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# 04050 Cold Mix Asphalt

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<sup>\*</sup>Bold text denotes a change in this version (February 2022)



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## 04050-1 <u>Description</u>

Cold Mix Asphalt shall be used for patching potholes and utility cuts primarily during the winter months and early spring before Hot Mix Asphalt is available.

### 04050-2 Materials

#### 2.1 Asphalt Cement

The **Asphalt Cement** shall be SC-250 which conforms to the requirements listed in **Table 1**. **Asphalt Cement content** by dry weight **of aggregate** shall be from 5.5 - 6.5.

**Table 1: Asphalt Cement Properties for Cold Mix Asphalt** 

	Asphalt			
	Grade	SC.	SC-250	
	ASTM			
	Test			
Requirements	Method	Min	Max	
Flash Point (C.O.C.), °C	D92	80	-	
Kinematic Viscosity at 60°C mm2/s	D2170	250	500	
Distillation Test Total				
Distillate to 360°C % by Volume	D402	4	20	
Distillation Residue				
Kinematic Viscosity at 60°C mm2/s	D2170	800	10000	
Asphalt Residue of 100% Penetration				
% by mass	D243	60	-	
Ductility of 100 Penetration Residue at				
25°C cm	D113 <sup>(1)</sup>	100	-	
Solubility of Distillation Residue to				
360°C cm % by mass	D2042 <sup>(2)</sup>	99.0	-	
Water, % by Mass or Volume	D95	-	0.5	

Note (1) If the ductility at 25°C is less than 100, the material will be acceptable if its ductility at 15°C is more than 100.

Note (2) Using trichloroethylene as solvent or use of ignition burn furnace.

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## 2.2 <u>Aggregate</u>

The Aggregate gradation for Cold Mix Asphalt shall conform to the Type 3 mix as specified in Section 04010. The maximum allowable mixing temperature is 80°C

## 04050-3 Measurement

Cold Mix asphalt shall be measured in tonnes of material loaded as determined by scales at the Contractor's plant location.

Material is to be scaled and recorded by the Contractor on duplicate weigh slips. Weigh slips must be signed by both parties at the time of loading and a copy supplied to the City of Saskatoon. Tickets shall include a ticket number, gross, net and tare weights, truck number and cumulative total by asphalt type and project for that day.

The weight of each vehicle shall be determined at the beginning of the work with the fuel tank half full, spare tire in place and the driver in the cab. This weight, called the vehicle weight will be checked and/or amended at the discretion of the Engineer.

#### 04050-4 Testing

The supplier shall, prior to initial delivery, undertake standard control tests and provide test results to prove compliance with the requirements for the desired type and grade of asphalt cement as listed in Table 1.

All tests conducted by the City shall be in accordance with the procedures and methods of the American Society for Testing and Materials (ASTM) except where the Canadian Government Specification Board (C.G.S.B.) and the National Standard Council (N.S.C.) of Canada is indicated.

## 4.1 **Quality Control**

Suppliers shall provide all standard control tests as listed in Table 1 for every 100 tonnes of SC-250.

If requested by the City, the supplier shall supply a representative 5 litre sample of SC-250 prior to delivery of any order. The City shall also have the right to obtain samples of not more than 5 litres from each shipment during the course of delivery of any order.

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### 04050-5 **Payment**

Payment for Cold Mix Asphalt will be at the unit price per tonne.

The unit price will be full compensation for removing overburden, excavating, crushing, screening, stockpiling, and drying the aggregate; mixing and loading the asphalt mix.

**End of Specification 04050** 

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