Scrap Metal Bales – Braced with Bull Boards at Rear of Load

Scrap metal bales are loaded in an offset pattern, generally one-two layers high, from nose to rear of container equipment.

The weight of the scrap metal bales must be distributed evenly both longitudinally and laterally in the trailer or container. Lading weight must be distributed evenly over the entire surface area of the equipment floor, with no more than 25,000 lbs. in any ten (10) linear feet or 2,500 lbs. per linear foot, regardless of commodity.

It is the shipper’s responsibility to prevent leakage (oil, grease, water, anti-freeze, etc.) from the scrap metal product. All liquids should be drained or removed from the lading. If residual liquids cannot be eliminated from the lading, equipment floor liners or absorbent are alternatives to prevent leakage through the equipment floor.

Wood floor blocking is required to restrict lateral movement of lading. Each stack of baled scrap metal is restrained with one 2”x4”x18” piece of lumber, which is secured to the equipment floor with four 16d nails placed in a staggered pattern. A staggered nail pattern prevents the nails from splitting the wood.

The rear of the load is secured with 2”x4” or 2”x6” bull boards in order to restrict longitudinal movement of lading. The bull boards may be inserted into the slotted door posts or corrugated sidewalls of the container equipment. The bull boards are nailed to vertical 2”x4” stabilizers in order to prevent displacement. Plywood buffer protection may be placed between the lading and the bull boards.

Bull Boards: The size and number of bull boards utilized will be determined by the net lading weight that is being restrained. Based upon the “load restraining capacity” of 2”x4” and 2”x6” bull boards summarized on the loading diagram, a 40,000 lb. load would require securement with five 2”x6” bull boards.
LOAD RESTRAINING CAPACITY

<table>
<thead>
<tr>
<th>RESTRAINT DEVICE</th>
<th>CAPACITY</th>
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<tbody>
<tr>
<td>2&quot; X 4&quot; BULL BOARD</td>
<td>5,600 LBS</td>
</tr>
<tr>
<td>2&quot; X 6&quot; BULL BOARD</td>
<td>8,000 LBS</td>
</tr>
<tr>
<td>2&quot; X 4&quot; &quot;T&quot; BRACE</td>
<td>7,000 LBS</td>
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“T” BRACE METHOD OF REINFORCING BULL BOARD. SHOWN BACKWARDS FOR CLARITY.

PLYWOOD BUFFER MATERIAL PLACED BETWEEN LADING & BULL BOARDS HELP EVENLY DISTRIBUTE LADING FORCES

SCRAP METAL LOAD SECUREMENT

1.) Bales of Scrap Metal Loaded in Offset Pattern, Two Layers High, from Nose to Rear Doors of Container Equipment.
2.) Lateral Floor Blocking = 2"x4"x18.” Floor Blocking Utilized for Each Stack of Two-High Bales, Secured with Minimum of 4 Nails (16d).
3.) Bull Boards Secured into Slotted Doorposts at Rear of Load. Plywood Buffer Protection placed between Bales & Bull Boards.

MITER CORNERS TO SIMPLIFY DROPPING BULL BOARDS IN PLACE