

User and Service Manual

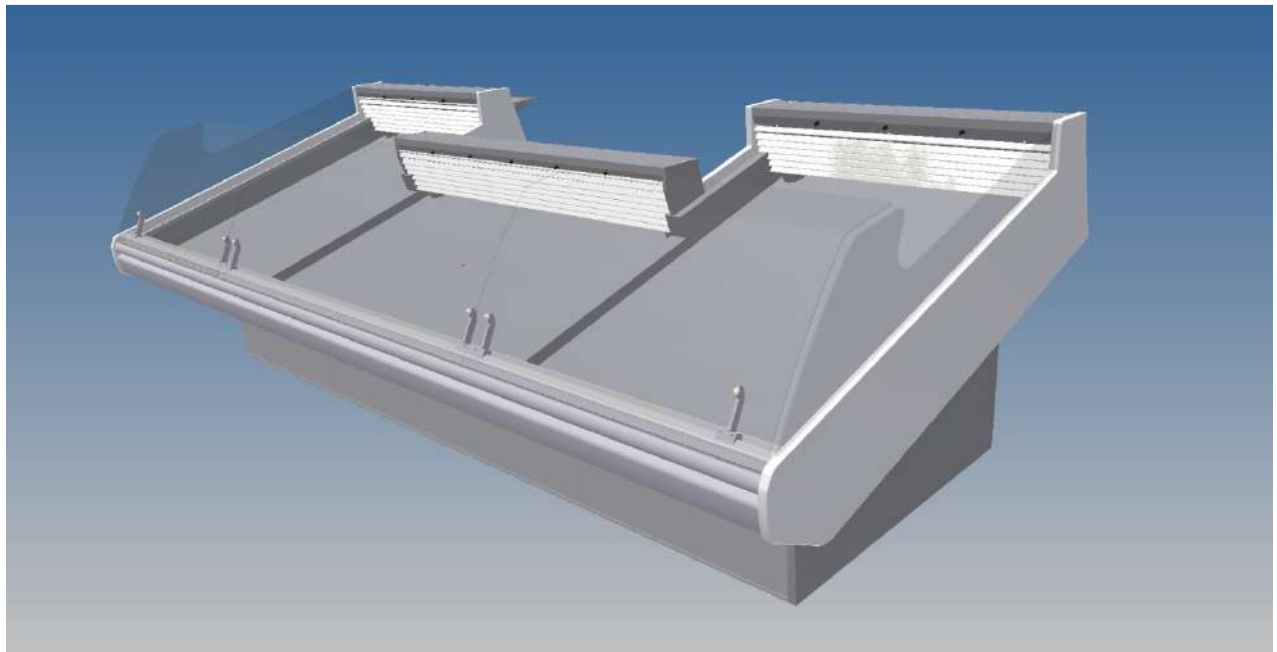
Glacier Seafood Cabinet

Models:

SS	(Self Service)
SSW	(Self Service – Wings)
AS	(Assisted)
ASW	(Assisted – Wings)

Available lengths (mm):

SS/AS	1000 / 1500 / 2000 / 2500 / 3000 / 3500 / 4000 / 4500 / 5000
SSW/ASW	3000 / 3500 / 4000 / 4500 / 5000



Smeva BV

Visiting Address: J.F. Kennedylaan 27
5555 XC Valkenswaard

Telephone: +31 (0)40-2073200

Internet: www.smeva.com

Specifications for this Manual:

Date: February 2014
Version: 1.0

Product Extent & Copyright

The user and service manual is part of the product. Always keep this manual with the product. Following this manual is mandatory for a correct and safe use of the product. The manual complies with the product version and with the applicable technical safety standards.



The product encompasses the following:



Seafood Cabinet



Built in Control Panel



Optional Micro Misting Unit



Optional Reversed Osmosis filter unit

Copyright

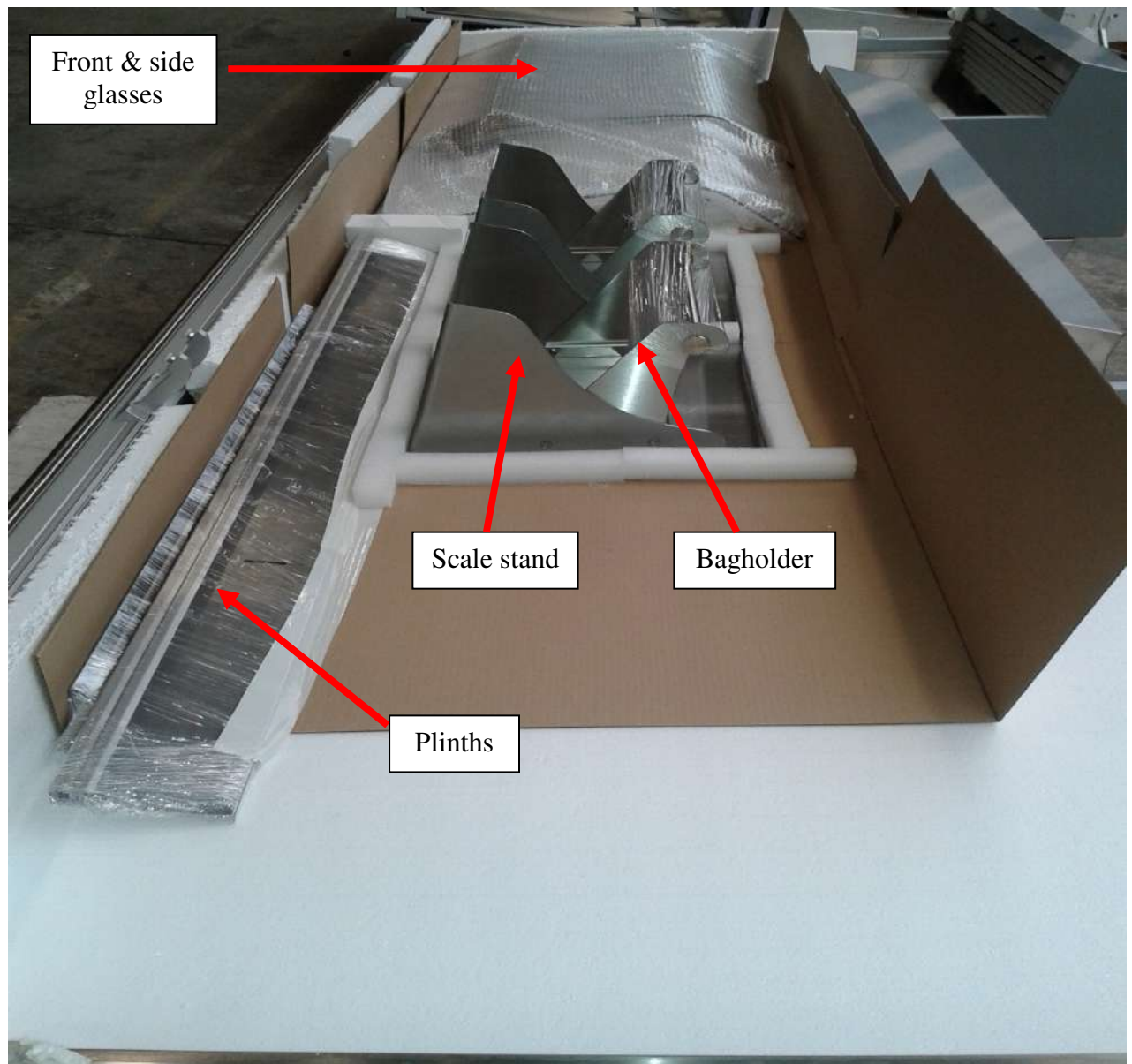
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The operating instructions reflect the current technical specifications at the time of the print. We reserve the right to change the technical or physical specifications.

