

**SECTION 09 29 00****GYPSUM BOARD****PART 1 - GENERAL****1.1 DESCRIPTION**

- A. This section specifies installation and finishing of gypsum board.

**1.2 RELATED WORK**

- A. Installation of wood framing members for walls, partitions, furring, soffits, and ceilings: Section 06 10 00, ROUGH CARPENTRY.
- B. Acoustical Sealants: Section 07 92 00, JOINT SEALANTS.

**1.3 TERMINOLOGY**

- A. Definitions and description of terms shall be in accordance with ASTM C11, C840, and as specified.
- B. Underside of Structure Overhead: In spaces where steel trusses or bar joists are shown, the underside of structure overhead shall be the underside of the floor or roof construction supported by the trusses or bar joists.
- C. "Yoked": Gypsum board cut out for opening with no joint at the opening (along door jamb or above the door).

**1.4 SUBMITTALS**

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturer's Literature and Data:
  - 1. Cornerbead and edge trim.
  - 2. Finishing materials.
  - 3. Laminating adhesive.
  - 4. Gypsum board, each type.
- C. Shop Drawings:
  - 1. Typical gypsum board installation, showing corner details, edge trim details and the like.
- D. Samples:
  - 1. Cornerbead.
  - 2. Edge trim.

3. Control joints.

#### 1.5 DELIVERY, IDENTIFICATION, HANDLING AND STORAGE

- A. In accordance with the requirements of ASTM C840.

#### 1.6 ENVIRONMENTAL CONDITIONS

- A. In accordance with the requirements of ASTM C840.

#### 1.7 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing And Materials (ASTM):
  1. C11-08 Terminology Relating to Gypsum and Related Building Materials and Systems
  2. C475-02 Joint Compound and Joint Tape for Finishing Gypsum Board
  3. C840-08 Application and Finishing of Gypsum Board
  4. C919-08 Sealants in Acoustical Applications
  5. C1002-07 Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs
  6. C1047-05 Accessories for Gypsum Wallboard and Gypsum Veneer Base
  7. C1396-06 Gypsum Board
  8. E84-08 Surface Burning Characteristics of Building Materials
- C. Underwriters Laboratories Inc. (UL):
  1. Latest Edition Fire Resistance Directory
- D. Inchcape Testing Services (ITS):
  1. Latest Editions Certification Listings

## PART 2 - PRODUCTS

### 2.1 GYPSUM BOARD

- A. Gypsum Board: ASTM C1396, 16 mm (5/8 inch) thick unless shown otherwise. Shall contain a minimum of 20 percent recycled gypsum.
- B. Water Resistant Gypsum Backing Board: ASTM C620, 16 mm (5/8 inch) thick.

- C. Gypsum cores shall contain a minimum of 95 percent post industrial recycled gypsum content. Paper facings shall contain 100 percent post-consumer recycled paper content.

## 2.2 ACCESSORIES

- A. ASTM C1047, except form of 0.39 mm (0.015 inch) thick zinc coated steel sheet or rigid PVC plastic.
- B. Flanges not less than 22 mm (7/8 inch) wide with punchouts or deformations as required to provide compound bond.

## 2.3 FASTENERS

- A. ASTM C1002 and ASTM C840, except as otherwise specified.
- B. Select screws of size and type recommended by the manufacturer of the material being fastened.
- C. Clips: Zinc-coated (galvanized) steel; gypsum board manufacturer's standard items.

## 2.4 FINISHING MATERIALS AND LAMINATING ADHESIVE

- A. ASTM C475 and ASTM C840. Free of antifreeze, vinyl adhesives, preservatives, biocides and other VOC. Adhesive shall contain a maximum VOC content of 50 g/l.

