

CARVART – Contract

INSTALLATION INSTRUCTIONS FOR:

- glassWALLCLAD
- glassBOARDS (Flush Frame, Floating Frameless)
- glassTACKBOARDS
- glassMIRRORS

GENERAL

These installation instructions are meant for industry professionals. If you are not trained to install glass products or to adequately anchor contract products and other architectural products for safe use, please contact your dealer and obtain the services of an industry professional. Carvart is not responsible for means and methods of anchoring and fastening glass and metal products. These installation instructions are meant as a guide, and to recommend industry standards based on previously installed projects and standard applications of use. These instructions serve to guide installation for an efficient and time-sensitive set up and, in no way, indicate means of fastening or specify anchors or substrate quality or strength. Carvart is not responsible for the structural integrity of the substrate to which the Carvart products are fastened and is not responsible for means and methods of hanging, supporting or fastening Carvart products to other substrates or products.

This document is intended for the above listed products only. If you do not have proper installation instructions for the Carvart product you are installing, please contact your dealer or service representative. Carvart reserves the right to change, modify and update this document at any time. Please contact your dealer for the current installation instructions.

Glass panels should always be stored in the original crate and transported in an appropriate L-Card with the bottom edges supported by soft padding (rubber pads are best). Do not allow hard or abrasive materials to come in contact with the glass edges.

SECTIONS IN THIS DOCUMENT

- I. Components (Products included with this shipment)
- II. Set up
- III. Installation

I. COMPONENTS

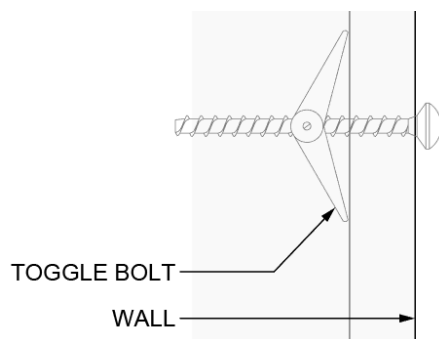
- Glass panel(s) with specified aluminum frame (refer to PO and packing list for quantity and finishes)
- Z-Clips (quantity specified in PO and packing list)

The following recommended components (supplied upon request by Carvart) should be used only according to manufacturer's instructions on designated materials and substrates, with proper preparation:

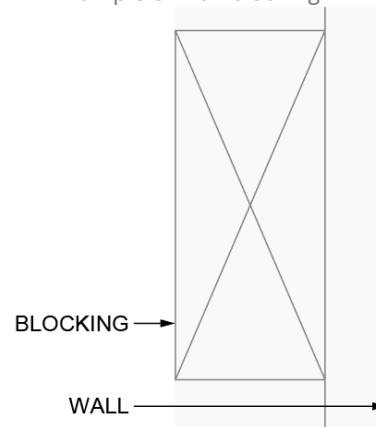
*** Carvart is not responsible for anchoring strength, fastener selection or substrate integrity. All means and methods of fastening and installation are solely the responsibility of the installer. The below recommended products are based on industry standards and previous installation examples. Carvart is a manufacturer and not an installation company; all installation practices here are meant as a recommendation only.*

- Laser or level
- Tape Measure
- Pencil or chalk
- Fasteners (must be compatible with substrate and user-provided blocking; toggle bolts may also be used but are not recommended as blocking remains strongest support option)
- Electric drill/screwdriver
- Suction cups
- 2 men (3 recommended depending on the size of the Carvart product)
- Self-tapping fasteners (type and length to be specified by installer)
- VHB tape (3M 5925 is recommended for adhering aluminum frame to semi-porous materials, most 3M VHB tape will be adequate.)
- Velcro (CRL Velcro Fastening Tape or CRL Scotchmate)
- Construction Adhesive (PL-400 Construction adhesive, do not allow construction adhesive to come in contact with the back-paint or finish glass)
- Toggle Bolts (recommended: heavy-duty pull zip toggles)

Example of toggle bolt:



Example of wall blocking:



II. SET UP

1. Pre-construction and according to a trained industry professional's guidelines, determine the optimal placement location(s) for the product.
2. Determine what type of blocking is in the partition or substrate and ensure this is adequate for fastening the weight of the panel.
 - a. Walls with blocking: Carvart recommends mechanically fastening all products to continuous plywood or sheet metal blocking. For construction walls, add 12" x 3/4" plywood blocking between studs at the intended top and bottom heights of the product to sit behind drywall.

