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General packaging guidelines for delivery packaging

Process owner: Packaging Management



Written by	Released by	Release date	
Processes & Packaging Management	Denis Dubs	28.06.2022	



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1. Abbreviations

ABS	Acrylonitrile butadiene styrene
DIN	German Institute for Standardisation (Deutsches Institut für Normung)
EN	European Standard
FSC	Forest Stewardship Council
ISO	International Standards Organisation
IPPC	International Plant Protection Convention
ISPM	International Standards for Phytosanitary Measures
PE	Polyethylene
PP	Polypropylene
PS	Polystyrene

2. Contact

For all information, queries and authorisation requests, please contact Vitra Packaging Management:

Vitra

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3. Aim

This guideline sets out packaging rules for deliveries between the Vitra Group (hereinafter referred to as 'Vitra') and its direct material suppliers (hereinafter referred to as 'Suppliers'). It applies to all Vitra delivery locations, which are hereinafter grouped under the term 'Vitra plants'.

By establishing rules for packaging processes, setting out specifications for the choice, design, material and dimensions of packaging, as well as defining the quantity of goods per load unit, Vitra – in coordination with its Suppliers – aims to ensure a smooth flow of materials, based on qualitative, economic and ecological aspects.

The Supplier is always responsible for protecting and delivering its products in compliance with the agreement. The supplier shall use suitable containers and materials for the delivery packaging in accordance with the following specifications. Information on the delivery packaging and any changes to it must always be communicated to Vitra and approved by Vitra. These details will be formalised in a contractual agreement (see chapter 5).

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4. Definition of terms

A **packing unit** (also called a package or parcel) is the smallest unit of packaged goods or packaging. It is put together by the shipper and represents the smallest logistical handling unit. It is not undone during transport, handling or storage.

- **Packaged goods** describe goods that are to be put in packaging for reasons of protection, logistics or to convey information.
- **Packaging** for goods consists of individual packaging types and packaging aids, which are in turn made up of a variety of packaging materials.
 - <u>Packaging materials</u> describe materials from which packaging is manufactured (wood, metal, corrugated card, paper, plastic etc.).
 - <u>Packaging types</u> describe the object in which the packaged goods are packed (cardboard box, carton, bag, sack, etc.)
 - <u>Packaging aids</u> increase stability and/or make different packaging types more functional (adhesive tape, strapping, film, interleaves, void fills, etc.).

For the purpose of transport, handling and storage, packing units often have to be grouped into **load units**. For this purpose, several packing units are usually combined into larger logistical units by means of suitable outer packaging, load carriers and loading aids. Some packing units are already very large and heavy on their own and cannot be transported without aids.

- **Outer packaging** often serves to group several packing units (pallet box, container, etc.), but can also provide added protection for individual packing units (transit box, sack, etc.).
- **Load carriers** are used to bear one or more packing units (with or without outer packaging) during transport (pallets, pallet cages etc.).
- <u>Packaging aids</u> (film, padding, void fills etc.), on the other hand, stabilise and secure several packing units during transport mostly on a load carrier.

Packaging, outer packaging and load carriers can also be divided into disposable and reusable **packaging types**.

- **Disposable packaging** covers all packaging, outer packaging and load carriers that are only intended for one-way transport and are not returned.
- **Reusable packaging** covers all packaging, outer packaging and load carriers that are intended for several transport cycles and can be returned after use.

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5. Contractual specification of delivery packaging

5.1. Packaging agreement

Once Vitra has placed an order, the Supplier is obliged to contact Vitra Packaging Management. Prior to the first delivery, the Supplier and Vitra shall jointly determine the type of packaging for the goods to be delivered.

Specific requirements for packaging and the delivery concept are to be recorded in writing between the Supplier and Vitra Packaging Management using the **Packaging agreement inbound** template. This can be accessed by the Supplier on the Vitra Supply Chain Management Portal under the section 'Packaging information' (<u>link</u>).

The packaging agreement must be completed and returned to Vitra for approval before the first delivery. Vitra Packaging Management will check the information provided. Vitra will inform the Supplier if any changes are required.

Vitra also reserves the right to propose its own packaging concept and stipulate specific requirements for the Supplier's packaging. The proposal must be checked by the Supplier for feasibility and safety.

The Supplier undertakes to provide the individual estimated costs for packaging at Vitra's request.

