

## **1. What is a Z Clip?**

Similar to the way a French Cleats works, Z Clips allow you to install items without screwing into the face of the object being hung. Z Clips interlock with each other, securing the installation of panels, signs, cabinets or another object to a wall or surface, while keeping the Z Clip hidden. Available in aluminum or stainless-steel, Monarch Z Clips are extremely strong and durable, providing easy installation and removal.

## **2. What is the load rating or weight bearing capacity of the Monarch Z Clips? i.e., how much weight can a Monarch Z Clip hold?**

We cannot provide structural recommendations. That said, Monarch Z Clips are extruded from 6063-T6 aluminum. By itself, Monarch Z Clips will withstand thousands of pounds of stress, both compressive and tensile. We suggest that your concern should not be with the structural integrity of the clip, but with integrity of the substrate you are screwing into and the hardware you are using.

We tested Z Clip strength ourselves at our own facility, mounting two MF625 1 ½" Z Clips to two pine 2x4 boards with four #8 x ¾" pan head screws, and connected them. We then put a load on the assembly trying to break the connection. It failed at 475lbs, with the screws pulling out of the wood and **no visible damage to the Z Clips**.

## **3. What can I do to add strength to the Monarch Z Clip hanging system?**

To increase the strength of the system for overweight items, you need to increase the number of fasteners (screws). On the panel side, this means decreasing the spacing between the Monarch Z Clips. On the wall side, it can mean using multiple screws at each stud or installing a piece of plywood blocking in front of the wall and securing the continuous length with fasteners every 8" or 4", instead of 16" or 24".

## **4. What else are Monarch Z Clips used to hang?**

Wall panels, acoustic panels, elevator panels, signage, artworks, etc. MONARCH Z CLIPS are so versatile that the possibilities are limitless. Our customers tell us they also use them for stone

## **5. Can I use Monarch Z Clips to hang panels on a ceiling?**

While Monarch Z Clips are strong, using them to hang ceiling panels is not recommended. Due to the French cleat-like interlocking engagement of our Z Clip products, they tend to be easily removed, which creates a serious safety hazard for a ceiling installations. Additionally, we engineered our Z Clips for strength in a vertical wall installation - using them horizontally to hang ceiling panels puts all tensile pressure in a different direction than the clips were designed for, which not only compromises the strength of the clips but puts a great deal of weight on the screw or adhesive fastener.

## **6. Do you have a minimum order?**

No. You can buy as little as 1 Monarch Z Clip or just 1 continuous length of 6' or 12'.

## **7. What is the difference between the 3/8" and 5/8" Monarch Clips?**

For most installations, there is very little tangible difference. The 3/8" clip has a shorter lift-off than the 5/8" clip. What this means is that if you want to have a ½" reveal between the top of the panel and the ceiling, you would need to select the 3/8" clip, which would give you ⅛" to mount the panel. Some of our customers also tell us that the longer length of engagement in the 5/8" clip helps to reduce the vibration, particularly in acoustic panel installations.

## **8. What configuration of panel clips and wall mounts do you recommend for a 4 x 8 panel?**

We do not make structural recommendations. Our customers tell us that for a 4' x 8' ¾" MDF Veneered Panel they will run three continuous lengths along the walls and mount 3 rows of 4 Monarch clips on the panel side to align with the continuous lengths.

## **9. Can I use an adhesive with the clip?**

Yes. The fluting in the clip is designed to increase the surface area for the adhesive to grab the clip. Because aluminum oxidizes, you should clean the aluminum with an abrasive cleaner before applying the adhesive to allow for the strongest hold. 3M has an industrial adhesives & tape division with a help desk that is very good at giving recommendations. You can reach them at 800-362-3550. You will need to know the material of the Monarch Z Clip (aluminum), the item to be hung and the environmental conditions.

## **10. Can you drill the holes and cut to length to help me save time on the job site?**

Yes. You can cut the Monarch Z Clips or other aluminum extrusion to any length you require.

## **11. What about applications where I don't want the panels to be able to be removed?**

This is easily solved by putting a dab of silicone or PL400 in the clip engagement area. The silicone or PL400 provides a strong, flexible hold.

## **12. Are you LEED certified?**

We have a standard recycled content letter we can provide showing that >75% of the aluminum content is Post Industrial or Post Consumer scrap. Our Monarch Z Clips are 100% recyclable aluminum.

## **13. What size screws can I use with your Monarch Z Clips?**

A #8 pan head screw. There is  $\frac{1}{8}$ " clearance for the head of the screw when the clips are engaged and the specified height of a #8 pan head screw is 0.096". You can test this yourself by simply measuring the head of the screw with a Vernier Caliper.

## **14. Can I use standoffs in drywall?**

We propose two solutions to installing standoffs in drywall (or gypsum). The first involves using a plate to ensure a perfect installation and strength in load bearing. The second utilizes common drywall anchors or toggle bolts.

## **15. Will you ship directly to a job site?**

Absolutely. Please contact Customer Service to discuss terms and conditions for direct shipment.

## **16. Do you ship International orders?**

Please contact Customer Service to discuss terms and conditions for international shipments.

## **17. Can you paint the Monarch Z Clip if it is going to be seen in the reveal?**

Generally, if you are installing a panel that is  $\frac{3}{4}$ " thick with a  $\frac{1}{8}$ " reveal, it will be very difficult to see anything except dark space between the panels. In situations where it is critical that the wall mounted length not be seen, some customers tell us they will spray paint the exposed z-clip black at the point of the reveals.

## **18. How should I use a Monarch Z Clip to hang a picture frame?**

Our customers use our Monarch Z Clips to mount picture frames all of the time. The important thing to keep in mind when mounting a picture frame that is 4 separate pieces glued together is to make sure the Z Clips are mounted on the side panels of the frames to prevent the corners of the frame from coming un-glued.

## **19. Can I use your Monarch Z Clips to secure a headboard?**

Yes. Most customers choose our 5/8" Monarch Z Clip because of its longer length of engagement and shorter projection from the wall. Most customers will run 2 continuous lengths along the wall 2 to 4" inside the ends of the head board and mount the Monarch Z Clips every 12" on the back of the headboard.

## **20. Where are your products manufactured?**

Monarch Z Clips are proudly made in the USA.