

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
ASPHALT REPAIR MASTIC

CFS:TGH

1 of 2

APPR:CRB:NDM:08-02-23

a. Description. This work consists of cleaning, filling, and leveling the longitudinal construction joints, transverse joints, longitudinal and transverse cracks, and spalls with asphalt repair mastic material.

Clean and fill joints, cracks and spalls at the locations shown in the contract, or as directed by the Engineer.

b. Materials. Furnish applied, pre-packaged, pourable, aggregate filled, polymer modified asphalt repair mastic for both concrete and HMA pavement repairs. Use Deery Level, Go Repair Mastic; Crafcro Mastic One; RightPointe Pave Patch Black; Fibrecrete SAMIscreed; Maxwell Gap Mastic Mod 201; P&T Products Dura-Fill Mastic T2; Pure Asphalt Mastic SR; or an approved equal, as determined by the Engineer.

For concrete pavement, use one of the following 100 percent solids silane primer products: Baracade Silane 100C, Hydrozo® 100, Sikagard® 705L, or an approved equal 100 percent solids silane material, as determined by the Engineer. Do not use silane primer material for HMA pavement repairs.

c. Equipment. Heat the asphalt repair mastic material in a thermostatically controlled hot oil jacketed mastic mixer equipped with a full sweep horizontal agitator that can maintain a uniformly mixed product. The mixer must have an effective means of dispensing the thoroughly mixed mastic material.

d. Surface Preparation and Installation. Prepare all surfaces by ensuring they are free from dust, dirt, oil, grease, and loose material prior to application of the mastic using clean, dry, oil free compressed air at 90 psi minimum. Sound substrate surfaces and remove delaminated material prior to final cleaning. Ensure the surfaces of the pavement are completely dry and clean at the time of mastic application.

Artificial heat may be used to warm the substrate surface provided it does not apply a direct flame to the substrate surface, as recommended by the mastic manufacturer. Do not overheat pavement surfaces.

1. HMA. Apply asphalt repair mastic when pavement temperature is above 40 °F. Place and finish asphalt repair mastic within 10 minutes after warming the pavement area.

2. Concrete. Apply asphalt repair mastic when pavement temperature is above 40 °F. Prior to placing the asphalt repair mastic material, apply silane primer onto the repair area and a minimum of 6 inches onto the adjacent pavement surface at a rate of no less than one gallon per 200 square feet. Allow a minimum of 1 hour for the primer to cure (more time may be necessary depending on weather conditions) prior to placing asphalt repair mastic.

Ensure the Contractor is trained and approved by the mastic manufacturer.

Heat and uniformly mix the asphalt repair mastic to the appropriate installation temperature using a mastic mixer. The product application temperature range is 350-400 °F, verify with specific manufacturer's requirements. At application temperature, material is a thick, grainy appearing mastic.

Place the mastic onto the properly prepared pavement surface in accordance with the mastic manufacturer recommendations.

Apply the mastic to the joint, crack or spall from the bottom up in lifts appropriate to the specific application. Mastic should be applied to open joints, cracks and spalls that are wider than 1¼ inches width. If multiple lifts are required, product should be installed in layers not to exceed 2½ inches, with cooling to 200 °F maximum before applying the next layer. Fill the uppermost 1/2 to 1 inch with the final lift.

Use a heated ironing wand and or shoe box to level and smooth the mastic until the material has formed a durable, well-bonded, level repair as directed by the Engineer.

Place temporary pavement markings if permanent markings are more than fifty percent covered before opening the road to traffic.

e. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item

Pay Unit

Asphalt Repr MasticFoot

Asphalt Repr Mastic will be measured in feet based on in-place quantities. Payment includes all surface preparation, temporary pavement markings, furnishing, hauling, placing, and finishing of all materials, removal, and disposal of all debris.