

S Group's Packaging Instructions for Food and Daily Non-Food Products



S Group Retail Business

Inex Partners

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Change history

Version	Changes
1.1	<ul style="list-style-type: none">• Page 16: Measurements for cases in storage automation systems• Page 18: Additional requirements for open and low case trays• Pages 20-23: Additional requirements for fruit and vegetable cases
1.1	<ul style="list-style-type: none">• Page 13: Additional information regarding shelf depths of cold store and freezer equipment
1.2	<ul style="list-style-type: none">• Additions and clarifications to page 8: Requirements for pallet loads in storage automation systems• Additions to page 9: Requirements for pallet loads in storage automation systems• Additions and clarifications to page 12: Using pallet labels• Clarifications to instruction on page 20: Additional requirements for fruit and vegetable cases• Changed Product Quality Manager contact information on page 23
1.3	<ul style="list-style-type: none">• Page 12: Using pallet labels• Pages 19-20: Additional requirements for fruit and vegetable cases



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S Group's Packaging Instructions for Food and Daily Non-Food Products

Introduction

These instructions and requirements for pallets and cases cover the entire supply chain. Adhering to these requirements will ensure the safe and efficient handling of goods in the S Group's automated distribution centre and in the store environment. In addition, these instructions define the requirements for cases considered to be shelf-ready. Pallets and cases suited for automated handling and shelf-ready packages are essential criteria when evaluating the competitiveness of a product.

Standards to be followed

The markings and dimensions of pallets and cases used in the S Group's automated distribution centre and store environments must comply with the following standards:

GS1 label guidelines

European Logistic Label (ELL)

SFS 5352 (modular dimensions)

Standard dimensions and markings are requirements for efficient logistics. In the automated distribution centre, the identification and efficient mobility of products are based on correct and readable labels. Defective packages and labels increase the number of errors in storage automation and cause delays in the supply chain.

Definitions of terms

Shelf-ready package refers to a product that is delivered in a ready merchandised unit. This means that the products do not need to be taken out of case and arranged on store fixtures individually.

Case refers to the secondary package that holds together the individual units of goods. A case can be used for shelving if it meets the requirements set for a shelf-ready package presented on pages 14-15.

Storage automation refers to automated storage processes such as receiving, storing, picking and shipping functions. Instead of manual handling, material is handled by using conveyors and various pieces of equipment.



S Group's Packaging Instructions for Food and Daily Non-Food Products

Pallets

Pallets in storage automation and store environments

In our distribution centre, receiving, storing, picking and shipping functions are operated using automation. Instead of manual handling, material is handled by using conveyors and various pieces of equipment. Automation significantly improves the efficiency of the logistics chain.

Storage automation handles both pallets from which incoming goods are unloaded for storage and pallets used in-store. Half pallets are delivered to stores through storage automation, and they must meet the requirements set by storage automation and store environments.

Pallet loads at most 1,100 mm high are ideal for storage and automation systems in our logistics centre. Any pallet loads of more than 1,100 mm in height must be agreed upon separately with packaging specialists of Inex (contact information on page 23). Pallet types and sizes accepted in our storage automation and store displays are presented in the following table.

Pallets in storage automation			
Pallet type	Maximum base dimensions (mm)	Maximum net weight (kg)	Recommended height of pallet load (mm)

EUR	800 × 1,200	720	≤1,100
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EUR 3-sized	1,000 × 1,200	970	≤1,100
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Pallets suitable for basic store furniture			
Pallet type	Maximum base dimensions (mm)	Maximum net weight (kg)	Recommended height of half pallets (mm)

Half pallets	600 × 800	360	≤1,000
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Quarter pallets	400 × 600	180	≤1,000
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Pallets suitable for mass in-store displays			
Pallet type	Maximum base dimensions (mm)	Maximum net weight (kg)	Maximum height of half pallets (mm)

EUR	800 × 1,200	720	2,300
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EUR 3-sized	1,000 × 1,200	950	2,300
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Beverage pallets	900 × 1,200	1,200	2,300
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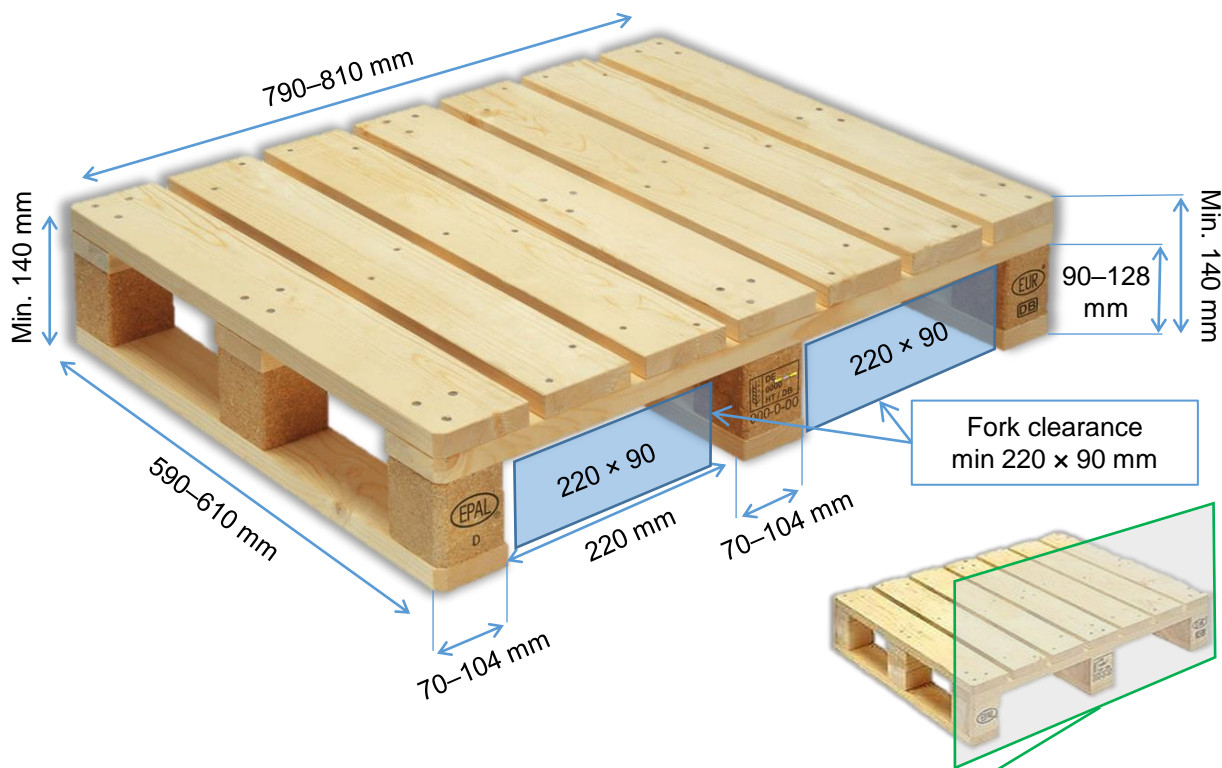


Pallets

Half pallets (EUR 6 pallet)

600 mm x 800 mm x 1,000 mm

- The minimum height of blocks is 90 mm.
- The maximum weight of a half pallet load is 360 kg.
- Half pallets are handled from the long side.



