

SKYSOL 2 Specification Notes

SKYSOL 2 SPECIFICATION NOTES

The following notes have been arranged in an order that correlates with the columns on the Custom Order Forms. The numbered sections relate directly with the order forms with the unnumbered sections providing additional information.

It is important when completing your Custom Order Form that you note the number at the top of the column on the Form and refer back to the relevant numbered section of these notes for the detail.

Shaped Blinds

When ordering shaped windows, Dometic has put together a comprehensive set of Standard Shape Order forms. The Standard Shape Order Form is similar to the Rectangular order form in its use of tick boxes to gain information about how you would like the blind to be built. However, there are also two diagrams illustrating the shape you require, showing opposite hands, with empty dimensions. If you are choosing to send measurements (rather than a template or CAD drawing) please fill in **all** the necessary empty dimensions (see How to Measure on Page 18). Please also tick as to whether the shape is on the Port or Stbd side.

For shapes that are not covered by the Standard Shape order form there is a Non-Standard order form with a grid for a sketch of the shape you would like a blind to cover. Dometic will assess this shape and may ask you for a CAD drawing of the shape or a hard template (again see "How to Measure" on Page 18).

Below is an example of a SKYsol drawing highlighting some of the keywords that are used later in the specification notes.



Fig 1 – SKYsol keyword drawing

1. Window Location

In Box 1 of the order form insert the position description of the window as per Fig 2 below

To avoid confusion, Dometic works in an order of location and reference number for quotes. Therefore, always show shapes looking from the inside of the boat. In a standard saloon or deckhouse arrangement we would start on the port aft side window, and work round clockwise – see below diagram



Fig 2 - An example of a standard wheelhouse window configuration

2. Fabric

In Box 2 on the order form insert the 7-digit code of your chosen fabric

Fabric selection sheets and full fabric samples and specifications are available from your distributor or Dometic direct. Please pay particular attention to the dim out and opaque qualities of each fabric together with the Pricing Group and colour. Each fabric has a different level of light reduction, heat reflection and opacity to provide the correct properties for your application.

In addition, when choosing your fabric consider the width of the window against the width of the fabric. The maximum widths are noted on the fabric chart against each fabric and if the width of your window exceeds this Dometic will have to either: (a) split the window into two areas for two blinds; or (b) where this is possible join the fabric together - although this solution will result in a fabric overlap and a visible shadow where the fabrics are joined. Please refer to Dometic for further information.

Some fabrics listed may not be suitable for certain shapes and this will be listed next to the fabric. If in doubt, please check with your distributor or Dometic.

It should also be noted that fabric colour can vary from batch to batch and Dometic cannot be held responsible for colour batch changes. Finally, while we treat our fabrics against fading, we cannot guarantee that the blinds won't fade over time – especially the darker colours.

3. Blind or Recess Size?

In Box 4 on the order form insert whether you require the blinds Recess or Blind size

This question is based on the area that you are measuring: if there is a recess area that the blind is being placed into and you are taking wall to wall measurements, then please confirm that the sizes you have taken are **Recess** size.

If, however, the area you are measuring does not have a recess area, or you know the exact size that you require the blind to be made to, please state **Blind** size.

• Recess Size - manual and powered blinds

When a Recess size is provided Dometic will make automatic 'build process deductions' from the size of the recess of 10mm for rectangles (5mm either side). For all other standard shapes please refer to the Build Process Deductions table overleaf.



	Build Process Deductions from Recess - Top Stack						Build Process Deductions from Recess - Bottom Stack					
	Manual			Powered			Manual			Powered		
	Right			Right			Right			Right		
Shape	Angle	Obtuse	Acute	Angle	Obtuse	Acute	Angle	Obtuse	Acute	Angle	Obtuse	Acute
1	N/A	20	10	N/A	40	10	N/A	N/A	N/A	N/A	N/A	N/A
2	5	20	N/A	5	40	N/A	5	10	N/A	5	10	N/A
3	10	15	N/A	10	30	N/A	5	10	N/A	5	10	N/A
4	N/A	15	10	N/A	30	10	N/A	N/A	N/A	N/A	N/A	N/A
5	10	15	10	10	30	10	N/A	N/A	N/A	N/A	N/A	N/A
6	N/A	20	10	N/A	40	10	N/A	N/A	N/A	N/A	N/A	N/A
7	5	N/A	N/A	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	5	15	10	5	30	10	N/A	N/A	N/A	N/A	N/A	N/A
9	5	N/A	10	5	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A
10	5	N/A	10	5	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A
11	N/A	N/A	10	N/A	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A
12	10	N/A	N/A	10	N/A	N/A	10	N/A	N/A	10	N/A	N/A
13	10	N/A	N/A	10	N/A	N/A	10	N/A	N/A	10	N/A	N/A
14	10	N/A	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	N/A	20	N/A	N/A	40	N/A	N/A	10	N/A	N/A	10	N/A
16	10	N/A	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

When a recess size is given for steep inclined blinds Dometic recommends that the recess depth is large enough to allow for sagging of the fabric over long drops.

