

## Standard Terminology Relating to Formed-in-Place Sealants for Joints and Cracks in Pavements<sup>1</sup>

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## 1. Scope

1.1 This terminology covers terms related to joint and crack sealing in pavements. The terminology is useful for describing material types and pavement types and the application of sealants and fillers to pavements.

1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

## 2. Terminology

2.1 Terms and Their Definitions:

- **application temperature**, n—the range of material temperature, as recommended by the manufacturer, that is to be used when installing sealant; for hot-applied sealants, the application temperature is any temperature between the minimum application temperature and safe heating temperature.
- **backer material**, *n*—a compressible material that is placed in joints or cracks before applying sealant to prevent bonding of the sealant on the bottom of the joint, control sealant depth, and prevent sagging of the sealant.
- **bond breaker**, *n*—a material installed in pavement cracks or joints that is intended to prevent adherence of the sealant to the bottom of the crack or joint.

chemically curing sealant, *n*—a sealant that cures primarily

through chemical reaction.

- **hot-applied sealant,** *n*—a compound that is applied in a molten state and cures primarily by cooling to ambient temperatures.
- **joint**, *n*—a designed and constructed or sawed space or opening between adjoining pavement surfaces.
- **maximum heating temperature,** *n*—the maximum temperature, as recommended by the manufacturer, to which a hot-applied sealant or filler for pavement cracks or joints can be heated while conforming to all specification requirements and result in appropriate application characteristics.
- **melter**, *n*—a piece of equipment designed specifically to melt and heat hot-applied sealant and filler accurately and controllably.
- **melter-applicator,** *n*—a piece of equipment designed specifically to melt, heat accurately and controllably, and apply hot-applied sealants and fillers to pavement cracks or joints uniformly.
- **minimum application temperature**, *n*—the minimum temperature, as recommended by the manufacturer, to which a hot-applied sealant or filler for pavement cracks or joints must be heated while conforming to all specification requirements and result in appropriate application characteristics.
- **sealant**, *n*—a material that has adhesive and cohesive properties to seal joints, cracks, or other narrow openings (generally less than 76-mm (3-in.) wide) in pavements against the entrance or passage of water or other debris.

## 3. Keywords

3.1 crack; joints; pavement; sealant

<sup>&</sup>lt;sup>1</sup> This terminology is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.33 on Formed-In-Place Sealants for Joints and Cracks in Pavements.

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