## TECHLITE ACOUSTICS

# TECHLITE® ACCENT LINEAR BAFFLES INSTALLATION INSTRUCTIONS



Installation procedures for Linear Baffle accessories may vary from manufacturer to manufacturer. For specific accessory component information, detail drawings, CAD design assistance, detailed information or other technical services, contact the manufacturer. Note: If significant changes to structure are to be made, such as mounting cables into framing members, such installation impacts appropriately land in the purview of a structural engineer or general contractor licensed in the state where installation occurs.

The following information provides general notes and installation instructions for TECHLITE ACCENT Linear Baffles.

#### Installing metal corkscrew hangers in linear baffles:

1) For vertical application, depending on the size of the linear baffle, each sheet should be equipped with 2 2-7/8" long corkscrew hangers for 2'x2', 2'x4', 4'x4', 3 corkscrew hangers for 4'x6' baffles, and 4 corkscrew hangers for 4'x8' baffles. Maximum distance between hangers should be no greater than 36". Use the diagram shown in Figure 1 and 2 below as a guide.

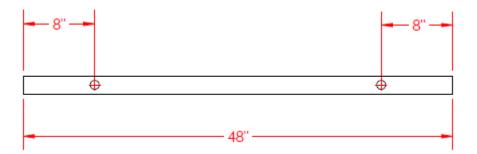


Figure 1: 2'x2', 2'x4' and 4'x4' Baffles

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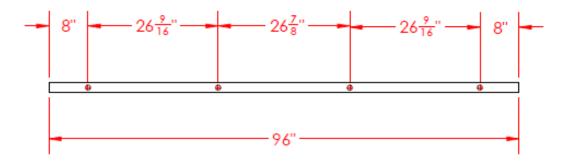


Figure 2: 2'x8' and 4'x8' Baffles

Installing vertically suspended linear baffles with long metal corkscrew hangers direct from underside of structural ceiling:

- 1) Refer to *Installing metal corkscrew hangers in linear baffles*.
- 2) Attach the appropriate anchor to underside of structure.
- 3) Thread tie wire/cable/lightweight chain through grommet or eye hook of the corkscrew hanger.
- 4) Twist the wire/cable/lightweight chain to complete the connection. Note: Do not overtighten the wire/cable or put excessive force on grommet/eye hook to avoid baffle failure. Tie wires/cables should be plumb.

### Installing vertically suspended linear baffles with long metal corkscrew hangers parallel from joists and/or trusses:

- 1) Refer to *Installing metal corkscrew hangers in linear baffles*.
- 2) Linear baffles can be wire/cable tied directly to the top or bottom of joists and/or trusses. Baffles attached to the top of joists will hang beside the joist, and baffles attached at the bottom will hang below the joists.
- 3) Use a minimum 1/16" wire hanger, cable or lightweight chain to suspend baffles from joists or trusses.
- 4) Attach wire/cable from the structural ceiling by looping the wire/cable around ceiling joists or trusses.
- 5) Thread the tie wire/cable through the grommet or eye hook and then loop around the joists or trusses.
- 6) Twist the wire to complete connection.

#### Installing vertically suspended linear baffles with metal corkscrew hangers perpendicular from joists and/or trusses:

- 1) Install a tight cable support system (by others) for linear baffles attachment
- 2) Secure anchors at both ends into the wall.
- 3) Use a minimum 1/16" wire, cable or lightweight chain to suspend baffles from joists or trusses.
- 4) Attach the wire/cable, thread the cable above the lower bar of the joists, and use a turnbuckle to tighten the cable. For long runs of cable or wide spacing of joists or trusses, additional vertical cable support may be required.
- 5) Attach the baffles to the wire/cable with tie wire. Tie wire connection should be snug to the cable to minimize sheet slippage.

#### Hanging vertical linear baffles using the wall-to-wall technique:

- 1) Refer to Figures 2 and 3 above for recommended corkscrew spacing. Maximum distance between corkscrew hangers should be no greater than 36".
- 2) Determine the length of cable required to hang it across room
- 3) Attach one end of the cable/chain to one wall or I-beam, where required, using a welded or bent eyebolt, and if necessary, eye turnbuckles for additional structural lateral support.
- 4) Use same attachment method for opposite wall and properly tighten

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- 5) Optional: Install center support hooks or eyes towards center of structural ceiling to counter cable sag. Amount and specific locations of center supports to be determined by structural engineer or licensed contractor.
- 6) Slip eye loop of corkscrew hanger over wire/cable. Turn eye loops perpendicular to the baffles locking the cable in place. Of a center ceiling support is employed, slide baffles from each end of the cable towards the center.
- 7) Slide baffles across the cable. For a nice, even dispersion across the cable/chain span, use cable spacers for desired spacing. The spacers can be used on the ends of cables to prevent baffles from knocking into objects, and between baffles to clear a path for HVAC ductwork and light fixtures.

### Installing vertically suspended baffles from c-track channel:

- 1) For the rack and channel, lay out the tube frame on a clean, protective surface with the holes facing up.
- 2) Using a rubber mallet, drive the tube connectors fully into the tube ends. Be sure to protect the tube from hard surfaces and denting during assembly.
- 3) Place channel underneath the frame, slide in hex nuts for assembly (add 2 extra and slide towards center for the channel positions that are to be used for suspending linear baffle).
- 4) Insert joint connector bolt, align to nut and hand thread. Using a hex driver, tighten while maintaining the frame and channel aligned properly.
- 5) Repeat steps for each channel.
- 6) Position the extra hex nuts and thread eyebolt or set screw for connecting the specified suspension system.
- 7) Align with nominal 3" of baffle extending from end of channel.
- 8) Place screw in pre-drilled hole of channel and fasten.
- 9) Complete channel/baffle set is now ready to mount on rack.

#### **General Notes:**

- 1) Linear baffles can be suspended to the structural ceiling vertically or horizontally.
- 2) Linear baffles come in white or light-grey, and are constructed of open-cell melamine foam.
- 3) Custom coatings to suit most color palettes available upon request
- 4) Store linear baffles out of direct UV sunlight.
- 5) Avoid hanging baffles greater than 10 feet below the structural ceiling. Extensive cabling/chaining will cause linear baffles to swing if suspended between HVAC air streams.
- 6) If installing less than 1-1/2" thick linear baffles in vertical or horizontal ceiling applications, please consult with TECHLITE Acoustics Engineering Department for technical assistance as it is not recommended to go below 1-1/2" thick.
- 7) Store and protect linear baffles from the elements and from damage
- 8) Suspension hardware is not to be pre-installed
- 9) Do not subject linear baffles to critical edge lighting without first consulting TECHLITE
- 10) If installing metal hardware in a corrosive environment such as an aquatic center, always use 316 stainless steel corkscrews and hardware.

#### List of accessories:

- Loctite General Purpose PowerGrab Adhesive
- Nominal 1/16" to 3/32" wire hanger, uncoated cable or lightweight chain
- Cable clamps
- 1/4" to 3/8" eyebolts (2 per cable if wall to wall mounted)
- Standard galvanized rope thimble cable protector (if required)
- Turnbuckles
- 1-1/4" 316 Stainless Steel Corkscrew Hangers
- 2-7/8" 316 Stainless Steel Corkscrew Hangers
- Rubber mallet

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- Drill/screw gun
- 1/8" hex driver for set screws, 4mm hex driver for joint connector bolts (for channel install)
- 3M Scotch-Grip™ 4550
- 3M Fastbond™ #49

Please consult TECHLITE Acoustics Engineering Department for technical assistance to suit your specific project requirements.

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