
Partie 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 05 50 00 – Metal fabrications
- .2 Section 06 20 00 – Finish carpentry
- .3 Section 07 92 00 – Joint sealants
- .4 Section 09 21 16 – Gypsum board assemblies
- .5 Section 09 22 16 – Non structural metal framing
- .6 Section 09 51 13 – Acoustical panel ceiling
- .7 Section 09 53 00 – Acoustical suspension
- .8 Section 09 91 23 – Interior painting

1.2 REFERENCES

- .1 American Society for Testing and Materials International (ASTM)
 - .1 ASTM C423-07, Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-51.34-M86(C1988), Vapour Barrier, Polyethylene Sheet for Use in Building Construction.
 - .2 CAN/CGSB-92.1-M89, Sound Absorptive Prefabricated Acoustical Units.
- .3 Canadian Standards Association (CSA)/CSA International
 - .1 CSA B111-1974(R2003), Wire Nails, Spikes and Staples.
- .4 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .5 South Coast Air Quality Management District (SCAQMD), California State
 - .1 SCAQMD Rule 1113-04, Architectural Coatings.
 - .2 SCAQMD Rule 1168-05, Adhesives and Sealants Applications.
- .6 Underwriter Laboratories of Canada (ULC)
 - .1 CAN/ULC-S702-97 Standard for Thermal Insulation, Mineral Fibre, for Buildings.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Provide product data in accordance with Section 01 33 00 - Submittal Procedures.
- .3 Provide samples in accordance with Section 01 33 00 - Submittal Procedures.

- .1 Submit duplicate 300 mm x 300 mm samples of each type acoustical unit.

1.4 QUALITY ASSURANCE

- .1 Construct mock-up in accordance with Section 01 45 00 - Quality Control.
- .2 Construct one representative mock-up of acoustical wall treatment system.
- .3 Construct mock-up 10 m² minimum to indicate method of assembly, installation and fixing.
- .4 Construct mock-up where directed.
- .5 Allow 24 hours for inspection of mock-up by Departmental Representative before proceeding with work.
- .6 When accepted, mock-up will demonstrate minimum standard for this work. Mock-up may remain as part of the finished work.

1.5 ENVIRONMENTAL REQUIREMENTS

- .1 Commence installation after building enclosed and dust generating activities are completed.
- .2 Permit wet work to dry prior to commencement of installation.
- .3 Maintain uniform minimum temperature of 15 degrees C and relative humidity of 20-40% prior to, during and after installation.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Waste Management and Disposal:
 - .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

1.7 MAINTENANCE

- .1 Extra Materials:
 - .1 Provide extra materials of acoustic units and adhesive in accordance with Section 01 78 00 - Closeout Submittals.
 - .2 Provide acoustical units for maintenance use amounting to 2% of gross wall area for each pattern and type required for project.
 - .3 Provide sufficient adhesive to install extra material provided.
 - .4 Extra materials from same production run as installed materials.
 - .5 Identify each package of acoustical units including colour and type, and each container of adhesive.
 - .6 Deliver to Departmental Representative upon completion of the work of this section.
 - .7 Store where directed by Departmental Representative.

1.8 ACCEPTABLE MATERIALS AND PRODUCTS

- .1 Acceptable products and materials: Where a particular brand name is stipulated, see Instructions to Bidders for procedure for requesting approval of substitute materials and products.

1.9 ACCEPTABLE PRODUCTS AND MATERIALS

- .1 Where a particular brand name is stipulated, see Instructions to Bidders for procedure for requesting approval of substitute materials and products

