Ocean hatches are for use on all craft types in accordance with ISO/DIS 12216.2(E), DESIGN CAT "A", AREAS II, III and IV. Modification of the hatch by the fitting of vents etc. will invalidate the compliance with the standard.

**Fitting Instructions**

Ocean hatches should be fitted to a flat surface with a maximum tolerance of +/- 1mm and a deck / hull thickness of 25-70mm (flanged version only). Check that all fastenings will be clear of deck moulding radii etc. Allow clearance for lid opening.  
**Do not open and close the hatch more than necessary until the lower frame is securely mounted.**

Mark the deck with a pencil around the inside edge of the lower frame. For hatches with a lower frame flange, increase the aperture size by 3mm all around.  
**It is essential that the lower frame is placed square on the deck opening.**  
**When fitting a number of hatches it is advisable to prepare a template.**

Cut out deck along pencil line using a suitable saw.  
Where the deck is of composite construction, it is recommended that the exposed laminate be sealed with the appropriate material prior to fitting the hatch. Openings cut in metal decks should have all burrs and sharp edges removed.  
**Hatches should not be considered as stiffening members and it is recommended that the deck be adequately stiffened to prevent distortion during heavy weather.**

Re-check the frame on aperture and then apply bedding compound to the channel in lower frame. Bedding compound must have good adhesive qualities (eg. silicone sealant), be a suitable grade for marine sealing applications, of 3mm minimum thickness and compressible to allow the lower frame to be pulled down in contact with the deck by the securing screws.

Position lower frame over hole and drill two fixing screw holes in opposite corners. Insert appropriate stainless steel fasteners.(see below).

**Deck type**

<table>
<thead>
<tr>
<th>Wood</th>
<th>M5 through bolts or marine grade wood screws.</th>
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<tbody>
<tr>
<td>GRP/Steel/Al Alloy</td>
<td>M5 through bolts or machine screws into suitable tapped plates.</td>
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<tr>
<td>Fixing Sizes</td>
<td>M5, 10UNC, 2BA, 3/16&quot;, Wood screws (min. length 40mm).</td>
</tr>
<tr>
<td>Hinge Fixings</td>
<td>M6 or 1/4&quot; through bolts only.</td>
</tr>
</tbody>
</table>

Drill remainder of holes and fasten down from the centre working out to the edges. Clean off surplus sealant.  
**Through bolts should be used where fixings pass through lower hinges (M6 or 1/4" only).**

Once installed check for correct operation of the hatch lid, ie. closing/locking, even pressure of seal etc.
**User Notes**

Small "vent" hatches are restricted to 90 degree opening and should not be forced beyond their "stop" position, as damage to the lever mechanism may occur. Larger hatches are not self supporting beyond the vertical position and will fall fully open if unrestrained.

The locking ventilation position is used by closing the handles into the catch block centre slot. Care should be taken not to stand on or load the hatch lid in this position, as damage could occur to the handle or catch block.

Always wash the hatch with soap, water and a soft cloth.

*Never use abrasive or solvent cleaners on the acrylic lid, as this may at a later date damage the acrylic.*

*To avoid risk of injury care should be taken to keep hands and limbs clear of lever and lid pinch zones while operating and adjusting the hatch.*

Backing plates are available separately to offer a quick solution to through bolting the hinge units neatly.

<table>
<thead>
<tr>
<th>Catalogue No.</th>
<th>Thread Size</th>
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<tbody>
<tr>
<td>3669913999</td>
<td>M6</td>
</tr>
<tr>
<td>3669914999</td>
<td>1/4&quot; UNC</td>
</tr>
</tbody>
</table>

**Friction lever adjustment**

The friction lever units installed on Ocean hatches are pre-set when manufactured to give correct positioning with a minimum opening load. It may be necessary occasionally to adjust the lever setting to correct the operation of the hatch.

Adjustment is made by means of the socket head screws on either side of the lever assembly.

Using a 4mm (5/32") hexagon key, turn the adjusting screw approximately 1/8th of a turn in a clockwise direction to increase the positioning force. This is most easily carried out in the fully open or closed positions.

*Do not over tighten the adjusting screws*

*On hatches with multiple lever units, care must be taken to adjust all levers to a similar loading.*

Open the hatch and check for correct operation.

Re-adjust if necessary until the desired operation is achieved.

Lubricants should not be used on the friction lever assemblies as this will adversely affect the function of the units.

Please Turn Over