

Marine
Hatches and portlights

Complete Cabin Comfort with light and air from Webasto





Webasto – synonymous with “home comfort” on board



Webasto heating systems have been setting global comfort standards for over 50 years in the marine business, with millions of highly satisfied users going about their everyday business who have placed their trust in the vast experience and specialist competence of Webasto.

Since some years Webasto offers a unique, integrated balance of heating, air-conditioning, light and fresh air in the marine market, resulting in complete cabin climate comfort control.

We call it the C5 solution!

When you think about controlling the comfort of the climate in your cabin, contact us. Webasto has representatives in more than 40 countries and works together with some 5.000 dealers, service centers, sales partners and subsidiaries around the globe.





The possibilities are endless

Remember, the products in this catalogue really are just the beginning. As glazing specialist our partner Gebo has the unique ability to build custom solutions for you. Therefore if a design concept calls for “non-standard” shapes, sizes, colours or finishes, we can custom-manufacture these for you, without the usual penalties of high unit costs or large minimum quantities.





Gebo Deckhatches

All Gebo deckhatches are made from finest quality seawater-resistant anodised aluminium and have a standard smoke grey acrylic panel of 10 or 15 mm thickness. All other parts, including hinges and handles, are also constructed from noncorrosive materials. Powder-coating of the frame to any RAL colour you specify is also available as standard, as are clear and bronze acrylics.

The deckhatches range offers a choice of flat base or base with flange and trim to accommodate almost any type of headlining and deckhead construction.

For a smoother profile, the frame on our standard hatches has been extended to fit flush against the base mounting. The base mounting screws are covered by the frame for a smoother appearance and extra safety. An underside sealant channel enables 100 %

waterproof fitting. A deep groove in the lower frame prevents penetration of water when the hatch is open.

Heavy duty friction hinges secure all Gebo hatches in any position from ventilation to full 180° or more. Hinges are also easily adjustable to suit the user.

Safety and comfort

Gebo hatches do not have a single catch, lip or knob for lines or sails to get caught on. Smooth inside frame contours guarantee troublefree access for both crew members and sails. The Gebo's unique Airco-Lock theft-proof ventilation setting lets fresh air in while the crew rest or when the boat is unattended.

FlushLine Deckhatches

For designers and builders looking for an even sleeker design than the standard version the 'FlushLine' deckhatch range was introduced. The Gebo 'FlushLine' deckhatches offer exciting options for power craft – and like the

'FlushLine' portlights, their sleek, low-profile looks work perfectly with the smooth, flowing lines of today's boat designs.



Gebo Portlights

Gebo portlights are made from anodised aluminium and have a standard smoke grey acrylic sheet of 10 mm thickness. All parts are constructed from non-corrosive materials. Powder-coating of the frame to any RAL colour you specify is also available. As standard the portlight is being manufactured with grey smoke acrylic. Clear, bronze and green acrylic are available on special order. Gebo portlights are designed for watertight hull fitting. So there's no problem when a heeling yacht pitches the portlight against the pressures of fastrunning water. The smooth angled outer frame prevents water from collecting on the frame and dripping into your cabin when the portlight is opened.

The Gebo's friction hinge firmly fixes the portlight in any of the positions without the need for stays.

Easy installation – and no hole drilling

Each Gebo portlight is supplied with an aperture template to aid fitting. There are no holes to drill as the Gebo's unique clamp system provides a perfect fit. You simply apply sealant between portlight and hull, then screw the inner rim onto the back of the outer frame from the inside. Both rim and frame are pre-drilled. Gebo clamp system portlights are suitable for wall thickness of 4 to 23 mm. Optional quick-fit stainless steel mosquito screens can be supplied for most standard sizes.

FlushLine Portlights

The Gebo FlushLine portlights can easily be installed on the top of the boat. The design of the frame of the 'FlushLine' portlights allows a completely flat outside appearance. In contrast to the other portlight ranges the 'FlushLine' can be opened to the outside.

The 'FlushLine' portlight is very easy to install and the 'FlushLine' clamp system is suitable for wall thicknesses of 9 to 21 mm.

EconoLine Portlights

Similar like the 'FlushLine', the Gebo 'EconoLine' portlights can easily be installed on the top of the boat. The 'EconoLine' portlight lid is formed out of ultra-tough 10 mm acrylic and can be opened to the inside of the boat. Multi-position Gebo stepless hinges are used in order to provide maximum flexibility for the user.

Easy to install

'EconoLine' portlights feature the Gebo unique clamp system for the fastest, neatest finish. Each 'EconoLine' portlight is supplied with an aperture template to aid fitting. The unique clamp fitting system eliminates the need for hole drilling. For a perfect fit you simply screw the inner rim onto the back of the outer frame from the inside. The 'EconoLine' clamp system is suitable for wall thicknesses of 4 to 20 mm.



Styling, safety
and comfort.



Standard Deckhatches with or without flange

The standard deckhatch is made from finest quality, seawater resistant, anodised aluminium and has a standard smoke grey acrylic panel of 10 or 15 mm thickness. Clear, bronze and green acrylic are available on special order. All other parts, including hinges and handles, are also constructed from noncorrosive materials.

