

SECTION 09250

GYPSUM WALLBOARD

PART 1 GENERAL

1.1 SUMMARY

- A. Includes But Not Limited To
 - 1. Furnish and install gypsum wallboard as described in Contract Documents, except behind ceramic tile.
 - 2. Furnish and install acoustical sealants as described in Contract Documents.
- B. Related Sections
 - 1. Section [06110](#) - Backblocking of gypsum wallboard joints
 - 2. Section [09305](#) - Backerboard behind ceramic tile
 - 3. Section [09822](#) - Quality of acoustical sealants

1.2 REFERENCES

- A. [Gypsum Association](#)
 - 1. GA-214-90 - 'Recommended Specification: Levels of Gypsum Board Finish'
- B. [American Society For Testing And Materials](#)
 - 1. ASTM C 36-99, 'Standard Specification for Gypsum Wallboard'
 - 2. ASTM C 475-94, 'Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board'
 - 3. ASTM C 840-01, 'Standard Specification for Application and Finishing of Gypsum Board'
 - 4. ASTM C 1002-00, 'Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panels or Metal Plaster Bases to Wood Studs or Steel Studs'

1.3 SUBMITTALS

- A. [Quality Assurance / Control](#) - Fire test results or assembly diagrams and numbers confirming products used will provide required fire ratings with installation configurations used.

1.4 QUALITY ASSURANCE

- A. [Pre-Installation Conference](#)
 - 1. Schedule pre-installation conference immediately before installation of gypsum wallboard.
 - 2. In addition to agenda items specified in Section 01300, review finish requirements necessary for installation of finish materials over gypsum wallboard.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages, containers, or bundles bearing brand name, applicable standard designation, and Manufacturer's name.
- B. Store material under roof and keep dry. Stack gypsum board flat and protect from damage.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements
 - 1. Temperature shall be 50 deg F and 95 deg F maximum day and night during entire joint operation and until execution of Certificate of Substantial Completion.
 - 2. Provide ventilation to eliminate excessive moisture.
 - 3. Avoid hot air drafts which will cause too rapid drying.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Gypsum Board
 - 1. For single layer gypsum board applied to trussed rafters, Corridor ceilings, or plywood web joists, use following 'Improved Type X' products -
 - a. **Approved Products** -
 - 1) Gyproc Fireguard C by Georgia Pacific
 - 2) Fire-Shield G Wallboard by National Gypsum
 - 3) Fire-Code 'C' by USG
 - 4) 'Improved Type X' boards from other manufacturers may be approved by Architect upon submission of letter of acceptance from jurisdiction having authority before bidding.
 - 2. For all other applications - Any manufacturer's product meeting requirements of ASTM C 36, Type X, UL one-hour rated, tapered edge, face paper suitable for painting.

2.2 ACCESSORIES

- A. Corner And Edge Trim
 - 1. **Acceptable And Approved Products** -
 - a. Metal - 24 ga minimum steel, electrolytic galvanized zinc-coated, treated for maximum cement and paint adhesion. Surfaces to receive bedding cement knurled for maximum bonding.
 - b. Paper-Faced Metal -
 - 1) Beadex Drywall Accessories
 - 2) Chicago Metallic
 - 3) Goldline Drywall Trim by Unimast
 - 4) USG
 - 5) Equal as approved by Architect before installation. See Section 01600.
 - c. Paper-Faced Plastic -
 - 1) No-Coat by Drywall Systems International
 - d. Solid Vinyl - May be used on curved portions of arches and similar decorative features.
- B. Joint Compound
 - 1. Best grade or type recommended by Wallboard Manufacturer and meeting requirements of ASTM C 475.
 - a. Use Taping Compound for first coat to embed tape and accessories.
 - b. Use Taping Compound or All-Purpose Compound for subsequent coats except final coat.
 - c. Use Finishing Compound for final coat and for skim coat.
- C. Joint Reinforcing - Paper reinforcing tape acceptable to Wallboard Manufacturer.
- D. Primer Under Surfaces To Be Textured
 - 1. **Acceptable Products** -
 - a. Sheetrock First Coat by USG
 - b. Prep Coat Plus by Hamilton Materials
 - c. Primer recommended by manufacturer of finish paint coat.
- E. Fasteners
 - 1. Bugle head screws meeting requirements of ASTM C 1002.
 - a. Types -
 - 1) Type W - For fastening gypsum board to wood members other than truss members and plywood web joists.
 - 2) Type S - For fastening gypsum board to steel framing and ceiling suspension members, truss members, and plywood web joists.

