

HUSHCORE™ Supreme™ System **Installation Guidelines**

BRD barriers are designed to meet rigid acoustical and structural requirements.

The step-by-step generic assembly methods outlined herein may not accurately reflect the entire project scope. Consult with your BRD Project Manager and refer to the project drawings regarding installation of your modular barrier or non-standard items.

As the truck containing the materials is being unloaded, and prior to commencing installation, the **Bill of Materials** furnished by BRD should be used to check that all necessary materials are on hand and ready to be installed. Every item in the shipment should be checked and measured to verify that all items and sizes match what is on the Bill of Materials.

Immediately report any missing or damaged material to BRD (610) 863-6300 making sure that all these discrepancies are listed on the receipt for the trucker.

I. LIST OF TOOLS RECOMMENDED FOR INSTALLATION (MINIMUM)

- A. Crane sized for the pick and reach requirements of the structural steel and panel weights.
- B. Lifting straps for proper lifting of columns and panels.
- C. Wrenches sized for tightening the anchor bolt nuts as shown on the installation drawings
- D. Pry bar.
- E. Hammer and sledge hammer.
- F. 4' Level or laser level system.
- G. Paint brush (approx. 1/2" wide) for any touch up needed (for painted systems only)
- H. 2" x 4" x 6" wood blocks. (minimum 4)
- I. Jig saw, hack saw, electric hack saw and tin snips. These tools are required for field modifications and to allow clearance around pipes, equipment, or other obstructions/penetrations.

II. PLANNING

Prior to beginning installation of your barrier system review the drawings which may include some or all of the below:

Plan View - showing the general foundation and column layout

Elevations – showing all walls viewed from the outside of the barrier and in some instances Internal Elevations.

Panel Layout Plan – showing the proper layout for the panels by mark-#.

Detail Sheet – showing all necessary details keyed to their appropriate location on either the Plan Views or Elevations.

Panels and connector components are keyed to the drawings and Bill of Materials in the following manner:

1. Panels are marked on the drawings by Panel Mark Number (i.e. 1-1, 1-2, etc.) and by the nominal size of the panel (i.e. 48x108 is a 48" x 108" panel). NOTE: Actual panel sizes could measure slightly undersized from the dimensions on the drawings to allow for column web thicknesses and tolerances.
2. Connector and Joiner components are indicated on the Drawings by type and length .
3. Please review drawings and details to determine **corner configurations** and **door and frame assembly method** used on your barrier.

III. SET STRUCTURAL COLUMNS

First, Survey all the foundations and anchor bolts. Check each set of anchor bolts for proper layout and center-to-center dimensions. Call BRD immediately if there are any variations from the installation drawings. If dimensions are OK, set all the leveling nuts accordingly such that the bottoms of all base plates are at the same elevation.

Using the crane (or hoist system) set each column on the anchor bolts. Ensure that the column configuration and mark # match the location on the installation drawings. Plum and square each column then tighten anchor bolt nuts.

Set all columns and anchor to foundations. Recheck spacing and center-to-center dimensions before starting panel installation.

Refer to the project drawings for rooftop installations which will require project specific anchorage and attachment methodologies.

IV. PANEL INSTALLATION

Once all columns are set you can begin the panel installation phase. The crating system is designed as the “staging” container as well so be careful when starting to remove panels from the crate. **DO NOT LIFT PANELS STRAIGHT OUT** of the packing crates. This will be difficult to do and has the potential to scratch the panels.

Remove the side wall (long side) of the crate and place some type of clamp at the top of the end wall to hold the panels in the vertical position. Once you are ready to start lifting panels move the clamp back to support the rest of the panels in the crate by freeing the first panel so it can be removed. Set the panel at the edge, or near the edge, of the crate on some wood blocking to allow you to secure your padded lifting strap around the center of the panel.

Properly secure the strap system to the center of the panel. Lift the panel slightly to ensure the panel is centered on the strap and will not lift out of level. Make sure that panels and steel are safely secured for each lift and are not carried overhead above people below.

The internal mounted barrier systems are designed as post and beam construction so the panels will be lifted to the top of the columns and lowered down between each column. For externally mounted barriers, the panels are supported top and bottom on structural angles spanning column to column.



For internal panel mounting, lift and set the first panel such that the bottom of the panel is set on the top of the column base plate. The panels are designed to handle all the load at the ends so there is no need for support across the span. Lower the next panel the same way only as the panel approaches the previously installed panel insert some wood blocking at each end. Lower the panel onto the wood blocking. This will then allow you to

remove the strap from your panel. Pull the wood out quickly and the panel will drop into place. Repeat until panels reach the top of the column and move over to the adjacent bay.

For external panel mounting, lift the first panel and seat the bottom into the base channel. Subsequent panels are set in sequence. Refer to the drawings to see whether panel joining is done via H-joiners, tongue and groove or with self-sealing V groove edges.

V. DOOR AND FRAME ASSEMBLY METHODS

There are two methods for installing doors.

1. The door frame fits into the H-joiners in a manner similar to a panel installation.
2. The door frame captures the adjoining wall panels with a “split-frame” detail.

The installation method you choose depends on your panel layout and desire to simplify installation. A review of the drawings and details will help you determine which installation method will be used. If the “Split-frame” method is used refer to the separate Door Installation Detail Sheet Provided with your installation drawings.

If there are multiple doors of identical size with your barrier be sure to match door to frame by matching the number found on a hinge of the door leaf and to the hinge of the frame assembly.

SHOULD YOU HAVE ANY QUESTIONS DURING INSTALLATION PLEASE CONTACT BRD Noise and Vibration Control, Inc. @ (610) 863-6300.