

# Proudfoot

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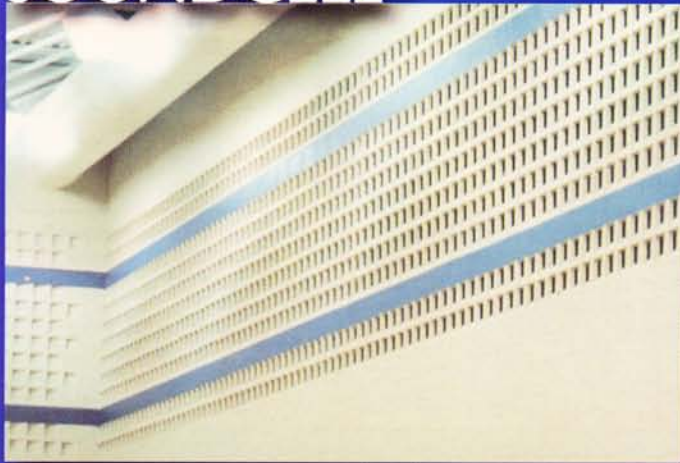
ARCHITECTURAL ACOUSTICS • INDUSTRIAL NOISE CONTROL  
[www.theproudfootcompany.com](http://www.theproudfootcompany.com)

## SOUNDBLOX®

**Sound Absorbing  
Structural Masonry Units**  
[www.soundblox.com](http://www.soundblox.com)



## SOUNDCELL®



**Architectural  
Acoustical Masonry Units**  
[www.soundcell.com](http://www.soundcell.com)

**Acoustical Products**  
[www.noisemaster.com](http://www.noisemaster.com)

## NOISEMASTER®





# SOUNDBLOX®

## Proudfoot Architectural Acoustics

The Proudfoot Company, Inc. is an industry leader in acoustical correction and noise control. Since 1965, Proudfoot has worked with architects and engineers to control noise levels on a wide variety of projects through the incorporation of its SOUNDBLOX products. Tens of millions of these popular units are in place around the world today.

## An Introduction to SOUNDBLOX

SOUNDBLOX units are the solution to acoustical correction and noise control problems in masonry construction. Attractive, economical, and efficient sound absorbing units, SOUNDBLOX are made locally near the jobsite by carefully selected quality concrete block producers. These producers employ patented Proudfoot molds designed to fit standard automatic block machines — thereby assuring uniform quality and acoustical efficiency of each SOUNDBLOX unit.

## SOUNDBLOX Masonry Units are Structural and Load-bearing

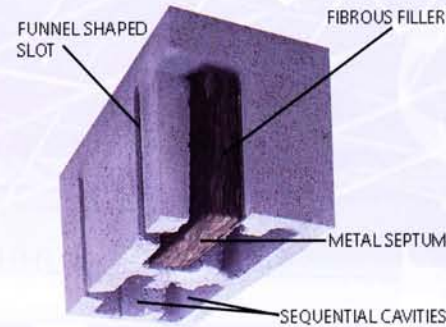
SOUNDBLOX have the same compressive strength as standard hollow concrete masonry units of similar composition. Installed conventionally with little or no added labor, the in-place cost of SOUNDBLOX is low by comparison to most other acoustical materials. Rugged and durable in construction, SOUNDBLOX masonry units are an excellent choice for industrial settings, gymnasiums, mechanical equipment rooms, and comparable installations.

## A Close Up Look At SOUNDBLOX

SOUNDBLOX derive their excellent sound absorption from a unique cavity-slot resonator construction. The cavities are closed at the top and the slots allow the cavities to function as damped (Helmholtz) resonators — an excellent sound absorption tool at low frequencies. The slots of the RSR, RSC and Q Type units are funnel-shaped for superior acoustical performance.

The amount of sound absorbed by properly installed SOUNDBLOX is increased dramatically when units incorporating a metal septum (membrane or divider) and fibrous filler in the cavity are specified. Together with funnel-shaped slots, these units provide higher levels of sound absorption across a wider range of frequencies. In addition to sound absorption, SOUNDBLOX

BLOX walls have a superior sound transmission loss (STL) performance rating when compared to walls of ordinary hollow concrete blocks of similar composition.



## SOUND TRANSMISSION LOSS CHARACTERISTICS

		FREQUENCY – Hertz						
Size	Type	125	250	500	1000	2000	4000	STC
6"	A-1	38	38	44	51	58	58	<b>49</b>
8"	RSC	36	44	50	54	58	56	<b>53</b>
12"	RSC/RF	45	46	52	58	62	61	<b>56</b>
12"	RSC/RF*	44	48	57	65	67	67	<b>60</b>

The sound transmission loss values shown above were determined in accordance with ASTM methods by ETL Laboratories in Cortland, NY, and Riverbank Laboratories in Geneva, IL. The SOUNDBLOX® walls were sealed on the unslotted side using two coats of Thoroseal® before testing. \* This wall was tested with the two rear cores filled with sand. See pages 3, 4 & 5 for NRC test results.

