

BEST PRACTICE TO TRANSPORT

Purpose:

Maersk is committed to ensuring the overall safety of maritime transportation. Therefore, we have created this easy reference document as a step-by-step guide to book certain commodities, which is intended to support the safety of our crew at sea and shoreside, as well as safety of cargo, environment, vessels, and facilities. This Best Practice gives you the needed guidance on correct stuffing.

Commodity:

Steel Plates > 2.0 mt / plate or bundle

Steel Slabs > 2.0 mt / slab or bundle

Steel Sheets > 2.0 mt / bundle

Commodity Code:

Steel & other metal Coils, Sheets, Pipes, Bars, Tube articles with per unit weight more than 2 tons

Booking via other channels

002317 Steel & other metal Coils, Sheets, Pipes, Bars, Tube articles with per unit weight more than 2 tons

Description and Definition:

Steel Plates and Slabs falls under the category of High Density commodity, as the weight is relatively high compared to cargo volume. This condition requires special handling and stuffing.

Synonyms:

Road Plates, Iron Mats, Metal Plates, Construction Plates, Iron Plates

Risk:

Steel Plates represents a high risk of damage to our equipment and subsequently injury/fatality to persons onboard and ashore. This Best Practice sets out to guide on safe loading and securing within standard containers to ensure it is within the limitations of the equipment.

The highest risk is that the plates/slabs are not secured for movement and exit the unit through side-, end- wall or door-end.

Stuffing Q&A:

- 1. What Transportation Unit can be used?*
We accept this cargo in standard 20" dry containers and Flatracks.
- 2. What Transportation Unit cannot be used?*
Non-operating reefers, Refrigerated units, 40" and 45" standard dry or HC.
- 3. How does the container have to be stuffed?*
Cargo shall be stuffed in accordance with CTU code. This includes securing for tipping and sliding in longitudinal and transverse direction. Forces towards side- and end-wall shall be distributed evenly throughout the full length/width.
Forces towards door-end shall be arrested by a bulkhead/barrier anchored in the corner posts.
To avoid that allowable point is exceeded, Maersk has chosen a simplified approach as given below in *Stuffing Instructions*.
- 4. Can dunnage bags be used for securing?*
Maersk have decided NOT to accept dunnage bags due to the variety of application and quality of

dunnage bags.

An exemption of this restriction might be applied for.

Mandatory Documentation:

After booking, customers will receive a request for documentation that shows the following:

- Plate/slab(s) weight and dimension.
- Stuffing methodology.
- Plate/Slab(s) weight are distributed on sufficient bedding to avoid exceeding point load.
- Sufficient securing for longitudinal and transverse movements.
- Plate/Slab(s) are prevented from tipping.
- Plate/Slab(s) are lifted from floorboards.
- Forces towards door end is arrested in corner post by a bulkhead.

Stuffing Instructions:

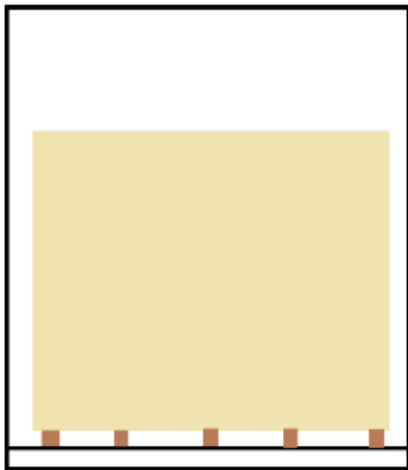
To avoid that allowable point load are exceeded, bedding timber under the cargo is an absolute must. This can be calculated on a case-by-case basis, but to simplify, MAERSK have following standards for bedding:

All steel plates/slabs, regardless of weight and dimensions, shall be bedded on;

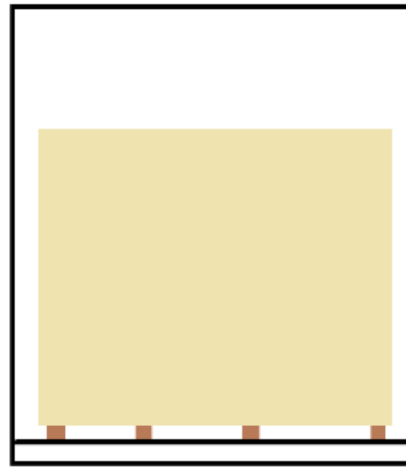
5 pieces 100 x 100 mm wood, with length exceeding the plates of 30cm in each end.

Or

4 pieces of 150 x 150 mm wood, with length exceeding the plates of 30cm in each end.



