

Integrated ceiling assemblies

Part 1 - General

1.01 Related documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this section.

1.02 Summary

- A. Section Includes:
1. Field-applied seamless acoustical finish.
 2. Acoustical substrate board.
- B. Related Sections:
1. Section 055000 "Metal Fabrications" for structural steel framing system components.

1.03 References

- A. Reference Standards:
Independent Third- Party Laboratory Tested
1. SS EN ISO354 and SS EN ISO11654. ASTM C423-17, for sound absorption.
 2. EN 13501-1:2018, ASTM E84-24, CAN/ULC-S102 Reaction to Fire
 3. ASTM E1477 for Light Reflectance
 4. CDPH/EHLB Standard Method v1.2-2017 Emissions
 5. ASTM D3273/ASTM D3274 for Mold
 6. ASTM E1414/E1414 M.21a/E413-22 for Sound attenuation class.

1.04 Submittals

- A. Product Data:
For each type of product indicated.
1. Include manufacturer's written installation instructions.
- B. Shop Drawings:
Show details of substrate joints, components, and attachments to other work.
- C. Samples:
For each type of finish coat indicated.

D. Qualification Data:
Authorized installer certification.

E. Product Certificates:
For acoustical finish system.

1.05 Quality assurance

A. Installer Qualifications:
Manufacturer's authorized representative who is trained and approved for installation of systems required for this Project.

B. Source Limitations:
Obtain acoustical finish system from single source from single manufacturer.

C. 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.

1. Included permanent fixtures in mockup such as lights, diffusers, and speakers.
2. Simulate finished lighting conditions for review of mockups.
3. Subject to compliance with requirements, approved mockups may be part of the completed Work if undisturbed at time of Substantial Completion.

1.06 Delivery, storage, and handling

A. 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.

B. Inspect materials upon delivery and immediately report to architect damaged or defective goods.

1.07 Field conditions

A. 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.

Part 2 - Products

2.01 Performance criteria

A. Noise Reduction Coefficient:
without backerboard:
Alpha w 0.60(LM); class C according to SS EN ISO354 and SS EN ISO11654

NRC 0,55 according to ASTM C423-17
with backerboard:
Alpha w 0.75(LM); class C according to SS EN ISO354 and SS EN ISO11654
NRC 0,80 according to ASTM C423-17

- B. Reaction to fire:
B s1 d0, according to EN 13501-1:2018
FSI = 15, SDI=40 according to ASTM E84-24.
- C. Light Reflectance:
93; ASTM E1477.
- D. VOC:
Meets CDPH/EHLB Standard Method v1.2-2017 specification requirements.
- E. Mold:
Meets ASTM D3273/ASTM D3274 specification requirements.
- F. Ceiling Attenuation Class(CAC):
51; ASTM 1414

2.02 Manufacturer

- A. Manufacturer:
Styjl AB; Kyrkängsgatan 6, 503 38 Borås, Sweden;
Tel: 46 33 4302200; www.styjl.com.
- B. Distributors:
 - 1. Europe:
Styjl AB; Kyrkängsgatan 6, 503 38 Borås, Sweden;
Tel: 46 33 4302200; www.styjl.com.
 - 2. North America:
Styjl Inc.; 263 ShumanBlvd, suite 145, 60563, Naperville, IL, USA;
Tel: 1 (402) 403 2266; www.styjl.com.
 - 3. Asia, Middle East, Africa, Australia and All Other Markets:
Styjl AB; Kyrkängsgatan 6, 503 38 Borås, Sweden;
Tel: 46 33 4302200; www.styjl.com.

2.03 Acoustical finish system

- A. Acoustical Finish System:
Provide manufacturer's recommended system:
 - 1. Products:
Styjl Straight Up.
 - 2. Acoustical scrim Density 25g/m2
 - 3. Finish:
Spray-applied and hand troweled, sound absorbing membrane, 2-coat
system composed of perlite and scrim.
 - a. Total membrane Dry Thickness:
1 – 1.5 mm (1/16 inch).

- b. Finish:
As per manufacturer's instructions.
[Product name suffix defines the texture, for example "Silk"]
 - 4. Acoustical Board:
15 mm (5/8 inch) sound absorbing, glass granulate board.
 - 5. Straight Up Pigment:
Manufacturer's recommended pigment.
 - a. Color:
[White]
[To match Architect's sample].
- B. Accessories:
As recommended by manufacturer.
- C. Water:
Clean potable water, free of mineral or organic matter.

Part 3 - Execution

3.01 Examination

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of Work.
 - 1. Verify HVAC system in the occupied space is balanced and drywall suspension grid system is 300 mm (16 inch) o.c.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 Preparation

- A. Comply with manufacturer's written instruction for substrate preparation.
- B. Protect adjacent surfaces.

3.03 Installation

- A. General:
Apply the acoustical finish system per manufacturer's installation guide.
- B. Attach acoustical board to 300 mm (16") o.c. drywall grid suspension system with zinc coated non-rusting screws.
- C. Prepare board joints and any trimless fixtures.
- D. Apply acoustical base layers and scrim.
- E. Apply acoustical finish coat to match approved mockup.

End Of Section