SECTION 04 70 00

(Master Format, 1995 Edition, 04700)

MANUFACTURED MASONRY

PART I - GENERAL

1.01 SUMMARY

- A. Section Includes: Manufactured Stone Veneer, Manufactured Stone Trim, and Application Materials.
- B. Related Sections:

INCLUDE ALL DIVISION 01 SECTIONS CONTAINING LEED ® REQUIREMENTS, ENTER SECTION (S) IN 1. BELOW THAT SPECIFIES SUBSTRATE FOR MANUFACTURED MASONRY. ADD/DELETE OTHER SECTIONS AS APPROPRIATE.

- 1._____-
- 2. Division 05 or 06 Section specifying weather resistant barrier over framed walls.
- 3. Division 07, Section specifying flashing material.
- 4. Division 09, Section specifying Portland Cement plastering.
- 5. Division 10, Section specifying fireplaces and stove.

1.02 REFERENCES

- A. American Concrete Institute (ACI).
- B. American Society for Testing and Material (ASTM):
 - 1. ASTM C 39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 - 2. ASTM C 177, Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot -Plate Apparatus.
 - 3. ASTM C 192, Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory.
 - 4. ASTM C 270, Standard Specification for Mortar for Unit Masonry.
 - 5. ASTM C 482, Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement.
- C. National Concrete Masonry Association (NCMA).
- D. Masonry Veneer Manufacturers Association (MVMA).
- E. LEED® US Green Building Council's Leadership in Energy and Environmental Design Green Building Rating SystemTM.

1.03 SUBMITTALS

- A. Submit the following items:
 - 1. Product Data: Cast Veneer Stone by EP Henry and application materials including mortar color charts, and weather resistant barrier.
 - 2. Samples: Panel containing full-size samples of specified Cast Veneer Stone by EP Henry showing full range of colors and textures complete with specified mortar.
 - a. Actual size of masonry sample minimum 12 by 12 inches.
 - 3. Quality Assurance/Control Submittals:
 - a. Test Reports for physical properties.
 - b. Manufacturer's Installation Instructions.
 - c. Material Safety Data Sheets. (MSDS)
 - 4. LEED® Submittals:
 - a. Credit MR 5.1 Local/Regional Materials: Indicate location of manufacturer of manufactured masonry, and distance from manufacturer to project site.

MANUFACTURED MASONRY CAN ALSO CONTRIBUTE TO CREDITS EA 1.1-1.5 FOR OPTIMIZING ENERGY PERFORMANCE, HOWEVER, NO SPECIFIC SUBMITTALS ARE REQUIRED IN THIS SECTION

- B. Closeout Submittals; submit following items:
 - 1. Maintenance Instructions
 - 2. Special Warranties

1.04 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer Qualifications:
 - a. Minimum five years experience in producing manufactured masonry.
 - b. Member of following organizations:
 - (1) NCMA
- B. Field constructed Mock-up: Prior to installation, erect minimum 4'x 4' sample panel(s) to verify selection(s) made for color and textural characteristics, and to represent completed masonry work for appearance, materials and construction.
 - 1. Minimum Size: 4 by 4 feet, or as required by architect
 - 2. Approved field panel (s) may remain as part of completed work.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Cast Veneer Stone by EP Henry shall be delivered in manufacturer's protective cartons, with anti-scuffing material between each layer of stone.
- B. Protect materials from rain, snow, ground water and soil during storage and installation.

1.06 PROJECT/SITE CONDITIONS

- A. In accordance with good building practices, maintain materials and ambient air temperature in the work area at a minimum of 40 degrees F during installation and for 48 hours following the completion of work.
- B. Do not install product below grade or in a water environment.
- C. Do not install in applications that expose the product to chlorine or chemicals, as discoloration may result.
- D. In fireplace and chimney applications, product should be kept at least 18" away from direct flame.

1.07 WARRANTY

EP Henry provides a 50 year warranty to the original purchaser for Cast Veneer Stone when installed in accordance with the manufacturer's installation specifications. The warranty applies to Cast Veneer Stone units only and does not cover installation labor or damage resulting from improper installation or misuse of product.

