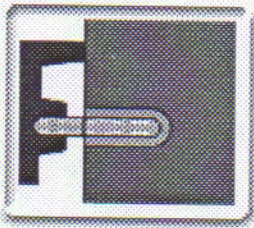


INDIVIDUAL LETTERS

Flush Mount with Studs (ST)



The backs of cast letters are drilled and tapped to accept threaded studs. Letters are mounted flush to the wall surface.

Letters 3" in cap height and smaller are generally provided with flat backs for adhesive mounting. These letters can be drilled and tapped upon request.

Recommended Uses

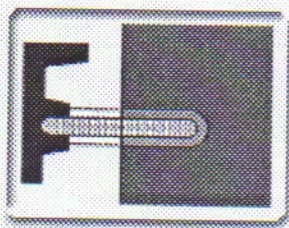
- All solid wall surfaces including brick, concrete, wood and stucco over cement block.
- Using studs and adhesive, most cast letters can be installed on hollow wall construction (such as drywall over studs).

Installation

A full-scale paper template to show spacing and mounting hole locations is included with all standard letters 3" and larger. Using this template, drill holes into the wall slightly larger than the diameter of the studs.

Insert threaded studs into the back of each letter. Verify accuracy of drilling by pushing letter with the studs inserted into the holes. When ready for installation, fill holes with silicone, epoxy or quick set cement. Press each letter into position and hold until the adhesive sets.

Projected Mount with Studs and Spacers (PM)



This mounting method is identical to flush mount except that letters are projected away from the wall. Standard spacer lengths are 1/4", 3/8", 1/2", 3/4" and 1".

Recommended Uses

- To level the front surfaces of letters mounted to slightly uneven wall surfaces.
- To protect wall surface from possible discoloration from metal oxidation.
- To restrict dirt, dust, rainwater and ice from accumulating behind the letters.
- To allow for expansion of metal letters against the wall surface.

Installation

Use the same installation procedures as for flush mount, but slide the spacers onto the threaded studs prior to mounting.

OASIS

Characters in most standard fonts with rounded tops will take slightly more vertical space than straight line characters.

Helpful Hints

- Bronze and brass cast letters are provided with brass studs. Aluminum cast letters are provided with aluminum studs. Stainless steel hardware is optional upon request.
- Smaller cast letters (1" to 3" cap height) are usually mounted using adhesive to the mounting surface. In these installations, spacing by "eye" on site is usually preferable to trying to use a mounting template.
- Always verify the spelling and spacing of a template provided by a letter manufacturer before actually installing the letters. Mistakes or misunderstandings can occur when ordering. Finding out after the letters are installed that a problem exists is too late!
- To make your own templates, all you need is a roll of paper (Kraft paper works well) and some pointed studs to mark your holes.
 - Spread the paper on a flat surface and draw a horizontal line to mark the baseline of your straight letters.
 - Lay out the letters, being careful to follow the proper spacing guidelines.
 - Carefully trace around all letters according to your layout.
 - Using short, pointed studs screwed into the backs of your letters (try buying allen head set screws at your local building supplies store with cone point ends - they work quite well for this purpose), punch holes through the paper to mark the stud locations. It's sometimes useful to lay cardboard under your paper to facilitate this punching process.
 - Be sure to individually number any duplicate letters in your message, as even identical letters may be drilled differently.
- When aligning your paper template on the wall mounting surface, be absolutely certain that the horizontal reference line you draw on the wall is parallel to the "apparent visual level" of the façade. Lining up your baseline to fall on a mortar joint on a brick or block wall can actually be visually distracting. It's usually better that the tops and bottoms of your letters fall between mortar joints. Also, be careful of any chalk line you use to mark your horizontal line. Chalk lines can be difficult to later remove, particularly from bricks or stucco.
- Blow the dust out of each drilled hole so the adhesive used to glue the studs in place will bond well. If you don't have air pressure handy, use an 18" long piece of plastic tubing to blow the dust out.

