Q-Sox® Installation Instructions



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Installation Sequence For Lite-Trak Rail® Suspension Q-Sox® Woven Cloth Duct

PREPARATION

Q-Sox woven cloth ducts should be installed only after all construction activity including sanding, painting, cleaning, touch-up and debris removal is complete. Q-Sox should NOT be installed until the jobsite, equipment, and personnel have been thoroughly cleaned to protect the Q-Sox appearance.

IMPORTANT - The air supply system should be purged and a <u>minimum 35% pre-filter installed</u> BEFORE the cloth duct is installed. Otherwise the duct will collect the dust resident in the blower and plenum system.

Unpack Hardware. Specific installation instructions, parts list and drawings as well as hardware for the project are included.

Unpack fabric boxes <u>only after</u> the Lite-Trak® rail and suspension hardware has been mounted to the building and you are ready to attach the cloth duct sections. This will prevent soiling the cloth duct during the cable mounting procedure.

Each duct box will have assembly instructions about the location for that specific duct (if there is more than one duct assembly). Fabric Duct Systems will factory package each duct section in sequential order to facilitate mounting each duct assembly. Each duct is made up of one or more sections from 10 feet to 22 feet long. These duct sections will facilitate washing the duct in industrial washing machines.

EACH DUCT SECTION MUST BE ASSEMBLED IN THE EXACT SEQUENTIAL ORDER PRESCRIBED ON THE DRAWINGS. THIS ORDER MUST BE MAINTAINED WHEN THE DUCTS ARE LATER REMOVED FOR WASHING AND RE-INSTALLED.

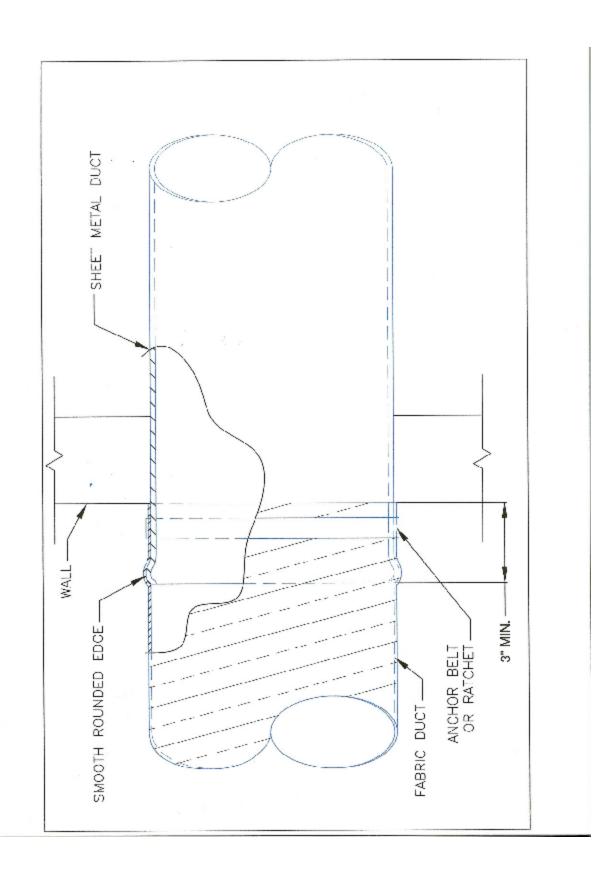
Tools necessary for installation include:

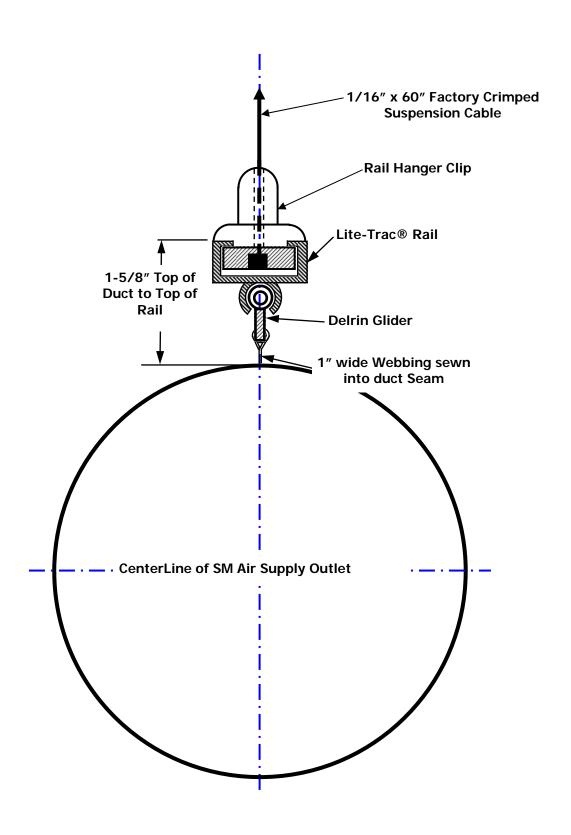
Pencil Chalk Line

Tape measure Power drill and drill bits
Plumb bob Cutter for 1/16" wire cable
Level 5/16" Nut driver/Socket

Materials NOT provided for installation:

Fasteners/anchors to attach suspension cable to ceiling.