## PART 3 - EXECUTION

### 3.1 GYPSUM BOARD HEIGHTS

- A. Extend all layers of gypsum board from floor to underside of structure overhead on following partitions and furring:
  - 1. Two sides of partitions:
    - a. Full height partitions shown (FHP).
    - b. Corridor partitions.
  - 2. One side of partitions or furring:
    - a. Inside of exterior wall furring or stud construction.
    - b. Room side of room without suspended ceilings.
    - c. Furring for pipes and duct shafts, except where fire rated shaft wall construction is shown.
- B. In locations other than those specified, extend gypsum board from floor to heights as follows:
  - 1. At ceiling of suspended gypsum board ceilings.
  - 2. At existing ceilings.

**3.2 INSTALLING GYPSUM BOARD**

- A. Coordinate installation of gypsum board with other trades and related work.
- B. Install gypsum board in accordance with ASTM C840, except as otherwise specified.
- C. Use gypsum boards in maximum practical lengths to minimize number of end joints.
- D. Bring gypsum board into contact, but do not force into place.
- E. Ceilings:
  - 1. For single-ply construction, use perpendicular application.
- F. Walls (Except Shaft Walls):
  - 1. When gypsum board is installed parallel to framing members, space fasteners 300 mm (12 inches) on center in field of the board, and 200 mm (8 inches) on center along edges.
  - 2. When gypsum board is installed perpendicular to framing members, space fasteners 300 mm (12 inches) on center in field and along edges.
  - 3. Stagger screws on abutting edges or ends.
  - 4. For single-ply construction, apply gypsum board with long dimension either parallel or perpendicular to framing members as required to minimize number of joints except gypsum board shall be applied vertically over "Z" furring channels.
  - 5. No offset in exposed face of walls and partitions will be permitted because of single-ply and two-ply or three-ply application requirements.
  - 6. Control Joints ASTM C840 and as follows:
    - a. Locate at both side jambs of openings if gypsum board is not "yoked". Use one system throughout.
    - b. Not required for wall lengths less than 9000 mm (30 feet).
    - c. Extend control joints the full height of the wall or length of soffit/ceiling membrane.
- G. Accessories:
  - 1. Set accessories plumb, level and true to line, neatly mitered at corners and intersections, and securely attach to supporting surfaces as specified.
  - 2. Install in one piece, without the limits of the longest commercially available lengths.
  - 3. Corner Beads:
    - a. Install at all vertical and horizontal external corners and where shown.
    - b. Use screws only. Do not use crimping tool.

4. Edge Trim (Casings Beads):
  - a. At both sides of expansion and control joints unless shown otherwise.
  - b. Where gypsum board terminates against dissimilar materials and at perimeter of openings, except where covered by flanges, casings or permanently built-in equipment.
  - c. Where gypsum board surfaces of non-load bearing assemblies abut load bearing members.
  - d. Where shown.

### 3.3 FINISHING OF GYPSUM BOARD

- A. Finish joints, edges, corners, and fastener heads in accordance with ASTM C840. Use Level 5 finish for all finished areas open to public view.
- B. Before proceeding with installation of finishing materials, assure the following:
  1. Gypsum board is fastened and held close to framing or furring.
  2. Fastening heads in gypsum board are slightly below surface in dimple formed by driving tool.
- C. Finish joints, fasteners, and all openings, including openings around penetrations, on that part of the gypsum board extending above suspended ceilings to seal surface of non decorated gypsum board construction. After the installation of hanger rods, hanger wires, supports, equipment, conduits, piping and similar work, seal remaining openings and maintain the integrity of the construction. Sanding is not required of non decorated surfaces.

### 3.4 REPAIRS

- A. After taping and finishing has been completed, and before decoration, repair all damaged and defective work, including nondecorated surfaces.
- B. Patch holes or openings 13 mm (1/2 inch) or less in diameter, or equivalent size, with a setting type finishing compound or patching plaster.
- C. Repair holes or openings over 13 mm (1/2 inch) diameter, or equivalent size, with 16 mm (5/8 thick gypsum board secured in such a manner as to provide solid substrate equivalent to undamaged surface.

**Tape and refinish scratched, abraded or damaged finish surfaces including cracks and joints in non decorated surface. - - - E N D - - -**