



**PART 1 – GENERAL**

**1.1 SUMMARY OF PRODUCT**

- A. Acoustic Panels manufactured with **formaldehyde-free** high-density acoustic insulation that meets CGSB 51-GP-10M and is GREENGUARD Gold Certified.

**1.2 SUBMITTALS**

- A. Shop Drawings: Show fabrication and installation details for acoustic panels, including plans, elevations, sections, details and attachment to other work.
- B. Submittals: Furnish samples, showing manufacture full range of colors, texture and patterns available for each type of acoustic product specified.
- C. Qualification Data: For firms specified in “Quality Assurance” Article to demonstrate their capabilities and experience.
- D. Product Certificates: Signed by manufacturer certifying that the products furnished comply with requirements.

**1.3 QUALITY ASSURANCE**

- A. Manufacturer and Installer Qualifications: Manufacturer and Installer shall have a minimum of 5 years experience in producing and installing specified products and shall furnish supporting documentation showing completed jobs of approximately the same size and scope.

**1.4 DELIVERY, STORAGE, AND HANDLING**

- A. Protect acoustic panels from water, rain, and/or snow when shipping/handling.
- B. DO NOT drag panels across surfaces as fabric/panel damage/soiling can occur.
- C. 2 people are to carry panels 1200mmx1200mm in size and larger.
- D. Only install acoustic panels when building is enclosed and HVAC is operational.
- E. Do not install acoustical panels until wet work is complete and dry.
- F. Install panels after painting and flooring is completed and/or installed.

**PART 2 – PRODUCTS**

**2.1 PANELS, GENERAL**

- A. The manufacturer’s acoustic panels shall be made with high density (96 kg/m<sup>3</sup>//6.0 lb/ft<sup>3</sup>) **formaldehyde-free** smooth fiberglass wrapped with acoustically transparent fabric.
1. Product Model: Echotrol 1” or 2” Acoustic Panel  
Western Noise Control  
Edmonton, Alberta, Canada  
Ph. (800) 661-7241  
Fax (780) 426-0325  
E-mail: info@acousticsolutions.com
  2. Facing Materials: Acoustically Transparent Fabrics as per Architect or heavy-duty white breathable vinyl coated textile scrim.
  3. Panel Thickness: Nominal 1”, 2”, 3”, and 4” thick panels.
  4. Noise Reduction Coefficient: NRC of 0.8 for 1”, NRC of 1.0 for 2”, and NRC of 1.0 for 4” low frequency panels.
  5. Panel Width: Up to 1,200 mm (48 inches/4 ft)
  6. Panel Length: Up to 3,040 mm (120 inches/10 ft) with 2,400 mm most economical (acoustic insulation is most commonly manufactured in 1,220mm x 2,440mm boards).



## Echotrol Acoustic Panel

### 2.2 CONSTRUCTION

- A. The acoustic panel product shall be supplied in widths and lengths as indicated. All edges will be fully wrapped with mounting as indicated.

### 2.3 MOUNTING

- A. Mounting Accessories: Manufacturer's standard accessories for securely mounting panels of type and size indicated and complying with the following requirements:
1. Walls: Engineered steel panel mounting plates to be securely attached to the wall substrate according to manufacturer's specification and adhesively bonded to the back of panel. Adhesive/Sealant is also to be applied to backside perimeter of panel.
  2. Ceilings: Factory-formed fastener holes are provided in the panel along with low-visibility matching-fabric covers for concealing the fastener heads. Ceiling substrate fasteners must be as per manufacturer's specification to ensure loading is engineered so panel cannot fall off ceiling. No adhesive is required for ceiling panels.

### 2.4 ACOUSTIC PERFORMANCE

Sound Absorption: Per ASTM C-423 Type A Mounting

#### 1" Thick Sound Absorption Coefficient per Octave Band Center Frequency

| 125Hz | 250Hz       | 500Hz      | 1000Hz      | 2000Hz      | 4000Hz | NRC          |
|-------|-------------|------------|-------------|-------------|--------|--------------|
| 0.11  | <b>0.24</b> | <b>.73</b> | <b>1.03</b> | <b>1.10</b> | 0.87   | <b>0.80*</b> |

#### 2" Thick Sound Absorption Coefficient per Octave Band Center Frequency

| 125Hz | 250Hz       | 500Hz       | 1000Hz      | 2000Hz      | 4000Hz | NRC         |
|-------|-------------|-------------|-------------|-------------|--------|-------------|
| 0.29  | <b>0.98</b> | <b>1.09</b> | <b>0.96</b> | <b>1.01</b> | 0.97   | <b>1.0*</b> |

#### 4" Thick Sound Absorption Coefficient per Octave Band Center Frequency

| 125Hz       | 250Hz       | 500Hz       | 1000Hz     | 2000Hz     | 4000Hz | NRC         |
|-------------|-------------|-------------|------------|------------|--------|-------------|
| <b>0.89</b> | <b>1.08</b> | <b>1.03</b> | <b>1.0</b> | <b>1.0</b> | 0.92   | <b>1.0*</b> |

\*Note: Average NRC is based on the 250,500, 1000, and 2000 Hz frequency bands and rounded to nearest multiple of 0.05

### 2.5 SURFACE BURNING CHARACTERISTICS

- A. All components pass flame spread and smoke development tests for CAN/ULC S102-M88 and/or ASTM E84 Class 1/A, NFPA 255, and/or NFPA 260 (Class 1).

### 2.6 AQUATIC ENVIRONMENT CHARACTERISTICS

- A. Does not accelerate corrosion on steel, copper or aluminum.
- B. The corrosion rate in mils/yr. will not exceed that of the 1ppm chloride solution.
- C. Does not promote mold growth.
- D. Water vapor sorption is less than 5% by weight.

## PART 3 – EXECUTION

### 3.1 INSTALLATION

- A. Install acoustic panels in locations indicated and in alignment with other panels. Comply with manufacturer's written instructions for installation of panels using type of mounting accessories as recommended by manufacturer.



## **Echotrol Acoustic Panel**

### **3.2 CLEANING**

- A. After completion of installation of panels, remove dust and other foreign material with a horse hair duster brush mounted on a vacuum cleaner. A damp cloth with mild detergent and warm water or foam/pure water-free solvents can also be used for heavier soiling BUT an inconspicuous section on the side of the panel should be tested beforehand when “wetting” the panel/fabric with anything.