Dansk Supermarked Group

PACKAGING INSTRUCTIONS

Revision 1.2, April 2016

Revision control

Major revisions version 1.2, April 2016:

- Netto part 4 replaced by Netto SRM manual
- Appendix A added with overview of Warehouse specific pallet requirements

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Introduction

How to use this instruction

Why is this packing instruction important for Dansk Supermarked?

Dansk Supermarked aims to keep a competitive position on all our markets. An important part of this objective is to give our customers the best possible value for money and our warehouse- and store staff the best possible working conditions in their everyday handling of the goods we sell in Bilka, Føtex and NETTO.

In order to achieve this, we need a close cooperation with you as a supplier, as you on a daily basis supply Dansk Supermarked with the most vital part of our business: The products we sell!

In that regard the ideal export carton is the one that passes through our warehouse and stores with the least possible handling. Therefore we have set up some simple requirements, to which we expect you to adhere. Dansk Supermarked wishes that you aim to develop your export carton with the intention of:

- Protecting the product during transportation through the entire chain of supply.
- Improving the stability of the export cartons.
- Insuring the correct labelling.
- Optimizing the export carton to warehouse requirements.
- Reducing picking time in the warehouse.
- Optimizing the export carton size to shelf space.
- Improving presentation in stores to increase sales.
- Removing the need for knives to open the export carton.
- Removing shrink wrap and other unnecessary paper and plastic from the stores.
- Meeting the provisions of the country specific Packaging Directives.
- Complying with the requirements of the EC and the Danish authorities.

How to use this manual

You need to use this manual as a guideline in how to choose the right export carton, packing method and delivery method for the product, in close cooperation with the buyer. The manual is divided into 4 parts:

- Part 1 a general overview of requirements for all warehouses (Needs to be read by all suppliers)
- Part 2 an overview of requirements for Føtex / Bilka Nonfood warehouse in Årslev
- Part 3 an overview of requirements for Føtex / Bilka Food warehouses
- Part 4 overview of requirements for all Netto warehouses

There are many details you have to take into consideration, so please read this guide carefully. This manual is a tool for both our buyers and our suppliers and is the basis of all packaging discussions.

This document is also available at www.dsg.dk.If you have any questions regarding this material, please get in touch with your contact person at Dansk Supermarked or send an email to logistics.dsn@dsg.dk.

Dansk Supermarked A/S

Although there is a difference in the concepts and sizes of all Dansk Supermarked's stores, they all depend on the same efficient supply chain – from the product arriving at our warehouse to the customer taking it home. It is important to understand that strengthening and streamlining the way we handle goods, is the key figure to strengthening our market position.

føtex

Føtex is a modern, family oriented supermarket, with high focus on customer service. In our Føtex stores food and nonfood products are placed side by side. There is a wide selection of products, varying from well-known brands to private labels of high quality. Føtex aims to keep the quality of all products high, especially the fresh food products. A typical Føtex store is approximately 3,000 sq. m., and has about 45,000 items in assortment. Føtex uses Sales Ready Packaging on some of the assortment, but is more likely to require Easy To Handle Packaging.

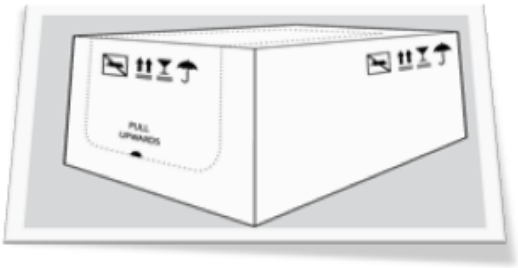
Bilka

Bilka is a low budget hypermarket, with more than 100,000 items in assortment. A Bilka store is between 8,000 and 15,000 sq. m, and includes amongst others a bakery, a delicatessen and a garden centre. A family restaurant is also located inside. Bilka has focus on a large range of products at low prices. Bilka also has an online shop, with a limited selection of nonfood products.
Bilka, like Føtex, requires Easy To Handle Packaging over Sales Ready Packaging.

Netto

NETTO is one of the leading discount stores in Denmark, and has a product range of approximately 1,200 items. This covers 90 % of the daily needs of a typical Danish consumer. NETTO is not only located in Denmark, but also in Germany, Poland ,Sweden and United Kingdom. NETTO stores are only about 700 sq. m., and are designed to be a convenient and quick place to shop.
At NETTO, Sales Ready Packaging is required on almost all products in the permanent assortment.

Part 1 – General instructions



Bilka

føtex

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Carton specifications

Easy To Handle Packaging

In order to improve efficiency through the supply chain, Dansk Supermarked is working towards as Easy To Handle export cartons as possible. Easy to handle for the warehouse employees, as well as the employees in the stores. Dansk Supermarked has identified the following criteria in order to define what Easy to Handle Packaging is: **Easy to identify, Easy to open and access, Easy to carry and store and Easy to dispose**. If you deliver in displays or in Sales ready packaging you also need to read the pages 40-45.

Easy to identify

- Employees must be able to identify the product even if the carton is not open
- Product description must fully reflect the product inside the carton
- Carton must have a label including;
    - DS order number, article number, product description, quantity, gross weight, purchasing department number and barcode
- Label must be printed on at least two opposite sides
- Carton must include handling symbols if applicable

Easy to open and access

- Improves the stocking of shelves in the stores
- The carton must be easy to open without the use of knife or other tools (ex. paper tape or perforation lid)
- Design of the carton should allow the employees to grasp the product inside with both hands when carton is opened
- There should be no sharp edges which can injure the employee
- Use as little cardboard, tape and plastic as possible, without compromising the durability and stability of the carton
- Use no unnecessary paper or plastic folded around the product inside the carton.

Easy to carry and store

- It is important for the working environment, that the cartons are easy to carry.
- The cartons must be able to withstand the automatic handling at our warehouse,
- The export cartons cannot weigh more than 12 kg. If a single carton exceeds 12 kg, it must be provided with grip holes and must be clearly labelled.
- The carton must be self-supported and stackable even when some products are taken out.

Easy to dispose

- The carton must be easy to fold and dispose of without the use of a knife or other tools.
- It is very time consuming having to sort cardboard and plastic when disposing of packaging, thus only use plastic when it is absolutely necessary.

The following pages will go into detail describing the good practice in carton specifications when delivering to Dansk Supermarked

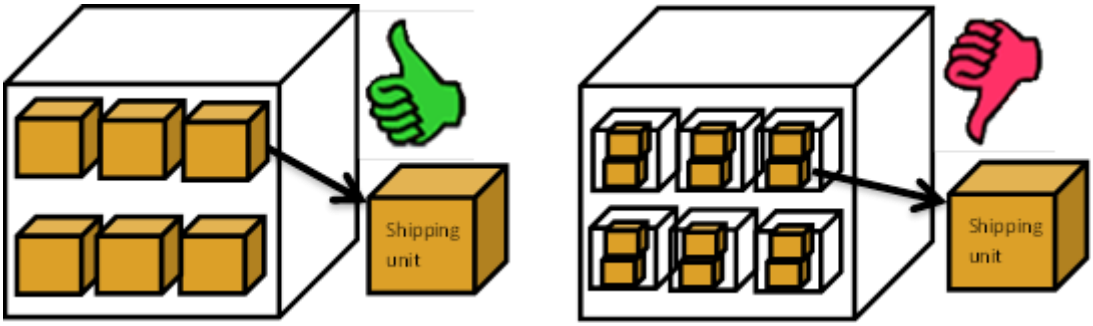
Carton quality

The carton quality must ensure:

- That the box remains stable during transportation
- That the box can be stacked in stores even when a number of products have been removed from the box
- That the box can support the weight of stacking the cartons up to a height of 2.4m during transport
- That lids / perforations of large cartons can withstand vacuum suction
- That the box fit the goods
- That boxes are never too full, thus creating round and unstable boxes.
- That no stacking pins, glue or wax is necessary (or used) to create a stable pallet

Outer packaging / Receiving unit

1. Should only be used for small export units to reduce handling time and shipping cost
2. Should only be used when the number of export units / shipping units exceeds 5
3. Only one items number per outer carton
4. Only one level of outer packaging is acceptable:



Please mark how many collis that are packed in each outer carton

5. Volume of the outer packaging should not exceed 70 L as this is the volume of our warehouse totes
6. Weight of the receiving unit must not exceed 12 kg

Scantainer as outer packaging

- Same as 1-4
- Can be used to fill more than one warehouse tote, and thus the volume be larger than 70L
- Weight of the scantainer can exceed 12 kg if delivered on EUR pallets

Labeling of cartons

When the consignment is delivered at the warehouse, it will be registered by means of barcode scanning or manual registration. To ensure that the barcodes and labels can be registered it is very important that the below mentioned requirements are met. **ALL retail units must have an EAN 13 for use in the stores and e-commerce.**

General requirements	
• Label must be white • Must be as big as possible • Text must be dark • Standard office fonts only • No underlining text	• Only machine written text • All text at least 8 mm high if possible • Text must be aligned • Characters must not touch each other
Placement	
Label must be placed in the center of the case; at least 30 mm away from the edge; on ***two opposite sides***	

Dansk Supermarked accepts two types of barcodes on cartons; the preferred EAN 128 / GS1 128 and EAN 13.

EAN 128 / GS1 128		**EAN 13**
Application identifier	Always ***(400)***	Must be the EAN of the ordering unit
DS order number (10 digits)	Ex. ***4001234567***	If the shipping unit contains 1 retail unit the Order EAN and the retail EAN are the same
Application identifier	Always ***(97)***	If the shipping unit contains more than one retail unit the Order EAN will be different from the retail EAN
DS article number (6-12 digits)	Ex. ***123456789012***	

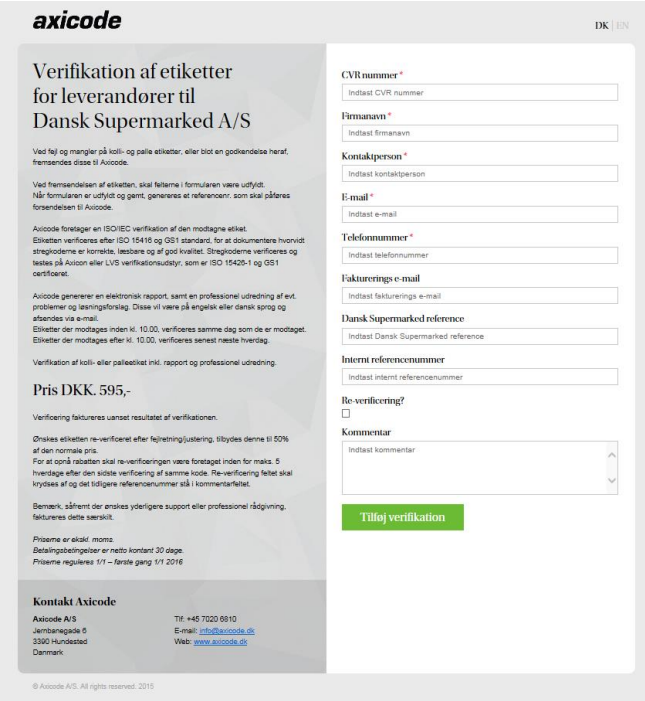
Besides the barcode the following information must also be marked on the case:

Information on the carton			
	Information	***Description***	***Example***
1	Order number	Dansk Supermarked order number (10 digits)	4001234567
2	Article number	Dansk Supermarked article number (6-12 digits)	123456789012
3	Product	Description of product	Jackets
4	Quantity	Number of sales units in case	12
5	Gross weight	Total weight of case + content	13 kg
Nonfood			
7	Color	Color of product	Green
8	Product range	If the case contains an assortment of different sizes or colors	S - M - L - Total 2 - 2 - 2 - 6
Food Products			
9	Prod. date	Production Date & Best before date	02-12-2014 (DD.MM.YEAR)
11	EAN number	EAN number of the product	5701050212850

Barcode and label test

In order to make sure our suppliers create good labeling and barcodes it is possible to verify the barcodes through the company Axicode. The supplier is of cource not obligated to use this company to perform the check, it is also allowed to use any other company within the area.

If you want to use Axicode, you have to fill out this formula:



The formula can be found on Axicodes website (http://verify.axicode.dk/). After filling out the formula you will receive a reference number which you have to enclose when sending a label to Axicode. You should scan the document or send the original barcode.

