# Curtains: Industrial & Flexible Barriers

# Acoustic Curtains: ABA, BA, and Flexible Barriers

# Acoustic Curtains - BA

IES 2000's "BA" composite features a reinforced loaded vinyl noise barrier with a quilted fiberglass sound absorber on one side. The rugged durable



exterior barrier is commonly used as a wrap or acoustical jacket due to its ability to conform to any shape. The quilted fiberglass layer decouples the noise barrier to enhance its acoustical performance.

BA Noise Barrier/Sound Absorber Composite IES 2000 BA's offers the benefits of a noise barrier and a sound absorber composite. BA's offers the benefits of a noise barrier and a sound absorber composite. The BA consists of a vinyl-coated-fiberglass-cloth facing on 2" quilted fiberglass that is bonded to a reinforced 1-lb psf. loaded vinyl barrier.

Curtain panels are constructed with grommets across the top and Velcro along the vertical edges. Rolls are available 54" wide x 25' long and can be supplied with edges bound or unbound (note: barrier is 54" wide, quilt is held 3" in from each vertical edge, and measures 48").

# Acoustic Curtains - ABA

The ABA "Barrier septum Composite" is a non-reinforced loaded vinyl noise barrier sandwiched between two layers of fiberglass. A variety of facings are



available including our standard industrial grade vinyl facing, an economy scrim facing and a silicone facing for high temperature or outdoor applications. Curtain panels are typically constructed with grommets across the top and mating hook and loop closures on the vertical edges.

Rolls measuring 4' x 25' are available with edges bound or

unbound. All products have a Class A flammability rating (per ASTM E-84). Use as a divider wall when separating two noisy areas that require absorption. Use to line the perimeter of a building Use anywhere a decoupler/barrier/absorber is required. Vinyl facings are available in white, tan, black, or gray Diamond patterns or straight stitch patterns are available.

# Flexible Barriers

## **1BC Noise Barrier**

1BC is a transparent poly-vinyl chloride noise, wind and thermal barrier. It is designed to minimize the passage of sound, heat, cold, or wind from one area to another while offering maximum visibility. Offers significant noise reduction while allowing for visibility and easy access.

## **1BNR Noise Barrier**

1BNR is a flexible non-reinforced loaded vinyl barrier that is designed to reduce the transmission of noise through walls, ceilings, and floors. Also used as a noise barrier component in acoustical composites.

## **1BR Noise Barrier**

1BR is a flexible reinforced loaded vinyl noise barrier featuring an internal reinforcement to offer maximum tear strength and durability. 1BR Panels can be used where a noise barrier wall is required. It is also commonly used in conjunction with IES -2000's Quilted Fiberglass Absorbers to form BA style acoustical curtain composites. 1BR is also available in a USDA approved grade.

## **2BNR Noise Barrier**

2BNR is a flexible non-reinforced loaded vinyl noise barrier that is designed to reduce the transmission of noise through walls, ceilings, and floors. 2B NR is a two-pound per sq. ft. material specifically designed to offer greater noise attenuation than standard one-pound per sq. ft. products, primarily at low frequencies.



# Acoustic Curtains - ABA Product Data

#### **Product Features:**

- Maximum noise reduction by combining sound absorber and noise barrier
- · Sound Absorption Rating to NRC-1.05
- · Transmission Loss Rating to STC-32
- · Offered in two styles with a variety of combinations
- · Acoustical liners, jackets, wraps and panels
- Available in curtain panels, bound or unbound rolls, custom fabrications or die-cut pieces
- · Flexible composites conform to any shape
- Fire safe and low smoke emissions per ASTM E-84, Class 1

## **Available Barriers:**

- ABA products utilize a flexible 1 lb. PSF non-reinforced loaded vinyl noise barrier septum (1BNR).
- · Also available with a 2lb. PSF or 1/2 lb. PSF barrier

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.

