

SECTION 92400 – PORTLAND CEMENT PLASTERING

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes:

1. Portland Cement Plaster
2. Metal lath and accessories
3. Weather resistant barriers

B. Related Sections:

C. Drawings, the provisions Agreement, the General Conditions, and Division 01 specifications apply to all work in this section.

D. Substitutions: Substitute products will be considered only under the terms and condition of section 016000.

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM)

1. A653 – Standard Specification for Sheet Steel, Zinc Coated (Galvanized) or Zinc Iron Alloy Coated (Galvannealed) by the Hot Dip Process
2. A924 – Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot Dip Process
3. C150 – Portland Cement
4. C206 – Finishing Hydrated Lime
5. C207 – Hydrated Lime for Masonry Purposes
6. C847 – Standard Specification for Metal Lath
7. C1063 – Lathing and Furring for Portland Cement and Portland Cement Lime Plastering, Exterior (Stucco) and Interior

1.3 SUBMITTALS

- A. Make submittals in accordance with Section 013300, unless otherwise specified
- B. Product Data: Submit product literature for each plaster accessory proposed for the work
- C. Samples
- D. Quality Control Submittals
- E. Warranty Draft: Concurrent with initial product data submittal, submit draft of manufacturer's warranty for stucco coating for Architect's review of terms. Draft shall include exceptions and inclusions

1.4 QUALITY ASSURANCE

- A. Building Codes: Materials, systems, and installation shall conform to the requirements of jurisdictional Code authorities
- B. Details of workmanship and installation not specified herein shall conform to specifications and recommendations of the following:
 - 1. Technical Services Information Bureau – (Orange, CA 714-221-5530)
- C. Pre-Installation Meeting
 - 1. Prior to ordering materials and starting work on this Section, and in accordance with Section 013119, meet with the following parties:
 - a. Owner
 - b. Architect
 - c. General Contractor
 - d. Cement Plaster Subcontractor
 - e. Sealant Subcontractor
 - f. Finish Coating Subcontractor
 - 2. Review procedures, details, and order of application regarding cement plaster and related construction. Discuss and determine responsibility for protection of the completed work
- D. Mock Up: Shall be built per Architects specifications

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with provisions of Section 016000
- B. Schedule procurement with regard to availability and lead times of Diamond<>Furr® System of products to avoid project delays due to material unavailability

1.6 COORDINATION

- A. Properly coordinate work with work of other trades. Verify location where work of other trades is indicated to penetrate cement plaster work
- B. Coordinate with work of other Sections for installation of sleeves, boxes, flanges and other related work
- C. Install system components so that there is no direct contact with mechanical work, except as detailed, at points of penetration

1.7 ENVIRONMENTAL CONDITIONS

1.8 WARRANTY

- A. See Manufacturer's warranty

1.9 SUBCONTRACTOR GUARANTEE

- A. Furnish Subcontractor Guaranties in accordance with Section 017700

PART 2 – PRODUCTS

2.1 PLASTER AND ACCOCIATED WALL MATERIALS

2.2 LATH AND UNDERLAYMENT

- A. 3.4 non furred Metal Lath
- B. Air and Weather Barriers

2.3 ACCESSORIES

- A. Furnish attachment devices as required for secure anchoring of plaster accessories; furnish connection devices and splice plates for reveals and slip joints to insure accurate alignment, allowance for axial movement where required
- B. Material:
- C. Approved Manufacturer:
Brand X Metals, Inc. (714) 978-3600 www.brandxmetals.com
- D. Anchorages for Lath and Accessories: Galvanized steel self-tapping wafer head screws or drill screws, or other approved metal fasteners of type and size to suit application
- E. Contractor to provide the following proprietary lath attachment system:

2.4 DEFINITIONS:

1. Diamond Furr® system definitions:

2.4 DEFINITIONS:

2. Diamond Furr® system definitions:

PART NUMBER	GAUGE & FINISH	APPLICATION
		C.I. 2" INSULATION DEPTH
DF-375	18G/G-60	FIELD AREAS W/GASKET
DF-375	18G/G-60	INSIDE/OUTSIDE CORNERS
DFS-3375	24G/G-90	WINDOWS/DOORS & TERM POINTS
DFW-3375	24G/G-90	WEEP SCREED
DFWD-3375	24G/G-90	WINDOW DRIP FLANGE
DFR-3375	24G/G-90	RESIDENTIAL WINDOWS
DFXS-3375	24G/G-90	2 PC SLIP JOINT
DFW-FF-IC-3375	24G/G-90	FACTORY FAB INSIDE CORNER WEEP
DFW-FF-OC-3375	24G/G-90	FACTORY FAB OUTSIDE CORNER WEEP
DFS-FF-IC-3375	24G/G-90	FACTORY FAB INSIDE CORNER J-STOP
DFS-FF-OC-3375	24G/G-90	FACTORY FAB OUTSIDE CORNER J-STOP
DF-375NG	18G/G-60	NO GASKET/BACKING FOR REVEALS
DF-SSP	24G/G-90	STRAIGHT SPLICING PART
DF-PCC	24G/G-90	PRE-CUT 90° CORNER
DFC	20G/G-90	CLIPS FOR TRIM ATTACHMENT

3. Applicable Quality Standards: ASTM A653, A924, C841, C847
4. C1047,C1063
5. Trim Definitions:
 - a. Control Joints are expanded wing type (i.e. XJ-15)
 - b. Slip Joints are two piece reveals at floor lines
 - c. Trims are architectural reveals

2.5 CEMENT PLASTER MIX DESIGN

PART 3 – EXECUTION

3.1 EXAMINATION

A. Prior to the start of work, carefully examine installed work of other trades and verify that work is complete to the point where work in this section may properly commence. Notify Architect in writing of conditions detrimental to the proper and timely completion of the work

B. Do not begin installation until all unsatisfactory conditions are resolved. Beginning work constitutes acceptance of conditions and responsibility for defective installation caused by prior observable conditions

3.2 INSTALLATION OF LATH, UNDERLAYMENT, AND ACCESSORIES

- A. Install products and systems in accordance with referenced standards and specifications, unless indicated or specified otherwise
- B. Weather and Air Barrier:
- C. Accessories:
 1. Install accessories as indicated in combination with cement plaster work
 2. Field cut accessories as necessary for accurate alignment and conformance to details; make all cuts neat and straight; remove burrs before installation

3. Install accessories in accurate alignment, straight, and according to details. Install shims behind flanges of accessories as necessary to achieve proper face location for accurate screeding to finished surface
4. Field drill accessories as necessary for anchorage
5. Install accessories for accurate alignment at end to end joints
6. Apply sealant behind end to end joints in control joint accessories, prior to application of plaster
7. Construct joints and intersections in accessories to preclude rainwater leakage.
8. Control Joints:
 - a. Install control joints where shown. Where not shown, install control joints to form rectangle or square areas not exceeding 144 square feet maximum with no dimension exceeding 12 feet or a length to width ratio not to exceed 2 ½ to 1. Verify exact locations with Architect prior to installation
 - b. Locate control joints over framing members and not between studs. Coordinate framing locations
9. Install reveals (Trims) at locations indicated on drawings
10. Install weep screeds at bottom terminating edge of plaster
11. Except as otherwise detailed, case finishes terminating at dissimilar materials; install corner bead at all outside corners
12. Corner beads shall be wire tied to metal lath; no fasteners shall be used to secure corner bead to substrate
13. Stops, other than casings, where shown or required around lighting fixtures, air diffusers, etc. are to be furnished under other Sections for installation as part of the cement plaster work. Type of stop, if not shown, shall be submitted to Architect for review and must be approved by the Architect prior to installation

14. All control joints and trims shall be installed after rigid foam insulation has been installed

15. Slip Joints:

- a. Install slip joints as indicated
- b. When not indicated, provide at slip joint locations in substructure, such as compensating channels between floors
- c. Verify exact location with Architect prior to installation
- d. Size cement plaster slip joint to match substrate expansion joint size

