AttainSilence
Basics of Sound Transmission

### Sound Transmission Class (STC)

| Airborne sound | Floor | Ceiling |

A rating of how well a building partition attenuates airborne sound (e.g. TV or radio). STC is dominated by the mass in an assembly (e.g. concrete vs. wood construction).

**This number is MINIMALLY affected by the floor covering and/or underlayment.**

### Impact Insulation Class (IIC)

| Impact sound | Floor | Ceiling |

A rating of how well a floor-ceiling assembly attenuates impact sounds (footsteps, dropped items). IIC is dominated by material properties and installation methods.

**This number can be SIGNIFICANTLY improved by the proper floor covering and underlayment.**

### Why worry about noise?

#### Health Concerns

- **Sleep Disturbance**
- **Cardiovascular Effects**
- **Psychophysiological Effects**

The World Health Organization links serious health concerns to excessive noise including: sleep disturbance, cardiovascular and psychophysiological effects. These can reduce performance at both school and work and provoke changes in social behavior.

In the Hospitality & Lodging Industry, better control of sound transmission has a direct correlation to higher guest satisfaction. Hotel noise has been cited in online guest reviews as a leading travel complaint since 2010 according to JD Power’s North American Hotel Guest Satisfaction Index.

### AttainSilence achieves Delta IIC ratings as high as 26dB

The best way to treat structure-borne noise is to suppress it at its source – the flooring! Once acoustic energy enters the structure of a building, it becomes much more difficult to control. It can cost 10 times as much to fix a noise problem than address it in the design phase.
Why is AttainSilence effective?

Different building materials transmit sound at different speeds. A vital piece of the AttainSilence System, ECOsilence is a recycled rubber underlayment that greatly reduces structure-borne sound transmission.

Speed of sound in various media

<table>
<thead>
<tr>
<th>Material</th>
<th>Speed (ft/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubber</td>
<td>130-492</td>
</tr>
<tr>
<td>Air</td>
<td>1130</td>
</tr>
<tr>
<td>Cork</td>
<td>1200</td>
</tr>
<tr>
<td>Concrete</td>
<td>10,500</td>
</tr>
<tr>
<td>Wood</td>
<td>10,800</td>
</tr>
<tr>
<td>Glass</td>
<td>13,000</td>
</tr>
<tr>
<td>Brick</td>
<td>13,700</td>
</tr>
<tr>
<td>Stool</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Acoustic Solutions

Ecore offers ECOsilence bases in 3 different thicknesses, and when combined with Attain, will handle all of your acoustic needs.

Acoustic Performance: AttainSilence

- **6” Concrete Subfloor**
- **8” Concrete Subfloor**
- **8” Concrete with Ceiling**
Attain is a collection of luxury vinyl tile designed for a wide range of commercial applications. Available in two traditional glue down thicknesses and one floating/click configuration, Attain is a diverse collection replicating wood planks, textiles, woven surfaces and concrete.

**Attain 2.0 Light Commercial**

2.0mm (0.08”) thickness  
8mil wear layer  
For use in light commercial environments  

**Product Options:**  
Wood: 2.0mm (0.08”) x 6” x 36” planks  
Texture: 2.0mm (0.08”) x 18” x 18” tiles  

**Color Shown:**  
Desert Oak 403

**Attain 2.5 Commercial**

2.5mm (0.10”) thickness  
20mil wear layer  
For use in commercial, heavy traffic environments  

**Product Options:**  
Wood (except Dark Ash): 2.5mm (0.10”) x 6” x 36” planks  
Dark Ash: 2.5mm (0.10”) x 7” x 48” planks  
Texture: 2.5mm (0.10”) x 18” x 18” tiles  

**Color Shown:**  
Smoked Cement 452

**Attain 4.2 Click**

4.2mm (0.17”) thickness  
20mil wear layer  
For use in commercial environments  
No adhesive needed for installation  