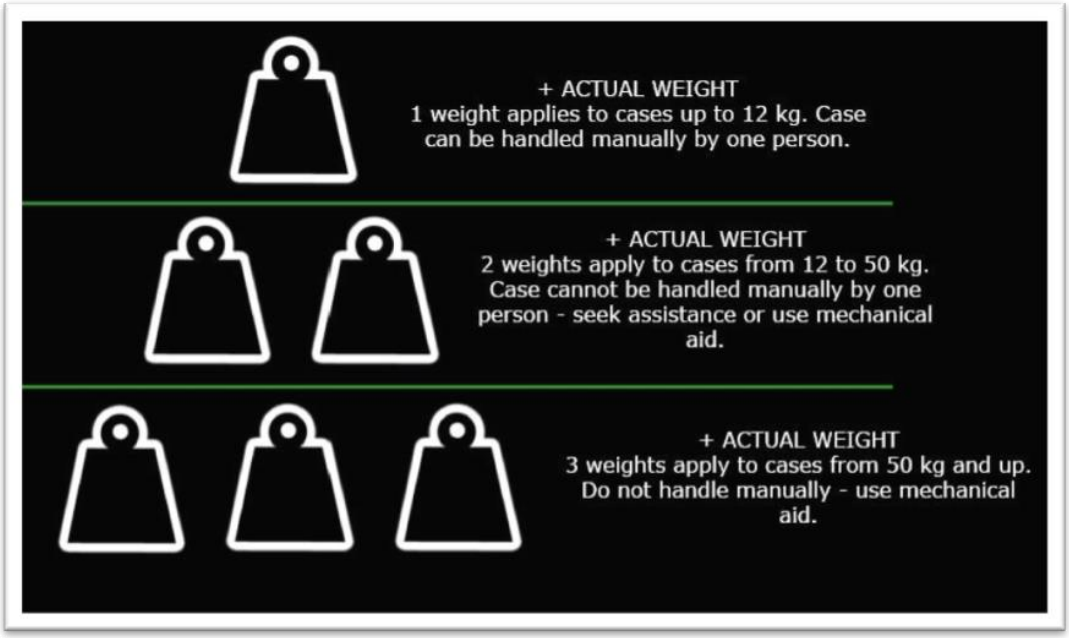
The price is 599 kr. for each label. If you make corrections in the label and wants to perform a new test, the price will be 50% of the original price, if you do it before 5 weekdays.

For further information contact your contact information at Dansk Supermarked.

Handling

Carton weight limits

- Weight limits for cartons stipulated by Danish authorities, is a ***gross weight of max 12 kg***
- Gross weight must be printed on the label to inform employees of the correct way to handle the box
- Dansk Supermarked introduces a special handling symbol, which is weight specific, and must be placed on each box (or the shipping mark):



Heavy or bulky products

- If the product itself is heavier than 12 kg or bulky (larger than 1 m^3) grip holes should be added either on both sides / opposite ends (suggested size 30 x 100 mm)
- If the product weight exceeds 20 kg the box has to be handled by two people and thus grip holes must be added to the box to facilitate this.

- If grip holes are not possible to make due to packaging (ex. No air / room around articles) external handles must be applied (plastic handles) or packaging altered to meet the requirements.

Handling symbols

The following international handling symbols must be used if your products require special handling during transport, at the warehouse or in the stores. ***Symbols may only be used when required.***

	Maximum stack (here shown as “8”) Goods like video monitors and glassware have a stacking limit. If this limit is exceeded, the compression from excess weight of overlaying boxes may damage the goods underneath. Use this symbol if the product has a stacking limit.
	Fragile: handle with care **Fragile: handle with care - glass**
	This side up Symbol only to be used if: Important for transport stability. Direction has implication for stability due to directional reinforcement in cases. Important for product stability. If product can be damaged/broken when packed in wrong direction.
	Do not stack
	Chemicals Use symbols like this if the container is fumigated or contains chemicals**.**

Product registration

When shipping to Dansk Supermarked, you must make sure that the correct master data is available to Dansk Supermarked. The procedure depends on the type of product you are delivering; textile or other nonfood products.
Master data registration is only done for new item numbers and it is done because both our systems and warehouse are highly dependent of correct master data.

Changes to master data

If you change the amount of goods in the colli.	Our automatic system cannot differentiate between boxes with different colli sizes, but with the same item number.	**Consequence**: Our stores will not receive the correct amount of goods	Contact
If you deliver in a new colli dimension	Our automatic system cannot differentiate between different volumes of the carton on the same item no.	**Consequence**: The system cannot find the correct way to store the goods, or to pack the goods.	

If you change the articles so that the master data are no longer correct, you have to contact DSG and deliver the articles on a new item number. DSG will supply you with the new item number

Packing of pallets

- ***Products must be kept within the pallet dimensions*** – at the bottom as well as the top, so no carton hang outside the pallet.
- ***Weight must be distributed evenly across the pallet*** – horizontally and vertically
- ***The items on the pallet must be wrapped in clear foil*** to ensure stability during transport, as well as dust protection - ***Foil cannot cover the pallet and cannot be colored***
- ***No individual wrapping of single cartons*** must be employed, and no part of the wrapping must get in touch with the pallet.
- ***Pallets must not be foiled together with other pallets***.
- ***Removing foil should not result in collapse*** – of a single row or the entire pallet.

- **"slave pallets" may NOT be used**– DS do NOT allow 4 * 1/4 pallets on a 1/1 pallet and 4 * 1/4 pallets wrapped in film to make it appear as a 1/1 pallet.
- ***One item number per pallet*** - The pallets should be packed with only one item number if possible.

  We want to receive clean units to avoid mixing of the articles..
- ***The labels of all the boxes must be visible without splitting up the pallet.***

Please refer to Appendix A for overview of warehouse specific pallet requirement.

Delivery

Loading of pallets on truck / container

In order to prevent damaged cases and to facilitate the handling during receipt at our warehouse, it is important to arrange the packing of the truck / container according to the following instructions:

1. When articles are stacked in the truck, **it is important to have at least 150 mm free space between top of the goods and the ceiling** so the goods can be unloaded by means of a fork-lift truck or other handling equipment.

2. If your order comprises many different articles, you have to make multiple layers in order to avoid mixing of the articles, as we want to receive “clean” units. You can either do that by inserting an extra pallet or a slip-sheet (only for nonfood).
3. Optimize the packing of the truck / container by stacking in multiple layers. If the articles are large and heavy or light (crushable) one layer is recommended, otherwise you can stack pallets or slip-sheets on top of each other to fill the truck. You are allowed to use a combination of EUR pallets and slip-sheets, as long as the bottom layer consists of a EUR pallet.
4. Pay careful attention to the fact that if you are using a one way pallet, the opening of the pallets must be facing the rear end/opening of the truck / container (Only Nonfood).
5. 1/1 pallets shall be placed 3 and 3 at the vehicle e.g. the short side of the pallet must always be turned towards the loading platform, and if you deliver on slip-sheets the grip handle must always be turned towards the loading platform.
6. 1/4 pallets shall be in rows of three (600* 1200).
7. All components must be adequately secured and protected to prevent movement inside the master carton as well as in the truck / container.

If you deliver our goods by truck you should not use the type ‘High-cube’. High-cubes have a low unloading level which we are not able to handle.

Information required upon shipment

When arriving to our warehouses the below requirements must be fulfilled:

- The Dansk Supermarked 10-digit order number must always appear from the driver's papers (freight bill and delivery note.) The order information must be available to the driver and therefore must not solely be attached to the products/pallets in the form of delivery notes or the like.
- Only papers covering products actually delivered may accompany the products.
- The driver must state the order number whether the products are delivered via central warehouses, warehouse hotel or have been transhipped to another carrier in transit.
- If the driver carries products for several order numbers, all order numbers must be advised.
- In case of part delivery, it must appear clearly from the papers which order number the delivery concerns. The order number must appear at both freight bill and delivery note.
- If the delivery note does not cover the entire order, it must be stamped "Part delivery". A copy of the delivery note must be attached to each freight bill.
- A freight bill indicating the precise part consignment delivered in EUR 1/4, 1/2 or full (1/1) pallets must be made out for each delivery.

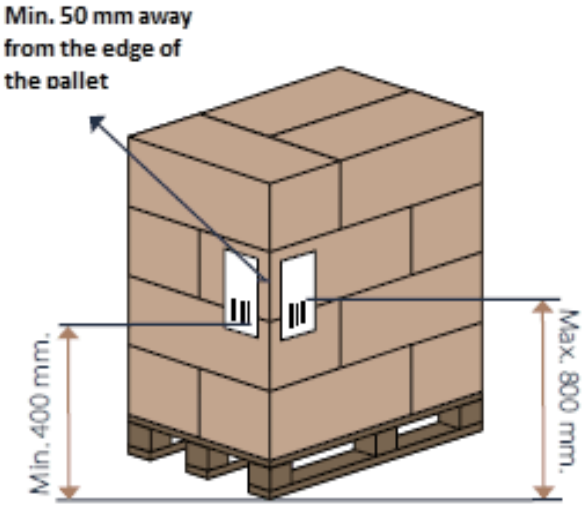
Labelling of pallets (applicable for Netto and Food)

Upon arrival the pallets will be registered by the means of barcode scanning and therefore there must be a GSI-128 pallet label on each pallet

- A separator character (FNC1) must always be inserted after a data field of variable length, if this data field is followed by additional data.
- **Parentheses** must not be expressed in the barcode.
- The **control digits** in GTIN and SSCC codes must be correct. Calculate control digits online at www.gs1.dk/kontrolciffer.
- **AI (37) may not be used**, if (01) is used. ((01) indicates the unit`s GTIN, e.g. the pallet`s item number and not the GTIN of the pallet content.)
- The 18 digits of the **SSCC** code must be structured as follows.:

Digit 1 : Company controlled prefix
Digits 2-8 : Your company`s GS1 Company Prefix
Digits 9-17 : Company controlled serial number
Digits 1 : Control digit

Full pallet



- The barcode may not contain company internal information in the form of (91)-(99).
  - (90) may only be used if explicitly agreed upon by your costumer.
- A dedicated margin (also known as “quiet zone”) devoid of lines, characters etc. must be found to the right and left of the barcode.
- The **dark bars** of the barcode must appear clear-cut on a light background , preferable white.
- The pallet label must be **smooth**, not creased.
- The recommended size of the pallet label is **A5**
- The label must be placed min 50 mm away from the edge of the pallet as shown below:
- At a **full pallet**, a label must be placed on **both sides** of the pallet.
- At **½ and ¼ pallets** the label must be placed on the top of the pallet and on the short side

Chemicals & Fumigation

Chemicals

This section should be read by all suppliers who produce our goods outside of Europe.

For suppliers inside of Europe you must comply with current legislation.

The use of chemicals in production, packaging and fumigating of containers should be avoided when possible. Suppliers to Dansk Supermarked need to read this packaging instruction as well as the trade agreement for Dansk Supermarked to keep updated on the requirements concerning chemicals and fumigates.

Avoid unnecessary use of fumigates in the container

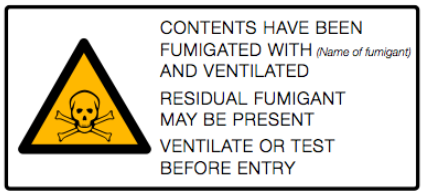
Fumigation of containers to avoid damp, mould and pests can be avoided by packing the goods in a dry environment and in a dry container. The goods must always be dry when packed in the container. If you follow this procedure you will in most cases be able to avoid the use of fumigates.

Prevent moisture in the container.

- The goods and container must be dry.
- Pack the container in a dry environment.
- If the humidity is high you can isolate the container inside with carton on the sides and on the top. The carton will absorb condensation.
- Use silica in the container to absorb humidity.

Fumigation of the containers must always be coordinated with your contact person at Dansk Supermarked. If you use fumigates in the containers:

- You must send a certificate with the contents that have been used to fumigate the container to Dansk Supermarked at nflvm@dsg.dk
- You must send a certificate that the container has been ventilated and is now fumigant free to Dansk Supermarked at nflvm@dsg.dk.
- Furthermore you must label your container with warning symbols, so that we can take the necessary precautions at our warehouse. The containers should as a minimum be labeled with the following information: A warning symbol, Name of the fumigant; Date of fumigation; Information about ventilation (Yes/No); Date of ventilation.



