

**ITEM 15403.200401 M - ASPHALT CONCRETE - TYPE 10FX OPEN GRADED SURFACE COURSE**

**DESCRIPTION**

This work shall consist of constructing a pavement course of hot, plant mixed asphalt concrete in accordance with specifications and in reasonable close conformity with required lines, thicknesses, grades, and typical sections shown on the plans or established by the Engineer.

**MATERIALS**

The requirements of §401 - Plant Mix Pavements - General for surface courses shall apply except as noted herein.

The contractor shall formulate and submit to the Regional Director, a job mix formula that satisfies the design general limits listed in Table 1 - Composition of Mixture. The Marshall requirements of §401-2.02 will not apply to this mix. The permeability shall be less than 60 seconds per 25 mm when tested in accordance with NYS Test Method 400-10F.

**Table 1  
Composition of Mixture<sup>1</sup>**

Screen Sizes	General Limits <sup>2</sup> % Passing	Job Mix Tolerance %
25 mm	100	-
12.5 mm	95-100	-
6.3 mm	40-56	±5
3.2 mm	20-30	-
850 µm	6-14	-
425 µm	4-12	-
180 µm	3-9	-
75 µm	2-5	-
Asphalt Content, % <sup>3</sup>	4.5-6.5	±0.4
Mixing & Placing Temp. Range <sup>4</sup> 121° - 163° C		
Description and Typical Uses	Open surface course with coarse texture and high permeability	

**NOTES:**

- All aggregate percentages are based on the total weight of the aggregate.
- Coarse aggregates to be used in this mix shall be separately stockpiled at the plant site, and available for sampling and testing by the Department at least 14 calendar days prior to the initial production of this mix. Production of this mix will not be permitted to start until the Materials Bureau has confirmed that samples of the stockpiled aggregates meet the specification requirements.
- The asphalt content is based on the total weight of the mix. The asphalt cement grade and No. shall be as specified in Table 401-1 of the Standard Specifications for top course mixes.
- The asphalt cement shall be introduced into the mixer at a temperature compatible with that of the aggregate as determined by the Regional Materials Engineer, between the limits of 107°C and 177°C.

**AGGREGATES**

Delete the requirements under §401-2.03 Aggregates, and replace with the following:

Fine aggregates shall consist of material conforming to the requirements of §703-01, Fine Aggregates. In addition, screenings free from deleterious materials and manufactured from sources of stone meeting the requirements of §703-02, Coarse Aggregates, may be used as fine aggregate.

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Coarse aggregates shall consist of approved crushed stone conforming to the requirements of §703-02, Coarse Aggregates, except for gradation. In addition, coarse aggregates used in these mixes shall meet the following frictional requirements:

**A. Coarse Aggregates.** Coarse aggregates shall be from approved sources and shall meet one of the following requirements:

1. Coarse aggregates shall be crushed limestone having an acid insoluble residue content of not less than 20%, excluding particles of chert and similar siliceous rocks.
2. Coarse aggregates shall be crushed dolomite having an acid insoluble residue content of not less than 17%, excluding particles of chert and similar siliceous rocks.
3. Coarse aggregates shall be crushed sandstone, granite, chert, traprock, ore tailings, slag or other similar non-carbonate materials. Non-carbonate particles are defined as those having an acid insoluble residue content not less than 80%.
4. Coarse aggregates shall be blends of two or more of the following types of materials; limestone, dolomite, sandstone, granite, chert, traprock, ore tailings, slag or other similar materials. These aggregates must meet the following requirements:

Not less than 20% (by weight with adjustments to equivalent volumes for materials of different specific gravities) of the total coarse aggregate particles (plus 3.2 mm material) shall be non-carbonate. In addition, not less than 20% of the plus 6.3 mm particles shall be non-carbonate. Non-carbonate particles are defined as those having an acid insoluble residue content not less than 80%.

**B. Blending.** Where coarse aggregates for these mixes are from more than one source or of more than one type of material, they shall be proportioned and blended to provide a uniform mixture.

**CONSTRUCTION DETAILS**

The construction details shall comply with the requirements specified in §401-3.01 through §401-3.15 except for the following modification:

The mix shall be compacted by two passes of a nominal nine metric ton steel wheel roller unless otherwise directed by the Engineer.

**METHOD OF MEASUREMENT**

The provisions of §402-4, Method of Measurement, shall apply except that the final Quantity Adjustment Factor shall be 1.00.

**BASIS OF PAYMENT**

The unit price bid per metric ton for the pavement course shall include the cost of furnishing all materials including asphalt cement and all equipment and labor necessary to complete the work.

**Payment will be made under:**

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<b><u>ITEM NO.</u></b>	<b><u>ITEM</u></b>	<b><u>PAY UNIT</u></b>
15403.200401 M	Asphalt Concrete - Type 10FX Open Graded Surface Course	Metric Ton

DISAPPROVED