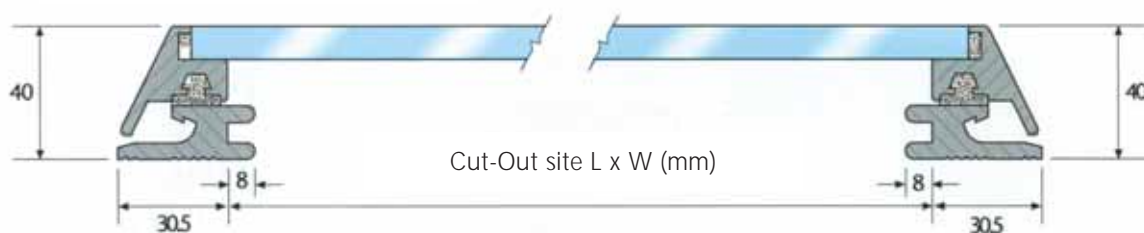
For a smoother profile, the frame on our standard hatches has been extended to fit smooth against the base mounting. The frame covers the base mounting screws for a smoother appearance and extra safety a deep groove in the lower frame prevents the penetration of water when the hatch is open.

**Lloyds certificate for
all design categories
(A, B, C & D)**

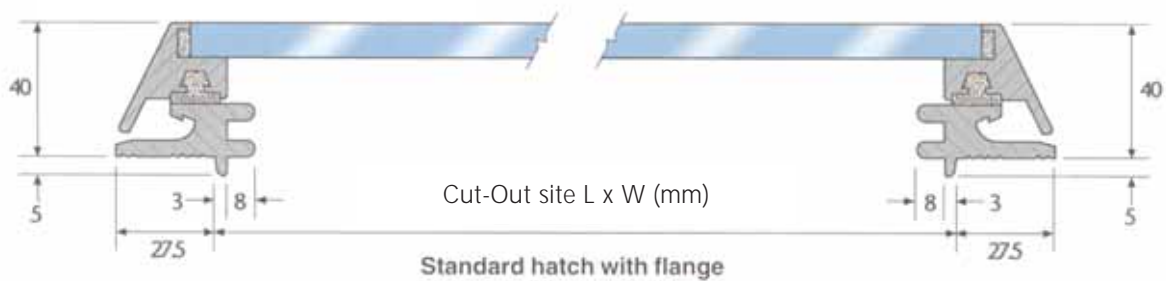
SHIP AREA II



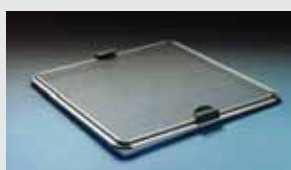
Standard hatch without flange



Standard hatch with flange



Accessories



Mosquito Screen



Fly-Blind



Aluminium Innerrim



Standard deckhatch without flange - sizes



Hatches should be fitted onto a flat surface with a maximum tolerance of 1 mm.