• Blind Size - manual and powered blinds

Blind sizes are used when you are mounting the blind outside the recess area or you are confident of the **exact** size you require the blind to be. If you are placing one blind next to another, we would recommend a 5-10 mm gap between the two blinds so they can move freely without interference. When Blind Size is specified for rectangles then Dometic will NOT make any build process deductions and will make the blind to the exact dimension indicated on the form.

Please note: When ordering shaped 'Blind Size' blinds to fit into a recess, Dometic cannot guarantee a precise fit where incorrect build process deductions have been made.

When Blind Size is provided for shaped blinds, Dometic may have to design a blind with slight light gaps to allow the blind hardware to fit the shape. These light gaps will always be kept to a minimum.

5. Hardware Colour

In Box 5 on the order form please tick to indicate the hardware colour you require.

The hardware is the metal profile section at the top and the bottom of the fabric, the various associated plastic components and the fixing brackets. Hardware is available in three colours: Beige, Graphite and White.

6. 2 Bar and 3 Bar formats

In Box 6 on the order form indicate whether you require a 2 Bar format or a 3 Bar format

There are two types of hardware arrangement available – 2-bar and 3-Bar:

- **2-Bar:** The 2-bar format has a headrail (being one bar) and a shuttle rail (the second bar) see Figs 1 and 4 on Page 6. 2 Bar blinds have individual fixing blocks with the guide wires and cording being fixed into these blocks which are then fitted to the boat. The 2 Bar format can be used with both rectangles and *most* shapes. Powered blinds are not supported in a 2 Bar format unless AO type (see section 10. Type)
- **3-Bar**: The 3 Bar format can be used with rectangular and standard shaped blinds. Instead of individual fixing blocks, the cording and guide wires are fixed into this third bar (fix rail) see Figs 1 and 4 on Page 6. This bar is mounted in the same way as the top headrail using fixing clips. The main advantage of the 3-Bar format is that it is quicker and easier to install.

There are certain shapes that can only be made in a 3 Bar format, see Standard Shape order forms. If one of your blinds can only be made in a 3 bar format, we suggest that the rest of your order is also made in the 3-bar format for uniformity.

7. Stacking Position

In box 7 on the order form please state whether you require a top or bottom stacking blind

You have the option to have your blind 'stacked' at the top or bottom of the blind when in the folded up position.

This option applies to all rectangles (except AO types, see Section 10 Blind Type), but may not be possible with powered blinds and some shapes/configurations.

Please refer to the Standard Shape Order Form.



Top Stacking



Bottom Stacking

Fig 3 – Top and Bottom Stacking options

7b. Fabric Position

In box 7b on the Day/Night Rectangles order form please state the arrangement you require the fabric.

This option is for Day/Night Rectangles only. The Night fabric is 100% Blackout fabric (Honeycomb) and the Day fabric can be any of the fabrics marked as such in the fabric options book.

There are two choices of fabric arrangement; Night Above and Day Below (NA/DB) or Day Above and Night Below (DA/NB).

Please note when ordering Powered Day/Night blinds that the Night fabric will always be above as powered Day/Night blinds are only available in a top stacking configuration.

8 Fixing Type

In Box 8 on the order form please tick the appropriate box to indicate which fixing type you require

This section details the various types of fixing brackets available for both manual and powered blinds.

The diagrams below illustrate the various options. .



Manual 3 Bar Face Fix



Manual 2 Bar Face Fix





Powered. 3 Bar. Recess Fix



Manual 3 Bar Recess Fix



Manual 2 Bar Recess Fix



9. Incline

In box 9 on the order form please state the angle of the blind.

This section relates to the degree of incline of your windows and is linked to the next section 'Blind Type'. It also allows Dometic to understand the location and type of window you are looking to cover - e.g., the side windows in a wheelhouse often have less of an incline than the forward windows. It is important for Dometic to have this information to ensure the correct type of blind is supplied.

Vertical upwards = 0°

Please let us know the incline of each blind. If you are unsure of the angle of inclination we suggest you use a simple plumb line and a protractor on the window to calculate the correct angle as illustrated in the diagram below.



Fig 5 – Plumb Line

10. Blind Type

In Box 10 on the order form, select the blind type you require

This section describes various types of blinds available and their abbreviations. Your choice will depend on:

- The inclination of the window (see Section 9), and
- Whether the blind will be subject to excessive movement when the vessel is travelling

The illustration below and the detail on the following pages will help you choose the correct blind type for your particular application.



