

RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

PART 1: GENERAL

DESCRIPTION OF WORK:

Under this Section, provide gypsum board for wall assemblies (non-fire rated and fire-rated), partitions, ceilings, ceiling access doors, fireproofing for beams and columns as indicated on drawings and as specified herein.

Note all gypsum drywall, except as noted on drawings, shall be provided with a LEVEL 4" gypsum wallboard finish.

Note all gypsum drywall shall be initial coated with the specified heavy-duty texture equalizing drywall primer. Reference Part 2, Products and 09900 Paint Schedule.

INDUSTRY STANDARDS:

For listing of names of industry standard agencies mentioned by abbreviation in this Section refer to Section 01068.

QUALITY ASSURANCE:

Manufacturers:

Standard: For purposes of designating type and quality for work under this Section, Drawings and Specifications are based on products manufactured or furnished by United States Gypsum Company.

Acceptable Manufacturers: Products of following manufacturers which meet all requirements of these specifications will be acceptable:

- U.S. Gypsum
- CertainTeed Corporation
- Georgia-Pacific
- National Gypsum Company

Source: Products for use on this Project shall be of one Manufacturer for same function, unless noted specifically otherwise herein.

SUBMITTALS:

Manufacturer's Data: Submit (in duplicate) Manufacturer's printed catalog cuts, installation instructions, and finishing instructions.

Test Reports: Submit (in duplicate) reports from Underwriter's Laboratories, Inc. or other acceptable testing agencies, on fire tests of designs referred to in Contract Documents.

Mock-up Sample: Fabricate a field mock-up of a gypsum wallboard assembly, across a drywall panel joint, with a crack control joint installed, with the specified drywall finishing primer and paint finish coats, for review and approval by Architect. Approved mock-up will stand on site for reference as the project standard for all gypsum wall board walls.

PRODUCT HANDLING:

Delivery: Deliver materials in original packages, containers or bundles bearing brand name and name of manufacturer or supplier for whom product is manufactured.

Storage: Gypsum board and insulation material delivered prior to use shall be stored within completely weather tight structure, off ground, and completely enclosed within weather tight covering. Stack all board materials on 2"x 4" risers, spaced 16" o.c. Weather tight covering shall also extend completely under stacked material to prevent seepage of moisture if over uncovered ground or damp slab.

Handling: Exercise care, during handling and storage, to avoid undue sagging or damage to edges, ends, and surfaces.

ENVIRONMENTAL CONDITIONS:

Building: Application of gypsum board shall commence only after structure is completely weather -tight.

Temperature: In cold weather and during period of gypsum board application and joint finishing maintain temperatures in building uniformly within range of 55 degrees to 70 degrees F. Provide adequate ventilation to eliminate excessive moisture in building during same period.

PART 2: PRODUCTS

MATERIALS:

Gypsum Board shall be furnished in 48" widths and in lengths of at least 2" greater than height from floor to finished ceiling to permit vertical installation of all boards. Contractor shall have option to furnish boards for vertical installation full height to structure above where required in one sheet, 48" wide.

Types: Gypsum Board shall conform to following:

1. Gypsum Board shall be fire-resistive type throughout of various thicknesses indicated, equivalent to Gold Bond Fire-Shield Type C Gypsum Board. Provide impact resistant gypsum wallboard at locations indicated on Drawings.
2. All 5/8" thick gypsum board shall be taper-edged, fire-resistive, conforming to ASTM C1396.
3. Moisture Resistant Gypsum MR Board shall be: Gold Bond XP Fire-Shield C Gypsum Board, 5/8" tapered long edges, face paper folded around long edges, with treated manila paper finish for 1 hour rated partitions. Use 5/8" moisture and mold resistant gypsum board for interior applications of MR board locations, and ceilings of janitor closets, shower rooms, tub rooms. Purple face paper and heavy, mold-resistant gray back paper surface for fire-rated assemblies.
4. Tile Backer Board: Use 5/8" tile backer board for backup of all areas scheduled to receive thin set ceramic tile. Moisture resistance silicone core reinforced with inorganic glass fiber matt. "DenShield Tile Guard" by Georgia-Pacific, or equal products by approved manufacturers.

