SECTION 09250 - GYPSUM BOARD

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:
 - 1. INTERIOR ABOVE CEILING GYPSUM BOARD.
 - 2. MECHANICAL ROOMS AND OTHER AREAS AS INDICATED.
 - 3. GYPSUM CEILINGS IN GANG TOILET ROOMS (5/8" MR)

1.3 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.

1.4 STORAGE AND HANDLING

A. STORE MATERIALS INSIDE UNDER COVER AND KEEP THEM DRY AND PROTECTED AGAINST DAMAGE FROM WEATHER, CONDENSATION, DIRECT SUNLIGHT, CONSTRUCTION TRAFFIC, AND OTHER CAUSES. STACK PANELS FLAT TO PREVENT SAGGING.

1.5 PROJECT CONDITIONS

- A. ENVIRONMENTAL LIMITATIONS: COMPLY WITH ASTM C 840 REQUIREMENTS OR GYPSUM BOARD MANUFACTURER'S WRITTEN RECOMMENDATIONS, WHICHEVER ARE MORE STRINGENT.
- B. DO NOT INSTALL PANELS THAT ARE WET, THOSE THAT ARE MOISTURE DAMAGED, AND THOSE THAT ARE MOLD DAMAGED.
 - 1. INDICATIONS THAT PANELS ARE WET OR MOISTURE DAMAGED INCLUDE, BUT ARE NOT LIMITED TO, DISCOLORATION, SAGGING, OR IRREGULAR SHAPE.
 - 2. INDICATIONS THAT PANELS ARE MOLD DAMAGED INCLUDE, BUT ARE NOT LIMITED TO, FUZZY OR SPLOTCHY SURFACE CONTAMINATION AND DISCOLORATION.

PART 2 - PRODUCTS

2.1 PANELS, GENERAL

A. SIZE: PROVIDE IN MAXIMUM LENGTHS AND WIDTHS AVAILABLE THAT WILL MINIMIZE JOINTS IN EACH AREA AND THAT CORRESPOND WITH SUPPORT SYSTEM INDICATED.

2.2 INTERIOR GYPSUM BOARD

A. GENERAL: COMPLYING WITH ASTM C 36/C 36M OR ASTM C 1396/C 1396M, AS APPLICABLE TO TYPE OF GYPSUM BOARD INDICATED AND WHICHEVER IS MORE STRINGENT.

B. TYPE X:

- 1. THICKNESS: 5/8 INCH (15.9 MM).
- 2. LONG EDGES: TAPERED.

2.3 JOINT TREATMENT MATERIALS

- A. GENERAL: COMPLY WITH ASTM C 475/C 475M.
- B. JOINT TAPE:
 - 1. INTERIOR GYPSUM WALLBOARD: PAPER.
- C. JOINT COMPOUND FOR INTERIOR GYPSUM WALLBOARD: FOR EACH COAT USE FORMULATION THAT IS COMPATIBLE WITH OTHER COMPOUNDS APPLIED ON PREVIOUS OR FOR SUCCESSIVE COATS.
 - 1. PREFILLING: AT OPEN JOINTS, ROUNDED OR BEVELED PANEL EDGES, AND DAMAGED SURFACE AREAS, USE SETTING-TYPE TAPING COMPOUND.
 - 2. EMBEDDING AND FIRST COAT: FOR EMBEDDING TAPE AND FIRST COAT ON JOINTS, FASTENERS, AND TRIM FLANGES, USE SETTING-TYPE TAPING OR DRYING-TYPE, ALL-PURPOSE COMPOUND.
 - 3. FINISH COAT IN AREAS EXPOSED TO VIEW.

