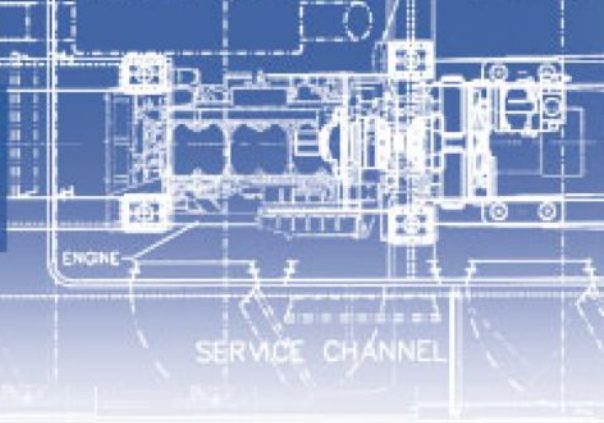


# NEW ENGLAND SOUNDPROOFING



## Technical Specifications SOUND BARRIER



Sound Barrier is a specially developed mass layer product offering superior acoustic transmission loss combined with good damping properties. Our Mass Loaded Vinyl sheet offers STC Ratings up to 32. It is a low cost material used for a variety of marine and land based applications. This Sound Barrier can be installed as a suspended barrier. This typical application would improve transmission loss between adjoining spaces. The combination of the damping and stiffness properties of Sound Barrier gives it excellent performance as a combined mass layer and damper when applied to partition panels and lightweight structural bulkheads, reducing transmission of both airborne and structure-borne noise. Application direct to panels is best done with pre-applied pressure sensitive adhesive (PSA), backed up by minimal fasteners or staples.

Sound Barrier exhibits the strength and workability of conventional reinforced barrier materials, without using a fabric layer. This innovation of integral strength and tear resistance provides a barrier that is suitable for suspension with mechanical fastenings, without the cost normally associated with a fabric reinforced laminated product. Sound Barrier is sold by the square foot on 4.5' wide rolls up to 500 linear feet. Sound Barrier 1/8" is Class A fire rated.

NEW ENGLAND SOUNDPROOFING

ALL YOUR SOLUTIONS TO YOUR SOUND PROBLEMS

## The Material

New England Soundproofing Sound Barrier is produced on 54ft (1.37m) wide rolls. Length of roll varies by product density. The following densities are available in quantity or on a per square foot basis;

## Surface Density

0.5 lb/sf (2.44 kg/m<sup>2</sup>)  
 1.0 lb/sf (4.88 kg/m<sup>2</sup>)  
 1.5 lb/sf (7.32 kg/m<sup>2</sup>)  
 2.0 lb/sf (9.76 kg/m<sup>2</sup>)

## Thickness

1/16" (1.59mm)  
 1/8" (3.18mm)  
 3/16" (4.76mm)  
 1/4" (6.35mm)

## Typical Physical Properties

|                                                   |             |
|---------------------------------------------------|-------------|
| Thickness (in)                                    | 1/16 to 1/4 |
| Weights (1lb/ft <sup>2</sup> )                    | .50 to 2.0  |
| Flammability,<br>UL 94 HF-1<br>MVSS 302           | MEETS       |
| Specific Gravity<br>(Barrier)<br><br>ASTM D 798   | 1.80        |
| Hardness<br>(Barrier)<br>Shore A 2<br>ASTM D 2240 | 90 Nominal  |

|                                          |            |
|------------------------------------------|------------|
| Stiffness, MPA<br>(Barrier)<br>ASTM 749  | 19.60      |
| Tensile, PSI<br>(Barrier)<br>ADSTM D 412 | 407        |
| Elongation, %<br>(Barrier)<br>ASTM D 412 | 120        |
| Tear, lbs/1"<br>(Barrier)<br>ASTM D 624  | 77         |
| Temp Range,<br>Degrees Fahrenheit        | -40 to 255 |

## Typical Acoustic Properties

### Transmission Loss of Tuff-Mass

| Frequency, Hz | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 | STC |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|
| 2 lb/ft, sq   | 18  | 19  | 18  | 19  | 19  | 23  | 26  | 27  | 28  | 32  | 34   | 35   | 37   | 38   | 40   | 42   | 43   | 43   | 32  |
| 1 lb/ft, sq   | 13  | 14  | 13  | 14  | 14  | 18  | 22  | 23  | 24  | 27  | 29   | 29   | 33   | 34   | 35   | 36   | 37   | 37   | 27  |
| .5 lb/ft, sq  | 8   | 5   | 6   | 7   | 12  | 13  | 14  | 15  | 17  | 19  | 22   | 22   | 24   | 26   | 28   | 30   | 32   | 32   | 20  |