Railway Association
of Canada
PIPES, STEEL 26 IN. MAXIMUM DIAMETER, UNIFORM OR MIXED LENGTHS AND DIAMETERS, SECURED WITH NON-METALLIC STRAPPING-GONDOLA CARS

RAC 12124C
Revised 01-2024 Ref: AAR Fig.124-C


RAC 12124C (Continued)
Revised 01-2024 Ref: AAR Fig. 124-C

| Item | No. of Pcs. | Description |
| :---: | :---: | :--- |
| A |  | Brake wheel clearance: see General Rules. |
| B | 3 per pile | $\begin{array}{l}\text { Bearing pieces: } 2 \text { in. } \times 4 \text { in. lumber. Length must be approximately } \\ \text { equal to width of car, but not less than width of load. Space suitably } \\ \text { under each pile. }\end{array}$ |
| C | 3 per pile | $\begin{array}{l}\text { Separators: lumber, minimum 2 in. x 4 in., width must be at least } 1 \text { in. } \\ \text { greater than height. }\end{array}$ |
| D | 5 pairs | $\begin{array}{l}\text { Side stakes: Hardwood 4x4 minimum. Stakes must be of sufficient } \\ \text { length to allow for placement of stake ties, Item E across top of load. } \\ \text { Stakes should be equally spaced. Locate end stakes approximately } 3 \mathrm{ft} \\ \text { from ends of pipe contacting the stakes. Fill space between stakes and } \\ \text { car side of stakes and load by nailing or securing fillers to stakes. }\end{array}$ |
| E | 4 per pair of |  |
| stakes. | $\begin{array}{l}\text { Stakes ties: 1-1/4 in. Polyester bands with a MBS of 3285 lbs. Place one } \\ \text { band midway between the floor and the top cord of the car, one across } \\ \text { the top of the load and one every 20 inches above the side of the car } \\ \text { circling both stakes. Strapping must be tensioned with the proper } \\ \text { tensioning tool and sealed with the appropriate buckle in accordance } \\ \text { with the manufacturer's recommendations. DO NOT SUBSTITUTE }\end{array}$ |  |
| F1 | Min 5 | $\begin{array}{l}\text { Approved Type 1A polyester strapping Grade 6, MBS of 7,700 lbs. }\end{array}$ |
| Interlace minimum of two rows of pipe below top of car side to top |  |  |
| over the second row of pipe from the top. Locate as far from bearing |  |  |
| pieces and stakes as possible.Strapping must be tensioned with the |  |  |
| proper tensioning tool and sealed with the appropriate Dynamic Load |  |  |
| Buckle in accordance with the manufacturer's recommendations. DO |  |  |
| NOT SUBSTITUTE. |  |  |$\}$

RAC 12124C (Concluded)
Revised 01-2024 Ref: AAR Fig.124-C

| Item | No. of Pcs. | Description |
| :---: | :---: | :--- |
| F3 | 3 per side of <br> incomplete <br> layer | Package bands: AAR-approved Type 1A Grade 6 polyester strapping. <br> Three package bands equally spaced to both sides of incomplete top <br> layers (split top layer into two equal parts). Secure laminated void <br> fillers (see Item G) to separators in center of incomplete layer. |
| G | Min 5 | Approved Type 1A polyester strapping Grade 6, MBS of 7,700 lbs. <br> Circle entire load. Locate as far from bearing pieces and stakes as <br> possible.Strapping must be tensioned with the proper tensioning tool <br> and sealed with the appropriate Dynamic Load Buckle in accordance <br> with the manufacturer's recommendations. DO NOT SUBSTITUTE. |
| H | As required per <br> each separator | Void Fillers: 2 in. x 4 in. lumber. Length to fill entire void between top <br> layer packages. Secure bottom piece to separator with minimum four <br> 16-D nails. Secure top lamination to bottom piece with minimum four <br> 16-D nails. |

## Notes and Additional Requirements:

1. Bundled pipe not allowed in this figure.
2. Pipe with collars must have ends staggered to permit nesting of pipe within the layers.
3. Rows of pipe below the sides of the car must be staggered as per drawing minimum 2 ft at each end.
4. Height of load above car floor must not exceed 10 ft .
5. If the load extends 5 ft 6 in . above the car side, or the load is 9 ft or higher above car floor, five pairs of stakes are required.
6. On loads 18 in. or less above car sides, space ties not less than 18 in. apart.
7. Center from end-to-end all layers above sides of car, with a minimum void of 24 in . from each end of the car.
8. Pipe less than 12 ft long must be loaded below top of car sides.
9. Small-diameter pipe must not be loaded inside larger-diameter pipe, except when loaded below top of car sides.
10. Pipe located on the outside of pile must contact all stakes used on that pile.
11. Suitable nesting, blocking, or securement must be used to fill in crosswise voids.

Reference the General Rules in Section 1 of the Open Top Loading Rules Manual for additional details.

