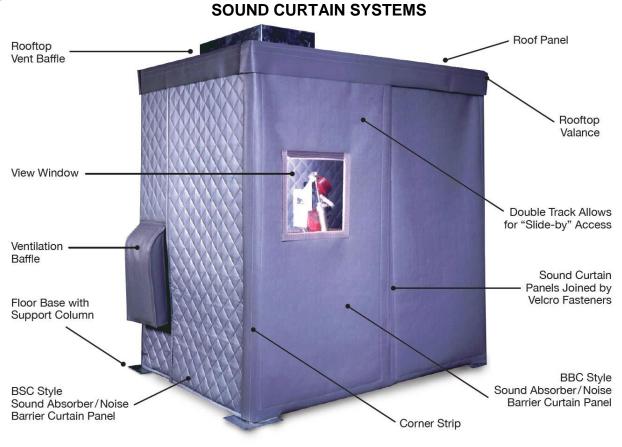
Noise and Vibration Control





IN-PLANT NOISE CONTROL APPLICATIONS:

dB Engineering's sound curtain systems offer significant noise reduction with high STC AND NRC acoustical ratings. They can be supplied as a partial or complete enclosure around noisy industrial equipment including:

COMPRESSORS, PUMPS, GENERATORS, BLOWERS, FANS, GRANULATORS, AND PRESSES

Also suitable for larger complete enclosures including:

MANUFACTURING EQUIPMENT, TEST CHAMBERS, AND MACHINERY ENCLOSURES

Noise and Vibration Control

Features of dB Engineering Sound Curtain Systems

In addition to very effective, high-performance sound curtain panels, a successful functional acoustical enclosure often requires a wide array of features and options allowing for equipment access, visibility and ventilation.

Modular panels join together to form any configuration required:

2 Sided partial enclosures

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- 3 Sided partial enclosures
- o 4 Sided full enclosures
- 4 Sided full enclosures with roof
- Framing systems are available for floor mount, wall mount, ceiling mount or suspended by threaded rod.
- A variety of framing systems are available including a heavy structural steel frame system for large enclosures.
- Double track systems; available for slide by access. Every panel can be a door.
- Durable construction for long service life in even severe industrial conditions.

- Rigid roof panels are available for maximum noise reduction.
- Clear vinyl windows are available for visibility and can be sewn on or removable.
 - Side air intake vent baffles allow air into the enclosure without compromising acoustical performance.
 - Roof top vent baffles made from rugged sheet metals are lined with sound absorption material.
 - Curtain panels can be field cut to work around obstacles.
 - Easy to install, relocate or modify.
- CAD drawings provided with every order.
- Short lead time even for custom enclosures and expedites available if needed even faster.
- Economical alternative to rigid metal acoustical enclosures.

Can be used as partition dividers, noise barrier walls, hood, or shroud covers

TRACK & HARDWARE



dB Engineering, Inc. | 1936 Lone Star Rd. | Mansfield, TX 76063 1-800-nonoise (1-800-666-6473) | www.800nonoise.com

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Noise and Vibration Control



"BBC" STYLE (BARRIER BACKED COMBINATION):

- Modular acoustical curtain panels feature grommets at top and Velcro fasteners along each edge.
- Sound absorptive quilted fiberglass on one side of reinforced mass loaded barrier material
- Reinforced barrier back offers excellent durability and abuse resistance
- Utilized as fixed panels and sliding doors on acoustical curtain enclosures
- Suitable for outdoor applications
- Custom fabricated for "acoustical jackets" on blowers, fans or compressor housings
- Also available in bound or unbound rolls
- STC ratings up to 37, NRC ratings up to 1.05
- Class A flammability rating (per ASTM E-84)



"BSC" STYLE (BARRIER SEPTUM COMBINATION):

- Sound absorptive faced quilted fiberglass (gray, white, tan or black) on both sides of loaded vinyl noise barrier material.
- Modular acoustical curtain panels feature grommets at top and Velcro fasteners along each edge.
- Utilized as perimeter walls, separator walls, or divider partitions between noise sources.
- Utilized as absorber/barrier composite liner in enclosures, rooms or buildings.
- Outer layer of quilted fiberglass adds additional sound absorption to environment.
- Also available in bound or unbound rolls.
- STC ratings up to 33, NRC ratings up to .85.
- Class A flammability rating (per ASTM E-84).

Noise and Vibration Control

ACOUSTICAL DATA:

The **most effective** noise reduction products combine **both sound absorption and noise barrier properties**. Tested under strict compliance to appropriate ASTM standards, we offer the following results:

Sound Transmission Loss (dB) per Octave Band Frequency									
	тнк.	WT.	125	250	500	1000	2000	4000	STC
BBC-13-2"	2″	1.5	13	20	29	40	50	55	32
BBC-13	1″	1.3	11	16	24	30	35	35	27
BBC-13-2 LB-2"	2.5″	2	19	25	33	46	53	58	37
BSC-25	2″	1.5	12	16	27	40	44	43	29
BSC-25-2 LB	2″	2.5	19	22	28	40	56	61	33
BB-RP Roof	2″	2	18	24	28	37	45	46	31
Panel									

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Per ASTM E 90

Sound Absorption Data – Absorber Component Random Incident Sound Absorption Octave Band Center Frequencies (Hz)								und
Product	тнк.	125	250	500	1000	2000	4000	NRC
BBC	1″	.12	.47	.85	.84	.64	.62	.70
BBC	2″	.07	.27	.96	1.13	1.08	.99	.85
BSC	2″	.45	.96	.87	.66	.47	.30	.75
BBC	4"	.21	.89	1.09	1.17	1.13	1.07	1.05

Per ASTM C 423

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	Flammability Rati	ngs				
Product	Descriptor	Flame	Smoke			
		Spread	Developed			
BSC- 25	Vinyl faced 1" quilted					
	fiberglass on both sides					
	of a 1 lb. PSF non-	23	30			
	reinforced loaded vinyl					
	barrier septum					
BSC-26	Silicone faced 1" quilted					
	fiberglass on both sides					
	of a 1 lb. PSF non-	4	19			
	reinforced noise barrier					
	septum					
BSC-24	Scrim faced 1" quilted					
	fiberglass on both side of					
	a 1 lb. PSF non-	5	1			
	reinforced noise barrier					
	septum					
BBC-	Vinyl faced 2" quilt on	23	12			
13-2″	one side of a 1 lb.					
	reinforced loaded vinyl					
	noise barrier					
BBC-13	Vinyl faced 1" quilt on					
	one side of a 1lb.	23	30			
	reinforced loaded vinyl					
	noise barrier					

Above table shows flame spread and smoke developed ratings per ASTM Designation E84; Surface Burning Characteristics of Building Materials.

Note: Class A rating applies to products with a flame spread index of 25 or less, and a smoke developed index of 450 or less.

Additional products tested to ASTM E 162 and ASTM E 662, test reports available on request.