### INSTALLATION INSTRUCTIONS FOR SECURITY ACOUSTICS WINDOW FRAME ASSEMBLIES

### GENERAL

The installation of acoustic window frame assemblies differs significantly from that of standard window frame assemblies. These instructions are specially designed for the successful installation of Security Acoustics Sound Tight products and are to be utilized in combination with the approved shop drawings in order to ensure proper operation, to achieve specified STC ratings and to validate product warranty. These instructions assume the installer has had previous experience in setting frames and installing glass. If any questions arise during installation please contact our Customer Service Department.

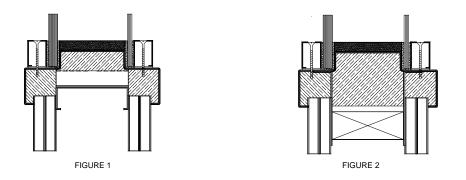
### FRAME INSTALLATION

**A**. Frames provided by Security Acoustics are designed to be installed as the metal stud, wood stud or masonry wall is erected. Frames designed to be installed in existing walls usually require special conditions which will likely require a review of the approved shop drawings. A review of the architect's plans and the approved hardware submittal is also recommended to verify proper swing and hardware preparation.

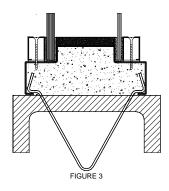
**B**. Frames should be immediately checked to ensure they are square and true. Minor damage which could occur during shipping can be easily corrected by an experienced installer. Note that frames intended for installation in metal or wood stud walls should be grouted prior to installation. Recommended grout fill is Gold Bond Gypsolite Plaster manufactured by National Gypsum (www.nationalgypsum.com) or Structo-Lite manufactured by U.S. Gypsum (www.usg.com). Heads, jambs and sills should be completely filled to the point at which the metal or wood stud attaches to the anchors provided. Grout should be allowed to set for a minimum of 24 hours prior to frame installation, however, once the grout begins to harden, the installer should trough or otherwise block out the areas behind the backbend to allow insertion of wallboard after installation (it should be noted that drywall insertion is a code requirement for fire rated assemblies). This also will tend to lighten the overall weight of the frame. Frames in new masonry walls will be grout filled as specified by the project documents as the wall and frame are erected. Frames in existing masonry walls should be grout filled after the frame is installed.

**C. Installation In New Metal/Wood Stud Walls (Fig. 1 and 2).** Using vertical wood braces for alignment and support and temporary wood spreaders at three points of the narrowest opening (width or height) to maintain the clear opening size, level and set the frame. Cross string the frame to ensure it is square and then anchor to the studs using the wall anchors provided. Floor anchors may also be provided for frames extending to the floor. Double king studs extending to the slab above are recommended and 16 Ga. minimum is recommended for metal studs. Double studs at the sill are also recommended

in order to support the weight of frames installed above the floor. Use more anchor screws than for normal installations as the final assembled frame will be very heavy. Once the frame is fully connected and wallboard is installed, the temporary wood spreaders can be removed. The frame should then be fully caulked around the perimeter at both sides where it meets the wall. Caulk the floor joint on frames extending to the floor.



**D. Installation In New Masonry Partitions (Fig. 3).** Instructions for this type wall are not significantly different from those above other than the actual anchorage to the wall and grout fill which takes place as the wall is erected. Special precautions should be taken to prevent the head and jambs from bowing during grout fill. Styrofoam strips should be field applied to the areas where removable stop screws occur to allow removal and reinstallation after grout has dried



#### GLASS

These instructions are for windows that are not factory glazed. Depending on the specified rating, all glazing in acoustic windows consists of one or two panes of laminated glass, each set in silicone gaskets. Double glazed assemblies also require sound dampening members inserted between each pane. Glass is provided by others. Net glass sizes should be total opening size less  $\frac{1}{2}$  top and bottom

# INSTALLATION OF GLASS FOR SG40 ASSEMBLY (Fig. 4)

**A**. Remove the loose stops, mark their respective locations and set aside. Note that these stops have been factory applied in a position suitable for the required glass and gaskets so it's important that they are reinstalled in their original locations.

**B**. Cut to size and apply the provided silicone gaskets around the perimeter of the  $\frac{1}{2}$ " pane of glass. Applications of a small bead of clear silicone caulk at the gasket abutments and around the perimeter where it meets the exposed glass on both sides will seal the joints and will help to keep the gaskets in place.

C. Insert the assembled pane of glass tight against the fixed frame stop. It should fit tightly in the opening but if any gaps appear they should be filled with acoustic caulk. Reinstall the loose stops as directed in item A.

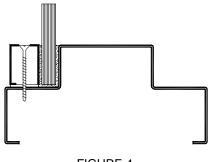


FIGURE 4

# INSTALLATION OF GLASS FOR DG50 ASSEMBLY (Fig. 5)

**A**. Remove the loose stops, mark their respective locations and set aside. Note that these stops have been factory applied in a position suitable for the required glass and gaskets so it's important that they are reinstalled in their original locations.

**B**. Cut to size and apply the provided silicone gaskets around the perimeter of the  $\frac{1}{2}$ " and  $\frac{1}{4}$ " panes of glass. Applications of a small bead of clear silicone caulk at the gasket abutments and around the perimeter where it meets the exposed glass on both sides will seal the joints and will help to keep the gaskets in place.

**C**. Insert one assembled pane of glass tight against the fixed frame stop. It should fit tightly in the opening but if any gaps appear they should be filled with acoustic caulk. Reinstall the loose stops as directed in item **A**.

**D**. Cut and apply the  $\frac{1}{2}$ " thick adhesive backed perforated vinyl coated neoprene sound dampening strip to the fixed frame stop. This should be the exact width of the stop.

**E**. Insert the remaining assembled pane of glass as directed in item **C**. Reinstall the loose stops as directed in item **A**.

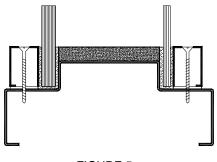


FIGURE 5

Note 1. Caution should be exercised to prevent fingerprints, dust or debris from accumulating on the inside of the double glazed assembly.

Note 2. It is recommended that this assembly should be glazed on a dry day with very low humidity.

# INSTALLATION OF GLASS FOR DG57 ASSEMBLY (Fig. 6)

**A**. Remove the loose stops, mark their respective locations and set aside. Note that these stops have been factory applied in a position suitable for the required glass and gaskets so it's important that they are reinstalled in their original locations.

**B**. Cut to size and apply the provided silicone gaskets around the perimeter of the  $\frac{1}{2}$ " and  $\frac{3}{8}$ " panes of glass. Applications of a small bead of clear silicone caulk at the gasket abutments and around the perimeter where it meets the exposed glass on both sides will seal the joints and will help to keep the gaskets in place.

C. Remove the screw applied perforated center stop, pack the provided desiccant bags underneath the insulation and then reinstall.

**D**. Insert one assembled pane of glass tight against the perforated stop. It should fit tightly in the opening but if any gaps appear they should be filled with acoustic caulk. Reinstall the loose stops as directed in item **A**.

**E**. Insert the remaining assembled pane of glass as directed in item **D**. Reinstall the loose stops as directed in item **A**.

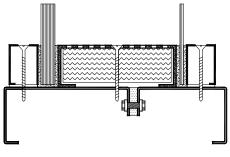


FIGURE 6

Note 1. Caution should be exercised to prevent fingerprints, dust or debris from accumulating on the inside of the double glazed assembly.

Note 2. It is recommended that this assembly should be glazed on a dry day with very low humidity.

Note 3. The perforated stop should be field painted after removal. Black is preferred but this is optional.