

Model SWA

(Scrim Wrapped Absorber)

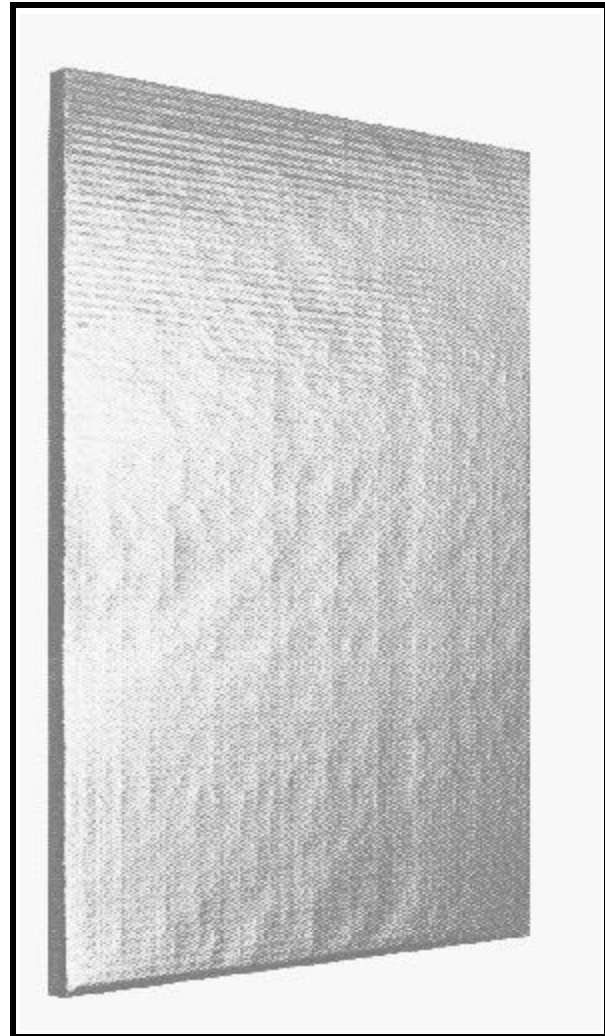
Model SWA Scrim Wrapped Absorber, as manufactured by NSTI, is a highly efficient tuned noise absorber designed for mid to low frequency absorption. Model SWA consists of a semirigid fiberglass core completely encapsulated within a 2 mil thick reinforced foil/polypropylene cover.

The absorber is available in standard sizes up to 4' x 8' and in thicknesses 1 and 2 inches. NRC's are 0.75 and 0.94, respectively, when tested in a number 4 mounting (Direct Mounted). SWA's "Flame Spread" and "Smoked Developed" ratings of 5 each provides suitability for applications requiring low flame and smoke emissions.

The board like absorbers offer good structural integrity and damage resistance. They can be used in temperatures ranging from -40° to 450°F.

Benefits:

- .. **NRC** - Up to 0.94.
- .. **Tuned** - for mid and low frequency response.
- .. **Wide Temperature Ranges** - from -40° to 450°F
- .. **Environment Safe** - Lead and asbestos free.
- .. **USDA/FDA Certified**
- .. **Custom Designs** - custom sizes and thicknesses.
Available in reflective foil and bright white polypropylene facings.
- .. **Durable** - Tear and puncture resistance. Offers oil and chemical resistance. Will not rot, shrink, or cause metal corrosion.
- .. **Fire Safe** - Low smoke and flame characteristics.
- .. **Easy Installation** - using adhesives or mechanical fasteners.
- .. **Cleanable** - Steam cleanable.
- .. **Moisture Resistant**



Applications:

- .. **Wall Mounted Panels** - reduces in plant ambient noise levels.
- .. **Absorptive lining** for existing metal housings.
- .. **Duct Lining**
- .. **Engine Housing Liners**
- .. **Excellent alternative** to drop in ceiling tiles.

NSTI designs custom noise control solutions for your specific applications.

Noise Suppression Technologies, Inc.
Model SWA - Performance Data

MATERIALS EMPLOYED

Aluminum Foil	0.0003"
Scrim	Fiberglass Scrim Reinforcement 4/inch x 4/inch
Adhesive	Flame Resistant
Film	0.0015" UV Stabilized White Polypropylene

PHYSICAL PROPERTIES

Basis Weight	15 lbs./MSF ± 10%
Permeance (MVTR) (ASTM E-96) Dry Cup, Proc. A.	0.02 Perms Maximum
Mullen Bursting Strength (ASTM D-774)	85 P.S.I. Minimum
Puncture Resistance—Beach (ASTM D-781)	100 Units Minimum
Tensile Strength (ASTM D-828)	M.D. 40 lbs./In. Width Avg. CD. 40 lbs./In. Width Avg.
Bond	Unable to delaminate without destroying the facing.
Light Reflectance (ASTM C-523 [500 nm])	90.5%

ENVIRONMENTAL TESTING

Weather Resistance	No corrosion or delamination at 120°F, 95% relative humidity for 30 days
Temperature Resistance	The laminate withstands 4 hours at 150° F without delamination.
Water Resistance	Withstands 24 hour H ₂ O immersion at 70°F without delamination.
Cold Weather Flexibility Masland Cold Crack (ASTM D-1790)	At -40°F passes with no cracking of the polypropylene surface.
Dimensional Stability (ASTM D-1204)	AD.± 0.125% M.D. ± 0.125%



Sound Absorption Coefficients		
1" and 2" Thick #4 Mounting		
Frequency,Hz	1" Thick	2" Thick
125	0.13	0.26
160	0.15	0.35
200	0.21	0.62
250	0.32	0.80
315	0.50	1.01
400	0.73	1.18
500	0.95	1.23
630	1.06	1.17
800	1.10	1.08
1000	1.08	1.00
1250	0.93	0.93
1600	0.76	0.81
2000	0.62	0.71
2500	0.55	0.64
3150	0.53	0.53
4000	0.46	0.43
NRC	0.75	0.94

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

SWA
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