Standard Deckhatch without flange

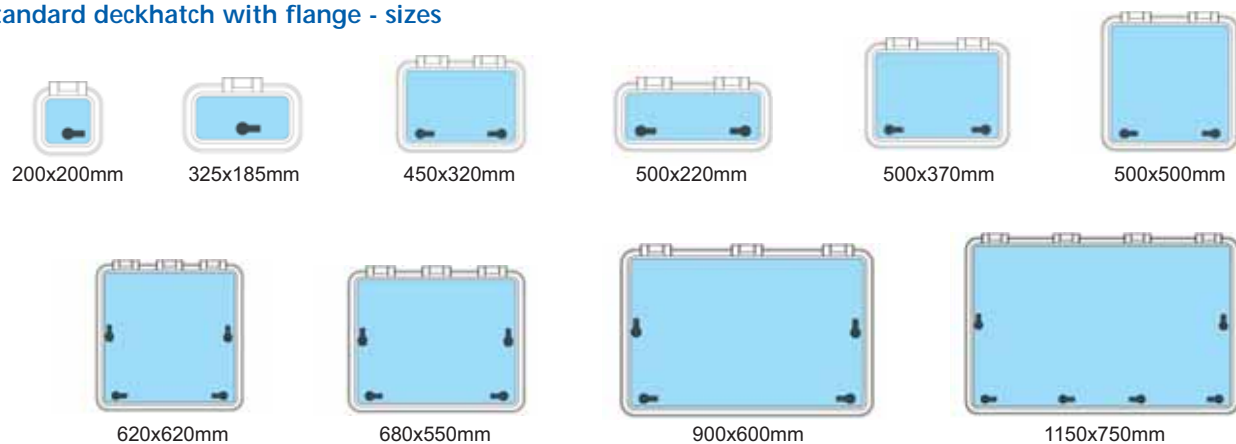
Accessories

Art.No.	Cut-Out size L x W (mm)	Radius (mm)	Overall size L x W (mm)	Radius (mm)	Acrylic (mm)	Mosquito Screen	Mosquito Screen size (mm)	Aluminium Innerrim	Fly-Blind
80.20.10.00	200 x 200	30	260 x 260	60	10	84.55.01.20	195 x 195	84.00.03.0Z	
80.20.27.00	260 x 260	30	320 x 320	60	10	84.55.01.22	255 x 255	84.01.63.0Z	
80.20.20.00	325 x 185	30	385 x 245	60	10	84.55.10.21	320 x 180	84.00.13.0Z	
80.20.90.00	341 x 196	30	401 x 256	60	10	84.55.01.28	336 x 191	84.00.73.0Z	
80.21.00.00	410 x 410	30	470 x 470	60	10	84.55.01.29	405 x 405	84.00.83.0Z	
80.20.30.00	450 x 320	30	510 x 380	60	10	84.55.01.23	445 x 315	84.00.23.0Z	84.70.01.50
80.20.80.00	451 x 451	30	511 x 511	60	10	84.55.01.30	446 x 446	84.01.73.0Z	
80.20.40.00	500 x 370	30	560 x 430	60	10	84.55.01.24	495 x 365	84.00.33.0Z	84.70.01.51
80.20.50.00	500 x 500	30	560 x 560	60	10	84.55.01.25	495 x 495	84.00.43.0Z	84.70.01.52
80.20.50.01/black	500 x 500	30	560 x 560	60	10	84.55.01.25	495 x 495	84.00.43.0Z	84.70.01.52
80.20.55.00/white	500 x 500	30	560 x 560	60	10	84.55.01.25	495 x 495	84.00.43.0Z	84.70.01.52
80.20.60.00	620 x 620	30	680 x 680	60	15	84.55.01.26	615 x 615	84.00.53.0Z	84.70.01.53
80.20.70.00*	800 x 800	30	860 x 860	60	15	84.55.01.31		84.00.63.0Z	
80.20.75.00*	900 x 900	30	960 x 960	60	15				

* with gas spring



Standard deckhatch with flange - sizes



Hatches should be fitted onto a flat surface with a maximum tolerance of 1 mm.

Standard Deckhatch with flange

Accessories

Art.No.	Cut-Out size L x W (mm)	Radius (mm)	Overall size L x W (mm)	Radius (mm)	Acrylic (mm)	Mosquito Screen	Mosquito Screen size (mm)	Aluminium Innerrim	Fly-Blind
80.29.00.00	200 x 200	30	255 x 255	58	10			84.00.03.0M	
80.29.10.00	325 x 185	30	380 x 240	58	10	84.55.01.50	315 x 175	84.00.13.0M	
80.29.20.00	450 x 320	30	505 x 375	58	10	84.55.01.54	440 x 310	84.01.23.0M	84.70.01.50
80.21.10.00	450 x 320	55	505 x 375	83	10	84.55.00.40	436,5 x 310	84.00.25.5M	84.70.01.50
80.29.80.00	500 x 220	30	555 x 275	58	10	84.55.00.55	490 x 210	84.01.33.0M	84.70.01.51
80.29.30.00	500 x 370	30	555 x 425	58	10	84.55.01.51	490 x 360	84.00.33.0M	84.70.01.51
80.21.20.00	500 x 370	55	555 x 425	83	10	84.55.00.41	486,5 x 360	84.00.35.5M	84.70.01.51
80.29.40.00	500 x 500	30	555 x 555	58	10	84.55.01.52	490 x 490	84.00.43.0M	84.70.01.52
80.21.30.00	500 x 500	55	555 x 555	83	10	84.55.00.42	490 x 490	84.00.45.5M	84.70.01.52
80.21.30.10 white	500 x 500	55	555 x 555	83	10	84.55.00.42	486,5 x 540	84.00.45.5M	84.70.01.52
80.21.30.01 black	500 x 500	55	555 x 555	83	10	84.55.00.42	486,5 x 490	84.00.45.5M	84.70.01.52
80.29.60.00	620 x 620	30	675 x 675	58	10	84.55.01.53	610 x 610	84.00.53.0M	84.70.01.53
80.21.40.00	620 x 620	55	675 x 675	83	15	84.55.00.43	606,5 x 610	84.00.55.5M	84.70.01.53
80.21.45.00	680 x 550	55	735 x 615	83	15	84.55.00.45	666,5 x 540		84.70.01.53
80.30.10.00	900 x 600	55	955 x 655	83	15	84.55.00.44			
80.23.00.00	1150 x 750	55	1205 x 805	83	15	84.55.00.49			



Sleek profile
for today's
power craft

FlushLine Deckhatches

The Gebo's new 'FlushLine' deckhatches offer exciting options for power craft - and like our FlushLine port-lights, their sleek, low-profile looks work perfectly with the smooth, flowing lines of today's boat designs.

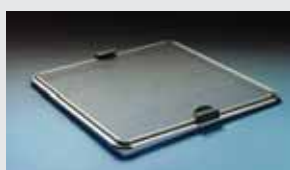
As standard the hatch is being manufactured with grey smoke acrylic. Clear, bronze and green acrylic are available on special order.

Appreciate the benefits every day

End users will appreciate Gebo design and quality too. There are no sharp edges to snag clothes or lines. Adjustable friction hinges hold the hatch open in any position up to 180°, including a fully-locked ventilation position. And for maximum security the handles in corporate a sturdy, easy-to-use blue locking button.

**Lloyds certificate for
all design categories
(A, B, C & D)**

Accessories



Mosquito Screen



Fly-Blind



ABS Innerrim



Aluminium Innerrim



FlushLine Deckhatches Round & Delta

All types of round FlushLine hatches are fitted with a new integrated, stepless hinge which allows the hatch to remain open in any position up to 180°. The hatch also has a lockable ventilation position that offers security while providing fresh air to the vessel! The extra sturdy, adjustable hinge will provide years of maintenance-free use.



Lloyds certificate for
all design categories
(A, B, C & D)

Accessories



ABS Innerrim Round



ABS Innerrim Delta



FlushLine Deckhatches - sizes



Hatches should be fitted onto a flat surface with a maximum tolerance of 1 mm.