- b. Lengths -
 - 1) Of length to penetrate wood framing 5/8 inch minimum.
 - 2) Of length to penetrate steel framing 3/8 inch minimum.

2.2 MANUFACTURERS

- A. Beadex Drywall Accessories, Auburn, WA (800) 726-2397 or (253) 931-6600
- B. Chicago Metallic, Chicago, IL (800) 323-7164 or (708) 563-4600 www.chicago-metallic.com
- C. Drywall Systems International, Bend, OR (888) 662-6281 or (541) 330-0668 www.no-coat.com
- D. Georgia Pacific, Atlanta, GA (800) 225-6119 or (404) 652-4000 www.gp.com
- E. Hamilton Materials Inc, Orange, CA (800) 331-5569 or (714) 637-2770
- F. National Gypsum, Charlotte, NC (800) 628-4662 or (704) 365-7300 www.national-gypsum.com
- G. Unimast Inc, Schiller Park, IL (800) 654-7883 or (847) 928-3400 www.unimast.com
- H. United States Gypsum Co, Chicago, IL (800) 874-4968 or (312) 606-4000 www.usg.com

PART 3 EXECUTION

3.1 INSTALLATION

- A. Interface With Other Work - Coordinate with Division 06 for location of backblocking for edges and ends of gypsum board and for blocking required for installation of equipment and building specialties. Do not install gypsum board until required blocking is in place.
- B. General - Install and finish as recommended in ASTM C 840 unless specified otherwise in this Section.
- C. Gypsum Wallboard
 - 1. General -
 - a. Install so trim and reinforcing tape are fully backed by gypsum wallboard. No hollow spaces between pieces of gypsum board over 1/8 inch wide before taping are acceptable.
 - b. Rout out backside of gypsum board to accommodate items which extend beyond face of framing, but do not penetrate face of gypsum board, such as metal door frame mounting brackets, etc.
 - 2. Single Layer Application -
 - a. Apply ceilings first using minimum of two men.
 - b. Use board of length to give minimum number of joints.
 - c. On walls over 108 inches high and on ceilings, apply board perpendicular to support.
 - d. Stagger end joints. End and edge joints of board applied on ceilings shall occur over framing members or be back blocked with 2x4 blocking. End joints of board horizontally applied on walls shall occur over framing members. Edge joints of board vertically applied on walls shall occur over framing members.
 - e. Butt edges in moderate contact. Do not force in place. Shim to level.
 - f. Leave facings true with joint, finishing flush. Vertical work shall be plumb and ceiling surfaces level.
 - g. Scribe work closely. Keep joints as far from openings as possible. If joints occur near an opening, apply wallboard so vertical joints are centered over openings. No vertical joints shall occur within 8 inches of external corners or openings.
 - h. Install board tight against support with joints even and true. Tighten loose screws.
 - i. Calk perimeter joints in sound insulated rooms with specified acoustical sealant.
 - 3. Double Layer Application -
 - a. Apply base layer as specified for single layer application, except edge joints need not occur over framing members or be back blocked.
 - b. Apply face layer with joints staggered in relationship to base and occurring over supports. Use combination of adhesive and screws if required to meet Manufacturer's specifications for fire-rated assembly. Apply screws attaching face layer through base layer into support for specified penetration.
 - 4. Fastening -