At Dansk Supermarked we will test container shipments according to current legislation if we suspect that a container is contaminated. Contact Dansk Supermarked if you need to know for which fumigates and chemicals we test.

If you use chemicals in your production:

Products containing chemicals will evaporate after production, and some contamination can be avoided by not packing the goods immediately after production.
To avoid or minimize contamination in the packing, certain products should be delivered in perforated packing. This is especially important for suppliers of shoes and other products containing many chemicals.

You must keep updated with the ECHA list of **substances of very high concern** (SVHC). The SVHC list is the first step in the procedure for restriction of use of a chemical. You can find the list by following this link: http://echa.europa.eu/web/guest/candidate-list-table

The SVHC list concerns substances in articles and substances in packing material.

Directly after a substance is included in the SVHC Candidate List, suppliers of articles which contain such a substance in a concentration above 0.1% (weight by weight) have to provide enough information to allow the safe use of the article to the recipients of the article.

If you need further help regarding how to avoid the use of chemicals and fumigates, or to find alternatives to forbidden chemicals or fumigates, Dansk Supermarked can support you in finding technical assistance.

Packaging & Cadmium Directive

All suppliers to Dansk Supermarked must meet the requirements of the Packaging Directive (A) as well as the requirements of the Cadmium Directive (B).
These Directives are important for you to follow as a supplier. If you do not follow these rules you are in reality breaking the Danish laws. For more information visit http://europa.eu/.

A) Packaging Directive
"Suppliers to Dansk Supermarked are requested to meet the requirements stipulated in the Packaging Directive, implemented in Danish law, from European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste and all international and national relevant standards (EN 13427, EN 13428, EN 13429, EN 13430, EN 13431, EN13432), as well as relevant underlying standards and other legislative requirements regarding packaging."

How to find the Packing Directive for elaborating details:
When entering the website go to 'official journal/ publication year and enter: 1994/official journal reference/ OJ Series: L/OJ Number 365/page number: 10/ on this side select 31994L0062.
An important requirement in the Packaging Directive is that packaging and packaging components may only be placed on the market in Denmark provided that the sum of concentration levels of lead, cadmium, mercury and hexavalent chromium does not exceed 100 ppm by weight.

B) The requirements of the Cadmium Directive
"Suppliers to Dansk Supermarked are requested to meet the requirements stipulated in the Cadmium Directive, implemented in Danish law, from Council Directive 91/338/EEC on the prohibition of sale, import and manufacture of cadmium-containing products, as well as relevant underlying standards and other legislative requirements regarding cadmium"

How to find the Cadmium Directive for elaborating details:
When entering the website go to ' official journal/ publication year and enter: 1991/official journal reference/ OJ Series: L/OJ Number 186/page number: 59/ on this side select 31991L0338.
An important requirement in the Cadmium Directive is that import, sale and manufacture of cadmium-containing products are prohibited. Cadmium-containing products mean products in which cadmium is used with more than 75 ppm in the homogeneous components of the product.

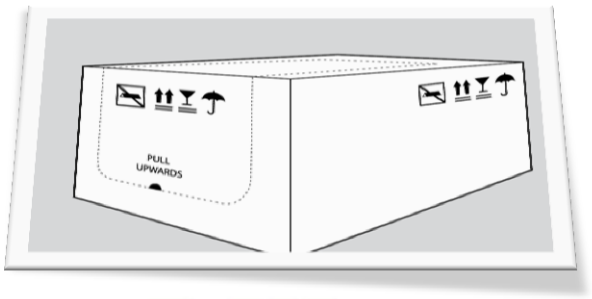
Goods reception control

In order to ensure the quality of the deliveries our Goods in department check every delivery and correct possible *errors*:

- Pallets foiled together
- Foil loosely hanging from the pallet
- Foil covering the pallet
- Pallet too tall
- One-way pallets from European suppliers
- Strips on boxes
- Defective/ poor quality pallet
- Pallet too broad or unstable
- Pallet too heavy
- Item numbers mixed on pallet
- Colli errors
- Breached units
- Bad cardboard quality
- Missing product information on boxes
- Wrong delivery date
- No order number on consignment note
- Product data incomplete
- No EAN number
- Pallet to broad or unstable
- Errors in EAN number
- ¼ or ½ pallet placed on top of 1/1 pallet (Warehouse specific – please refer to Appendix A)
- Wrinkled EAN number

Suppliers who do not comply with the delivery specifications stipulated in the packaging instruction will be fined

Part 2 – Føtex / Bilka Nonfood Instructions



Bilka

føtex

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Warehouse

Dansk Supermarked's Nonfood warehouse in Aarslev is an automatized warehouse where we handle nonfood goods for all of our Føtex and Bilka stores in Denmark. The warehouse has replaced 5 other nonfood warehouses, and has 2 automatized highbay storage areas for pallets. In the warehouse we operate after the goods to man principle.

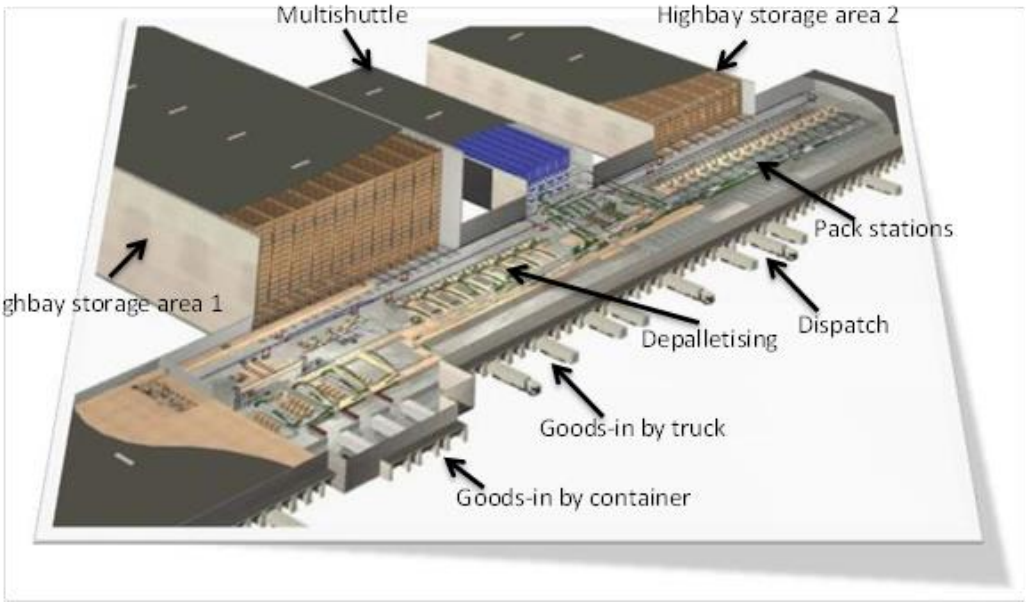
Due to the high degree of automation at our warehouse, we require that our suppliers deliver our goods in the correct carton dimensions, with correct labelling and more. It is therefore very important that you carefully read and follow the instructions in this document, so that we can avoid unnecessary and expensive manual handling.

Facts about our nonfood warehouse in Aarslev.

- Highbay 1 storage area is 80 m wide, 140 m deep and 42 m high
- 16 automatized cranes in the two highbay storage areas bring the goods to the positions where it is needed.
- The cranes move with a maximum speed of 15 km/h, and the biggest of them weighs approx. 23 tons
- The two highbay storage areas have room for more than 105,000 EUR pallets.

In the multishuttle cartons are handled individually but still automatically.

- The multishuttle is 33 m wide, 100 m deep and 21 m high
- It can store more than 108,000 cartons
- It has 180 fully automatized shuttles
- It can receive 6,000 cartons/hour, and at the same time it can find 6,000 cartons which are needed for other locations



Definitions

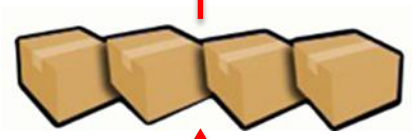
Packaging is very important in our stores and in our nonfood warehouse in Aarslev. Below is a short description of the different definitions of cartons.

Retail unit / Sales unit

The unit that is sold to the customer in the shops.

For large sized products (e.g. TV's, furniture and similar) the goods will be delivered to the warehouse as retail-unit

Export / Shipping unit



A box containing a specific number of retail / sales unit.

This is the unit that is shipped to the shops from the warehouses.

Usually this is also the unit in which the goods are delivered to the warehouse.

Outer / Receiving unit

A box containing a specific number of export /shipping units.

The outer unit is only used for transport from the supplier to the warehouse and will be emptied at the warehouse. The receiving unit is used primarily when the export unit / inner carton has a small volume (3 litres or less).

Only one level of outer packaging is allowed

How your articles are to be delivered must always be agreed between you and your contact person from Dansk Supermarked.

Breached units

It is very important that you ***do not deliver breached units***. A breached unit, is a unit that does not contain the same amount of goods as the other delivered units on the same item no.

Our goods-in department cannot receive the breached unit since it is not identical with the master data, and you therefore need to call your contact person at Dansk Supermarked before you ship the order if you see that the order from Dansk Supermarked does not match with the colli size.

Articles arriving on the same item-no should always arrive in the same colli size.

Carton size

Handling types and dimensions

At our warehouse we operate with 4 handling types / shipping units; Small, Medium, Large and Maxi .
If you are in doubt about what dimensions the carton should have please call your DSG contact person.

Small

Measurements (mm)

Volume	Largest side	Volume outer packaging
3 L	520	70 L

Description

Examples of small products are; sunglasses, underwear & kitchen utensils. These type of products normally arrive at the warehouse in outer packaging, which should not exceed a volume of 70L, as this is the maximum capacity of our warehouse totes.

Preferable

Medium

Measurements (mm)

Smallest	2nd smallest	Largest
50-320	100-420	150-600
320-420	max: smallest * 1,3 (max 530)	max 600

Description

Medium cartons are the most cost effective way of handling goods at our warehouse. These products are the ones that we can handle most automatically, and most of our products should be able to fit in this type of box. (Medium boxes should min. weigh 250 g)

Large

Measurements (mm)

Smallest	2nd smallest	Largest
420 – 800	530 – 800	600 - 1200

Description

Lids / perforation should be able to withstand vacuum suction

If you believe that your products could fit into a medium carton by making adjustment to packaging or changing the colli size, please contact your contact person at Dansk Supermarked

Maxi

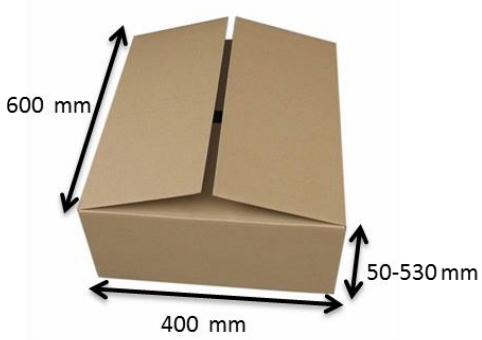
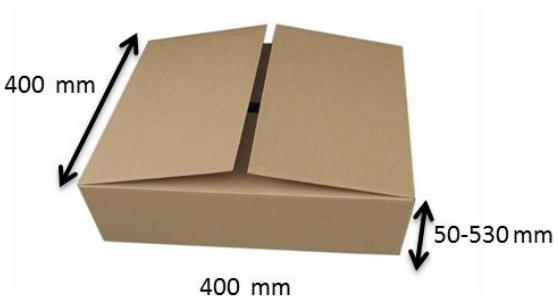
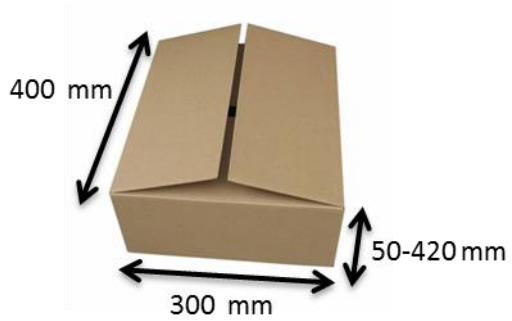
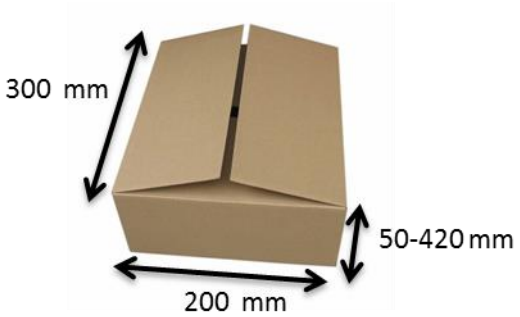
Description

Maxi goods are larger than the dimensions of the large cartons on at least one side, and therefore cannot fit on a EUR pallet.