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Glacier Seafood Cabinet

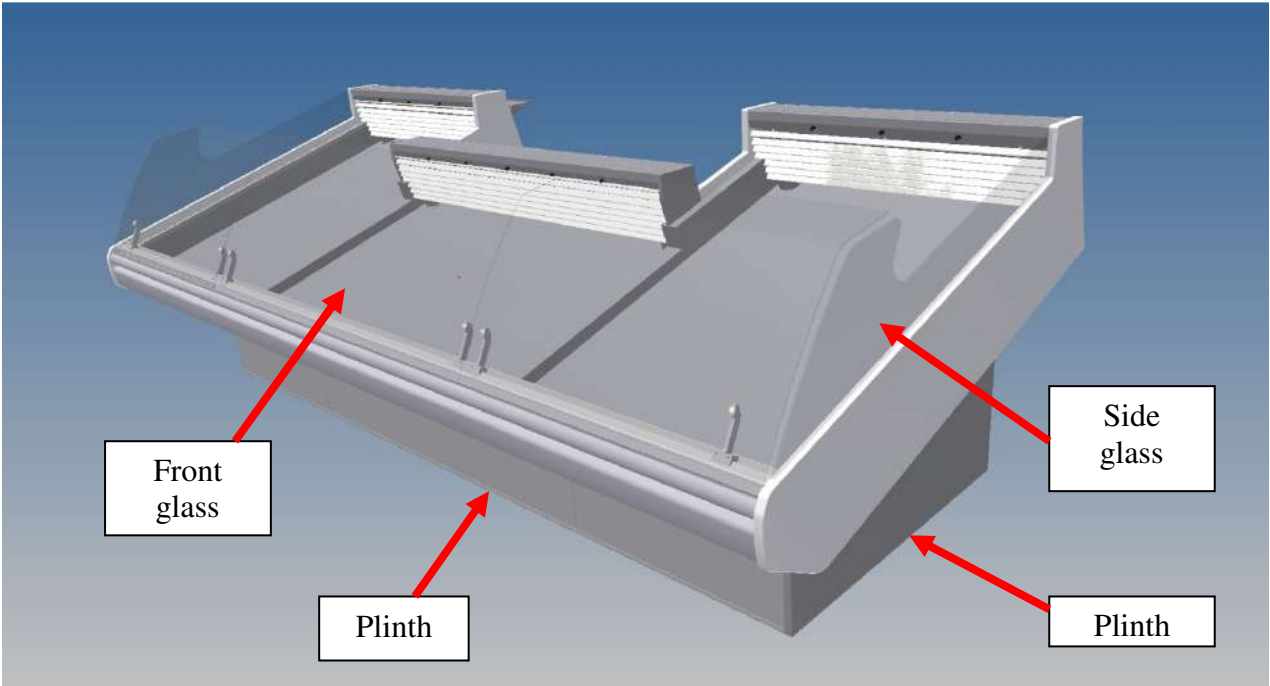


Picture: Overview “What’s in the box”

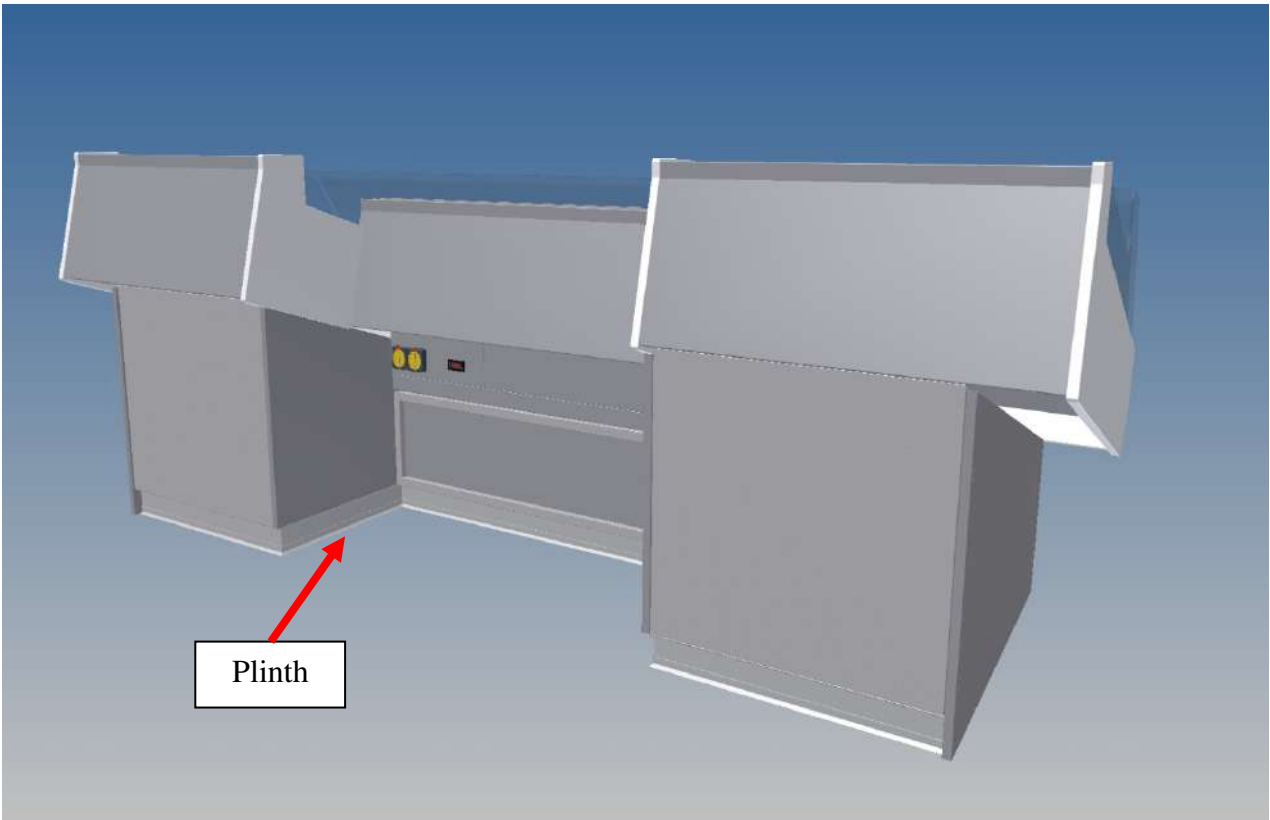
Summary of items:

- Front glasses, length 1500 mm & 1000 mm (number depends on length of cabinet)
- Side glasses (2)
- Plinths & screws for service side
- Bent plinths for side panel
- Gasket for plinths service side
- Beams for hob profile at service side (AU, not included)
- Accessories:
 - scale stand including brackets
 - plastic bag holder
 - transparent dividers for display area

	Glacier Seafood Cabinet	
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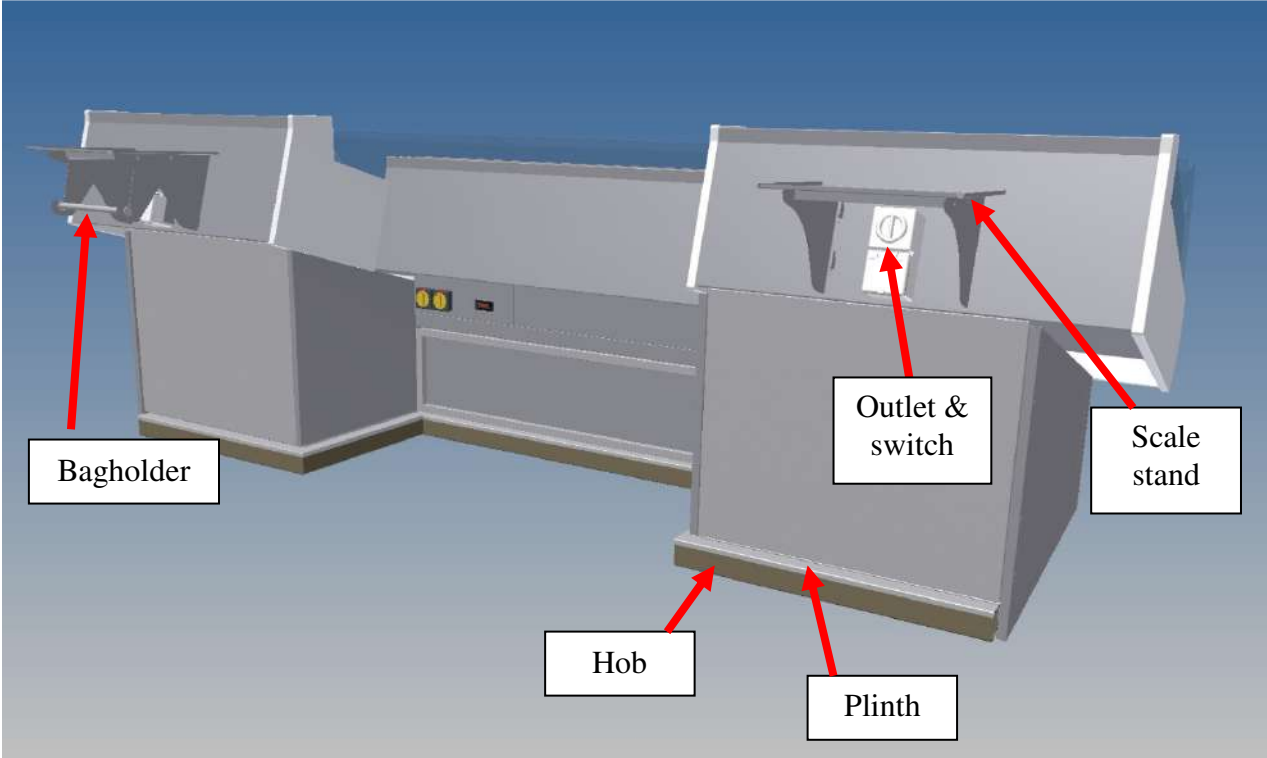


Picture: Assembly Glacier front view



Picture: Assembly Glacier back view (EU version)

	Glacier Seafood Cabinet	
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Picture: Assembly Glacier back view (AU Version)

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Related external documents :

- Datasheet Glacier
- Floorplan Glacier
- Optional manual Reversed Osmosis
- Optional manual micro misting
- Specific manual controller / thermostat

Safety

This manual contains the directions for use and operation of the product. Therefore, the manual must be carefully read and understood by the user before the actual use of the product. This includes the general safety instructions as well as the specific safety instructions indicated below, which are marked with the appropriate warning symbols.



General warning symbol.



Electrical danger.

Warnings

Not complying to the safety instructions might lead to personal danger and damage to the product. Ignoring the safety instructions may also void warranty and liability of the supplier. More specifically, not following the safety instructions could lead to the following dangers: Loss of important functions of the product, risk for persons to electrical shock or mechanical injury and/or material damage.



This label indicates that you should consult the manual.



