

**RECEIVING/INSPECTION**

Upon delivery, inspect shipping containers and dampers carefully. Note any damage on trucker's delivery receipt. Contact the freight company within 24 hours for inspection. Do not install dampers. It is easier to repair on the floor than in the duct.

**STORAGE**

Store in an orderly manner. Do not pile dampers on each other. Cover with plastic sheeting to protect from excessive moisture, dirt and debris. Avoid unnecessary handling of dampers.

**GENERAL INSTALLATION**

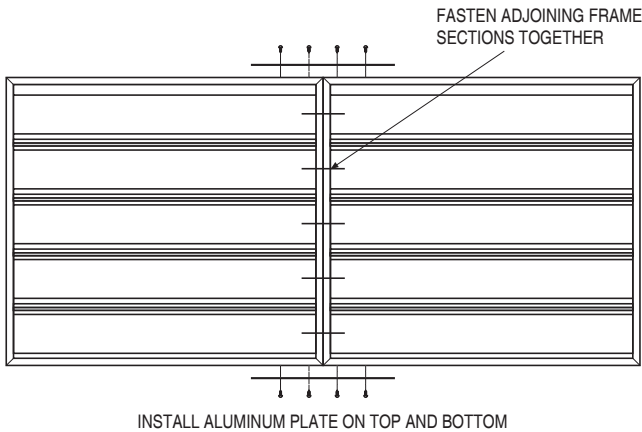
Handle and lift dampers by frame only. Do not lift by blades or linkage. Use sufficient people and appropriate rigging (if required) to evenly lift multiple section assemblies. Do not drop, drag or twist dampers. Inspect ductwork or opening where damper will be installed for any obstructions and to ensure it is straight and level. Ductwork should be supported to prevent sagging due to damper weight. Ensure dampers are installed completely square and plumb, and that blades are free to operate without binding. Use shims as appropriate between damper frame and duct opening to prevent distortion of the frame by fasteners. Care must be taken to ensure that any fasteners used do not interfere with linkage or blade operation. If applicable, counterbalance assembly must be adjusted for damper to open at desired pressure.

**MULTIPLE SECTION ASSEMBLIES**

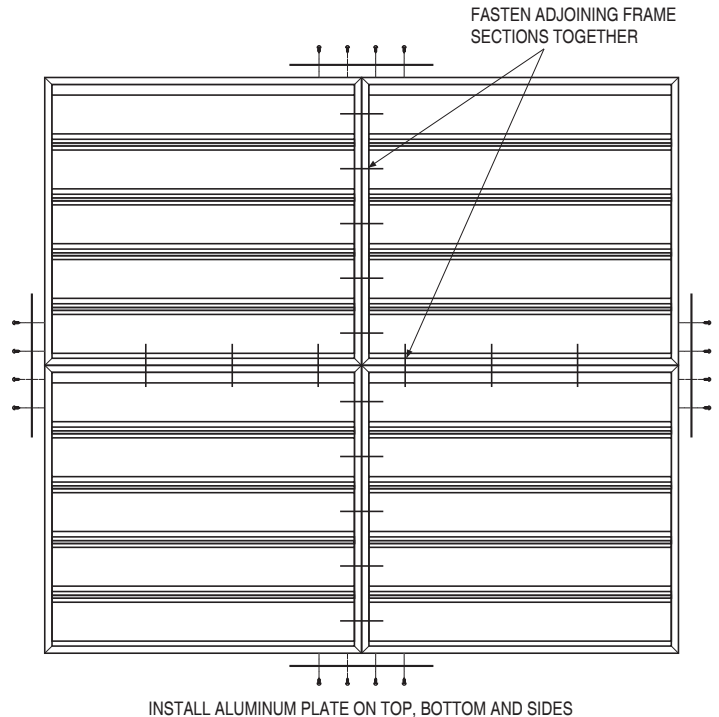
Backdraft dampers larger than single section maximum sizes will be manufactured in equal size sections and must be assembled together in the field. Assemble sections together as shown in Figures 1 and 2 using 1/4" (6) - 20 bolts and locknuts or #10 Tek screws (fasteners by others) spaced on approximately 6" (152) centers. In addition, for single section high dampers install 10" (254) long x 1/16" (1.6) thick aluminum plates on top and bottom, as shown in Figures 1 and 3, using #8 Tek screws or AAP-64 rivets, or similar. For multiple section high dampers install aluminum plates on top, bottom and sides as shown in Figure 2. For larger size dampers not shown follow the same methods. Additional bracing (by others) may be required to support the weight of the assembly and to resist system pressure.