Fig 6 – Blind Types and relative angles

AO – Rectangular blinds only

AO - 2 Bar, Top Stack only. Vertical, free-hanging blind. These blinds do not have any guide wires and are operated by a pull cord system on the left or right of the headrail. Because it is free hanging, the blind will move around when the vessel is in motion and is more suitable for domestic arrangements.

Not available in Bottom Stack

Maximum distance between cord holes 500mm



AO/DB – Rectangular blinds only

AO/DB – Top Stack only. Suitable for an incline of 0-20° from the vertical with the same pull cord system as the AO but also has guide wires that run through the fabric for stability and to avoid movement when the vessel is moving. This blind type is particularly good for very wide rectangles of 1300mm and over.

Not available in Bottom Stack

Maximum distance between cord holes 500mm



AO/DBE – Rectangular blinds only

AO/DBE is the same as the AO/DB except that the guide wires run down the **outside** of the fabric allowing the guide wires to be hidden behind a side valance or recess area if available. This option will require a deduction of 20mm for the fabric (10mm either side) from the X (width) dimension to allow for the guide wire to travel outside of the fabric.

Not available in Bottom Stack

Maximum distance between cord holes 500mm.



AB – Rectangular and Shaped blinds

AB blinds are suitable for an incline of 0-30° from the vertical and the blind's configuration of cords is based on a tension system. These blinds are operated by a central handle on a moving rail allowing the blind to be stopped in any location as it travels up and down.

Maximum distance between cord holes 400mm



DB – Rectangular and Shaped blinds

DB blinds are suitable for an incline of 30-60° from the vertical. The blinds' cord configuration is the same as an AB blind but with additional guide wires to support the fabric at this incline.

A blind at 150-1100mm wide will have guide wires that travel down the first cord holes at 55mm in from each end, 1100-max fabric width the cords will travel down the second cord holes at 300-350 in from each end.

Maximum distance between cord holes 300mm



DBE – Rectangular blinds only

DBE blinds are suitable for an incline of 20-45° from the vertical. The blind's cord configuration is the same as an AB blind but with guide wires that run down the outside of the fabric allowing a discrete them to be hidden behind a side valance or recess area if available. This option will require a deduction of 20mm for the fabric (10mm either side) from the X dimension to allow for the guide wire to travel outside of the fabric.



Maximum distance between cord holes 300mm

PB – Rectangular and Shaped blinds

PB blinds are suitable for an incline of 60-120° from the vertical. The blind's cord configurationis the same as an AB blind but with guide wires travelling through each cord hole to give maximum support for the fabric at these extreme angles of incline

Maximum distance between cord holes 200mm



11. Cord Position if AO (manual only)

In box 11 on the order form please indicate whether you require left or right cord controls

If you have chosen a pull cord blind you need to tick on the custom order form whether you require this cord lock system to be fitted on the left or the right of the blind (standard position is 30mm from the edge of the headrail).

12. Quick Tension (manual only)

In box 12 on the order form please state whether you require the Quick Tension system.

This section refers to the quick tensioning system device that is used in the production of SKYsol 2. Although Dometic endeavours to make all blinds to the precise dimensions given sometimes the blinds require a small amount of adjustment when being installed. The Quick Tension (QT) system enables the customer to install the blinds with greater tolerance.

This QT system works by employing a sliding handle along the Fixrail (see Fig 1) that adds or takes away tension in the blind. When used on larger blinds with greater numbers of cords the number of QT units becomes greater but only one handle is required.

The QT system is primarily used for rectangular blinds although can be used for certain shaped blinds – see Dometic for more detail.

13. Handle option

In box 13 on the order form please indicate which type of handle you require

When a tension blind is required (AB, DB etc.) there is a choice of handles available depending on the operation of the blind:

- Lozenge handle
- Clear Plastic handle (for use with Control Rod and handle turns through 180 degrees), or a
- Fabric strap handle.

Dometic can also provide a control rod to be supplied if the blind is out of reach which connects to the clear plastic handle to move the blind. This is a separate accessory to the blind.

14. Powered SKYsol

In box 14 on the order form please state whether you require manual or powered blinds, the position of the motor (top or bottom) and which type of controls you require

Powered blinds use different headrails from manual blinds (see Fig 3) together with larger fixing brackets. This larger headrail holds the motor together with enough cable to connect to the left or the right of the blind to the 24v DC supply. Dometic will need to know whether you require this rail to be at the top or the bottom of the recess, depending on the blind shape and configuration.

Please note you can still have a top stack blind with the motor rail at the bottom or a bottom stack with the motor rail at the top, again this will depend on the blind shape and configuration.

Please also note except for the AO type blinds which are 2-Bar only, **all** powered blinds are to have the 3 Bar format.

The housing for powered blinds requires a minimum width of 70mm inside the recess area to fit these blinds (including fixing bracket) – see Fig 4.

