WESTERN NOISE CONTROL (2015) LTD.

Echotrol Suspended Acoustic Clouds

PART 1 – GENERAL

1.1 SUMMARY OF PRODUCT

A. Echotrol Suspended Acoustic Clouds 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 clouds, including plans, elevations, sections, details and attachment to other work.

B. Submittals: Furnish samples.

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 clouds from water, rain, and/or snow when shipping/handling.

B. DO NOT drag material as damage/soiling can occur.

C. 2 people are to carry panels 1200 mm x 1200 mm in size and larger.

D. Only install clouds when building is enclosed, dust generating activity is completed, and HVAC is operational.

E. Do not install clouds until wet work is complete and dry.

F. Install clouds after painting and flooring is completed and/or installed.

PART 2 – PRODUCTS

2.1 ECHOTROL SUSPENDED ACOUSTIC CLOUDS, GENERAL

A. The manufacturer's absorptive material shall be made with high density (96 kg/m3//6.0 lb/ft3) **formaldehyde-free** smooth fiberglass wrapped with acoustically transparent fabric appropriate to the application.

1. Product Model: Echotrol Acoustic Clouds
   Western Noise Control
   Edmonton, Alberta, Canada
   Ph. (800) 661-7241
   Fax (780) 426-0325
   E-mail: info@acousticsolutions.com
2. Facing Materials:
   A. Non-wet and non-corrosive environments: Guilford of Maine's "Open House/Anchorage" or Victor's "Whisper" or other Acoustically Transparent Fabrics as per Architect
   B. Wet or Corrosive Environments: PVC as per Architect
3. Cloud Thickness: Nominal 1" or 2" thick absorptive material
4. Backing: Fabric scrim covering entirety of back face of cloud.
5. Noise Reduction Coefficient: NRC of 0.8 for 1" absorptive material and 1.0 for 2" absorptive material.

6. Cloud Width: Up to 1,200 mm (48 inches/4 ft)
7. Cloud Length: Up to 3,000 mm (120 inches/10 ft) with 2,400 mm most economical (acoustic insulation is most commonly manufactured in 1,220mm x 2,440mm boards).

2.2 CONSTRUCTION

A. Acoustic cloud product shall be supplied in widths, lengths, and finishes as indicated.

2.3 MOUNTING

A. Mounting Accessories: Manufacturer's standard accessories for securely mounting clouds of type and size indicated and complying with the following requirements:
   1. Ceilings: Proprietary factory-supplied cloud anchors are supplied along with a proprietary fastening assembly engineered for the specific ceiling clouds are being hung from. Ceiling substrate fasteners must be as per manufacturer's specification to ensure loading is engineered so cloud cannot fall off ceiling. No adhesive is required for ceiling clouds.

B. Quantity of Mounting Points: 4 per cloud sized 1200 mm x 1500 mm or less, 6 per cloud sized 1200 mm x 3000 mm or less.

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
0.05	**0.26**	**.77**	**1.04**	**1.04**	1.03	**0.80***

2" Thick Sound Absorption Coefficient per Octave Band Center Frequency

125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	NRC
0.32	**0.81**	**1.08**	**1.06**	**1.03**	1.04	**1.0***

***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, ASTM E84 Class 1/A, NFPA 255, and/or NFPA 260 (Class 1).

PART 3 – EXECUTION

3.1 INSTALLATION

A. Acoustic clouds in locations and orientations indicated. Comply with manufacturer's written instructions for installation of clouds using type of mounting accessories indicated or, if not indicated, as recommended by manufacturer.

3.2 CLEANING

A. After completion of installation of clouds, 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 cloud should be tested beforehand when "wetting" the cloud/fabric with anything.

END OF SECTION