- **The recommended height of a half pallet load is ≤1,000 mm (including the height of the pallet).**
- The recommended height enables the use of pallets in the store furnishing frames of all S Group chains.
- Half pallets can also be used in mass displays.
- Half pallets are handled from the long side.
- Packages must be inside the edges of pallets.
- Reusable half pallets (e.g. leased half pallets) should primarily be used.
- Half pallets may only contain one type of product per pallet. Mixed pallets are not used.
- A half pallet load must only consist of full pallet layers.
- EUR 3-sized or EUR pallets must not be placed under half pallet deliveries.

Half pallets in store displays:

The pallet/product face must be **on the long side**, so that one half pallet fits in the pallet position in a basic shelf.



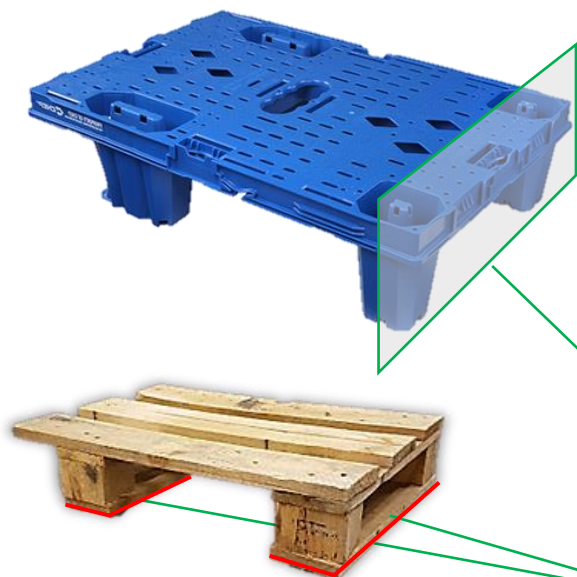


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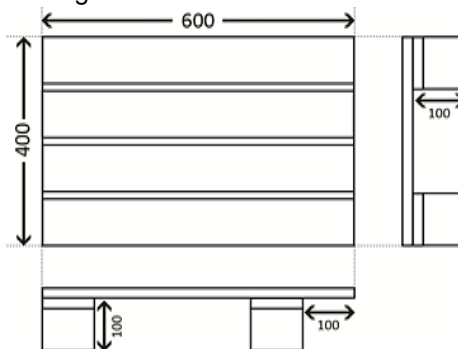
Pallets

Quarter pallets

400 mm x 600 mm x 1,000 mm



- The minimum height of blocks is 100 mm.
- The maximum weight of a quarter pallet load is 180 kg.



Quarter pallets in store displays:

The pallet/product face must be **on the short side**, so that two quarter pallets fit side-by-side in the pallet position on a basic shelf.

Quarter pallets must not include any crosswise board.



- The recommended height of a quarter pallet load is $\leq 1,000$ mm (including the height of the pallet).
- The recommended height enables the use of pallets in the store furnishing frames of all S Group chains.
- Quarter pallets can also be used in mass displays.
- **Four-way pallets must be used.**
- **Quarter pallets must not include any crosswise board.**
- Packages must be inside the edges of pallets.
- Reusable quarter pallets (e.g. leased quarter pallets) should primarily be used.
- Quarter pallets may only contain one type of product per pallet. Mixed quarter pallets are not used.
- A quarter pallet load must only consist of full pallet layers.
- EUR pallets must be used for quarter pallet deliveries.



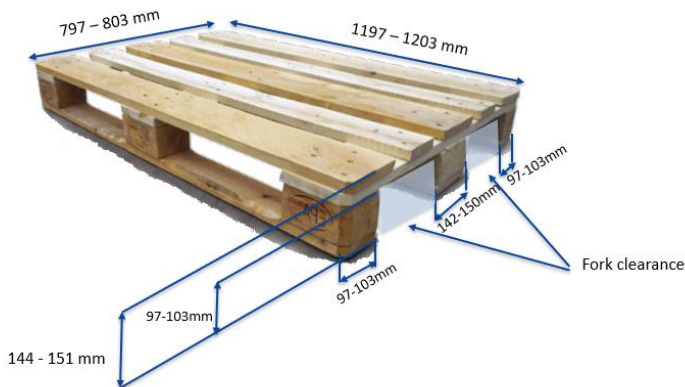
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Pallets

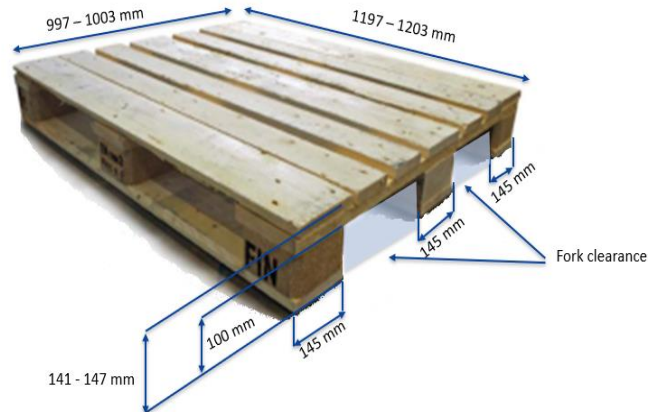
EUR, EUR 3-sized and beverage pallets

- EUR, EUR 3-sized and beverage pallets are mainly used for delivery.
- They are also suitable for store displays.
- They do not fit in the basic store furnishing frame.
- When used in mass in-store displays, the maximum height of a pallet load is $\leq 2,300$ mm (including the height of the pallet).

EUR



EUR
3-sized



Examples of pallet locations in mass in-store display areas





S Group's Packaging Instructions for Food and Daily Non-Food Products

Pallets

Requirements for pallets in store displays

- Pallet loads must be sturdy. The load must not protrude outside the edges of the pallet.
- The use of space must be effective in pallet loads. There can be no empty space in packages.
- It must be easy to remove the protective material of pallet loads without requiring any tools.
- It must be possible to place pallet loads ready for sales without requiring any tools.
- No marketing material extending over the top of pallet surface is used.
- Pallets must display products, not packaging material.
- It must be easy to recognise the product from the pallet face.
- It must be easy for customers to grab products from the pallet face.
- Pallets used in store displays must also meet the storage automation requirements presented on page 8.