The motor specifications are Voltage 24v DC – minimum supply voltage 20v DC. Dometic can provide a manual rocker switch, radio control and 240v AC to 24v DC transformers. For full details, please refer to Dometic 'Powered' section of the Handbooks.

It is essential that Dometic knows what type of switching will be used in conjunction with the blinds to determine whether a time stop is required for the blind. A time stop is an electronic device which is programmed to the correct time it takes for the blind to either open or close (a time stop must be used with constant contact switch units). If momentary switches are fitted there is no requirement for the time stop as once the blinds are at the desired position releasing the switch will kill the power.

Constant Contact Switch = Push the switch and it latches on, permanently supplying power to the blind, whether or not the switch is held in an 'ON' position.

Momentary Switch = Push the switch and it powers the blind, release the switch and the power stops.

15. Quantity

In Box 15 on the order form please state the quantity of blinds you require.

This section refers to the quantity of blinds you require. Dometic would advise that when completing the custom order form for a boat set with number of blinds the same size yet have different locations (see Section 1.Window Location), you complete a new row for each blind. This ensures that you get the blind correctly labelled for the windows.

This box can also be used for multiple blinds if ordering more than one boat set that hold the same sized blinds.

How to Measure

• Rectangles

When measuring a rectangular recess Dometic advise that you take at least three measurements of each dimension. For example if you are measuring the width of a window measure the across the top of the window, across the middle of the window and across the bottom of the window, use the smallest measurement of them all as the X (width) dimension. This ensures that Dometic doesn't make the blind too big for the application.

Order Forms for Rectangular Blinds and Day/Night blinds (rectangles only) can be found at the end of these Notes.

• Standard Shapes

When measuring a shaped window great care must be taken to ensure the accuracy of the measurements. If Dometic is creating a drawing from the measurements supplied and the measurements do not compute by a tolerance of +/- 5mm, Dometic will ask you to re-measure or confirm the adjusted measurements.

The front of the Standard Shape order form is similar to the Rectangular order form in its use of tick boxes to gain information about how you would like the blind to be built. However, there are two diagrams with empty dimensions to illustrate the shape you require.

If you choose to send measurements (rather than templates or CAD drawings) please fill in **all** the empty dimensions. Dometic will also accept CAD drawings (preferred) or hard templates of the Standard Shapes (see Templating overleaf).

• Non Standard Shapes

If your window shapes does not match any of the standard shapes, there is a separate Order Form for Non-Standard Shapes following these Notes. On this form there are the same tick boxes as the standard shapes but Dometic has provided a grid for you to sketch the shape to allow us to assess it. If the shape you require is non standard then Dometic will require you to send either a CAD drawing (preferred) or a hard template of the shape (see Templating below).

Templating

If you are ordering shaped blinds for a window recess and you cannot provide a CAD (Computer Aided Design) drawing you will need to make a template.

A template is a piece of material which exactly reflects the size and shape of the recess where the blind will be fitted, **or** the size and shape of the actual blind.

A template can be made from paper, cardboard, wood, plastic, fibreglass – anything which, when laid out flat, remains in the same shape – e.g., most fabrics are not suitable as they can shrink or distort. A stiff paper is excellent as it is easy to shape and can be held in place without collapsing or folding and maintains a true shape.

For **recess** measurements, the template should fit into the recess with no gaps around the edges. It should be a snug fit, but must not be so tight that it gets stuck. If the circumference is curved, it should have a smooth finish. If you can hold the template in the recess and observe that the shape matches the shape of the recess, then it is sufficient. However, if the template gets stuck, trim back the edge which is sticking. If you can see gaps around the edges stick more material to the template to bring it back to the correct shape.

For **blind** measurements, the template should be the **exact** size and shape of the blind you require. Begin with paper and experiment using scissors or a craft knife and hold or tape the paper over the recess. When held against the light, the recess area will appear lighter. Trace with a pen around the light area – at this point you may need help to hold the material in place. If the recess is not too big, this paper template is likely to be sufficient.

If the recess is large, say more than 0.5 metre square, you may need to make a more robust template after you have made the initial shape.

All templates received by Dometic are measured and transferred into our CAD system to enable the SKYsol design team to develop a suitable solution.

CAD and SKYsol 2

Dometic has the facility to receive the window shapes in a CAD format (AutoCAD & Solidworks); this helps to speed up the processing of the order and is the preferred way of receiving shape outlines. When submitting these drawings please also send 2D drawings showing the basic outline of the recess that you require the blind to be built to together with the appropriate location/reference (see Section 1).

Installation Services

Dometic offers a global templating and installation service – together with after sales service for the installation. Contact Dometic direct to discuss details of how this can be arranged.

Training is also available for Boat Yards to install on a repeat order basis.