MOUNTING BASICS

In general, hook and loop tapes and clamps are the most inexpensive and versatile methods for securing devices. In most cases, Velcro and clamps require no tools or expertise to set up, making them the ideal option for busy teachers, parents, and therapists. We hope you find the following information helpful.

HOOK AND LOOP TAPES

Hook and loop tapes such as Velcro™ are a great way to attach two objects together without using nuts, bolts or clamps. Velcro is often used to mount a communicator or switch on a tabletop, wheelchair tray or mounting plate. There are two types of Velcro-type closures: standard nylon hook and loop tapes and heavy duty “mushroom head” or “dual lock” tapes.

Standard Nylon Hook and Loop Tape

Standard nylon hook and loop tape is suitable for light duty applications, such as attaching a light switch to a flat surface. The hook side of the tape feels coarse to the touch while the loop side feels soft. The small hooks catch on the small loops giving the tape its bonding strength. Nylon hook and loop fasteners have good shear strength, but they have low pull-off strength. In general, standard nylon hook and loop closures are a more cost effective option than “mushroom” lock tapes for light duty applications.

Mushroom Head Closures

Self-lock mushroom-head closures, such as 3M Dual Lock™ and Velcro Woven Mushroom tapes are suitable for applications where higher holding power is required, such as mounting a communicator on a vertical surface. These tapes use stronger mushroom-shaped parts that interlock, creating a stronger mechanical bond. Mushroom head closures have very strong shear strength and greater pull-off strength than regular hook and loop closures. Since mushroom head tapes require much more force to separate than standard tapes, do not use them to attach small or delicate objects.

Tips for Using Hook and Loop Tapes

When applying any fastening tape to a surface, it is important that the surface is clean and free from oil or waxy residue. The tape sticks best to materials such as plastic or laminate that have a smooth, non-porous surface. It can also stick to wood, but the bond will not be as strong. If you attach mushroom head tape to a painted surface such as a wall, the paint will sometimes come off because the strength of the adhesive exceeds the bond between the wall and the paint. Both standard and mushroom head tapes achieve the greatest holding power when the mounting surfaces are flat. An uneven or round surface will drastically reduce holding power. Velcro™ is available in hook and loop strap form if you would like to hold onto a round surface.

“C” CLAMPS

Clamping is a good option when you are working with children or adults who tend to toss or move objects. C clamps are useful for holding a plate or object to a table or wheelchair tray.

Many of our products incorporate a small clamping area into the mold so that a clamp may be used directly on the product. See for example **Lighted Musical Tambourine (#896)**, the **Mini Dome (#72)**, and the **Learn and Dance Zoo (#3105)**.

When using a C clamp directly on one of our products, it is important that the clamp not be over-tightened, as this can cause the plastic base to crack. A two- or three-inch C clamp is usually ideal for table clamping. A wheelchair tray may require a three-inch clamp depending on the tray manufacturer.

A common practice is to mount a communicator or toy to a 1/8" or 1/4" plate using Velcro and then clamp the plate to a table top. The mounting plate can be made from plastic, wood or metal.

WALL MOUNTING

When mounting a communicator or busy box to a wall, there are some simple guidelines to follow that will make your job easier. Most walls are made of sheetrock with wooden 2" wide studs spaced 16" apart on center. A modern building may have metal studs behind the sheetrock to conform to the newer building codes. In either case, wall anchors are required to secure our products to a wall.

Basic Plastic Wall Anchors

Each of our wall mounted products comes with four plastic wall anchors and four metal screws. The first step in wall mounting is to hold your device in place where you want it on the wall, then mark the hole locations with a pencil. Once the hole locations are clearly marked, use a 1/8" drill to pre-drill the holes for the wall anchors. When drilling, do not go deeper than 1" into the wall to avoid accidentally drilling into an electrical line. The next step is to press the plastic wall anchor into the hole. You can do this by lightly tapping the back of the plastic anchor with a screwdriver handle until the anchor is flush with the wall. After installing the wall anchor, put your device in place, insert the screws, and tighten.

Zip-It Anchors

If the stock wall anchors pull out of the wall, you may have to use a medium Zip-It type hollow wall anchor. You should be able to get Zip-It anchors from your local hardware store. This type of anchor does not need a pre-drilled hole, it simply screws into the sheetrock creating its own hole and locking securely in place.

Toggle Wing Anchor

If you are securing a very heavy device to the wall, you can also use a heavy duty Toggle Wing type of wall anchor. The Toggle Wing design will require you to drill a 3/8" hole, but it is the most secure way of mounting a device to the wall.