

**ITEM 18203.9904 M - CRACKING AND SEATING EXISTING CONCRETE  
PAVEMENT**

**DESCRIPTION**

Under this item, the Contractor shall crack and seat the existing concrete pavement within the payment limits shown on the plans or within revised payment limits established by the Engineer in writing prior to the placement of a bituminous overlay.

**MATERIALS**

None Specified.

**CONSTRUCTION DETAILS**

The cracking equipment shall be a self-propelled, self-contained unit equipped with a guillotine type drop weight having a mass between 5444 kg and 5897 kg. The dimensions of the striking surface of the drop weight shall be 1650 mm to 1775 mm in width and 150 mm to 175 mm in depth (thickness).

Before cracking and seating operations begin, the Engineer will designate a test section. The Contractor shall crack the pavement in the test section using varying impact energies until full depth cracking is established with minimum surface spalling to the satisfaction of the Engineer. This impact energy, and the striking pattern later described, will then be used for the remainder of the project. The Department of Transportation will obtain cores within the test section, to verify that cracks are being established full depth. The Contractor shall apply water to the surface in a fine spray to accentuate the cracks as ordered by the Engineer.

The Contractor shall crack the pavement transversely such that adjacent cracks do not exceed 900 mm in the longitudinal direction. One pass of the breaker down the center of the lane is acceptable, provided cracking is produced across the entire lane width. Pavement cracks radiating from the ends of the drop weight to the pavement edge are acceptable. The drop height shall be adjusted to produce full depth cracking with minimum surface spalling.

Cracking concrete slabs shall be done in the direction of travel unless otherwise approved by the Engineer. The contractor shall take necessary precautions to insure that the head of the cracking equipment does not strike within 450 mm of transverse joints to avoid overbreaking and/or undue spalling at these joints.

Installation of underdrain, when required, shall be accomplished before the cracking and seating operation is begun unless otherwise approved by the Engineer. Cracking concrete pavement will not be permitted over existing drainage facilities (with the exception of newly installed underdrains), and/or utility lines (gas, water, etc.). Provisions shall be made to protect passing traffic from flying debris during the cracking operation.

Following cracking but prior to asphalt patching and overlaying, the entire pavement surface shall be seated with all areas receiving a minimum of two passes of a roller conforming to the requirements of Section 203-3.13B and having a gross mass of 45 metric tons. Seating shall be accomplished within one week of cracking regardless of when the first bituminous course is placed. If the pavement is opened to traffic after the cracking and seating operations but prior to placement of the first bituminous course, the Contractor shall maintain the pavement by sweeping and asphalt patching to the satisfaction of the Engineer.

The sequence of operations in conjunction with this item shall be performed in the following order: installation of any underdrains, cracking, seating, patching with asphalt concrete, remaining joint cleaning

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and filling, tack coat, overlaying. Work shall be sequenced so that the cracking and seating of the concrete pavement is completed prior to the construction of shoulders.

The Contractor shall schedule operations so that a minimum of 90 mm of asphalt concrete are placed over the cracked and seated pavement before paving ceases for the winter. Asphalt concrete shall be placed within two weeks of the completion of the cracking and seating operations. If approved by the Engineer, the Contractor can delay placement of the overlay (in the cracked and seated sections) beyond this two week limit if the Contractor demonstrates that traffic is maintained safely over the cracked and seated pavement by sweeping and/or patching.

**METHOD OF MEASUREMENT**

The quantity shall be the number of lane kilometers computed from the payment lines shown on the plans or from revised payment limits established by the Engineer in writing prior to performing the work.

**BASIS OF PAYMENT**

The unit price bid per lane kilometer shall include the cost of furnishing all labor, materials, and equipment necessary to crack and seat the existing concrete pavement. Underdrain, asphalt patching, joint cleaning and filling, tack coat, overlay courses and maintenance and protection of traffic shall be paid for under their respective items.

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