After final approval, the packaging agreement shall become an integral part of the contract between Vitra and the Supplier.

5.2. Test delivery

If necessary, Vitra may request a test delivery from the Supplier to the receiving plant.

5.3. Subsequent modifications

Subsequent changes to the packaging concept as defined in the packaging agreement must be agreed in advance with Vitra Packaging Management. Modifications must be documented in the packaging agreement and approved by Vitra.

5.4. Damage

The cost of damage incurred during transport, handling and storage as a result of packaging that does not meet the requirements or comply with the agreement shall be charged to the Supplier.

5.5. Additional measures

Should other measures, in addition to the requirements outlined here or agreed between Vitra and the Supplier, be necessary in the Supplier's experience to protect the materials, these must be communicated to Vitra and agreed upon.

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6. Specifications for delivery packaging

6.1. General specifications for delivery packaging

6.1.1. Functionality of delivery packaging

Unless otherwise agreed, packaging for delivery to Vitra must fulfil the following general criteria:

- Protection against damage and soiling of the packaged goods during transport, handling and storage
- Optimum utilisation of packaging types and load carriers
- Securing of the packing and load units during transport
- Guarantee of stackability
- Suitability of load units for unloading using forklift trucks and via a ramp
- Compliance with specified standard dimensions
- Consideration of climatic conditions during transport with regard to corrosion and moisture protection
- Compliance with all hazardous goods regulations and safety measures in case of delivery or transportation of hazardous goods,

6.1.2. Consideration of economic and ecological aspects

The packaging concept should always consider not only on economic but also ecological aspects. The waste management objectives of environmental legislation include:

- avoiding packaging

i.e. limiting it to what is absolutely necessary.

reducing packaging

i.e. the utilisation of reusable packaging. As a rule, reusable packaging is to be given preference over disposable packaging, provided that this has no major functional or economic disadvantage, and that there is nothing to prevent the return of packaging from an ecological standpoint.

- **recyclability of packaging materials** Environmentally compatible recyclability of materials must be guaranteed for both reusable and disposable packaging.

6.1.3. Measurements and maximum weight

A load unit must not exceed a dimension of 1200 x 800 x 1000 mm and must be stackable at least two units high. The maximum height of 1000 mm includes the load carrier.

A single packing unit (single cardboard box) must not exceed a gross weight of 15 kg.

If these requirements cannot be met, the Supplier is obliged to inform Vitra prior to delivery. Deviations must be approved by Vitra Packaging Management.

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6.1.4. <u>Labelling</u>

All packing and load units must be clearly labelled and are to display at least the following information:

- Weight
- Quantity
- Vitra article number
- Material designation

6.1.5 Position of the label

Description: 0201

Assembly: M/A



When reusing packaging, care must be taken to ensure that any existing markings and labels must be removed before delivery to Vitra.

6.2. Particular specifications for reuseable packaging

6.2.1. Reuseable packaging and load carriers

The following **reuseable load carriers** may generally be used for deliveries to Vitra plants:

Euro / DB pallet: as per DIN 15146

- Dimensions of footprint: 1200 x 800 mm
- Only Euro pallets with IPPC marking are accepted. This has been mandatory for Euro pallets since 01.01.2010. You can find more information at https://www.epal-pallets.org/eu-en/load-carriers/epal-euro-pallet
- Pallets must comply with pallet quality class B or higher and be exchangeable and serviceable.
 - If this is not complied with, Euro/ DB pallets will not be refunded and will be disposed of.

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Pallet cages: as per DIN 15155

- Dimensions of footprint: 1200 x 800 mm
- Pallet cages must be exchangeable and serviceable.
- If this is not complied with, pallet cages will not be refunded and will be disposed of.

The use of other reusable load carriers and packaging is in principle also possible, but the Supplier must consult with Vitra and obtain the latter's approval before the first delivery.

If certain packaged goods can only be transported in **special containers** due to their characteristics (size, shape), the Supplier shall consult with Vitra Packaging Management prior to the first delivery. The responsibility for planning and construction lies with the Supplier and Vitra's specifications must be observed. Approval from Vitra Packaging Management is mandatory for the use of special containers.

