

## SECTION 09 20 00 - GYPSUM BOARD

### PART 1: GENERAL

#### 1.1 SECTION INCLUDES

**\*\*NOTE TO SPECIFIER: Delete items below not required for project.**

- A. Gypsum board wall panels.
- B. Gypsum Board soffit and ceiling panels.
- C. Accessories and Trim.

#### 1.2 RELATED SECTIONS

**\*\*NOTE TO SPECIFIER: Delete any sections below not relevant to this project; add others as required.**

- A. Section 05 40 00 - Cold Formed Metal Framing.
- B. Section 06 10 10 - Rough Carpentry.
- C. Section 07 92 00 - Sealant: Joint sealant and acoustical sealant.

#### 1.3 REFERENCES

**\*\*NOTE TO SPECIFIER: Delete references from the list below that are not actually required by the text of the edited section.**

- A. ASTM C473 - Standard Test Methods for Physical Testing of Gypsum Panel Products.
- B. ASTM C 475 - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
- C. ASTM C 514 - Standard Specifications for Nails for the Application of Gypsum Board.
- D. ASTM C 665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
- E. ASTM C 840 - Standard Specification for Application and Finishing of Gypsum Board.
- F. ASTM C 954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs From 0.033" to 0.112" in thickness.
- G. ASTM C 1002 - Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.
- H. ASTM C 1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base.
- I. ASTM C 1177 - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
- J. ASTM C 1178 - Standard Specification for Glass Mat Water-Resistant Gypsum Backing Panel.
- K. ASTM C 1396 - Standard Specification for Gypsum Board.
- L. ASTM D 3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.

- M. GA-214 - Recommended Levels of Gypsum Board Finish.
- N. GA-216 - Application and Finishing of Gypsum Board.
- O. GA-231 - Assessing Water damage to Gypsum Board.
- P. GA-238 - Guidelines for the Prevention of Mold Growth on Gypsum Board.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Design data test reports.
  - 4. Installation methods.

**\*\*NOTE TO SPECIFIER: Delete the following paragraphs if LEED is not applicable.**

- C. LEED Submittals (Where applicable): Provide documentation of how the requirements of Credit will be met:
  - 1. List of proposed materials with recycled content. Indicate post-consumer recycled content and pre-consumer recycled content for each product having recycled content.
  - 2. Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content.
- D. Verification Samples: For each finish product specified, submit two samples representing actual product, color, and patterns.
  - 1. Texture: Submit a sample 12" square of textured coated gypsum board.
- E. Manufacturer's Certificates: Certify products that meet or exceed specified requirements.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A company specializing in manufacturing products specified in this section with minimum ten years documented experience.
- B. Installer Qualifications: A company specializing in performing work of this section with minimum 3 years documented experience.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging indicating manufacturer and product name and protect until ready for installation.
- B. Store gypsum in accordance with GA-238 and manufacturer recommendations.

#### 1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) in accordance with ASTM C 840 and within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

## PART 2: PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturers: CertainTeed Gypsum, Inc., USGypsum.

**\*\*NOTE TO SPECIFIER: Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.**

- B. Single Source Responsibility: Obtain gypsum board products, joint treatment, and accessories from a single manufacturer or from manufacturers recommended by prime manufacturer of gypsum board products.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 31 00.

**\*\*NOTE TO SPECIFIER: Select the Gypsum Board Wall Panels required from the following paragraphs and delete those not required.**

### 2.2 GYPSUM BOARD WALL PANELS

- A. Standard Gypsum Board Products:

1. Regular Gypsum Board: Gypsum core panel solid set core enclosed in paper, complying with ASTM C1396.
- a. Thickness:  $\frac{5}{8}$ "

**\*\*NOTE TO SPECIFIER: Select one of the following thickness paragraphs and delete those not required.**

- b. Width:

**\*\*NOTE TO SPECIFIER: Select one of the following width paragraphs and delete those not required.**

- 1). 48"  
2). 54"  
3). 48" or 54"

- c. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'  
2). 9'  
3). 10'  
4). 12'  
5). Use longest length available to avoid joints.

