

SECTION 515—SAWING AND SEALING OF BITUMINOUS OVERLAYS

515.1 DESCRIPTION—This work is the saw cutting of new bituminous concrete courses directly above existing or constructed transverse joints in the underlying concrete pavement as directed, and sealing the reservoir.

515.2 MATERIAL—

- (a) **Sealing Material.** [Section 705.4\(b\)](#), [\(c\)](#), or [\(g\)](#)
- (b) **Tape Bond Breaker.** [Section 513.2\(c\)](#)

515.3 CONSTRUCTION—

(a) **General.** Locate and reference the location of each existing transverse joint before placing any bituminous courses. Make all saw-cuts directly above the existing transverse joints.

Do not saw cut until the bituminous course has thoroughly cooled. Perform saw cutting within 7 days after placing the wearing course. Perform this work on all finished overlay areas before discontinuing work due to seasonal paving limitations.

Make saw-cuts only in the lane in which the existing joint is located. Extend the saw-cuts through any existing widening. Provide separate saw-cuts in each lane if existing transverse joints are offset more than 25 mm (1 inch).

If placing the wearing course the following construction season due to seasonal paving limitations, provide a 25 mm (1-inch) deep, 3 mm (1/8-inch) wide saw-cut in the last placed bituminous concrete course.

- (b) **Sawing.** Use the following table to determine saw-cut reservoir size:

| | |
|--|------------------------------------|
| Overlay Thickness (millimeters) | Reservoir (millimeters) |
| 38 or less | 13 deep by 13 wide |
| greater than 38 | 25 deep by 13 wide |
| Overlay Thickness (inches) | Reservoir (inches) |
| 1 1/2 or less | 1/2 deep by 1/2 wide |
| greater than 1 1/2 | 1 deep by 1/2 wide |

Additionally, if the total depth of overlay is 90 mm (3 1/2 inches) or greater make a preliminary saw-cut 3 mm (1/8 inch) wide to a depth of 38 mm (1 1/2 inches) or one-third of the total overlay thickness, whichever is greater. Indicated overlay depths do not include scratch or leveling courses.

If wet sawing, immediately flush the reservoir with water.

If not placing the wearing course within the same construction season, provide a 3 mm (1/8-inch) wide saw-cut in the last placed bituminous course to a minimum depth of 25 mm (1 inch) or one-third the thickness of the bituminous material placed, whichever is greater.

(c) **Sealing.** Do not place sealing material unless the reservoir faces are thoroughly clean and dry. Do not place on the same day as wet sawing. Clean the reservoir by using compressed air immediately before placing sealing material. Use compressed air free of oil, moisture, or any other substance that would prevent bonding of sealing material to the reservoir faces.

Do not place sealing material if the air temperature is less than 4 °C (40F), or above 32 °C (90F), unless otherwise allowed by the Representative.

Determine the safe heating temperature and recommended pouring temperature from the manufacturer's shipping container. Heat and maintain the material temperature within these recommended safe temperatures. Place the material as close as possible to the recommended pouring temperature. Do not maintain any single batch of material at the pouring temperature for more than 6 hours. Reheat according to the manufacturer's recommendations.

Place tape bondbreaker on bottom of joint reservoir immediately before sealing. Do not allow tape to extend up reservoir face more than 3 mm (1/8 inch).

Fill the reservoir with sealing material to a level 3 mm to 6 mm (1/8 inch to 1/4 inch) below the pavement surface. Do not allow sealing material to spread over the pavement surface.

515.4 MEASUREMENT AND PAYMENT—Meter (Linear Foot)