



SCOTT SYSTEM

SUGGESTED MASTER SPECIFICATION

SECTION 04 21 30 THIN BRICK EMBED SYSTEM FOR CONCRETE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Thin brick individual plastic bracket holder product for embedding thin brick in precast, tilt-up or poured-in-place concrete.

1.2 RELATED SECTIONS

- A. Section 03 10 00 - Concrete Forming and Accessories.
- B. Section 03 11 16 - Architectural Cast-in Place Concrete Forming.
- C. Section 03 45 13 - Faced Architectural Precast Concrete.
- D. Section 03 45 00 - Precast Architectural Concrete.
- E. Section 03 47 13 - Tilt-Up Concrete.
- F. Section 09 97 23 - Concrete and Masonry Coatings.

1.3 REFERENCES

- A. ASTM International (ASTM):
 - a. ASTM C 31 – Standard Practice for Making and Curing Concrete
 - i. Test Specimens in the Field.
 - b. ASTM C 33 – Standard Specification for Concrete Aggregates.
 - c. ASTM C 39 – Standard Test Methods for Compressive Strength of
 - i. Cylindrical Concrete Specimens.
 - d. ASTM C 94 – Standard Specifications for Ready Mixed Concrete.
 - e. ASTM C 150 – Standard Specifications for Portland Cement.
 - f. ASTM C 1088 – Standard Specification for Thin Veneer Brick Units
 - i. Made from Clay or Shale.
- B. American Concrete Institute (ACI): Latest Annual Edition:
 - a. ACI 117 – Standard Specifications for Tolerances for Concrete Construction and materials.
 - b. ACI 301 – Specifications for Structural Concrete for Buildings.
 - c. ACI 305 – Hot Weather Concreting.
 - d. ACI 306 – Cold Weather Concreting.
 - e. ACI 315 – Manual of Standard Practice for Detailing Concrete

- g. Structures.
- C. Concrete Reinforcing Steel Institute (CRSI):
 - a. Manual of Standard Practice and Specification for Placing Reinforcement.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 – Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - a. Thin brick bracket holder samples and literature.
- C. Shop Drawings: Establish thin brick coursing patterns and areas required.
- D. Selection Samples: Submit two sets of sample boards representing the full range of thin brick colors and textures. Submit assembled thin brick individual bracket holder to be used in the embedment of the thin brick in the concrete panel.
- E. Verification Samples: Thin brick samples submitted in individual bracket holders must have a thin wax coating applied to the face of the brick.

1.5 QUALITY ASSURANCE

- A. Single Source Requirements: Provide primary and secondary components required for installation of thin brick systems shall be components of system recommended by single source.
- B. Manufactured Qualifications: Minimum 3 years' experience manufacturing similar products.
- C. Installer Qualifications: Minimum 2 years' experience with thin brick individual bracket holder installation.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - a. Build mock-up area as required to produce an acceptable mock-up piece for inspection.
 - b. Include the details shown on shop drawings such as brick coursings, edge rustication & reveals. Use the full range of brick sizes, colors, textures, and any other variances.
 - c. Use the type of bond breaker, release agent or wax recommended by the brick manufacturer. Pressure wash the panel clean with 140+ degree F water at minimum water pressure of 3,000 psi.
 - d. The mock-up shall demonstrate the proposed range of color, texture, and workmanship to be expected in completed work. The mock-up panel shall be saved for comparison to the finished job.
 - e. Construct mock-up on site at location as directed by Architect. Clean the sample panel using the same materials and tools as planned for the final construction.
 - f. Do not proceed with remaining work until workmanship, color, style, pattern, and texture are approved by Architect.
 - g. Rebuild mock-up area as required to produce acceptable mock-up piece.
 - h. Remove mock-up at the completion of the work.
 - i. Mock-up may be incorporated into the work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Materials shall be delivered to the location in unopened factory containers. Upon arrival, materials shall be inspected for damage and the manufacturer informed of any discrepancies. Deficient materials shall not be used.
- B. Materials shall be stored in a protected location and safeguarded from damage in accordance with the manufacturer's recommended storage instructions.

1.7 PROJECT CONDITIONS

- A. The individual thin brick holders may be installed in forms under acceptable working conditions.
- B. Standing water after snow or rain must be removed from the forms before concrete is poured. Care must be taken if the water level reaches depth that covers the back of the bricks. Water may carry some of the dissolved chemical bond breaker solution onto the brick surface thus affecting the brick to concrete bonding.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturers:
 - a. Scott System, which is located at:
 - 109 General Fellows Road, Greenwich, NY 12834.
 - Tel: (518) 383-0500 Fax: (518) 992-5140
 - Email: info@scottsystem.com
 - Web: www.scottsystem.com
 - b. Acceptable thin brick manufacturers for use with Brick Snaps and Rim Snaps:
 - i. Metro Brick as manufactured by Ironrock Capital, Inc.
 - ii. Summitville Tiles, Inc.

