



AUSTRALIAN RAIL TRACK CORPORATION LTD

Discipline: Engineering (Track & Civil)

Category: Standard

Reclaimed Sleeper Plates and Boring Patterns

ETA-02-02

Applicability

| | | | |
|-----------------|---|----------------|--|
| New South Wales | ✓ | CRIA (NSW CRN) | |
|-----------------|---|----------------|--|

Primary Source

| |
|--------------------------|
| ARTC NSW Standard TCS 11 |
|--------------------------|

Document Status

| Version | Date Reviewed | Prepared by | Reviewed by | Endorsed | Approved |
|---------|---------------|-------------|-------------------|---------------------------------|----------|
| 1.2 | 18 Jun 10 | Standards | Manager Standards | Exec Manager SS&P 21/06/2010 | CEO |

Amendment Record

| Version | Date Reviewed | Clause | Description of Amendment |
|---------|---------------|--------|---|
| 1.0 | 01 Dec 09 | | Implementation draft. Supersedes NSW Standard TCS 11 v1.2 |
| 1.1 | 22 Mar 10 | 3 | Implementation draft update. Hole diameter suitability clarified |
| 1.2 | 18 Jun 10 | | Banner added regarding mandatory requirements in other documents and alternative interpretations. |

© Australian Rail Track Corporation Limited 2011

Disclaimer:

This document has been prepared by ARTC for internal use and may not be relied on by any other party without ARTC's prior written consent. Use of this document shall be subject to the terms of the relevant contract with ARTC.

ARTC and its employees shall have no liability to unauthorised users of the information for any loss, damage, cost or expense incurred or arising by reason of an unauthorised user using or relying upon the information in this document, whether caused by error, negligence, omission or misrepresentation in this document.

This document is uncontrolled when printed.

Authorised users of this document should visit ARTC's intranet or extranet (www.artc.com.au) to access the latest version of this document.

Contents

| | | |
|---|-------------------------------|---|
| 1 | General | 3 |
| 2 | Reclaimed Sleeper Plates..... | 3 |
| 3 | Sleeper Boring Patterns..... | 4 |

Mandatory requirements also exist in other documents.

Where alternative interpretations occur, the Manager Standards shall be informed so the ambiguity can be removed. Pending removal of the ambiguity the interpretation with the safest outcome shall be adopted.

1 General

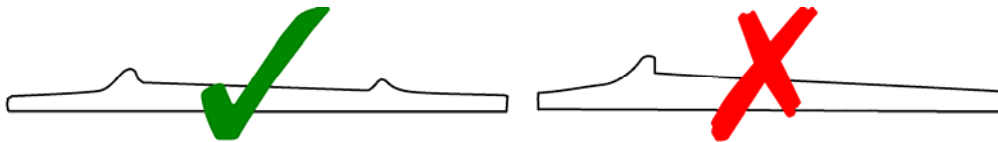
Approved reclaimed sleeper plates and sleeper boring patterns are shown below.

2 Reclaimed Sleeper Plates

Reclaimed sleeper plates must meet the following requirements for acceptance and re-use on ARTC's track (main line and sidings).

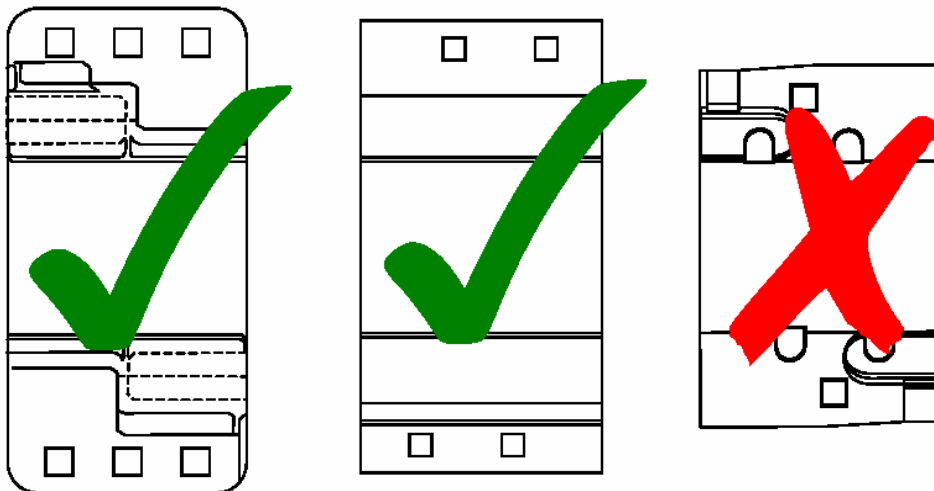
Sleeper plates with dogspike holes

- 1) Only double shouldered sleeper plates may be re-used.