100 x 100 mm configuration



150 x 150 mm configuration



Configuration from above

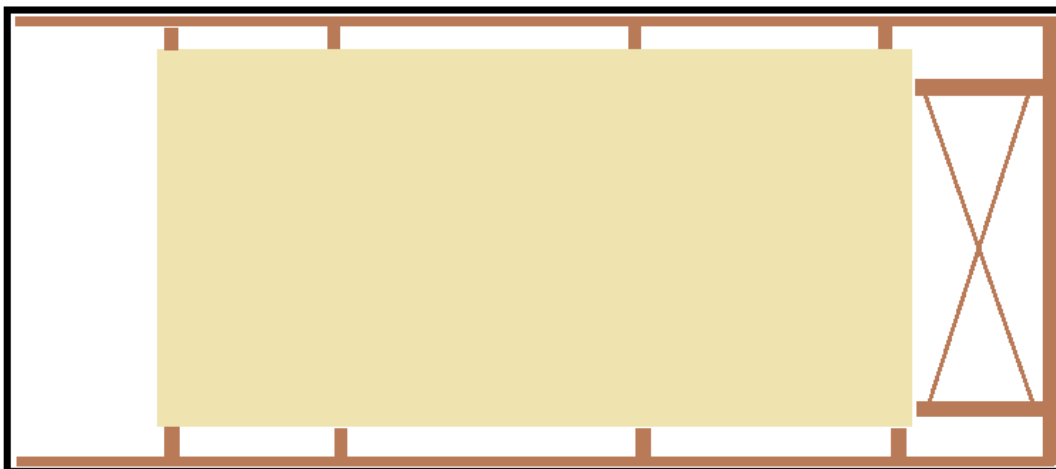
To avoid that the plates/slabs slide in transverse and longitudinal direction, it needs to be secured by wooden bracing.

With reference to CTU Code, the weight needs to be distributed throughout the full length of side- and end walls.

Bracing needs to be applied at full height of the cargo.

Bracing needs to be applied with wood, being minimum 100 x 100 mm dimensions.

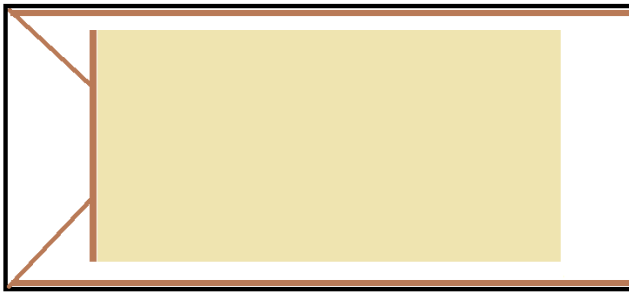
Compression members to be minimum 4 pcs in total for each sidewall, and 2 for end-wall.



Bracing configuration

A bulkhead needs to be inserted towards the doors, with the purpose of having the corner-posts to absorb the forces.

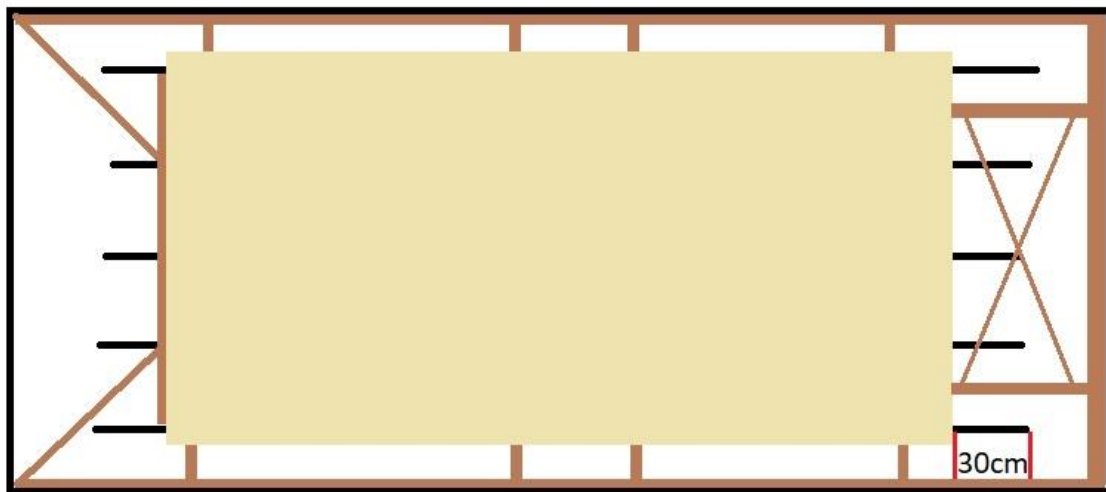
Bulkhead can either be inserted in between the recess in cornerposts and supported by compression members or constructed as V-shape towards same recess.



Bulkhead V-configuration



Bulkhead with compression members



Stuffing, full configuration

Links to Additional Information & Industry Standards:

[Code of Practice for Packing of Cargo Transport Units \(CTU Code\)](#)

[Informative Material Related to the IMO/ILO/UNECE Code Of Practice For Packing Of Cargo Transport Units \(CTU Code\)](#)

[CINS / TT Club Transport of Coiled Materials in Containers](#)

Last revision date: 23-02-2024

Revision History

Version	Date	Changes	UID
1	21-04-2023	Transfer to new template. Simplified text and updated illustrations.	ONB003