Pallets used in store displays must fit in the basic store furnishing frame.

Products must face consumers and be easy to grab by consumers.

The use of space must be effective in pallet loads.

There can be no empty space in packages. The effectiveness of the use of pallets must not be reduced by any marketing material.

Pallets must display products.

Pallet loads are sturdy and their use of space is effective. Products are easy to recognise and grab from the pallet face.



S Group's Packaging Instructions for Food and Daily Non-Food Products

Pallets

Pallets suitable for automation systems

Pallets suitable for automation systems are absolute requirements for efficient goods receiving. The starting point of a cost-efficient and automated receiving system is a pallet that meets the requirements set by automation.

Requirements for pallet loads in storage automation systems

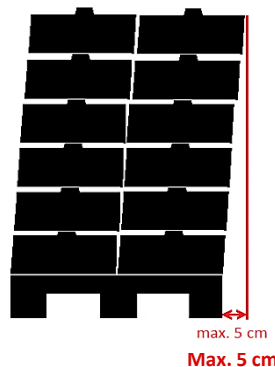
- Pallet load and tying must withstand the strain caused by transportation.
- All pallets must be fully intact.
- We recommend that standard reusable pallets are used.
- Every pallet must be neatly tied or wrapped so that the wrapping or stretch film is not loose.
- Extra pallet labels or papers should not hang loose or extend outside of the edges of the pallet.
- Each pallet load can only consist of full layers, and each layer must consist of an equal number of cases.
- A single pallet can only consist of a single type of product, with a single best before date.
- Packages must be packed as neatly as possible.
- There can be no adhesive or taping between pallet layers or packages in a single layer.
- Cases cannot be wrapped or taped together.
- No empty space between packages can be filled with any filler material.
- If a slipsheet board is used between layers, the material must be stiff cardboard or corrugated cardboard. (See more instructions on page 11.)
- A slipsheet board can only be placed on a pallet load if another pallet is stacked on top of that pallet.
- There should not be ice in pallet layers or on top of the pallet in frozen products.



All pallets must be fully intact. Even minor deviations can cause problems in automatic receiving systems.

Products must remain inside the edges of the pallet; they must not extend outside the edges.

Pallet loads must be as straight as possible. The maximum permitted tilt is 5 cm.



Stretch film can also be wrapped around the pallet, without covering the forklift clearance.

To make the receiving process easier, stretch film can only be wrapped around products on pallets.



S Group's Packaging Instructions for Food and Daily Non-Food Products

Pallets

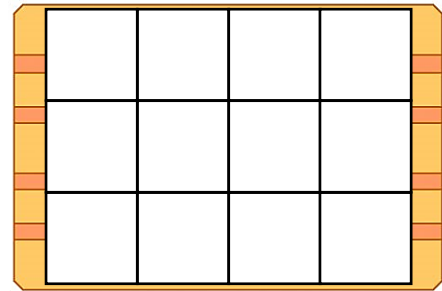
Requirements for pallet loads in storage automation systems

The following requirements do not apply to half pallets used in store displays.

Filling rate of a pallet layer

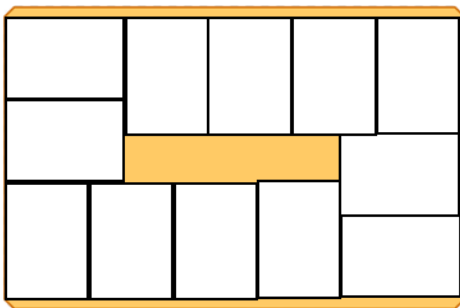
Each pallet layer must cover at least 75 % of the pallet area and be located in the middle of the pallet. If there is any empty space on a pallet, it must be located on the short sides of the pallet as evenly as possible at both ends.

There can be no empty space in the middle of a layer. Pallets should be filled from one long side to the other, without any products extending over the edges. Please note the special requirements for low case trays on page 18.

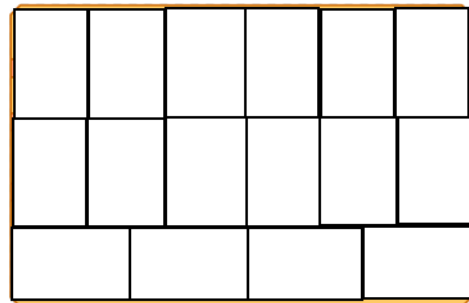


Pallet loads optimizing

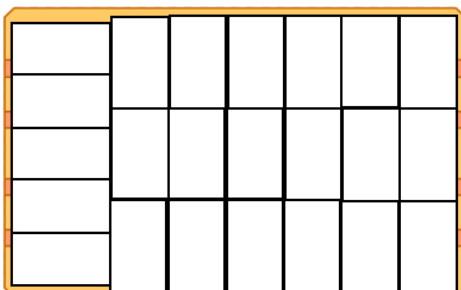
The aim is to cover 100 % of the pallet layer. This is easy when you follow instructions of module size cases (e.g. 300 mm x 200 mm, 400 mm x 300 mm) when designing outer case packages. Few examples are listed below.



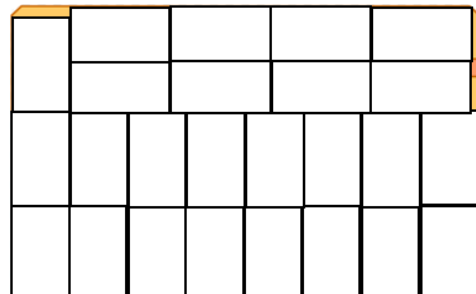
Dimensions of outer case:
L 305 mm x W 220 mm
Filling rate of the pallet is 83,9 %.



Dimensions of outer case have been changed:
L 300 mm x W 200 mm
Then outer case is module size and filling rate of the pallet is 100 %. There are 33 % more products on the pallet.



Dimensions of outer case:
L 250 mm x W 145 mm
Filling rate of the pallet is 87 %.



Dimensions of outer case stay same but **layout is different**.
Then filling rate of the pallet is 94 %. There are 8,6 % more products on the pallet.