- d. Edges:

**\*\*NOTE TO SPECIFIER: Select one of the following edge paragraphs and delete those not required.**

- 1). Square  
2) Tapered

2. Fire Rated Gypsum Board: Gypsum core panel with a specially formulated core for use in fire-resistive Type X designs, complying with ASTM C 1396.

- a. Thickness:  $\frac{5}{8}$ "
- b. Width:

**\*\*NOTE TO SPECIFIER: Select one of the following width paragraphs and delete those not required.**

- 1). 48"
- 2). 54"
- 3). 48" or 54"

- c. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
- 2). 9'
- 3). 10'
- 4). 12'
- 5). Use longest length available to avoid joints.

- d. Edges:

**\*\*NOTE TO SPECIFIER: Select one of the following edge paragraphs and delete those not required.**

- 1). Tapered
- 2). Evenwall
- 3. Fire Rated Gypsum Board: Gypsum core panel with a solid set, fire-resistive core for use in fire-resistive Type C designs, complying with and ASTM C 1396.
  - a. Product: ProRoc Type C, manufactured by CertainTeed Gypsum, Inc.
  - b. Thickness:

**\*\*NOTE TO SPECIFIER: Select one of the following thickness paragraphs and delete those not required.**

- 1).  $\frac{1}{2}$ "
- 2).  $\frac{5}{8}$ "

- c. Width: 48"
- d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
- 2). 9'
- 3). 10'
- 4). 12'
- 5). Use longest length available to avoid joints.

- e. Edges: Tapered

**B. Moisture and Mold Resistant Products:**

- 1. Moisture and Mold Resistant Gypsum Board: Gypsum core panel with enhanced core formulated for resistance to moisture and mold; surfaced with moisture/mold resistant paper on front, back, and long edges, complying with ASTM C 1396.

- a. Product: ProRoc Moisture and Mold Resistant with M2TECH Gypsum Board by CertainTeed Gypsum, Inc.
- b. Thickness: ½”
- c. Width:

**\*\*NOTE TO SPECIFIER: Select one of the following width paragraphs and delete those not required.**

- 1). 48”
- 2). 54”

- d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8’
- 2). 10’
- 3). 12’

- e. Edges: Tapered.

- f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.

- 2. Fire Rated Moisture and Mold Resistant Gypsum Board: Gypsum core panel with enhanced core formulated for resistance to moisture and mold; for use in fire-resistant Type X designs. Surfaced with moisture/ mold resistant paper of front, back, and long edges, complying with ASTM C 1396.

- a. Product: ProRoc Moisture and Mold Resistant with M2TECH Type X Gypsum Board by CertainTeed Gypsum, Inc.

- b. Thickness: 5/8”

- c. Width:

**\*\*NOTE TO SPECIFIER: Select one of the following width paragraphs and delete those not required.**

- 1). 48”
- 2). 54”

- d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8’
- 2). 10’
- 3). 12’

- e. Edges: Tapered

- f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.

- 3. Moisture and Mold Resistant Gypsum Board, Paperless Sheathing: Gypsum core panel with enhanced core formulated for resistance to moisture and mold, complying with ASTM C 1177.