Glasses:

During opening and cleaning, hold the cover glass at the topside only -not at the side edges- to avoid jamming injury.

Because of the low visibility of the glass itself, do not leave the counter unattended with the glass opened. Employees and customers might run into them.



Do not remove any of the labels on the cabinet.



The following labels are present on the equipment:

- Identification label;
- Warning labels;
- Product identification label & CE (see Chapter 7);



Electrical danger:

All electrical parts are outside the wet display area;

Outlets, control panel and main switch are present at the service side;

Electrical junction box and appliances are present in the substructure at the service side (IP67 rated).

Cleaning:



Before cleaning, always shut off the main switch on the control panel.



Do not spray water on the control panel or in the technical spaces.

1 Introduction

You have made the right choice in purchasing the Glacier Seafood Cabinet from Smeva, which has been specifically developed for presenting seafood on crushed ice.

The cabinet is designed for a tilted presentation of seafood on crushed ice, providing temperature and humidity control during a maximum of 12 hours, rendering the contents fresh during the whole day. Following a day of presentation, the cabinet should be switched of, rinsed and cleaned.

Technical features of the Glacier Seafood Cabinet:

- The welded inner container is made of high quality 316 stainless steel;
- The waste water outlet is designed with extra-large conduit (50 mm outer diameter);
- Optional micro-misting operated by means of high-pressure nozzles over the presentation area for maintaining moist and high-gloss seafood products. The water supply of the micro-misting unit is filtered with a reversed osmosis unit;
- Optional ice-melting rinsing system for melting remaining crushed ice in the cabinet.



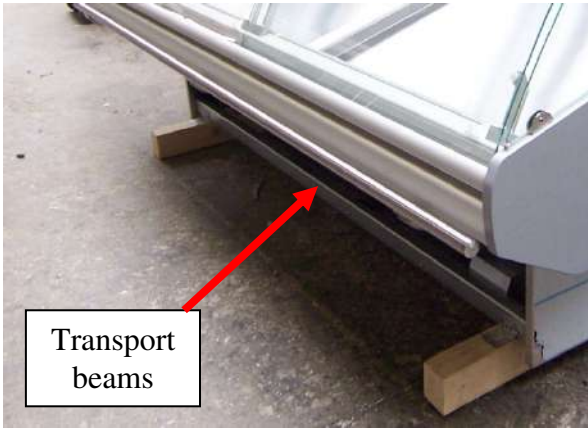
This manual will tell you how to correctly use and maintain your Glacier Seafood Cabinet, which is guaranteed by Smeva with respect to quality, reliability and the use of the latest technological developments.



For your convenience, a limited malfunctions list has been included, which can be used to resolve minor technical problems. For more serious malfunctions and/or defects in your seafood cabinet, please consult your Smeva partner.

2 Transport & Installation

Picture: Overview “What’s in the box & Assembly



Picture of AS version.



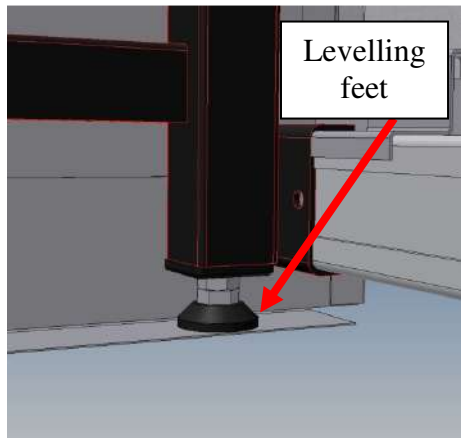
Picture of ASW version.

Transport (internal)
 The cabinet is supplied with transport beams. The pictures show the transport beams for the AS versions (Picture of AS version) and for the ASW versions (Picture of ASW version), respectively.

- i Lifting of the cabinet should take place with lifting equipment carefully positioned under the transport beams.
- i Total counter weight is indicated on the Glacier datasheet.

▶ Forklift blades entirely under transport beams

Positioning
 According to floorplan.

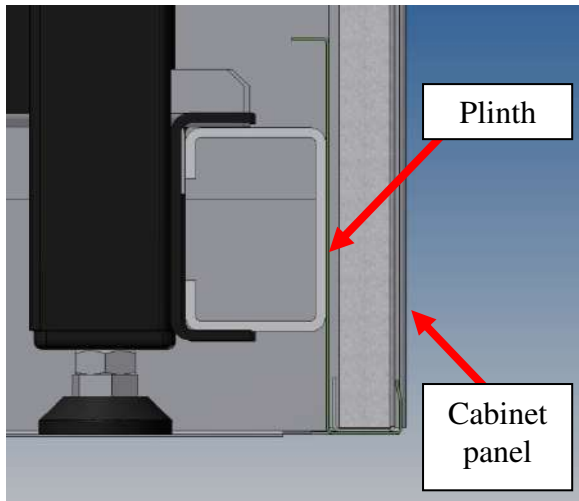


Levelling
 Level the cabinet by means of the levelling feet.

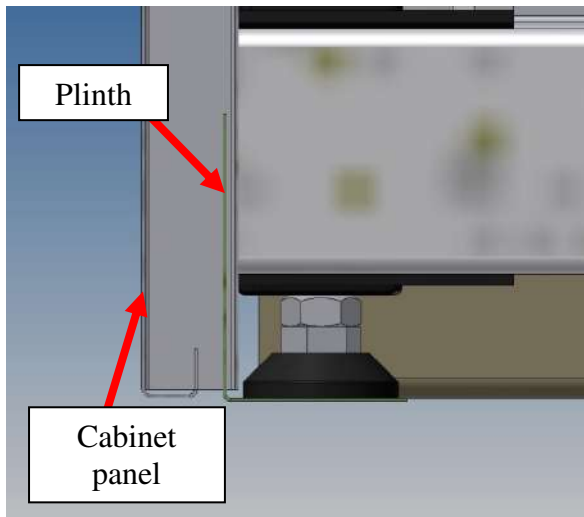
- ⌘ Fork wrench 17 mm
- ⌘ Spirit level

▶ Level

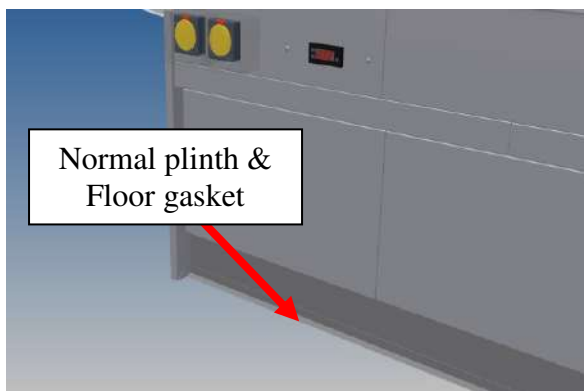
Glacier Seafood Cabinet



Detail of front panel.



