

# WEIGHT DISTRIBUTION

»» Guideline

# Weight distribution in containers for safe transport.

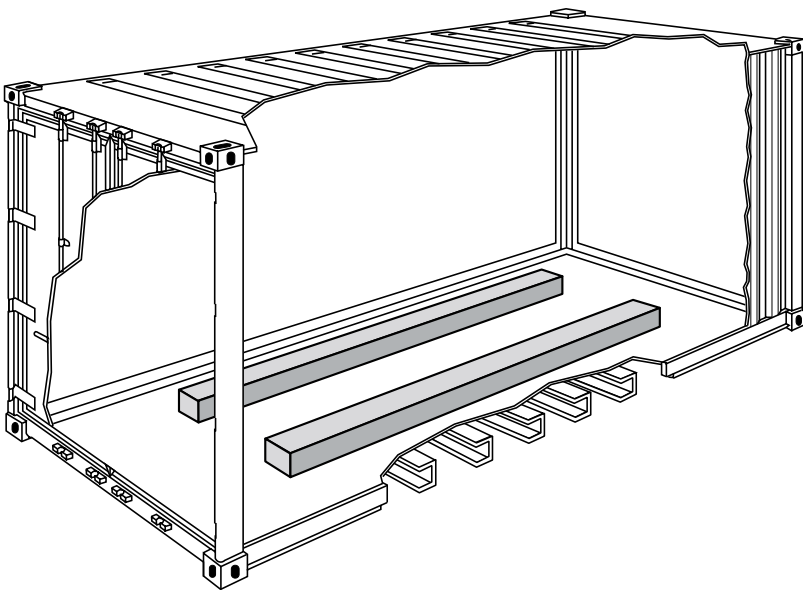


This guide explains the correct weight distribution on container floors and is based on the CTU Code of Practice and the loading diagrams and floor limits of our containers. We do not override and enhance the lashing requirements of the IMO/ILO/UNECE CTU Code of Practice and the IMO Code of Safe Practice for Cargo Stowage and Securing. Both contain more detailed instructions on cargo securing.

The weight distribution differs fundamentally between General Purpose, Open Top, Hard Top containers and Flatracks. The following

information applies specifically to Hapag-Lloyd containers. For other containers with similar payloads, the figures below can also be used.

Hapag-Lloyd General Purpose, Open Top and Hard Top containers are available with a wooden floor and with a steel floor. The maximum spread load is defined as weight per running meter. This means that the maximum weight of the cargo depends on the length that it rests on the container floor. This limit and the maximum payload of the container itself should not be exceeded.

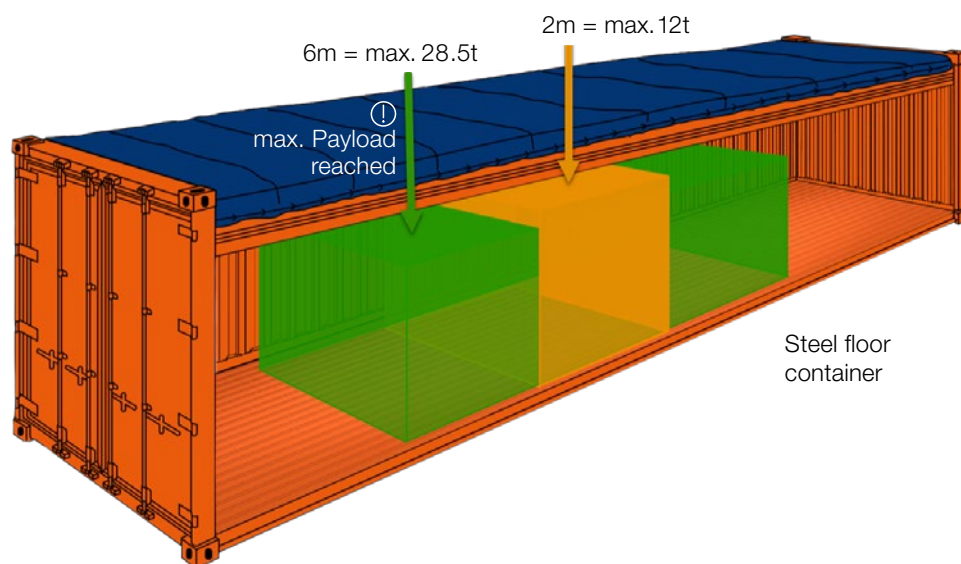


It is possible to extend the resting length of the cargo by using solid wooden or steel beams, but not more than 100 cm at each end of the load. It is important that the weight is distributed lengthwise on the container floor.

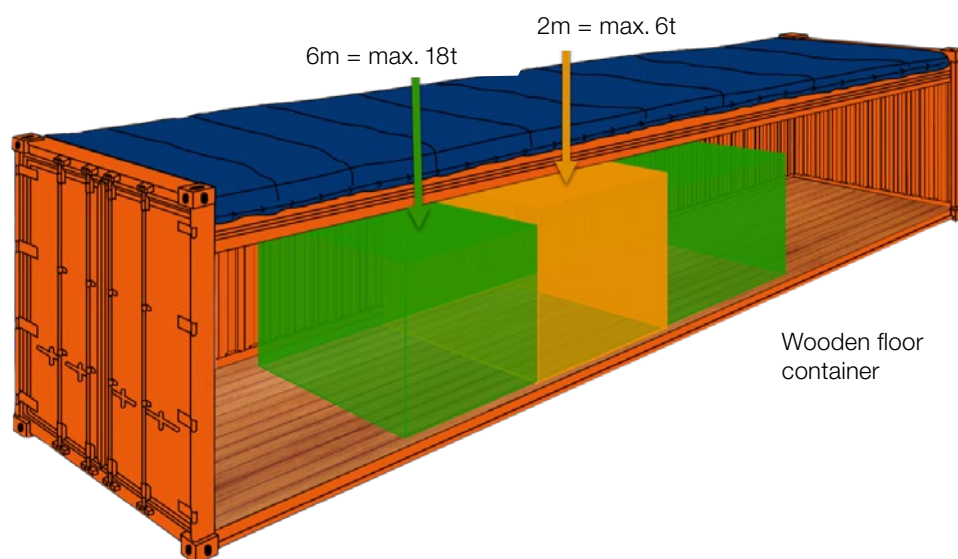
# General Purpose, Open Top & Hard Top Containers

