

Acoustic Baffles

Environmental Noise Control Baffles are used to reduce overall noise levels in industrial, recreational, and other high noise areas, and are suspended from wires or from the structure near the noise source. Actual room noise reduction can be up to 10 to 15 dB depending on the configuration of the space and the absorption present before installing baffles. Acoustic Baffles are having good noise absorbing material with 0.85 NRC, absorb noise and prevent echo-generation



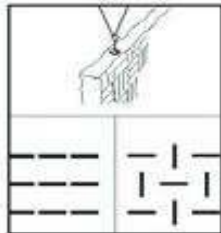
Acoustical Sound Control Baffle System

General installation instructions

- Determine optimum arrangement of baffles. Baffles can be hung from a cable suspended over the shop floor (wall-to-wall cable) or from cables or chains suspended from the ceiling (ceiling cable or chain). Both methods require use of corkscrew hangers, which are supplied by Illbruck and included in each box (2 per baffle).
- Avoid hanging baffles more than ten feet below the ceiling because long tethering will cause them to sway in air currents. Baffle distance from the ceiling has little effect on acoustic performance. Baffles can be hung horizontally or vertically, above or below lights.

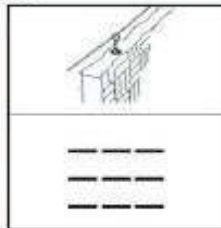
• Wall-to-wall cable installation

This method is best for large jobs over open areas where scaffolding would be cumbersome. Optional spacers help place baffles evenly across cable span. Baffles are arranged parallel with each other.



• Ceiling cable/chain installation

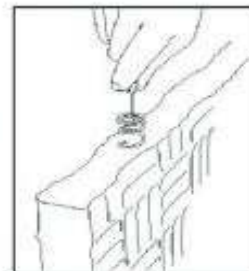
This method uses cable or chain to hang the baffles from the ceiling. Baffles can be aligned in the same direction or arranged so that every other baffle is turned 90 degrees. Tests show that baffles arranged in a criss-cross pattern perform slightly better than baffles hung in the same direction.



Installing corkscrew hanger in baffle

(for both methods)

1. Mark a dot with a pen at least 3" (4" to 8" optimal) in from each edge of baffle and centered on the width of the baffle.
2. Center the corkscrew hanger over the dot. Holding the hanger vertically, press down lightly and turn. Allow the downward pressure to pierce the foam; do not poke the hanger point into the foam. (If necessary, spray anger with dry lubricant.) If it pops out of the side of the baffle, start over at a different point. Do not try to re-start in the same place.
3. Turn the corkscrew hanger clockwise until it is completely seated and the top coil of the hanger is touching the edge of the baffle. The hanger extends approx. 1" from the top of the coil to the eye loop to allow room for spacers.



Note: Turn the eye loop so it is parallel to the top of the baffle and the opening of the eye loops face the same direction (important for installing on cable).

Hint: Prepare a stack of baffles at the same time. Measure and mark the distance from the edge and insert hangers. This creates a uniform look and provides enough material to do an entire run in one trip.

Wall-to-wall cable installation

W1. Determine length of cable needed to suspend it across the room to hang baffles.

W2. Attach steel cable to one wall or I-beam with eye-bolts and turnbuckles.

W3. Attach the other end of the cable to the opposite wall or beam and tighten.

W4. Slip the eye loops over the cable (figure W1). Turn the eye loops approx. 1/4 turn counterclockwise so the eye loop is perpendicular to the baffle, locking the cable in place (figure W2).

W5. Slide baffles across the cable. Optional: Insert PVC spacer bars (available from illbruck) between baffles for even placement across the cable span (figure W3). Spacers can be used on the ends of cables to keep baffles clear of objects, or between baffles to create openings for ductwork or light fixtures.

W6. Optional: Install a center support hook or eye in the middle of the ceiling to counter cable sag (approx. 2 1/2' over 80 feet). Slide baffles from each end of the cable to the center.



Fig. W1

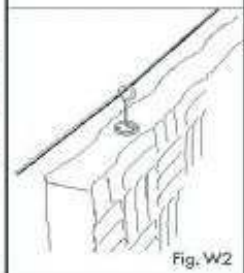


Fig. W2

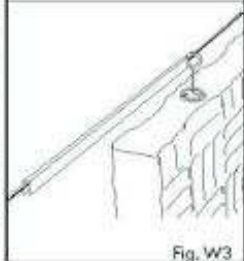


Fig. W3

Ceiling cable or chain installation

C1. Use 1/16" cable or light-weight chain to hang baffles from the ceiling.

C2. Attach cable or chain from the ceiling by looping it around ceiling joists or trusses, or installing anchor eyes in the ceiling.

C3. Slip the eye loop of the corkscrew over the cable (figure C1). Use S hooks if necessary. Turn the eye loops approximately 1/4 turn counterclockwise so the eye loop is perpendicular to the baffle, locking the cable in place (figure C2).

C4. For baffles with grommets instead of corkscrew hangers, simply attach the bottom end of the cable or chain to the grommet in the corner of the baffle, either directly or by using 'S' hooks.



Fig. C1



Fig. C2

Fabric Wrapped Acoustic Baffles

Fabric Wrapped Acoustic Baffles reduce sound reverberation and provide a more peaceful environment. These baffles are wrapped with a soft synthetic suede fabric, and their strong sound-absorbing performance, durability and eye pleasing appearance are unmistakable. These baffle products are Class 1 fire rated and offer high sound absorption ratings, NRC .80 - 1.05.

The Acoustic hanging baffles are constructed with grommets, which allow for a quick and easy installation.

Decorative Fabric Wrapped Acoustical Baffles

- » High Performance
- » Architecturally Decorative
- » Custom Engineered & Manufactured

Properties

- » Free of Synthetic and Natural mineral Fibre, Holgens & CFCs
- » High degree of Thermal resistance.
- » Very Low Volume Weight.
- » Color Customized.
- » Baffles covered with Ripstop Nylon Fibre are extremely durable sound insulation Baffle
- » There are multiple colors in both PVC and Rips Stop nylon to choose.
- » Fire rating and a sound absorption rating of 0.90 - 1.10 NRC.
- » Covered in (Sailcloth, Guilford, Whispertex, Tekwall, Webcore) finish

NRC CHART										
PANEL TYPE	THICKNESS INCHES)	FINISH	CORE	ABSORPTION (SABINS PER 48" × 24" UNIT)						
				125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	SABINS
TYPE 1	1"	FABRIC	GLASS FIBER	4.55	6.20	8.42	12.83	14.35	14.28	10.45
TYPE 2	2"	FABRIC	GLASS FIBER	4.48	8.00	13.20	17.93	16.98	16.35	14.02