Detail of side panel.



Picture of plinth at the back.



The **cabinet** panels on the consumer side, and at the side, can slide over the plinths, always covering the adjusting stands and keeping the counter closed at ground level.



Panels slide to correct position

Plinths (EU)

At the service side a normal plinth and floor gasket is mounted (see picture plinth).



Phillips #2 screwdriver

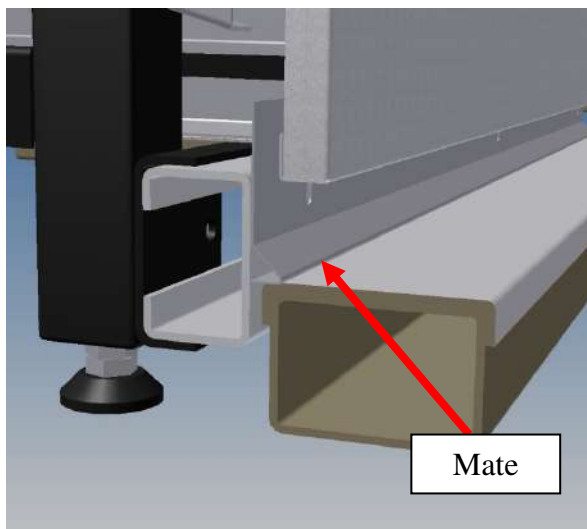
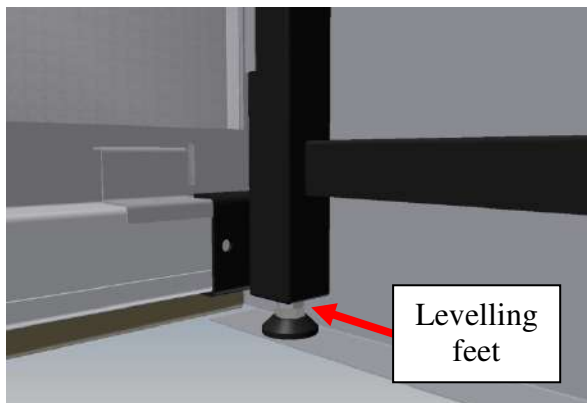
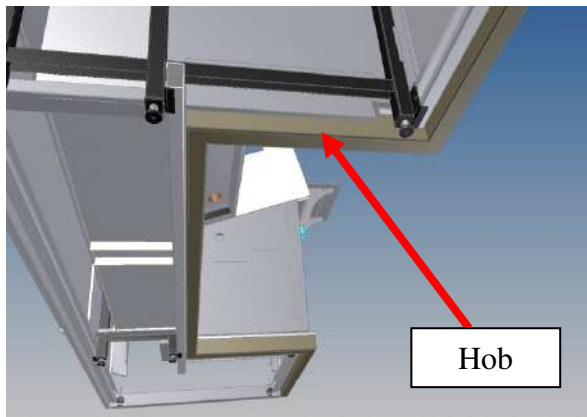


Self-tapping screws (included).



Black colour for black boards.

Glacier Seafood Cabinet



Plinth service side (Australia)

For the Australian market, the cabinet is provided with an additional hob at the service side.



Hob (not included), installation performed by local contractor.

1. The hob is placed on the shop floor, according to floor plan drawing.



Level

2. The levelling feet are adjusted to the correct height.



Fork wrench 17 mm



Spirit level



Level

3. The plinths are adjusted to the height of the hob.



Plinth correctly positioned



1. Height adjustment of front glasses.




2. Left/right adjustment of front glasses.


Mounting & adjustment of front glasses


- Adjust the windows until they are in the correct position by manually turning in/out the adjustable plastic supports (see Figure 1).

 Flush

- Adjust the glasses with respect to their left/right position by adjusting the stops that are present in the hinge profiles (see Figure 2).

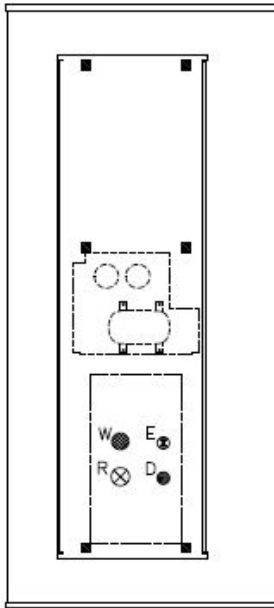
 Allen key 3 mm

 Correct left/right position

 Space between windows 2-6mm

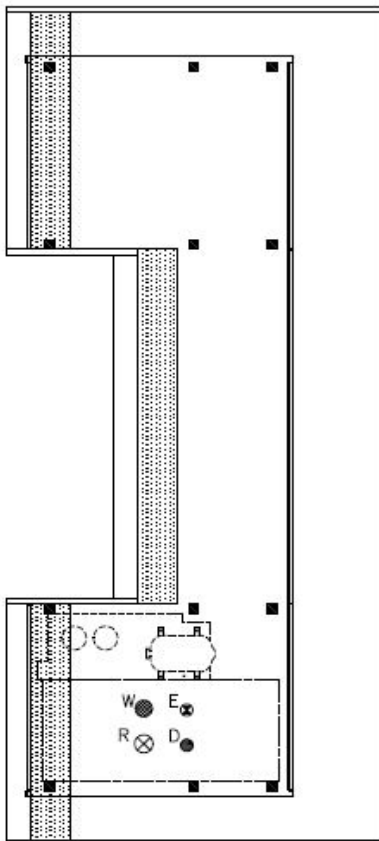
Glacier Seafood Cabinet

Glacier

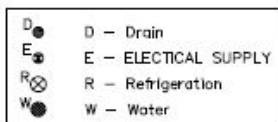


consumerside

Glacier with wings



consumerside



Picture of installation / floorplan

Technical installation

In general, all technical installation has to be carried out by skilled and certified personnel under national laws.
 Refrigeration system according to Pressure Equipment Directive.
 Electrical power supply according to Low Voltage Directive.