The Proudfoot Company Inc., the pioneering innovator in Acoustical Concrete Masonry Units (ACMU's), announces the introduction of the alternative "Green" filler insert. For those architects who have LEED®'s points on their minds, this new recycled material offers comparable if not superior, acoustical performance. Beyond this, by substituting the new "Green" (in name only) filler insert for Traditional fiberglass inserts in our Soundblox® or SoundCell® ACMU's, you can make a legitimate claim for the following LEEDS points.

### Indoor Environmental Quality (EQ) Credit

Low /Emitting Materials (the "Green" filler insert contains no formaldehyde or resins and does not off-gas) 1 pt. Credit 4.4

Innovation in Design Credits (ID) Credits (1-4 pts 1.1-1.4)

Enhanced Acoustical Performance

Innovative Material Choice

### Materials & Resources (MR ) Credits

Resource Reuse (either recycled or reused cotton fibers) 1-2 pts. Credit 3.1-3.2

Recycled Content (the "Green" filler insert contains over 75% post industrial recycled content) 1-2 pts. Credit 4.1-4.2

Rapidly Renewable Material (Cotton) 1 pt. Credit 6.0

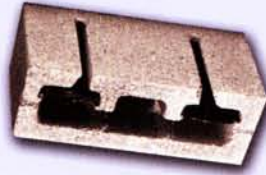
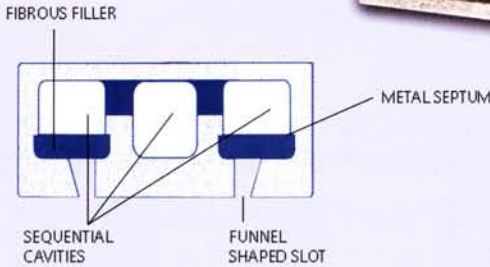
Local/Regional Materials (Made in the USA) 1-2 pts. Credit 5.1-5.2





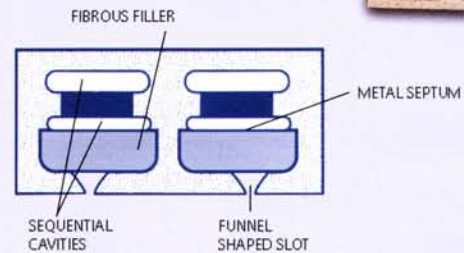
Type RSC 4" & 6" have three (3) sequential cavities, two (2) flared slots, metal septa and fibrous fillers, and an NRC rating of .80 and .85 respectively.

## Type RSC (6")



Type RSC 8" & 12" have four (4) sequential cavities, two (2) flared slots, metal septa and fibrous fillers, and an NRC rating of .80 and .85 respectively.

## Type RSC (12")



## Sound Absorption Coefficients — Type RSC

Size	Type	Surface	Exposed Slots / Cavities	FREQUENCY – Hertz																	NRC
				125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	
4"	RSC	PAINTED	2/3	.18	.22	.36	.64	1.12	1.16	1.02	.89	.76	.72	.76	.77	.80	.73	.68	.58	.65	.80
6"	RSC	PAINTED	2/3	.48	.70	.93	1.14	1.05	.97	.91	.84	.75	.76	.77	.70	.67	.68	.56	.51	.59	.85
8"	RSC	PAINTED	2/4	.48	.85	1.17	.99	.90	.88	.98	.79	.62	.58	.60	.61	.70	.69	.70	.64	.51	.80
12"	RSC	PAINTED	2/4	.57	*	*	.76	*	*	1.09	*	*	.94	*	*	.54	*	*	.59	*	.85

The above sound absorption data was determined by tests conducted at Geiger and Hamme Acoustical Laboratory in strict compliance with ASTM C423 specifications. Actual installed performance may vary.  
\* Measurements at these frequencies were not taken.

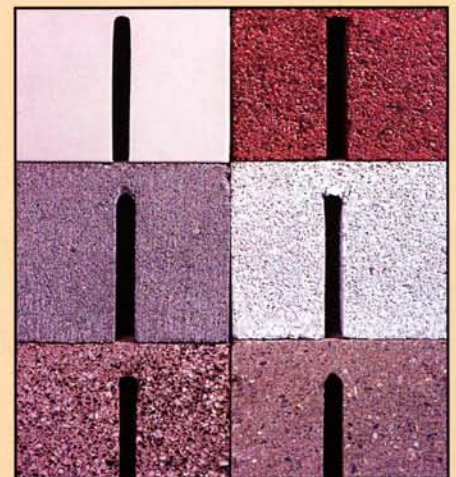
## Architectural Finishes

SOUNDBLOX® can be painted and are available in a variety of colors and architectural finishes, including:

- Ground-Face
- Burnished
- Decro-Face®
- Spectra-Glaze®
- Split-Rib®

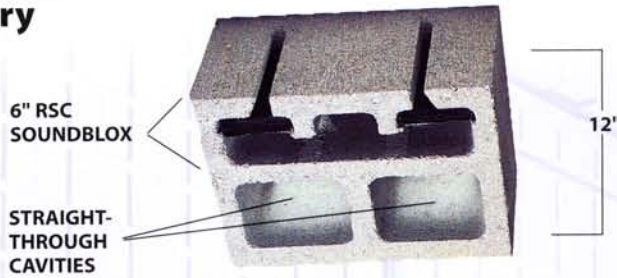
Check your local SOUNDBLOX® producer for available architectural finishes in your area.

\*Split-Rib (Type RSR) are available in 8" thickness only.  
Decro-Face® is a trademark of E.P. Henry, Woodbury, NJ.  
Spectra-Glaze® is a trademark of The Burns & Russell Co., Baltimore, MD.





## Reinforced Masonry



STRAIGHT-THROUGH CAVITIES



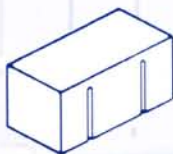
## SOUND ABSORPTION COEFFICIENTS — TYPE RSC/RF

Size	Type	Surface	Exposed Slots / Cavities	FREQUENCY — Hertz																	
				125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	NRC
8"	RSC/RF	PAINTED	2/5	.18	.22	.36	.64	1.12	1.16	1.02	.89	.76	.72	.76	.77	.80	.73	.68	.58	.65	.80
10"	RSC/RF	PAINTED	2/5	.18	.22	.36	.64	1.12	1.16	1.02	.89	.76	.72	.76	.77	.80	.73	.68	.58	.65	.80
12"	RSC/RF	PAINTED	2/5	.48	.70	.93	1.14	1.05	.97	.91	.84	.75	.76	.77	.70	.67	.68	.56	.51	.59	.85
12"	RSC/RF-4	PAINTED	2/5	.18	.22	.36	.64	1.12	1.16	1.02	.89	.76	.72	.76	.77	.80	.73	.68	.58	.65	.80

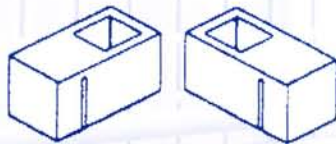
The above sound absorption data was determined by tests conducted at Geiger and Hamme Acoustical Laboratory in strict compliance with ASTM C423 specifications. Actual installed performance may vary. \* Measurements at these frequencies were not taken.

## Left-Hand and Right-Hand Units

For situations requiring a full core for vertical reinforcement, SOUNDBLOX units with open cavities on either the left- or right-hand side are available. When used in conjunction with standard SOUNDBLOX units, reinforcing bars and grout can be incorporated easily and efficiently. SOUNDBLOX left-hand and right-hand units have been approved for use in reinforced masonry construction and are allowed 90% of the shear value of ordinary hollow concrete block.



STANDARD UNIT

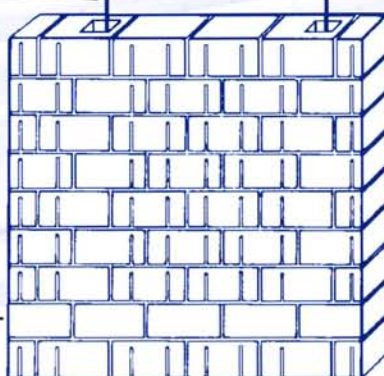


LEFT- AND RIGHT-HAND UNITS AVAILABLE IN 8" A-1, 8" Q AND 8" & 12" RSC

Open top, non-slotted cavities for reinforcing bars and grout.

Spacing of vertical reinforcing at multiples of 16" as required (i.e.; 32", 48", etc.).

A course of standard bond beam used for horizontal reinforcement as needed.



## Type RSC/RF

Special SOUNDBLOX unit providing the sound absorption of Type RSC units. Incorporates a metal septum and filler, and two additional large, straight-through cavities, allowing specification of this unit in applications requiring vertical reinforcing, thermal insulation or accommodations for vertical conduits and/or pipes. Available in 8", 10" and 12" thicknesses. For specific dimensions and structural property details of RSC/RF units, contact the Proudfoot Company, Inc.

## Type 12" RSC/RF4

For additional groutable area

STRAIGHT-THROUGH CAVITIES



4" RSC SOUNDBLOX

STRAIGHT-THROUGH CAVITIES



Split face on exterior for single wythe construction. (Available in 12" RSC/RF and 12" RSC/RF4 only)