

## DATA SHEET

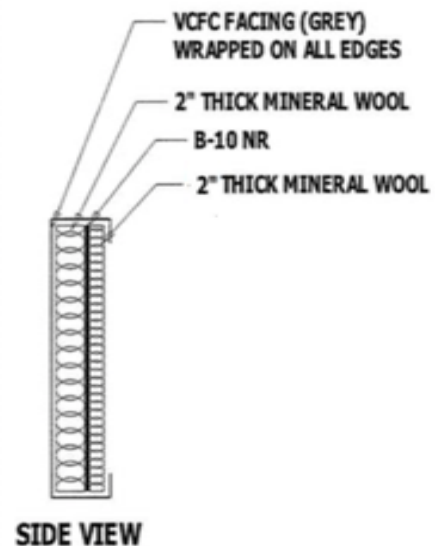
### NOISE BLOCKER 2 + 2

#### **A. Product Description**

Multilayer acoustic panel covered with reinforced polyester fabric, composed of three acoustic elements:

- 1) **Decoupler** - This element decouples the panel from the surface where it is attached. Consists of 2" thick mineral wool board made of inorganic fibers derived from basalt or volcanic rock. It is fire-resistant and suitable for use in high-temperature environments.
- 2) **High Density Noise Barrier** - Mass loaded vinyl (1 psf), Sound Seal model B10-NR. Thickness 2" Sound Transmission Coefficient: 26 dB.
- 3) **Absorption** - Consists of 2" thick mineral wool board made of inorganic fibers derived from basalt or volcanic rock. Noise Reduction Coefficient (NRC) = 1.10. In addition to noise reduction, mineral wool is fire-resistant and suitable for use in high-temperature environments.

#### **B. Product Photo and Multilayer Diagram**



## C. Component Specifications

### B 10 – NR Mass Loaded Vinyl

**Noise Barrier 10NR** is a flexible non-reinforced mass 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.

- Rolls are available 54" wide up to 60' long
- Limp, flexible, formable, versatile
- High tear and tensile strength

### APPLICATIONS

Typically used as a noise barrier in gypsum wallboard and stud construction to substantially improve transmission loss between rooms. Also, utilized as a barrier septum material in acoustical curtain construction to form multilayer composites.

| Property            | Specification                                |
|---------------------|--|
| Description         | 1 lb-psf non reinforced loaded vinyl barrier |
| Nominal thickness   | 0.10 inches                                  |
| Standard width      | 54"  |
| Roll length         | 30' or 60'                                   |
| Weight              | 1.0 lb psf                                   |
| Tensile (PSI)       | 220  |
| Elongation          | 140%   |
| Service Temperature | -20°F to +180°F                              |



B 10 – NR

#### ACOUSTICAL PERFORMANCE

| Frequency (Hz) | Sound Transmission Loss (dB) |
|----------------|------------------------------|
| 125            | 13                           |
| 250            | 17                           |
| 500            | 22                           |
| 1k             | 26                           |
| 2k             | 32                           |
| 4k             | 37                           |

#### STC 26dB

Tested in accordance to ASTM E90

MINERAL WOOL 2" THICK      DENSITY 128 kg/m<sup>3</sup>

#### DESCRIPTION

Mineral wool board made of inorganic fibers derived from basalt, a volcanic rock, with a thermosetting resin binder. Advanced manufacturing technology ensures consistent product quality, with high fiber density and low shot content, for excellent performance in high temperature thermal control and fire resistance applications.

#### ADVANTAGES

Acoustic and Thermal. Good acoustic absorption and thermal conductivity values help maximize control of unwanted noise and heat loss, contributing to reduced operating costs and greater energy savings.

Lightweight, Low Dust.

Low Smoke & Flame Spread. When tested in accordance with ASTM E84, UL 723, CAN/ULC-S102-M, these unfaced insulation boards have a flame spread rating of 5 and a smoke developed rating of 0. The faced insulation has a flame spread rating of 25 and a smoke developed rating of 5.

Noncombustible. MinWool-1200 Industrial Board is rated as noncombustible in accordance with ASTM E136 and CAN4-S114-M.

Mold Resistant. Mineral Wool does not support growth of fungi.

## APPLICATIONS

Provides excellent acoustical and thermal insulation performance for mechanical, power and process systems operating from sub-ambient to 1200°F(650°C). Very low in-service shrinkage helps prevent gaps from forming at joints, preventing costly thermal leaks. The insulation is designed to be field-jacketed. It may be installed directly on hot surfaces; system shut-down and staged heat-up are not required.

## SPECIFICATION COMPLIANCE

|                               |  |
|-------------------------------|--|
| <b>ASTM C356</b>              | In-Service Shrinkage: 0% at 1050°F (566°C); <2% at 1200°F (650°C)              |
| <b>ASTM C447</b>              | Maximum Service Temperature: 1200°F (650°C)                                    |
| <b>ASTM C665</b>              | Corrosivity to Steel: Passes   |
| <b>ASTM C795/C871/C692</b>    | Stainless Steel: Passes  |
| <b>ASTM C1104</b>             | Water Vapor Absorption: <1% by Weight, <0.02% by Volume @ 120°F (50°C), 95% RH |
| <b>ASTM C1335</b>             | Shot Content: <25%   |
| <b>ASTM C1338</b>             | Fungi Resistant: Passes  |
| <b>ASTM E84</b>               | Flame Spread/Smoke Developed: Unfaced 5/0 or less; Faced 25/5 or less          |
| <b>ASTM E136</b>              | Noncombustible: Passes   |
| <b>UL 723, CAN/ULC-S102-M</b> | Flame Spread/Smoke Developed: Unfaced 5/0 or less; Faced 25/5 or less          |
| <b>NOMINAL DENSITY</b>        | 128 Kg/m <sup>3</sup> or 8 lb/ft <sup>3</sup>                                  |

## D. NOISE BLOCKER 2 + 2 ACOUSTICAL PERFORMANCE

Tested in accordance to ASTM E90 and ASTM C423

| Frequency (Hz)                | 125  | 250  | 500  | 1k   | 2k   | 4k   | 8k |
|-------------------------------|------|------|------|------|------|------|----|
| Sound transmission loss (Db)  | 21   | 27   | 38   | 48   | 58   | 67   | 66 |
| Sound Absorption Coefficients | 0.89 | 1.20 | 1.16 | 1.09 | 1.01 | 1.03 | 93 |

**STC 40 dB**

**NRC 1.10**