See floorplan drawing for location of specific connections.

Connecting refrigeration tubing to remote condensing unit:
 Tubing, red copper, sealed under moderate pressure (0.5 Bar).



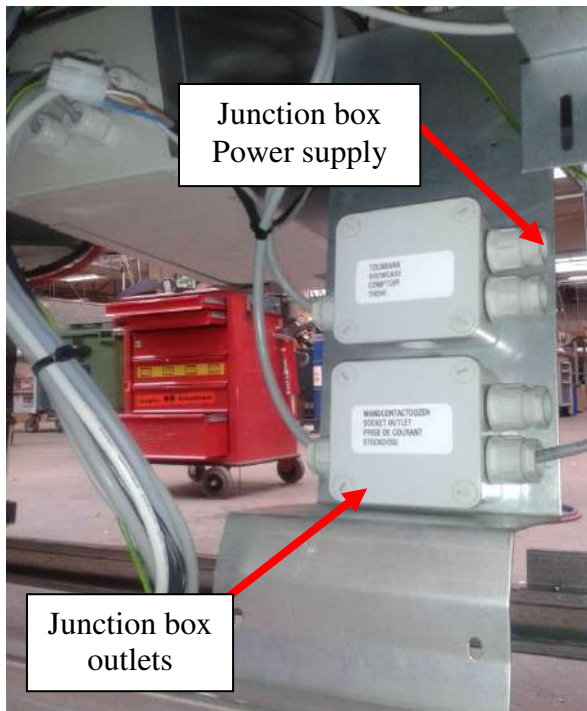
Diameter and cooling capacity depends on cabinet length (see machine label and datasheet).

Connection of water supply:
 The counter is supplied with adapter 3/4" female.
 Install a service tap with back pressure valve 3/4-male" (not included).

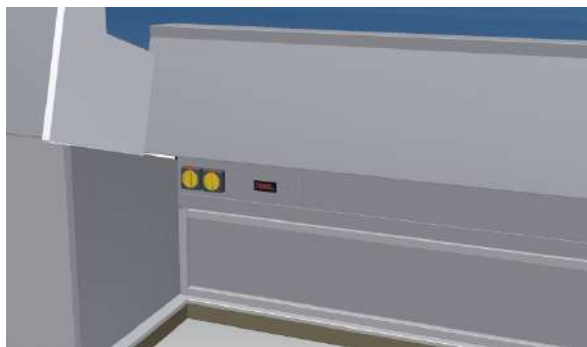


Tubing for water system prepared under substructure by means of ø6 mm and ø10 mm polymer tubing with quick-insert plugs.

Connection of drain:
 PVC tubing ø 50 mm. Install siphon (air trap) between cabinet drain and floor level (not included).



Mains connection at junction box.



Picture 2

Electrical installation and power up

1. Cabinet supply

The electrical installation is performed by connecting the main power to the electrical junction box inside the substructure (cable gland \varnothing PG16).

2. Outlets supply

A separate junction box inside the substructure



All wiring to the controller box and electrical parts has been pre-installed by the manufacturer.



Network, patch wiring connect directly to the controller box. Appliances (e.g. cash register/scale) connect directly to the network.

Power up the cabinet by means of the mains power switch at service side.



Thermostat settings :

The advised set point of the thermostat is from -4 to -2 °C, differential 2 K.

For more details on your temperature controller, consult the manual for the controller based on specific brand and type.



Advised defrost cycles: 4 x 30min/24 h;
Defrost termination $+6$ °C. (Even when the cabinet is normally switched off at night).

3 Guidelines for Use

General

To ensure the optimum performance of your Glacier Seafood Cabinet, carefully consider the following:

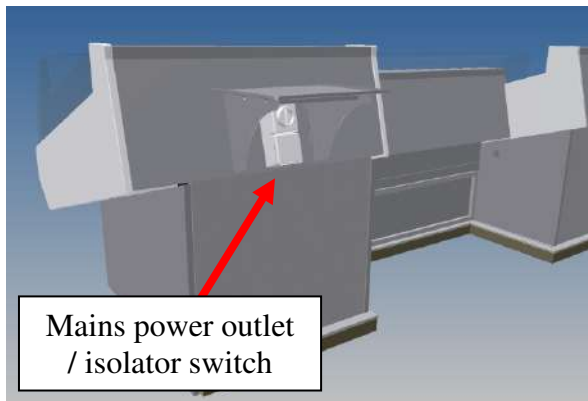
- The cabinet must be thoroughly cleaned and the pre-set temperature must be reached before loading your products;
- Do not overload with ice, or cover the air-off grill. An ice layer of 4-6 cm. is sufficient.
- Do not place products above the advised load line, this will prevent the cooling air to effectively reach the products; see load level label at the side glass
- Prevent the radiation of direct sunlight and high volumes of ambient lighting on the cabinet display area;
- Do not place the cabinet near heat sources;
- Prevent draught over the cabinet, such as caused by open doors / shopwindows.



Lighting and draught is a major cause of dehydration and discoloration of products.



Do not block the openings in the rear air grills, this will obstruct the air circulation, adversely affecting the product temperature.



Australia / EU

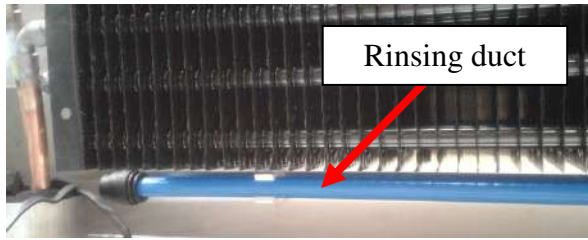


For connection of peripheral equipment (e.g. scales, cash registers), your Glacier can be equipped with a mains power outlet / isolator switch underneath the scale stand.



This outlet should be installed and connected to the main power source by your qualified installation engineer.

Glacier Seafood Cabinet



Ice melting & rinsing system (optional)

At the end of operation, and before cleaning, open the tap of the ice melting & rinsing system.

Let water run sufficient for 10-20min. causing the ice to melt. Remove the loose and larger pieces of ice manually.