2.4 AUXILIARY MATERIALS

- A. GENERAL: PROVIDE AUXILIARY MATERIALS THAT COMPLY WITH REFERENCED INSTALLATION STANDARDS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- B. STEEL DRILL SCREWS: ASTM C 1002, UNLESS OTHERWISE INDICATED.
 - 1. USE SCREWS COMPLYING WITH ASTM C 954 FOR FASTENING PANELS TO STEEL MEMBERS FROM 0.033 TO 0.112 INCH (0.84 TO 2.84 MM) THICK.
- C. THERMAL AND SOUND INSULATION: AS SPECIFIED IN DIVISION 7 SECTION-07211 "BATT INSULATION."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE AREAS AND SUBSTRATES, WITH INSTALLER PRESENT, AND INCLUDING WELDED HOLLOW-METAL FRAMES AND FRAMING, FOR COMPLIANCE WITH REOUIREMENTS AND OTHER CONDITIONS AFFECTING PERFORMANCE.
- B. EXAMINE PANELS BEFORE INSTALLATION. REJECT PANELS THAT ARE WET, MOISTURE DAMAGED, AND MOLD DAMAGED.
- C. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- 3.2 APPLYING AND FINISHING PANELS, GENERAL
 - A. COMPLY WITH ASTM C 840.
 - B. INSTALL PANELS WITH FACE SIDE OUT. BUTT PANELS TOGETHER FOR A LIGHT CONTACT AT EDGES AND ENDS WITH NOT MORE THAN 1/16 INCH (1.5 MM) OF OPEN SPACE BETWEEN PANELS. DO NOT FORCE INTO PLACE.
 - C. LOCATE EDGE AND END JOINTS OVER SUPPORTS, EXCEPT IN CEILING APPLICATIONS WHERE INTERMEDIATE SUPPORTS OR GYPSUM BOARD BACK-BLOCKING IS PROVIDED BEHIND END JOINTS. DO NOT PLACE TAPERED EDGES AGAINST CUT EDGES OR ENDS. STAGGER VERTICAL JOINTS ON OPPOSITE SIDES OF PARTITIONS. DO NOT MAKE JOINTS OTHER THAN CONTROL JOINTS AT CORNERS OF FRAMED OPENINGS.
 - D. COVER BOTH FACES FACE OF SUPPORT FRAMING WITH GYPSUM PANELS IN CONCEALED SPACES (ABOVE CEILINGS, ETC.).
 - 1. UNLESS CONCEALED APPLICATION IS INDICATED OR REQUIRED FOR SOUND, FIRE, AIR, OR SMOKE RATINGS, COVERAGE MAY BE ACCOMPLISHED WITH SCRAPS OF NOT LESS THAN 8 SQ. FT. (0.7 SQ. M) IN AREA.
 - 2. FIT GYPSUM PANELS AROUND DUCTS, PIPES, AND CONDUITS.
 - 3. WHERE PARTITIONS INTERSECT STRUCTURAL MEMBERS PROJECTING BELOW UNDERSIDE OF FLOOR/ROOF SLABS AND DECKS, CUT GYPSUM PANELS TO FIT PROFILE FORMED BY STRUCTURAL MEMBERS; ALLOW 1/4- TO 3/8-INCH- (6.4- TO 9.5-MM-) WIDE JOINTS AND INSTALL ACOUSTICAL SEALANT.
 - E. ISOLATE PERIMETER OF GYPSUM BOARD APPLIED TO NON-LOAD-BEARING PARTITIONS AT STRUCTURAL ABUTMENTS, EXCEPT FLOORS. PROVIDE 1/4- TO 1/2-INCH- (6.4- TO 12.7-MM-) WIDE SPACES AT THESE LOCATIONS, AND TRIM EDGES WITH EDGE TRIM WHERE EDGES OF PANELS ARE EXPOSED. SEAL JOINTS BETWEEN EDGES AND ABUTTING STRUCTURAL SURFACES WITH ACOUSTICAL SEALANT.
 - F. ATTACHMENT TO STEEL FRAMING: ATTACH PANELS SO LEADING EDGE OR END OF EACH PANEL IS ATTACHED TO OPEN (UNSUPPORTED) EDGES OF STUD FLANGES FIRST.

3.3 APPLYING INTERIOR GYPSUM BOARD

- A. INSTALL INTERIOR GYPSUM BOARD IN THE FOLLOWING LOCATIONS:
 - 1. TYPE X: AS INDICATED ON DRAWINGS.
- B. SINGLE-LAYER APPLICATION:
 - 1. ON PARTITIONS/WALLS, APPLY GYPSUM PANELS VERTICALLY (PARALLEL TO FRAMING), UNLESS OTHERWISE INDICATED OR REQUIRED BY FIRE-RESISTANCE-RATED ASSEMBLY, AND MINIMIZE END JOINTS.
 - A. STAGGER ABUTTING END JOINTS NOT LESS THAN ONE FRAMING MEMBER IN ALTERNATE COURSES OF PANELS.
 - B. AT STAIRWELLS AND OTHER HIGH WALLS, INSTALL PANELS HORIZONTALLY, UNLESS OTHERWISE INDICATED OR REQUIRED BY FIRE-RESISTANCE-RATED ASSEMBLY.
 - 2. FASTENING METHODS: APPLY GYPSUM PANELS TO SUPPORTS WITH STEEL DRILL SCREWS.