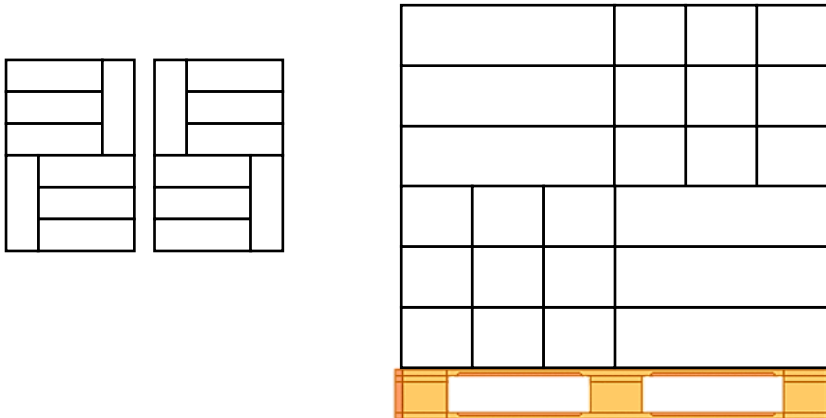
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Pallets

Requirements for pallet loads in storage automation systems

Crosswise stacking

A pallet is sturdier if the direction of products is turned, for example, every third layer. In this case, the product pattern and the number of packages remain unchanged; the pattern is only turned by 180 degrees.



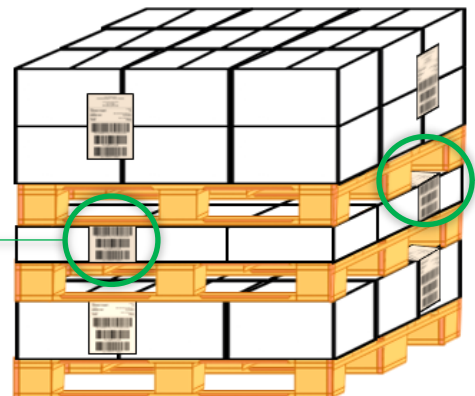
Stacked pallets

All items must primarily be delivered on separate pallets. If the ordered volume is very low, a sandwich pallet consisting of layers of several different items can be formed.

In this case, every item is wrapped on a separate pallet and with a separate pallet label. Pallet layers are stacked on top of each other to form a tower which is wrapped for transportation. When a sandwich pallet is received, the extra wrap can be removed from around all pallets, after which each pallet is a separate wrapped unit with a separate pallet label.

If the product layer on a pallet is so low that the pallet label is taller than a single layer, the top of the label can be folded on top of the product layer.

Barcodes must be readable.



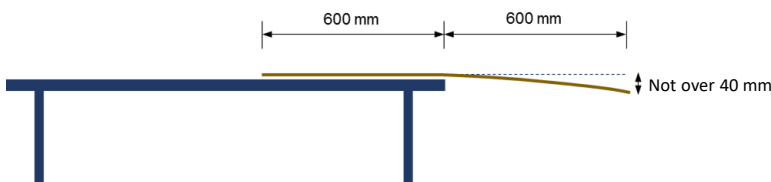


S Group's Packaging Instructions for Food and Daily Non-Food Products

Pallets

Using slipsheet boards

- If slipsheet boards are used between layers:
 - The board cannot be larger than the dimensions of the pallet.
 - A board must be placed between the same layers on every pallet consisting of the same product.
 - The material must be stiff cardboard or corrugated cardboard.
- Material recommendations for slipsheet boards:
 - Stiff cardboard, thickness >1 mm
 - Stiff corrugated cardboard, thickness >2 mm
- One-sided corrugated cardboard, paper, friction paper or plastic must not be used.
- The slipsheet board must be a single board, dimensioned according to the size of the pallet.
- Holes in slipsheet boards must be minimized.
- It must be easy to remove the board.
- Testing the stiffness of a slipsheet board: when the short side of the board extends over a surface (e.g. a table), it must not bend by more than 40 mm.



Tying fruit and vegetable pallet loads



An example of how to tie a fruit/vegetable pallet.

When tying fruit and vegetable pallet loads, we recommend that corner supports and at least five plastic bands or perforated stretch film are used.

The use of a nylon or other net is not permitted.



A nylon net wrapped around forklift wheels.



S Group's Packaging Instructions for Food and Daily Non-Food Products

Pallets

S Group's requirements for pallet markings

In S Group's supply chain, pallet markings must be in accordance with the GS1 European Logistics Label (ELL) standard.

The use of an ELL label with the serial shipping container code (SSCC) is mandatory.

The party forming a logistics unit must use its own GS1 company prefix number.

The GS1-128 barcode type is used for GS1 logistics markings.

An example of an ELL label is shown on page 24.

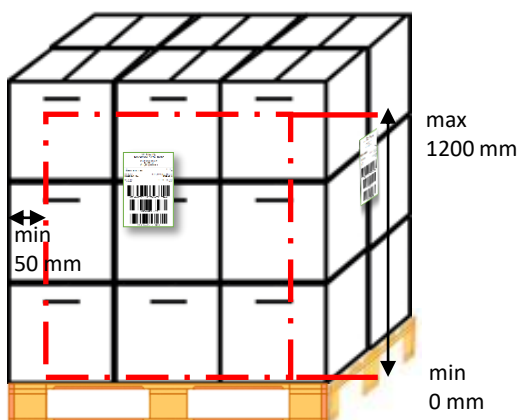
Pallet label in accordance with the GS1 ELL standard
PALLET LABEL (European Logistic Label)



More information about GS1 labels and their use is available from GS1 (gs1.org).

Using pallet labels

- The recommended size of the pallet label is A5 (148 mm × 210 mm). Self-adhesive matte plastic is recommended.
- Each pallet load must have two identical labels, one of which must be on the long side and the other on the short side.**
 - In fruits and vegetables pallet loads (EUR1, EUR3) pallet labels must be on pallets both long sides.**
- Labels must be attached in the area indicated in the image as high as possible, so that they do not hang loose from any corner.
- Labels must be at least 50 mm from corners.
- On quarter pallets**, labels must be attached on top of the pallet.
- On half pallets**, labels must be attached on the short sides.
- If no stretch film or similar is used, the label can be attached directly on products, without binding several packages together.
- If stacked pallets are used, each pallet must contain a separate label.
- There must be only one unique SSCC barcode on each pallet.





S Group's Packaging Instructions for Food and Daily Non-Food Products

Cases

Cases in storage automation and store environments

Significant savings can be achieved in in-store shelving when products are replenished in shelf-ready packages, instead of individually. A well-designed shelf-ready package helps to display the product. Products can be displayed more neatly, and customers can recognise and purchase them better. In addition, a uniform and neat layout of a shelf-ready package communicates the product family to customers and supports the brand.

In addition to being shelf-ready, a good package also protects products during transportation and storage and makes it easier to handle products in different phases of the supply chain. A case suitable for storage automation produces significant added value in terms of storage handling.

Shelf-ready packages and cases suitable for storage automation are essential criteria when evaluating the competitiveness of a product.

