

**SECTION 09 23 00
GYPSUM PLASTERING**

PART 1 - GENERAL**1.1 DESCRIPTION**

- A. This section specifies metal and gypsum lathing and gypsum plaster.
- B. It is the contractor's responsibility to repair and/or replace existing damage/defects to the window surrounds.

1.2 RELATED WORK

- A. Room finish schedule: Section 09 06 00, SCHEDULE FOR FINISHESS.

1.3 TERMINOLOGY

- A. Definitions and description of terms shall be in accordance with ASTM C11, C841, and C842 and as specified.
- B. Underside of Structure Overhead: In spaces where steel trusses or bar joists are shown, the underside of structure overhead is the underside of the floor or roof construction supported by beams, trusses, and bar joists.
- C. Self-furring Lath: Metal plastering bases having dimples or crimps designed to hold the plane of the back of the lath 6 to 10 mm (1/4 to 3/8 inch) away from the plane of the solid backing.
- D. Solid Backing or Solid Bases: Concrete, masonry, sheathing, rigid insulation, and similar materials to which plaster is directly applied.
- E. Wet Areas: Areas of a building where cyclic or continuous exposure to very humid or wet conditions, or in which a dew point condition may occur in the plaster. Dew point conditions occur frequently in such areas as laundries, natatoriums, cart and dish washing spaces, hydrotherapy, kitchens, bathing or shower rooms and similar areas.

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturers' Literature and Data:
 - 1. Accessories for plaster, each type.
 - 2. Metal plaster bases, each type.
 - 3. Fasteners.
 - 4. Bonding compounds, including application instructions.
 - 5. Admixtures, including mixing and application instructions.
- C. Manufacturers certificates:
 - 1. Gypsum plaster.
 - 2. Keene's cement.
- E. Samples: Accessories for plaster, each type, not less than 150 mm (six inches) long.

Panel showing finish coat, 6 by 12 (inches).

1.5 DELIVERY, STORAGE, AND PROTECTION

ASTM C841 and C842.

1.6 PROJECT CONDITIONS

Maintain work areas at a minimum temperature of 13°C (55°F) for not less than one week prior to application of plaster, during application of plaster and until plaster is completely dry.

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 basic designation only.
- B. American Society for Testing And Materials (ASTM):
- A641-09.....Zinc-Coated (Galvanized) Carbon Steel Wire
 - C11-10.....Terminology Relating to Gypsum and Related Building Materials and Systems.
 - C28-10.....Gypsum Plasters
 - C35-01 (R2009).....Inorganic Aggregates For Use in Gypsum Plaster
 - C61-00(R2006).....Gypsum Keene's Cement
 - C206-03(R2009).....Finishing Hydrated Lime
 - C472-99(R2009).....Physical Testing of Gypsum, Gypsum Plaster and Gypsum Concrete
 - C631-09.....Bonding Compounds for Interior Gypsum Plastering
 - C841-03(R2008).....Installation of Interior Lathing and Furring
 - C842-05(R2010).....Application of Interior Gypsum Plaster
 - C847-10.....Metal Lath
 - C1002-07.....Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs
 - D3678-97(R2008).....Rigid Poly (Vinyl Chloride) (PVC) Interior-Profile Extrusions
- C. Commercial Item Description (CID):
- A-A-55615.....Shield, Expansion; (Wood Screw and Log Bolt Self Threading Anchor)

PART 2 - PRODUCTS

2.1 GYPSUM PLASTERS

- A. Base and Finish coats ASTM C28 and ASTM C842, except as otherwise specified.

1. Compressive strength of base coat for high-strength gypsum and Keene's cement finish coat plaster; 25 Mpa (2800 psi) when tested in accordance with ASTM C472.
2. Compressive strength of finish coat (when fully dry) of high-strength gypsum plaster; 35 Mpa (5,000 psi) when tested in accordance with ASTM C472.

B. Keene's Cement for Finish Coats: ASTM C61.

2.3 LIME

ASTM C206, Type S.

2.4 AGGREGATES

- A. ASTM C35, natural sand, except grade aggregates in accordance with "TABLE 1", except sand for Keene's Cement Finish Coat, 100 percent passing a No. 30 sieve.
- B. Vermiculite and perlite aggregates are not permitted, except where required for fire rated assemblies.

2.5 BONDING COMPOUND (FOR INTERIOR WORK)

ASTM C631, except water re-emulsifiable compound is prohibited.

