

## dBcloth Urethane Faced Foams



**dBcloth Urethane Faced (dB BU/BNU)** acoustical foams are designed to provide maximum absorption of airborne sound with minimum thickness and weight. These flexible polyurethane open cell foam products are manufactured to optimize pore size, air flow resistance, and density.

**dB BU/BNU** foams provide a colorful - standard colors are Black (BU) or Bone White BNU - durable, abrasion and puncture resistant product. These urethane films are heat laminated to form a decorative textured surface and can be made impervious to most petroleum products, moisture, and dirt.

Matte facing can be added to our embossed foam to give a more pronounced decorative rosette pattern. (Type Deco-Foam CF) .

**dB BU/BNU** Foams can be purchased in rolls or sheets, and can be die cut, or fabricated to customer specifications. They are easily cut with a knife, saw or scissors. The addition of pressure sensitive adhesive provides a convenient method of fastening to most substrates.

## Polyurethane Foam - Physical Properties

Property	Polyester Foam	Polyether Foam
<b>Color</b>	Charcoal Grey	
<b>Density</b>	2lb/ft <sup>3</sup> (32 kg/m <sup>3</sup> ) ±10% or 4 lb/ft <sup>3</sup> (64 kg/m <sup>3</sup> ) ±10% per ASTM D3574-86 test A	
<b>Tear Strength</b>	1.5 ppi (2.6 N/cm) per ASTM D3574-86 test F	1.58 ppi (2.8 N/m) per ASTM D3574-86 test F
<b>Tensile Strength</b>	20 psi (135 kPa) per ASTM D3574-86 test E	13 psi (90 kPa) per ASTM D3574-86 test E
<b>Elongation</b>	120% per ASTM D3574-86 test E	193% per ASTM D3574-86 test E
<b>Compression Set (50% Deflection)</b>	Max 10% ASTM D3574-86 test D	
<b>Heat Resistance</b>	Retention of tensile strength after 22 hours dry heat aging at 140°C min. 70% ASTM D3574-86 test K	
<b>Humidity Resistance</b>	Retention of tensile strength after 6 hours, steam autoclave at 105°C min. 70% ASTM D3574-86 test L	
<b>Chemical Resistance</b>	Good for common fluids, water, petroleum, solvents, and alkalis. Swelling will occur, will return to almost 100% after drying	
<b>Flammability</b>	MVSS 302, UL-94 HF1, and FAR 25.853(b)	
<b>Service Temperature</b>	-40°F (-40°C) to +225°F (107°C) continuous to 275°F(135°C) intermittent	
<b>Thermal Conductivity</b>	BTU-in/ft <sup>2</sup> h°F 0.25 (36mW/m <sup>2</sup> K) per ASTM C 177	

**dB BU/BNU Foams** can be made in combination with **dBmat** barrier systems when both absorption and transmission loss is needed (see dBmat brochure), or **VE™** damping systems, when enhanced vibration control is required. (see VE damping brochure).

### Pressure Sensitive Adhesive

Supported SBR (temps to 60°C/140°F)  
 Unsupported Acrylic (temps to 120°C/250°F)  
 Supported Acrylic (temps to 120°C/250°F)

### Standard Sizes

Rolls 54" x 50ft (1370mm x 15m)  
 Sheets 54" x 72" or 36" or 24"(1370mm x 1800 or 900 or 600mm)  
 Fabricated or Die Cut  
 Thicknesses ¼" - 2"(6mm - 50mm)

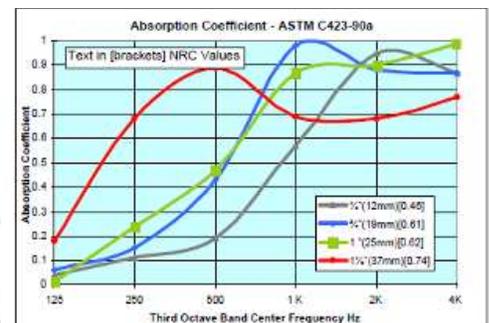


Figure 1 Absorption Performance for various thicknesses of HC BU/BNU Foams