Presentation of Quality & Logistic Eng.

Load units and pallets

Criteria for proper palletization of goods entrusted to Fresh Ways





Load units







Criteria for proper LU



Definition of LU

The Load Unit (LU) refers to the basic unit used for **storage and transportation**, placed on a modular support or packaging (such as a crate, pallet or container) to ensure **efficient handling**. In industry jargon, it is commonly referred to as a **pallet** or "bancale", meaning the wooden platform with goods placed on top.

When preparing **LUs** to be entrusted to Fresh Ways, please ensure compliance with the following essential criteria:

Stable goods, placed **entirely within the pallet perimeter**, securely fastened to the pallet using stretch film and/or strapping.

- Compact load with weight evenly distributed across the pallet.
- **Load unit sealed** on **all sides**, including the top.

In general, it is required that the goods are **completely secure**, both in terms of **protecting the products themselves (Food Defence)** and ensuring the **stability of the load** for safe handling with mechanical equipment and transportation



LU – Load Unit

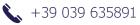


Criteria for proper LU

Further details and insights:

- **PALLET**: the goods must **not exceed the pallet support area**, which must be made of wood (plastic pallets are not suitable for temperature-controlled transport, especially for frozen goods);
- **DIMENSIONS**: in general, the LU must comply with the standard dimensions of 80 cm x 120 cm and a maximum height of 180 cm (including the pallet height). Any exceptions (such as UK pallets or greater height) must be agreed upon contractually;
- **SEALING**: LUs must be sealed and wrapped with stretch film:
- the sealing must be applied completely on all sides of the LU (height, width, and top) in a way that preserves the integrity and safety of the products (Food Defence);
- the sealing must not entirely cover the pallet base to allow handling with pallet jacks and proper air circulation in the loading compartment of refrigerated/frozen vehicles.
- **IDENTIFICATION**: the **final destination** of the goods must be **clearly identified** on each LU to prevent operational errors.





Criteria for proper LU

When entrusting Fresh Ways with a **composed LU** (consisting of multiple pallets) destined for the same location, the following guidelines must be followed:

- an LU containing more fragile or lighter products must not be placed underneath another LU with heavier products.;
- the composed LU must be properly sealed and secured to form a single unit (the two parts must move together and not be handled separately);
- the composed LU must be clearly labeled with the final destination of the goods;
- if possible, place a suitable horizontal cover between the upper and lower LUs to ensure even weight distribution on the lower unit.







Examples of proper LUs













Examples of improper LUs



Stretch film not secured to the pallet



Damaged stretch film



LU not wrapped on the top side



Insufficient film on the sides and missing on top



Goods exceeding the pallet area



LU out of shape and not properly wrapped

resh Wavs

Logistics & Warehouse



LU not wrapped and pallet unsuitable for temperature-controlled transport



LU not sealed





Unbalanced load



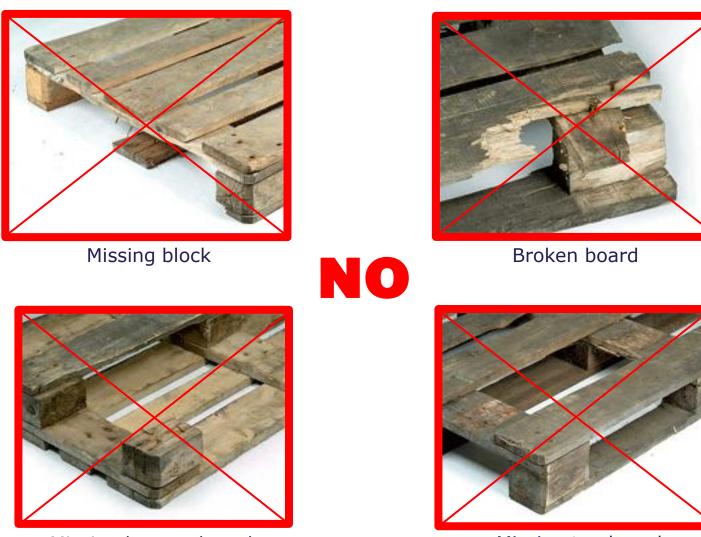








Examples of incorrect pallets



Missing bottom board









Pallet: EPAL suitable for exchange



AGGLOMERATE BLOCK

WOODEN BLOCK

The block can be made of both **wood and agglomerate**; both materials are **allowed by the Epal** technical specifications.



NEUTRAL CENTRAL BLOCK (WITH NAIL)

On a **repaired and interchangeable Epal pallet**, the production staple may be absent if the block was replaced during the repair.

BLACK STAPLE

If there is a nail, it indicates that the repair has been carried out, making the pallet interchangeable.



YELLOW STAPLE The production staple can be either yellow or black.

The **black staple** is used by Level 2 producers. The **yellow staple** is used by Level 1 producers.





VARIOUS EXAMPLES OF ISPM 15 MARKING REMOVAL



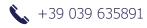
Epal pallets may have a darkened or unmarked central block: This is **not a defect** if there is a repair nail (on one of the two sides). It means that the Epal-certified repairer **does not have the license** to repair under the **ISPM 15 phytosanitary regulation**, required for pallets intended for export outside the EU. Therefore, the repairer **removes the IPPC logo** and applies the repair nail. In the absence of other defects, the pallet is **interchangeable** but **not suitable for export**

outside the EU.

The removal of the **Fitok mark** on the central block is not a reason for rejection on its own.



3



Pallet: EPAL NOT suitable for exchange



A board is damaged and exposes the nails



A block is missing or damaged



A board is damaged



A board is missing



More than 2 boards are damaged

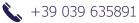


The **EPAL mark is missing** on the **side blocks** (if the pallet was produced after August 1, 2013); The **EUR mark on the right** and the **EPAL mark on the left** are missing (if the pallet was produced before August 1, 2013)

Other characteristics General poor condition

- The load capacity can no longer be guaranteed.
- The **pallet** is particularly **dirty** (e.g., residues of chemicals, paint, used oils, etc.).
- · Significant chipping on several blocks.
- It is evident that **unauthorized components** have been used in the pallet's **manufacturing** or **repair** (e.g., used materials for repairs).





Thank you





