance and any other foreign material. After sawing, immediately flush the joints with water to remove a majority of the saw slurry. After the joints have dried, just prior to applying sealant, the remaining residue must be removed by sandblasting. Both joint faces must be adequately sandblasted to remove traces of sawing residue. For effective sandblasting the nozzle should be positioned within 2 inches (5cm) of the surface being cleaned. After sand blasting, the joint should be cleaned using clean compressed air with a minimum pressure of 90 psi (620kpa). Moisture and oil traps are required on the compressor unit. The objective of the above cleaning operations is to provide vertical, intact and clean concrete bonding surfaces which are free from all contaminants and are dry. Joints should be carefully inspected to assure that an appropriate level of cleanliness has been achieved. This can be accomplished by rubbing your finger along each joint face. If any evidence of dust and contaminants occur, additional sandblasting should be performed until all dust and contaminants are removed. Alternate cleaning methods that accomplish the same level of cleaning as sandblasting may be considered. Contact Crafco for approval of alternate cleaning methods. Non-water absorptive backer rod of the size specified in Table 1 shall be placed in the joint to the depth listed in Table 1. Do not puncture backer rod during installation because puncture damage can create bubbling. Sealant must be installed to meet the minimum amounts of recess specified in Table 1 because insufficient recess can expose the sealant surface to vehicle tire contact and abrasion which can cause loss of adhesion.

RESEALING JOINT DESIGN AND PREPARATION FOR SEALING: Old sealant should be removed by any appropriate method. After removal of old sealant, the joint is to be saw cut to an appropriate width to provide clean vertical concrete surfaces which are free from contamination by old sealant. As a general rule, the joint should be sawn to a width which is between 1/8 inch (3mm) and 1/4 inch (6mm) wider than the original joint. The recess, sealant bead thickness, backer size, and sawed joint depth shall meet requirements shown in Table 1 for the joint width used. The sandblasting, cleaning, and sealing operations above should then be followed. If joints are not sufficiently cleaned and contamination with old sealant is present, compatibility problems may occur such as sealant softening and bleeding.

APPLICATION TEMPERATURES AND WEATHER CONDITIONS: Sealant should be applied when pavement and ambient temperatures are above 40°F (4°C) and ambient temperature is less than 100°F (38°C). At high temperatures the sealant will cure quickly after mixing, while, at low temperatures, the sealant will cure more slowly. At 77°F (25°C), properly mixed Superseal 200E will begin solidifying within 30 minutes and will be tack free within three hours. At 100°F (38°C), the sealant will solidify within 15 minutes, while at 40°F (4°C), solidification occurs in approximately two to three hours. During sealing, the weather must be dry with no indications of rain within four hours. Sealing should not occur at temperatures below the dew point due to an increased chance of having moist or damp joints.

CLEAN UP: Unmixed or uncured sealants can be cleaned from tools or other surfaces using solvents such as M.E.K., lacquer thinner, or toluene. Sealant which is on workers skin can easily be removed with industrial waterless hand cleaner compounds.

STORAGE: Superseal 200E should not be stored in direct sunlight, and ambient storage temperature should not exceed 100°F (38°C). **Do not store sealant outside under a tarp or plastic cover as this could lead to excessive heat buildup under the cover.** The storage life of the material is approximately one year, when stored properly in unopened containers. The sealant is not affected by exposure to high humidity conditions. Containers should not be opened until the day of use.

SAFETY PRECAUTIONS: All personnel involved with the sealing operation should read the Material Safety Data Sheet for Crafco Superseal 200E before sealing is started. Superseal 200E does not contain any lead compounds or isocyanates. For additional information and safety procedures, contact your local Crafco distributor or refer to your Crafco safety manual.

Joint Design Recommendations
for Crafco Superseal 200E
in Joints in PCC Pavements

Joint Width	3/8”	1/2”	5/8”	3/4”	7/8”	1”	1 1/8”	1 1/4”	1 3/8”	1 1/2”
Minimum Sealant Recess	1/4”	1/4”	1/4”	1/4”	3/8”	3/8”	1/2”	1/2”	1/2”	1/2”
Backer Rod Diameter [1]	1/2”	5/8”	3/4”	1”	1 1/4”	1 1/4”	1 1/2”	1 1/2”	1 3/4”	2”
Sealant Bead Thickness [2]	3/8”	1/2”	1/2”	1/2”	5/8”	5/8”	3/4”	3/4”	3/4”	3/4”
Minimum Joint Saw/Reservoir Depth	1 3/8”	1 5/8”	1 7/8”	2 1/8”	2 1/2”	2 1/2”	2 7/8”	3 1/8”	3 3/8”	3 3/4”
Minimum Backer Rod Depth	5/8”	3/4”	3/4”	3/4”	1”	1”	1 1/8”	1 1/4”	1 1/4”	1 1/4”
Estimated Usage	122	70	55	46	31	26	20	16	15	14

1 Backer rod diameter should not be varied from specified dimensions. If larger sizes are used, increased saw depth is needed.
2 Sealant bead thickness can vary by ± 25% of design value.