****

SECTION 098316

ACOUSTICAL PLASTER CEILINGS

Specifier's Note: ASTM C423 Test Mounting Type A(to a solid surface)

1. GENERAL

Specifier's Note: Section includes interior acoustical plaster finish for ceilings and walls installed 6’ (1.82M) above finished floor level.

* + - 1. RELATED DOCUMENTS
         1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this section.
      2. SUMMARY
         1. Section Includes:

Field-applied seamless acoustical finish.

Acoustical substrate board.

* + - * 1. Related Sections:

Section 055000 "Metal Fabrications" for structural steel framing system components.

Section 092900 "Gypsum Board Assemblies" for gypsum board substrate.

* + - 1. REFERENCES
         1. Reference Standards:

ASTM C423 Mounting Type A for NRC

ASTM E84 for Flame Spread

ASTM E1477 for Light Reflectance

California Specification 01350 for VOC

ASTM D3960 for VOC

EPA Method 24 for VOC

ASTM D3273/ASTM D3274 for Mold

ASTM D6991 for Flexibility

ASTM E761 for Compressive Strength

ASTM E605 for Density

* + - 1. SUBMITTALS
         1. Product Data: For each type of product indicated.

Include manufacturer's written installation instructions.

* + - * 1. Shop Drawings: Show details of substrate joints, components, and attachments to other work.
        2. Samples: For each type of finish coat indicated.
        3. Qualification Data: For Installer.
        4. Product Certificates: For acoustical finish system.
      1. QUALITY ASSURANCE

Specifier's Note: Engage experienced installer who has attended a training seminar by this manufacturer. Provide copy of certificate of training. Installers must use installation tools and equipment recommended by manufacturer. New installers must have a Fellert authorized technical representative onsite to assist with the installation of the project mockup.

* + - * 1. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of systems required for this Project.
        2. Source Limitations: Obtain acoustical finish system from single source from single manufacturer.
        3. Mockups: Before installing acoustical finish, install mockups of at least 9 sq. meters (100 sq. ft.) in surface area to demonstrate aesthetic effects and set quality standards for material and execution.

Included permanent fixtures in mockup such as lights, diffusers, and speakers.

Simulate finished lighting conditions for review of mockups.

Subject to compliance with requirements, approved mockups may be part of the completed Work if undisturbed at time of Substantial Completion.

* + - 1. DELIVERY, STORAGE, AND HANDLING
         1. Deliver materials to project site in original, unopened packages, and store them in fully enclosed space where they will be protected against damage from moisture and other harmful conditions. Protect materials from freezing.
         2. Inspect materials upon delivery and immediately report to architect damaged or defective goods.
      2. FIELD CONDITIONS
         1. Environmental Limitations: Do not install acoustical finish until spaces are enclosed and weather tight, wet work in spaces is complete and dry, work at and above ceilings is complete. Maintain 15 - 32 degrees C (60 - 90 degrees F) ambient temperature and 70 percent relative humidity maximum. This condition should be maintained during and after the installation. Ventilate building space during acoustical finish application and until dry.

1. PRODUCTS
   * + 1. PERFORMANCE CRITERIA
          1. Noise reductions Coefficient: NRC 0.75; ASTM C423 - 07a Test Mounting Type E-400.
          2. Flame Spread: Class A with flame spread and smoke development <25; ASTM E84.
          3. Light Reflectance: 90; ASTM E1477.
          4. VOC:

Total System: Meets the classroom and office requirements of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers – Version 1.1 – Emission Testing Method for California Section 01350.

Acoustical Plaster: Less than or equal to 4 grams per liter per ASTM D3960.

Primer: Less than or equal to 9 grams per liter per EPA Method 24.

Acoustical Coating: Less than or equal to 2 grams per liter per ASTM D3960.

* + - * 1. Mold: Meets ASTM D3273/ASTM D3274 mold specification requirements.
        2. Internal Stress: 2.1 rating; ASTM D6991.
        3. Compressive Strength: 160 psi; ASTM E761.
        4. Density: 1.86 lbs. /ft.; ASTM E605.
      1. MANUFACTURER
         1. Manufacturer: Fellert Acoustical Ceilings AB; Kyrkängsgatan 6, 503 38 Borås, Sweden; Tel: 46 33 4302202; www.fellert.com.
         2. Distributors:

Europe: Fellert Acoustical Ceilings AB; Kyrkängsgatan 6, 503 38 Borås, Sweden; Tel: 46 33 4302202; www.fellert.com.

North America: Fellert North America, Inc.; 1706 E. 123rd Ter, Olathe KS 66061; Tel: 913-393-5920; www.fellert.com/organisation.

Asia, Middle East, Africa, Australia and All Other Markets: Fellert Acoustical Ceilings AB; Kyrkängsgatan 6, 503 38 Borås, Sweden; Tel: 46 33 4302202; www.fellert.com.

* + - 1. ACOUSTICAL FINISH SYSTEM
         1. Acoustical Finish System: Provide manufacturer’s recommended system:

Products: Fellert Even Better New England Finish.

Plaster: Spray-applied and hand troweled, sound absorbing plaster, 2-coat system composed of cotton fiber and perlite.

Total Plaster Dry Thickness: 3 mm (0.125 inch).

Finish: New England (raised).

Specifier's Note: Plastic C Channel used to finish the system to adjacent surfaces.

C-Channel: Plastic.

Acoustical Board: 25 mm (1 inch) 6 lb. density sound absorbing, fiberglass board.

Specifier's Note: Adhesive used to attach the fiberglass board to drywall and other substrates.

Specifier's Note: Use primer on drywall where fiberglass board is not being utilized, mesh tape, Plastic C Channel and vinyl trims.

Primer: Manufacturer's recommended primer.

Coating: Manufacturer’s recommended coating.

Total Coating Dry Thickness: approx. 1 mil.

Color: [White] [To match Architect's sample].

* + - * 1. Accessories: As recommended by manufacturer.
        2. Water: Clean potable water, free of mineral or organic matter.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of Work.

Verify HVAC system in the occupied space is balanced and drywall grid suspension system is 406 mm (16 inch) o.c.

* + - * 1. Proceed with installation only after unsatisfactory conditions have been corrected.
      1. PREPARATION
         1. Comply with manufacturer’s written instruction for substrate preparation.
         2. Protect adjacent surfaces.
      2. INSTALLATION
         1. General: Apply the acoustical finish system per manufacturer’s installation guide and ASTM C1396.
         2. Secure C-channel to studwork.
         3. Attach acoustical board to o.c. drywall grid suspension system with spring washers and screws.
         4. Apply self-adhesive mesh tape and primer to the intersection of C channel and acoustical board and gypsum drywall rippers. Allow to fully dry prior to plaster application.
         5. Sand the board.
         6. Spray and trowel one coat of plaster. Allow to fully dry prior to lightly sanding.
         7. Spray and trowel one coat of plaster to match approved mockup and leave to fully dry. Do not sand the final coat of plaster.
         8. Spray-apply coating to match approved mockup.

END OF SECTION