Sleeper plates for Pandrol fastenings

- 2) DO NOT use reformed plates



- 3) DO NOT use any sleeper plates with evidence of excessive corrosion, notch marks or oxyacetylene burn marks on the rail seat, shoulder or at spike holes.
- 4) Check that the shoulders are not worn to a sharp edge. General wear is acceptable.
- 5) Check that the plate is not cracked.
- 6) Use a straight edge to check that plate underside concavity, convexity or unevenness is not greater than 1mm. This includes worn ridges on the underside of the sleeper plate.
- 7) Use a Go – NoGo gauge to check for the following dimensions.
 - The lockspike holes shall be no wider than 19 mm at bottom surface.
 - The dogspike holes shall be not wider than 25.5 mm at bottom surface.
 - The rail seat width, when tested by a 150 mm gauge, shall fit with a tolerance of 1 mm. This will be demonstrated by inserting the gauge squarely between the shoulders and “wriggling the gauge”. Only slight wriggling is acceptable.

3 Sleeper Boring Patterns

Sleepers are to be prebored in accordance with the Attachment 1. These drawings make no provision for gauge widening (or reduction) and if such special conditions are required, the order is to be so endorsed.

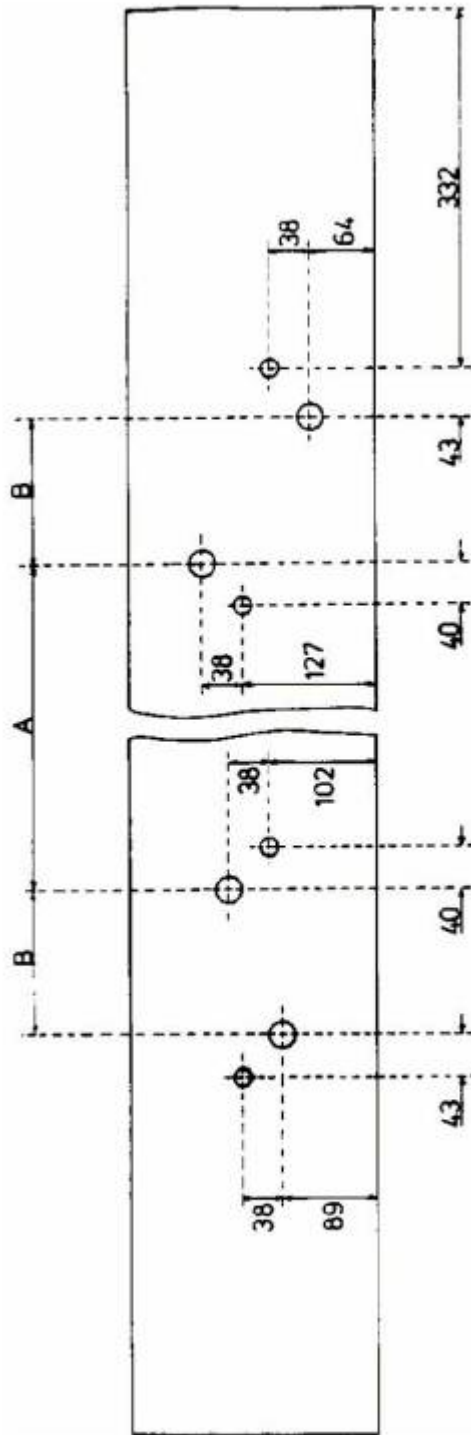
Hole diameters are suitable for NSW dog spikes and lock spikes only.

Orders for sleepers from suppliers are to state the rail section and the sleeper plate type to be used on the order.

Location dimensional tolerances are +/-1 mm

Drilled holes to be as specified by manufacturer's instructions.