S Group's criteria for shelf-ready packages are divided into absolute and added-value criteria:

Absolute criteria define whether or not a package is shelf-ready. If a package meets all absolute criteria, it is shelf-ready. If an absolute criterion is not met, the package cannot be used in shelving.

Added-value criteria are important features, considering the functionality of shelf-ready packages. A package may be ready for shelving, even if it does not meet added-value criteria.

Criteria for shelf-ready packages are presented in tables on pages 14 and 15. Requirements for cases suitable for automation systems are presented on pages 16 - 21.

Shelf depths in S Group's stores to support packaging design

Shelf depths			
Basic shelf (warm)	PRISMA 600 mm	S-MARKET 500 mm	Small stores 400 mm
Exceptions:			
Beverages	-	600 mm	600 mm
Toilet paper and paper towels	800 mm	600 mm	600 mm
Diapers	800 mm	600 mm	600 mm
Crisps	800 mm	-	-
Hygiene	500 mm	-	-
Makeup and women's fragrances	400 mm	400 mm	-






The shelf depths of cold store and freezer equipment vary by product and temperature range. Details of product range shelf depths are available from your S Group contact person (sourcing manager for the product range concerned: forename.surname@sok.fi) or from space and supply chain management: tilanhallinta.market-ketjuohjaus@sok.fi.



S Group's Packaging Instructions for Food and Daily Non-Food Products

Cases

Absolute criteria to be used in evaluating shelf-ready packages





Absolute criteria			
Criterion		Requirement	Example
1.	Opening the shelf-ready package leaves a tray or underlay enabling shelving.	Ability to shelve as a complete tray.	
2.	The front edge of the shelf-ready package on the facing side is sufficiently low or can be removed.	Consumers can identify the consumer package at all shelf heights and from all parts of the shelf as well as from a full and partly emptied shelf-ready package. The edge of a shelf-ready package must not cover any significant product information.	
3.	Customers can easily pick and return products.	Easy to buy from all shelf heights and all parts of the shelf, as well as from a full and partly emptied package.	
4.	The maximum weight of a shelf-ready package is 10 kg (recommended weight less than 7 kg) and is strong enough for shelving even after opening.	It must be possible for store employees to lift the packages and the packages must not break when shelving them. Attention must be paid to safety during the shelving process. The shelf-ready package must bear the weight of the sales units.	
5.	The maximum depth of a shelf-ready package is 60 cm.	Shelf-ready packages must fit in a shelf 60 cm deep. Shelf depths vary according to the product range and chain. Check the table on page 13. Packages suitable for several shelf depths enable their use in our different chains.	



S Group's Packaging Instructions for Food and Daily Non-Food Products

Cases

Added-value criteria to be used in evaluating shelf-ready packages

Added-value criteria		
Criterion	Requirement	Example
1. Easy to open: <ul style="list-style-type: none"> Without tearing If a package needs to be torn to open it, there must be neat and even surfaces after it has been opened Can be opened without any tools However, the package must be sturdy enough. 	<ul style="list-style-type: none"> Savings in working hours Tidy store appearance Safe to shelf and buy Easy to shelf (tear strips rarely work) Minimised wastage 	
2. Efficient use of space: <ul style="list-style-type: none"> The shorter side of a shelf-ready package facing consumers No empty space in a full package Package with modular dimensions Package depth: 25–30 cm It must be possible to stack packages on shelves, even when opened, if the product enables stacking 	<ul style="list-style-type: none"> Optimal and efficient use of space and precision in product sales Logistical efficiency Packages suitable for all shelf depths 	
3. Packaging material is easy to remove and recycle	<ul style="list-style-type: none"> Minimised amount of waste Easy to recycle and eco-friendly 	
4. Recognisable packages	<ul style="list-style-type: none"> Recognisable when transported 	



S Group's Packaging Instructions for Food and Daily Non-Food Products

Cases

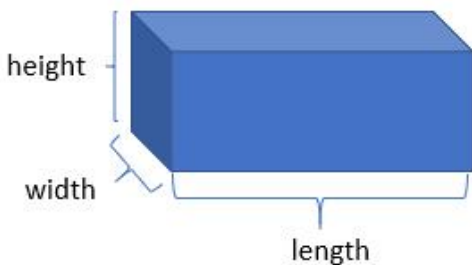
Cases suitable for automation systems

A case suitable for storage automation produces significant added value in terms of logistics. Our most cost-efficient and highly automated picking system requires packages that meet the requirements set by storage automation.

Not all products are fully suitable for automated picking systems. For example, some cases of cosmetic products are too small for automation systems. Packages not suitable for automation are picked manually, using light and voice picking systems. Packages not suitable for automation may be ready for shelving if they meet the criteria for shelf-ready packages on page 14. If your packages do not fully meet the requirements set by an automated picking system, please contact packaging specialists of Inex (contact information on page 23).

Requirements for cases in storage automation systems

- A case must always contain the same number of consumer packages.
- **Any changes in the number of consumer packages and dimensions of cases must be reported immediately.**
- The minimum dimension of the base of a case is 100 mm x 150 mm and its maximum dimension is 400 mm x 600 mm.
- The minimum height of a case is 50 mm and its maximum height is 400 mm.
- The ratio between the height and width of a case cannot be more than 1.7.
- The maximum weight of a case is 23 kg. The recommended weight is less than 16 kg.
- Packages must be rectangular.
- The shape of a case or a package must not change during handling.
- It must be possible to stack cases with different sizes.
- There can be no empty space inside cases.



Any empty space inside packages must be minimised.



The ratio between the height and width of a case cannot be more than 1.7. A high centre of gravity may cause packages to fall over on conveyor belts.



It must be possible to stack cases with different sizes.



S Group's Packaging Instructions for Food and Daily Non-Food Products

Cases

Requirements for cases in storage automation systems

- To prevent cases from opening accidentally, it must be ensured that the adhesive used to keep the packages closed is strong enough and bears the weight of consumer packages.
- If a package includes a cover, the cover must be strong enough so that it does not open when lifted from the top.
 - The cover must be attached to the package, using an adhesive, tape or pins.
- When using locking tabs, their maximum height is 16 mm.
- If shrink film is used, it must be so strong that it does not break when the products are lifted from the shrink film or a separate lifting lug.
- Cases wrapped in plastic must be so tight that the shape of the packages does not change during handling.
- Shelf-ready packages must have a sufficiently sturdy and high cardboard collar, tray or wrap to prevent the products from falling during transportation.
- It is particularly important that packages in automated handling must be sufficiently strong. So they can stand the compression and other mechanical stresses imposed on packages.

Shrink film must bear the weight of consumer packages and lifting.



The cover must be attached to the package, using an adhesive, tape or pins.



