

DISTRESS AND ASSOCIATED REPAIR GUIDELINES

1. Edge / longitudinal and transverse cracks (greater than 1/8-inch and less than 3/4-inch wide):

- 1.1. Clean the crack using high-pressure air, hot-air blasting or high-pressure water.
 - 1.1.1. Clear debris out of the area and out of cracks
 - 1.1.2. Make sure the crack is dry before applying sealer materials (sealer will not bond in wet conditions)
- 1.2. After cleaning cracks, check for crack depth. For the medium (1/2 to 3/4 inch) cracks, install a backer rod in cracks deeper than 2-inches to conserve sealant.
 - 1.2.1. The backer rod should be compressible, non-shrinking, nonabsorbent material with a melting point higher than the temperature of the sealant.
 - 1.2.2. The backer rod should be about 25% larger than the crack width.
- 1.3. Fill cracks with modified-asphalt crack sealer ASTM D 6690, or equal
 - 1.3.1. Squeegee spillage and excess material on the pavement surface.
 - 1.3.2. Dust the surface of the sealer with dry blotter sand to avoid tracking of sealant by traffic.

2. Localized Fatigue (Alligator) Cracking and Depressed Pavements:

- 2.1. Saw cut a rectangular (or square) perimeter for the localized repair
 - 2.1.1. Mark the perimeter at least one foot outside observed distresses
 - 2.1.2. Saw cut the perimeter through the full depth of asphalt so that the patch has a vertical face.
- 2.2. Remove asphalt and unstable base material to a depth no greater than 6-inches. Compact remaining base or subgrade soils using a plate compactor. No standing water in patch area.
- 2.3. Apply a tack coat to the perimeter face of the patch to create a bond.
- 2.4. Place dense-graded hot-mix asphalt (HMA) in the patch area (in layers no greater than 3-inches) and compact after each layer using the plate compactor (or small roller on larger areas).
 - 2.4.1. Place and spread the mix carefully to avoid segregation of the aggregate
 - 2.4.2. Do not overfill the patch area on the final lift in anticipation of vehicular traffic compaction.
 - 2.4.3. Compact each layer thoroughly. Compaction / densification of the patching material is key to a successful repair.