

Informal meeting on Code of Practice for Packing of Cargo Transport Units

at the request of the United Nations Economic Commission for Europe Working Party on Intermodal Transport and Logistics

Geneva and virtual, 29-30 September 2021 (second meeting)

Item 4 of the provisional agenda

Updates to the CTU Code

Stowage and Fastening of Bulk Goods

Submitted by the Russian Federation

1. Bulk goods in containers shall be carried with use of disposable liners.

A liner into a container shall be made of the two-ply fabric propylene with a density not less than 120 g/m² (woven polypropylene of high strength, and polypropylene coating (lamination) on the inner side).

A liner shall, at its surface, have a marking that contains the following (for example):

- trademark (manufacturer's name);
- name of product and its specifications;
- number of product;
- date of manufacture.

2. Containers for the stowage of liners with goods shall have a doorway groove for fastening the beams of the doorway shield.

The inner surfaces of the walls and floor of a container shall not have any mechanical damage and sharp edges, protruding or loose screws, welded seams, or marks indicating repairs that are made on the inner surface.

3. The following shall be installed for fastening the liner in a container:

- end shield;
- doorway safeguarding shield.

The height of shields shall exceed the height of loading not less than by 100 mm.

At the end wall, full width, a shield made of plywood sheet with a thickness not less than 8 mm, position 5. It is permitted to install an end shield composed of two plywood sheets, by width, and with an overlapping value not less than 200 mm in the middle part.

The liner installation shall be executed from the rear wall of a container to the doorway opening. Sequentially, beginning with the rear wall, the upper part of the liner shall be fixed to the upper bracing facilities of a container, using the strips sewn to the liner for this purpose. The lower part of the liner shall be fastened by the lower bracing facilities of a container, and the liner material's adjoining the container walls shall be provided by the tension of strips (Figure 23).

Figure 23



The container doorways shall be safeguarded by shields made of a sheet of plywood with a thickness not less than 8 mm, full width, and six steel beams with a section not less than 50x70 mm and thickness not less than 3 mm. The steel beams shall be installed in the grooves of corner posts of a container, equally spaced by the height of loading, and shall be fastened by straps that shall be tied in a double knot to the wire rods of the shoot of the container corner posts. It is permitted to install a sheet of plywood composed of two parts, by width, and with an overlapping value not less than 200 mm in the middle.

The steel beams shall be fastened to the safeguarding sheets by means of textile straps or plastic clamps.

If available, the liner unloading chute located below shall, prior to loading, be firmly tied by strings available (Figure 24).

Figure 24

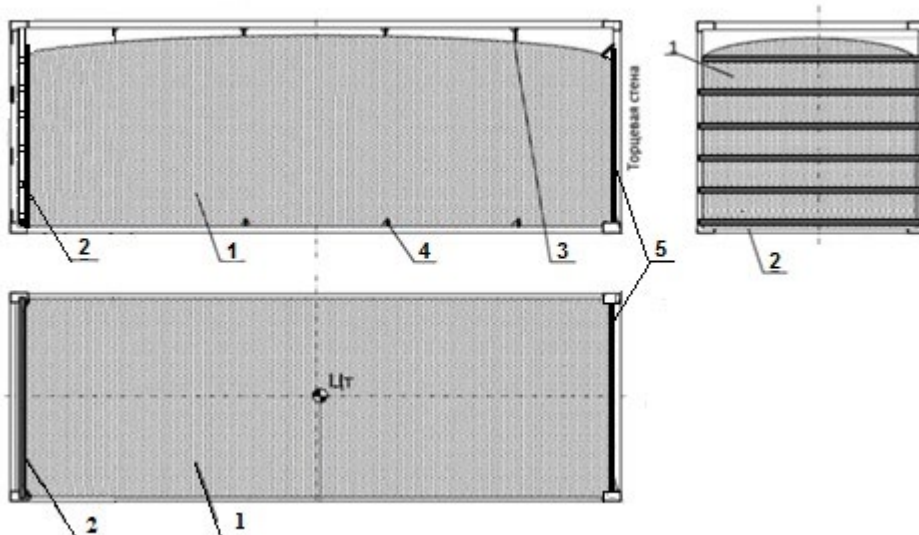


4. Loading of bulk goods shall be executed through the loading opening of a liner or loading chute, which shall, after completion of loading, be buttoned or tied subject to the container’s design.

Loading shall be performed in a smooth flowing manner in the container floor space (Figure 25). The maximum loading height shall not exceed the level by 100 mm lower than the upper edge of the doorway opening safeguard or end wall of a container.

Figure 25

Pattern of stowage and fastening of a liner with goods



- 1 – liner with goods; 2 – shield for safeguarding the doorway opening;
- 3 – strips for fastening a liner with upper bracing facilities of a container;
- 4 – strips for fastening a liner with lower bracing facilities of a container;
- 5 – shield made of a sheet of plywood.