To prevent packages from opening, it must be ensured that the quality and volume of the adhesive used are sufficient.



The maximum height of locking tabs is 16 mm.



S Group Packaging Instructions for Food and Daily Non-Food Products

Cases

Additional requirements for open and low case trays

- e.g. yoghurt and quark trays

- The minimum height of a case unit (tray and product) is 50 mm.
- The edges of a tray may not be higher than the consumer packages within.
- Any tray corners or locking tabs that are higher than the product may nest no more than 10 mm when stacked.
 - The case unit must remain visible for not less than 50 mm when nested trays are stacked.
- The consumer packages must cover any holes in the bottom of a tray.
 - Holes should preferably be positioned in the middle of the tray sides if there is no need to position them on the base.
 - An internal structure supporting cups or jars is recommended for case trays.
- The recommended material for tray is:
 - Corrugated cardboard or
 - Sturdy paperboard (not less than 600 g/m²).
- The pallet layer filling rate and pallet pattern are very important:
 - A pallet layer must cover not less than 90 per cent of the pallet surface, with the empty space distributed evenly on all four sides.
 - The pallet pattern must be unbroken (no holes in the middle) and rectangular in shape (no holes on the edges).

If there are holes at the bottom of the tray, the consumer packages must cover them.



A pallet layer must cover not less than 90 per cent of the pallet surface.

90 %

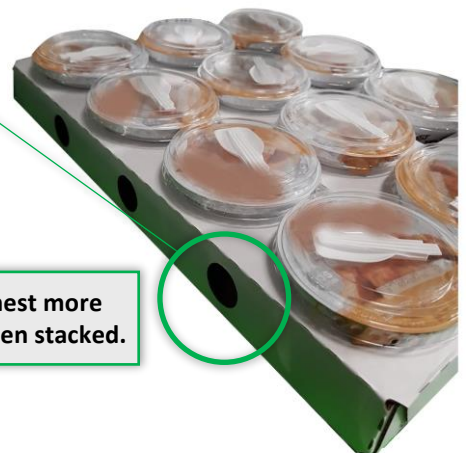


Minimum case height 50 mm.

Tray structure supports cups. Holes in tray positioned in the middle of tray sides.



Trays may not nest more than 10 mm when stacked.





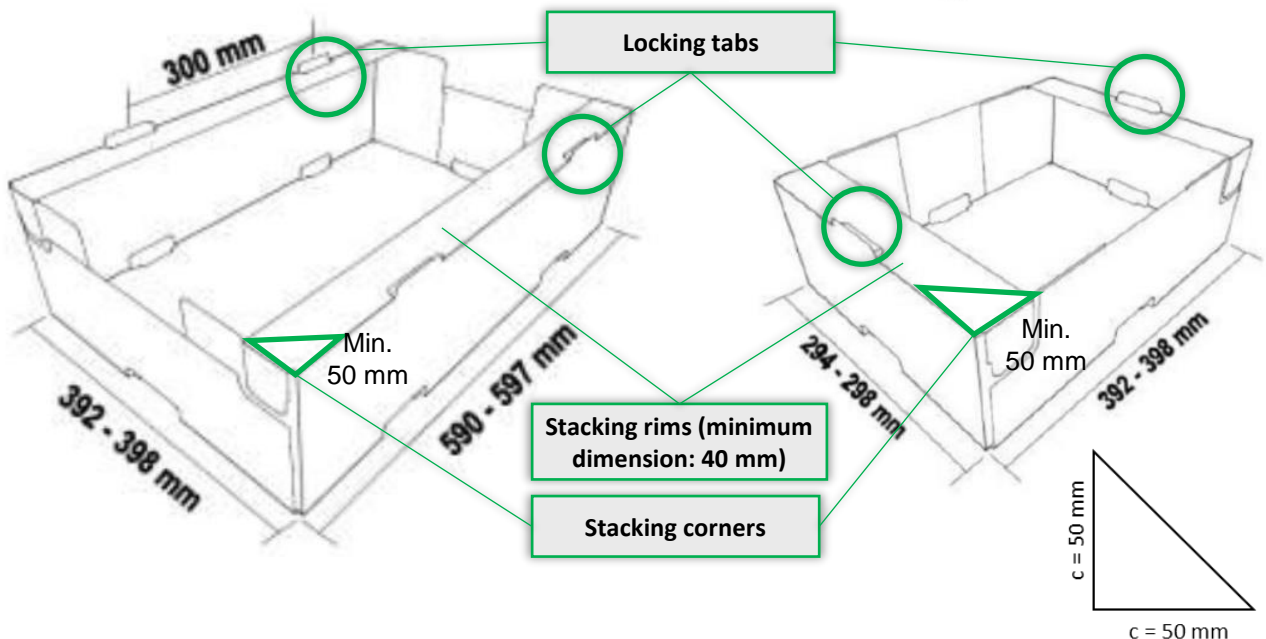
S Group's Packaging Instructions for Food and Daily Non-Food Products

Cases

Additional requirements for fruit and vegetable cases

- Folding recyclable black plastic Euro Pool System's fruit and vegetable crates are recommended.
 - EUR-pallets should be used with plastic crates
- When using cardboard packages, fruit and vegetable cases must be modular.
 - 600 mm x 400 mm, or
 - 400 mm x 300 mm
- The minimum height of a box is 60 mm.
- In order to stack boxes firmly, they must have stacking rims on both sides or stacking corners in all corners. The minimum width of stacking rims is 40 mm. The short sides of stacking corners must be at least 50 mm ($c = 50$ mm). (See image.) The short sides of the triangle cannot be shortened by means of rounding.
- Box stacking rims should primarily be on the long side in larger (600 mm x 400 mm) model and on the short side in small (400 mm x 300 mm) model, but may also be on the short side in larger (600 mm x 400 mm) model.
- There must also be locking tabs on the long side of the larger packaging model and on the short side of the smaller packaging model. The maximum height of locking tabs is 16 mm.
- The products and all packaging materials must remain within the box.
- The box must not deform, for example due to overpacking or materials failure.

Black folding plastic fruit and vegetable crate (Euro Pool System)





S Group Packaging Instructions for Food and Daily Non-Food Products

Cases

Additional requirements for fruit and vegetable cases

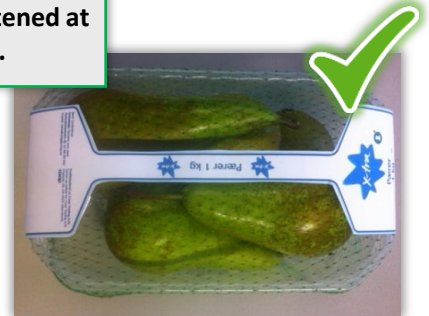
Adding case labels to plastic crates

We recommend using case label made of non slippery paperboard or cardboard that extends under the supporting edges. The dimension of label should be width 85-88mm x height 34-60mm depends on box size.

