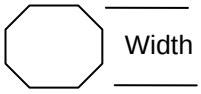
# MRTS87

# Supply of Timber Bridge Materials and Components

# Appendix G

# APPENDIX G

## OCTAGONAL SAWN GIRDERS




**CHECKLIST**

**Timber Supplier** .....

**Inspection Location**.....

**Inspector**.....

**Date** .....

**GIRDER IDENTIFICATION**.....

**ORDER DETAILS** .....

**DETAILS**

| | | YES | NO |
|---|---|---|---|
| • Sawn width ……. (Satisfies tolerance ± 3mm) | ? → | …… | ...……reject |
| • Length (Acceptable - ə order length) | ? → | …… | ……...reject (with consideration) |
| • Pipe size …….. (Acceptable 35mm diameter) | ? → | …… | ……...reject |
| • Sawn to octagonal template | ? → | …… | ……...reject |

| SUPPLY SPECIES …… | STRENGTH GROUP | S1 | S2 |
|---|---|---|---|
| | | | |

**TOLERANCE (See over):-**

| | | YES | NO |
|---|---|---|---|
| • For Strength Group S1, satisfies Technical Standard MRTS87 requirements | ? → | …… | ...……reject (or treat as S2) |
| • For Strength Group S2, satisfies Technical Standard MRTS87 requirements and free of knots or noticeable defects on middle third of length on nominated tension faces | ? → | …… | ……...reject |
| • Species identification brand in place | ? → | …… | ……add |

## PRESERVTIVE TREATMENT:

| | | YES | NO |
|---|---|---|---|
| • Sapwood >25 x 25mm on arris or policy of treating all sawn girders | ? → | ……..arrange treatment | ...……... |
| • Post treatment compliance stamp | ? → | …… | ……arrange |
| • Post treatment compliance certificate | ? → | …… | ……obtain |

| | |
|---|---|
| **GIRDER APPROVED** | …… |

- Inspection identification mark added - [ ]
- Preservative treatment arranged - [ ]
- Preservative treatment completed - [ ]

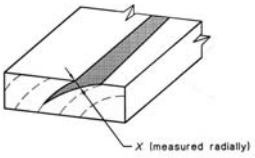
| | |
|---|---|
| **GIRDER REJECTED** | …… |

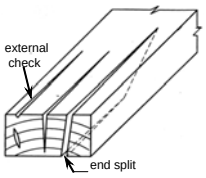
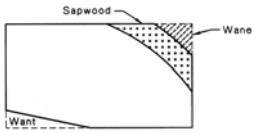
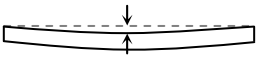
Reason or comment:- .....

.....

## ALLOWABLE DEFECTS – HARDWOOD SAWN GIRDERS

Using requirements of MRTS87 (AS 2082 Structural Grade 1 as modified)

| TYPE OF CHARACTERISTIC | MRTS87 REQUIREMENTS | SKETCH | PASS | FAIL |
|---|---|---|---|---|
| Tight knots* | Up to 50 mm maximum diameter, provided in one face only at any section. | | | |
| Borer holes (not associated with decay)<br>• Diameter up to and including 3 mm<br>• Diameter over 3 mm or where separated by less than 2 x diameter | • Not exceeding 12 holes per 100 x 100 mm<br>• As for knots | | | |
| Termite galleries | Enclosed not permitted.<br>Not enclosed ) as for want and wane | | | |
| Heart and heart shakes) | Permitted if within middle third of section | | | |
| Tight gum veins (or smears)* | Not exceeding 150 mm individual length and not closer than 1 metre centres<br>Not one surface to another | | | |
| Loose gum veins, ring shakes and included bark. | Not permitted | | | |
| Gum pockets, latex pockets, resin pockets; overgrowth of injury: *<br>One surface to another and intersecting an end.<br>Otherwise:<br>• Individual length not exceeding<br>• Individual width (measure radially)<br>• One surface only:<br>• One surface to another: | As for end splits<br>• Lesser of 3W or 300 mm<br>• Not exceeding 12 mm or ¼ of the surface on which it occurs<br>• Not permitted |  | | |

| TYPE OF CHARACTERISTIC | MRTS87 REQUIREMENTS | SKETCH | PASS | FAIL |
|---|---|---|---|---|
| End splits, aggregate length | Not exceeding W or 100 mm |  | | |
| External checks | Width not exceeding 3 mm<br>Individual length not exceeding L/4 | | | |
| Primary rot | Depth not exceeding 3mm.<br>Aggregate area in any 2 m of length not exceeding<br>150 x 100 mm | | | |
| Want and wane | Not exceeding 25 x 25mm on arris |  | | |
| Lyctid susceptible sapwood | May exceed 10% of area of section | | | |
| Hit and miss, exceeding the limits for want and wane | Depth not exceeding 3 mm<br>Individual length not exceeding 600 mm | | | |
| Bow | Maximum of:<br>• 20 mm for 6 m length<br>• 30 mm for 9 m length |  | | |

* For S2 timber and these defects, none in middle third of length on nominated lower faces.