

SECTION 807 MATERIAL FOR RESEALING JOINTS AND CRACKS

This material shall consist of a blend of asphalt cement and 18 " 2% by weight of a mixture of recycled, reclaimed crumb rubber.

MATERIALS.

- a. *Asphalt.* The asphalt used shall have a maximum penetration of 150 as determined by AASHTO T 49.
- b. *Crumb Rubber.* The recycled, reclaimed crumb rubber used in the mixture:
 1. shall be produced from a process that crushes, tears, grinds, or abrades the used rubber at or above ordinary room temperature, and produces rubber particles with a very ragged, sponge-like surface. Grinding rubber at cryogenic temperatures is prohibited.
 2. shall contain recycled, vulcanized crumb rubber or reclaimed, devulcanized rubber, or both.
 3. shall contain a minimum of 25% natural rubber by weight of the total rubber portion of the mixture.
 4. shall contain no more than a trace of fabric.
 5. shall be free of wire and other contaminating materials, except that up to 4% calcium carbonate or talc may be included to prevent the rubber particles from sticking together.
 6. shall have no rubber particles greater than 30 (6 mm) in length.
 7. shall conform to the following gradation requirements:

<i>Sieve Size</i>	<i>Percent Passing</i>
No. 10 (2.00 mm)	100
No. 16 (1.18 mm)	90 - 100
No. 30 (600 Fm)	40 - 80
No. 80 (180 Fm)	0 - 10

MIXTURE REQUIREMENTS

- a. *Pour Point.* The pour point shall be at least 20 EF (11 EC) lower than the safe heating temperature, which is the maximum temperature to which the material may be heated without exceeding the permitted flow.
- b. *Cone Penetration.* Penetration shall not exceed 90 at 77 EF (25 EC), 150 g, five seconds.
- c. *Flow.* The flow shall not exceed 5 mm at 140 EF (60 EC).
- d. *Bond.* The sealant shall be tested at 0 EF (-18 EC) for five complete cycles. The development at any time during the test procedure of a crack, separation, or other opening that at any point is over 30 (6 mm) deep in the sealant or between the sealant and mortar block, shall constitute failure of the test specimen. The depth of the crack, separation, or opening shall be measured perpendicular to the side of the sealant showing the defect. At least two test specimens in a group of three representing a given sample of sealant shall meet this requirement for bond.

- e. *Packaging.* The pre-mixed sealant shall be packaged in units weighing no more than 30 lb (13.6 kg) with a maximum of two 30 lb (13.6 kg) units per shipping container. The plastic film used in packaging the units shall readily melt at normal application temperatures when placed in the installation equipment. Bonding or sticking of the packaged units to each other or to the shipping container or packaging causing unnecessary contamination of the sealant with staples and fasteners, as determined by the Engineer, shall be sufficient cause for rejection of the material.