

# Heavy Duty Zero Clearance Frame

## Heavy Duty Zero Clearance Divider Bar

ABC's Heavy Duty Zero Clearance Divider Bar is designed to be used with ABC's Heavy Duty Zero Clearance components, and separates the fixed face from the hingeable vandal covers. It is used on the top section of the changeable copy area. The outer face can easily be locked with ABC's lock and key components.

ABC's Hanger Bar supports the inner face and gas cylinders support the outer face assembly for service. It makes servicing Zero Clearance cabinets easy even when faces are large.

The Divider Bar allows for top of the sign to be independent of the lower changeable letter portion of a sign, thus the top section can be designed to have a unique shape.



Side Hinged Trophy Case

The H.D. Zero Clearance Frame is also used to build trophy and display cases. It is ideal for building wall mounted or pedestal mounted illuminated map cases for shopping malls, public transportation terminals and large building directories.



A continuous stainless steel piano hinge is riveted between the Z.C. Saddle and the Z.C. Carrier Frame, as illustrated.

When lamps are to be changed (on any assembly other than the Access Flexframe) the inner face can be lifted off the Hanger Bar, giving total access to the lamps and wireway covers. If the Access Flexframes are used, all lamp, ballast and wiring service is done through the outside perimeter removable C-Cover.

## ENGINEERING

Because the Zero Clearance Frame assembly is mounted to one of ABC's structural frames, please refer to the engineering data given for your choice of frame to which the Zero Clearance Frame assembly is to be mounted.

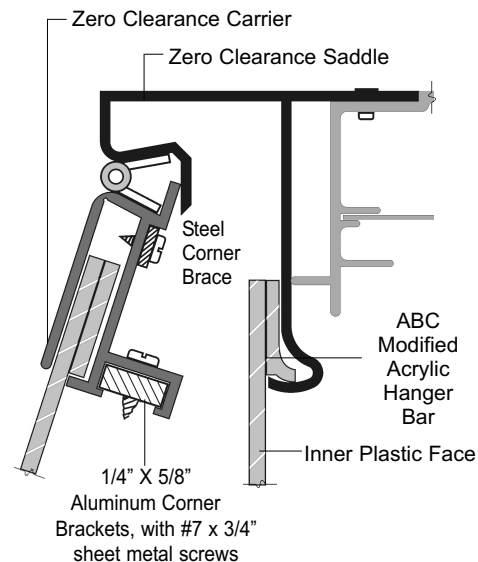
# Heavy Duty Zero Clearance Frame

## FOR DESIGNERS AND SPECIFIERS

"Zero Clearance" means that the sign hinges within its own perimeter dimension, and can be completely recessed into a wall, or can be flush against another sign and still function.

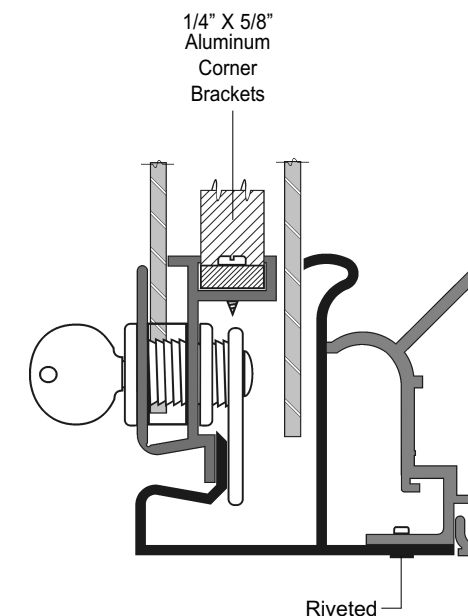
ABC's Heavy Duty Zero Clearance Frame system is designed specifically for hinged faces up to 6' X 10' or 5' X 12' in size. Smaller signs may be side-hinged, but large signs should be hinged at the top.

The H.D. Zero Clearance assembly consists of the **Zero Clearance Saddle** and the **Zero Clearance Carrier Frame**. The **Z.C. Saddle** part may be permanently riveted to your choice of ABC's Access Flexframes, Type I Frame, Type II Frame or Type III End Frame. There's a wide choice for designing single or double face wall-mounted or pipe mounted signs, and for choosing a frame that is the most economical for your project.