3.4 FINISHING GYPSUM BOARD

- A. GENERAL: TREAT GYPSUM BOARD JOINTS, INTERIOR ANGLES, EDGE TRIM, CONTROL JOINTS, PENETRATIONS, FASTENER HEADS, SURFACE DEFECTS, AND ELSEWHERE AS REQUIRED TO PREPARE GYPSUM BOARD SURFACES FOR DECORATION. PROMPTLY REMOVE RESIDUAL JOINT COMPOUND FROM ADJACENT SURFACES.
- B. PREFILL OPEN JOINTS AND DAMAGED SURFACE AREAS.
- C. APPLY JOINT TAPE OVER GYPSUM BOARD JOINTS, EXCEPT THOSE WITH TRIM HAVING FLANGES NOT INTENDED FOR TAPE.
- D. GYPSUM BOARD FINISH LEVELS: FINISH PANELS TO LEVELS INDICATED BELOW AND ACCORDING TO ASTM C 840:
 - 1. LEVEL 1: ALL LOCATIONS EXCEPT MECHANICAL ROOMS, FIRE RISER ROOM, PLUMBING CHASE AND FIRE WALLS.
 - 2. LEVEL 3: GYPSUM BOARD ABOVE CONCRETE MASONRY UNITS IN MECHANICAL ROOMS, FIRE RISER ROOMS, PLUMBING CHASES, FIRE WALLS AND ANY OTHER EXPOSED GYPSUM WALLS NOT COVERED IN PARAGRAPHS 3.4.D.1 THROUGH 3.4.D.3.
 - 3. LEVEL 4: GYPSUM BOARD CEILINGS

THE FOLLOWING IS A DESCRIPTION OF FINISH LEVELS TAKEN FROM MASTER SPEC FORMAT 95:

<u>LEVEL 1</u>: AT JOINTS AND INTERIOR ANGLES, EMBED THE TAPE IN THE JOINT COMPOUND. PANEL SURFACES MUST BE FREE OF EXCESS JOINT COMPOUND, BUT TOOL MARKS AND RIDGES ARE ACCEPTABLE.

LEVEL 3: AT JOINTS AND INTERIOR ANGLES, EMBED THE TAPE IN THE JOINT COMPOUND AND IMMEDIATELY APPLY THE JOINT COMPOUND OVER THE TAPE. APPLY ONE ADDITIONAL COAT OF THE JOINT COMPOUND OVER THE TAPE. APPLY TWO SEPARATE COATS OF THE JOINT COMPOUND OVER FASTENER HEADS AND FLANGES OF TRIM ACCESSORIES. PANEL SURFACES AND THE JOINT COMPOUND MUST BE SMOOTH AND FREE OF TOOL MARKS AND RIDGES.

LEVEL 4: AT JOINTS AND INTERIOR ANGLES, EMBED THE TAPE IN THE JOINT COMPOUND AND IMMEDIATELY APPLY THE JOINT COMPOUND OVER THE TAPE. APPLY TWO ADDITIONAL SEPARATE COATS OF THE JOINT COMPOUND OVER FLAT JOINTS. APPLY ONE ADDITIONAL COAT OF THE JOINT COMPOUND OVER INTERIOR ANGLES. APPLY THREE SEPARATE COATS OF THE JOINT COMPOUND OVER FASTENER HEADS AND FLANGES OF TRIM ACCESSORIES. PANEL SURFACES AND THE JOINT COMPOUND MUST BE SMOOTH AND FREE OF TOOL MARKS AND RIDGES. "DRYWALL PRIMER" MUST BE APPLIED TO SURFACES BEFORE APPLYING FINAL DECORATION.

A. PRIMER AND ITS APPLICATION TO SURFACES ARE SPECIFIED IN OTHER DIVISION 9 SECTIONS.

3.5 PROTECTION

- A. PROTECT INSTALLED PRODUCTS FROM DAMAGE FROM WEATHER, CONDENSATION, DIRECT SUNLIGHT, CONSTRUCTION, AND OTHER CAUSES DURING REMAINDER OF THE CONSTRUCTION PERIOD.
- B. REMOVE AND REPLACE PANELS THAT ARE WET, MOISTURE DAMAGED, AND MOLD DAMAGED.
 - 1. INDICATIONS THAT PANELS ARE WET OR MOISTURE DAMAGED INCLUDE, BUT ARE NOT LIMITED TO, DISCOLORATION, SAGGING, OR IRREGULAR SHAPE.
 - 2. INDICATIONS THAT PANELS ARE MOLD DAMAGED INCLUDE, BUT ARE NOT LIMITED TO, FUZZY OR SPLOTCHY SURFACE CONTAMINATION AND DISCOLORATION.

END OF SECTION