FlushLine Deckhatches

Accessories

Art.No.	Cut-Out size L x W (mm)	Radius (mm)	Overall size L x W (mm)	Radius (mm)	Acrylic (mm)	Mosquito Screen	Mosquito Screen size (mm)	Aluminium Innerrim	ABS Innerim	Fly-Blind
80.50.30.00	275 x 275	42	330 x 330	70	8	84.50.00.00		84.00.94.2M	84.60.00.00	
80.50.31.00	310 x 310	42	365 x 365	70	8					
80.50.35.00	325 x 185	42	380 x 240	70	8	84.50.00.12	324 x 184	84.00.94.2M		
80.50.60.00	420 x 420	42	475 x 475	70	8	84.50.00.01	419 x 419	84.01.04.2M	84.60.00.01	
80.55.60.00	420 x 420	42	475 x 475	70	10	84.50.00.01	419 x 419	84.01.04.2M	84.60.00.01	
80.50.60.50*	420 x 420	42	475 x 475	70	8	84.50.00.01	419 x 419	84.01.04.2M	84.60.00.01	
80.50.40.01	450 x 320	42	505 x 375	70	8	84.50.00.09	449 x 319	84.00.24.2M		84.70.01.50
80.55.40.01	450 x 320	42	505 x 375	70	10	84.50.00.09	449 x 319	84.00.24.2M		84.70.01.50
80.50.80.00	470 x 470	42	525 x 525	70	8	84.50.00.02	469 x 469	84.01.14.2M	84.60.00.02	
80.50.80.50*	470 x 470	42	525 x 525	70	8	84.50.00.02	469 x 469	84.01.14.2M	84.60.00.02	
80.50.70.50	500 x 370	42	555 x 425	70	8	84.50.00.04	499 x 369	84.00.34.2M	84.60.00.06	84.70.01.51
80.50.70.60**	500 x 370	42	555 x 425	70	8	84.50.00.04	499 x 369	84.00.34.0M	84.60.00.06	84.70.01.51
80.55.90.00	510 x 510	42	565 x 565	70	10	84.50.00.03	509 x 509	84.01.24.2M	84.60.00.03	84.70.01.52
80.55.90.50*	510 x 510	42	565 x 565	70	10	84.50.00.03	509 x 509	84.01.24.2M	84.60.00.03	84.70.01.52
80.55.10.00	620 x 620	42	675 x 675	70	10	84.50.00.05	619 x 619	84.00.54.2M	84.60.00.05	84.70.01.53
80.56.10.50*	620 x 620	42	675 x 675	70	10	84.50.00.05	619 x 619	84.00.54.2M	84.60.00.05	84.70.01.53

* with stay (stay: Art.nr. 84.50.00.00) ° green acrylic



FlushLine Deckhatches round / delta - sizes



Round hatch

Delta hatch



277mm



420mm



518mm



530x435mm

Hatches should be fitted onto a flat surface with a maximum tolerance of 1mm.

FlushLine Deckhatches round

Accessories

Art.No.	Cut-Out size Diameter (mm)	Radius (mm)	Overall size Diameter (mm)	Radius (mm)	Acrylic (mm)	Mosquito Screen	ABS Innerrim
80.55.27.70	277		282		10	84.50.00.16	
80.55.42.00	420		475		10	84.50.00.14	84.60.00.08
80.55.51.00	518		573		10	84.50.00.15	84.60.00.09

FlushLine Deckhatches delta

Accessories

Art.No.	Cut-Out size L x W (mm)	Radius (mm)	Overall size (mm)	Radius (mm)	Acrylic (mm)	Mosquito Screen	ABS Innerrim
80.50.50.00	530 x 435	42	585 x 490	70	8	84.50.00.18	84.60.00.07



Simple installation:
no hole drilling

Portlights Rectangular



Gebo portlights are made from anodised aluminium and have a standard smoke grey acrylic sheet of 10 mm thickness. All parts are constructed from noncorrosive materials. Clear, bronze and green acrylic are available on special order.

The smooth angled outer frame prevents water from collecting on the frame and dripping into your cabin when the portlight is opened.

Lloyds certificate for
all design categories
(A, B, C & D)

SHIP AREA I

Accessories



Mosquito Screen



Portlight with rainshield



Rainshield



The modern look
for your boat

Portlights Circular Ended

Designers and boat builders looking for an circular ended portlight, will be delighted to see the Gebo portlights.

Gebo portlights are designed for watertight hull fitting. So there's no problem when a heeling yacht pitches the portlight against the pressures of fastrunning water.



Lloyds cerificate for
all design categories
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Accessories



