Z-Bracket Application

ABC's "Easy Sheet" series on building extruded aluminum sign frames - 1/01

Since the C-cover on ABC's Access frame is not structural, it is necessary to provide a strong attachment to the internal, structural frame when the sign is to be mounted in a projecting manner, or between support columns.

To facilitate this, ABC provides an accessory part: a heavy extruded aluminum Z-shaped bracket, cut to fit the width of either the Large or Small A/Flexframes or A/Bleedframes. The part may be bolted or welded to the internal flat floor of the frame.

The Z-Bracket extends from the bottom of the frame to the underside of the C-Cover. For a perfect fit, it is necessary to grind off the two small ribs from the underside of the Large C-Cover for the Z-Bracket to fit under the C-Cover properly.

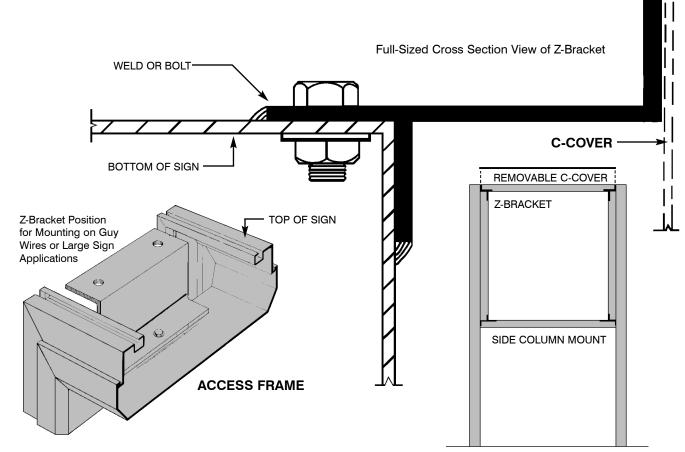
A short piece of the cover may be permanently attached to the frame over the Z-Brackets where hardware or bolts must pass through the Cover. This requires the Cover to be spliced, so that the main Cover can be opened for service access.

Also, the top corners of the mitered C-Cover must have a small sheet aluminum flashing angle to prevent water from entering the frame at the top corners.

Flat sheet aluminum plates are used to waterproof the splices in the Cover. Both the splice plates and the corner flashing must have a self-adhesive neoprene gasket to seal to the Cover properly. These parts should be permanently riveted to one piece of the Cover, and sheet metal screwed to

the mating Cover. This allows the covers to be opened for service, but prevents these flashing parts to come loose or be left off by service people.

The neoprene tape is a U.L. listed component for ABC extrusions. It is self adhesive on one side only, so that the tape sticks to the splice plates, but not to the Cover, yet seals against water entry. It is available from ABC, or you may purchase the flashing angles and splice plates prefabricated, with the proper tape already applied from ABC.



Please contact ABC if you have any questions: 2028 SE Frontage Road, Fort Collins, Colorado 80525 Toll-Free: 800-248-9889 Fax: 970-482-4019 Email:abcsigns@abcsignproducts.com

The parts described on this page are covered by one or more of the following patents:
U.S. 4,007,552 4,265,039
CANADIAN 1,021,565 1,149,159 1,170,048 1,170,049 1,170,050



SEE OTHER SIDE FOR PROJECTING MOUNT

Z-Bracket Application (cont.)

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GUY WIRE INSTALLATIONS

The Z-Bracket is designed to be reversible. The outer flange may then be parallel to the side C-covers of the sign, or the top and bottom C-covers of the sign, depending on which way the Z-Bracket is mounted to the inside of the sign frame. (See other side for illustrations).

For a flag mounted sign to a wall, guy wires must be used as illustrated below. The Z-Bracket is not designed to resist the wind force of a flag mounted sign without guy wires. Steel Angle brackets should be mounted to the outside Cover of the sign, and bolted through the Cover

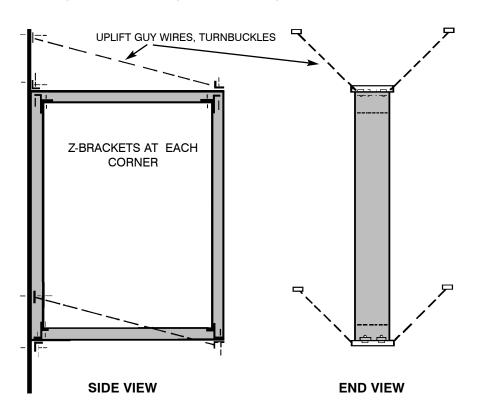
to the Z-Brackets. The guy wires are then attached to external steel angle brackets.

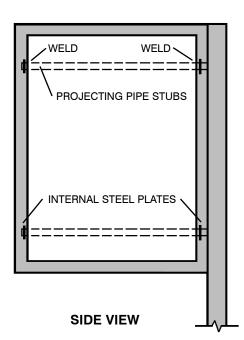
A short section of the C-Cover is permanently attached between the angle bracket and the Z-Bracket, with a splice to the removable C-Covers so that service access is maintained, (see Easy Sheet #17)

Flag mounted signs using guy wires as illustrated are only limited in size by the allowable loads on the guy wires, lag bolts, turnbuckles and bolt strength attaching the angle brackets to the Z-Brackets. If in doubt regarding this type of installation, always consult a structural engineer to ensure a <u>safe</u> installation.

FLAG MOUNT WITHOUT GUY WIRES

Any ABC frame may be installed off a tube, pole or building if projecting pipes or square tubes pass through the sign in the same manner as for a pole-mounted sign. The projecting pipes or tubes must be substantially welded to the support column, or built into the building for the purpose. The internal plate & bolt engineering is found in ABC's Windspeed & Design Criteria, 1998 edition.





NOTE: The guy wires should always provide an up-lift for the weight of the sign.

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