- a. Apply from center of wallboard towards ends and edges.
 - b. Apply screws 3/8 inch minimum from ends and edges, one inch maximum from edges, and 1/2 inch maximum from ends.
 - c. Spacing -
 - 1) Ends - Screws not over 7 inches on center at edges where blocking or framing occurs.
 - 2) Wood Framed Walls And Ceilings - Screws 7 inches on center in panel field.
 - 3) Metal Framed Walls - Screws 12 inches on center in panel field.
 - d. Set screw heads 1/32 inch below plane of board, but do not break face paper. If face is accidentally broken, apply additional screw 2 inches away.
 - f. Screws on adjacent ends or edges shall be opposite each other.
 - g. Drive screws with shank perpendicular to face of board.
- D. Trim
- 1. Corner Beads -
 - a. Attach corner beads to outside corners.
 - 1) Attach metal corner bead with staples spaced 4 inches on center maximum and flat taped over edges of corner bead. Also, apply screw through edge of corner bead where wood trim will overlay corner bead.
 - 2) Set paper-faced trim in solid bed of taping compound.
 - 2. Edge Trim - Apply where gypsum board abuts dissimilar material in accordance with Manufacturer's instructions. Hold channel and 'L' trim back from exterior metal window and door frames 1/8 inch to allow for caulking.
- E. Finishing
- 1. General -
 - a. Tape and finish joints and corners as specified below to correspond with final finish material to be applied to gypsum board. When sanding, do not raise nap of gypsum board face paper or paper-faced trim.
 - b. First Coat -
 - 1) Apply tape over center of joint in complete, uniform bed of specified taping compound. If metal corner bead is used, apply reinforcing tape over flange of metal corner bead and trim so half of tape width is on flange and half is on gypsum wallboard.
 - 2) Completely fill gouges, dents, and fastener dimples.
 - 3) Allow to dry and sand lightly if necessary to eliminate high spots or excessive compound.
 - c. Second Coat -
 - 1) Apply coat of specified joint compound over embedded tape extending 3-1/2 inches on both sides of joint center. Use finishing compound only if applied coat is intended as final coat.
 - 2) Re-coat gouges, dents, and fastener dimples.
 - 3) Allow to dry and sand lightly to eliminate high spots or excessive compound.
 - d. Third Coat - Apply same as second coat except extend application 6 inches on both sides of joint center. Allow to dry and sand with fine sandpaper or wipe with damp sponge.
 - e. Fourth Coat - Apply same as second coat except extend application 9 inches on both sides of joint center. Allow to dry and sand with fine sandpaper or wipe with damp sponge.
 - 2. Finishing Levels -
 - a. Unfinished Gypsum Board Surfaces And Under Acoustical Tile -
 - 1) GA-214-90 Level Two - 'All joints and interior angles shall have tape embedded in joint compound and one separate coat of joint compound applied over all joints, angles, fastener heads, and accessories. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable,' except under acoustic tile.

- b. Gypsum Board Surfaces in Mechanical, Storage, And Utility Areas to Receive Paint, and Surfaces to Receive Sisal Wall Covering -
 - 1) GA-214-90 Level Three - 'All joints and interior angles shall have tape embedded in joint compound and two separate coats of joint compound applied over all joints, angles, fastener heads, and accessories. All joint compound shall be smooth and free of tool marks and ridges.'
 - c. Gypsum Board Surfaces to Receive Vinyl Wall Covering, Multi-Color Coating System, and Painted Texturing, Except in Mechanical, Storage, And Utility Areas -
 - 1) GA-214-90 Level Four - 'All joints and interior angles shall have tape embedded in joint compound and three separate coats of joint compound applied over all joints, angles, fastener heads, and accessories. All joint compound shall be smooth and free of tool marks and ridges.'
 - d. Painted Smooth Gypsum Board Surfaces, Except in Mechanical, Storage, And Utility Areas -
 - 1) GA-214-90 Level Five - 'All joints and interior angles shall have tape embedded in joint compound and three separate coats of joint compound applied over all joints, angles, fastener heads, and accessories. A thin skim coat of finishing compound shall be applied to the entire surface. Surface shall be smooth and free of tool marks and ridges.'
3. Prime gypsum board surfaces which are to receive texturing.

3.2 CLEANING

- A. Remove from site debris resulting from work of this Section including taping compound spills.

END OF SECTION

