

SECTION 09 21 16
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SUMMARY

Specifier Note: Revise paragraphs below to suit project requirements.

- A. Section Includes: composite gypsum wall and ceiling panels.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section.

- B. Related Sections:

1. Section 07 92 19: Acoustical Joint Sealants.
2. Section 09 29 00: Gypsum Board.
3. Section 13 48 00: Sound, Vibration and Seismic Control.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section.

1.02 REFERENCES

- A. ASTM International:

1. ASTM E-84 Standard Test Method for Surface Burning Characteristics of Building Materials.
2. ASTM E-119 Standard Test Method for Fire Tests of Building Construction and Materials.
3. ASTM C-919 Standard Practice for Use of Sealants in Acoustical Applications

Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional (not dimensional) tolerances of a complete system. Limit descriptions to composite and operational properties required to link components of a system together and to interface with other systems.

1.03 SYSTEM DESCRIPTION

- A. Performance Requirements

1. Surface Burning Characteristics (ASTM E84)
 - a. Meet or exceed Class A
2. Sound Rated Assemblies: Provide materials and construction identical to those tested in STC/IIC-rated assemblies by an independent testing agency.
 - a. Test Method: ASTM E 90

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction.

Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.

1.04 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit product data sheet, for specified products.
- C. Test Reports: Upon request, provide certified test reports showing compliance with specified performance requirements.

Specifier Note: Article below should include prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Conditions of the Contract and Division 1 Regulatory Requirements Section. Repetitive statements should be avoided.

- A. Installer Qualifications: The Installer shall be a licensed contractor or homeowner working on personal property with experience in installing gypsum wallboard, acoustical channels, and sealant products
- B. Regulatory Requirements and Approvals: For fire rated assemblies, comply with the Gypsum Association Fire Resistance Design Manual

1.06 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirements Section.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged packaging with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
 - 1. Store panels in a dry location prior to installation
 - 2. Neatly stack panels flat to prevent sagging.
 - 3. Handle panels to prevent damage to edges, ends, and surfaces.
 - 4. Protect sealant compounds from freezing or overheating per manufacturers instructions.
 - 5. Protect acoustical channels from moisture and physical damage
 - 6. Approved fasteners to be stored in dry location prior to installation

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) Section. Use this article to require special or extended warranty or bond covering the work of this section.

1.07 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

Specifier Note: Coordinate subparagraph below with manufacturer's warranty requirements.

- 1. Warranty Period: Limited warranty available 1 (one) year from date of purchase.

PART 2 PRODUCTS

2.01 SOUNDPROOFING SYSTEM

- A. Manufacturer: Supress Products, LLC
 - 1. Contact: P. O. Box 3472, San Rafael, CA 94912-3472, Phone: 800.456.4061, Fax: 888.222.9879 E-mail: info@supressproducts.com ; Web site: www.supressproducts.com.

2.02 PRODUCT SUBSTITUTIONS

- A. Substitutions: No substitutions permitted.

2.03 MATERIALS

A. Sound-Engineered Drywall (SED) Wall and Ceiling Panels:

Specifier Note: The standard size SED panel is 4' x 8'. The following lengths can be special ordered: 9', 10', and 12'

1. SED 124X (X-panel length)
 - a. Thickness: 1/2 inch.
 - b. Weight: 2.5 lbs/ft²
2. SED 584X (X-panel length)
 - a. Thickness: 5/8 inch
 - b. Weight: 2.7
3. SED 344X (X-panel length)
 - a. Thickness: 3/4 inch
 - b. Weight; 3.7 lbs/ft²
4. SED 444X (X-panel length)
 - a. Thickness: 1 inch
 - b. Weight: 5.0 lbs/ft²

2.04 ACCESSORIES

- A. Acoustical Sealant: Supress Acoustical Sealant
- B. Acoustical Channel: Supress Acoustical Channel

