## Modular LEGO® Intermodal Standard

Brought to you by collaboration of Brick Model Railroader and Brick Train Depot.

## Purpose:

The purpose of this standard is to allow for builders to build and collaborate on intermodal equipment. It will define the lengths, widths, and heights of containers that are based on real world container sizes.

## Scale:

All dimensions are scaled based on 8 studs to 10 feet.

## Dimensions:

Width: Containers will be 6 studs wide.
Real containers are 8 feet wide which is 6.4 studs. The rounding down is to allow for more available constructions types.
Length: The lengths derived shall be as follows:

- $20^{\prime}=16$ studs
- $40^{\prime}=32$ studs
- $45^{\prime}=36$ studs
- $48^{\prime}=38$ studs
- 53 = 42 studs

The rounding is to allow for whole integer dimensions.
Height: The heights derived shall be as follows:

- Standard ISO height ( 8 '- 6 ") will be 19 plates with the top layer being tiles.
- High cube containers ( $9^{\prime}-6^{\prime \prime}$ ) shall be 21 plates with the top layer being tiles. This is also the maximum allowed height.
The rounding is to allow for more construction types and to match the containers from LEGO® set 10219 Maersk Train.


## Connections:

Bottom: The bottom connection is to be LEGO® part 35480, Plate, Modified $1 \times 2$ Rounded with 2 Open Studs. The plate can be oriented longitudinally or laterally as long as one of the two studs is in each corner.
For $40^{\prime}$ and longer there shall be a plate placed longitudinally at the center of the container to allow for $20^{\prime}$ containers to be stacked under longer lengths.
For lengths longer than $40^{\prime}$, there will need to be additional connection points for $40^{\prime}$ containers centered on each container ( 32 studs apart).
Top: $\quad$ The top connection is strongly recommended to be LEGO® part 20482, Tile, Round $1 \times 1$ with Bar and Pin Holder. This is not a hard requirement as any $1 \times 1$ plate or $1 \times 1$ round plate can also be used. The connection points are at each corner for $20^{\prime}$ and $40^{\prime}$ containers.
For lengths longer than $40^{\prime}$, there will need to be connection points for $40^{\prime}$ containers centered on each container ( 32 studs apart).

For further reference see the images at the end of this document.

## Trailers:

Connection height for trailers shall be 9 plates tall and shall be a smooth surface with a hole for the connection of the trailer. Part number 15535 Tile, Round $2 \times 2$ with Hole is recommended.

Please Note: For all images below, part 35480 is Dark Bluish Gray and part 20482 is Light Bluish Gray. The extents of the container is marked with a white tile.

20' container connections


40' container connections


45' container connections


48' container connections


53' container connections


Trailer connection height


