Installation Instructions

Product Name

AcoustiFence® Noise Reducing Fences

Installation Type

Chain Link Fence

Installation Overview

This installation overview provides suggestions for handling and installing AcoustiFence® Noise Reducing Fences. AcoustiFence is made from Acoustiblok, a heavy, high density product (1lb/ft²), so when preparing for the installation always schedule at least two to three installers for efficiency and safety.

All tools (except common hand tools) and materials required for a professional Acoustiblok sound installation are available from Acoustiblok, Inc.

Installation Notes – Very Important

1. If there are prevailing winds and you are attaching AcoustiFence to a chain link fence, it is highly advisable to put the AcoustiFence material on the side the wind blows from, for extra strength.
2. Air must not go under the bottom of the fence. Do not hang a 6' AcoustiFence from the top of an 8' chain link fence unless it is sandwiched between 2 layers of chain link.
3. It is highly recommended that the AcoustiFence installation be reinforced in high wind environments, especially if the AcoustiFence material is likely to be constantly flapping. We recommend adding another chain link fence to the structure on the other side of the AcoustiFence material. Call to discuss options that will fit your specific installation.
4. Cold temperatures will reduce the flexibility of the AcoustiFence material during installation. Attempting to unroll the material if it is at a very low temperature is not recommended. Find a way to warm up the roll, such as leaving it indoors until the material roll reaches room temperature.
5. On the top, leave ties loose enough to allow the grommet to pivot on the ties.
6. If painting the AcoustiFence material, do not use "elastomeric" paint. An exterior vinyl acrylic latex pain is recommended and works well.

7. Using nails or screws alone instead of the grommets to support the fence will cause tears in the material. Sandwiching the material between two surfaces can help to resolve this.
8. Leaving even one grommet unsupported will cause excessive strain on the adjoining grommets, possibly leading to tearing of the material.
9. Be aware of **increased structural requirements** when attaching AcoustiFence to a structure; consult with a structural engineer.
10. In some geographical areas with intense sun light, the black version of AcoustiFence may reach very high temperatures and should be painted with a white or off white exterior, acrylic latex to prevent fence damage or serious burns from touching. Using our foliage "Landscape" over the black fence can also work.

Installation Suggestions

Installation on a Chain Link Fence up to 6'

1. Unroll the AcoustiFence material on the ground and let it relax in the sun for at least 3 hours.
2. Roll the AcoustiFence material back up. Lean the roll against the fence as vertical as possible, with the grommet edge to the top. Line up the top of the roll to the top of the fence or at the desired height. (Air must not go under the bottom of the fence.
3. Begin unrolling the AcoustiFence material along the fence. While one person slowly unrolls the material, the second person inserts the ties in each grommet, attaching it to the fence or support structure. Leave the ties very loose at this time. Insure that the material is kept taut (lengthwise) as you install the ties to prevent it from bunching up between ties. A third person is useful to help support the weight and keep the fence pulled tight. Do not tighten the ties yet; keep them loose until all ties are installed.
4. On the top only, pull each tie so that the AcoustiFence material is properly lined up at the desired height. **Do not** make the cable tie tight! It must be loose enough to allow the eyelet to pivot freely on the tie. Try to distribute weight equally using every grommet.
5. On the top only, increase the tension on each tie (do not fully tighten) such that the weight of the fence is evenly distributed. Do not trim off the end of the cable tie until you are sure the weight is evenly distributed. (You my even wait on this for several days to ensure equal tension after the material fully relaxes in place)
6. The end and bottom grommets must all be attached, without slack. The bottom and sides must not be allowed to flap or to be excessively loos such that when the wind blows it yanks back and forth on the bottom grommets. At the bottom, add dirt on both

sides along the full length of the fence or bury the bottom edge such that it will not flap in the wind. Air and sound must not be allowed under the fence.

Horizontal Installation of Multiple AcoustiFence Rolls on a Chain Link Fence

1. First hang the top AcoustiFence (A) in accordance with the single fence installation recommendations for a chain link fence. Remember that the primary objective is to allow the fence to pivot on the top cable ties. The ties must be loose, and they must be adjusted such that there is equal tension on each tie.
2. Place the first 1" x 4" board (B) on the backside of the bottom edge of the AcoustiFence material on the other side of the chain link fence. Use pan head screws and large flat washers (G) as needed to screw through the front side of the AcoustiFence material, approximately 24" apart, into the 1' x 4' board (B) to temporarily hold it in position.
3. Maneuver the bottom AcoustiFence (C) into position. Using a pan head screw (D) with a large flat washer, screw from the front side of the fence, through the AcoustiFence and chain link fence and into the 1" x 4" board (B) to temporarily position the bottom fence. These are merely to hold and position the 1" x 4" board and the two AcoustiFence sections.
4. The front 1" x 4" board (E) is now ready to be bolted on top of the bottom fence (C). A bit of alignment and measuring will be needed here. The object is to drill a 5/16" hole trough the front 1" x 4" board (E), the eyelet in the bottom AcoustiFence (C), the top AcoustiFence material (A) and the 1" x 4" board (B) which is temporarily attached to the chain link fence.
5. Tighten the bolts (F) on the chain link wit consistent pressure to sandwich both fences together. Do not be alarmed that the 1" x 4" boards may not be pressed together at the bottom. What we are attempting to do is hold the fence in position, but as it moves in even small amounts, we don't want a tight stress point, which will cause fatigue and tearing when flexing consistently.