The **Z.C. Saddle** is designed with a special curved Hanger Bar to support the inner plastic face to be hung from the top by means of ABC's Modified Acrylic Hanger Bar which is attached to the face as illustrated

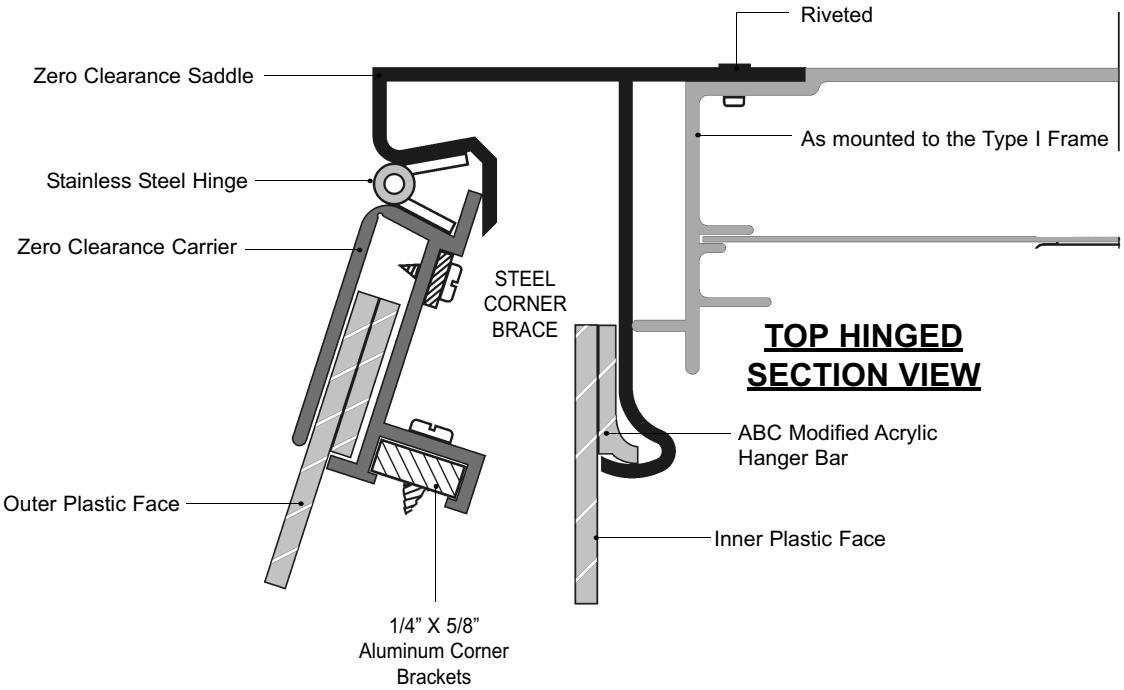
The **Z.C. Carrier Frame** has a heavy wall thickness for welding the mitered corners. It also features a slot for bolting 1/4" thick X 5/8" wide architectural aluminum corner brackets and flat steel corner braces to enable one end and bottom of the Carrier Frame to be removable for installing or removing the outer plastic face. (See illustrations)



