GUIDE SPECIFICATION

Corporate Office:
Panel Brick Manufacturing, Inc.
P.O. Box 907
1120 Ewing Road
Owensboro, Kentucky 43202
270-684-7268 voice
http:/www.thinbrickbyOwensboro.com

SECTION 04840

THIN BRICK/PANEL BRICK VENEER

****

Welcome to the Thin Brick/Panel Brick Guide Specification! Panel Brick Manufacturing, Inc. has prepared this guide specification in electronic media, as an aid to specifiers in preparing written construction documents for Section 04840 — Thin Brick Brickettes © and Panel Brick Veneer.

The specifier can edit entire master to suit project requirements, modify or add items as necessary, or delete non-applicable items. Words and sentences within brackets [_____] reflect a choice to be made regarding inclusion or exclusion of a particular item or statement. This Section may include performance, proprietary, and descriptive type specifications. Edit to avoid conflicting requirements. Notes to guide the specifier are included between lines of asterisks to assist in choices to be made. They should be removed before the Section is printed for use.

This guide specification is based on the Construction Specifications Institute (CSI) Section Format standards. References to section names and numbers are based on MasterFormat 95 recommendations.

For specification assistance with specific product applications, please contact the offices above.

In the interest of continuous improvement of its product line, Panel Brick Manufacturing, Inc. reserves the right to modify its product's composition, colors, textures, sizes, and other physical and performance attributes, and subsequently, these guide specifications at any time. Updates to this guide specification will be posted as they occur. Panel Brick Manufacturing, Inc. makes no expressed or implied warranties regarding content, errors, or omissions in the information presented. Specifications modified or rewritten to not be in conformance with manufacturer's standard processes, products, and procedures, may void warranties and related remedies.

****

GENERAL

1) SUMMARY
    A) Related Documents: General and Supplementary Conditions of the Contract, Division 1 General Requirements, and Drawings are applicable to this Section.
    B) Section Includes:
        1) Adhesive adhered, solid, manufactured thin brick/panel brick veneer for exterior [interior] [panelized system] [and] [individual unit] application on rigid backer board over building substrate.
        2) Adhesives, fasteners and mortar.
        3) Moisture barrier

****

Retain and edit following paragraph and related subparagraphs for Project as required, or delete if cross-referencing is not necessary for Project.

****

    C) Related Sections:
        1) Section 05400 "Cold Formed Metal Framing" for exterior wall framing.
        2) Section 06100 "Rough Carpentry" for exterior sheathing.
        3) Section 07920 "Sealants" for sealants at control joints and intersections with dissimilar materials.
        4) Section 09260 "Gypsum Board Assemblies" for interior wall framing and tile backing board substrates.

****

Retain following paragraph if Section is affected by Alternates defined for Project.

****

    D) Alternates: Work of this Section is affected by Alternates. Refer to Section 01230.

****

Include submittal requirements below, which are consistent with the scope of the project and extent of work of this Section. Only request submittals which are necessary for review of design intent.

****

2) SUBMITTALS
    A) Submit following in accordance with Section 01330.
        1) Product Data: Submit for all specified products. Include all applicable physical and performance data.
        2) Samples: Submit 4 samples of thin brick/panel brick veneer units to illustrate color, texture, and size range of each type unit.
        3) Manufacturer's detailed installation instructions.
        4) [List of projects on which manufacturer has supplied thin brick/panel brick veneer materials.]
        5) [Certifications listed in Quality Assurance article of Part 1 this Section.]

3) FIELD SAMPLES
    A) General: Comply with Section 01400.
    B) Sample Installation: Construct thin brick to 3 feet by 4 feet panel size, including sub-framing, substrate surfaces, fasteners, adhesive bonding, joint work, moisture barrier, grout color, expansion joints and control joints.
        1) Obtain Architect's approval before beginning work. Protect and retain sample as a basis on which the quality of the work will be judged. Do not remove until Substantial Completion.
        2) Accepted Field Sample: May [not] remain as part of completed Work.

****
Include quality assurance requirements below, which are consistent with the size and scope of the project and extent of work of this Section. Only request qualification statements which you intend to review, and which are necessary to establish qualifications of the product, manufacturer, or installer.
****

4) QUALITY ASSURANCE
    A) Installer: Experienced in similar types of work of similar scope and be able to furnish list of previous jobs and references if requested by Architect.
    B) Expansion Joints: Provide expansion joints as indicated on Drawings or, if not indicated, install at frequency and in accordance with details and as recommended by manufacturer. Confirm locations and frequency with Architect before beginning work.

****
Retain applicable certification requirements, which are consistent with the Project and its location. Coordinate with thin brick veneer manufacturer.
****
    C) Certifications:
        1) Provide written documentation that products have met or exceeded at least one of the following certifications for a minimum of 10 years:

(a) FHA-HUD.
(b) BOCA — Building Officials and Code Administrators International, Research Report No. 97-18.