Preferred handling dimensions

Another important criteria for dimensions is that the boxes in combination with other boxes fit a EUR pallet. The dimensions of EUR pallets are 800 mm (width) x1200 mm (depth).

If you deliver in the following dimensions you will be sure that the cartons fit a EUR pallet, and fit the requirements of Dansk Supermarked.

Length 600 mm	**Width** 400 mm	**Height** 50-530 mm	**Length** 400 mm	**Width** 400 mm	**Height** 50-530 mm
					
Length 400 mm	**Width** 300 mm	**Height** 50-420 mm	**Length** 300 mm	**Width** 200 mm	**Height** 50-420 mm
					

If you have problems deciding the dimensions of the boxes, make sure that it always fits the goods, and that you do not deliver breached units (see p. 8) If the export case is larger than the goods, the export case will cave in and collapse during transport.

Most of the goods delivered to the nonfood warehouse in Aarslev should be able to fit into one of the above mentioned cartons.

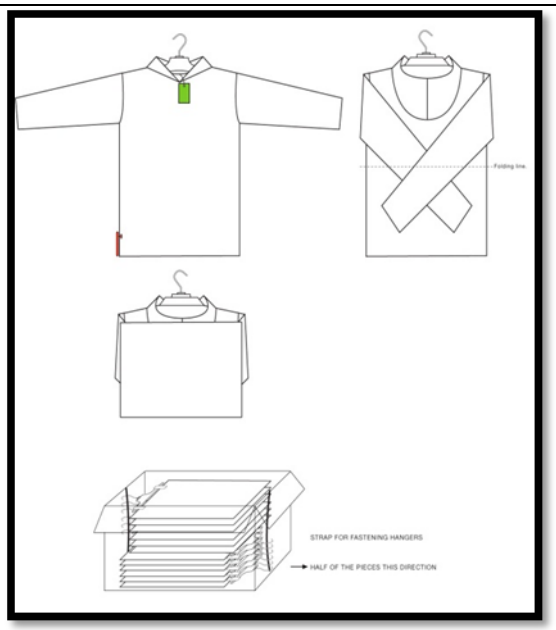
Special instructions for textile suppliers

Textile can be folded in different ways so that it can fit into a medium sized carton. Normally your contact person at Dansk Supermarked will send you instructions on how to fold the clothes if special folding is necessary.

If the clothes when folded cannot fit into a medium sized carton, you should call your contact person at Dansk Supermarked to find an individual solution for that specific product.

Here are two examples of issues we often see with textile products at our warehouse:

The shipping carton is slightly too big to be Medium



Example

We received some jackets in a carton with the dimensions 630x470x200 mm (LxWxH).
The width of the carton is in this example defined by the width of the hanger. This carton is 3 cm too long and 5 cm too wide and is therefore classified as a large carton. (Large cartons are approximately 2 times more expensive to handle in our warehouse than medium cartons.)

Solution

If the jackets had been folded on the middle, the carton would have the following size 470x400x400 mm, and it would now be classified as medium.
(The longest side is now equal to the side which was earlier the width because the jackets are now folded)

Products packed in polybags exceed the 3L limit

(Consequence: we have to handle the product as small even though the measurements indicates that it is medium)

Example

We receive 10 t-shirts in a plastic bag with the dimensions 400x300x200 mm (LxWxH). This product has a volume of 24 litres, and will therefore reduce the amount of articles in our shop totes, and increase the handling time in the warehouse and our stores.

Solution

This type of products should be delivered in a medium carton instead of a plastic bag

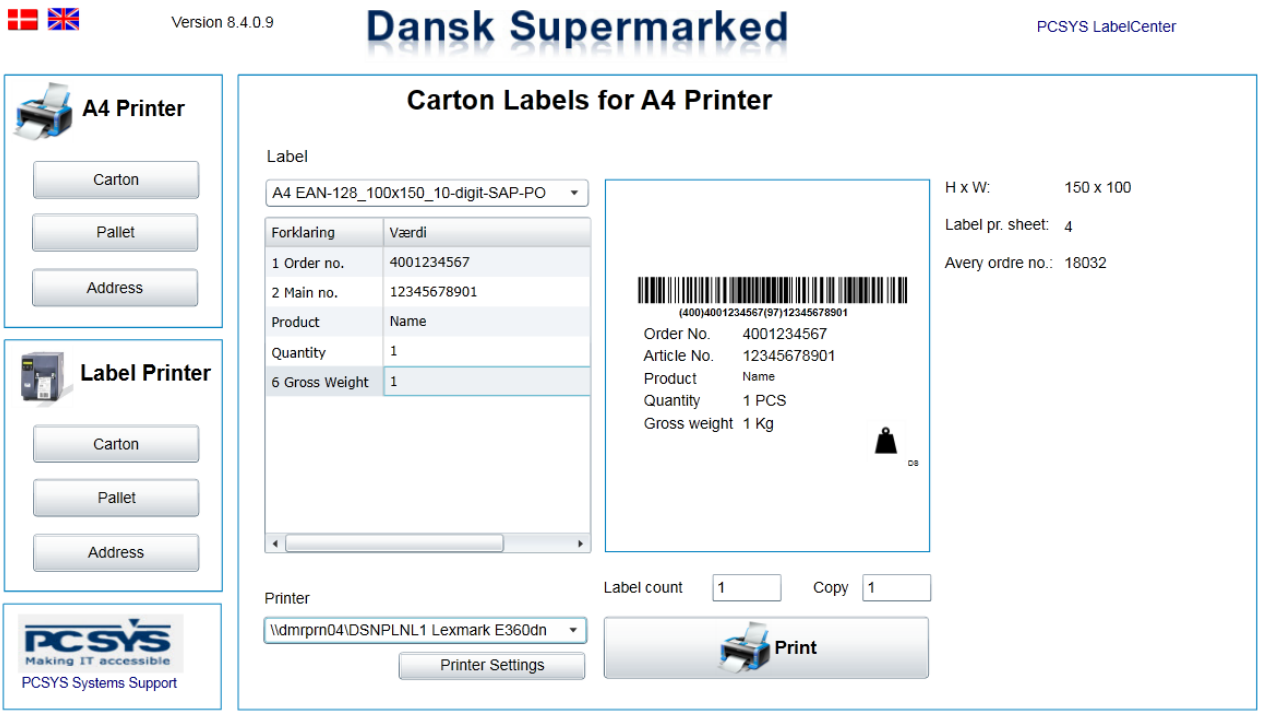
Print service

In order to make sure that our suppliers can create good and proof labeling, we cooperate with PCSYS who has developed a new and easy to use application for label printing!

For a monthly fee, you can use this service for all your label needs.

Please follow the link below to read more about the service and see prices:

http://www.pcsys.dk/labelcenterdansksupermarked



This site can be used with both a regular printer, and a label printer. It also print labels for different usages.

1. Choose type of label and printer
2. Choose the type of label (ex. EAN 128/EAN13)
3. Enter the information needed for the label
4. Choose your printer local installed printer
5. Choose the number of labels. Press print

Delivery on pallets

Delivery on pallets

The carrying capacity of the pallet is very important. Make sure that the pallet is stable and strong enough to carry the goods. It is quite decisive that the pallets are made strong enough for the goods, no matter which material the pallet is made of. The pallet must endure the transportation, as well as the subsequent handling of the pallets[1].

EUR pallets

All European suppliers should deliver our goods on EUR pallets if the goods can fit on a EUR pallet.

Thus all deliveries made by truck should be done on 1/1 or 1/2 EUR pallets complying with the EN 13698-1:2003 standard if the product fit such a pallet. Pallets size is therefore 800x1200 (Width x Length) or 800x600 (Width x Length).

One-way pallets

One-way pallets must only be used by suppliers outside Europe, or for those goods that cannot fit onto a EUR pallet

When you are designing the one-way pallet, you have to make sure that the size of the pallet fits the goods, so that the goods will not be damaged during the transportation and during the handling at the warehouse.

Poor one-way pallet.

Good one-way pallet.

For suppliers outside Europe, please make sure the dimensions of the one-way pallet when possible are below those of a standard EUR pallet (800x1200 mm), as we strive to slave these on to EUR-pallets. A good measure for a one-way pallet would be 760x1170 mm (Width x Length).

If there are lower boards crossing from side to side on the pallet, please make sure the open side is facing the opening of the truck. We have to be able to unload the truck with our forklifts.
The fork-lift pockets under the pallet must be at least 100 mm high (from floor to underside) and 200 mm wide (see the figure below). This ensures that the pallets can be handled automatically with lifting equipment at our warehouse.

[1] Be aware that EC authorities have *special* requirements as to the nature of the wood when imported from certain countries to Denmark. The import restrictions for wooden packing observe the international standard ISPM 15. This implies that any wooden packing must be heat-treated or fumigated, and the wood must be marked with an IPPC logo and indication of which kind of treatment being used. IPPC = International Plant Protection Convention. For more information please visit: WWW.IPPC.INT

If the pallet length exceeds 1200 mm, for instance for tables, the pallet must be accessible from both sides, and fork-lift pockets must consequently be placed at both sides of the pallet (all with minimum height of 100 mm/width of 200 mm).

Suppliers who do not comply with the delivery specifications stipulated in packaging instruction will be fined per pallet 100 DKK (per error) with a minimum fine of 500 DKK no matter if one or ten errors has been made

Stacking height

A pallet must never be so high that it cannot support itself. This includes ensuring that the edge stiffness is sufficiently high. You should only use corner protection and similar when it is absolutely necessary. Straps or foil around any single box is not allowed.

Packaging must be of sufficient quality to support the weight of stacking the cartons up to a height of 2400 mm including an extra pallet in the middle, in order to double stack pallets during transportation.

The pallets must also be packed ensuring that no articles weighing from 12 kg and up are being stacked higher than 1400 mm.

The total weight of the pallet may not exceed 1200 kg

Even though that there is a maximum allowed height of the pallet, it is very important to pack the pallet as efficient as possible in order to use all space on the pallet.

EUR pallets		**One-way pallets**	
	If you pack on EUR 1/1 the maximum allowed height of pallets is 1800 mm including the pallet. If you pack on 1/2 EUR pallets the maximum allowed height of pallets is 1000 mm including the pallet		If you pack on 1/1 one-way pallets the maximum allowed height of pallets is 1650 mm including the pallet. If you pack on ½ one-way pallets the maximum allowed height of pallets is 850 mm including the pallet

Delivery in container

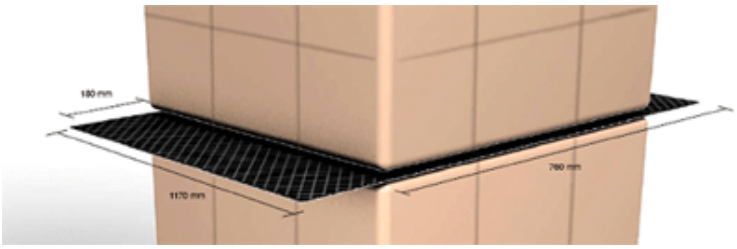
Delivery on slip-sheets

Delivery on slip sheets is the preferable way to deliver our goods when you deliver in a container.

When you deliver on slip-sheets we can easily place the goods on an EUR pallet in our warehouse.