- b. Walls without blocking: If no continuous blocking exists, fasteners should hit studs. Using a stud finder, locate wall studs along the width of the product mount area. It is strongly advised that set screws be secured into at least 2 studs top and bottom. Supplement with toggle bolts in between studs.*
- c. Walls without studs: If no studs can be found or used for fastening, toggle bolts, according to manufacturer's recommendations, can be used as an alternative. Carvart does not recommend using toggle bolts in dry wall only.*

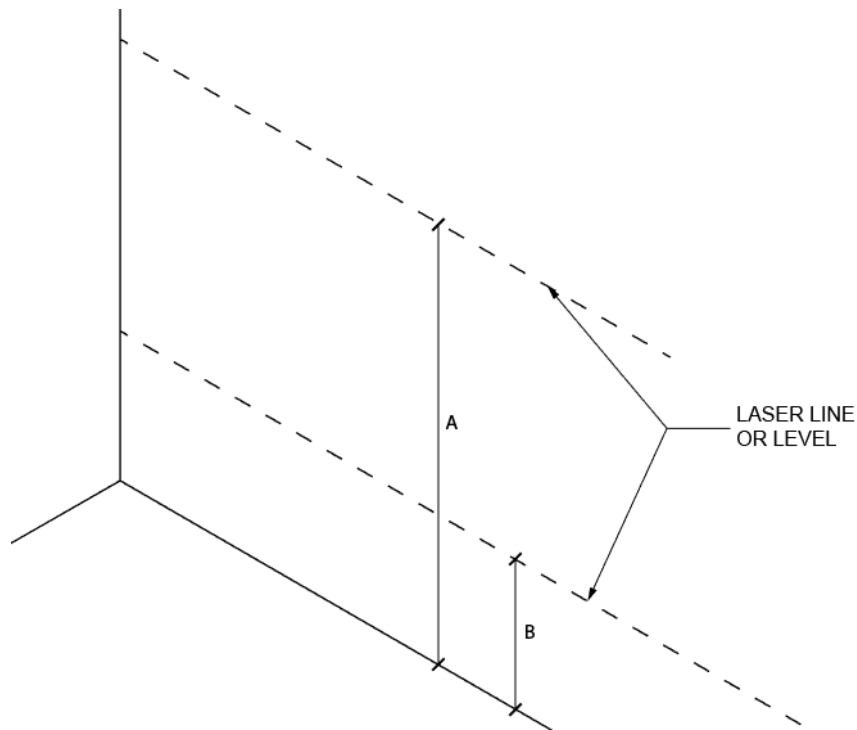
*If toggle bolts must be used, Carvart recommends the following, included upon request:

5/8" - 3/4" wall thickness: Plastic Toggle Anchor, McMaster Carr #92392A240

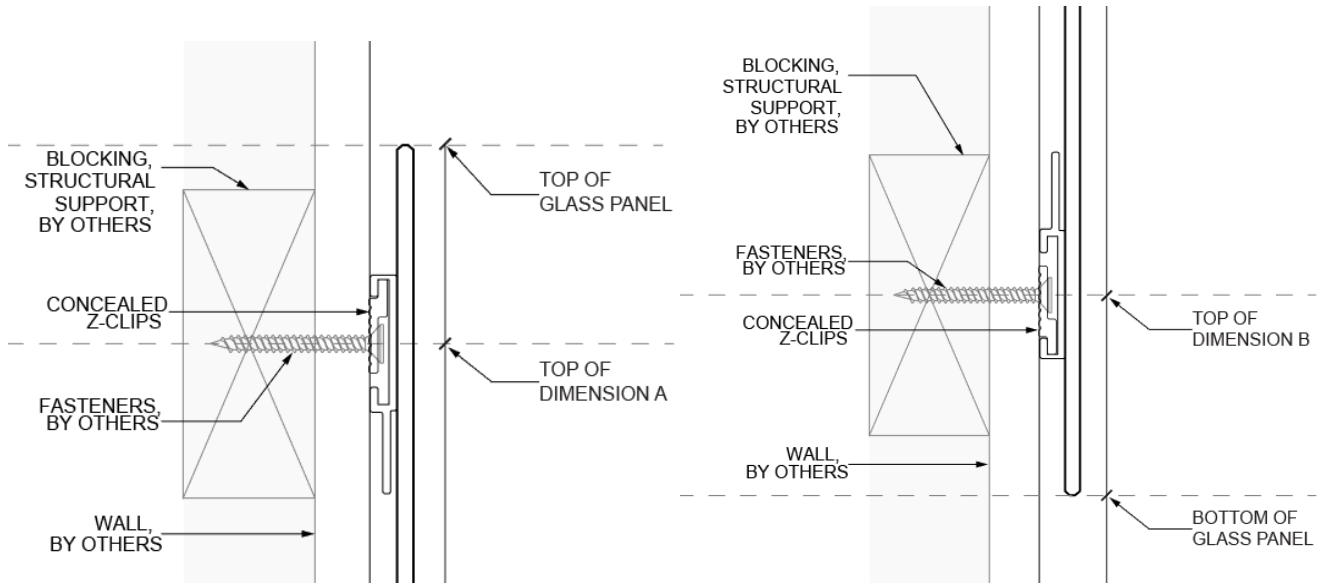
3/8" - 1/2" wall thickness: Plastic Toggle Anchor, McMaster Carr #92392A230

3/8" - 3-5/8" wall thickness: High-Strength Toggle Anchor, McMaster Carr #97802A314

- a. With laser or level, set heights on the wall or partition to which the Carvart product will be fastened to. With a pencil or chalk, establish the heights shown in the diagram below where z-clips will be fastened according to the offset dimensions in step c of set up.