PART 3 EXECUTION

3.01 EXAMINATION

- A. Inspect all areas and conditions where work of this section is to be performed. Correct all unsatisfactory conditions prior to installation of Supress Sound Engineered Products as described in this section. Examine areas and conditions under which Work of this Section will be performed. Correct conditions detrimental to timely and proper completion of Work. Do not proceed until unsatisfactory conditions are corrected.
- B. Inspect all substrates to which Sound-Engineered drywall attaches or abuts. Verify that all wall and ceiling embeds structural, architectural, plumbing, electrical and HVAC are installed such that SED can be installed in accordance to manufacturer's requirements. Examine substrates to which Sound-Engineered Drywall attaches or abuts. Verify pre-set hollow metal frames, cast-in anchors, and structural framing for compliance with requirements for installation tolerances and other conditions affecting performance of gypsum drywall construction.

3.02 PREPARATION

- A. Studs, joist edges, and plywood must be reasonably clean and dry prior to SED installation.
- B. For remodel and repair projects remove nails, screws or any obstruction which are covering or protruding from the stud or joist line prior to SED installation.
- C. Studs and joists to align and have spacing such as to provide a level/plumb surface for SED installation in accordance with manufacturer's installation instructions.

3.03 GENERAL INSTALLATION REQUIREMENTS

- A. Install and finish in accordance with ASTM C840 (for framing installation requirements), ASTM C919 (for acoustical sealant), local building codes, and manufacturer's instructions.
- B. Fur out all solid brick, concrete or masonry walls with 2x4 wood or lightweight steel studs prior to the installation.

3.04 MANUFACTURER'S INSTRUCTIONS

- A. Cut SED by scoring and breaking, or by sawing, working from either side. When cutting by scoring, the paper shall be cut by a standard utility knife or a similar tool. Make one cut/score on the first side, then a second cut/score on the opposite side, aligned with the first cut. Complete the panel separation by snapping in the reverse direction. Smooth edges and ends to obtain clean, tight, parallel joints.
- B. Apply Supress Acoustical Sealant using a standard quart-sized caulking gun. Apply a small (3/16" to 1/4") continuous bead of sealant to the area on the existing wall where the outside edges of the panel will be placed, in a "C" or a "Reverse C". Repeat for additional panels as they are placed on the existing surface.

- C. Attach Supress SED panels using drywall screws of the appropriate diameter and length to meet local building codes, typically #8 bugle head coarse thread for wood studs or fine thread for metal studs, driven flush without breaking the paper surface. Supress Sound-Engineered Drywall panels shall be installed tight against framing members. Fastener spacing to conform to local building codes and designer specifications.
- D. Stagger panel joints ; joints on the opposite side of a partition wall shall not occur on the same stud or horizontal blocking
- E. Wall stud and ceiling joist spacing to conform to local building codes, designer criteria, and not to exceed 24 o.c.
- F. Depending on the STC rating required, various wall assemblies are available. Single 2x4 stud construction, staggered 2x4 as well as double 2x4 with single layer of SED on one or both sides of wall may be required. Consult with Manufacturer for the optimum assembly required.
- G. All SED edges to have solid blocking and all interior corners to have studs at both sides for panel to stud attachment.
- H. Install SED ceiling panels attached to solid framing at all edges prior to installation of wall panels.
- I. Seal all gaps between the panels at walls and ceilings as well as wall to ceiling intersection and any cut-outs or penetrations for electrical outlets, pipes, fire sprinkler nozzles, etc. with Supress Acoustical Sealant.
- J. For IIC ratings compliance install acoustical channels at all panel joints at wall or ceiling applications and attach SED to acoustical channel only.

3.05 FINISHING

- A. Finish as regular drywall. Allow for acoustical sealant to cure for 24 to 48 hours prior to tape and compound installation at panel edges

3.06 PROTECTION

- A. Provide final protection and maintain conditions that ensure gypsum board construction being without damage or deterioration at time of Substantial Completion.

END OF SECTION