6.2.2. Materials for reuseable packaging

Vitra authorises the following materials for reuseable packaging:

- Wood: for Euro/ DB pallets As a rule, only wood packaging that complies with IPPC standard ISPM no. 15 'Regulation of wood packaging material in international trade' is to be used for deliveries.
- **Steel**: for pallet cages
- **Plastics**: the following types of plastic are authorised for reuseable special containers approved by Vitra:
 - o ABS
 - o PE
 - **PP**
 - **PS**

For the use of other types of materials, the Supplier must obtain Vitra's consent prior to delivery. The Supplier shall provide Vitra with a data sheet on the material in question at the latter's request.

6.2.3. <u>Return transport of reuseable packaging</u>

Responsibility for organising the return of reusable packaging, as well as the associated costs, is always based on the Incoterms agreed between the Supplier and Vitra for the delivered goods. The exact procedure must be discussed with Vitra Packaging Management before the first delivery.

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6.3. Particular specifications for disposable packaging

6.3.1. Disposable packaging and load carriers

The following disposable packaging may *generally* be used for deliveries to Vitra plants:

- Cardboard packaging, bags and sacks

The following disposable packaging may only be used for deliveries to Vitra plants *after prior agreement between the Supplier and Vitra*:

- Disposable pallets (different sizes)
- Disposable crates
- Special disposable containers

The following minimum load capacity requirements apply to **disposable pallets**:

- Size 600 x 800mm Minimum load capacity: 250 kg
- Size 1200 x 800mm Minimum load capacity: 500 kg

Furthermore, to ensure smooth handling with lifting equipment, it is necessary that the fork openings (the space between the floor and the deckboards of the pallet) are 95 mm high.

Disposable cardboard boxes can be used in modular sizes so that mixed pallets are also flush.

The following dimensions are specified for cardboard boxes: **length [mm] width [mm] height [mm]**

	L	W	н	_
1	1200	800	300-900	'Pallet box
1/2	600	800	300-900	
1/3	400	800	300-900	
1/4	600	400	200-450	
1/8	300	400	200-450	

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6.3.2. Materials for disposable packaging

Materials used for disposable packaging must be recyclable according to the current state of knowledge. The recycling system for companies in Germany is used as a benchmark. In order to maximise the recyclability of disposable packaging, the number of different materials used in individual packaging must be kept to a minimum. Furthermore, preference should be given to the use of packaging material made from recycled material.

Vitra authorises the following materials for disposable packaging:

- Plastics

The following types of plastic are authorised for bags, sacks or special disposable containers approved by Vitra:

- o PP
- o PE

The plastic used must be clearly identifiable by means of a material identification label. Should this not be possible in exceptional cases, the Supplier is obliged to provide Vitra with a data sheet before the first delivery.

- Wood

In general, only wood packaging that complies with the **IPPC standard** ISPM no. 15 'Regulation of wood packaging material in international trade' is to be used for delivery. FSC-certified wood types are preferred.

- Paper, cardboard, carton

Packaging made of paper or cardboard must be free of harmful substances during production. No newsprint or other printed paper may be used. Preference is given to packaging made of paper/cardboard/ carton with FSC certification.

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For the use of other types of materials, the Supplier must obtain Vitra's consent prior to delivery. The Supplier shall provide Vitra with a data sheet on the material at the latter's request.

6.4. Packaging aids

The following packaging aids can be used to form packing and load units:

- Plastic strapping
- At least 2 plastic straps must be used to secure the load on a pallet unless otherwise specified.
- Adhesive tapes made of PP, PE or paper-based.
- Adhesive dots and labels Adhesive dots and labels must be removable without leaving a trace, except on cardboard packaging.
- Air cushions made of PE or paper-based
- Interleaves made of corrugated cardboard
- Paper-based void fills

The use of polystyrene as an interleave or void fill is only permitted in special cases and after consultation with and approval from Vitra prior to the first delivery.

Stretch film made of PE may be used to wrap load units provided it does not squash the packing units and load carriers.

Other packing and loading aids may only be used after approval from Vitra prior to the first delivery.

6.5. Securing loads

Neither the goods nor the packing or loading aids may protrude beyond the edges of the load carrier.

If a load unit is made up of smaller packing units, these must be arranged to fit the standard dimensions of the load unit and be adequately secured from slipping.

The load unit must be configured in such a way that the goods remain undamaged during the transport, handling and storage processes.

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