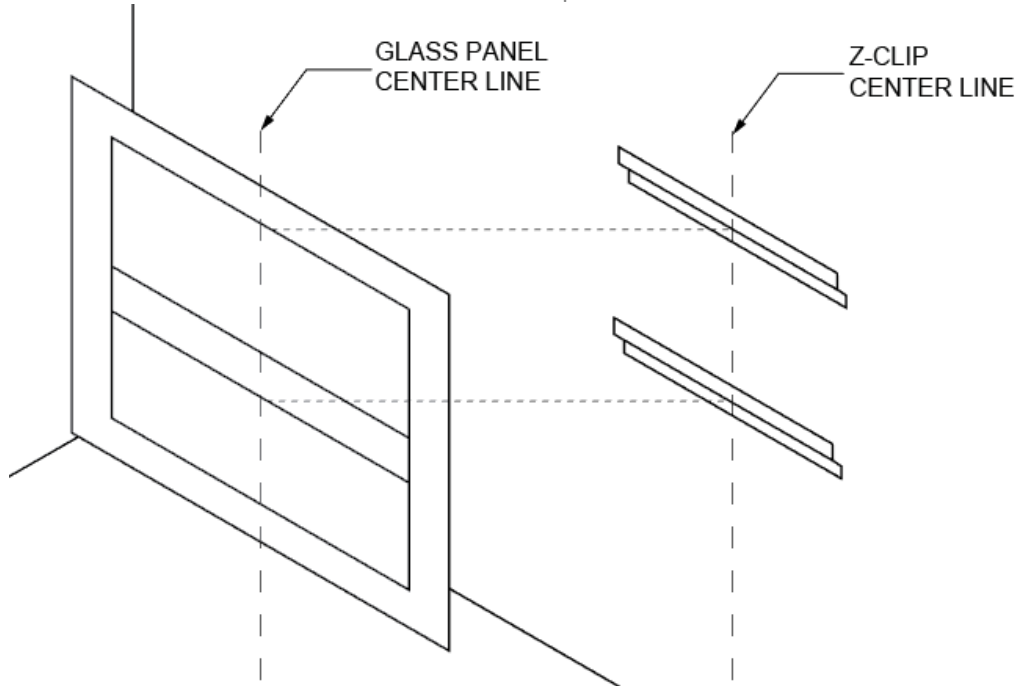
- b. Use the offset in the diagrams below to establish anchor/z-clip fastening height as they relate to the glass panel offset shown below for top and bottom z-clips. Please note that some products have an intermediate cross member and z-clip might not be fastened to the *bottom* aluminum rail. See diagrams below for specific product offsets and dimensions.



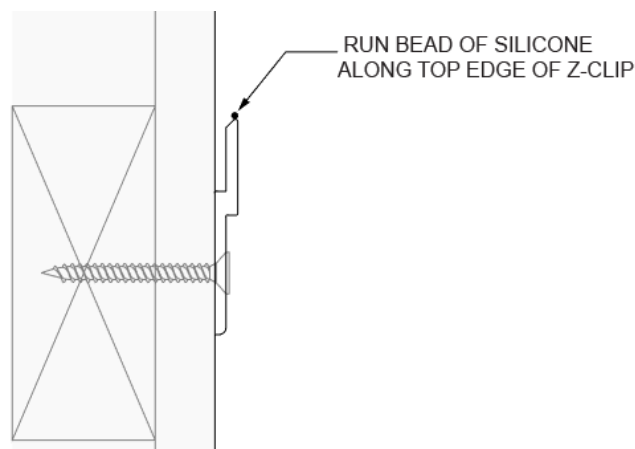
Top Detail

Intermediate Detail

c. When setting the horizontal location of the Z-Clip, please ensure the center of the Z-Clip is marked and aligned with the center of the Carvart product being hung on the vertical surface. The Z-Clips are manufactured to be shorter than the interior dimension of the aluminum frame on the back of the product.



4. It is recommended that the panels be secured to prevent vertical shift after they have been set on Z-Clips. This can be done by either adding a bead of silicone to the top of the bottom z-clip immediately prior to hanging the panel.



III. INSTALLATION

With a minimum of 2 persons (3 is recommended for large panels), carefully mount glass panel to z-clips. Use suction cups according to manufacturer's instructions or carefully lift by hand the panels in place. CAUTION: Panels may appear to be attached while they are only sitting on top of the Z-Clip and not completely secured around Z-Clip. Please ensure panels are securely locked into z-clips. If VHB tape was used to secure bottom rail, peel off the remaining adhesive protective strip and firmly press panel against wall or substrate. Additional pressure can be added to ensure proper adhesion. Ensure glass is fully protected when securing or adding pressure. Glass should not come in contact with metal, stone or any other hard surface. Carpet, wood and neoprene gaskets should be used along with suction cups with handling glass products.