

**CRD-C 525-89**

**CORPS OF ENGINEERS TEST METHOD FOR EVALUATION OF HOT-APPLIED  
JOINT SEALANTS FOR BUBBLING DUE TO HEATING**

**1. Scope**

1.1 This standard gives a procedure for testing hot-applied joint sealants for use in rigid pavements for tendency to bubble on heating.

1.2 This standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

**2. Referenced Documents**

2.1 Federal Specifications

CRD-C 530 (FS SS-S-1401C) Sealant, Joint, Non-Jet-Fuel-Resistant, Hot-Applied, for Portland Cement and Asphalt Concrete Pavement

CRD-C 529 (FS SS-S-1614A) Sealants, Joint, Jet-Fuel-Resistant, Hot-Applied, for Portland Cement and Tar Concrete Pavements.

**3. Significance and Use**

3.1 This method permits evaluation of samples of hot-applied joint sealants to determine if they bubble when heated in a stipulated manner for a specified time.

**4. Sampling**

4.1 Samples for testing shall be the non-immersed bond specimens that have been tested and complied with the requirements of CRD-C 530 (FS SS-S-1401) or CRD-C 529 (FS SS-S-1624).

**5. Laboratory standard conditions shall be 23° 2°C (73.4° 3.6°F) temperature and 50 5 percent relative humidity. Specimens shall be stored and tested at standard conditions unless otherwise specified.**

**6. Specimen Preparation**

6.1 Reinsert the spacers between the concrete blocks. Place the samples into the assembly used to pour the original sample and sit them flush on the base plate. Use clamps or other suitable devices to hold the blocks together. Test at least two samples.

**7. Procedure**

7.1 Place each test sample in a forced-draft oven maintained at a temperature of 70 1° C (158 2°F) for 24 0.25 h. Remove from the oven and allow to cool for 30 min. Examine the samples for any evidence of bubbling and record the results.

**8. Evaluation**

8.1 Any evidence of bubbling visible to the naked eye is a basis for a determination of noncompliance with a requirement that there shall be no evidence of bubbling.