- a. Product: GlasRoc Sheathing by CertainTeed Gypsum, Inc.
- b. Thickness: ½”
- c. Width: 48”
- d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8’
  - 2). 10’
  - 3). 12’
- e. Edges: Square
  - f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.
4. Fire Rated Moisture and Mold Resistant Gypsum Board, Paperless Sheathing: Gypsum core panel with enhanced core formulated for resistance to moisture and mold; for use in fire-resistant Type X designs, complying with ASTM C 1177.
- a. Product: GlasRoc Sheathing Type X by CertainTeed Gypsum, Inc.
  - b. Thickness: 5/8”
  - c. Width: 48”
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8’
  - 2). 10’
  - 3). 12’
- e. Edges: Square
  - f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.
5. Moisture and Mold Resistant Gypsum Board, Paperless Tile Backer: Gypsum core panel with enhanced core formulated for resistance to moisture and mold, complying with ASTM C 1177.
- a. Product: GlasRoc Tile Backer by CertainTeed Gypsum, Inc.
  - b. Thickness: ½”
  - c. Width: 48”
  - d. Length: 8’
  - e. Edges: Square
  - f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.
6. Fire Rated Moisture and Mold Resistant Gypsum Board, Paperless Tile Backer: Gypsum core panel with enhanced core formulated for resistance to moisture and mold; for use in fire-resistant Type X designs, complying with ASTM C 1178.
- a. Product: GlasRoc Tile Backer Type X by CertainTeed Gypsum, Inc.
  - b. Thickness: 5/8”
  - c. Width: 48”
  - d. Length: 8’
  - e. Edges: Square

- f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.

C. Moisture Resistant Products

- 1. Water-Resistant Gypsum Board: Gypsum core panel with enhanced water resistant core for use behind tile in wet areas, complying with ASTM C 1396.
  - a. Product: ProRoc Moisture Resistant, manufactured by CertainTeed Gypsum, Inc.
  - b. Thickness: ½”
  - c. Width: 48”
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8’
- 2). 9’
- 3). 10’
- 4). 12’
- 5). Use longest length available to avoid joints.

- e. Edges: Tapered.

- 2. Fire Rated Water-Resistant Gypsum Board: Gypsum core panel with enhanced fire-resistance and water resistance core for use in fire-resistive Type X designs, complying with ASTM C 1396, Type X.
  - a. Product: ProRoc Moisture Resistant Type X, manufactured by CertainTeed Gypsum, Inc.
  - b. Thickness: 5/8”
  - c. Width: 48”
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8’
- 2). 9’
- 3). 10’
- 4). 12’
- 5). Use longest length available to avoid joints.

- e. Edges: Tapered.

- 3. Moisture and Mold Resistant Gypsum Board, Paperless Tile Backer: Gypsum core panel with enhanced core formulated for resistance to moisture and mold, complying with ASTM C 1177.
  - a. Product: GlasRoc Tile Backer by CertainTeed Gypsum, Inc.
  - b. Thickness: ½”
  - c. Width: 48”
  - d. Length: 8’
  - e. Edges: Square
  - f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.

- 4. Fire Rated Moisture and Mold Resistant Gypsum Board, Paperless Tile Backer: Gypsum core panel with enhanced core formulated for resistance to moisture and mold; for use in fire-resistant Type X designs, complying with ASTM C 1178.

- a. Product: GlasRoc Tile Backer Type X by CertainTeed Gypsum, Inc.
- b. Thickness: 5/8"
- c. Width: 48"
- d. Length: 8'
- e. Edges: Square
- f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.

D. Specialty Products:

- 1. Flexible Gypsum Board: Gypsum core panel with enhanced core to allow for flexibility; Complying with ASTM C 1396.

- a. Product: ProRoc 1/4 Flex, manufactured by CertainTeed Gypsum, Inc.
- b. Thickness: 1/4"
- c. Width: 48"
- d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
  - 2). 12"
  - 3). Use longest length available to avoid joints.
  - 4). Edges: Tapered.
- 2. Gypsum Backer Board: Gypsum core panel for use as first layer in multi-layer applications or as base layer in ceilings for adhesive tile applications, complying with ASTM C 1396.

- a. Product: ProRoc Backer Board, manufactured by CertainTeed Gypsum, Inc.
- b. Thickness: 1/2"
- c. Width: 48"
- d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
  - 2). 9'
  - 3). 10'
  - 4). 12'
  - 5). Use longest length available to avoid joints.
- e. Edges: Square.
- 3. Fire Rated Gypsum Backer Board: Gypsum core panel with enhanced fire-resistant core for use as first layer in multi-layer applications or as base layer in ceilings for adhesive tile applications in Type X designs, complying with ASTM C 1396, Type X.