5) PROJECT CONDITIONS
   A) Environmental Requirements:
      1) Minimum air temperature of 40 degrees F (4 degrees C) prior to, during, and for 48 hours after completion of work; and
      2) Cold Weather Requirements: IMIAC (International Masonry Industry All-Weather Council) - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.

6) DELIVERY, STORAGE, AND HANDLING
   A) Deliver, store, handle, and protect materials in accordance with Section 01600.
      1) Store mortar materials on pallets in dry place.
      2) Protect materials from rain, moisture, and freezing temperatures.
      3) Store manufactured thin brick/panel brick veneer above ground on level platforms, which allow air circulation under stacked units.
      4) Handle units on pallets or flat bed barrows.

7) WARRANTY
   A) Special Warranty: Prepare and submit in accordance with Section 01780.
      1) Provide a 20-year warranty against manufacturing defects in manufactured thin brick/panel brick veneer products.

PRODUCTS

1) ACCEPTABLE THIN BRICK/PANEL BRICK VENEER PRODUCT
   A) Subject to compliance with requirements, provide the following product:
      1) BRICKETTES ® as manufactured by Panel Brick Manufacturing Inc. 1120 Ewing Road, Owensboro, Kentucky 42302, (270) 684-7268.

****

Insert thin brick veneer color. Refer to thin brick veneer manufacturer’s current product literature.

****

(a) Thin Brick/Panel Brick Veneer Style/Color: [Greywood] [Homestead] [Martingale] [Old Lexington] [Plantation] Rosewood] [Sierra] [Springfield] [Rustic] [Old Oakley] [King William] [Hacienda] [Cooperstown] [Centennial] [Colonial] [Flashed Martingale] [Bircham] [Brookshire].

2) BRICKETTES ® THIN BRICK VENEER
   A) Thin Brick Veneer:
      1) Kiln fired thin brick, composed of following materials:
         (a) Clay, shale, fire clay, sand or mixtures thereof, kiln fired to fusion to produce clay masonry units per ASTM C1088, Type [TBS (Standard)] [TBX (Select)].
      2) Durability: ASTM C1088, Grade Exterior.
      3) Freeze and Thawing: No breakage and not greater than 0.5% loss in dry weight when tested in accordance with ASTM C1088.
      4) Thin brick veneer size: 7 _ inches by 2 _ inches by _ inch.

****
Insert thin brick veneer special shape requirement below as required for specific project, selected from manufacturer's standard product lines.
****

   B) [Thin brick special shapes: Corner units.]

****
Insert thin brick veneer accessories below as required for specific project.
****

3) PANEL BRICK VENEER ACCESSORIES
   A) Rigid Backer Board: High density, asphalt impregnated, fiberboard nail base, ASTM C 208. Rigid backer board shall meet requirements specified in Federal Specification LLL-1-535B, Class E, Style 2 and ANSI/AHA A194, 1-1985, Type IV, Class 2.
      1) Manufacturer: Temple Inland Corporation.
   B) Adhesive: Exterior, waterproof, synthetic rubber base adhesive, complying with APA AFG-01. [For exterior application of individual thin brick veneer units, interior/exterior water base, non-flammable adhesive].
      1) Manufacturer: Panel Brick Manufacturing Inc. p.o. Box 907, 1120 Ewing Road, Owensboro, Kentucky 42302, (270) 684-7268.

C) Mortar: A rich mixture of the following materials, mixed in accordance with the manufacturers detailed installation instructions for tuck pointing thin brick veneer joints.
   1) Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
   2) Hydrated Lime: ASTM C 207, Type S.
   3) Aggregate for Mortar: ASTM C 144.
      (a) For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
      (b) White-Mortar Aggregates: Natural white sand or crushed white stone.
      (c) Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.

****
"Pigments" below are only needed for applications where the mortar joints will be exposed and a custom color is required for the joints.
****

   4) Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes. Use only pigments with a record of satisfactory performance in masonry mortar.
   5) Water: Potable.
   6) Thoroughly mix grout ingredients in quantities needed for immediate use. Mix grout to ASTM C 270, Type S proportions.

D) Mortar Mixes:
   1) Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.
   2) Limit cementitious materials in mortar to portland cement and lime.
   3) Pigmented Mortar: Use colored cement product or select and proportion pigments with other ingredients to produce color required. Do not add pigments to colored cement products.
      (a) Pigments shall not exceed 10 percent of portland cement by weight.
      (b) Mix to match Architect's sample.

