

## SECTION 092900 – GYPSUM BOARD

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Gypsum board for interior and exterior applications.
2. Cementitious panels at bathroom and toilet tilework.
3. Cementitious panels at exterior soffits and fire passage ceilings.
4. Texture finishes.

B. Related Sections:

1. Section 099123 – Interior Painting.

C. Reference and Industry Standards

1. The following reference standards shall be applicable to this Section:
  - a. The current Enterprise Green Communities Criteria, and the current New York City Overlay.
2. Industry Standards
  - ASTM (American Society for Testing and Materials)

D. The current NYC Overlay of the current Enterprise Green Communities Criteria:

1. Mandatory Requirements: See the NYC Overlay of the 2020 EGC reference standard for full specification.
  - a. All projects must achieve compliance with the mandatory criteria measures that are applicable:
    - Criterion 6.6: Bath, Kitchen, Laundry Surfaces
    - Criterion 6.10: Construction Waste Management
2. Optional Project Requirements for Certification Points
  - a. Additionally, rehab projects are required to achieve **55** optional points. Criteria with optional points related to this Specification Section include, but may not be limited to:
    - Criterion 6.7: Regional Materials
    - Criterion 6.10: Construction Waste Management

## 1.2 ACTION SUBMITTALS

- A. Environmental Product Declaration (EPD) for each type of product.

## 1.3 INFORMATIONAL SUBMITTALS

- A. Documentation for compliance with Enterprise Green Communities Criteria.

# PART 2 - PRODUCTS

## 2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E119 by an independent testing agency.
- B. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E90 and classified according to ASTM E413 by an independent testing agency.

## 2.2 GYPSUM BOARD, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

## 2.3 INTERIOR GYPSUM BOARD

- A. Gypsum Wallboard: ASTM C1396.
  - 1. Thickness: 1/2 inch.
  - 2. Long Edges: Tapered.
- B. Gypsum Board, Type X: ASTM C1396.
  - 1. Thickness: 5/8 inch.
  - 2. Long Edges: Tapered.
- C. Flexible Gypsum Board: ASTM C1396. Manufactured to bend to fit radii and to be more flexible than standard regular-type gypsum board of same thickness.
  - 1. Thickness: 1/4 inch.
  - 2. Long Edges: Tapered.
- D. Gypsum Ceiling Board: ASTM C1396.
  - 1. Thickness: 1/2 inch.
  - 2. Long Edges: Tapered.
- E. Impact-Resistant Gypsum Board: ASTM C1396 gypsum board, tested according to ASTM C1629.
  - 1. Core: 5/8 inch, Type X.

2. Surface Abrasion: ASTM C1629, meets or exceeds [Level 1] [Level 2] [Level 3] requirements.
3. Indentation: ASTM C1629, meets or exceeds [Level 1] [Level 2] [Level 3] requirements.
4. Soft-Body Impact: ASTM C1629, meets or exceeds [Level 1] [Level 2] [Level 3] requirements.
5. Hard-Body Impact: ASTM C1629 meets or exceeds [Level 1] [Level 2] [Level 3] requirements according to test in Annex A1.
6. Long Edges: Tapered.
7. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

F. Mold-Resistant Gypsum Board with Moisture-resistant and Mold-resistant Core and Fiberglass Mat Surface.

1. Core: [1/2 inch, regular type] [5/8 inch, Type X].
2. Long Edges: Tapered.
3. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.
4. Approved by manufacturer for cellars, basements and/or bathrooms.

2.4 SPECIALTY GYPSUM BOARD

- A. Gypsum Board, Type C: ASTM C1396. Manufactured to have increased fire-resistive capability.
1. Thickness: As required by fire-resistance-rated assembly [indicated on Drawings].
  2. Long Edges: Tapered.

2.5 EXTERIOR GYPSUM BOARD FOR CEILINGS AND SOFFITS

- A. Exterior Gypsum Soffit Board: ASTM C1396, with manufacturer's standard edges.
1. Core: [1/2 inch, regular type] [5/8 inch, Type X].
- B. Glass-Mat Gypsum Sheathing Board: ASTM C1177, with fiberglass mat laminated to both sides and with manufacturer's standard edges.
1. Core: [[1/2 inch, regular type] [5/8 inch, Type X].
- C. Cementitious Backer Units: ANSI A118.9 and ASTM C1288 or ASTM C1325, with manufacturer's standard edges.
1. Thickness: [1/4 inch] [1/2 inch] [5/8 inch].