METAL LETTERS INSTALLATION METHODS AVAILABLE

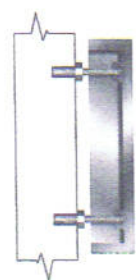


CAST METAL LETTERS have threaded stud bosses for stud insertion.

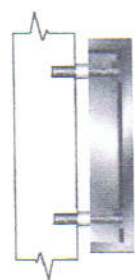
FLAT CUT METAL LETTERS have tapped holes for stud insertion or are stud welded.



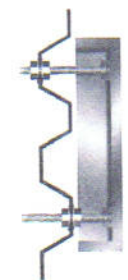
FLUSH MOUNTING Studs are set in adhesive cement. There is no space between the letter and the surface.



PROJECTED JAM NUT MOUNTING Studs are set in adhesive cement. Stainless steel jamb nuts are inserted between the letter and the mounting surface.



PROJECTED SPACER MOUNTING Studs are set in adhesive cement. Pre-cut spacers are inserted between the letter and the mounting surface.



CORRUGATED METAL WALL MOUNTING Where you have access to the rear of the wall, washers and nuts are used on both sides of it.



FLAT METAL WALL MOUNTING Where you have access to the rear of the wall, washers and nuts are used on both sides of it.

Always
check pattern
before
leaving the shop!



1. Check pattern in shop FIRST!

2. Tape one edge of the template to the installation surface with masking tape and unroll it. Level the template and tape the other edge to the installation surface.

3. Drill 1/4" holes 3 inches deep where indicated on your template. Remove the template and clean out all drill holes using any of the following methods: a quick puff of air; using the vents on your drill; compressed air or a turkey baster.



4. Insert the studs into the stud holes on the back of each letter. Now fill the drill holes in the wall of the first letter with silicone.

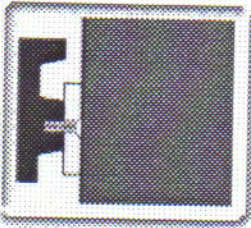


5. Push the tube of silicone over each stud on the first letter in order to evenly coat it with adhesive.



6. Push the letter into the drill holes using a shim to assure the proper standoff of the letter from the wall. Repeat steps 3 through 5 for the rest of the letters.

Back Bar Mount (BB)



Letters are pre-mounted in the factory to an aluminum bar. For letters 6" in cap height and greater, we recommend using a double bar mount. Letters under 6" would normally use a single bar mount.

The bars are generally painted to match the background of the mounting surface.

Recommended Uses

- This mount is particularly effective on an irregular wall surface, such as the corrugated steel fascia on prefabricated metal buildings.

Installation

Mount back bars directly to the wall surface through the holes drilled into the bars. Type of mechanical fastener depends upon the wall construction. Generally, machine screws or sheet metal screws work effectively.

Templates

Mounting templates may be included in the cost of all **standard** cast letters 3" and larger and may be provided unless otherwise specified when ordering.

Templates are not included in the price of **custom** cast letters and must be specified when ordering.

Letter Spacing

Generally, letter spacing is referred to as the white space between letters of a word. The total amount of white space between letters should be relatively equal in order for the letters to read legibly. This does not mean that the spaces between letters are mechanically measured to equal the same amount, but rather that the entire amount of space between letters be roughly equal to the stroke of the letter.

SPAC

Good Letter Spacing

Amount of white space between letters is visually equal and is approximately the width of the letter stroke.

S P A C

Poor Letter Spacing

Amount of white space between letters has been mechanically measured to be equal.

Letter Size

Certain letters and numerals are designed to be larger than the rest of the letters in a font in order to look visually pleasing. The letters are C, G, J, O, Q, S and U and the numerals 2, 3, 5, 6, 8, 9 and 0. Letters that are rounded on both the tops and bottoms will extend slightly both above and below a straight letter. Letters that are rounded on one end only will extend either above or below a straight letter.