# Acoustic Curtains - BA Product Data

## **Product Features:**

- Vinyl coated fiberglass cloth facing on 2" quilted fiberglass/ 1lb-psf reinforced loaded vinyl barrier
- Flammability/Flame Spread: 23.0
- Flammability/Smoke density: 30.0
- Nominal thickness: 2.0 inches
- Temperature range: -20° to +180° F
- Standard width: 54" wideRoll length: 25' long
- Weight: 1.5 lb psf

# Flexible Barriers Product Data

## 1BR Noise Barrier

- 1 Pound Per Square Foot Reinforced Load Vinyl Barrier
- · Standard thickness: 0.107 inch
- · Standard width: 54" wide
- · Roll length: 60' long
- · Weight: 1.0 lb psf

## 2BNR Noise Barrier

 2 Pound Per Square Foot Non-Reinforced Load Vinyl Barrier



- Tensile (PSI): 900 lb/ in2
- Tear (pound force): 70 lb/ in.
- Service Temperature: -20° F to +180°
- Octave Band Center Frequencies (Hz): 125-13, 250-17,500-22, 1K-26, 2K-32, 4K-37, NRC-26
- · Nominal thickness: 0.23 inches
- Standard width: 54" wide
- Roll length: 60' long
- · Weight: 2.0 lb psf
- Octave Band Center Frequencies (Hz): 125-13, 250-17,500-22, 1K-26, 2K-32, 4K-37, NRC-26

#### **Acoustical Data:**

Sound Transmission Loss (dB) Octave and Center Frequencies (Hz) - ASTM E-90  $\&~\rm E~413$ 

Product	(In./Nom.)	Wt. Lb./S.F.	125	250	500	1K	2K	4K	STC
ABA-121	2	2.5	19	22	28	40	56	61	33
ABA-111	2	1.5	12	16	27	40	44	43	29
ABA-112	2.08	1.75	13	20	29	40	50	55	32
ABA-111-S	2.08	1.3	12	16	27	40	44	43	29

Sound Absorption Data-Absorber Component Random Incident Sound Absorption - ASTM C 423

Product Octave Band Center Frequencies (Hz)								
	125	250	500	1K	2K	4K	NRC	
ABA 2" thick	0.19	0.99	0.96	0.8	0.57	0.33	0.85	

Sound Transmission Loss (dB) Octave and Center Frequencies (Hz) - ASTM E-90  $\&~\rm E~413$ 

Product	(In./Nom.)	Wt. Lb./S.F.	125	250	500	1K	2K	4K	STC
BA-21	2	1.5	13	20	29	40	50	55	32
BA-11	1	1.3	11	16	24	30	35	35	27
BA-21-S	2	1.5	13	20	29	40	50	55	32
BA-11-S	1	1.3	11	16	24	30	35	35	27

Product	Octave Band Center Frequencies (Hz)								
	125	250	500	1K	2K	4K	NRC		
BA 1" thick	0.12	0.47	0.85	0.84	0.64	0.62	0.7		
BA 2" thick	0.12	0.27	0.96	1.13	1.08	0.99	0.85		
BA 4" thick	0.21	0.89	1.09	1.17	1.13	1.07	1.05		

#### **1BC Noise Barrier**

- 1 Pound Per Square Foot Reinforced Load Vinyl Barrier
- Standard thickness: 0.107 inch
- Standard width: 54" wide
- Roll length: 60' long
- · Weight: 1.0 lb psf

#### **1BNR Noise Barrier**

- 1 Pound Per Square Foot Non-Reinforced Loaded Vinyl Barrier
- Nominal thickness: 48" sheet/ roll, 16" strips
- Standard width: 54" wide
- Roll length: 30' or 60' long
- · Weight: 1.0 lb psf
- · Tensile (PSI): 220

- Tensile (PSI): 900 lb/ in2
- · Tear (pound force): 70 lb/ in.
- Service Temperature: -20° F to +180°
- Octave Band Center Frequencies (Hz): 125-13, 250-17,500-22, 1K-26, 2K-32, 4K-37, NRC-26
- · Elongation: 140%
- Service Temperature: -20° F to +180°
- Octave Band Center Frequencies (Hz): 125-13, 250-17,500-22, 1K-26, 2K-32, 4K-37, NRC-26