E) Moisture Barrier:

****
Select one of the following two subparagraphs. Moisture barrier over sheathing is required by most codes. Option "a" is recommended by manufacturer as a positive means of stopping moisture migration through wall and diverting free moisture to base of wall. Option "b" is a less expensive product, yet still meets code requirements.
****

1) [Tyvek Stucco Wrap, by E.I. Dupont, or comparable product as approved by Architect. Provide tape to seal joints, seams, and tears, of same permeance as membrane.]
2) [ASTM D 226, No. 15 non-perforated asphalt saturated organic felt.]

F) Joint Sealant: Refer to Section 07920.
G) Fasteners: Coated 1-1/2 inch nails, staples, or screws of type and for spacing as recommended by thin brick veneer manufacturer for loads encountered.
H) Cleaner: Nonacid cleaner as recommended by thin brick veneer manufacturer.

EXECUTION

1) EXAMINATION AND PREPARATION
   A) Examination:
      1) Verify that field conditions are acceptable and are ready to receive work in accordance with the manufacturers written installation instructions.
      2) Verify that built-in items are in proper location and ready for roughing into masonry work.
      3) Consult Architect if deficiencies exist. Correct deficiencies in accordance with requirements of thin brick veneer manufacturer's written installation instructions.
   B) Protect surrounding area from possible damage during installation work.
   C) Initiating installation constitutes Installer's acceptance of substrates.
2) INSTALLATION

****
Moisture barrier is needed over sheathing substrates for exterior applications.
****

   A) Moisture Barrier:
      1) Apply sheets horizontally, starting at the base of the wall, and lapping each successive upper sheet over the previous lower sheet.
      2) Lap horizontal and vertical joints 6 inches.
      3) Cut and seal joints, penetrations, openings, and projections with manufacturer's recommended tape.
      4) Install with corrosion-resistant staples.

****
Select the appropriate installation for the construction from the options listed.
****

   B) [Individual Brickette ® Thin Brick Veneer Unit Application:

1) [Interior: Apply Interior/Exterior adhesive to the back of each thin brick veneer unit] [Exterior: Cover the wall substrate with Interior/Exterior adhesive to a depth of _ inch in accordance with the manufacturers written installation instructions.]
2) Place individual Brickette ® units in position level, with 3/8 inch joint spacing, plumb with surrounding units. Apply firm pressure to bed the unit solidly in the adhesive base.
    (a) Bond Pattern: Running bond, or as indicated on the Drawings.
    (b) Install outside corner return units with short and long lengths alternated.
    (c) Plan work to minimize jobsite cutting. Perform necessary cutting with proper tools to provide uniform edges; take care to prevent breaking unit corners or edges.

C) [Panelized Thin Brick Veneer (Panel Brick) System Application:
1) Mechanically fasten rigid backer board with thin brick veneer facing to substrate and supporting structure with [screw] [nail] fasteners, two fasteners per square foot minimum, in accordance with the manufacturers written installation instructions.
    (a) Fastener Schedule: Provided by the thin brick veneer manufacturer.
2) Interlock rigid backer board panels in a [one-half] [one-third] running bond.]

D) Jointing:

****
Select the appropriate construction from the options listed.
****

1) [Allow adhesive to set and cure in accordance with the manufacturers instructions for individual thin brick veneer units.] [After installation and acceptance of panelized veneer system].
2) Install mortar to thin brick veneer joints using a tuck pointing tool, metal tipped mortar bag or a grout setting machine in accordance with the manufacturers written installation instructions.
    (a) Fill joints completely with mortar.
    (b) Remove excess mortar; do not allow mortar to dry on face of units.
    (c) Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness, unless otherwise indicated.
    (d) Clean and finish joints in accordance with manufacturer’s instructions.

E) Control Joints: Size in accordance with Section 07920 for sealant performance, but in no case larger than adjacent mortar joints in exposed thin brick veneer units.

F) Expansion Joints: Provide where indicated on Drawings or as recommended by system manufacturer.
G) Built-in Work: As work progresses, build in door and window frames, nailing strips, anchor bolts, plates, and other items specified in various sections.
    1) Build in items plumb and level.
    2) Do not build in organic materials subject to deterioration.

3) ADJUSTING
    A) Cutting and Fitting: Cut and fit for chases, pipes, conduit, sleeves, and grounds. Cooperate with other sections of work to provide correct size, shape, and location.

4) CLEANING AND SEALING
    A) Cleaning: Comply with Section 01740.
        1) Remove excess mortar and smears using brush or steel wool.
        2) Replace defective mortar. Match adjacent work.
        3) Clean soiled surfaces with non-acidic solution, acceptable to the thin brick veneer manufacturer, which will not harm masonry or adjacent materials.
        4) Leave surfaces thoroughly clean and free of mortar and other soiling.
        5) Use nonmetallic tools in cleaning operations.

END OF SECTION