Note: Hardware should be a material that will not rust or corrode.

Horizontal Installation of Multiple AcoustiFence Rolls, using Adhesive

This installation involves first mounting an AcoustiFence roll from the ground up and securing it to a chain-link fence crossbar or other supporting structure, then securing an AcoustiFence roll above this one and affixing the bottom of it to the top of the lower AcoustiFence roll.

1. Hang the first roll of AcoustiFence (the bottom one) per the **Installation on a Chain Link Fence up to 6'** section above.
    a. It is ideal to have a horizontal cross member between the vertical poles from which to hang the bottom roll of AcoustiFence.
    b. If you do not have a cross member or other support, you can hang the material directly from the chain link fence, being careful to have equal tension on each tie.
    c. You must also make sure that the chain link you're tying to is able to support the weight of the AcoustiFence material without sagging. This can be achieved by reinforcing (at a minimum of every 12 inches) the connection of the chain link to the horizontal bar on top, to which the chain link is minimally tied.
    d. Ensure the bottom roll of AcoustiFence is exactly where you want it to be, and then let it set for at least half a day in the sun, which will allow it to find its natural positioning.
2. Hang the top roll of AcoustiFence from the top rail, ensuring the ties are relatively loose. You should be able to fit 2 fingers into the ties. Again, make sure this roll of AcoustiFence material has lain in the sun for at least 3 hours before installation; otherwise there will be a small amount of expansion occurring after you have secured the fence, causing slight ripples.
3. After the top roll of AcoustiFence has been mounted and left hanging loosely (overlapping the bottom fence by at least 5 inches), but with even tension on each tie, take a pencil and scribe a line on the bottom of the fence where the bottom of the top fence overlaps. Masking tape is an alternative that makes for a neater result.
    a. Approximately ½ inch up from that line or edge of tape, while the top fence is held up by some else, run a 3/16 (max ¼) bead of FCA10 for the entire length of the 30 foot fence. Then run another bead one inch above the first bead. Do not exceed the ¼ inch bead size or smear the adhesive flat, as edges need to be exposed to air to cure.
    b. Now begin to ensure that the top fence is pressed firmly into the adhesive. Taping down the bottom edge during curing time is advisable. Normal masking tape will work but should be left on too long as it will be difficult to remove. Initial adhesive curing is approximately 24 hours. Complete curing is approximately 7 days.
    c. After curing and testing the bond between the two fences, snug up the top ties on the fence, ensuring they have equal tension. We want a little bit of extra tension because that will also help support the weight of the bottom fence.

Installation Instructions

Vertical Sections Installation on a Chain Link Fence

1. Ensure your framework or fence is properly designed for all mechanical stress.
2. It is advisable to unroll the AcoustiFence material on the ground and let it relax in the sun for at least 3 hours.
3. Start by hanging and position from the top. Pull each tie so that the AcoustiFence material is properly lined up at the desired height. DO NOT make the cable tie tight! It must be loose enough to allow the eyelet to pivot freely on the tie. Tyr to distribute weight equally using every grommet.
4. Increase the tension on each tie (do not fully tighten) such that the weight of the fence is evenly distributed. Do not trim off the end of the cable tie until you are sure the weight is evenly distributed. (You may even wait on this for several days to ensure equal tension after the material fully relaxes in place.
5. The side and bottom grommets should also be attached together. The bottom and sides must not be allowed to flap or to be loos such that when the wind blows it yanks back and forth. At the bottom add dirt on both sides, the full length of the fence. Air and sound must not be allowed under the fence.

You will have a 3” overlap at each vertical seam and the edge grommets are every 12 inches. The zip ties should be installed from the other side (need 2 people) and the correct way to zip tie to the chain link fence is shown below.

Another option is adding a 1.5” wide x ¼” thick metal bar to the seam. This will significantly strengthen the seam as well as closing much of the air gaps in the seam, which allows sound penetration. When the zip ties are cinched it sandwiches the 2 layers of AcoustiFence between the metal bar and the chain link fence. The metal bar could also be taller than the AcoustiFence section, with one end buried into the ground so that the bottom edge cannot move.

Improperly Installed AcoustiFence

The picture below demonstrates what happens when AcoustiFence is improperly installed. The prime reasons for this fence failure are as follows:

1. The bottom of the fence next to the ground is not adequately nor permanently attached to anything, thus allowing it to flap in the wind.
2. Just as with metal, if there is a fixed rigid point of connection at which the material is allowed to move back and forth, it is only a matter of time till the material fatigues and tears. With metal the term is metal fatigue. This why we stress leaving the cable ties loose enough to let the AcoustiFence eyelets pivot freely.
3. If wind is common, we strongly recommend attaching AcoustiFence to one chain link fence and then adding another layer of chain link on top of the material to sandwich the AcoustiFence material in between.
4. Do not forget to do the same with each end of the AcoustiFence material. (Do not ignore sealing the gaps in the fence airtight, as it only takes a little bit of space for sound to transmit through. The bottom of the fence should be covered with soil on both sides). Holes and joints can be filled with FCA10.

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6900 Interbay Blvd
Tampa, Florida USA 33616
Telephone: (813)980-1440
www.Acoustiblok.com
sales@acoustiblok.com