

Gebo Sliding Door Units

The sliding door unit can be fitted on the outside of the aperture. The outer frame as well as the door is seamless as all the joints are hard soldered. This guarantees complete watertightness. The bottom rail of the outer frame is provided with holes draining to the outside so the unit can also be fitted in an inclined position. The door can be locked in a closed position by means of a lock fitted in the top corner. The door can also be locked in the fully opened position.

ISO 12216

On request we can make provision for intermediate locking positions. Handles are fitted on the inside and outside of the door. The aluminium frame of the door slides on stainless steel runners. This construction guarantees soundless sliding and absolute watertightness (ISO 12216).

As a standard the sliding and fixed sections are supplied fully glazed. If required, crossbars can be fitted so that solid panels instead of glass can be installed. The unit can also be supplied with an internal rim to improve the interior finish.

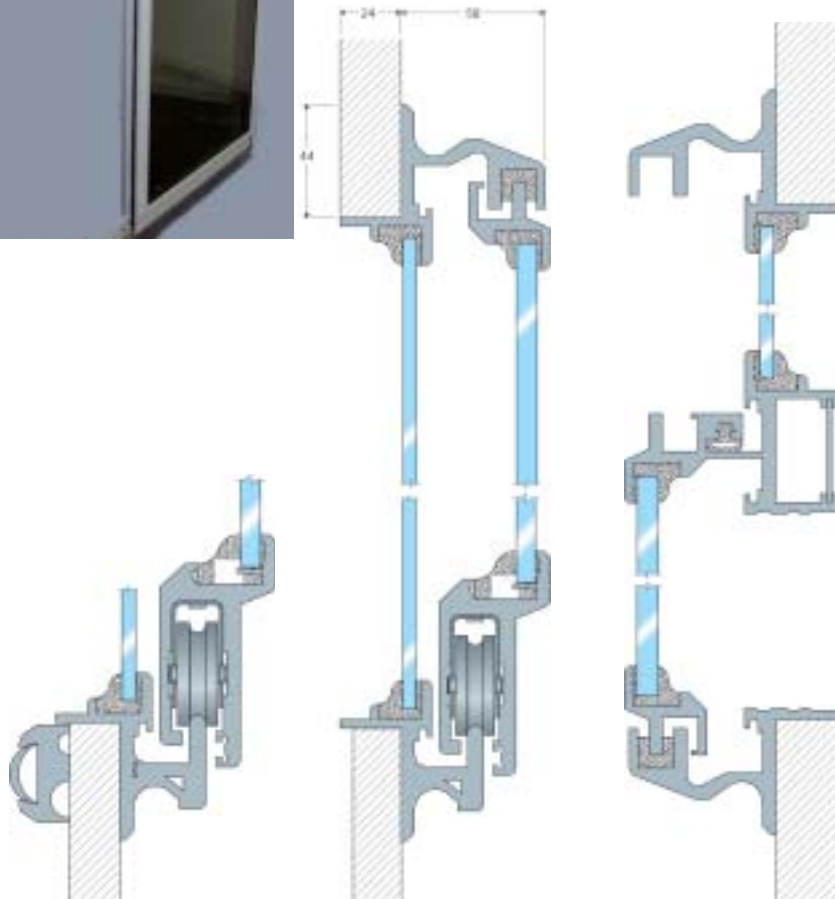
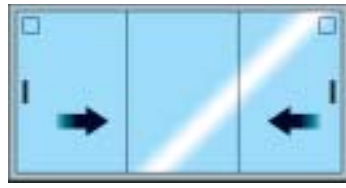
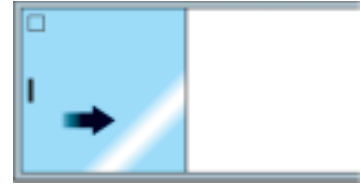
The door units can only be supplied in powder-coated finish.

Many colors are possible.

Glass thickness:

Sliding part:	8mm
Fixed part:	6mm

Many door unit designs are possible. Please contact us with your requirements.





Directions for ordering Ships' Windows

GENERAL DIRECTIONS FOR ORDERING SHIPS' WINDOWS

It is essential that you pay attention to the following points when ordering windows.

If you follow all the instructions carefully, we can guarantee a window that fits exactly:

Insufficient information may cause extra work and delay because we will have to contact you to obtain the information we need.

1 When supplying a template make sure that it fits the windows aperture exactly. Use hardboard or similar material which does not shrink or stretch. If paper or cardboard are the only materials available, write as many dimensions as possible, on the template i.e. height and width, so that it can be checked for reference.

2 When ordering sliding windows, the horizontal sides must be parallel. When ordering half-drop windows the vertical sides must be parallel.