2.6 TILE BACKING PANELS

- A. Glass-Mat, Water-Resistant Backing Board: ASTM C1178, with manufacturer's standard edges.
1. Core: [1/2 inch, regular type] [5/8 inch, Type X].
  2. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

- B. Cementitious Backer Units: ANSI A118.9 and ASTM C1288 or ASTM C1325, with manufacturer's standard edges.
  - 1. Thickness: **[1/4 inch] [1/2 inch] [5/8 inch]**.
  - 2. Mold Resistance: ASTM D3273, score of 10 as rated according to ASTM D3274.

## 2.7 TRIM ACCESSORIES

- A. Interior Trim: ASTM C1047.
  - 1. Material: **[Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized-steel sheet] [Galvanized or aluminum-coated steel sheet or rolled zinc] [Plastic] [Paper-faced galvanized-steel sheet]**.
- B. Exterior Trim: ASTM C1047.
  - 1. Material: Hot-dip galvanized-steel sheet.

## 2.8 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C475.
- B. Joint Tape:
  - 1. Interior Gypsum Board: Paper.
  - 2. Exterior Gypsum Soffit Board: Paper.
  - 3. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.
  - 4. Tile Backing Panels: As recommended by panel manufacturer.
- C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.
- D. Joint Compound for Exterior Applications:
  - 1. Exterior Gypsum Soffit Board: Use setting-type taping compound and setting-type, sandable topping compound.
  - 2. Glass-Mat Gypsum Sheathing Board: As recommended by sheathing board manufacturer.
- E. Joint Compound for Tile Backing Panels:
  - 1. Glass-Mat, Water-Resistant Backing Panel: As recommended by backing panel manufacturer.
  - 2. Cementitious Backer Units: As recommended by backer unit manufacturer.

## 2.9 AUXILIARY MATERIALS

- A. Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.

- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
- C. Steel Drill Screws: ASTM C1002 unless otherwise indicated.
  - 1. Use screws complying with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
  - 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- D. Sound-Attenuation Blankets: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.
  - 1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.
- E. Acoustical Sealant: As specified in *Section 079200 – Joint Sealants*.
- F. Thermal Insulation: As specified in *Section 072100 – Thermal Insulation*.
- G. Vapor Retarder: As specified in *Section 072100 – Thermal Insulation*.

## 2.10 TEXTURE FINISHES

- A. Primer: As recommended by textured finish manufacturer.
- B. Polystyrene Aggregate Ceiling Finish: Water-based, job-mixed, polystyrene aggregate finish with flame-spread and smoke-developed indexes of not more than 25 when tested according to ASTM E84.
  - 1. Texture: [**Fine**] [**Medium**] [**Coarse**].
- C. Aggregate Finish: Water-based, job-mixed, aggregated, drying-type texture finish for spray application.
  - 1. Texture: [**Light spatter**] [**Spatter knock-down**] <Insert texture>.
- D. Non-Aggregate Finish: Premixed, vinyl texture finish for spray application.
  - 1. Texture: [**Orange peel**] [**Spatter**] [**Spatter knock-down**] <Insert texture>.
- E. Acoustical Finish: Water-based, chemical-setting or drying-type, job-mixed texture finish for spray application.
  - 1. Application Thickness: [**1/2 inch**] <Insert dimension>.
  - 2. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
    - a. Flame-Spread Index: [**25**] <Insert value> or less.
    - b. Smoke-Developed Index: [**50**] [**450**] <Insert value> or less.
  - 3. NRC: [**0.55**] <Insert NRC> according to ASTM C423.

## PART 3 - EXECUTION

### 3.1 INSTALLATION AND FINISHING OF PANELS

- A. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- B. Comply with ASTM C840.
- C. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch-wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- D. For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- E. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- F. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- G. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C840:
  - 1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
  - 2. Level 2: Panels that are substrate for tile.
  - 3. Level 3: Where indicated on Drawings.
  - 4. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated:
    - a. Primer and its application to surfaces are specified in *Section 099123 – Interior Painting*.
  - 5. Level 5: Where indicated on Drawings.
    - a. Primer and its application to surfaces are specified in *Section 099123 – Interior Painting*.
- H. Glass-Mat Gypsum Sheathing Board: Finish according to manufacturer's written instructions for use as exposed soffit board.
- I. Glass-Mat Faced Panels: Finish according to manufacturer's written instructions.
- J. Cementitious Backer Units: Finish according to manufacturer's written instructions.

### 3.2 APPLYING TEXTURE FINISHES

- A. Surface Preparation and Primer: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes. Apply primer to surfaces that are clean, dry, and smooth.

- B. Texture Finish Application: Mix and apply finish using powered spray equipment, to produce a uniform texture [**matching approved mockup and**] free of starved spots or other evidence of thin application or of application patterns.

### 3.3 PROTECTION

- A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- B. Remove and replace panels that are wet, moisture damaged, and mold damaged.

**END OF SECTION 092900**