

## General

The following guidelines provide basic assembly and installation instructions for model BC-550 blast damper.

**Warning:** Read the installation instructions thoroughly before installing or servicing this equipment. Improper installation, adjustment, service or maintenance may lead to property damage, injury or death.

## Receiving and Handling

Check for obvious and hidden package damage after receiving. Check to be sure that all parts of the shipment, including accessories, are in the package. Dampers must be kept clean and dry. Indoor storage and protection from dirt is highly recommended.

If there is a question about the condition of the damper or the installation process, please call customer service at 817-509-2300.

## Storage of Dampers Prior to Installation

The intent of a proper storage of blast containment dampers is to prevent physical damage, material corrosion and deterioration of organic material.

1. After visually inspecting the damper for damage, store indoors, protect from sunlight, moisture and flooding. Protect dampers from debris and dirt accumulation.
2. Dampers may be stored and stacked horizontally if wood or equivalent spacers are placed between flanges. Do NOT store with axles vertical. Place dampers on pallets or supports to allow air circulation.
3. Consult manufacturer if storage time exceeds two years.

## Do's

1. Verify airflow direction and blast direction.
2. Verify movement of blades after installation.
3. Use provided holes at the top and bottom of the jambs as lifting points.

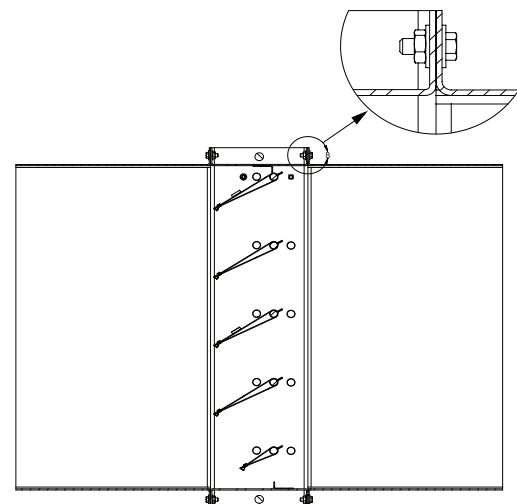
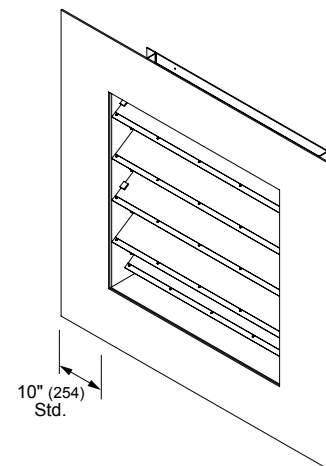
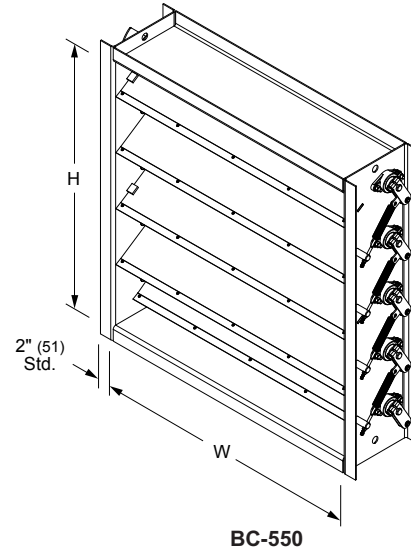
Note: It is the responsibility of the installer to verify the structural integrity of the existing structure to support the loads imparted by the damper.

## Don'ts

1. Do not use axles or linkage as a lifting point.
2. Do not lift damper with chain/strap with blade open and with chain/strap through frame as this could damage blade and stop seal.
3. Do not tighten mounting bolts around the damper by starting at one point as uneven flange compression can result.
4. Do not use pry bar to match the frame holes to matching ductwork as frame can be warped/pulled out-of-round by excessive force.

