**Specification (Measurement)** 

Transport and Main Roads Specifications MRS87 Supply of Timber Bridge Materials and Components

**July 2017** 



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## 1 Introduction

This Specification applies to the supply of materials and components used in the construction and / or maintenance of bridges built either wholly or partially with timber materials.

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 2.1.3 of MRS01 *Introduction to Specifications*, the Standard Work Items covered by this Specification are listed in Table 2.1.

Table 2.1 - Standard Work Items

Standard Item No.	Description	Unit of Measurement				
	Materials supplied on Site					
73501	Hardwood kerbs, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long	each				
73502	Plywood kerbs, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long	each				
73503	Hardwood decking, supply on Site, ([thickness] mm thick), [length] metres long	m²				
73504	Plywood deck sheets, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long	each				
73505	Plywood deck sheets including coating, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long	each				
73506	Hardwood spiking planks, supply on Site, ([width] mm wide, [thickness] mm thick)	m				
73507	Hardwood end spiking plank, supply on Site, ([width] mm wide, [thickness] mm thick)	m				
73508	Hardwood girders, round, supply on Site, ([diameter] mm diameter), [length] metres long	each				
73509	Hardwood girders, octagonal, supply on Site, ([width] mm wide), [length] metres long	each				
73510	Hardwood corbels, round, supply on Site, ([diameter] mm diameter), [length] metres long	each				
73511	Hardwood corbels, octagonal, supply on Site ([width] mm wide), [length] metres long	each				
73512	Hardwood headstocks, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long	each				
73513	Hardwood piles, supply on Site, ([diameter] mm diameter), [length] metres long	each				
73514	Hardwood wales and braces, supply on Site, ([width] mm wide, [thickness] mm thick)	m				

Standard Item No.	Description	Unit of Measurement		
73515	Hardwood sill, round, supply on Site, ([diameter] mm diameter), [length] metres long	each		
73516	Hardwood sill, rectangular, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long	each		
73517	Hardwood struts and fenders, round, supply on Site, ([diameter] mm diameter), [length] metres long	each		
73518	Hardwood struts and fenders, rectangular, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long	each		
73519	Hardwood distributor planks, supply on Site, ([width] mm wide, [thickness] mm thick)	m		
73520	Hardwood running planks, supply on Site, ([width] mm wide, [thickness] mm thick)	m		
73521	Hardwood ballast boards, supply on Site, ([width] mm wide, [thickness] mm thick)	m		
73522	Hardwood cover boards, supply on Site, ([width] mm wide, [thickness] mm thick)	m		
73523	Hardwood backing slabs, supply on Site, ([width] mm wide, [thickness] mm thick)	m		
73524	Steel bridge decking, supply on Site, ([depth] mm deep, [thickness] mm thick), [length] metres long	m²		
73525	Steel kerb, supply on Site, ([depth] mm deep, [thickness] mm thick), [length] metres long	each		
73526	Precast prestressed concrete bridge decking, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long, [hand] (clockwise/anticlockwise skew/square delete as appropriate), [degrees] degrees skew	each		
Materials supplied ex Works				
73601	Hardwood kerbs, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long	each		
73602	Plywood kerbs, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long	each		
73603	Hardwood decking, transport to Site, ex Works/Stockpile [location], ([thickness] mm thick), [length] metres long	m²		
73604	Plywood deck sheets, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long	each		
73605	Plywood deck sheets including coating, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long	each		
73606	Hardwood spiking planks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)	m		
73607	Hardwood end spiking planks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)	m		
73608	Hardwood girders, round, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long	each		

Standard Item No.	Description	Unit of Measurement
73609	Hardwood girders, octagonal, transport to Site, ex Works/Stockpile [location], ([width] mm wide), [length] metres long	each
73610	Hardwood corbels, round, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long	each
73611	Hardwood corbels, octagonal, transport to Site, ex Works/Stockpile [location], ([width] mm wide), [length] metres long	each
73612	Hardwood headstocks, transport to Site, ex Works/Stockpile [location] ([width] mm wide, [thickness] mm thick), [length] metres long	each
73613	Hardwood piles, transport to Site, ex Works/Stockpile [location], ([diameter]), [length] metres long	each
73614	Hardwood wales and braces, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)	m
73615	Hardwood sill, round, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long	each
73616	Hardwood sill, rectangular, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long	each
73617	Hardwood struts and fenders, round, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long	each
73618	Hardwood struts and fenders, rectangular, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long	each
73619	Hardwood distributor planks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)	m
73620	Hardwood running planks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)	m
73621	Hardwood ballast boards, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)	m
73622	Hardwood cover boards, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)	m
73623	Hardwood backing slabs, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)	m
73624	Steel bridge decking, transport to Site, ex Works/Stockpile [location], ([depth] mm deep, [thickness] mm thick), [length] metres long	m²
73625	Steel kerb, transport to Site, ex Works/Stockpile [location], ([depth] mm deep, [thickness] mm thick), [length] metres long	each
73626	Precast prestressed concrete bridge decking, transport to Site ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long, [hand] clockwise/anticlockwise skew/square (delete as appropriate), [degrees] degrees skew	each
73627	Storage of timber bridge materials and components at Site	lump sum

### 2.2 Work Operations

#### Items 73501 to 73526

These items are used only where materials and components are supplied by the Contractor.

Work Operations incorporated in the above items include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) supply of construction materials
- c) transport to Site
- d) preparation of Site storage area, and
- e) unloading at Site.

#### Items 73601 to 73626

These items are used only where components are supplied by the Principal for collection by the Contractor from the location nominated in the Principal Supplied Materials List.

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 the materials and components at the location nominated in the schedules, including loading where so required
- c) transport to Site
- d) preparation of Site storage area, and
- e) unloading at Site.

### Item 73627 Storage of timber bridge materials and components at Site

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications, and
- b) stacking of materials and components at Site to the requirements of this Specification.

## 2.3 Measurement of work

The measurement of steel bridge decking shall be the plane (not developed) length along the centreline of the bridge multiplied by the overall deck width as shown on the Standard Drawings.

Adequate allowance shall be made by the Contractor for additional quantities in order to allow for overlap of sheets.