D. Installation of Proprietary Lath Attachment System

1. General:

- a. Install Diamond<>Furr® System termination component products prior to the application of mechanical weather barrier, rigid insulation, and metal lath
- b. When installing a mechanically applied air and weather barrier; install the termination components DFW & DFS series first directly to framing and then the field component DF-375 series over the rigid insulation (Ecomax) fastened to the framing
- c. Fastener Type: Galvanized wafer head self-tapping screws, unless otherwise noted
- d. Fastener Length: Provide fasteners sufficient in length to pass through rigid insulation and framing member with minimum 3 threads visible (steel frame construction). Wood framed construction should comply with ASTM 1063C regarding fastener depth
- e. Fastener Spacing: Maximum 16 inches on center
- f. Lath Wire Tie Spacing: Maximum of 6-1/2 inches

2. DFS-3375: Fasten over framing at termination points requiring J-Mold type plaster stop

3. DFW-3375: Fasten over framing at base of exterior wall at uniform height to perform as weep screed
4. DF-375: Fasten over rigid insulation on opposite sides of framing member at outside corner conditions as required to maintain continuity in lath depth and angle around outside corners
5. DF-WD-3375: Fasten over framing over window and door heads, unless otherwise noted on the drawings
6. DF-XS-3375: Fasten two-piece slip joint at floor line
7. DFW-FF-IC-3375, DFW-FF-OC-3375, DFS-FF-IC-3375, DFS-FF-OC-3375:
 - a. Install Diamond<>Furr® factory-fabricated corner parts at 90° corners connected to DFW and DFS series trims
 - b. Fasten over framing, flush with framing corner. Shim behind as necessary to create uniform finish.
 - c. Provide factory corner parts with DFSP splices installed at both ends to receive corresponding parts at butt joints
8. DFSP:
 - a. Provide splices when joining two pieces of Diamond<>Furr® Weep or J-Stop products together at butt joints
 - b. DFSP fits into the hem of butting parts, splicing two together prior to final fastening by installer
 - c. Place splice with equal amount on each side of butt joint
9. DF-PCC:
 - a. Factory pre-cut 90° corners used to connect DFS series trims
 - b. DF-PCC fits into the hem of butting parts, splicing two together prior to final fastening by installer
 - c. Place part with a sufficient amount on each side of the butt joint to create a 90° angle flashing at corners

10. DF-375:

- a. Fasten over rigid insulation to vertical framing with galvanized wafer head self-tapping screws
- b. Install plaster slip joints prior to the installation of the DF-375 furring strips over the rigid insulation

11. DF-375NG:

- a. Fasten as furring and backing components when installing aluminum trim over rigid insulation. No gasket is required in this condition.
- b. See plans for specific trim locations
- c. Attach with ½ " wafer head self-tapping screw fasteners in conjunction with Diamond<>Furr® DFC metal clips

12. DFC:

- a. Provide Clips attached over furring component (DF-375NG) of Diamond<>Furr® products to hold backing for trims.
- b. Wire-tie clips to DF-375 for horizontal and vertical backing

E. Insulation:

1. Type: Refer to Section 072100 – Thermal Insulation
2. Special Sizes:
 - a. Provide rigid insulation from the supplier cut approximately 1" width by 8' length by 2" height and stagger all joints
 - b. Fit 1" wide insulation into Diamond<>Furr® trim parts between inside part of termination point and furring components (DFS-3375, DF-WD-3375, and DFW-3375)
3. Outside corners: Provide rigid insulation at outside corners to create a flush corner condition with edges perpendicular to each other allowing one side to completely cover the other. Field cut insulation as necessary.

4. Spray Foam Insulation: Provide rigid insulation manufacturer approved spray foam insulation to fill in any gaps occurring during installation of rigid insulation 1/8" or greater prior to lath being installed. Follow manufacturer's instructions for flashing joints and penetrations.

F. Lath:

1. Attach non furred 3.4 metal lath in accordance with ASTM C1063
2. Metal lath over rigid insulation:
 - a. Metal lath shall be attached with 18 gauge galvanized wire, in a butterfly style tie, a minimum of every 6.5" to all Diamond<>Furr® trim and furring strip products
 - b. Metal lath shall be broken around all reveals or slip joints in such a way as to accommodate the parts and Diamond<>Furr® attachment components (DF-375)
 - c. Metal lath shall not be mechanically attached to reveals or slip joints