SUPPLEMENTAL INFORMATION VERTICAL SURFACES / STONE FIREPLACES

SECTION 1. INTRODUCTION

1.01 Methods. There are several methods by which stone fireplace facings may be installed. Consideration should be given to each method when making a selection for a specific installation. See information about installation methods on the following page, and illustrations of examples at the close of this section.

SECTION 2. DESIGN CRITERIA

- **2.01** Fireplace headers and legs (uprights) may be thin-set if stone is no thicker than 1/2". Fastening of stone slab thicker than 1/2" must be mechanical unless specifically designed and approved by the thin-set manufacturer.
- 2.02 Exposed stone edges must be gauged to the precise thickness specified. Gauging tolerance cannot be over ±1/32".
- 2.03 Backup Materials/Temperature. Cracking of fireplace facings is primarily due to expansion and contraction of backup materials. Ensure that stone surface temperatures do not exceed ability to safely and comfortably touch the stone facing when a fire is burning in the fireplace. Setting space between stone and backup should be at least 3/4".
- 2.04 White portland cement is recommended for light-colored granite and marble. White portland cement with a low alkali content is recommended for limestone.

For additional information, refer to Chapter 13, Installation General Information.

2.05 Geographic Methods. Some installation methods and materials are not recognized and may not be suitable in some geographic areas because of local trade practices, building codes, climatic conditions, or construction methods. Therefore, while every effort has been made to produce accurate guidelines, they should be used only with the independent approval of technically qualified persons.

SECTION 3. PRODUCT DESCRIPTION

- **3.01 Basic Use.** As interior stone fireplace facings for commercial, institutional, and residential use.
- 3.02 Finishes. Polished, honed, natural cleft.
- **3.03 Colors.** Most of the commercially available varieties are suitable.
- **3.04** Sizes. Thicknesses of 3/8", 1/2", 3/4", 7/8", 1-1/4", or as specified.

SECTION 4. TECHNICAL DATA

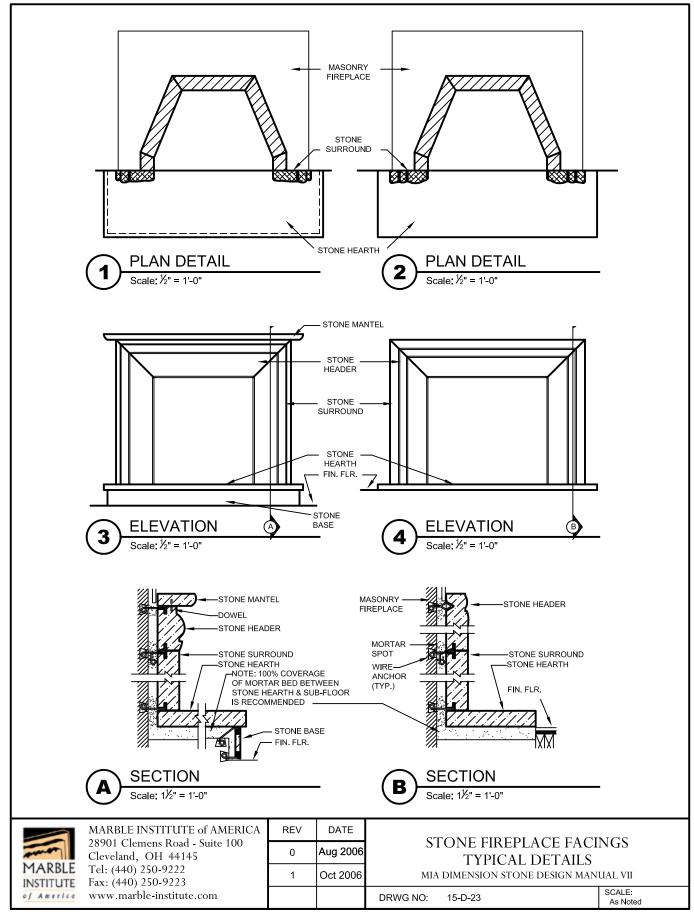
- 4.01 Each stone variety used for fireplace facings should conform to the applicable ASTM standard specification and the physical requirements contained therein. The specification for each stone type are as follows:
 - A) Granite: ASTM C615 Standard Specification for Granite Dimension Stone

SECTION 5. INSTALLATION

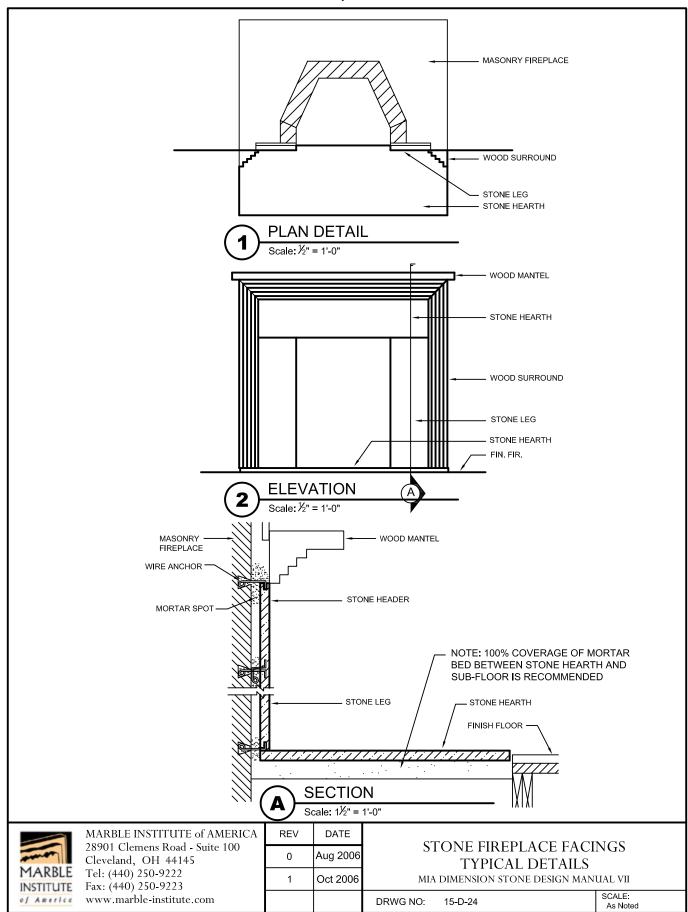
- 5.01 Standard Set System. Stone facings are set firmly against mortar spots located at anchors.
- **5.02** Thin Set System. A nonstaining adhesive should be

- spread over the backup wall with a notched trowel and the stone facing positioned plumb against the adhesive. Used for stone no thicker than $\frac{1}{2}$ ".
- **5.03 Back Buttering.** For all applications, the stone tile shall be back buttered to achieve, as close as practical, 100% adhesive contact between the stone and the backup.
- **5.04 General Precaution.** During construction, the General Contractor shall protect all stone from staining and damage.

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