Slip-sheet specifications

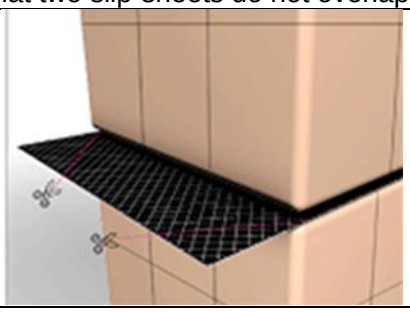
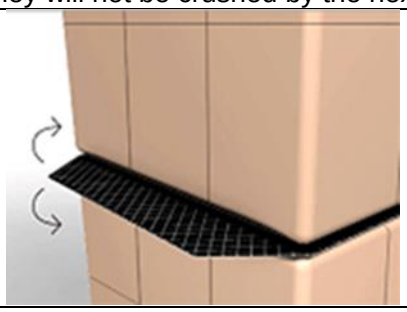
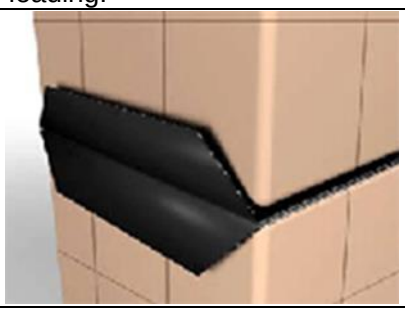
- ***The slip-sheet must be stable enough to carry the goods*** – For most products a slip-sheet made of coated carton can be used but for very heavy products (combined weight of goods on slip-sheet: 800 kg) a slip-sheet made of plastic must be used.
- ***The slip-sheet must be stable enough to endure the transportation (and humidity), as well as being handled after the transportation.***
- ***The slip-sheet must have a maximum dimension of 760 mm x 1170 mm***. This is to ensure, that when we unload a container or truck, each unit of goods will fit on an EUR-pallet.
- ***The grip-edge of the slip-sheet, must be an additional 180 mm wide***. (the part where the mount, as shown below, grips and pulls the slip-sheet)



Packing slip-sheets

- ***Each layer of slip-sheet may not exceed 1650 mm*** (If the goods are larger than 1650 mm please make the slip-sheet fit the goods)
- ***Heavy articles (12kg +) may not be placed higher than 1400 mm*** – otherwise insert extra layer
- ***Products must be kept inside the boundaries of the slip-sheet*** – at the bottom as well as the top, so that no cartons exceeds the size of the slip-sheet / hangs outside the slip-sheet.
- ***If possible the container must be loaded in two layers*** – to optimize the filling of the container
- ***Slip-sheets must be packed evenly*** – so weight is distributed evenly across the slip-sheet both horizontally and vertically
- ***The slip-sheet must be wrapped in foil*** to ensure stability during transport, as well as dust proection. (No. individual wrapping of single cartons must be used)
- ***The cartons on the slip-sheet should not collapse when removing foil***
- ***All labels should be visible without splitting up the slip-sheet*** if possible
- ***If possible there must only be one product type per layer, and always different types must be clearly divided by cardboard.***
- ***All slip-sheets must have a GS1-128 pallet label.***

Using slip-sheets

1. This is the empty slip-sheet. Please ensure that the chosen fabric and the dimensions fit the type of goods, you aim to pack on it.	**2.** The cases are placed on the slip-sheet like this. Two layers are needed when the height exceeds 1650 mm, or division is needed due to multiple different articles.
3. A perfect stacking of cases on a slip-sheet.	**4.** The corners of the slip-sheet are cut off, to ensure that two slip-sheets do not overlap.
	
5. Corner-protection must be added, only when the nature of the goods demands this.	**6.** The goods must be wrapped. Multiple loads must not be wrapped together, and foil must not get around the slip-sheets. Please remember to turn the adhesive side inwards, otherwise goods will stick together at arrival at our warehouse.
7. The edges must be folded either up or down, to ensure they will not be crushed by the next pallet .	**8.** The slip-sheet and the goods on it are now ready for loading.
	

Loosely packed

If you cannot deliver our products on a slip-sheet, we prefer that you deliver the goods loosely packed in the container.

At our new warehouse in Aarslev we have installed boom-conveyors which we use when we empty loosely packed containers.

When we empty a container through this system the cartons will either go through a barcode scanner and directly into our high-bay storage area until we need to pack it, or it will be packed onto EUR pallets if the cartons are large. Hereafter it will go into the high-bay storage area until we need to pack it.

We empty loosely packed containers by using boom-conveyors.

Packing of a container

When the loose export cases are stacked in the container, it is important to do it carefully so that the goods will not tumble around during transportation.

Be sure not to place heavy articles (exceeding 12 kg) higher than 1400 mm. If you deliver heavy articles you should instead deliver on a slip-sheet or on a pallet.

Perfectly packed container

Example of how not to pack a container

If you intend to deliver a mix container comprising two or more articles, you should make sure to separate these articles from each other, and to make some kind of punctuation mark, which indicates where an article stops and a new one begins. This punctuation mark could for instance be a cardboard or something similar.

Information required upon shipment

To ensure efficient communication between the supplier and Dansk Supermarked, a complete shipping list must be faxed or sent as an email to the purchaser no later than on the day of shipment. The list must embed the following information:

- Dansk Supermarked Order Number	- Total volume of shipment (m3)
- Container number	- Total weight of shipment (kg)
- Bill of lading number	- Total number of export cases in shipment
- Name of vessel (if ship)	- Delivered on pallets or slip-sheet
- Date of departure	- ..If "yes" then number of pallets of sheets
- Consignor/Shipper	- Information about hazardous materials
- Consignor's/shipper's contact person	- Information about master data for goods

General requirements for containers

Dimensions of General Purpose containers

The table below gives a general guideline to the dimensions of a container, but keep in mind that the dimensions deviate within container series.

Sizes	Door openings		Internal dimensions			Max payload	Volume
In feet	Width	Height	Length	Width	Height	In kg	In m3
20 std.	2,34 m	2,27 m	5,89 m	2,35 m	2,39 m	28200	33
P40 std.	2,34 m	2,27 m	12,03 m	2,35 m	2,39 m	28800	67
40 high	2,34 m	2,58 m	12,03 m	2,35 m	2,70 m	28620	76
45 high	2,34 m	2,58 m	13,56 m	2,35 m	2,70 m	27600	85

Moisture absorbing materials

Example of Silica product for shipping-containers

The relative air humidity inside the container depends on the moisture from the cargo as well as the air during loading and the outside temperature during the transportation. Condensation might emerge when you move cargo from a warm zone to a colder zone. In order to avoid condensation during transportation, please use moisture absorbing materials e.g. silica. The condensed water not only causes damage to the goods, but can also moist the cardboard pallets during transportation, so they become damp and collapse before arrival. Please also remember to check that the ventilation holes are open, e.g. after fumigation, before the container is shipped.

Maximum permissible weight of a container plus its contents

For some goods, e.g. heavy granite, steel etc. there is a limit to the maximum weight of a container. Please check with national authorities regarding this, as this limit varies in different countries. The supplier must not exceed these weight limits when stowing a container, even in case of excess space in the container.
Once there is space left in a container always apply absorbent/cushioning material to separate and protect the cargo from damage during transport - like foam, mats and fibreboard. Also the goods must be secured to prevent the cargo from crashing inside the container. When loading the container, ensure that the centre of gravity is in the middle of the container. If the container is loaded unevenly, the centre of gravity will shift during transportation, and damage will be inflicted on the goods.

Delivery by truck

Information upon arrival by truck

When arriving by truck you must always inform us prior to arrival, to facilitate planning at our warehouses.

When your truck pulls in at our Nonfood Warehouse, you will have to enter the site via the automated gatekeeper. This is a touch screen, placed conveniently outside the gate.

A series of simple screens will guide you through entering the information we need to receive, before opening the gates. If you arrive with a shipment which has not been booked in our systems you will have to use the automatic gatekeeper to call our planning department. **When this information has been given, three things can be decided by the system:**

Automated gatekeeper

1. Opening of entrance-gates, and a dock door assigned to driver. (This happens when the driver arrives at the correct time, and all details are correct)

2. Opening of entrance-gates, and a parking-space assigned to driver. (This happens when time of arrival is inconsistent compared to the booking details, or the warehouse is behind schedule)

3. Gates remain closed, and driver is told to park on outside parking space, and to return at a later specified time. (This happens when no prior agreements have been made, or when details need to be investigated before truck is allowed on-site)

At arrival by truck Dansk Supermarked will check the delivery and sign the freight bill to acknowledge the delivered pallets/colli. Waiting time may occur.

How to find the warehouse in Aarslev

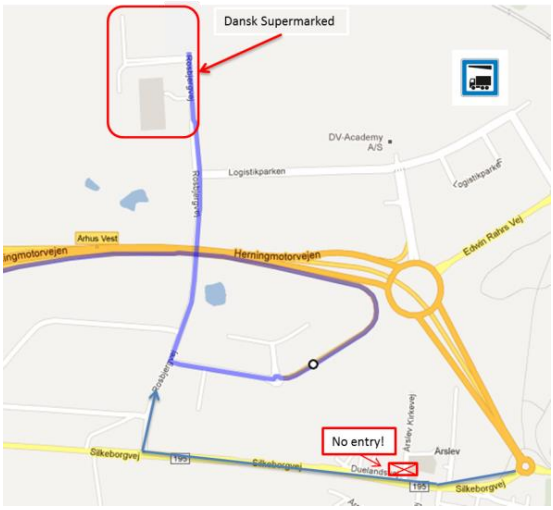
Due to the fact that Rosbjergvej was previously connected to Aarslev Kirkevej in the village of Aarslev we have experienced that truck drivers with older GPS systems have an issue finding the warehouse and end up on small closed road, where turning around has caused trucks to get stuck or to damage the property of our neighbors.

In order to avoid this please follow the instructions below instead of the GPS system when there is a chance it might lead your driver astray.

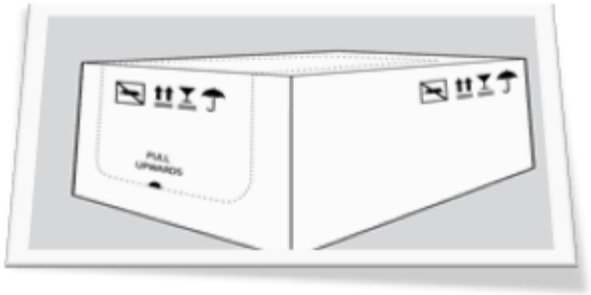
When exiting the highway follow the signs leading towards the industrial area in Årslev, then turn right on Rosbjergvej and follow the road to the warehouse.

If you by accident get to Silkeborgvej do under NO circumstances enter Aarslev Kirkevej but continue along the road and enter the warehouse through Rosbjergvej.