PART 2 – MATERIALS

2.01 MANUFACTURER

A. EP HENRY
201 Park Avenue
Woodbury, NJ 08096

Tele: 856-845-6200
Fax: 856-845-0023
Website: www.ephenry.com

INSERT NAME, ADDRESS AND PHONE NUMBER OF LOCAL DISTRIBUTOR BELOW.

- 1. Manufacturer's Distributor
- B. Substitutions: None permitted.

2.02 MANUFACTURED MASONRY MATERIALS

It is recommended that an amount equal to 5% be added to the order for each product type to allow for cutting, trimming and to achieve the best fit.

SELECT PRODUCTS FROM A., B., AND C. BELOW AS REQUIRED FOR THE PROJECT. DELETE THOSE NOT USED

A. CAST VENEER STONE BY EP HENRY: FLATS

1. Singl	le Product Style	, Color		
2. Blene	ded Product Sty	le, Color		
a	Percent:		,	
h	Percent:			

B. CAST VENEER STONE BY EP HENRY: CORNERS

 Single Product Blended Product 	-		
a Perc	• .		
b Perc			
C. CAST VENEER	STONE BY EP Color	HENRY: FITT	TINGS
1. Trim Stones:			
2. Keystones:			
3. Electrical:			

D. CAST VENEER STONE BY EP HENRY PHYSICAL PROPERTIES:

- 1. Compressive Strength: All Cast Veneer Stone units exceed ASTM C-39 and C192 with minimum of 2000 psi.
- 2. Bond Between Stone Unit, Type S mortar and backing to meet ASTM C-482 with minimum of 50 psi.
- 3. Thermal Resistance: ASTM C 177.
- 4. Fire Hazard Test: UL 723.
- 5. Maximum Veneer Unit Weight: 15 psf.

2.03 RELATED MATERIAL (See Typical Wall Details for Cast Veneer Stone by EPH)

EDIT FOLLOWING MATERIALS BASED ON LOCAL USAGE AND BUILDING CODE REQUIREMENTS, DELETE MATERIALS SPECIFIED IN SEPARATE SECTIONS.

- A. Weather Resistant Barrier, as required.
- B. Metal Lath: minimum 2.5 # galvanized metal lath.
- C. Fasteners: For sheathing over wood or metal stud.
 - 1. Wood Studs: Galvanized nails with a minimum shank diameter of 1/8" or galvanized staples with a minimum length of 1 3/8".
 - 2. Metal Studs: Self tapping, galvanized, flat head screws with a minimum head diameter and length of ½".
- D. Mortar: Type S mortar, mixed from components or pre-blended and complying with ASTM C-270

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates upon which Cast Veneer Stone by EP Henry will be installed for compliance with Manufacturer's Installation Guidelines.
- B. Correct any improper conditions prior to proceeding with installation.

3.02 PREPARATION

- A. Do not allow work to occur on the opposite side of walls to which manufactured masonry is being applied during and for 48 hours following installation of the Cast Veneer Stone by EP Henry.
- B. Refer to Manufacturer's Installation Guidelines for proper surface preparation.

3.03 INSTALLATION

MANUFACTURER'S INSTALLATION GUIDELINES ARE BASED ON TYPICAL INSTALLATION SITUATIONS. UNUSUAL CONDITIONS SHOULD BE ADDRESSED WITH MANUFACTURER PRIOR TO INCLUDING IN SPECIFICATION.

- A. Install Cast Veneer Stone by EP Henry in accordance with Manufacturer's Installation Guidelines.
- B. Install related materials specified above in accordance with type of substrate and Manufacturer's Installation Guidelines and Typical Wall Details for Cast Veneer Stone.

3.05 CLEANING

A. Clean manufactured masonry in accordance with Manufacturer's Installation Guidelines.

3.06 PROTECTION

- A. Protect finished work from rain during and for 48 hours following installation.
- B. Protect finished work from damage during remainder of construction period