
SECTION 09250 - GYPSUM BOARD
SECTION 09270 - GYPSUM BOARD ACCESSORIES

Guidance for designers and specifiers, with suggested language to be modified and incorporated into project specifications.

ENVIRONMENTAL CONSIDERATIONS

Qualities:

- *Abundant resource (conserves limited resources).*
- *Recycled paper backing (conserves resources).*
- *Inert nontoxic material (minimizes pollution).*
- *Use of industrial waste product (flue-gas-desulfurization gypsum).*

Problems:

- *Mining of materials contributes to dust, soil erosion, destruction of habitats.*
- *Paper facings hold moisture, which can promote mold growth.*
- *Vinyl-faced gypsum board creates conditions that may support mold.*
- *Difficult to recycle (contributes to landfill problem).*

Recommendations:

- *Minimize waste (conserves resources).*
- *Utilize recycled-content materials (conserves resources).*
- *Specify gypsum board product made with flue-gas desulfurization (synthetic) gypsum.*
- *Avoid premixed joint compounds containing additives (minimizes indoor air quality and pollution problems).*
- *Select products that minimize framing (conserves resources).*
- *Avoid vinyl-faced gypsum board.*
- *Use unfaced board with cellulose or fiberglass fibers embedded in gypsum matrix.*
- *Collect scrap for recycling or use as soil amendment.*

RELATED LEED® CREDITS

Materials & Resources – Credit 4 – Recycled Content

PART 1 - GENERAL

1.01 SUBMITTALS

- A. **[INCLUDE IF PROJECT REQUIRES RECYCLED CONTENT DOCUMENTATION, SUCH AS FOR LEED RECYCLED CONTENT CREDIT(S)]** Submit invoices and documentation from manufacturer of the amounts of post-consumer and post-industrial recycled content by weight for products with specified recycled content.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Gypsum Board: Specify manufacturers that take back scrap for recycling. *[Water-resistant and glass-fiber reinforced types may be difficult to recycle.]*

1. Recycled content:
 - a. Paper: 100% post-consumer recycled content
 - b. Gypsum: Post-industrial and post-consumer recycled gypsum *[Use highest level that is readily available.]*
 - c. Synthetic gypsum: Minimum 95% recycled content
- B. Fiber Gypsum Wallboard Panels: Fiber-reinforced gypsum board *[Recycled paper and gypsum over a recycled paper, gypsum, and perlite core; heavier and more durable than conventional gypsum board with a dense, hard surface less prone to mold growth; 1/2"-thick material can span 24", has to be cut or scored on both sides]*
 1. Thickness: 1/2" and 5/8"
 2. Fire resistance: 1/2" and 5/8" panels equivalent to Type X, ASTM E119, and CAN/ULC-S101, with Class 1 flame spread, smoke development, and fuel contribution in accordance with ASTM E84 and CAN/ULC-S102
 3. Moisture tolerance: After wetting, regains original strength upon drying

2.02 RELATED MATERIALS

- A. Joint Compound:
 1. Dry mix: Lime compound; all-purpose joint and texturing compound containing inert fillers and natural binders
 2. All-purpose, premixed: Low-VOC, free of antifreeze, vinyl adhesives, preservatives, biocides, and other slow-releasing compounds
- B. Drywall Stops: Galvanized steel (high recycled content) or 100% recycled HDPE with minimum 25% post-consumer recycled content
- C. Joint Tape: Recycled-content paper

PART 3 - EXECUTION

3.01 MATERIALS HANDLING

- A. Protect gypsum products from moisture and contaminants. Do not store near materials that may offgas harmful volatile organic compounds, such as solvents and kerosene.

3.02 INSTALLATION

- A. Gypsum Board: Comply with ASTM C840 and GA-216, except where exceeded by other requirements.
 1. Lay out panels to minimize waste; reuse cutoffs whenever feasible.
 2. Select panel sizes to minimize waste. *[Use 54"-wide panels for 9' ceilings.]*
 3. Minimize framing:
 - a. Install 5/8" gypsum or 1/2" ceiling board over framing at 24" on center. Ceilings insulated with heavy or compressed insulation (such as cellulose, mineral wool, or compressed fiberglass batts) may require 5/8" gypsum board.
 - b. Float corners with single studs and drywall clips.
- B. Fiber Gypsum Board: Comply with ASTM C840 and GA-216, except where exceeded by other requirements.

1. Lay out panels to minimize waste; reuse cutoffs whenever feasible.
2. Select panel sizes to minimize waste.
3. Install 1/2" fiber gypsum board over framing at 24" on center. Ceilings insulated with heavy or compressed insulation (such as cellulose, mineral wool, or compressed fiber-glass batts) may require 5/8" fiber gypsum board.

C. Taping and Finishing:

1. Tool joints as smoothly as possible to minimize sanding and dust.
2. Protect workers, building occupants, and HVAC systems from gypsum dust.

3.03 WASTE MANAGEMENT

- A. Separate clean waste gypsum products from contaminants for recycling in accordance with the Waste Management Plan. Do not include wood, plastic, metal, asphalt-impregnated gypsum board, or any gypsum board coated with glass fiber, vinyl, decorative paper, paint, or other finish. Place in designated area and protect from moisture and contamination.
- B. Recycle clean waste gypsum products:
1. Return to gypsum board manufacturer.
 2. Pulverize and apply on-site as soil amendment in accordance with landscape specifications. Do not use products containing glass fiber. Protect granular material from moisture.
- C. Separate metal waste in accordance with the Waste Management Plan and place in designated areas for recycling or reuse.

END OF SECTION 09250 / 09270