Mesa Precast | Jess Mason | 480-600-6776 | jmason@mesaprecast.com

Cornices & Band Courses

CSI MasterFormat 04 72 00 · Mesa Precast · archstoneglobal.polsia.app

PART 1 — GENERAL

1.1 SUMMARY
A. This Section includes:
1. Precast architectural cast stone cornice assemblies
2. Band courses, string courses, and entablature components
3. Architrave, frieze, and cornice units
4. GFRC cornice profiles where scheduled
B. Related Sections:
1. Section 04 20 00 — Unit Masonry
2. Section 07 92 00 — Joint Sealants
3. Section 05 50 00 — Metal Fabrications (shelf angles)

1.2 REFERENCES
A. ASTM C1364 — Standard Specification for Architectural Cast Stone
B. ASTM C666 — Standard Test Method for Resistance to Rapid Freezing and Thawing
C. ASTM C947 — Flexural Properties of Thin-Section Glass-Fiber-Reinforced Concrete
D. ASTM C1194 — Standard Test Method for Compressive Strength of Architectural Cast Stone
E. PCI MNL-128 — Recommended Practice for GFRC

1.3 SUBMITTALS
A. Product Data: Data sheets, mix designs, and test reports.
B. Samples: Two samples minimum, 12" minimum length, each profile and finish color.
C. Shop Drawings: Elevation layout, cornice profiles, unit sizes, joint locations, anchor details, shelf angle design.
D. Test Reports: ASTM C666 freeze-thaw; ASTM C1194 compressive strength.

1.4 QUALITY ASSURANCE
A. Manufacturer: Minimum 10 years' experience per ASTM C1364.
B. Compressive Strength: Minimum 6,500 psi at 28 days.
C. Absorption: Maximum 6% per ASTM C642.
D. Freeze-Thaw: 300+ cycles per ASTM C666 with less than 0.10% mass loss.

1.5 DELIVERY, STORAGE & HANDLING
A. Ship on padded racks. Label with shop mark and piece number.
B. Store off ground. Protect from damage and moisture.
C. Lift at design pick points for projecting cornice elements.

PART 2 — PRODUCTS

2.1 MANUFACTURERS
A. Acceptable Manufacturer: Mesa Precast, Mesa, AZ
Contact: Jess Mason, 480-600-6776
1. Additional manufacturing locations: Texas, Pennsylvania
2. Representative: contact via archstoneglobal.polsia.app
B. Substitutions: Equal products by other certified manufacturers may be submitted 10 days prior to bid.

2.2 CAST STONE CORNICES AND BAND COURSES
A. Material: Architectural cast stone per ASTM C1364.
B. Mix Design: Portland cement, limestone aggregate, integral pigments. No fly ash in faces.
C. Profiles: As shown on drawings — cornice assemblies, band courses, and entablature units.
D. Projection: Cornice projection as shown. Provide continuous galvanized shelf angle support for projections over 6 inches.
E. Color: Portland Grey / Bucks County Buff / Old World Cream / Carbon Blend as selected.
F. Finish: Smooth-form, acid-washed, or sandblasted as specified.
G. Joints: 3/8" open joints with backer rod and sealant per Section 07 92 00.

2.3 PHYSICAL PROPERTIES (ASTM C1364)
A. Compressive Strength: 6,500 psi minimum at 28 days.
B. Absorption: 6% maximum by weight.
C. Freeze-Thaw (ASTM C666): 300 cycles minimum.
D. Tolerances: ±1/8" in cross-section. ±1/4" in 10 feet from level.

2.4 GFRC CORNICE PROFILES (Where Scheduled)
A. Material: Glass fiber reinforced concrete per ASTM C947 and PCI MNL-128.
B. Glass Fiber Content: Minimum 5% by weight, alkali-resistant.
C. Use for projections exceeding 8" or where dead load requires weight reduction.

2.5 ANCHORAGE
A. Anchors: Stainless steel or hot-dip galvanized, minimum 3/8" diameter.
B. Shelf Angles: Continuous galvanized shelf angle for projections over 6"; engineer to size.
C. Setting Shims: Plastic or stainless steel only.

PART 3 — EXECUTION

3.1 INSTALLATION
A. Install per manufacturer's written instructions and shop drawings.
B. Bearing surfaces: Level, clean, free of debris.
C. Set in mortar bed (Type N or S); full-coverage bearing.
D. Anchor all projecting cornices per shop drawings.
E. Provide continuous shelf angle support for projections over 6 inches.
F. Control joints at maximum 20-foot intervals unless noted otherwise.
G. Slope band courses and top of projecting cornices minimum 1/8" per foot away from building for water drainage.

3.2 TOLERANCES
A. Variation in cross-section: ±1/8".
B. Variation in length: ±1/8".
C. Variation from level: ±1/4" in 10 feet.

3.3 CLEANING & PROTECTION
A. Protection: Cover completed work during construction.
B. Cleaning: Plain water or mild detergent. No acidic cleaners.
C. Sealant: Backer rod and sealant at all horizontal joints and perimeter conditions.

END OF SECTION 04 72 00

Material Selection Guide

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Property	Precast Concrete	Cast Stone	GFRC
Compressive Strength	3,500–4,500 psi	6,500 psi min	4,000 psi min
Water Absorption	<6% (ASTM C642)	<6% (ASTM C1364)	N/A (non-porous face)
Freeze-Thaw Cycles	300 (ASTM C666)	300 (ASTM C666)	300 (ASTM C666)
Weight (approx.)	~140 pcf	~135 pcf	~25–30 psf (panel)
Dimensional Tol.	±1/4"	±1/8" / ±1/4" in 10'	PCI MNL-128
Key ASTM Standards	C150, C33, C642, C1194	C1364, C1185, C947, C1194	C947, C1116, PCI MNL-128
CSI Reference	03 45 00	04 72 00	03 49 00
Anchors / Sealant	Stainless steel	Stainless steel	Galvanized / Stainless
Sealant Ref.	Section 07 92 00	Section 07 92 00	Section 07 92 00

Part 3 Execution Notes — Key Requirements

1. Mortar: Type N or S (ASTM C270). Full-coverage bearing on all units.
2. Joints: 3/8" nominal. Backer rod + sealant at all horizontal and perimeter joints (Section 07 92 00).
3. Anchors: Stainless steel or hot-dip galvanized steel. No uncoated ferrous metal in contact with stone.
4. Tolerances: ±1/8" dimensional. ±1/4" in 10 feet from level or plumb.
5. Cleaning: Plain water or mild pH-neutral detergent. No acid cleaners on limestone-colored finishes.
6. Cutting: Wet saw only. No hammer-and-chisel for structural cuts.
7. Submittals: Product data, shop drawings, samples, test reports required before fabrication starts.

Mesa Precast — Technical Sales Contact

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