Opening hours: 7.00 – 14.30 Monday to Friday



Part 3 – Føtex / Bilka Food instructions



Bilka

føtex

DELIVERY 34

FOOD WAREHOUSE'S 34

PALLET SPECIFICATION 35

STACKING HEIGHT 35

SPECIFICATION FOR OUTER CARTON 36

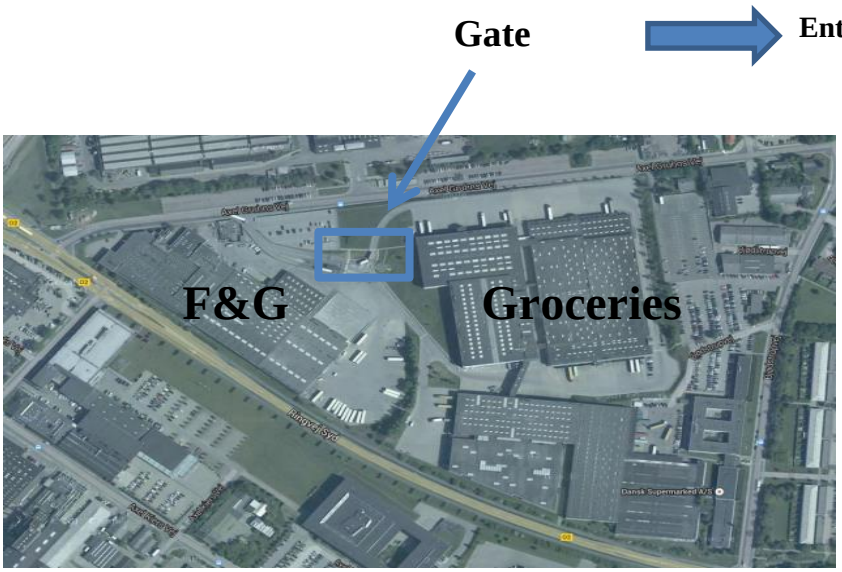
REQUIREMENTS TO FRESHNESS 36

FINES SPECIFIC FOR FØTEX BILKA FOOD WAREHOUSES 37

Delivery

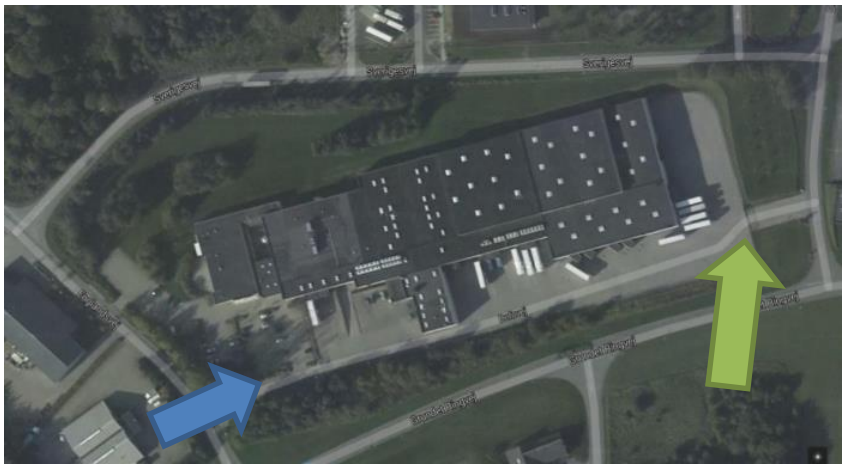
Food warehouse's

Dansk Supermarked have 4 warehouse which provides Bilka and Føtex with food products. The warehouses are located in Vejle, Ishøj, Højbjerg and stores different types of goods. The food warehouse consists of:

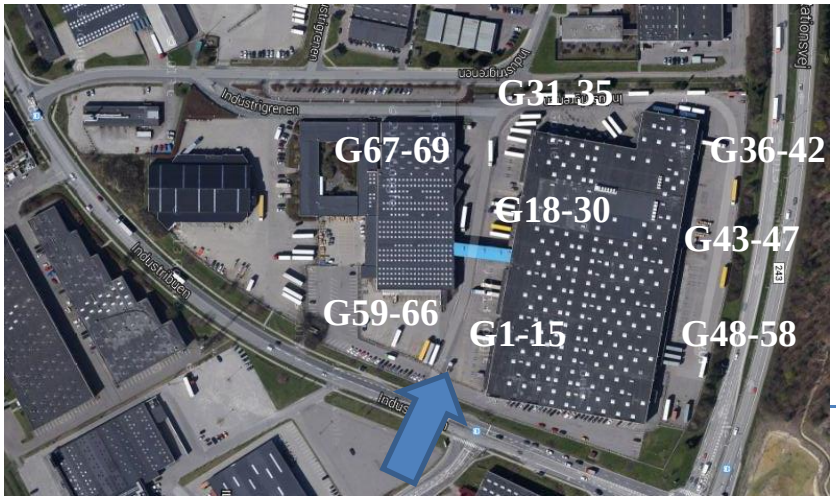


Højbjerg
The food warehouses in Højbjerg consist of an automated warehouse which stores Groceries and a manual warehouse which stores fruit & vegetables

F&G	Gate 101-108
Bakery	Gate 208-212
Grocery	Gate 201-207 + 301-305
Grocery ¼ pl	Gate 332-335
Paper	Gate 332-335



Vejle
The food warehouses in Vejle stores products in cool storage



Ishøj
The food warehouses in Ishøj stores fruit, vegetables and grocery

G1-15	Wine dispatch Jylland
G18-30	Dispatch Sjælland
G31-35	Dispatch Sjælland
G36-42	fruit & Weg. Receiving
G43-47	Grocery receiving/return goods
G48-58	Wine receiving
G59-66	Wine receiving (Netto)
G67-69	Dispatch wine (Netto)

Opening Hours	
F&G Højbjerg	Every day of the week: 05:00 - 11:00
Groceries Højbjerg	Goods receipt: Sunday 23:00 to Friday 23:00 Bakery: 7:00 - 14:00 Monday - Friday
Vejle	Terminal Goods: 06:00 - 14:00 Sunday to Friday Storage Goods: Sunday 22:00 to Saturday 05:00
Ishøj	Fruit and vegtables: 06:00 - 11:00 Sunday to Friday Wine/Grocery: 06:00 - 14:00 Monday to Friday

Pallet specifikation

The pallet specifications for the food terminals is different from terminal to terminal. Underneath is an overview of which type of pallets is accepted by which terminal. Please refer to appendix A for further details.

Pallet type	
F&V Højbjerg	Euro
Groceries Højbjerg	All pallets - except CHEP 1/4 and all one-way pallets
Vejle	All pallets - except CHEP 1/4 and all one-way pallets
Ishøj	All pallets - except CHEP 1/4 and all one-way pallets

Stacking height

A pallet must never be so high that it cannot support itself, otherwise the products may be damaged. This includes ensuring that the edge stiffness is sufficiently high. You should only use corner protection and similar when it is absolutely necessary. Straps or foil around any single box is not allowed..

The pallets must also be packed ensuring that no articles weighing from 12 kg and up are being stacked higher than 1400 mm.

The total weight of the pallet may not exceed 780 kg.

Dansk Supermarked aims to optimize processes and strives to create the best possible working conditions in both warehouses and stores. This is done in close collaboration with suppliers and buyers.

All pallets	
	If you pack on EUR 1/1 the maximum allowed height of pallets is 1800 mm including the pallet. If you pack on 1/2 EUR pallets the maximum allowed height of pallets is 1600 mm including the pallet If you pack on 1/4 EUR pallets the maximum allowed height of pallets is 1400 mm including the pallet

Specifications for outer carton

- ✓ Outer carton shall protect the products throughout the entire supply chain
- ✓ Ensure a stable outer carton
- ✓ Outer carton shall be easy to open without the use of tools
- ✓ Ensure a presentable outer carton to increase sales (not necessary for frozen products and wine)
- ✓ Optimize the outer carton size to shelf space
- ✓ Outer carton shall be easily disposable

To sum up, the ideal outer carton is the one that passes through the warehouse and the store with the least possible handling.

Requirements to freshness

- The product shall be at DS' disposal during at least 75 pct. of the total shelf life in days of the product, and the product may be at the Supplier's disposal during no more than 25 pct. of the total shelf life in days of the product or by other agreement.
- In case of delivery to the warehouse of goods with a date of freshness exceeding what is agreed upon, the acceptance of the goods will be refused and the goods will be returned at the Supplier's account. DS will charge the carrier’s list prices if the goods are delivered ex works.
- If mixed pallets are delivered for which an exceeded date of freshness can be established as regards to the goods of the top layer, the whole pallet will be rejected at once.
- Articles of the "lower layers" of the mixed pallets will also be rejected, if the date of freshness has been exceeded. This means that if an exceeding of the date of freshness is observed on products in, by way of example, the middle layer, these products and all the rest of the layers on the pallet will be rejected.
- DS does not accept the receipt of products with a date of freshness older than that of earlier delivered products.
- The goods will be returned at the Supplier's account. DS is not prepared to pay freight costs in connection with the delivery.
- DS is entitled to either accept or refuse the delivered order

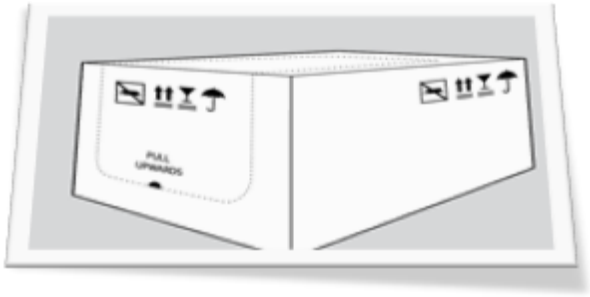
Fines specific for Føtex / Bilka Food Warehouses

Suppliers who do not comply with the delivery specifications stipulated in the packaging instruction will be fined per pallet 100 DKK (per error) with a minimum fine of 500 DKK no matter if one or ten errors has been made.

Other fines specific for Føtex / Bilka warehouses

- Ishøj,Vejle and F&G Højbjerg **accepts** strips on the boxes
- Too late delivery: **5000 DKK**
- Wrong Best before date: **1000 DKK**
- Missing PO. NR. **1000 DKK**
- Non-fulfillment of freshness: **1000 DKK**

Part 4 – Netto instructions



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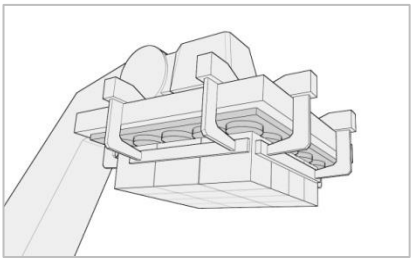
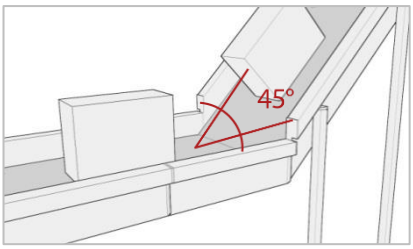
Description of Netto's automatic warehouse system

- The process of moving the cartons from the pallet to the sorting facility is done automatically
- The automatic part of the warehouse functions as a 'gripping disc' system. The layerpickers are a combination of belt pressure and vacuum lifting when outer cartons are being lifted from the pallets
- The outer carton shall be able to withstand a 45 degree slip down a conveyor in the warehouse
- In the sorting system the cartons are registered by means of light beams. A carton with open sides 7 cm from the bottom of the outer carton and up risk being registered as 2, 3 or more cartons, depending on the number of openings between products. Therefore closed sides 7 cm from the bottom and up or stuffed units in the carton are necessary

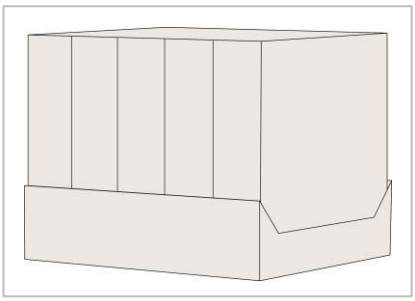
In case of questions or concerns about the automatic warehouse system functions, please contact Brian Kim Sværke, direct phone: +45 8778 7507



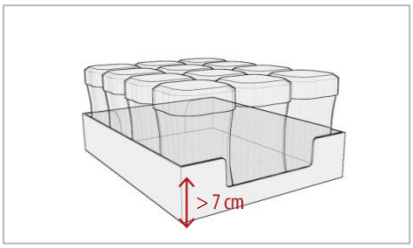
Gripping disc system picking one layer of a pallet



45 degree conveyor



Height on sides and back can vary when the products are not transparent or when there is no gaps between the products



Minimum 7 cm sides and back when content is transparent

Requirements for Sales ready packaging

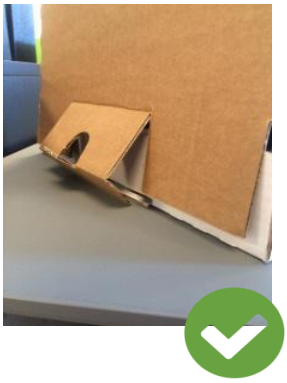
Requirements when the goods are for both manual and automatic warehouses

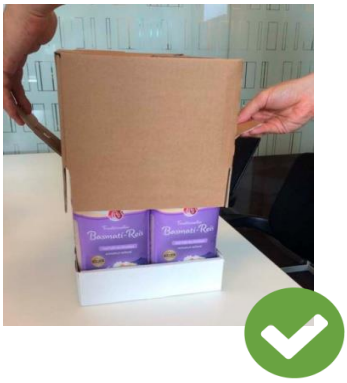
For the automatic warehouse cartons with fixed lid, shrink-wrap with perforation or in some cases a loose lid placed inside outer carton can be used. Whether loose lid can be used at automatic warehouse is a case by case assessment. It depends on weight and size. If loose lid can be used it should be placed inside carton and sides of carton should go all the way up (see picture below).

