As the cost of materials and labor continue to spiral upward, residential and commercial builders must continuously strive for the perfect balance between cost and quality. The result is often seen in the use of light weight materials, thinner drywall, PVC drain pipes, copper piping and air ducting. While the use of these materials helps to keep cost down, they can also allow an increase in the usual noise caused by heating and cooling systems, expanding and contracting ductwork, and water supply and drain pipes.

**Model LAG 10 Composite** Acoustical Pipe/Duct Lagging, as manufactured by NSTI, can significantly reduce the noise levels associated with light weight construction techniques. LAG 10 Composite combines a barrium sulphate loaded vinyl noise barrier bonded to a reinforced aluminum foil facing on one side, and a 1” quilted fiberglass decoupler on the other side, thus allowing for a one-step installation process.

The vinyl barrier provides mass and flexibility, while the reinforced aluminum foil facing adds increased mechanical strength, weatherability, an attractive appearance, and improved fire retardancy. The 1” thick quilted acoustically absorptive fiberglass decoupler, allows the vinyl barrier to float independently of the noise source, thus maximizing performance.

The quilting forms a matrix of 4” diamond stitched patterns, which encapsulate the glass fibers. When the facing material on these stable encasements is subjected to airborne sound waves, the individual membrane faces respond diaphragmatically (like a drum head) and transmit sound energy into the fiberglass batting core material where it is dissipated as thermal energy.

LAG 10 Composite is easily installed. Simply cut to length and secure in place using FSK tape, duct tape, bands or mechanical fasteners.

**Benefits:**
- **STC** - Up to 27.
- **Wide Temperature Ranges** - From -40° to 220°F.
- **Environment Safe** - Lead and asbestos free.
- **Durable** - Tear and puncture resistance. Offers oil and chemical resistance. Will not rot, shrink, or corrode.
- **Fire Safe** - Meets Class 1 when properly installed. Low smoke and flame spread.
- **Easy Installation** - Using bands, matching lag tape or mechanical fasteners.
- **Moisture Resistant**

**Applications:**
- **Heating/Cooling System Ductwork**
- **Water Supply Lines**
- **Drain Pipes**
- **Alcove Liners for Appliances Such As Dishwashers, Laundry Dryers and Washing Machines**
Model LAG 10 Composite has an operating temperature of -40° to 220°F. The composite is 54” wide and is available in 10' and 30' rolls. The barrier component alone is also available in 54" x 60' rolls.

**Product Properties:**

<table>
<thead>
<tr>
<th>Sound Transmission Loss</th>
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<tbody>
<tr>
<td>Frequency, Hz.</td>
</tr>
<tr>
<td>125</td>
</tr>
<tr>
<td>250</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>1000</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>4000</td>
</tr>
<tr>
<td>STC</td>
</tr>
</tbody>
</table>

**Service Temperature:** -40° to 220°F

**Flammability Per Fed. Test Std. No. 191-5903**

Flame Out: 0 Seconds  
Afterglow: 0 Seconds  
Char Length: 0.2 Inch

**Surface Burning Characteristics per ASTM E84**

Flame Spread Index: 10  
Smoke Developed Index: 40

**Corrosion Resistance:** Excellent for most oils, grease, acids, and mild alkalis.

**Material Thickness:** 0.10” Barrier; 1.0” Composite

**Material Roll Size:** 54” x 30’ Composite  
54” x 30’ Barrier Only

**Composite Weight:** 1.25 PSF

**Thermal Conductivity:** .27

NSTI manufactures a variety of acoustical materials designed to enhance the comfort levels in both residential and commercial buildings. Listed below are a few of these products.

- **Model FWC** (Flexible Wall/Ceiling Composite)  
  Significantly reduces noise propagation through common stud walls.

- **Model DCA** (Decorative Cloth Absorber Panels)  
  Decorative flame retardant cloth covered absorbers that are available in a variety of colors and textures.

- **Model FNB** (Flexible Noise Barrier) limp, tough, high mass vinyl loaded with lead free fillers to increase performance. FNB resists the passage of sound waves and reduces noise transmission.

Please see the respective product data sheet for more information. NSTI also designs and manufactures custom noise control solutions. Please call us to discuss your specific application.

NSTI believes the information contained herein to be accurate as of the publication date. Actual product performance may vary based on specific application conditions.