NOISE BARRIER

Dynaplate™

INCREASE BASS

From The Makers of Dynamat®

» Constrained Layer Damping Material
» Reinforces Body Panels
» Maximum Sound Pressure Level (SPL)
» Peel-And-Stick Application

Dynaplate is perfect for maximizing Bass and for light-weight applications!

Dynaplate is an exotic constrained layer damping material that structurally reinforces your car body panels for maximum SPL. Using only a two-layer set-up yields non-flexible panels that prevents the "ballooning effect" common in SPL vehicles. Where performance is a concern, Dynaplate is the sound choice.

Dynaplate is an extremely light-weight damping material with a pressure sensitive adhesive for easy installation. At only 0.16 pounds per square foot, it is the lightest damping material available in the marketplace. Dynaplate is perfect for import racers, when you want to keep weight to a minimum. Where weight is a concern, Dynaplate is the sound choice.

- **Specifically designed to maximize SPL.**
- **Meets dB Drag racing , USAC and IdBL rules.**
- **Used in a multiple layer set-up, Dynaplate flexes less than car sheet metal.**
- **Thinnest and lightest damping material on the market.**

FOR USE THROUGHOUT YOUR VEHICLE

DYNAPLATE

DynaPlate 15 sq.ft.
(1.39 sq.meters)
3 shts. 5 sq.ft. each
(0.46 sq.meters)
Part No. 13105

HIGHEST QUALITY MADE IN USA

Dynamat Inc.
3042 Symmes Road | Hamilton, OH 45015
513.860.5094 | **www.dynamat.com**

Dynaplate™

SPECIFICATIONS | PROPERTIES | DATA

DESCRIPTION

Dynaplate is a light-weight aluminum constrained-layer vibrational damper. Dynaplate conforms with effort to sheet metal and other hard substrates. Material performance is optimized for temperature ranges between -10˚ C to +60˚ C (14˚ F to+140˚ F) Material can withstand temperature extremes between -54˚ C to +170˚ C (-65˚ F to +350˚ F) and is highly resistant to aging.

ACOUSTIC PROPERTIES

The acoustic loss factor "n" is used as a measure of ability to damp structure-borne sound. It states how much vibrational energy (in steel sheets for instance) is converted to heat rather than sound. For constructions containing several layers of damping material, the combined loss factor "n comb" is used. The theoretical maximum loss factor is 1 (no vibration). An undamped 1mm thick steel panel has a loss factor of roughly 0.001 at 200 Hz. Dynaplate applied to that panel would increase the loss factor to 0.17 @ +20˚ C (+68˚ F) Multiple layers of Dynaplate can be used for significant improvement of sound damping.

APPLICATIONS

Dynaplate can be die cut to shape and placed onto the body surface after sheet metal cleaning operation and prior to paint system (typically at the sealer application operation) or on painted panels. Dynaplate is used as treatment for metal panels, partitions, ducts, doors, bins, panels etc. in railroad cars, buses, automobiles and ships. It is also used for ventilation ducts, relay cabinets, steel furniture, home appliances, sink units, computer equipment and machine tools and for many other purposes.

INSTALLATION

Dynaplate should be cut to the desired size before the release liner is removed. It may be cut with scissors, knife or die. Remove dust, grease, moisture, and other foreign matter from the application surface. Peel off the release liner. The simplest application technique is to bend the mat slightly and attach it along its shortest edge. The mat is then pressed firmly into place, preferable with a roller for larger pieces. This reduces the risk of leaving air pockets, which reduce the sound damping capacity. The temperature of Dynaplate and application surface should not be below room temperature during fitting. Heating the material is not necessary.

SPECIFICATIONS

Appearance:
10 mil 99.995% pure aluminum with aerospace damping adhesive, craft paper release liner

Thickness:
0.014" (0.51mm)

Mass:
0.17lb./ft^2 (0.83kg/m^2)

Acoustic Loss Factor @ Temperature
(Using ASTM method E756 @ 200 Hz):

0.05 @ +14˚ F (-10˚ C)

0.08 @ +32˚ F (+0˚ C)

0.11 @ +50˚ F (+10˚ C)

0.17 @ +68˚ F (+20˚ C)

0.15 @ +86˚ F (+30˚ C)

0.13 @ +104˚ F (+40˚ C)

0.11 @ +122˚ F (+50˚ C)

0.08 @ +140˚ F (+60˚ C)

Temperature Range (Optimal Performance):
-10˚ C to +60˚ C (14˚ F to+140˚ F)

Temperature Range (Resistance):
-54˚ C to +177˚ C (-65˚ F to +350˚ F)

Adhesive Peel Strength:
12.9 lbs/inch (22.5N/cm) on cold steel

Chemical Resistance:
Resistant to water and mineral oils

Federal Standards Tests:
FMVSS 302: Meets

Handling And Application:
Material must be stored at room temperature for best application

Storage Information:
Number Of Sheets In Stack: 200 max
Material must be stored horizontally in its wrapping

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