2.6 ACCESSORIES FOR GYPSUM PLASTER

ASTM C841.

2.7 FASTENERS

- A. Tie wire, screws, clips, and other fasteners ASTM C841, except as otherwise specified.
- B. Screws: ASTM C1002.

PART 3 EXECUTION

3.1 SURFACE PREPARATION OF SOLID BASES

- A. Prepare and condition in accordance with ASTM C842, except as otherwise specified.
- B. Surface of masonry and concrete shall be straight and true so that maximum variation in plane does not exceed 6 mm (1/4 inch), 3 mm (1/8 inch) plus, 3 mm (1/8 inch) minus), in 3 m (10 feet), non-accumulative.
- C. Form ties and other metal projections shall be cut back to slightly below the surface.
- D. Projections shall be removed and depressions, holes, cracks and similar voids shall be filled flush with patching compound compatible with the substrate and plaster, within the tolerance, specified in ASTM C842.
- E. Clean existing concrete surfaces specified to receive plaster to ensure mechanical key as specified in ASTM C842.
- F. Condition new or existing concrete surfaces specified to receive plaster by applying bonding compound as specified in ASTM C842.

3.2 INSTALLING PLASTERING ACCESSORIES

- A. Install accessories in accordance with ASTM C841, except as follows:
 - 1. Set plastering accessories plumb, level and true to line, neatly mitered at corners and intersections, and securely attach to supporting surfaces as specified for metal lath.
 - 2. Install in one piece, within the limits of the longest commercially available lengths.
 - 3. Wood plugs are not acceptable anchorage for fasteners.
- B. Corner Beads: Install at all vertical and horizontal external plaster corners, as required to establish grounds, and where shown.
- C. Casing Beads:
 - 1. Install casing beads at locations where plaster terminates against other materials.
 - 2. Where shown.
 - 3. Where plaster terminates against trim of steel frames and trim of other materials and equipment, except where trim overlaps plaster.
 - 4. Where plaster for new walls or furring (vertical or horizontal) terminates against existing construction.
 - 5. Around perimeter of openings for recessed casework and equipment, except where edge is covered by flanges. Locate to conform to dimensions shown on approved shop drawings.
 - 6. Both sides of expansion and control joints, unless shown otherwise.
 - 7. Install casing beads where ceilings butt into or are penetrated by walls, columns, beams, and similar elements so as to provide floating angle (unrestrained) construction in accordance with ASTM C841.
- D. Cornerites:
 - 1. Install at interior corners of walls, partitions, and other vertical surfaces to be plastered, except where metal lath is carried around angle.
 - 2. Fasten only as necessary to retain position during plastering.
 - 3. Omit cornerites at junction of new plastered walls with existing plastered walls.
 - 4. Where metal plastering bases are specified not to be carried around internal angles, and at locations where casing beads are specified and shown.

3.4 GYPSUM PLASTER APPLICATION

- A. Proportion, mix, and apply plaster in accordance with ASTM C842.
- B. Thickness of Plaster: ASTM C842, except as follows:
 - 1. Where greater thickness is shown.
 - 2. Where thickness is required to match existing.

3. Apply finish coats to a uniform thickness of approximately 2 mm (1/16 inch) with not more than 3 mm (1/8 inch) thickness at any point.
- C. Plaster shall have a smooth-trowel finish unless specified or shown otherwise.
- D. Finish Coat Locations:
 1. Gypsum lime-putty finish: Use for all walls and ceilings not required to have Keene's cement or high-strength gypsum plaster.
 2. Keene's cement or high-strength gypsum plaster finish: Use for walls and ceilings in locker rooms, toilets, and scheduled areas.
- E. Provide base and finish coats of plaster on walls and ceilings where plaster is shown on drawings and scheduled in the room finish schedule, and as follows:
 1. All existing interior window surrounds that show spalling or damage due to current or past moisture infiltration.
 - a. Remove and dispose of existing damaged plaster to either the original solid base or the intact base coat (in acceptable condition).
 2. Any existing interior window surrounds that receive damage to the existing base or finish coat due to either:
 - a. Process of removing the existing window.
 - b. Process of installing the new window.

3.6 PATCHING

- A. After all work (except painting) is finished, point around all trim, frames, and similar items.
- B. Patch damaged new plaster to match previously applied plaster in color and texture.
- C. Sanding plaster is prohibited.
- D. Patch, alter and replace existing plaster surfaces as required to complete work:

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