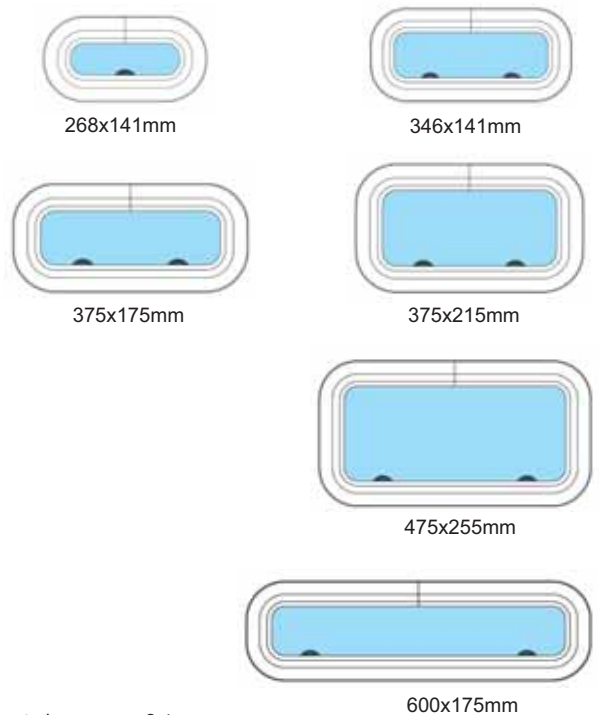
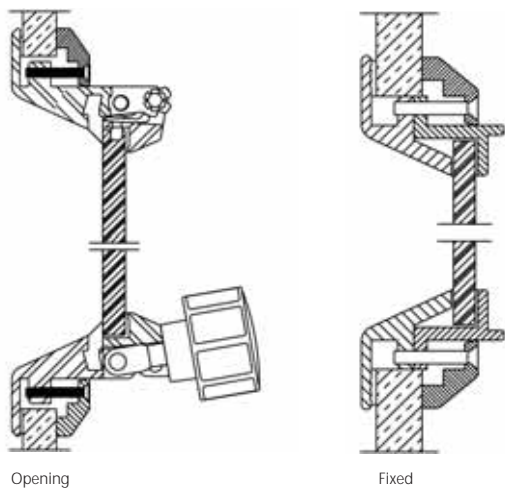
Mosquito Screen



Rainshield



Portlights – Rectangular



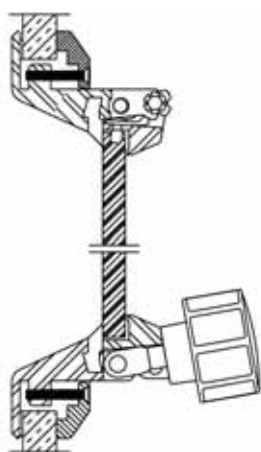
Portlights should be fitted onto a flat surface with a maximum tolerance of 1 mm.

Portlights rectangular

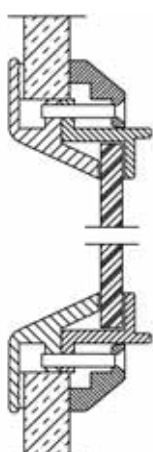
Accessories

Art.No.	Cut-Out size L x W (mm)	Radius (mm)	Overall size L x W (mm)	Radius (mm)	Glass See Trough (mm)	Mosquito Screen	Rainshield
81.00.10.00 Opening	268 x 141	56	293 x 166	68	203 x 76	84.75.00.01	
81.00.55.00 Opening	346 x 141	56	371 x 166	68	281 x 76	84.75.00.02	
81.00.20.00 Opening	375 x 175	56	400 x 200	68	310 x 110	84.75.00.03	84.85.00.03
81.00.29.00 Opening	375 x 175 black	56	400 x 200	68	310 x 110	84.75.00.03	84.85.00.03
81.00.30.00 Opening	375 x 215	56	400 x 240	68	310 x 150	84.75.00.04	84.85.00.04
81.00.30.01 Opening	375 x 215 black	56	400 x 240	68	310 x 150	84.75.00.04	84.85.00.04
81.00.40.00 Opening	475 x 255	56	500 x 280	68	410 x 190	84.75.00.05	84.85.00.05
81.00.85.00 Opening	600 x 175	56	625 x 200	68	535 x 110	84.75.00.06	84.85.00.06
81.10.11.00 Fixed	268 x 141	56	293 x 166	68	213 x 86		
81.10.55.00 Fixed	346 x 141	56	371 x 166	68	291 x 86		
81.10.21.00 Fixed	375 x 175	56	400 x 200	68	320 x 120		
81.10.21.01 Fixed	375 x 175 black	56	400 x 200	68	320 x 120		
81.10.31.00 Fixed	375 x 215	56	400 x 240	68	320 x 160		
81.10.31.01 Fixed	375 x 215 black	56	400 x 240	68	320 x 160		
81.10.41.00 Fixed	475 x 255	56	500 x 280	68	420 x 200		
81.10.86.00 Fixed	600 x 175	56	625 x 200	68	545 x 120		

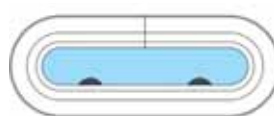
Portlights – Circular Ended



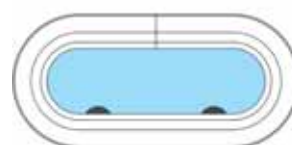
Opening



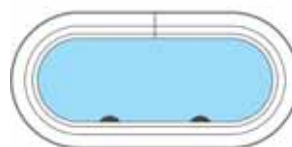
Fixed



375x141mm



375x175mm



483x229mm



600x175mm

Portlights should be fitted onto a flat surface with a maximum tolerance of 1 mm.