Alternatively an adhesive label glued to plastic crate may be used. The adhesive label should be attached as flat area as possible to the side of crate. Only water-soluble adhesives may be used for case labels.



Example of automation-
friendly label fastened at
both ends.



Other product packaging requirements

Punnet labels and other packaging materials must remain within and below the box edges.

We recommend using punnet labels that fasten to both ends of the packaging material.



Consumer package labels and
other packaging materials
protruding from boxes disrupt
automated handling.





S Group Packaging Instructions for Food and Daily Non-Food Products

Cases

Additional requirements for fruit and vegetable cases

Lid and taping solutions to prevent materials extending beyond box edges.

If the quality of a product requires packaging in a plastic bag, then we recommend sealing the bag openings firmly with tape as shown below or using a cardboard cover that is suitable for automated handling.

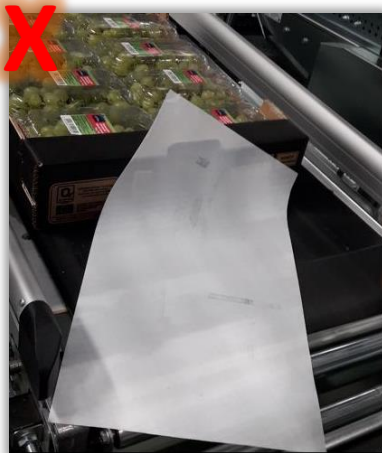
The same cardboard cover option may also be used for wineglass labels or other packaging materials that can easily protrude beyond the edges of the box.



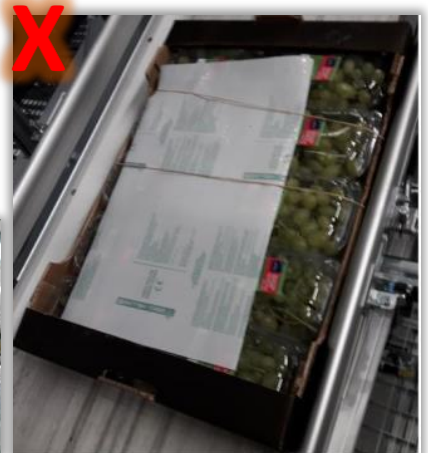
A cardboard lid should be bent under the supporting edges.



If plastic bags have to be used, then the edges must be closed with long broad tape as shown.



Use of various rubber bands, separate paper or detachable plastic covers is prohibited.





S Group's Packaging Instructions for Food and Daily Non-Food Products

Cases

S Group's recommendations for case markings

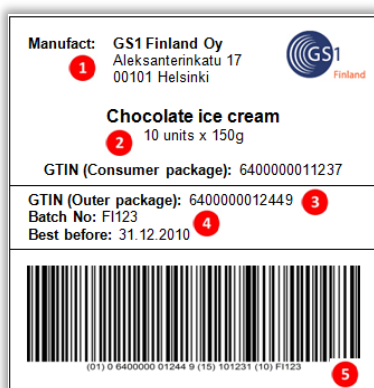
It is recommended to follow GS1 marking instructions for labels.

The case label must indicate the name and quantity of the product, the date, any batch information and the GTIN code.

The GTIN code must be indicated in the form of a barcode. GS1-128, EAN 13 or ITF14 formats can be used.

The case label must be located on top of the case or on the cover, so that the label can be seen from above.

Case label in accordance with the GS1 standard



- 1 Information about the manufacturer
- 2 Product description
- 3 GTIN
- 4 Batch code and date
- 5 GS1-128 barcode

Sales unit label requirements for Fresh Fruits and Vegetables

At least following info is required for sales unit labels (NOTE! Texts should be in **Finnish and Swedish**):

Product name

Country of origin (Alkuperämaa/Ursprungsland)

Quality class for all the products which have official quality classification (1 lk./kl.)

Name and address of the packer (Pakkaaja/Förpackare)

Lot code

Weight

For packed products number of consumer packagings / sales unit

In addition to these:

Variety (Lajike/Sort (*mandatory* info for: oranges, mandarins, apples, pears, table grapes))

Color of the fruit flesh of peaches and nectarins (Hedelmämallon väri/Fruktköttets färg)

Yellow = keltamaltainen/gul

White = valkomaltainen/vit

Size class, if products are sorted by size (Koko/Storlek)

Keräkaali/Kål, 1 lk/kl

Alkuperämaa/Ursprungsland: Suomi/Finland

Pakkaaja/Förpackare: Supplier Oy, Street 12, Village, Finland

LOT 18245

10kg



S Group's Packaging Instructions for Food and Daily Non-Food Products

Sales unit label requirements for Fresh Fruits and Vegetables

For organic products also, **EU organic leaf symbol** with right next to the symbol **id of the supervising authority and info about origin**.

Translations:

Produced in EU = Tuotettu EU:ssa/EU-jordbruk

Produced outside EU = Tuotettu EU:n ulkopuolella/Icke-EU-jordbruk

Produced in XX = Tuotettu XX:ssa/XX jordbruk (XX = name of the country)

For organic products also, EU organic leaf symbol with right next to the symbol id of the supervising authority and info about origin.

Translations:

Produced in EU = Tuotettu EU:ssa/EU-jordbruk

Produced outside EU = Tuotettu EU:n ulkopuolella/Icke-EU-jordbruk

Produced in XX = Tuotettu XX:ssa/XX jordbruk (XX = name of the country)



In case you are not sure about the accuracy of your sales unit label texts, please confirm them with Product Quality Manager Riikka Nummi (riikka.nummi@sok.fi).

Contact information

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S Group's Packaging Instructions for Food and Daily Non-Food Products



Contents of European Logistic Label (ELL) standard Fixed measure products (pallet is not a product)

This part of the label has a free format, which can be used to describe e.g. company and product information.

This part of the label includes pallet information in text format. Titles should be presented in English as specified in GS1 standards. In addition, titles can be provided also in the other language if necessary. Information contains pallet's SSCC-code, GTIN of outer package, batch/lot number, count of packages on pallet, e.g. the best before date and gross weight. Same information is presented in barcodes in the lower part of the label.

Notice that each logistic unit must be assigned its own unique SSCC-code!

AI (02) signifies the GTIN of outer package and AI (37) count of outer packages on the pallet. **AI (02) and (37) are used always together and are recommended to be presented in the same GS1-128 barcode.** AI (37) can contain maximum of 8 numbers information.