Partie 2 Products

2.1 MATERIALS

- .1 Sound absorbing plaster system: (**P-ISO** on drawings)
 - .1 Two coat acoustic panels, 70mm, 16kg/m², collé au panneau de support du mur ou plafond:
 - .1 Acoustic mineral wool panel, 66mm, adhered to substrate.
 - .2 2.5 mm base coat, 0.7 mm grain size.
 - .3 Finish coat: 1.5 mm, 0.3 mm size, colour selected by Departmental Representative.
 - .4 Trim for corners, edges and transitions provided by system manufacturer.
 - .5 Acceptable product:
 - .1 BASWaphon Classic by BASWA Acoustic.
 - .2 Replacement materials and products : approved by addendum in accordance with Instructions to Bidders.
 - .2 Fibreglass panel: (**FV3** on drawings):
 - .1 To ASTM C1071 and CGSB 51.11-92.
 - .2 Fibreglass panel, 51 mm thick, straight edges, black, no coating.
 - .3 Dimensions: largest size or as indicated.
 - .4 Density: 3 lbs/ ft³.
 - .5 Surface burning characteristics: maximum 25.
 - .6 Smoke developed: maximum 50.
 - .7 Mechanically fastened.
 - .8 Sound absorption: 1.07 at 500 Hz, tested to ASTM C423.
 - .9 Acceptable products:
 - .1 Akousti-Liner
 - .2 Decoustics
 - .3 Technisilence
 - .3 Cloth covered fibreglass panel: (**FV6** on drawings)
 - .1 To ASTM C1071 and CGSB 51.11-92.

- .2 Fibreglass panel, 51 mm thick, straight edge, chemically hardened edges, resistant clothrecouvert de tissu résistant, colour selected by Departmental Representative.
- .3 Dimensions: largest size or as indicated.
- .4 Density : 6 lbs/ ft3.
- .5 Surface burning characteristics: maximum 25.
- .6 Smoke developed: maximum 50.
- .7 Mechanically fastened.
- .8 Sound absorption: 1.17 at 500 Hz, tested to ASTM C423.
- .9 Produits acceptables:
 - .1 Akousti-Liner
 - .2 Decoustics
 - .3 Technisilence
- .4 Adhesive: type recommended by acoustic unit manufacturer.
- .5 Black adhesive tape to conceal fasteners, as indicated on drawings.
- .6 Staples, nails and screws: to CSA B111, non-corrosive finish, type recommended by acoustic unit manufacturer.
- .7 Select paints that provide reduced environmental impacts as described in section 09 91 23 - Interior Painting. Ensure that selected paint materials will not compromise the acoustical properties of wall treatments.

2.2 FABRICATION

- .1 Demountable acoustic units:
 - .1 Use one piece trim, continuous, with mitred corners and concealed fastenings.
 - .2 Conceal and make magnetic fastenings integral part of trim. Adhesive bonding of magnets is not acceptable.

Partie 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 INSTALLATION OF FIXED ELEMENTS (acoustic plaster)

- .1 Ensure substrate surface is straight and clean.
- .2 Install acoustic units to clean, dry and firm substrate using adhesive.
- .3 Maintain temperature at 20° Celsius, 50% humidity.
- .4 Allow each coat to dry to relative humidity less than 10%.
- .5 Glue and joint bearing panels. Let dry.

- .6 Sand bearing panels, apply base coat and let dry.
- .7 Sand base coat, apply finish coat and let dry.

3.1 DEMOUNTABLE ACOUSTIC UNITS (fibreglass panels)

- .1 Ensure substrate surface is straight to tolerance of plus or minus 3 mm.
- .2 Install acoustic units to clean, dry and firm substrate using staples or screws, as recommended by manufacturer and indicated on drawings.
- .3 Install acoustic units plumb and aligned. Arrange units symmetrical on each wall or as indicated.
- .4 Scribe acoustic units to fit adjacent work. Butt joints tight.
- .5 Conceal exposed fasteners with black adhesive black as indicated on drawings.

3.2 CLEANING

- .1 Proceed in accordance with Section 01 74 11 - Cleaning.
- .2 Keep acoustic installation and all components clean. Remove blemishes immediately.

3.3 PROTECTION

- .1 Use polyethylene to protect finished acoustical wall treatment from damage.
- .2 Remove prior to substantial completion.

END OF SECTION