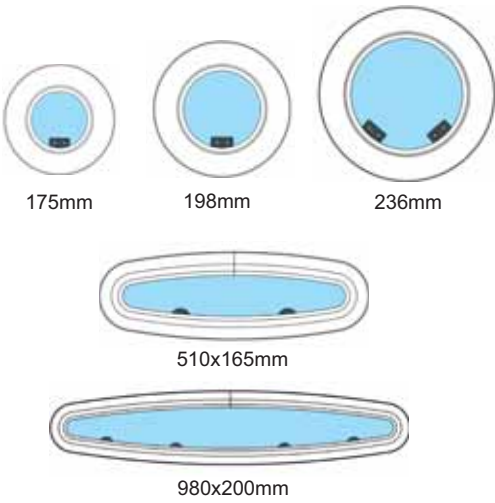
Portlights circular ended

Accessories

Art.No.	Cut-Out size L x W (mm)	Radius (mm)	Overall size L x W (mm)	Radius (mm)	Glass See Trough (mm)	Mosquito Screen	Rainshield
81.00.10.05 Opening	375 x 141	71	400 x 166	83	310 x 76	84.75.00.08	
81.00.20.05 Opening	375 x 175	88	400 x 200	100	310 x 110	84.75.00.09	84.85.00.09
81.00.20.09 Opening	375 x 175 black	88	400 x 200	100	310 x 110	84.75.00.09	84.85.00.09
81.00.61.00 Opening	483 x 229	114	508 x 324	126	418 x 164	84.75.00.10	84.85.00.10
81.00.85.05 Opening	600 x 175	88	625 x 200	100	535 x 110	84.75.00.16	84.85.00.16
81.10.21.05 Fixed	375 x 175	88	400 x 200	100	320 x 120		
81.10.21.09 Fixed	375 x 175 black	88	400 x 200	100	320 x 120		
81.10.85.05 Fixed	600 x 175	88	625 x 200	100	545 x 120		

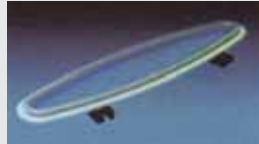


Portlights Round and Elliptical



Accessories

Mosquito Screen round



Mosquito Screen elliptical

Portlights should be fitted onto a flat surface with a maximum tolerance of 1 mm.

Portlights round

Art.No.	Cut-Out size Diameter (mm)	Radius (mm)	Overall size Diameter (mm)	Radius (mm)	Glass – See Through (mm)	Mosquito Screen
81.00.75.00 Opening	175		200		110	84.75.00.11
81.00.81.00 Opening	198		223		133	84.75.00.12
81.00.83.00 Opening	236		261		171	84.75.00.13
81.10.75.00 Fixed	175		200		120	
81.10.81.00 Fixed	198		223		143	
81.10.83.00 Fixed	236		261		181	

Accessories

Portlights elliptical

Art.No.	Cut-Out size Diameter (mm)	Radius (mm)	Overall size Diameter (mm)	Radius (mm)	Glass – See Through (mm)	Mosquito Screen
81.00.79.00 Opening	510 x 165		535 x 192		445 x 102	84.75.79.00
81.00.76.01 Opening	980 x 200		1005 x 225		855 x 135	84.75.76.01
81.10.79.00 Fixed	510 x 165		535 x 192		455 x 112	

Accessories

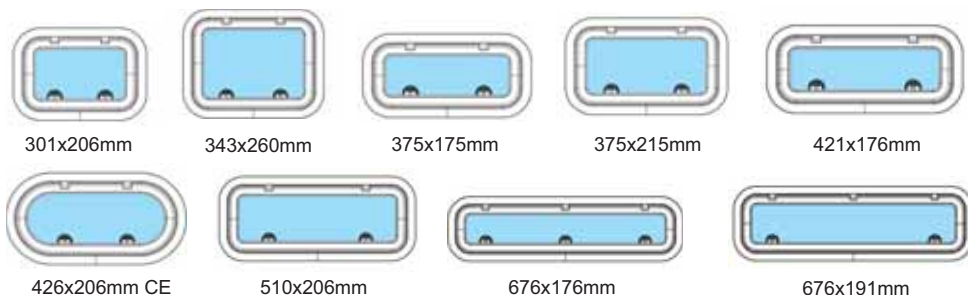


FlushLine Portlights

The Gebo FlushLine portlights can easily be installed on the top of the boat. The design of the frame of the "FlushLine" portlights allows a completely flat outside appearance. In contrast to the other portlight ranges the "FlushLine" can be opened to the outside.

**Lloyds certificate for
all design categories
(A, B, C & D)**

SHIP AREA III



Flushline portlights are suitable for wall thicknesses of 9 to 21 mm
Portlights should be fitted onto a flat surface with a maximum tolerance of 1 mm.

Accessory



Mosquito Screen

FlushLine Portlights

Accessories

Art.No.	Cut-Out size L X W (mm)	Radius (mm)	Overall size L X W (mm)	Radius (mm)	Glass – See Through (mm)	Mosquito Screen
81.32.26.00	301 x 206	56	326 x 231	68	221 x 126	84.75.01.02
81.32.35.00	343 x 260	56	368 x 285	68	263 x 180	84.75.01.05
81.32.40.00	375 x 175	56	400 x 200	68	295 x 95	84.75.01.06
81.32.45.00	375 x 215	56	400 x 240	68	295 x 135	84.75.01.07
81.32.50.00	421 x 176	56	446 x 201	68	341 x 96	84.75.01.08
81.32.32.00 Circ. ended	426 x 206	103	451 x 231	115	346 x 126	84.75.01.04
81.32.65.00	510 x 206	56	535 x 231	68	430 x 126	84.75.01.11
81.32.71.00	676 x 176	56	701 x 201	68	596 x 196	84.75.01.14
81.32.70.00	676 x 191	56	701 x 216	68	596 x 111	84.75.01.13



More quality
for your money

Portlights EconoLine



The Gebo 'EconoLine' portlights can easily be installed on the top of the boat. They 'EconoLine' portlight lid is formed out of ultra-tough 10 mm acrylic and can be opened to the inside of the boat. 'EconoLine' portlights feature the unique Gebo clamp system for the fastest, neatest finish.

