

TECHNICAL INFORMATION SHEET



Product Description

Wave Baffles provide a cost effective method for reducing reverberation in larger spaces with high ceilings. Improved acoustics and noise reduction in gymnasiums, arenas, natatoriums, multi-purpose and other large spaces is achieved utilising Wave Baffles.

Wave Baffles are designed for horizontal suspension in a wave-like form at the ceiling level. This provides high levels of sound absorption for reducing reverberation in large, high cubic volume rooms. As an option the baffle can be finish faced on both sides and hung vertically as an acoustical banner.

The Wave Baffle is produced in custom sizes with suspension hardware that can be engineered to create the desired amount of vertical drop between suspension points. The typical vertical drop at the mid-point of the baffle is 152mm or greater. A variety of finishes are available for baffles up to 1,220mm wide and 9,000mm long.

Two types of Wave Baffle are available:

- Type SE: Sewn Edges with sailcloth or other fabric facing
- Type HB: Heat Bonded vinyl encapsulates the fibreglass blanket Both types may be suspended as horizontal "clouds" or vertical baffles.

Physical Information

A fibreglass blanket is encapsulated in a sewn sailcloth fabric with a woven scrim backer (Type SE) or a heat sealed vinyl covering on both sides (Type HB). Grommet or suspension hardware is located at the perimeter as required.

Type SE Wave Baffles utilise a sailcloth (nylon) or a Guilford fabric facing on the exposed side and edges of the baffle. The facing is sewn at the perimeter into the fibreglass blanket and woven scrim backer. For vertically hung baffles, the sailcloth facing can be applied on both sides. Attachment hardware is typically grommets built into the baffle. Type SE baffles provide greater durability.

Type HB Wave Baffles utilise a vinyl covering that fully encapsulates the fibreglass blanket with all edges heat sealed. Type HB baffles are the most economical. Optional perforated vinyl available.

Applications

- Larger spaces with high ceilings that require reduced reverberation
- Gymnasiums
- Natatoriums
- Arenas
- Multi-Purpose Rooms

Technical Information

Acoustical Performance

Frequency (Hz)	125	250	500	1000	2000	4000
Type SE	0.46	0.80	1.26	1.47	1.27	1.05
Type HB	0.41	0.64	1.00	1.33	1.64	0.29
Type HB (perfed)	0.51	0.56	0.93	1.12	1.08	0.88

Tested per ASTM C423-90a in a suspended position similar to a typical installation.

Notes: SE is sailcloth with sewn edges. HB is heat bonded vinyl (solid). Vinyl can be perforated to improve high frequency absorption.

Note to Designer: Wave Baffles are tested in a Type J mounting that replicates a standard horizontally draped installation. A type E400 mounting (used by others) is not recommended for testing because the baffles are framed in on all sides producing misleading absorption coefficients for typical installations.

Fire Test Data

All components meet the class A rating as tested by ASTM E 84.

Minimum Drop Requirement

CMS Acoustics recommends that the middle of the Wave Baffle be allowed to drop at least the minimum distance as described in the following table. There is no limit to the maximum drop allowed.

Baffle Length (mm)	Minimum Drop (mm)
3,048	76
4,572	152
6,096	305
7,620	457
9,144	610

IMPORTANT: Directions for use are given for guidance only and are not intended to form part of any contract. They should be varied or adapted to suit your particular materials or conditions of use. Goods supplied by the company are made to approved standards from the highest quality raw materials but no warranty or guarantee is given as to their suitability for any particular purpose or application, and no liability is accepted for any loss or damage arising directly or indirectly from the use of the Company's products irrespective of any information given to us as to intended use of such products. It is therefore recommended that prospective users should test a sample of this product under their own conditions to satisfy themselves that the product is suitable for the purpose intended.