Lite-Trak Rail Layout

- 1. Layout the proper number of 10 foot Lite-Trak Rails on the floor for the entire duct run.
- 2. Cut the last Rail section to obtain the correct length for the overall duct run. Remove burrs or sharp edges from the Rail ends. SAVE THE REMAINING RAIL PIECE FOR USE ON OTHER DUCT RUNS.
- 3. The Lite-Trak® can be mounted to vertical cable hangers or directly to the ceiling or rafters. EITHER <u>Hanger Clips</u> OR <u>Ceiling Anchor Plate Assemblies</u> are provided for these mounting alternatives.
- 4. Insert and position Hanger Clip & Cable Assemblies (or Ceiling Anchor Plate Assemblies) into the top slots of the appropriate Rail sections at 7 foot intervals along the Rail. Then position ONE Hanger Clip & Cable Assembly (or ONE Ceiling Mount Assembly) at each end of the overall duct run
- 5. It is now time to splice together the Lite-Trak® Rail sections for the entire duct run.

Lite-Trak aluminum rail sections

Rail Butt Joint

Splice Bar with 4 self-tapping hex screws.

Lite-Trak Rail – Splicing Rail Sections (cont)

- 1. Insert Splice Bar HALFWAY into one Lite-Trak section. Using a 5/16" Nut Driver or Socket wrench, tighten down the two self-tapping hex head screws. These screws will jam fit the Splice Bar and penetrate the Lite-Trak. DO NOT PENETRATE THROUGH THE RAIL INTO THE LOWER CHANNEL. THIS WILL IMPEDE THE WEBBED GLIDERS FROM SLIDING IN THE LOWER CHANNEL
- 2. Slide the adjacent Lite-Trak® section onto the Splice Bar. Mate the end of both Lite-Trak sections carefully and tightly together. It is essential that the joints of each 10' Lite-Trak Rail section be aligned to permit the smooth insertion of the webbed Gliders into the lower channel of the Lite-Trak® Rail.
- 3. Tighten the two screws into that section.
- 4. Repeat for each Lite-Trak® section until the designed total Rail length is completed.
- 5. Now re-position each Hanger Clip (or Ceiling Anchor Plate Assembly) in the Rail and rotate the Hanger Clip 90° to secure the Hanger Clip to the Rail. Hanger Clips and Crimped cables are provided for every seven feet of Rail.

Attaching the Rail Hanger Clips

Rotate Hanger Clip 90°

Rotate Hanger Clip 90°

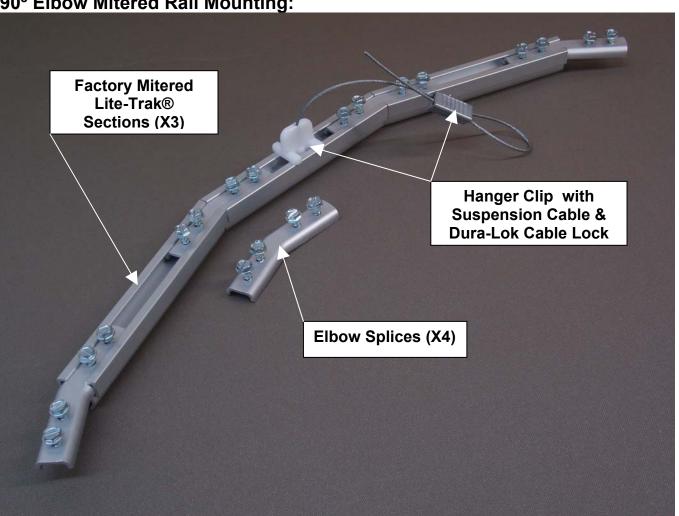
Rail channel

Insert Factory crimped suspension cable

Mounting the Lite-Trak Rail to Vertical Suspension Cables.