Lloyds certificate for
all design categories
(A, B, C & D)

SHIP AREA II

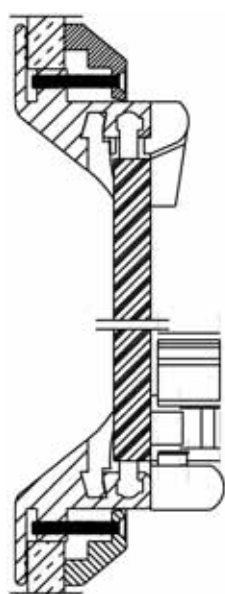
Accessories



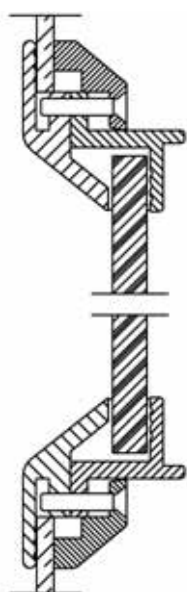
EconoLine mosquito screen and rainshield



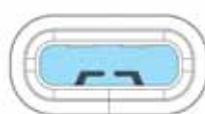
Portlights – EconoLine



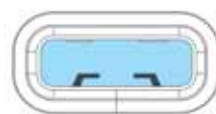
Opening



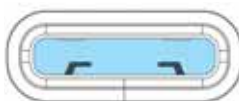
Fixed



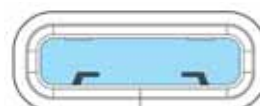
304x155mm



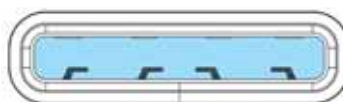
347x171mm



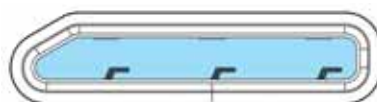
405x155mm



429x171mm



627x171 / 676x167 / 676x191mm



688x175mm PS



Portlights should be fitted onto a flat surface with a maximum tolerance of 1 mm.

EconoLine Portlights

Accessories

Art.No.	Cut-Out size L x W (mm)	Radius (mm)	Overall size L x W (mm)	Radius (mm)	Glass See Trough (mm)	Mosquito screen	Rainshield
81.70.00.00 Opening	304 x 155	56	329 x 180	68	227 x 78	84.75.00.50	
81.70.00.05 Opening	347 x 171	56	372 x 196	68	270 x 94	84.75.00.52	84.85.00.52
81.70.00.10 Opening	405 x 155	56	430 x 180	68	328 x 78	84.75.00.53	
81.70.00.15 Opening	429 x 171	56	454 x 196	68	352 x 94	84.75.00.54	
81.70.00.20 Opening	627 x 171	56	652 x 196	68	550 x 94	84.75.00.55	
81.70.01.00 Opening	676 x 167	56	701 x 192	68	599 x 90	84.75.00.56	
81.70.01.01 Opening	676 x 191	56	701 x 216	68	599 x 114	84.75.00.57	
81.70.00.25 Opening PS	688 x 175	56	713 x 200	68	611 x 98		
81.70.00.30 OpeningSB	688 x 175	56	713 x 200	68	611 x 98		
81.71.00.00 Fixed	304 x 155	56	329 x 180	68	240 x 91		
81.71.00.05 Fixed	347 x 171	56	372 x 196	68	283 x 107		
81.71.00.10 Fixed	405 x 155	56	430 x 180	68	341 x 95		
81.71.00.15 Fixed	429 x 171	56	454 x 196	68	365 x 107		
81.71.00.20 Fixed	627 x 171	56	652 x 196	68	563 x 107		
81.71.00.25 Fixed PS	688 x 175	56	713 x 200	68	624 x 111		
81.71.00.30 Fixed SB	688 x 175	56	713 x 200	68	624 x 111		



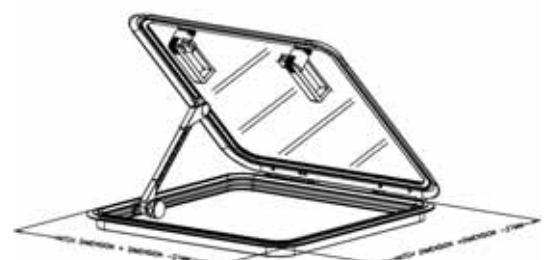
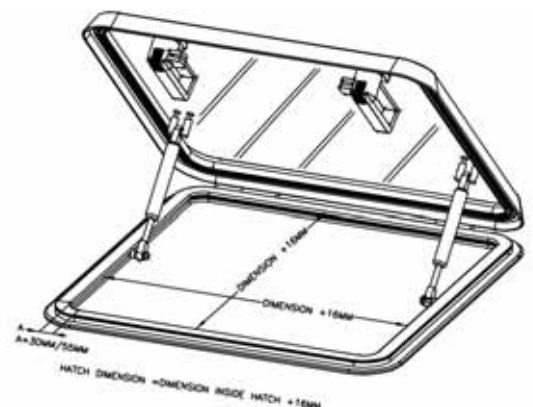
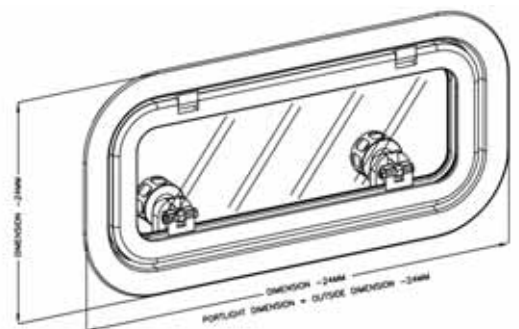
How to measure sizes