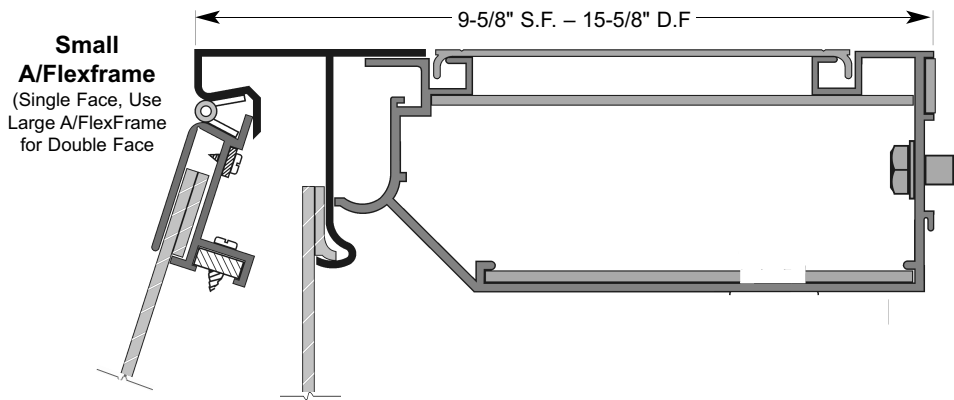
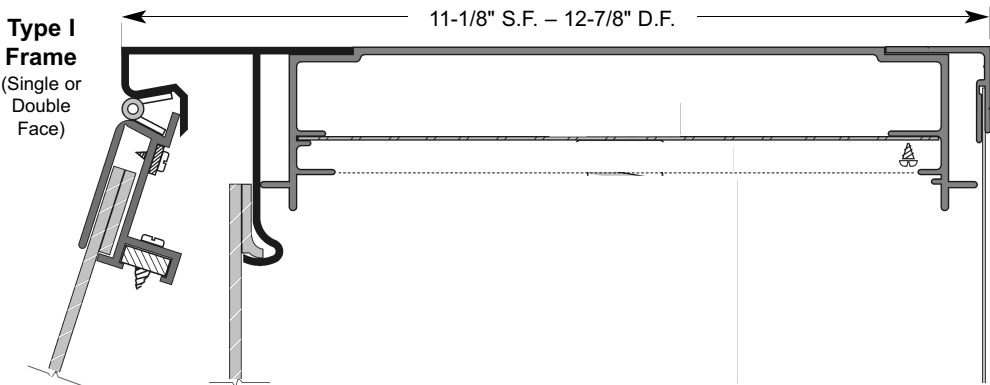
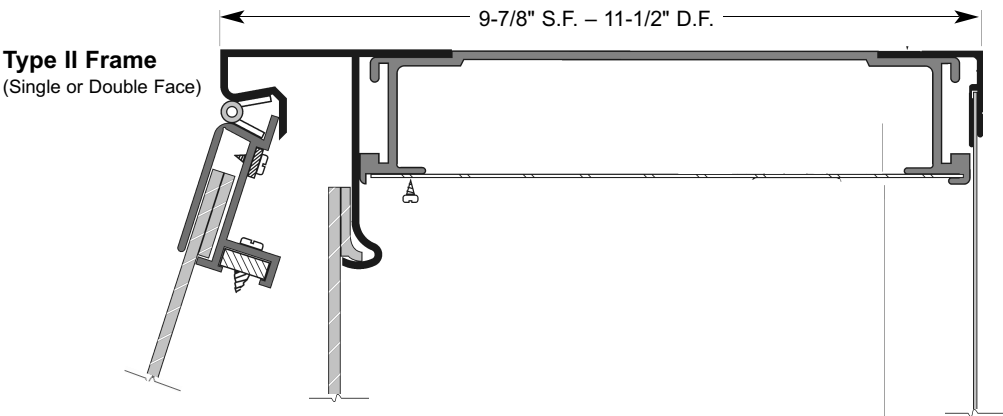
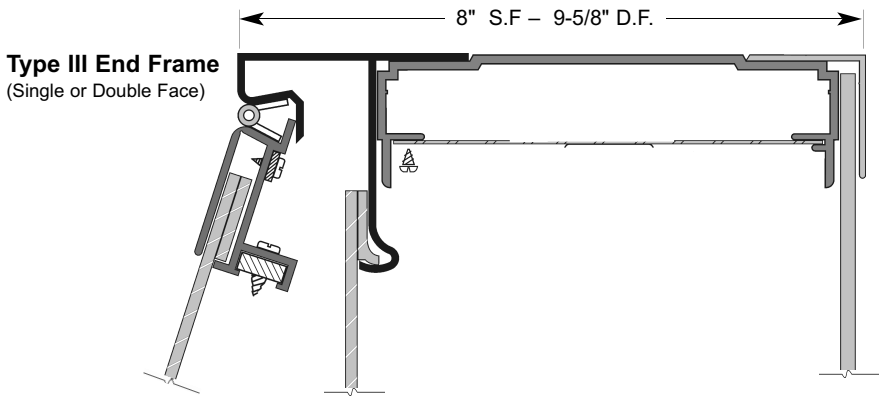
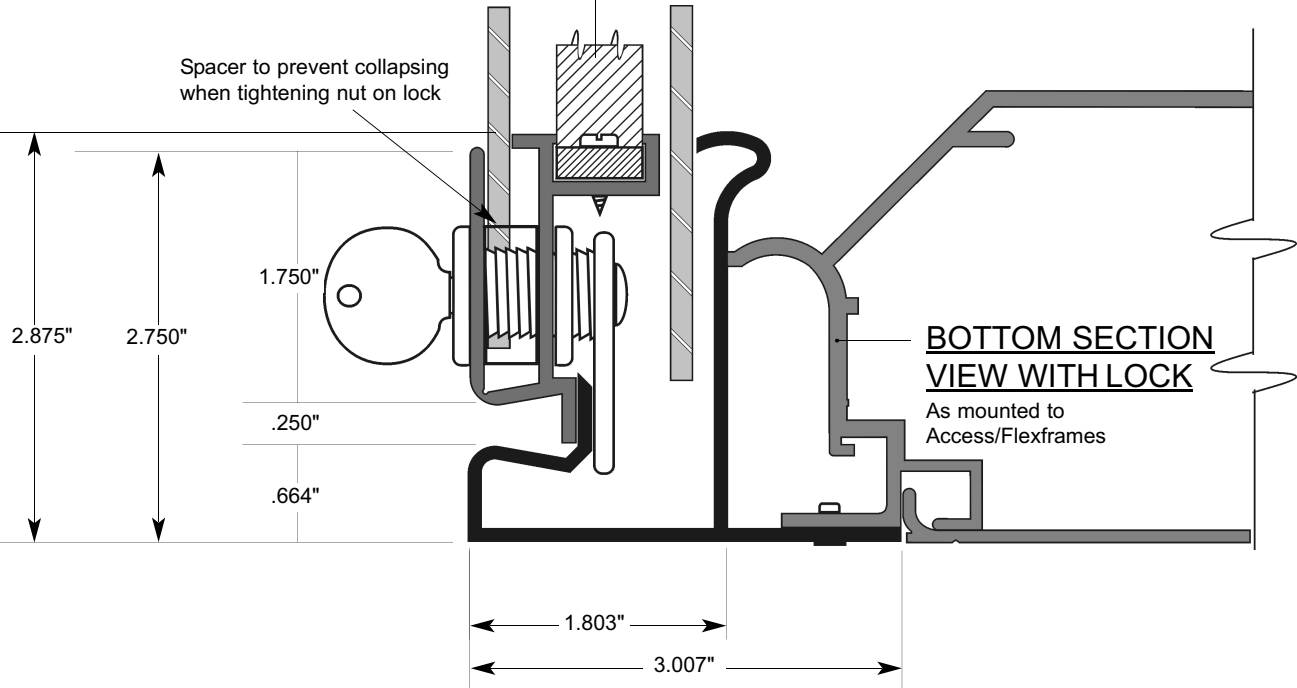
The Z.C. Carrier Frame part is designed for drilling and mounting the keyed locks on the sides or bottom frame. Note that the plastic face must be slotted around the lock to allow for expansion and movement of the face in the frame.