## Installation Details, Duct Mounted

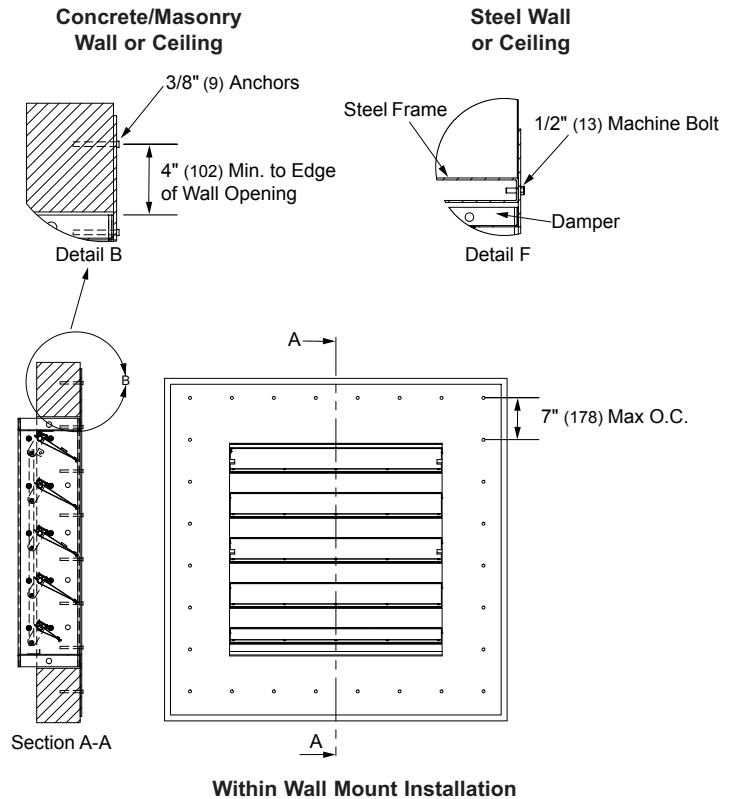
1. It is assumed that ductwork is specified to withstand blast loading independently from the blast damper.
2. A minimum of  $\frac{3}{8}$ " (9) diameter bolts (Grade 5) are recommended to fasten the blast damper to the ductwork.
3. The installation of the damper must be square and free of misalignment to insure proper operation.



Duct Mount Installation

## Installation Details, Mounted within Wall/Ceiling

1. Wall/Ceiling should be of concrete, masonry or steel construction.
2. Wall/Ceiling must be engineered to withstand specified blast load.
3. Wall/Ceiling opening dimensions shall be:
  - a. Height = Overall damper height + 1/2" (13)
  - b. Width = Single section width: Overall damper width + 1" (25)  
Multi-section width: Overall multi-section width + 2" (50)
4. Mounting flange plate is 1/4" (6) thick.
5. Minimum recommended fastener:
  - a. Steel wall: 1/2" (13) machine bolt: drill and tap through steel frame tube.
  - b. Concrete/masonry wall: 3/8" (9) Hilti HUS-EZ anchor minimum embedment is 3 3/4" (83).
6. Minimum of two fasteners per side to be used (top, bottom, left, and right). Fasteners should be spaced a maximum 7" (178) on center.
7. Fasteners should be spaced a minimum of 4" (102) from edge of wall/ceiling opening for concrete/masonry installations.



## Installation Details, Mounted to Wall/Ceiling

1. Wall/Ceiling should be of concrete, or masonry or steel construction.
2. Wall/Ceiling must be engineered to withstand specified blast load.
3. Wall/Ceiling opening dimensions shall be:
  - a. Height = Net I.D. height
  - b. Width = Net I.D. width
4. Mounting flange plate is 1/4" (6) thick.
5. Minimum recommended fastener:
  - a. Steel wall: 1/2" (13) machine bolt: drill and tap through steel frame tube.
  - b. Concrete/masonry wall: 3/8" (9) Hilti HUS-EZ anchor minimum embedment is 3 3/4" (83).
6. Minimum of two fasteners per side to be used (top, bottom, left, and right). Fasteners should be spaced a maximum 7" (178) on center.
7. Fasteners should be spaced a minimum of 4" (102) from edge of wall/ceiling opening for concrete/masonry installations.