- a. Product: ProRoc Backer Board Type X, manufactured by CertainTeed Gypsum, Inc.
- b. Thickness: 5/8"
- c. Width: 48"
- d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'



- 2). 9'
- 3). 10'
- 4). 12'
- 5). 14'
- 6). 16'
- 7). Use longest length available to avoid joints.

e. Edges: Square.

E. High Performance Products:

1. Abuse Resistant Gypsum Board: Gypsum core panel with enhanced core to provide resistance to abuse, complying with ASTM C 1396.
  - a. Product: ProRoc Abuse Resistant, manufactured by CertainTeed Gypsum, Inc.
  - b. Thickness: ½"
  - c. Width: 48"
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
- 2). 9'
- 3). 10'
- 4). 12'
- 5). Use longest length available to avoid joints.

e. Edges: Tapered.

2. Fire Rated Abuse Resistant Gypsum Board: Gypsum core panel with enhanced core to provide resistance to abuse for use in fire-resistive Type X designs, complying with ASTM C 1396, Type X.
  - a. Product: ProRoc Abuse Resistant Type X, manufactured by CertainTeed Gypsum, Inc.
  - b. Thickness: ⅝"
  - c. Width: 48"
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
- 2). 9'
- 3). 10'
- 4). 12'
- 5). Use longest length available to avoid joints.

e. Edges: Tapered.

3. Fire Rated Shaft Liner Gypsum Board: Gypsum core shaftwall panel with enhanced fire resistant core, complying with ASTM C 1396 Type X.
  - a. Basis of Design: ProRoc Shaftliner Type X, manufactured by CertainTeed Gypsum, Inc.
  - b. Thickness: 1"
  - c. Width: 24"
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
- 2). 12'
- 3). Use longest length available to avoid joints.

e. Edges: Modified Tapered.

## 2.3 GYPSUM BOARD CEILING AND SOFFIT PANELS

### A. Exterior Soffit Board

1. Regular Exterior Soffit Board: Gypsum core soffit panel with sag resistant core, complying with ASTM C 1396.
  - a. Basis of Design: ProRoc Exterior Soffit Board, manufactured by CertainTeed Gypsum, Inc.
  - b. Thickness: ½"
  - c. Width: 48"
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
- 2). 12'
- 3). Use longest length available to avoid joints.

e. Edges: Tapered.

2. Fire Rated Exterior Soffit Board: Gypsum core soffit panel with enhanced fire and sag resistant core for use in fire resistive designs, complying with ASTM C 1396, Type X.
  - a. Basis of Design: ProRoc Exterior Soffit Board Type X, manufactured by CertainTeed Gypsum, Inc.
  - b. Thickness: 5/8"
  - c. Width: 48"
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
- 2). 12'
- 3). Use longest length available to avoid joints.

e. Edges: Tapered.

3. Moisture and Mold Resistant Gypsum Board, Paperless Sheathing: Gypsum core panel with enhanced core formulated for resistance to moisture and mold, complying with ASTM C 1177.
  - a. Product: GlasRoc Sheathing by CertainTeed Gypsum, Inc.
  - b. Thickness: ½"
  - c. Width: 48"
  - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
  - 2). 10'
  - 3). 12'
  - 4). Edges: Square
- e. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.
4. Fire Rated Moisture and Mold Resistant Gypsum Board, Paperless Sheathing: Gypsum core panel with enhanced core formulated for resistance to moisture and mold; for use in fire-resistant Type X designs, complying with ASTM C 1177.
    - a. Product: GlasRoc Sheathing Type X by CertainTeed Gypsum, Inc.
    - b. Thickness: 5/8"
    - c. Width: 48"
    - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
  - 2). 10'
  - 3). 12'
- e. Edges: Square
  - f. Mold Resistance: Panel score of 10 (highest rating available) when tested in accordance with ASTM D 3273.
- B. Interior Ceiling Board
1. Regular Gypsum Ceiling Board: Gypsum Core panel with enhanced sag resistant core; complying with ASTM C 1396.
    - a. Basis of Design: ProRoc Interior Ceiling, manufactured by CertainTeed Gypsum, Inc.
    - b. Thickness: 5/8"
    - c. Width: 48"
    - d. Length:

**\*\*NOTE TO SPECIFIER: Select one of the following length paragraphs and delete those not required.**

- 1). 8'
  - 2). 12'
  - 3). 14'
  - 4). Use longest length available to avoid joints.
- e. Edges: Tapered

**\*\*NOTE TO SPECIFIER: Select the Accessories required from the following paragraphs and delete those not required.**

## 2.4 ACCESSORIES

- A. Interior Trim: Complying with ASTM C 1047.

1. Corner Bead
2. Casing Beads:

**\*\*NOTE TO SPECIFIER: Select one of the following casing bead paragraphs and delete those not required.**

- a. LC-Bead
- b. L-Bead
- c. U-Bead

3. Control Joint

B. Fasteners:

**\*\*NOTE TO SPECIFIER: Select one of the following fastener paragraphs and delete those not required.**

1. Screws: ASTM C 954 or ASTM C 1002 as recommended by panel manufacturer.
2. Adhesive: Recommended by panel manufacturer.

C. Joint Treatment:

1. Tape: Comply with ASTM C 475.
2. Joint Compound: Comply with ASTM C 475.

D. Texture Finishes:

1. Primer
2. Wall Texture: Texture finish shall be specified by the Architect or UT Dallas Project Manager.
3. Ceiling Texture: Texture finish shall be specified by the Architect or UT Dallas Project Manager.

**\*\*NOTE TO SPECIFIER: Include the following paragraphs and delete those not required.**

E. Sealant: Provide Joint Sealant and Acoustical Sealant as specified in Section 07 92 00.

F. Insulation: Thermal and acoustical insulation as recommended by manufacturer.

### **PART 3: EXECUTION**

#### 3.1 EXAMINATION

- A. Do not begin installation until supports and substrates have been properly prepared.
- B. Verify that framing and supports are ready to receive work and opening dimensions are as indicated on the Drawings.
- C. If support and substrate preparation is the responsibility of another installer, notify Architect and/or UT Dallas Project Manager of unsatisfactory preparation before proceeding.

#### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Examine gypsum board panels for damage and existence of mold. Install undamaged panels.
- C. Examine gypsum board in accordance with GA 231 for water damage.

- D. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's written instructions and ASTM C 840 and GA 216.

**\*\*NOTE TO SPECIFIER: Edit the following paragraphs as required for the project. Select single or double layer systems as required and delete those paragraphs not required.**

- B. Erect single layer gypsum board in most economical direction with ends and edges occurring over firm bearing.
- C. Erect single layer fire rated gypsum board with edges and ends occurring over firm bearing.
- D. Erect exterior gypsum sheathing horizontally, with edges butted and ends occurring over firm bearing.
- E. Double Layer Applications: Use gypsum first layer, placed perpendicular or parallel to framing or furring members. Place second layer with offset joints from joints of first layer.
- F. Place control joints consistent with lines of building spaces as indicated on Drawings.
- G. Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.

### 3.4 FINISHING

**\*\*NOTE TO SPECIFIER: Edit the following paragraphs as required for the project. Select the finishing levels as specified and defined in GA 214 and delete those not required.**

- A. General: Comply with ASTM C 840, GA 214 and GA 216.
  - 1. Level 1: Plenums, service corridors; above ceilings.
  - 2. Level 2: Areas of water resistant gypsum backing board under tile; exposed areas where appearance is not critical.
  - 3. Level 3: Areas to receive heavy or medium textured coatings; heavy-grade wall coverings.
  - 4. Level 4: Areas to receive flat sheen paint finish; light textured coatings; lightweight wall coverings.
  - 5. Level 5: Areas to receive gloss, semi-gloss sheen paints; critical lighting conditions.

### 3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 09 20 00