Heavy Duty Zero Clearance frames can be used on ABC's Conventional Frames and Access Frames. For sign cabinets deeper than 16" use ABC's Wide Fab Frames with HDZC parts.

Heavy Duty Zero Clearance Frame  
3/4 Actual Size Section Drawings



**FOR CHANGEABLE LETTER SIGNS**  
Subtract 6.5" from the outside sign frame dimensions to get the Visible Opening for the letter track.



**NOTE:**  
All the above illustrations are shown Single Face. The Dimensions for Double Face Versions are also given.

Accessories

**Keyed Locks**  
ABC can provide the keyed locks to fit, as illustrated, for the bottom or sides of the frame to prevent vandalism. (Part # 700306)

**Corner Brackets & Angle Braces**  
The 1/4" thick X 5/8" wide aluminum corner brackets are cut from architectural aluminum angles with a square inside corner that is necessary to fit properly. (The standard steel corner braces are Stanley #999, 4" X 5/8") ABC can supply these parts from stock.

**Metal Backs in Single Face Signs**  
The ABC Back Adapter extrusion is used with the Type I, Type II AND Type III Frames. The Small A/Flexframe has an integrated back adapter. See the respective catalog sheets for full details for any frame to be used with the H.D. Zero Clearance Frame system.

**Modified Acrylic Hanger Bar**  
It is very important to use a *continuous hanger bar* on any suspended plastic face. If there is a joint in the hanger bar, the face may crack at that point.

ABC's special Hanger Bar is extruded in 16' lengths. It can be cemented, riveted or mounted with VHB tape to any acrylic or polycarbonate face. (ABC part # HB 0217)

**Gas Spring Cylinder Struts**  
Gas Spring Cylinders hold the outer face open for hands-free letter changing, yet are easy to close and re-lock. They are totally concealed within the frame when closed. **The minimum height requirement is 24". They come in three different sizes: 20lb struts for signs up to 24 sq.ft., 40lb struts for signs up to 40 sq.ft., and 60lb struts for signs over 40 sq.ft.**

The Ball Studs for mounting the struts are included with the Gas Spring Cylinders.



All ABC Sign Products parts described on these pages are included by one or more of the following patents:  
U.S. 6,088,942 4,817,656 4,265,039 4,007,522  
Canadian 1,170,048-049-050 1,149,159 1,021,565