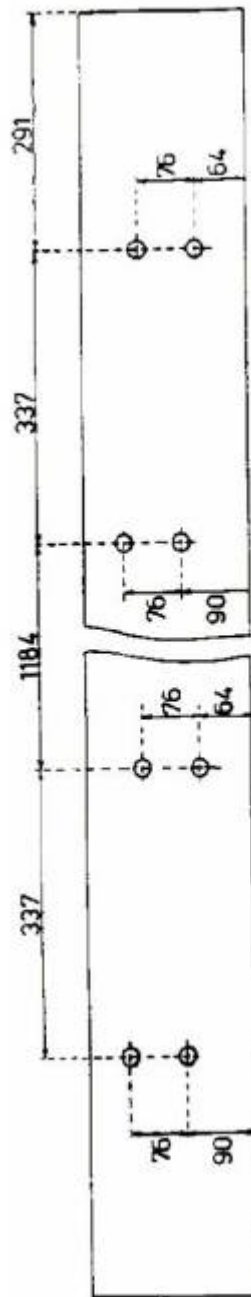
Attachment 1



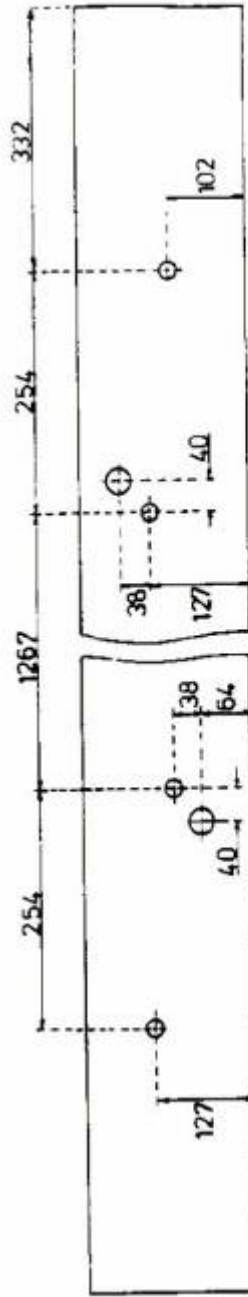
LEGEND

- ⊕ ∅ 16mm lockspike hole
- ⊕ ∅ 19mm dogspike hole

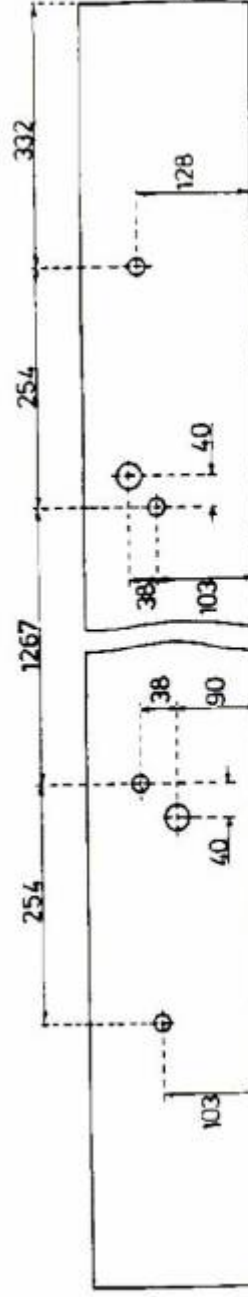
| RAIL SECTION | BHP SLEEPER PLATE CAT. No. | A | B | RAIL SECTION | A | B |
|---|----------------------------|------|-----|--|------|-----|
| A.S. 53kg, 100lb A.S. | DF 1 (OLD PATTERN) | 1348 | 171 | 80lb A.S. 'B' 1928, A, A ^{1,2} & 3 * | 1346 | 152 |
| A.S. 53kg ** | DF 30 (NEW PATTERN) | 1348 | 171 | 71 1/2 lb 'D' 1875 * | 1346 | 146 |
| 100 lb A.S. 1916 | DF 1 (OLD PATTERN) | 1354 | 171 | 60 lb A.S. 1916, A.S. 'A' & A.S. 'B' * | 1365 | 133 |
| A.S. 50kg, A.S. 47kg, 90lb A.S. 1925/28, 80lb A.S. 'A' 1928 | DF 10 | 1366 | 152 | 60 lb 'B' 1896 & 'B ^A ' 1907. * | 1366 | 127 |
| 90lb A.S. 1916 * | | 1346 | 162 | NOTES: * 'A' dimension based on tapered base sleeper plates except for **. For cant adze increase 'A' by 6mm. * Unplated, if not on tapered base or cant adze & no lockspike holes. ** Lockspike & Dogspike hole arrangement is a mirrored & inverted image of 53kg old pattern. | | |
| 90lb 'J' 1913 * | | 1343 | 162 | | | |



Pandrol plated for 53 & 60kg rail



53kg old pattern plate reformed for pandrol clips.



53kg new pattern plate reformed for pandrol clips

NOTE: Reformed patterns may be ordered without dogspike holes for straight sections of track

LEGEND

- ⊕ ∅ 16mm lockspike hole
- ⊕ ∅ 19mm dogspike hole