If loose lid cannot be used the gripping systems create the need for a fixed lid or shrink-wrap with perforation:

- Lid must be attached to the carton to avoid lid falling off at any point in the supply chain (as limited use of tape, glue or other adhesive as possible, use preferably hooks of cardboard)
- Shrink wrap perforation is preferred at bottom of tray and needs to be located opposite lifting sides to avoid tearing when lifted.

If carton is to be used for both automatic and manual warehouses the following examples of cartons are approved:



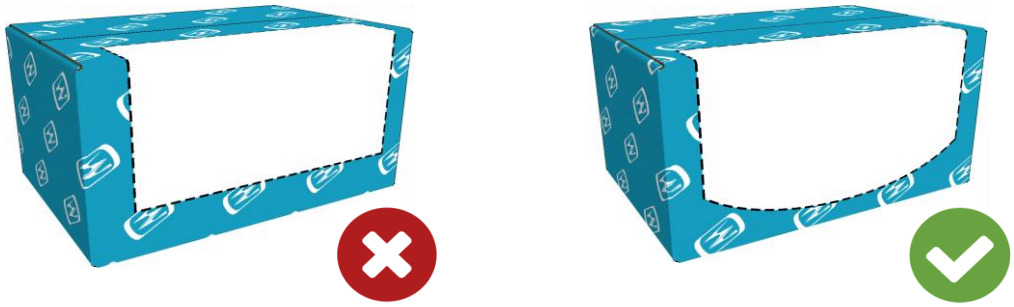


- Min. weight of outer carton is 500 grams due to the gripping disc system.
- If outer carton exceeds 5,5 kilograms then use slip-sheets between cartons in order to avoid pallets sliding apart.
- Further, the bottom of the outer cartons must not be shiny/slippery.
- The outer carton must not have open sides from bottom up to 7 cm (there are few exceptions with small products), so that the light beam can pass through it. In case it is important that the outer carton have open sides, then the supplier must ensure that the units inside the outer carton are tightly stuffed to cover up any gaps between the products. When using open sides or trays with low sides it is important to ensure that the sides of the packaging still are high enough to make it easy to handle in stores.

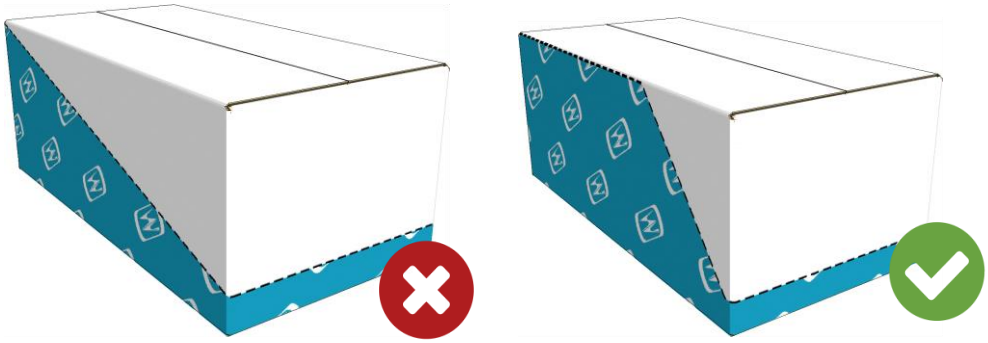
Cardboard perforation is only accepted for automatic warehouses

Cardboard tear-off is not accepted and perforation should be avoided. However, if use of cardboard perforation is the only option please be aware that the perforation meets the following requirements:

- Perforation should leave nice edges when tearing off
- There should be clear symbols that indicate how perforation should be handled
- Perforation should have round edges (see example below)



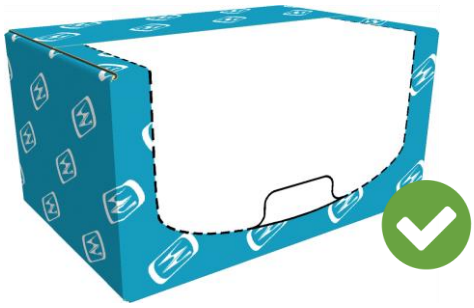
Curved perforation lines do not open prematurely and improve stacking strength



Perforation should be placed so that the load-bearing sides are as intact as possible while still maintaining high product facing (see example below).

Minimising the cutting of load bearing flutes will strongly improve the stacking strength of a box

- To ease the perforation opening for the employee a cut should be made to make a starting point for the tearing. Further, a large and visible hand hole will make it easier for the employee to get a firm grip.



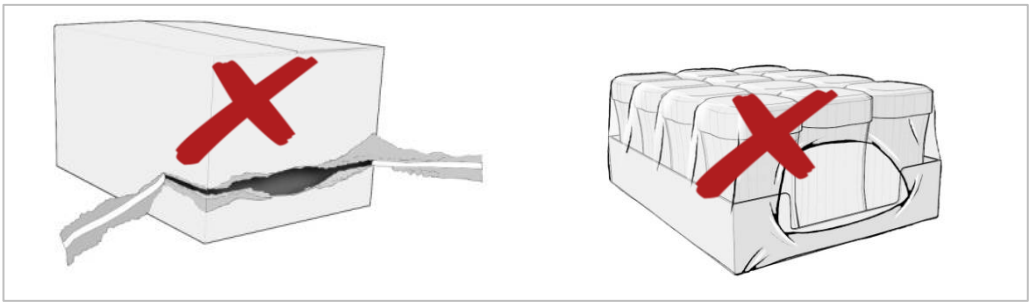
Requirements for the manual warehouses

FOR THE MANUAL WAREHOUSES

- The outer carton should be provided with a lid to protect the product throughout the supply chain.

- Avoid using tape, glue or other adhesive, so that the lid is easily taken off. See example below.

- Cardboard tear-off, perforation or shrink-wrap with perforation are not an option when only manual warehouses are to handle the carton.



- If carton is to be used for both manual and automatic warehouses, please see page 40 for requirements when goods are for both the automatic and manual warehouses.

  Contact person for questions to manual warehouses should be addressed to Purchasing Director Daniel Grabka, phone +48 512 408 928.

Shelve depth requirements for outer carton

The depth for outer carton must strive to fit the shelves depth to avoid space waste. The table below illustrates shelf depth across countries:

	DK	SE	DE	PL	UK
Bottom	80	80	80	80	80
Mid	60	60	60	60	60
Top	60	40	40	60	60

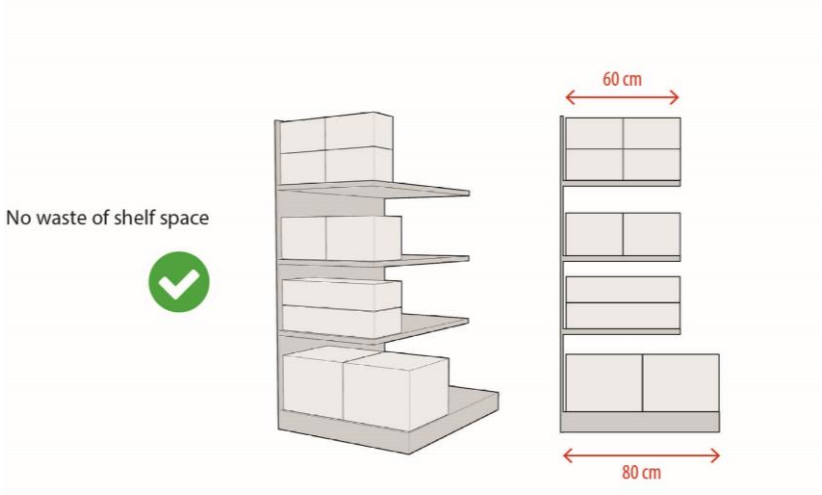
As seen, general shelf measures are 80 cm for the bottom shelves and 60 cm for remaining shelves. Top shelf depths vary between countries.

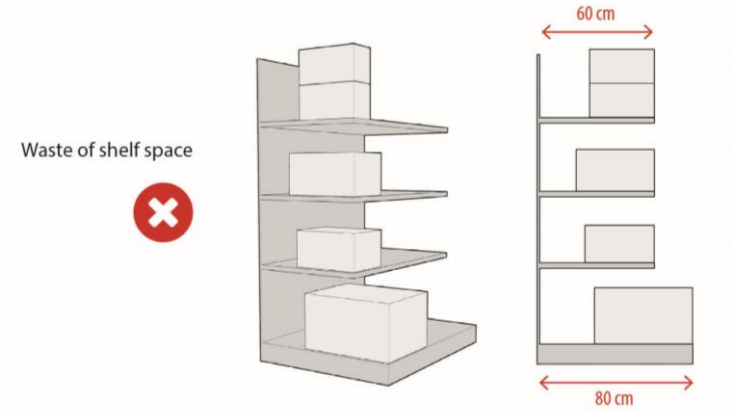
The optimal outer carton must therefore strive to be:

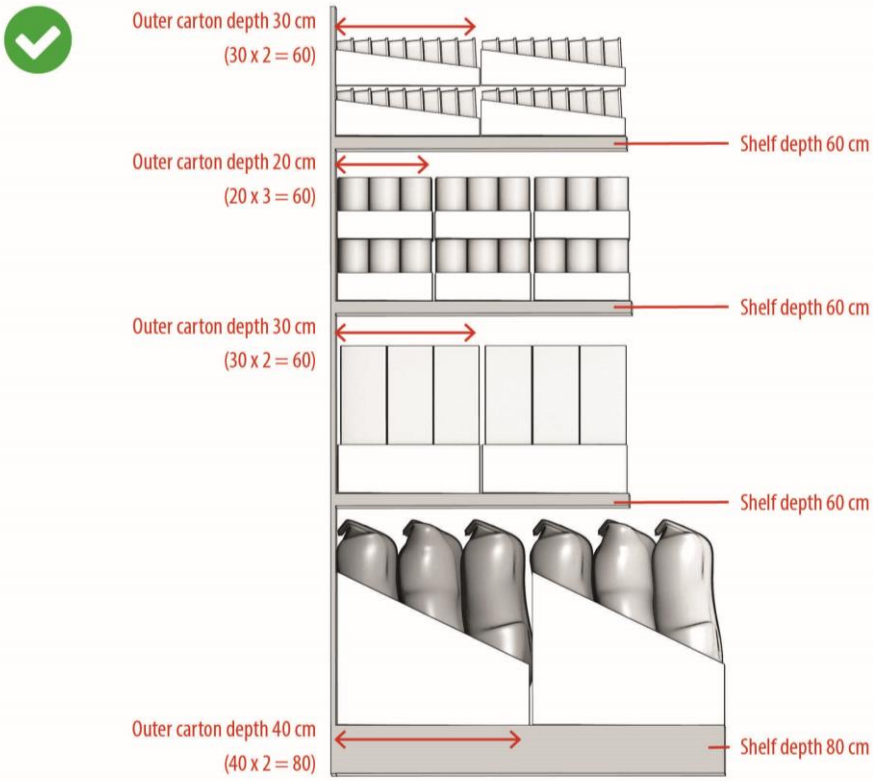
	Optimal outer depth measures
Bottom	20 or 40 cm
Mid	20, 30 or 60 cm

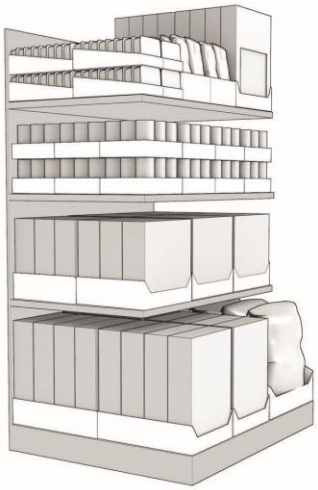
Depth shall also be aligned with the size and weight of the product to ensure the handling of the outer carton.

There will be exceptions within some categories where depth of outer carton needs to be considered from case to case.







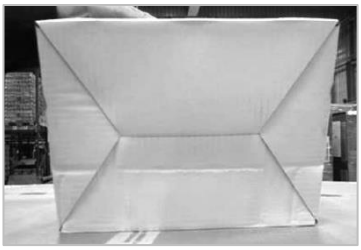


Optimal packaging depths make room for more products on the shelves.