**Product Options:**  
Wood: 4.2mm (0.17”) x 7” x 48” planks  
Texture: 4.2mm (0.17”) x 12” x 24” tiles  

**Color Shown:**  
Cream Linen 455
### Attain – Finish Options

<table>
<thead>
<tr>
<th>Wood</th>
<th>Texture</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEACH OAK 400</td>
<td>CREAM LINEN 455</td>
</tr>
<tr>
<td>LIGHT ASH 401</td>
<td>STEEL LINEN 456</td>
</tr>
<tr>
<td>SADDLE OAK 402</td>
<td>CHARCOAL LINEN 457</td>
</tr>
<tr>
<td>DESERT OAK 403</td>
<td>MOCHA LINEN 451</td>
</tr>
<tr>
<td>WEATHERED OAK 404</td>
<td></td>
</tr>
<tr>
<td>GOLDEN ELM 405</td>
<td></td>
</tr>
<tr>
<td>RICH WALNUT 406</td>
<td></td>
</tr>
<tr>
<td>DARK ASH 407</td>
<td></td>
</tr>
<tr>
<td>SMOKED CEMENT 452</td>
<td></td>
</tr>
<tr>
<td>WHITE CEMENT 453</td>
<td></td>
</tr>
<tr>
<td>BUFF CEMENT 454</td>
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<tr>
<td>URBAN CEMENT 450</td>
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</tbody>
</table>
Available in a variety of thicknesses and compatible with most floor finishes, ECOsilence is an underlayment designed to exceed IIC requirements while maintaining a low profile. 2mm can achieve Delta IIC ratings up to 25dB and IIC ratings up to 72 dB. For the most current data, please visit us at ecorecommercialflooring.com. Note: ECOsilence 10 can be used under any wood or tile product, not to be used under LVT.

Perimeter Isolation Strip
Perimeter isolation strips isolate the flooring from the walls to minimize lateral sound transmission. Lightweight and easy to install, the strips are to be used with every ECOsilence installation.

Dimensions:
6mm (0.24") x 2.5" x 50lf
The AttainSilence System combines the varied look of Attain and the reliable performance of ECOsilence for one warranted system that provides an ideal solution to the acoustical challenges in your environment.

**AttainSilence 2.0**
- AttainSilence 2.0.2
  - 2.0mm (0.08") Attain over 2.0mm (0.08") ECOsilence
- AttainSilence 2.0.5
  - 2.0mm (0.08") Attain over 5.0mm (0.20") ECOsilence

**AttainSilence 2.5**
- AttainSilence 2.5.2
  - 2.5mm (0.10") Attain over 2.0mm (0.08") ECOsilence
- AttainSilence 2.5.5
  - 2.5mm (0.08") Attain over 5.0mm (0.20") ECOsilence

**AttainSilence 4.2**
- AttainSilence 4.2.1
  - 4.2mm (0.17") Attain over 1.0mm (0.04") ECOsilence

Feel confident knowing that AttainSilence comes with a full system warranty.
Can a floor do more? Yes.

Since 1871, Ecore has been transforming reclaimed waste into performance surfaces that make people’s lives better. What started with simple cork closures has evolved into a diverse portfolio of products solving complex problems in applications ranging from playgrounds, weight rooms and turf fields to hospitals, hotels and retail environments. We are driven everyday by a simple question, “Can a floor do more?” At Ecore, we believe the answer is “YES.” We are building our company and the products we offer based on the simple notion that floors should elevate beyond current expectations. Our energy is focused on the interaction between people and the surface. We engineer performance well beyond industry standards related to acoustics, ergonomics and safety.

Harvesting the unique power from a myriad of waste streams, Ecore creates products that align—substantial force reduction with a balanced amount of energy return to create dynamic surfaces that are catered to the individual and the application.

People will fall… we will be there to catch them! Professionals will overwork their bodies... we will soften the blow! Footfall sounds will keep someone awake... we will quiet the noise!