AI (02) is always presented in format of 14 numbers. If GTIN-13 is used, the number 0 has to be added in the front of GTIN-13.

SSCC (Serial Shipping Container Code) is the unique and global identification key for logistic units. SSCC contains a running number for individualizing every pallet. **Notice that SSCC is the mandatory element on the GS1 Logistic label. Every pallet has to have a unique SSCC, which is assigned for the life time of the pallet item.**

AI (00) is the Application Identifier for the SSCC. Barcode which includes the SSCC-code is placed in the lowest in the label. SSCC is also recommended to present alone in the barcode. In addition, all barcodes in the label should be centered.

AI = Application Identifier

Standardized prefix (2-4 numbers) in front of the data to tell what the data means. E.g. AI (00) n2 + n18

More detailed information about Application Identifiers can be found from GS1 Global web pages:
http://www.gs1.org/barcodes/technical/application_identifiers



GS1-128 barcodes are used in the GS1 pallet label. **Notice that GS1-128 barcode technology should not be confused with Code-128 technology.**

AI (330n) describes gross weight of the pallet in kilograms. The last number of AI defines amount of decimals.

AI (10) describes batch/lot number. Batch number can include maximum of 20 characters information in alphanumeric form.

AI (15) describes the best before date. The form is always YYMMDD (Year, Month, Day) in GS1-128 barcode. The date information could be also something else than the best before date, e.g. AI (11) production date, AI (13) packaging date, or AI (17) expiration date.

Technical properties of GS1-128 barcode:

- GS1-128 barcode represents data in the widths (lines) and the spacings of parallel lines. In addition, GS1-128 includes Quiet Zones on left and right side of the barcode.
- The maximum physical length is 165mm including Quiet Zones.
- The minimum height of all GS1-128 barcodes in pallet label is 32mm.
- The minimum space of GS1-128 Quiet Zone is 5,75 mm from edge of the label.
- The recommended X-dimension of GS1-128 barcode is 0,495 mm.
- The maximum number of data characters in a GS1-128 is 48.

Pallet label location:

- Two identical labels on sides next to each other, one on the short side and one on the long side to the right.
- Labels should be located minimum 50mm from side edge of the pallet.
- Labels should be located as high as possible, but inside the standard limits, which are 400 – 800 mm from the bottom of the pallet.



S Group's Packaging Instructions for Food and Daily Non-Food Products



coop Trading

coop Norge

coop Danmark

Inex Partners

18.9.2013

Contents of ELL-standard label for Fresh Fruits and Vegetables

This part of the label has a free format, which can be used to describe fresh fruits or vegetables grower's, packer's and/or distributor's information and product information. ELL-labels for fresh fruits and vegetables should include also country of origin, size and quality class of the products.

This part of the label includes pallet information in text format. Titles should be presented in English as specified in GS1 standards. In addition, if necessary titles can be provided also in the other language. Information contains e.g. pallet's SSCC-code, GTIN of outer package, batch/lot number, count of packages on pallet, the packaging date, the packer's GLN-number (if available) and gross weight.

Notice that each logistic unit must be assigned its own unique SSCC-code!

AI (02) signifies the GTIN of outer package and AI (37) count of outer packages on the pallet. **AI (02) and (37) are used always together and are recommended to be presented in the same GS1-128 barcode.** AI (37) can contain maximum of 8 numbers information.

AI (02) is always presented in format of 14 numbers. If GTIN-13 is used, the number 0 has to be added in the front of GTIN-13.

SSCC (Serial Shipping Container Code) is the unique and global identification key for logistic units. SSCC contains a running number for individualizing every pallet. The extension (first) digit in SSCC may vary from 0 to 9 – in this example has been used digit 3. **Notice that SSCC is the mandatory element on the GS1 Logistic label. Every pallet has to have a unique SSCC-code, which is assigned for the life time of the pallet item.**

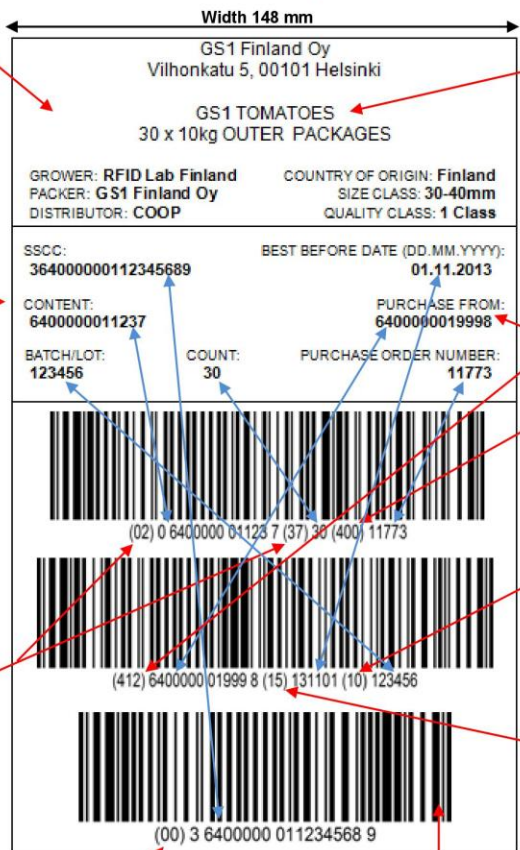
AI (00) is the Application Identifier for the SSCC. Barcode which includes the SSCC-code is placed in the lowest in the label. SSCC is also recommended to present alone in the barcode. In addition, all barcodes in the label should be centered.

AI = Application Identifier

Standardized prefix (2-4 numbers) in front of the data to tell what the data means. E.g. AI (00) n2 + n18

More detailed information about Application Identifiers can be found from GS1 Global web pages:
http://www.gs1.org/barcodes/technical/application_identifiers

Fixed measure products



In this example label, the grower is RFID Lab Finland, which grows Finnish tomatoes to the vegetable packer GS1 Finland. The GS1 Finland has branded GS1 Tomatoes, which are sold to the distributor named COOP. The example GS1 Tomatoes are 1. Class and their size are between 30-40mm.

The purchase from point of fresh fruits and vegetables could be described with the packer's GLN number AI (412). Alternatively could be used the Global G.A.P number (GPN).

AI (400) describes the customer's purchase order number, which can include maximum of 30 characters information in alphanumeric

AI (10) describes batch/lot number. Batch number can include maximum of 20 characters information in alphanumeric form.

AI (15) describes the best before date. The form is always YYMMDD (Year, Month, Day) in GS1-128 barcode. If best before can't be used, e.g. packaging date AI (13) can be used instead.

Technical properties of GS1-128 barcode:

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- The maximum physical length is 165mm including Quiet Zones.
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