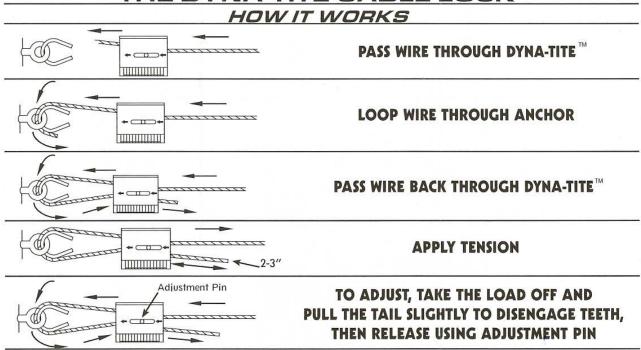
- 1. The circular slot in the Lite-Trak Rail must be aligned with the centerline of sheet metal outlet. The entire Rail length should be parallel to the closest wall for aesthetic reasons.
- 2. The suspension cables for the entire duct run must be secured to the ceiling at the 6 to 8 foot intervals set on the Lite-Trak Rail. These crimped 1/16" cable lengths and the Dyna-Tite Cable Locks® are provided with the hardware from Fabric Duct Systems. Ceiling or beam fasteners are provided by the installation contractor.
- 3. Suspending the Lite-Trak from the ceiling must be done carefully so as **not to** bend or twist the Spliced Lite-Trak® Rail Assembly.
- 4. With two or more workers, raise the Lite-Trak. **NOTE:** It may be advantageous to UNSPLICE 10 foot sections to more conveniently install the Lite-Trak and then RESPLICE the sections after suspension
- 5. Make sure the Lite-Trak Rail Assembly is level over its entire length by adjusting the Dyna-Tite Cable Locks to the proper elevation.

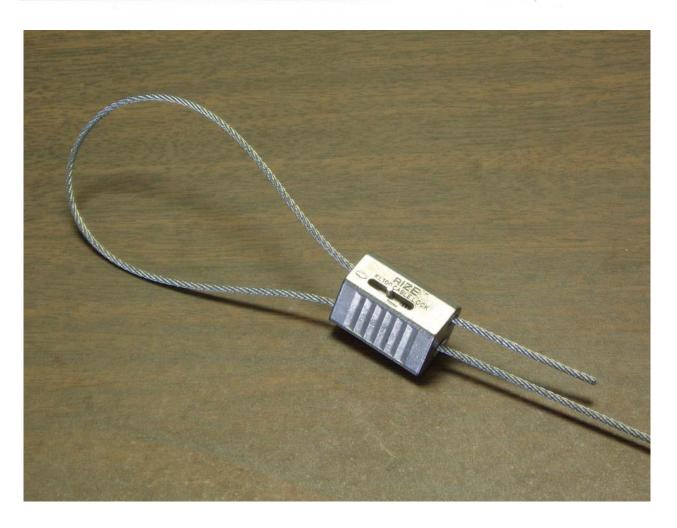
90° Elbow Mitered Rail Mounting:

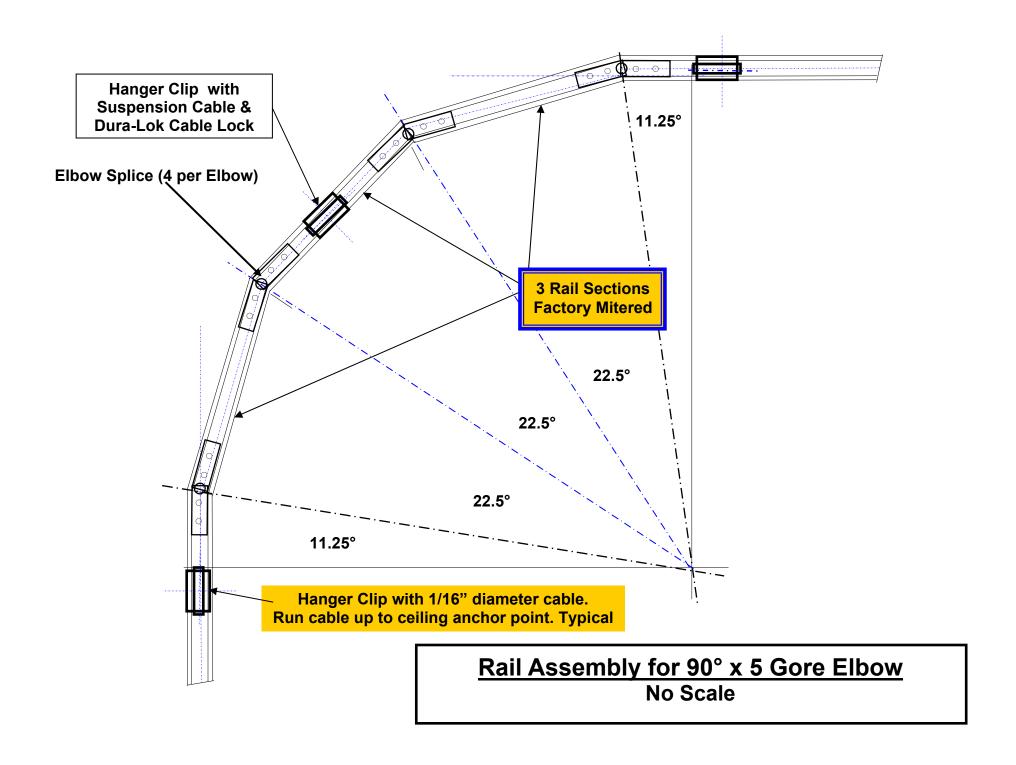


Cable Lock Installation Instructions CL12

Assembly Instructions and Warnings
THE DYNA-TITE CABLE LOCK







Q-Sox woven cloth ducts should be installed only after all construction activity including sanding, painting, cleaning, touch-up and debris removal is complete.

Q-Sox should NOT be installed until the Air Supply Units and connecting sheet metal have been thoroughly cleaned and the filtration elements installed.

Failure to perform these correct installation procedures may void product warranty.

FABRIC DUCT HANGING PROCEDURE

Handle the cloth duct sections with clean hands. Insure that all installation tools are also clean and free of oil and dirt.

- 1. Install each section of the Q-Sox cloth duct into the circular slot of the Lite-Trak Rail beginning at the plenum outlet. Start with the last Duct Section with the End Cap end and work in reverse order.
- 2. If the duct is designed with Gliders, slide the gliders sequentially into the lower channel of the Rail. Pull the duct along the Rail as each Glider is installed in the Rail. If the design incorporates a Beaded Vinyl Welt on the top of the fabric duct, compress the circular Bead into the Mounting Rail. DO NOT USE ANY SHARP OR POINTED TOOL – the eraser end of a wood pencil is ideal. Do this for the entire length of the duct Section. When the entire duct is installed, the Beaded Vinyl Welt will slide easily within the Rail channel.
- 3. DO NOT ALLOW THE FABRIC DUCT TO TOUCH OR DRAG ACROSS THE FLOOR.
- 4. When all sections have been attached to the extrusion, the several duct sections may then be connected to each other at their Zipper/Velcro® joints (unless the entire duct run has been assembled at the factory beforehand). This is best accomplished by starting at either the top seam where the beaded welt is attached to the duct. Smooth out any bumps or wrinkles as you work around the circumference to connect the entire joint. If the cloth duct has incorporated a continuous slotted vent (for increased air flow), insure that the slots on each duct section are aligned with the slots on the adjoining duct sections.
- 5. Secure the open hemmed end of the fabric duct to the metal output duct with the Anchor Belt. The installation is then complete.

FINAL ADJUSTMENT



- 1. Stretch Glider at end of each duct to insure the duct is extended to its full length.
- 2. Drill 0.172" diameter pilot hole in bottom channel. Align with center of white Glider.
- 3. Install #10 x $\frac{1}{2}$ " Self-tapping Sheet Metal Screw to secure the Glider in position.



Washing and Maintenance Instructions For Q-Sox Coated Polyester Ducts with Orifices or Linear Vents

In order to ensure long term and optimum distribution of air, it is necessary to keep the Q-Sox® fabric ducts free from dirt and dust. Effective maintenance will ensure that the ducts supply the required quantity of air and also an optimum service life.

Cleaning the Outside Duct Surface

Over time, dust will accumulate on the exterior surface of the coated polyester fabric. If the room ambient air has not experienced greasy contaminants, this brown/grey dust can be easily removed by vacuuming with the aid of a medium stiff bristle (non-metallic) brush. The air supply system must be "OFF" and both sides of the drooping duct can be easily vacuumed while the duct is suspended.

Washing

Should vacuuming and brushing not be effective to remove exterior dirt, the ducts must be unzipped in sections and removed from the rail or cable suspension system.

There are two methods depending on convenience or the equipment available:

- > Spray clean with a hose & nozzle using a bristle brush and mild detergent, or
- Using a commercial size washing machine.

Before spraying or laundering, first turn each duct section INSIDE OUT. Spray the linear mesh vents to insure debris is removed and not clogging the mesh. This is not necessary with ducts having punched orifices larger than 1/2 inch diameter,

Then turn the duct right side out and proceed:

- > Pre-rinse:104° F for 10 minutes
- Do NOT add any softener, as this will influence the surface characteristics of the Q-Sox duct.
- ➤ Wash: 104° F for 20 minutes; Use Mild detergent, no bleach
- Rinse thoroughly after washing.
- Wash and drip dry and immediately install the Q-sox fabric ducts.
- > OBSERVE TO REINSTALL THE DUCTS IN THE CORRECT SEQUENTIAL ORDER.

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