WAVEBAR®

This Installation Guide provides recommendations for the application of Wavebar® to reduce crosstalk ceiling noise.

WORKING HEALTH AND SAFETY

- Personal Protection Equipment (PPE), including eye protection, gloves and safety clothing is recommended.

  Note: This product is suitable for professional and experienced users only.

DESCRIPTION

Wavebar® barriers are dense, flexible curtains that reflect noise. They are:

- more flexible, practical and economical than full height partitions
- improves confidentiality by virtually eliminating noise from adjacent rooms
- provides cross talk privacy and peace of mind in director’s offices, board rooms
- consultation rooms, computer rooms, hallways, nurseries, etc.
- easy to install - ideal for refurbishments. Simply suspend from slab to ceiling tiles, no additional framework is necessary.
- proven project history - wavebar has been utilised in office fitouts and refurbishments for more than three decades as a safe and reliable way to reduce room-to-room noise transmitted via a common ceiling.

applications

- Inside cavities or over lightweight wall, ceiling and floor constructions. Ideal for home theatre rooms, office partitions, meeting rooms
- Between the plenum chamber of a floor slab, the roof and adjoining partition walls
- Can be laminated onto lightweight structures to damp vibration and reduce airborne noise
- Portable acoustic curtains and screens (See Wavebar-Install-304-4IG for more information)

Please refer to our website pyroteknc.com for latest information
1. **Installation to slab**
   Fix metal track or batten and wavebar to slab by mechanical means (masonry nails). Silicone/mastic is recommended to ensure an acoustic seal between Wavebar and slab.

2. **Installation to ceiling**
   Allow wavebar to drape down onto ceiling on both sides of the ceiling grid. Cut around ceiling suspension hangers.

3. **Installation around pipework or ducting**
   - Cut a slit from edge of sheet to pipework location, cut flange to diameter of pipe.
   - Move pipe or wavebar into location before closing flaps behind the pipe.
   - Ensure all junctions of ducting and wavebar are securely taped, mechanically fixed or sealed with plasticiser resistant mastic.

4. **Installation joins**
   Joins should be overlapped by a minimum of 50 mm and firmly secured by screws/rivets every 100 mm or join with plasticiser resistant mastic.

5. **Return air plenums (suggested treatments only)**
   Where medium to low acoustic ratings are required return air flow can be channelled through spacing left in baffle above doorways. Where high acoustic ratings are specified, acoustic ducting should be used.
ACOUSTIC DATA

The following figures represent the tested room-to-room transmission loss achievable when wavebar is utilised in the ceiling plenum between the partition/ceiling and the slab.

- No Wavebar - CAC = 35
- Wavebar 2 kg - CAC = 44
- Wavebar 4 kg - CAC = 48
- Wavebar 8 kg - CAC = 50

The above figures have been documented as a result of a testing program completed at an accredited laboratory.

<table>
<thead>
<tr>
<th>Product</th>
<th>Roll width</th>
<th>Roll length</th>
<th>Roll diameter</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>wavebar 2kg/m²</td>
<td>1380mm</td>
<td>10m</td>
<td>200mm</td>
<td>28kg</td>
</tr>
<tr>
<td>wavebar 4kg/m²</td>
<td></td>
<td>5 or 10m</td>
<td></td>
<td>28 - 56kg</td>
</tr>
<tr>
<td>wavebar 8kg/m²</td>
<td></td>
<td>5m</td>
<td></td>
<td>52kg</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

Material
The acoustic sound barrier shall be wavebar mineral loaded PVC as supplied by Pyrotek, comprising barium powder spread evenly throughout and encapsulated within a flexible PVC sheet supported by a polyester fabric. The density shall be a minimum of 1.8g/cm³.

Performance
The wavebar barrier shall be 2 kg to achieve 44 CAC, 4 kg to achieve 48 CAC, 8 kg to achieve 50 CAC as documented by full test reports from an accredited laboratory.

Installation
The wavebar barrier shall be installed in strict accordance with the manufacturer’s recommended procedures as detailed in this wavebar brochure. Care must be taken to seal around pipe or duct penetrations to eliminate sound leakage.

Please contact Pyrotek® for further information or detailed advice on your specific application.