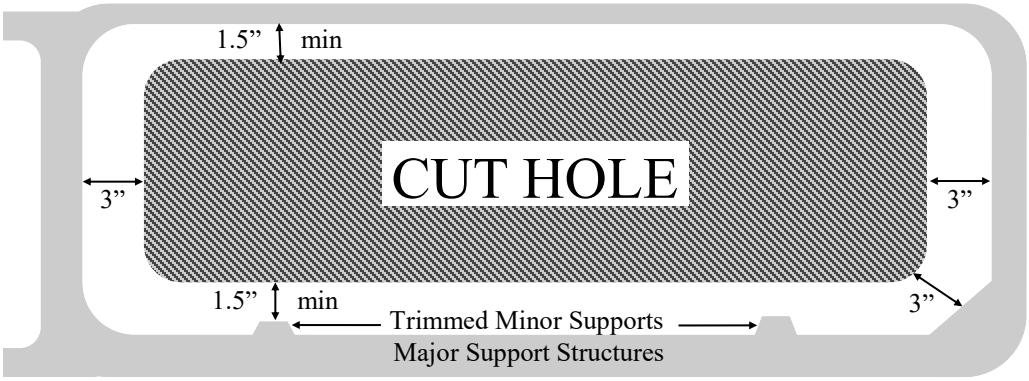
Arctic Tern Product Collection Considerations for Fitment: Windows, Roof Hatches & Cargo Access Doors

This material must be read and understood before ordering

Thank you for considering our products for your build! We have many happy DIY and professional builders using our windows with great success. Unfortunately we cannot make specific recommendations regarding fitment. There are so many variables regarding make, model, year, configuration, and modifications that recommending any particular component would be irresponsible on our part. What we can do is offer help with measurements and give you all the information you need to make that determination for yourself. On our website we have a Library tab with files that contain critical dimensions you will need to fit your components.

Here are a few items that must be considered:

1. All utility vans have panels where windows or cargo doors may be installed. These panels are surrounded by major support structures, and they have thinner supports keeping the sheet metal rigid. We do not recommend ever cutting into or modifying major support structures. Minor support structures may be cut to allow for these installations. For the installation of windows and cargo doors into vans, or any curved wall surface, we generally recommending 3” of free sheet metal at minimum on each side of the window. This requirement may be relaxed if the surface has a very slight curve of say 1/16” over the span. One example is the 450 x 500mm window in the passenger side rear door of Transit Vans. This is a tight fit, but has been done many times successfully. The builder must assess their skill level before attempting this installation. In most cases, this need for extra distance will be seen in the vertical edges of the window. If no curvature is present along the top and bottom, 1 1/2” of free sheet metal is sufficient. You must still have 2” of clearance to the supports for the blind and screen to clear. This allows enough free sheet metal to conform the curve of the wall to the window. In some cases, the van panel will have a corner that is angled, and this will reduce the available space for a window installation. An example is the slider door panel on most Sprinter vans. See the drawing below for appropriate clearances.



2. Make sure that the clearance on the inside of the van allows for the installation of the blind assembly. The blind is slightly larger than the window, which is nice! It allows the blind and screen to open completely out of the window opening. Care must be taken to allow enough room for this assembly so that cabinets or countertops do not interfere. Also, be aware that at least ½" of free space is needed above and below the assembly. This is required to open the housing and install the mounting screws. Complete dimensions for all of our windows are on our Library Page.

3. The blind and screen assembly is designed to hook onto the window and screw to the wall. Note that sufficient framing must be present beyond the corners of the windows to screw the blind to. The frame should extend beyond the cut hole at least 1" and provide a corner to screw in the blind. Some installers have found it better to inset the window into the finished wall and mount the screen separately. This is perfectly fine. The blind and screen assembly does not need to be mounted directly onto the window.

4. Note Regarding Panel Vibration: The left and right rear panels in some vans, primarily Sprinters, are known to have vibration problems. These panels can literally vibrate like a drum head if unconstrained. A few customers have reported rattling from our windows when mounted in these locations, when the walls are not properly finished. A properly finished wall should include insulation and a hard inner panel that is tied to the outer skin so that the wall cannot vibrate uncontrollably. This is a good practice for all van mounted windows. More information regarding panel vibration can be found on our Library Page in the Van Vibrations Video.

5. Choosing the right wall thickness specification for your windows is important! We need to know what your final wall thickness with be to ensure that you get the right components for your build. We have four window trim rings to choose from that accommodate walls from 24mm to 74mm. (24-34mm, 35-44mm, 45-54mm, and 64-74mm). Our windows require a minimum wall thickness of 24mm, or 15/16". Walls thinner than 15/16" will require spacer frames to be fabricated. All sheet metal (van) installations require this minimum spacer frame! The best materials to use for these spacer frames are hardwood or metal tubing. The spacers should be mounted into place inside the van, prior to window installation. A high strength polyurethane adhesive, such as Bostik Adhesive distributed by Tern Overland, Sikaflex 252, or 3M 5200 Quick Cure may be used, but we have found that Very High Bond (VHB) bonding tape is a quick and effective solution to attaching these frames. 3m and other companies sell automotive grade VHB tape. The frame/spacer should be clamped to the sheet metal to pull it flat, so that the window clamps to a flat surface. These frames can be as simple as four pieces of aluminum or wood. Aside from installing the spacer, do not use adhesive to install the window. It will cause damage to the rubber gasket and cause leaking. The gasket on the window is 100% water tight. Be sure to use the correct screws for install (chart in the installation guide).

6. Roof hatches must be installed on a flat secure surface. If you are considering installing a hatch on a van roof or other curved surface, a flat metal frame must be created to support the hatch. Failure to do this will result in malfunction of the hatch, and possibly damage. Roofs must also be a minimum of 30mm (1-3/16" thick). You can fabricate your own adapter ring or contact our partner diyvan.com to order a custom adapter ring specific to your installation.

7. The Arctic Tern Windows are not designed to be used as a roof hatch.