3 The template must be sawn straight without undulation to avoid errors in size.

4 Please indicate the following details on the template:

- Outside
- Top
- Starboard of port side
- Type of window required
- Type of section, type of surface treatment
- Direction of sliding
- Your name

5 For each type of section we offer various standard radii. We strongly recommend that only these radii are specified as there is an extra cost for producing a non-standard radius and it will extend delivery time.

6 For fixing the window always use stainless-steel materials. If you want us to supply these with the windows, please specify what is required, e.g. bolts and nuts, self-tapping screws, etc. Fastenings are not included in the price of the windows, with the exception of clamp system.

7 Delivery time only becomes effective after receipt of your official order, templates, and all the information required to manufacture the windows.

8 Unless otherwise specified in the order, we supply windows with clear toughened glass of approx. 5mm thickness. Should tinted glass be required, please state desired colour. Smoke grey, bronze and green are the standard tinted colours available.

9 Upon receipt of your order we suggest that every window is checked against the appropriate templates as

soon as possible as any claim must be made within four days of delivery.

10 Accuracy of measurements of windows are only guaranteed if these "directions for ordering ships windows" are followed.

11 Should you need to fit horns, windscreen wipers, searchlights, etc. through the glass, please indicate the diameter of the axle or the bolt to go through the glass. We will then adjust the actual diameter of the hole to eliminate the possibility of the hole distorting during the glasstoughening process.

12 We reserve the right to change the construction of the illustrated windows and other articles.

13 In case you have questions, please don't hesitate to call, fax or e-mail us. We'll gladly be of assistance.

AREA'S APPLICABLE FOR BUILDING IN MARINE WINDOWS

DESIGN CATEGORY A "ocean"

All Gebo products are being tested for category A -ocean sailing. Designed for long passages where wind-force can reach 8 Beaufort or more and waves can reach over 4 mtr.

DESIGN CATEGORY B "sea"

Boats designed for offshore passages where wind-force can reach up until 8 Beaufort and waves can reach up to 4 mtr.

DESIGN CATEGORY C "shore"

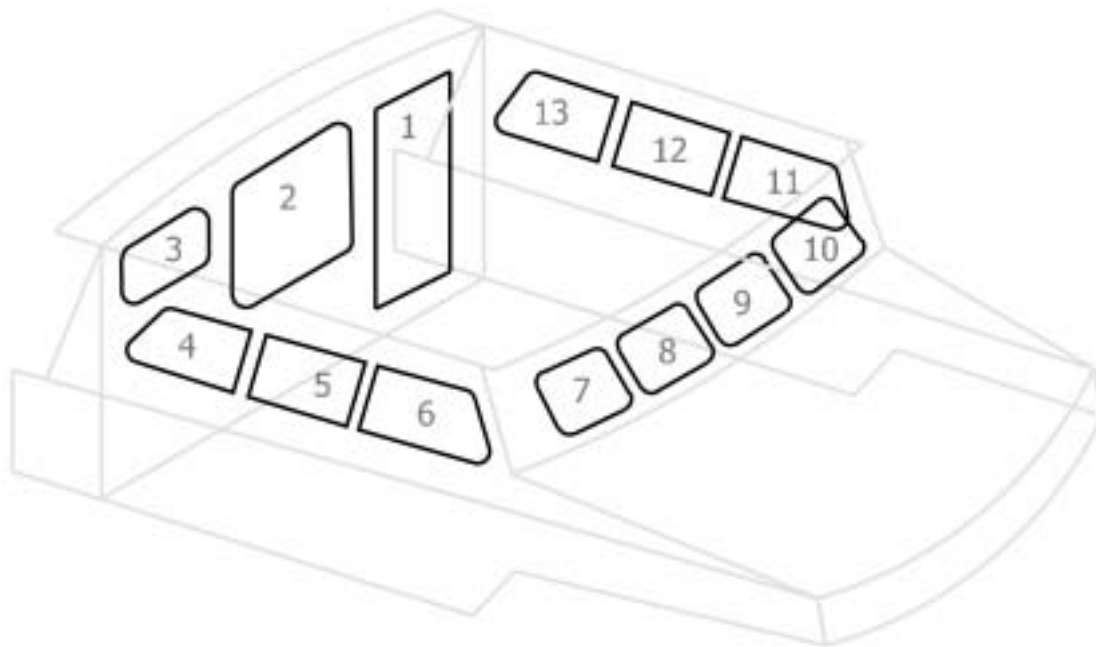
Boats designed for in shore use, large bays, river mouths, lakes and rivers where wind-force can reach up until 6 Beaufort and waves can reach up to 2 mtr.

DESIGN CATEGORY D "sheltered water"

Boats designed for use on small lakes, rivers and canals where wind-force can reach up until 4 Beaufort and waves can reach up to 0.5 mtr.

To get a description of the 'area' please call Gebo-Boomsma.

Digital template model for ordering marine windows



Templates plan



Why Aluminium?