Portlights:

Take following into account:

- Will the portlight open inward or outward?
- Is the portlight shape rectangular or circular ended?
- What is the total outside measurement?
- Portlights should be fitted to a flat surface with a maximum tolerance of 1 mm over the length.

The cut out size is the total outside size minus 24 mm. Rainshield and flyscreens are available for the portlights. They are listed according to cut out size.



Hatches:

Take following into account:

- Hatches should be fitted to a flat surface with a maximum tolerance of 1 mm.
- Take measurements of the cut out size in the deck.
- Will you have wood trim on the inside or not?
- When no wood is required on the inside, you may use a hatch with a flange.
- When you do wish a wood trim on the inside or are replacing an existing (Gebo) flatbase hatch, we recommend a hatch without a flange.
- What is the radius of the corners?
- Flushline Hatches with a flange always have a radius 42



Why Aluminium?

More and more boat owners need 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 Treatment

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 powdercoated 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 lukewarm 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.

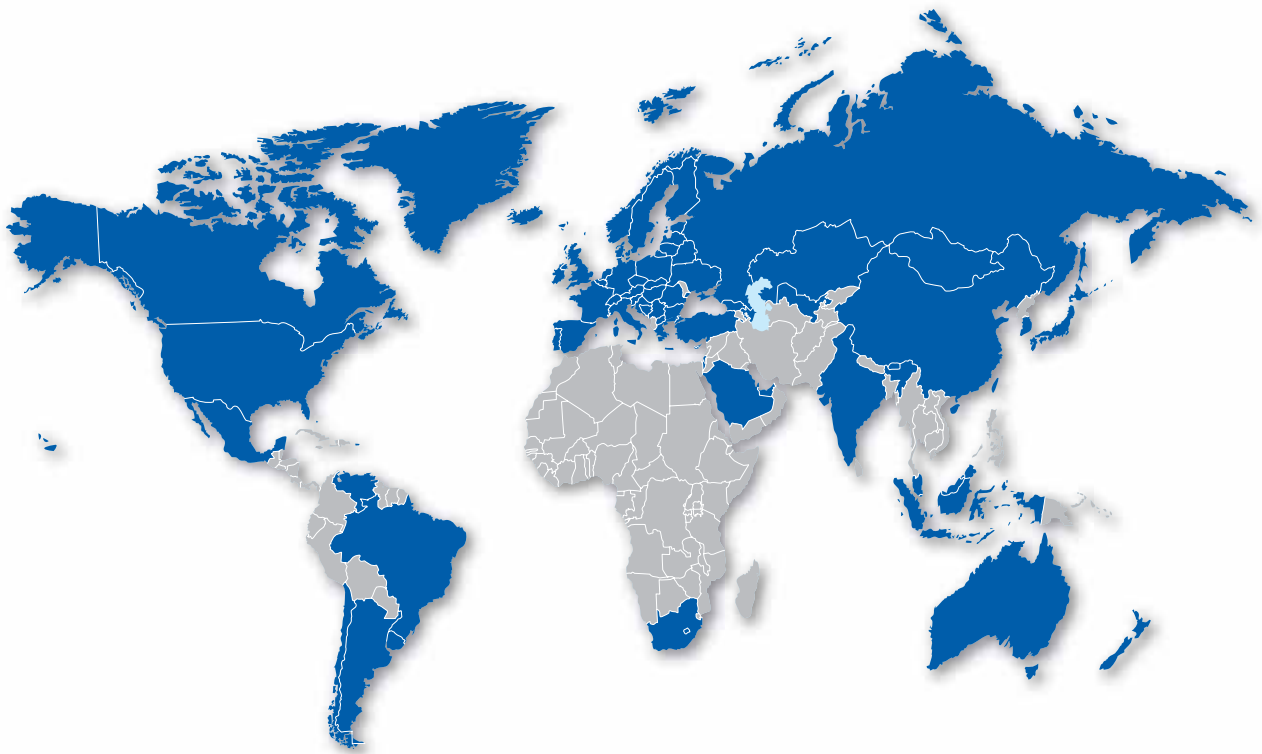
Maintenance of the acrylic

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:

Please remove the foil from the acrylic prior to exposing the hatch/portlight to sunlight.

Webasto inside and outside – the whole world over



Webasto has representatives in more than 40 countries and works together with some 5.000 dealers, service centers, sales partners and subsidiaries around the globe. This is of importance for people travelling in their boat or yacht, because only with this level of support they can be assured that an expert is available to give them advice and assistance almost everywhere they go.

Webasto heating / air-conditioning systems and hatches / portlights are indispensable companions for happy cruises on all seas, rivers and lakes.