General requirements to outer carton

Presentable outer carton with low cut facing and print on carton according to the brand design manual. This includes:

- The carton should be white on the inside
- The carton should have shiny offset print on the outside

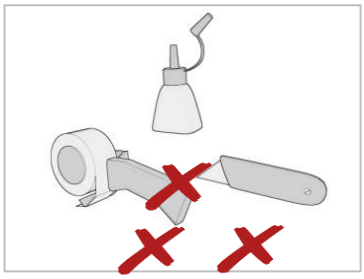


If possible, for easy handling in stores please ensure that:

- The carton should contain automatic folding bottom. If this is not possible apply tape on bottom
- Removable lid has holes for easy grip
- The carton should contain holes in sides for easy handling
- No use of knifes should be necessary in stores
- There must be a limited or no use of pins, glue, tape or wax.
- Where perforation is the only option (note: only allowed when solely to automatic warehouse) it is essential that any tape or glue does not cover the perforation.
- Max. weight of outer carton is 12 kg. For the automatic warehouse there is a minimum weight of 500 g.

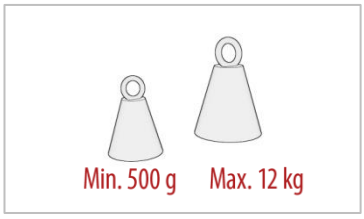
Ensure a stable outer carton that can withstand handling throughout the supply chain. Outer carton should be aligned with the weight and height of the product. Test whether the carton is stable by lifting and pressing the carton, with content, from a diagonal angle.

- Products with shrink-wrap need to be placed in a tray, for whole cartons to be placed easily on shelves. The shrink wrap perforation is preferred at bottom of tray and needs to be located opposite lifting sides to avoid tearing when lifted.



Handling instructions (arrows and symbols) are important in order for staff to make the carton ‘ready for sale’.
These instruction shall be supported by:

- order EAN-code
- product description name
- push symbols near cardboard perforations to ensure nice edges
- none of the handling instructions must be visible on the facing of the carton



Special requirements for chilled and frozen

Outer carton shall be able to withstand water and cooling.

Approval procedure

Final approval of the outer carton for international products has to be done by the International Sourcing department. For local products the final approval of the outer carton is done by the local buyer. All approvals are done in collaboration with the warehouse.

Pallet requirements

The following pallets are accepted at both automatic and manual warehouses:

EURO pallets:

- EURO full pallet max height 180 cm
- EURO ½ pallets max height 170 cm
- EURO ¼ pallets max height 180 cm

CHEP pallets (blue pallets):

- CHEP full pallets max height 180 cm
- CHEP ½ pallets max height 170 cm
- CHEP ¼ pallets max height 180 cm
- Only the following two types of CHEP ½ and ¼ pallets are accepted:

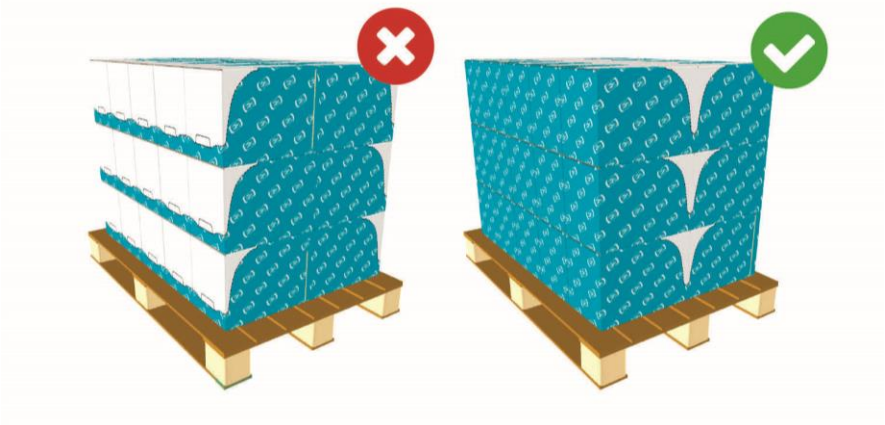
Please be aware that in Germany and Sweden max. pallet height for both EURO and CHEP deviates..
Please refer to Appendix A for detailed overview of warehouse specific pallet requirements.

The indicated max. pallet heights are only applicable for the above approved pallet types.

If possible please double stack pallet in the trucks. If four ¼ pallets are delivered to automatic warehouse in Køge, DK and UK these should be placed on top of 1 EURO sized pallet. This is not a requirement for the remaining warehouses.

When stabling the pallet it is important that the pallet is:

- Stabled as a stand alone unit
- Possible to transport
- Stabled with as few holes as possible through all layers
- Optimal stabled with a utilisation degree of minimum 90%.
- Stabled with the weakest side of the carton (e.g. side with perforation or
- low cut in front) towards the middle



Stretch film around the pallet should be tight to avoid wrap hanging outside the pallet. However, products must not be damaged by too tight film (see picture).

Further, when using stretch film around whole pallets, please ensure that the pallet tunnels are free and accessible. Loose tails of stretch film should also be avoided.

Pallets should be labeled with a GS1 – EAN128 pallet label on each pallet.

Both 20’ and 40’ containers are accepted.

UK and Sweden warehouses have limited slip sheet and will be agreed upon on a case by case basis.

Outer carton – Good examples

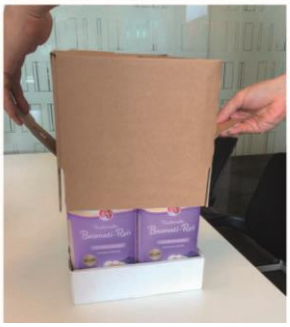
*Good examples for **both** manual and automatic warehouse*

- Nice off-set print on outer carton
- +7 cm. at the bottom
- Fixed lid – easily opened without tools

- Good alternative to tear-off on outer carton
- Outer carton fixed with hooks (at bottom)
- Good display of products
- Nice off-set print on tray
- Nice print on outer carton to easily identify product

- +7 cm. tray
- Fixed lid (glued inside of tray – easy to open without tools)
- Good display of products and nice off-set print on tray

- Outer carton fixed with hooks – easy to open without tools
- Outer carton in brown liner
- Outer carton has automatic folding bottom



- Could be even further improved with holes in sides for easier handling in stores
- IMPORTANT: The brown outer carton needs to clearly communicate the contents of the colli

FOR THE AUTOMATIC WAREHOUSES

Good examples for automatic warehouse only

- Stackable
- Easy to make sales-ready without any use of tools
- Fixed lid (perforation)

- Perforation must leave nice edges at facing
- Ensure easy breaking of perforation (i.e. clearly marked, no tape etc.)
- Better alternative: Lid with hooks

- 7 cm. tray
- Good display of product and nice off-set print
- Perforation clearly marked and easy to open without any use of tools

- Further improvement: Shrink wrap perforation being located on bottom of colli for easier handling in store

Good examples for manual warehouse

FOR THE MANUAL WAREHOUSES

- Non-fixed lid with holes for easy removal of lid
- Off-set print on tray (and white inside)
- Nicely cut facing - no perforation

- In some cases these cartons can be used for the automatic warehouse. This is a case by case assessment

- Non-fixed lid with holes for easy removal of lid
- Off-set print on outside and white inside of carton
- Nicely cut facing - no perforation Automatic folding bottom

- In some cases these cartons can be used for the automatic warehouse. This is a case by case assessment

In some cases these cartons can be used for the automatic warehouse, this is a case by case assessment.

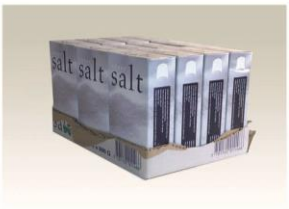
Outer Carton - Bad examples

- No tray – not possible to put directly on selves
- No perforation – hard to make sales ready

- No display and print
- No perforation

- Less than 7 cm tray
- Not easy to tear off
- Unstable when lifted

- No print
- Bad tear-off



Appendix A – Pallet Overview per warehouse

Format	Country	Warehouse	Automatic or manual	Type of pallets that can be handled																Special requirement for the use of 1/2 and 1/4 pallets
				EURO type				CHEP (blue pallets)				Red pallets				One way pallets				
				1/1 pallets 80 x 120	1/2 pallets 80 x 60	1/4 pallets 40 x 60	UK 100 x 120	1/1 pallets 80 x 120	1/2 pallets 80 x 60	1/4 pallets 40 x 60	UK 100 x 120	1/1 pallets 80 x 120	1/2 pallets 80 x 60	1/4 pallets 40 x 60	UK 100 x 120	1/1 pallets 80 x 120	1/2 pallets 80 x 60	1/4 pallets 40 x 60	UK 100 x 120	
Blue	DK	Ishøj	Manual	180 cm	160 cm	140 cm	NA	180 cm	160 cm	NA	NA	180 cm	160 cm	NA	NA	180 cm.	160 cm.	140 cm.	180 cm.	do not place 1/4 or 1/2 pallet on top of 1 Eur
Blue	DK	Vejle	Manual	180 cm	160 cm	140 cm	NA	180 cm	160 cm	NA	NA	180 cm	160 cm	NA	NA	NA	NA	NA	NA	4 ¼- pallets must be stacked on top of 1 EUR-sized pallet. We only accept a good quality EUR pallets
Blue	DK	Højbjerg - F&V	Manual	180 cm	160 cm	140 cm	NA	180 cm	160 cm	NA	NA	180 cm	160 cm	NA	NA	NA	NA	NA	NA	do not place 1/4 or 1/2 pallet on top of 1 Eur
Blue	DK	Højbjerg - grocery	Automatic/Manual	180 cm	160 cm	140 cm	NA	180 cm	160 cm	NA	NA	180 cm	160 cm	NA	NA	NA	NA	NA	NA	do not place 1/4 or 1/2 pallet on top of 1 Eur
Blue	DK	Årslev	Automatic	180 cm	100 cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 ¼- pallets must be stacked on top of 1 EUR pallet. 1/2 pallets must be stacked on top of 1 EUR pallet.
Netto	DK	Køge	Automatic	180 cm	170 cm	180 cm	NA	180 cm	NA	NA	NA	180 cm	NA	NA	NA	NA	NA	NA	NA	4 ¼- pallets must be stacked on top of 1 EUR-sized pallet.
Netto	DK	Aarslev	Manual	180 cm	170 cm	140 cm	NA	180 cm	NA	NA	NA	180 cm	NA	NA	NA	NA	NA	NA	NA	Not relevant
Netto	PL	Motaniec	Manual	180 cm	180 cm	180 cm	NA	180 cm	180 cm	180 cm	NA	180 cm	180 cm	180 cm	NA	NA	NA	NA	NA	do not place 1/4 or 1/2 pallet on top of 1 Eur
Netto	PL	Domaslaw	Manual	180 cm	180 cm	180 cm	NA	180 cm	180 cm	180 cm	NA	180 cm	180 cm	180 cm	NA	NA	NA	NA	NA	do not place 1/4 or 1/2 pallet on top of 1 Eur
Netto	PL	Kopytkowo	Manual	180 cm	180 cm	180 cm	NA	180 cm	180 cm	180 cm	NA	180 cm	180 cm	180 cm	NA	NA	NA	NA	NA	do not place 1/4 or 1/2 pallet on top of 1 Eur
Netto	DE	Wustermark	Automatic / manual	180 cm	170cm	180 cm	NA	180 cm	170 cm	180 cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	do not place 1/4 or 1/2 pallet on top of 1 Eur
Netto	DE	Stavenhagen	Manual	180 cm	165 cm	150cm	NA	180 cm	165 cm	180 cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	¼- and ½-pallets can be stacked on top of 1 EUR-sized pallet, but single ¼ and ½-pallets also accepted.
Netto	SE	Linköping and Falkenberg	Manual	160 cm	160 cm	160 cm	NA	160 cm	NA	NA	NA	160 cm	160 cm	NA	NA	160 cm	160 cm	160cm	NA	do not place 1/4 or 1/2 pallet on top of 1 Eur
Netto	UK	Scunthorpe	Manual	180 cm	170 cm	180 cm	180 cm	180 cm	170 cm	180 cm	180 cm	180 cm	170 cm	180 cm	180 cm	180 cm	170 cm	180 cm	180 cm	4 ¼- pallets must be stacked on top of 1 EUR-sized pallet.