

The Mbrick™ Family of eMbedded Brick Systems
by
Innovative Brick Systems, LLC
February 23, 2005

Specifications for:

- **Versa Liner® Single Use Brick Trays**
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Section 04215 – Thin brick veneer for concrete

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| Related sections | Section 03100 Concrete Formwork: Formwork requirements Section 03300 Cast in Place Concrete: General Requirements Section 03330 Architectural Concrete Section 03450 Plant Precast Architectural Concrete Section 03470 Tilt-UP Precast Concrete |
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Part 1 – General

1.1 Description

- 1.1.1 **Versa Liner®** single use brick inlay system for precast or site-cast concrete wall panel construction. Includes the Quick-Connect™ perimeter joint design for precise and secure tray connections. Forms a seamless cove joint.

1.2 References

- 1.2.1 The latest edition of building code having jurisdiction: UBC, SBCCI, BOCA, NBC Canada.
- 1.2.2 American Society for Testing and Materials (ASTM)
 - a. **C-1088** Standard Specification For Thin Veneer Brick Units Made From Clay or Shale.
 - b. **C-31** Methods of Making and Curing Concrete Test Specimens in the Field.
 - c. **C 33** Specification For Concrete Aggregates
 - d. **C 39** Test Methods For Compressive Strength of Cylindrical Concrete Specimens
 - e. **C 94** Specifications for Ready Mixed Concrete
 - f. **C 150** Specification for Portland Cement
- 1.2.3 American Concrete Institute (ACI), latest Annual Edition
 - a. **117** Standard Specifications for Tolerances for Concrete Construction and Materials.
 - b. **301** Specifications for Structural Concrete for Buildings
 - c. **305** Hot Weather Concreting
 - d. **306** Cold Weather Concreting
 - e. **315** Manual of Standard Practice for Detailing Concrete Structures

- 1.2.4 Concrete Reinforcing Steel Institute (CRSI)
 - a. Manual of Standard Practice and Specification for Placing Reinforcement.

1.3 Submittals

1.3.1 Shop Drawings

- a. Submit formwork shop drawings and panel elevations detailing the location of embedded brick work.
 - 1. Panel Sizes
 - 2. Joint Locations
 - 3. Joint Widths
 - 4. Brick Coursing
 - 5. Brick Coursing Alignment Across Panel Joints
 - 6. Reveal and False-joint Locations and Dimensions

Architect/Engineer review of shop drawings is for general conformance with design concept and project requirements only, and does not imply approval or any variance from the Contract Documents.

1.3.2 Product Data from Manufacturers (two sets)

- a. Brick Color chips representing color and size of each brick type to be used.
- b. Form Liner Samples representing all brick inlay form liners which will be used.
- c. Bond breaker sample on brick chip representing bond breaker which will be used.
- d. Printed product data and installation instructions for brick inlay form liner system, and brick.

1.3.3 Quality Assurance

- a. Manufacturers Qualifications: Minimum 5 years documented experience producing specified products.
- b. Job Mock Up Panel: Minimum 4 feet by 4 feet.
 - 1. Incorporate edge, reveal, and brick coursing detail as shown on drawings.
 - 2. Utilize full range of brick sizes, variance of brick size, general color of brick and variance in color and texture of brick.
 - 3. Show clean, pressure washed brick and concrete surface
 - 4. Utilize full range of color of concrete mortar joints
 - 5. Maintain Mock Up for comparison with finished work

1.4 Tolerances

- 1.4.1 Dimensions of the finished panel, at the time of erection in the structure, shall conform to the tolerances for precast, non prestressed elements in ACI 117, unless otherwise specified by the Architect.

Part 2. Products

2.1 Manufacturers

2.1.1 Acceptable Liner Manufacturers

a. **Innovative Brick Systems, LLC**

11625 Reed Ct. #B
Broomfield, Colorado 80020
720-890-6032
720-890-6038
www.mbrick.com

2.1.2 No substitutions allowed.

2.2 Materials

2.2.1 Brick

- a. Type: ASTM Type TBX, Conforming to ASTM C-1088 by _____(brick manufacturer).
- b. Size: _____(width, length, depth)
i. Tolerance: +0", - 1/16" in length and width.
- c. Color: _____
- d. Texture: _____

2.2.2 Brick Coating:

Wax or NoxCrete™ brick coating will be applied to each brick face to facilitate the cleaning of the cast brick surface.

- a. Retarder papers may be substitute

2.2.3 Brick Form Liner by Innovative Brick Systems, LLC.

- a. Single use form liner Versa Liner™ Brick faces will be coated with wax or approved bond breaker to prevent grout staining.

Part 3. Application

Prepare, install, and finish in accordance with current release of manufacturer's MBrick Technical Design and Installation Guide.