5. Exterior Wall Sheathing Board shall be 5/8" thick fire retarding fiberglass reinforced gypsum board, with sealed and taped joints: "Dens-Glass Gold" by Georgia-Pacific, or equal products by approved manufacturers.
6. Gypsum Soffit board shall be 5/8" thick, fire coded, exterior gypsum soffit board ToughRock Fireguard C Soffit Board by Georgia Pacific, or equal products by U. S. Gypsum, National Gypsum.
7. Sheetrock Brand First Coat drywall texture equalizing finishing primer, or equivalent.

FASTENERS:

Screws for attachment of board to metal studs and metal ceiling and wall furring shall be 7/8" or 1" US Drywall Screw, Type S. All screws shall have bugle head.

METAL AND PLASTIC CORNER BEADS AND TRIM:

Interior Work:

Metal: Fabricate metal corner beads from galvanized steel, not lighter than 0.02" nominal thickness, in following shapes and sizes.

1. Corner Beads shall be 90 degree external corners, equivalent to USG No. 100-Perf-A-Bead.
2. Board termination Metal Trim shall be equivalent to USG 200 Series Perf-A-Trim, sized for wallboard thickness.

Drywall Control Joint shall be equivalent to USG CJS45, V-joint design, fabricated from 45 mm galvanized steel.

REINFORCING TAPE AND JOINT TREATMENT (INTERIOR)

Tape shall be equivalent to "Perf-A-Tape".

Compound for embedding and fill coat application shall be equivalent to "Perf-A-Tape Joint Compound".

Compound for finishing shall be equivalent to "Perf-A-Tape Topping Compound".

ADHESIVE AND CAULKING:

Laminating Adhesive: Laminating adhesive for face layer application in double-layer systems shall be equivalent to "Perf-A-Tape Joint Compound, embedding type".

Caulking Compound: Acoustical type sealant, furnished by Gypsum Board products manufacturer.

CRACK CONTROL JOINTS:

Crack control joints shall be provided in pre-approved locations as directed by the Drawings and the Architect, at each jamb of windows exceeding 10' in width, in walls at 40' intervals, and in ceilings at 30' intervals. Provide manufacturer standard metal exp/control joint material.

PART 3: EXECUTION

CONDITION OF SURFACES:

Inspection: Examine surfaces to receive gypsum board for defects, which might impair quality of finished installation. Do not start work until such defects have been corrected.

Framing Spacing: Framing members to which gypsum board will be fastened shall be straight and true, and spaced as indicated on Drawings, not to exceed 16" o.c. for walls and ceilings. Framing and bridging members shall be adequate to carry design or code loading. Bridging members shall be spaced 48" o.c.

Supplemental Framing: Provide back blocking and framing as necessary for support of fixtures and all mounted equipment.

Coordination: Conduit, piping, retainers for corner guards and other items to be concealed by or penetrating, wallboard shall be installed and tested before applying wallboard.

INSTALLATION OF GYPSUM BOARD:

Cutting and Fitting:

Cut gypsum board by scoring and breaking, or by sawing. Work from face side.

Cut edges and ends of gypsum board shall be smoothed where necessary, in order to obtain neat jointing when board is erected.

Cut-outs for pipes, fixtures or other small openings shall be scored on face and back in outline before removal, or shall be cut out with saw or other suitable tools.

Where gypsum board meets projecting surfaces, scribe and cut neatly, fitting closely for caulked joint.

Application of Gypsum Board:

Apply continuous bead of Acoustical Sealant on floor at line of contact of board.

Walls: Apply gypsum board vertically, pressing into sealant, with boards in moderate contact, but not forced into place. At interval and external corners conceal cut edges of boards by overlapping covered edges of abutting boards. Arrange joints on opposite sides of partitions so as to occur on different framing members. Place long dimensions of panels parallel to furring or framing members. Panels shall be of length required to reach from 2" above ceiling line to floor line in one continuous length. Make joints over framing or furring members.