More and more boat owners are having to replace the glazing on their boats with aluminium windows. Aluminium has a number of advantages over more costly materials such as stainless steel or brass. Most importantly, it allows greater flexibility in design and requires less maintenance.

For these reasons it is the most popular metal for manufacturing marine window frames.

Although bare untreated aluminium has a relatively good corrosion resistance, it is not recommended for a marine environment. To improve their corrosion resistance, aluminium windows are either anodised or powder-coated.

SURFACE TREATMENTS

A good aluminium ships' window should last as long as the craft in which it is installed. For protection and aesthetic finish of the aluminium the following surface treatments are applied.

ANODISING

Anodising is the most common way of improving the corrosion resistance of aluminium. During this process the natural layer of oxide is thickened and compressed to 15-20 micron by electrolytic action. This gives a very hard corrosion-resistant layer which is fully transparent and allows the natural aluminium colour to show through.

COATING

For powder coating an electrostatic layer of 60-80 micron of polyurethane paint is applied to the aluminium. The necessity of cleaning is considerably less than for anodised aluminium. An extra advantage is that a repair to the powder coating can be carried out without removing the window.

Gebo ships' windows are anodised or powder-coated after all machining, thereby preventing corrosion to tapped holes or sawn surfaces.

The operational life of powder-coated or anodised aluminium is increased by regular and correct cleaning.

MAINTENANCE OF ALUMINIUM

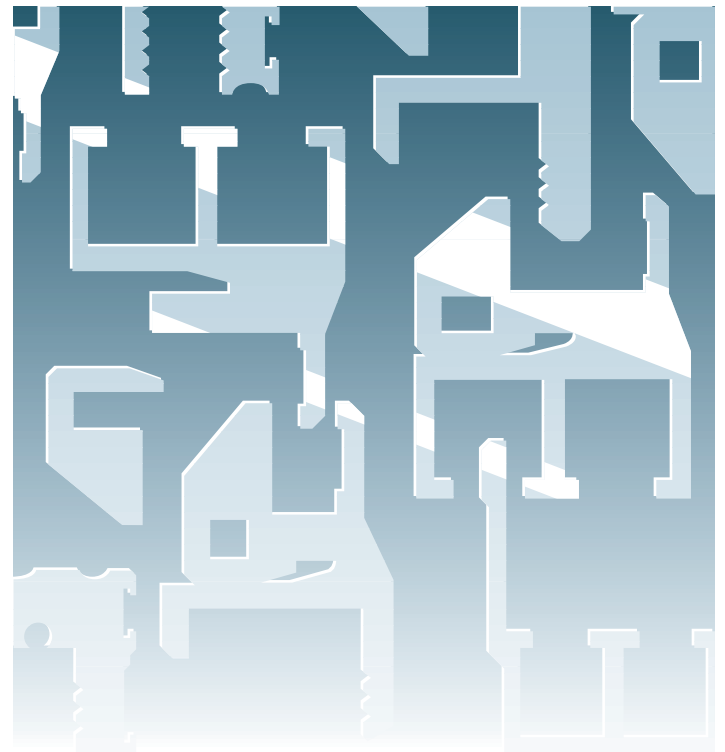
The durability of anodised or powder-coated aluminium has been proved over many years. Although aluminium is relatively maintenance free it is necessary to regularly clean the windows to preserve their good appearance. The cleaning frequency depends on the location of the ship. In very polluted areas (industrial estates, near airports, etc.) the necessity for cleaning can be as much as 24 times a year. In less polluted areas the normal cleaning frequency will be four times a year.

It is advisable to wash the glass and aluminium frame with luke-warm water. The addition of a little soap solution will assist the washing process. In the first stages of corrosion, aluminium looks dull and spotty, even after cleaning with water. A radical cleaning with special products can prevent further corrosion.

NEVER use:

- Alkaline products containing sodium solutions
- Acid products like muriatic or those containing phosphor
- Steel wool, abrasives or sandpaper
- Cleaning products for glass can also contain alkaline, which can corrode aluminium.

If in doubt, please contact us.



MAINTENANCE OF THE ACRYLIC

The acrylic in Gebo portlights and hatches are only to be cleaned with low warm water and a little solution of soap. All other detergents can cause damages to the acrylic.

Important:

Take the foil off the acrylic prior to exposing to sunlight.

IMPORTANT NOTICE

Specification may be changed without prior notice. Please consult your Gebo representative if in doubt. Gebo-Boomsma does not accept any claims as a result of changed product specifications or errors in this brochure.

GENERAL CONDITIONS

To all orders placed with us the present General Conditions shall exclusively apply. These General Conditions have been filed at the county/court in Amsterdam under number 198/88 Gebo-Boomsma, Almere-Haven. A copy of these General Conditions will be sent upon request.