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**Specification (Measurement)**

**Transport and Main Roads Specifications  
MRS22 Supply of Cover Aggregate**

**October 2010**

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## 1 Introduction

This Specification applies to the supply and delivery of cover aggregate and prime cover material for use in sprayed bituminous surfacing treatments, and the construction of stockpile sites for storage of cover aggregate.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications* and other Specifications as appropriate.

This Specification forms part of the Transport and Main Roads Specifications Manual.

## 2 Measurement of work

### 2.1 Standard Work Items

In accordance with the provisions of Clause 2 of MRS01 *Introduction to Specifications*, the Standard Work Items incorporated in this specification are listed in Table 2.1.

**Table 2.1 – Standard Work Items**

Standard Item No.	Description	Unit of Measurement
5011	Supply of cover aggregate [ <i>precoated</i>   <i>unprecoated</i> ], [ <i>nominal size</i> ] mm nominal size.	m <sup>3</sup>
5012	Supply of cover aggregate [ <i>precoated</i>   <i>unprecoated</i> ], [ <i>nominal size</i> ] mm nominal size.	tonnes
5013	Supply of prime cover material, [ <i>type of material</i> ].	m <sup>3</sup>
5021	Transport of materials, [ <i>type of material</i> ].	m <sup>3</sup>
5031	Construction of stockpile site.	lump sum

### 2.2 Work Operations

**Item 5011** Supply of cover aggregate [*precoated* | *unprecoated*], [*nominal size*] mm nominal size.

**Item 5012** Supply of cover aggregate [*precoated* | *unprecoated*], [*nominal size*] mm nominal size.

This item is used only where cover aggregate is supplied by the Contractor. Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) winning and processing of the material
- c) loading, delivery and stockpiling of the cover aggregate, and
- d) precoating, if required.

**Item 5013** Supply of prime cover material, [*type of material*].

This item is used only where prime cover material is supplied by the Contractor. Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) winning and processing of the material, and

- c) loading, delivery and stockpiling of the prime cover material.

**Item 5021 Transport of materials, [type of material].**

This item is used only where cover aggregate and/or prime cover aggregate is supplied by the Principal for collection by the Contractor at the point of supply. Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) taking delivery of cover aggregate or prime cover material at the location and by the mode nominated in the Contract, and
- c) transport to the Site and stockpiling, if required.

**Item 5031 Construction of stockpile site.**

This item is used only for a materials supply contract. This item shall not be used where cover aggregate and/or prime cover material is supplied and spread under the Contract. Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) clearing, grubbing, compacting and trimming of the natural ground
- c) drainage of the site and the construction of access tracks
- d) construction of a pavement and a seal, where stated elsewhere in this specification, and
- e) supply of all construction materials.

**2.3 Calculation of quantities**

**2.3.1 General**

For a material supply contract only, the quantity of cover aggregate and/or prime cover material shall be calculated by the method stated in Clause 1 of Annexure MRS22.1 which shall be one of the methods described in Clauses 2.3.2, 2.3.3 and 2.3.4.

For all other contracts, the quantity of cover aggregate and/or prime cover material shall be calculated in accordance with the method specified in Clause 2 of MRS11 *Sprayed Bituminous Surfacing (Excluding Emulsion)*.

**2.3.2 Method A – Stockpile measurement**

The quantity of the material shall be calculated from the dimensions of the stockpile. For this purpose, the Contractor shall shape the stockpile to the requirements of Table 2.3.2.

**Table 2.3.2 – Stockpile shape requirements**

Section	Dimension
Base	Rectangular or square in plan
Height	A constant height, maximum 2 metres
Side slopes	Between 1.5 horizontal to 1 vertical and 2 horizontal to 1 vertical
Top Surface	Trimmed flat

### **2.3.3 Method B – Truck measurement**

The quantity of material in each truck shall be calculated from the dimensions of each load. If required by the Superintendent, the load shall be trimmed flat.

The total quantity of material shall be determined by the tally of the trucks and the quantity in each.

### **2.3.4 Method C – Volume measurement using weight**

The total dry volume of the material shall be calculated from the tally of the masses on weighbridge docketts which represent the delivered material. Convert mass to volume by weighing a set volume.

Where necessary, as determined by the Superintendent, deductions shall be made to the mass obtained from the tally of the weighbridge docketts to account for any water contained in the loads of material.

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