**IMPORTANT: BE SURE ALL FASTENERS (BY OTHERS) DO NOT INTERFERE WITH DAMPER LINKAGE AND BLADE OPERATION!**

**FIGURE 1:**

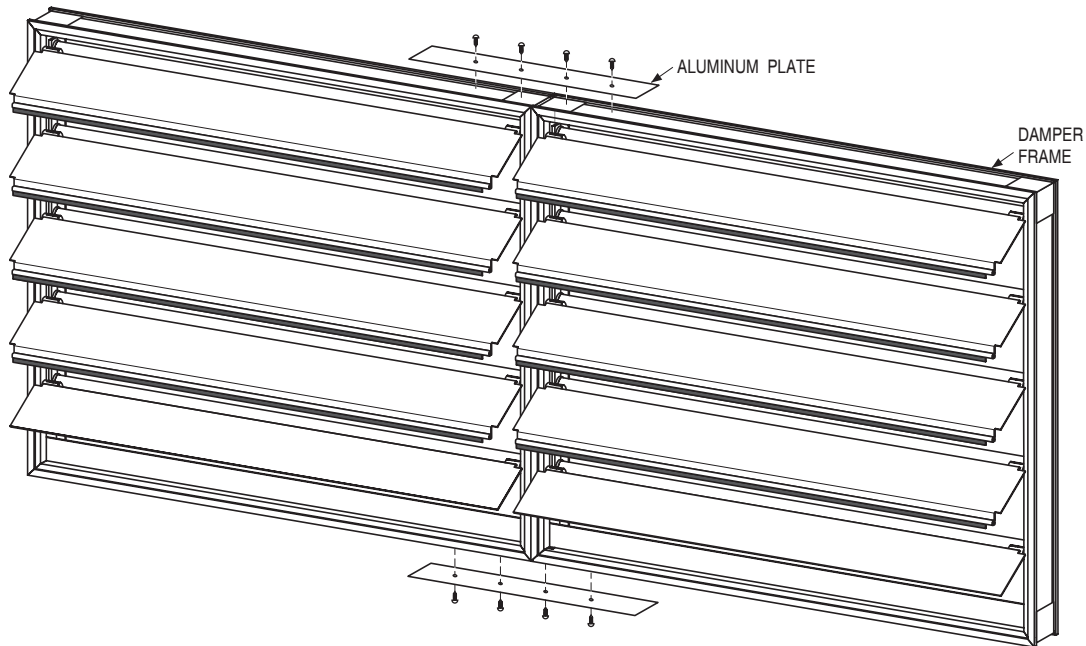


**FIGURE 2:**



**IMPORTANT: BE SURE ALL FASTENERS (BY OTHERS) DO NOT INTERFERE WITH DAMPER LINKAGE AND BLADE OPERATION!**

**FIGURE 3:**



### COUNTERBALANCE ADJUSTMENT

Nailor counterbalanced backdraft dampers can be adjusted to open at a specific pressure. Before making adjustments, be sure that the damper is installed square and plumb and that the blades move freely. Damper should be fully closed under conditions of no airflow. Opening pressure can be adjusted by sliding counterbalance weights (further from blade to further assist opening). If full adjustment has been made and blades still don't open fully then more weight should be added. Repeat process if necessary to achieve final positioning.

### MAINTENANCE

Dampers should be inspected at least once every two years, depending upon operating conditions, as part of a regular maintenance program. Wipe any dirt, dust etc. from blades and linkage. Lightly lubricate linkage and other moving parts with a dry type lube such as Moli-Spray Oil #3. Cycle damper by hand to ensure all blades and linkages move freely.

Dimensions are in inches (mm).

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Houston, Texas  
Tel: 281-590-1172  
Fax: 281-590-3086

Las Vegas, Nevada  
Tel: 702-648-5400  
Fax: 702-638-0400

Toronto, Canada  
Tel: 416-744-3300  
Fax: 416-744-3360

Calgary, Canada  
Tel: 403-279-8619  
Fax: 403-279-5035