**** NOTE TO SPECIFIER ** Delete one of the following two paragraphs: coordinate with requirements on product options and substitutions.**

- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with the provisions of Section 01 60 00 – Product Requirements.

2.2 MATERIALS

**** NOTE TO SPECIFIER ** Delete items below not required for project.**

- A. Brick Snap - Single-use individual bracket holder for embedding thin brick in tilt-up or precast concrete. Product is furnished as a unit with the Snap pre-assembled to the thin brick by means of compression tabs along the interior of the brick pocket perimeter of the Snaps. This perimeter also forms the coved mortar joint between bricks. Each unit is designed to attach to other units by means of connecting pins in one of six (6) different coursing patterns in the same field.
- B. Rim Snap - Multi-use individual bracket holder for embedding thin brick in vertical poured-in-place concrete & precast concrete. Product is furnished as a separate unit along with thin brick in a separate container. Rim Snaps are attached to plywood-faced vertical forms via staples or nails in one of six (6) coursing patterns as required. Once attached, thin brick is pressed into the holders and the concrete is poured and vibrated as required. Any size forms may be used with this product to produce brick embedded concrete facades. Once forms are stripped, the still-attached Rim Snaps may be reused up to three (3) times. Replace any damaged snaps per manufacturer instructions.
- C. Thin Brick

- A. Acceptable Thin Brick Manufacturing Criteria:
 - a. Type TBX, Conforming to ASTM C-1088.
 - b. Absorption Rates, Conforming to ASTM C-67.
 - c. Brick Size Tolerances: +0 inch (0 mm) to -1/16 inch (-1.5 mm) in length and width.
- B. Brick sizes to fit Brick Snap single-use system:
 - a. Modular, 2-1/4 inches by 7-5/8 inches
 - b. Closure, 3-5/8 inches by 7-5/8 inches
 - c. Utility, 3-5/8 inches by 11-5/8 inches
- C. Brick sizes to fit Rim Snap multi-use system:
 - a. Modular brick only, 2-1/4 inches by 7-5/8 inches
- D. Thin Brick Sizes: Metro Brick as manufactured by Ironrock Capital, Inc.
 - a. Modular, 5/8 inch by 2-1/4 inches by 7-5/8 inches (16 mm by 57 mm by 194 mm).
 - b. Closure, 5/8 inch by 3-5/8 inches by 7 5/8 inches (16 mm by 92 mm by 194 mm).
 - c. Norman, 5/8 inch by 2-1/4 inches by 11-5/8 inches (16 mm by 57 mm by 295 mm).
 - d. Modular Corner, 5/8 inch by 2-1/4 inches by 7-5/8 inches by 3-5/8 inches (16 mm by 57 mm by 194 mm).
 - e. Closure Corner, 5/8 inch by 3-5/8 inches by 7-5/8 inches by 3-5/8 inches (16 mm by 92 mm 194 mm by 92 mm).
 - f. Utility, 5/8 inch by 3-5/8 inches by 11-5/8 inches (16 mm by 92 mm by 295 mm).
 - g. Edge Cap, 5/8 inch by 2-1/4 inches by 7-5/8 inches by 3-5/8 inches (16 mm by 57 mm by 194 mm by 92 mm).
- E. Thin Brick Sizes: Summitville Tiles, Inc.
 - a. Standard Unit Thin Brick, 2-1/4 inches by 7-5/8 inches by 9/16 inch
 - b. (57 mm by 194 mm by 14 mm).
 - c. Modular Corner, 9/16 inch by 2-1/4 inches by 7 5/8 inches by 3-5/8 inches (14 mm by 57 mm by 194 mm).
 - d. Modular Corner, 1 inch by 2-1/4 inches by 7-5/8 inches by 3-5/8 inches (25 mm by 57 mm by 194 mm).
 - e. Edge Cap, 9/16 inch by 2-1/4 inches by 7-5/8 inches by 3-5/8 inches (14 mm by 57 mm by 194 mm by 92 mm).
 - f. Edge Cap Corner (Left and Right), 9/16 inch by 2-1/4 inches by 7-5/8 inches by 3-5/8 inches (14 mm by 57 mm by 194 mm by 92 mm).
- F. Brick Face Coating: Thin wax coating applied to face of brick are required by brick manufacturer for use with Brick Snap & Rim Snap systems.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's written instructions as applicable to specified application. Install bricks to specified pattern.

END OF SECTION