NSTI manufactured Model FWC Flexible Wall/Ceiling Composite combines acoustically absorptive fiberglass with a limp high mass loaded vinyl barrier septum. Used as an internal component in stud/gypsum board walls, Model FWC can significantly decrease noise propagation between areas. Where "Cross Talk" is the problem, as is common in areas using suspended ceilings, Model FWC can be used as an overlayment above the ceiling tiles. In this application, the first layer of fiberglass acts as a decoupler, thus increasing the performance of the internal barrier septum. The top fiberglass component further reduces overhead noise by controlling reverberant noise energy often present due to heating and cooling systems.

Benefits:
- **Effective** - High mass barrier septum significantly reduces noise transmission.
- **Durable** - Will not rot, shrink, or otherwise degrade.
- **Economical** alternative to expensive massively constructed walls.
- **Easily Installed** - No special tool requirements.
- **High Performance** - Sound Transmission Class (STC) up to 27.
- **Custom Designs** - Custom solutions are our specialty. Please call our engineering department with your difficult projects.
- **Environment Safe** - Lead and asbestos free.
- **Wide Temperature Range** - From -40° to 225° F. Optional high temperature configurations up to 550° are available.
- **Maintenance Free** - Install and forget.
- **Additional Thermal Insulation** - k = .25

Applications:
- **Internal Component to Standard and Staggered Stud Walls.**
- **Isolation of High Noise Areas - Home Entertainment Theater Rooms, Play Rooms & Family Rooms.**
- **overlayment for Typical Suspended Ceilings.**
- **Secure Conference Rooms & Executive Offices.**
- **Increased Comfort - Use in "Quiet Areas" such as Bed rooms, Studies, Guest Rooms or Patient Quarters.**
- **Underlayment - Use in floors having noisy areas on lower levels.**

NSTI designs custom noise control solutions for your specific applications.
NSTI can assist in the design of wall/ceiling systems that greatly reduce the passage of noise energy between areas. Various levels of performance can be achieved by altering individual components of the system. For example, less critical areas may only require the addition of acoustic material, such as Model FWC, while more critical and noisier areas may require an engineered system. An acoustically engineered system may use multiple layers of Model FWC, gypsum board and construction techniques such as staggered stud constructed walls and NSTI Model RFS Resilient Furring Strips (see Model RFS data sheet) to control the noise. It is crucial that an engineered system is devised before construction begins to achieve optimal performance. NSTI designs custom noise control solutions for your specific applications. Please give us a call today at the number listed below.

**Specifications:** Composite shall consist of a dense barrium sulfate loaded barrier septum laminated between two 1” thick fiberglass absorbers. The barrier septum shall be rated per the following chart. The absorber material shall consist of low density, flexible fiberglass batt (PCF=2.7) and shall be continuously bonded to the barrier septum.

**Availability:** Model FWC is available in standard roll form, 54” width x 30’ length or in custom sizes per specific application. Model FWC is available with a 0.5 and 1.0PSF barrier septum. The performance values for these versions are documented in the table in the next column.

**Engineer's Note:** In order to achieve optimal performance it is crucial that a system is designed before construction begins. Please let our engineers help you increase the performance of your application.

**Acoustical material to be Model FWC by Noise Suppression Technologies, Inc.**

<table>
<thead>
<tr>
<th>NSTI</th>
<th>Composite</th>
<th>Frequency (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Weight Lbs./sq. ft.</td>
<td>125</td>
</tr>
<tr>
<td>FWC50</td>
<td>0.9</td>
<td>11</td>
</tr>
<tr>
<td>FWC100</td>
<td>1.4</td>
<td>15</td>
</tr>
</tbody>
</table>

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