Adhesive for laminating gypsum boards to CMU block wall surfaces shall be Loctite PL Premium Polyurethane Construction Adhesive, or equivalent adhesive. CMU surface to be clean (free of dirt, dust, loose particles), sound, and completely cured and dry. Fill all cracks and gaps in CMU with concrete repair compound. Use a concrete bonding primer where necessary for optimal adhesion.

Ceilings: Apply board to ceilings with long dimension of board at right angles to furring members. At perimeters of all ceilings, edge joint shall be laid on metal trim strip against continuous bead of caulking, applied in advance of board application.

Gypsum Board End Joint at masonry walls shall be laid on metal trim strip against continuous bead of caulking, applied in advance of board application.

Corner Beads and Metal Trim: Internal corners do not require corner beads, but shall be reinforced with tape. External corners shall have corner bead fitted neatly over corner, and secured with same type fasteners used for applying wallboard.

ATTACHMENT:

Method: Space fasteners not less than 3/8" nor more than 1/2" from edge and ends of board. While fasteners are being driven, hold board in firm contact with under laying support. Application of fasteners shall proceed from central portion of board to ends and edges. If paper surface is broken by fastener in attachment, drive another fastener approximately 2" from faulty fastener.

Drive screws to provide screw head penetration just below gypsum board surface.

Spread adhesive over laminating surface of face or base layer gypsum board. Extend adhesive up to ends and edges of all board.

Spacing of Fasteners shall be as follows:

Screw Method: Space screws at maximum of 12" o.c. for ceilings and 16" o.c. for walls.

Corner Beads and Trim shall have fasteners spaced 6" o.c. driven through gypsum board into framing members.

For installation onto CMU wall surfaces, apply generous amount and continuous 1/2" diameter beads of adhesive to back of gypsum board sheet and spread with a notched trowel into a grid pattern. Push/press into place tightly and hold in place with perimeter screw anchors until manufacturer's required cure time is exceeded.

JOINT FINISHING AND FASTENER CONCEALMENT:

Provide "LEVEL 4" gypsum wallboard finish at all areas, unless indicated otherwise.

Provide total coverage coat of Sheetrock Brand First Coat Primer or equivalent prior to paint coats. Reference 09900.

Method: Mix and use joint compound and topping compound in accordance with manufacturer's recommendations printed on bag. Apply by machine or hand tool. Allow minimum drying time of 24 hours between adhesive coats. Sand all coats as necessary after each application. Clean excess compound from surface of gypsum board as compound is applied.

Reinforcement: Reinforce wall and ceiling angles and inside vertical corner angles with tape folded to conform to adjoining surfaces, and to form straight, true angle. All gypsum board joints except joints at metal trim shall be tapered.

Embedment Coat: Apply thin, uniform layer of joint compound (embedding type) approximately 3" wide over joint to be reinforced. Center tape over joint and seat into compound; leaving sufficient compound under tape to provide proper bond. Apply skim coat of compound immediately after embedding tape.

Fill Coat: After drying, cover embedding compound with fill coat of compound. Spread evenly over and slightly beyond tapered edge area of board. Feather at edges.

Topping: Cover fill coat with topping compound. Spread evenly over and slightly beyond edge of proceeding coat. Feather with smooth, uniform finish.

Fastener Concealment: Treat dimples at fasteners (and holes where temporary fasteners are removed) with three coats of joint compound applied as each coat is applied to joints.

Conceal flanges of all corner beads and trim members by minimum of two coats of compound applied strictly in accordance with Manufacturer's directions.

Caulking:

Joints at Penetrations: Where pipes, conduits, ducts, electrical devices, etc., penetrate gypsum board, seal joint around perimeter with caulking compound.

Joints between ceilings and walls shall be sealed continuously with acoustical sealant, as specified above.

DRYWALL CEILING ACCESS DOORS: Provide 24" x 24" x 16 gauge minimum primed steel ceiling access doors each space with drywall ceiling, hinged and with key lock. Provide UL Listed fire-rated doors all locations where a rating is required. Provide USG No. 200-B metal trim on all edges of gypsum board. Finish as specified in 09900 Paint.

END OF SECTION