Micro misting unit (optional)

The micro misting unit controls the humidity level of your products, which maintains the high quality and appearance during the day of presentation.

The micro misting unit automatically starts working when the counter is powered up.

i The micro misting unit is factory set to 2-3 s of misting every 15 minutes.



Partially switching off nozzles is possible by adjusting them with the enclosed key tool (clockwise = closed; anti clockwise = opened, see picture).

⚙ Key tool (enclosed)

i For more details on your micro misting unit, consult the manual (supplied by Smeva).

4 Cleaning & Maintenance

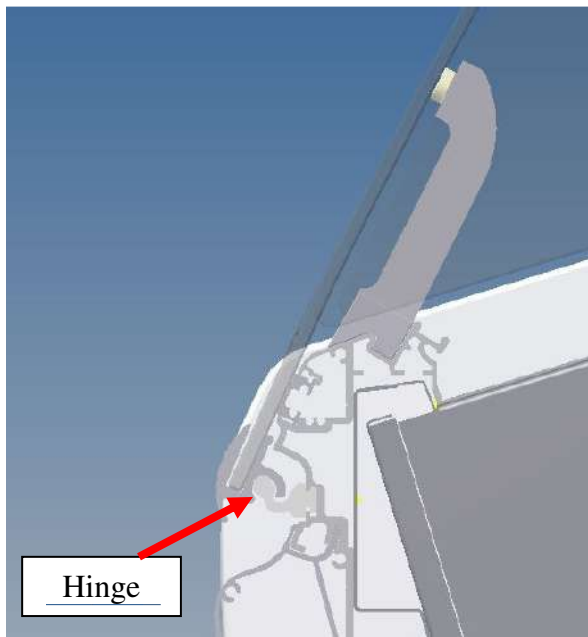
General

Before cleaning your Glacier, the cooling system must be turned off by means of the mains power switch (see Chapter 2, under “Electrical installation and power up”).

- Before cleaning, allow ample time for the ice to melt;
- Never use aggressive cleaning agents or sharp tools to remove ice or dirt;
- Do not allow (cleaning) water to run into the control panel at the service side;
- Rinse the display area regularly with lukewarm water and take care to flush the drains thoroughly;



As a HACCP manager, you are legally obliged to log the maintenance of the cabinet, and to perform an annual check-up of your counter by a skilled engineer. During the check-up, attention should be given to the cleaning of the wet areas and drain system, adjustment of the refrigeration equipment and the possibility of refrigerant gas leakages from the system. Repair infected materials and coatings to avoid corrosion or leakages. Consult your installation partner for maintenance.




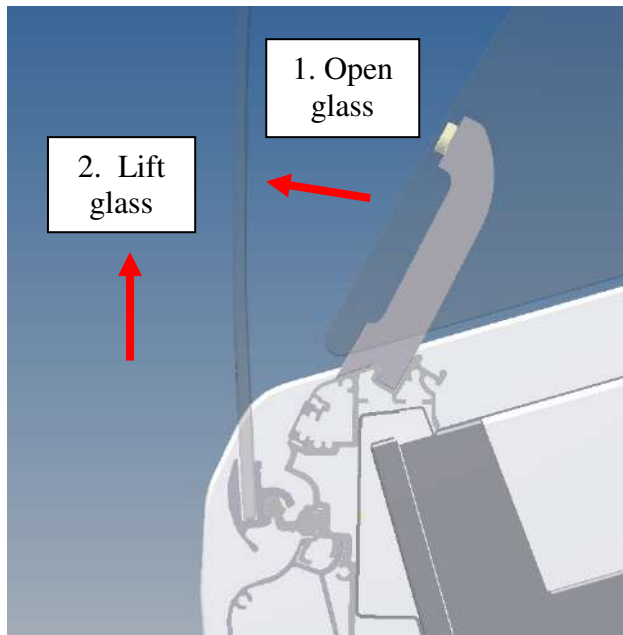
Glasses

Open the glass by holding it in the middle.



Fully opened

- Clean the glass with water and if necessary with methylated spirits.
- Free of grease and fingerprints
-  The glass hinges at the bottom are maintenance-free and should not be lubricated.



Removal of front glass.

Removing the front glasses

For intensive cleaning, the front glasses can be removed. To do so, follow the steps below:

1. Open the glass to its vertical position.
2. Remove the glass upward in a straight line.

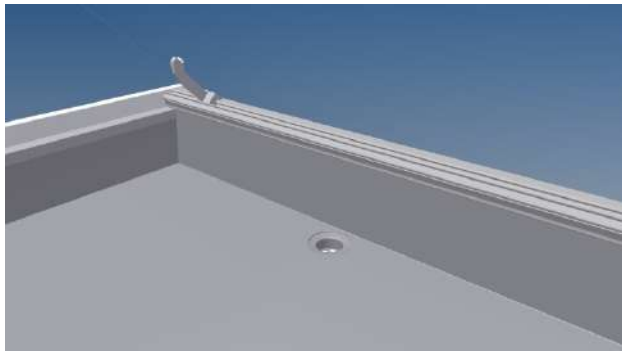


Do not open all the glasses simultaneously when cleaning the counter. This translates unnecessary weight onto the support structures, resulting in distortion of the support and possible glass breakage.



Because of the low visibility of the glass itself, do not leave the counter unattended with the glass opened. Employees and customers might run into them.

Glacier Seafood Cabinet



Crushed ice tank

The high resistance 316 stainless steel display surface comes into contact with ice and seafood products.

The cooling system just under the ice tank surface is under pressure ! Do not pick stuck- and frozen ice with sharp objects. It will damage the stainless steel surface or might pierce the cooling system.

- ☑ Clean the wet stainless steel surface with lukewarm water ($\pm 50^{\circ}\text{C}$) and soap and rinse remaining ice with ample water.

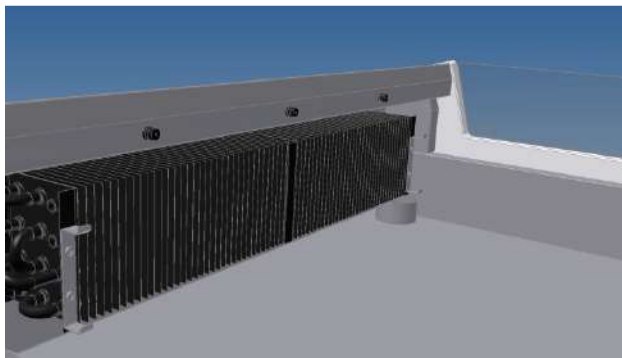


Free of ice, dirt and slime

- ☑ Clean the drains and remove debris.