» Maximum payload related to the Resting Length

Steel floor	20'	40'
1m	7,6t	6t
2m	15.2t	12t
3m	22.8t	18t
4m	30.2t	24t
5m	30.2t	28.5t
6m	30.2t	28.5t
7m		28.5t
8m		28.5t
9m		28.5t
>9m		28.5t



Wooden floor	20'	40'
1m	4,8t	3t
2m	9.6t	6t
3m	14.4t	9t
4m	19.2t	12t
5m	24t	15t
6m	28.8t	18t
7m		21t
8m		23t
9m		26t
>9m		28.4t



# Flatracks

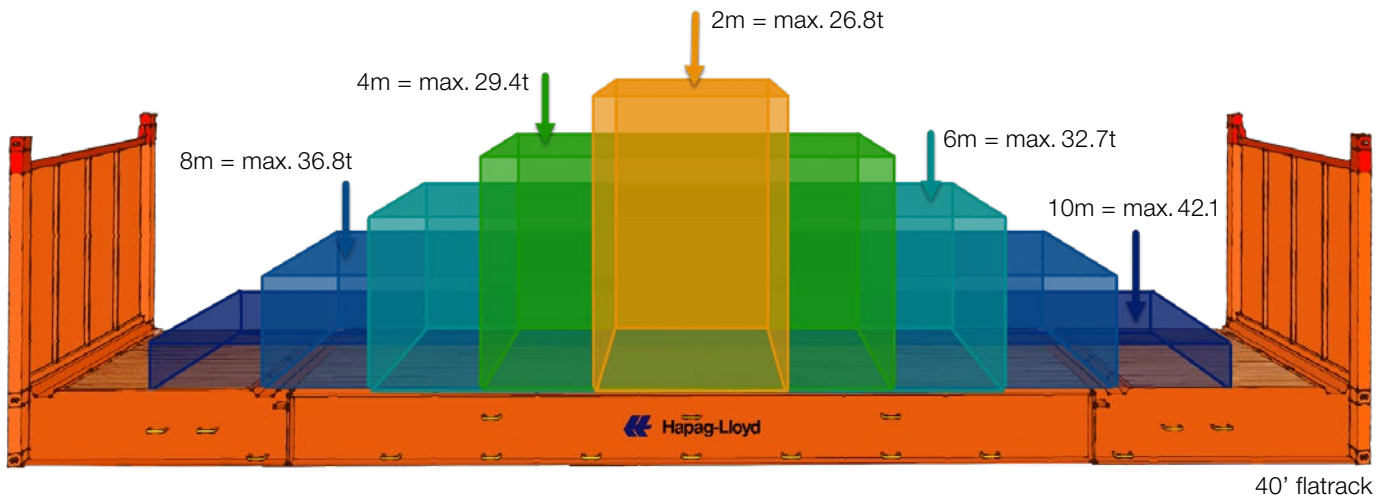


Hapag-Lloyd flatracks are designed for the transportation of heavier and more concentrated loads than standard containers. The main strength of a flatrack lies in the two outer floor beams, so that the cargo must either rest on these or the weight must be transferred to the beams via cross beams.

Although a maximum payload is stated on each flatrack, the maximum permissible weight is calculated from the resting length of the load itself.

The maximum payload is a theoretical value and can only be utilized if the weight of the load is distributed over the entire length of the main beams of the flatrack. A shorter support length results in a lower permissible load. Half of the payload can be loaded in any way, regardless of the length of the load.

It is possible to extend the length using strong timber or steel beams, but not more than 100 cm at each end of the load. Other special bedding arrangements (e.g. point load) can be clarified with the Hapag-Lloyd Special Cargo Department if the footprint of the cargo is specified.



## Maximum payload related to the Resting Length

Flatrack	20'				40'			
	27.9t	31.2t	37t	42.1t	39.3t	44t	49t	54.2t
2m	16.7	18.7	22.2	25.2	21.4	24.0	25.6	29.5
4m	20.9	23.4	27.7	31.5	23.5	26.4	29.4	32.5
6m	27.9	31.2	37.0	42.1	26.2	29.3	32.7	36.1
8m					29.4	33.0	36.8	40.6
10m					33.6	37.7	42.1	46.4
12m					39.3	44.0	49.1	54.2

In the interest of the safety of the crew, vessel, equipment, and terminal facilities, including stevedores, Hapag-Lloyd reserves the right to inspect flatracks and containers prior to loading and to refuse loading in the event of stowage and/or securing deficiencies.

If you have any questions or require a specific solution for a particular cargo, please contact the Hapag-Lloyd Special Cargo Department as follows:  
[special.cargo@hlag.com](mailto:special.cargo@hlag.com)

