COLD POUR CRACK SEALANT – LOW TEMPERATURE FLEXIBILITY

1.0 SCOPE

1.1 This test method describes the procedures for determining the Low Temperature Flexibility of rubberized asphalt emulsion crack sealant.

2.0 APPARATUS AND PROCEDURES

2.1 Apparatus:
- White blotting paper pieces about 50 mm x 7 mm x 0.5 mm thick (56-GP-34 Grade A)
- Brass Mask 3.2 mm (1/8”) with 37 mm x 50 mm opening
- Metal Plate, flat
- Mandrel, 6 mm diameter held in horizontal position
- Silicone stop cock lubricant

2.2 Prepare three specimens of each sample to be tested as follows: Dampen a piece of blotting paper with distilled water to prevent distortion on application of emulsion, and lay it on a metal plate. Apply a thin film of silicone to the inside edges of the brass mask and place the mask on the damp blotting paper. Fill mask with an excess of the emulsion sample and scrape off the sample level with the top of the mask. After the specimen has set sufficiently, 15 minutes to 2 hours depending on sample, remove the mask and place the specimen on a screen to allow evaporation of water from all surfaces. Cure for at least 72 hours. Place the cured specimens in a refrigerated chamber maintained at the specified temperature within $\pm$ ½°C, taking precautions against absorption of radiant heat, and condition them for 1 hour. Without removing them from the chamber, bend each specimen at a uniform rate around the 6 mm diameter mandrel through 180° in 30 seconds. Conduct the bending operation by starting with the specimen in a vertical position and sweeping the top end around the mandrel at the specified rate with the blotting paper side against the mandrel.

2.3 The maintenance of this rate of bend is facilitated by watching the sweep of the second hand of a clock, which moves at the specified speed. Record any evident of cracking or breaking.

3.0 REPORT

3.1 Report Pass or Fail.