No blockage



Display surface after removal of grill

When the grill is removed, the area below the evaporator can be cleaned.



Coil and tubes contain refrigerant under pressure!

Do not pick ice from the coil or tubes with sharp objects. It will damage lamellas and coating. Piercing may cause personal injury and leakage of refrigerant to the environment.

- ☑ Clean the coil with handwarm water ($\pm 50^{\circ}\text{C}$) and soap and rinse with ample water.



Free of ice, dirt and slime

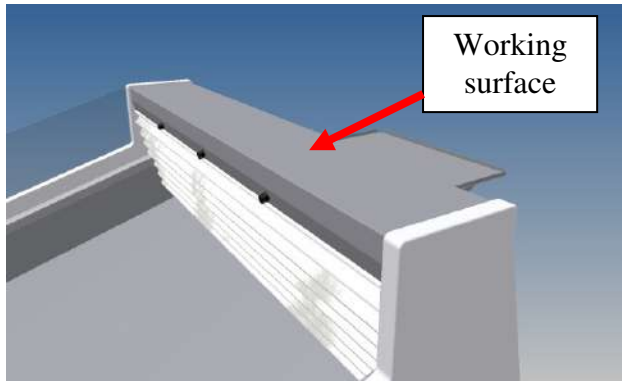


Corners clean



We recommend cleaning the display surface every day, as this is a fish counter.

Glacier Seafood Cabinet



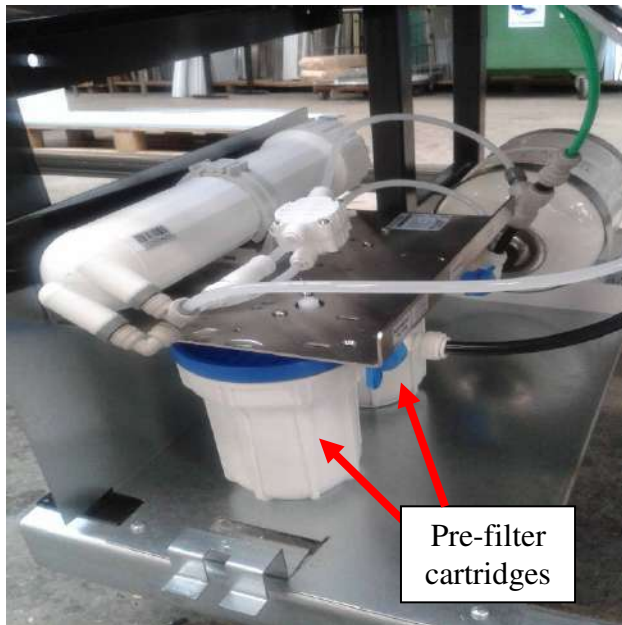
Working surface and grill

The stainless steel working surface and grill is liable to get stained by salt.

- ☑ Clean this dry stainless steel surface regularly with ample lukewarm water.
- ☑ Dry the surface thoroughly after cleaning.



Dry



Reversed osmosis filters

For the replacement of the reversed osmosis (RO) pre-filter cartridges, follow the instructions accompanying the filter cartridges.



The advised interval for replacing RO pre-filters is 6 months.



Do not use abrasives or aggressive cleaning products.

5 End of Service, Disassembly & Removal

Your Glacier Seafood Cabinet has been developed for an anticipated service life of 15 years. However, this life time is dependent on environmental conditions and intensity of use.

The Glacier contains specific parts that are liable to wear. These parts need to be replaced during the service life of the cabinet.



On removal the Glacier must be disposed of according to local regulations.



Refrigerants (CFC's) are subject to the Kyoto Protocol



For materials used in this product, see Chapter 7.

Refrigerant	Global Warming Potential/CO ₂ Eq
R22	1500
R134a	1300
R404a	3260
R507	3300
R407a	1770
R407c	1520
Natural coolant	
R744	1
R290	2

6 Malfunctions



This list has been compiled based on a normal operation history of the equipment at the time of the malfunction.

General malfunction



When the counter has stopped functioning, check whether the mains supply voltage is present:

1. Check the fuses in the power group to which the Glacier is connected;
2. Check the earth leak switch of the power group to which the Glacier is connected;



Fuse in



Earth leak switch on



If you cannot find anything wrong, please contact your Smeva partner.

Partial malfunction



When the Glacier is only partly malfunctioning and you are unable to rectify the malfunction by turning the respective function off and on again, contact your Smeva partner.



Never open the control panel/switch box


Malfunction in the (optional) micro misting unit



When the micro misting unit produces too little or no output, first check the water supply and reversed osmosis filter. If this doesn't solve the problem, please check the manual of the unit or contact your Smeva partner.

7 Product Identification

Mechanical specifications

<p>Front glass:</p> <p>Side glass:</p> <p>Crushed ice tank:</p> <p>Workbench:</p> <p>Side skirts and panels:</p> <p>Insulated body:</p> <p>Support frame:</p>	<p>Bottom-side hinged tempered glass</p> <p>Tempered glass</p> <p>AISI 316 stainless steel</p> <p>AISI 314 stainless steel</p> <p>Galvanised and coated steel</p> <p>Foamed Polyurethane*</p> <p>Painted steel and galvanised profiles with adjustable feet</p> <p> *Polyurethane foamed body manufactured without the use of greenhouse and ozone depleting gases.</p>
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Electrical specifications

<p>Controller:</p> <p>Power supply:</p>	<p>Plastic and electronic board, based on customer specifications</p> <p>230 VAC, 50 Hz, max. 16 A</p>
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Cooling specifications

<p>Circuit volume:</p> <p>Design pressure:</p> <p>Refrigerant:</p>	<p>According to machine label</p> <p>According to machine label</p> <p>According to machine label</p> <p>Chemical formula designated for specific type of refrigerant</p>
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For rapid assistance in the event of queries or defects, the left service compartment of your Glacier is provided with the machine labels below. Copy this information and pass it to your service engineer in the case of problems or defects.

