

# SPECIFICATIONS FOR Thin Tech THIN VENEER PANEL SYSTEM

## SECTION 04245 BRICK PANEL SYSTEM

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 general requirements apply to this section.

#### 1.2 SUMMARY

This specification document is designed to provide Dealers, Architects, and Specifiers with information concerning the Thin Tech System, through the outline of materials, construction details and product dimensions.

#### **Related Work: (Select as Required)**

Design Information Concrete: .....	Section	03001
Fiber Reinforced Concrete: .....	Section	03240
Tool Driven Concrete Fasteners: .....	Section	03275
Pre-Cast Concrete: .....	Section	03400
Lift-Slab/Tilt-Up Construction: .....	Section	03470
Closures and Setting Accessories for Concrete: .....	Section	03490
Design Information Masonry: .....	Section	04001
Mortar and Masonry Grout: .....	Section	04100
Unit Masonry: .....	Section	04200
Concrete Unit Masonry: .....	Section	04220
Reinforced Unit Masonry: .....	Section	04230
Stone: .....	Section	04400
Granite: .....	Section	04465
Masonry Restoration and Cleaning: .....	Section	04500
Simulated Stone: .....	Section	05050
Structural Metal Framing: .....	Section	05100
Structural Framing Systems: .....	Section	05160
Cold-Formed Metal Framing: .....	Section	05400
Expansion Control: .....	Section	05800
Laminated and Processed Sheets: .....	Section	06118
Structural Plywood: .....	Section	06122
Fiberwood Sheets and Decking: .....	Section	06124
Composite Wood/Metal Framing: .....	Section	06150
Design Information Thermal and Moisture Protection:.....	Section	07001
Waterproofing and Damp Proofing: .....	Section	07100
Sheet Membrane Waterproofing: .....	Section	07110
Damp Proofing: .....	Section	07150

Water Repellent Material: .....	Section	07180
Vapor Retarders: .....	Section	07190
Air Infiltration Barriers: .....	Section	07195
Insulation: .....	Section	07200
Fireproofing: .....	Section	07250
Fire stopping: .....	Section	07270
Pre-Formed Flashing: .....	Section	07645
Flexible Flashing: .....	Section	07650
Joint Fillers and Gaskets: .....	Section	07910
Sealants, Caulking and Seals: .....	Section	07920
Non-Load Bearing Wall Framing: .....	Section	09110
Metal Furring and Accessories: .....	Section	09206
Gypsum Board: .....	Section	09250
Gypsum Fabricators: .....	Section	09290
Tile: .....	Section	09300
Ceramic Tile: .....	Section	09310
Quarry Tile: .....	Section	09330
Pre-Engineered Structures: .....	Section	13120
Metal Building Systems: .....	Section	13122
Portable and Mobile Buildings: .....	Section	13124
Pre-Engineered Wood Component Systems: .....	Section	13136
Pre-Engineered Parking Structures: .....	Section	13138
Pre-Fabricated Residential Structures: .....	Section	13144

### 1.3 SCOPE OF WORK

Include all labor, materials and appliances, and perform all operations in connection with the installation of the Thin Tech SYSTEM and all related work, in strict accordance with drawings, and as specified herein.

Dimensions are normal and specifications are based on the latest product information available at time of publication. Thin Tech Masonry Panels LLC reserves the right to make changes in its product at any time without notice.

Products to be considered equal to those specified must be approved in writing by the architect, engineer, or specifier ten (10) days prior to the project bid date.

### 1.4 SUBMITTALS

Samples provided in small-scale form for initial selection purposes showing range of colors, textures, and patterns are available for each type of thin veneer.

Shop drawings detailing dimensioned plans and elevations that include large scale details of connections, joint conditions, and other related components.

Test Reports: System Flammability, Wind Load, Rain Penetration, Freeze / Thaw and Component Physical Property Tests are available from THIN-TECH MASONRY PANELS, LLC.

## **1.5 QUALITY ASSURANCE**

Appoint at least one supervisory journeyman who shall be present at all times during execution of work, who shall be thoroughly familiar with design requirement, type of materials being installed, reference standards and other requirements, and who shall direct all work performed at jobsite.

Applicator Contractor shall be Thin Tech SYSTEM approved and/or have at least three (3) years experience in the installation of panel systems.

Comply with all applicable codes, regulations, and standards. Where provision of applicable codes, regulations, and standards conflict with requirements of this section, the more demanding shall govern.

Thin Tech component parts meet National Building Code requirements including: BOCA, SBCC, ICBO, CABO, HUD-FHA, VA and MEA.

## **1.6 PERFORMANCE CHARACTERISTICS**

Assembled Wall System shall meet or exceed the following performance standards when tested in accordance with ASTM requirements.

## **1.7 SEQUENCING AND SCHEDULING**

Sequence thin brick system installation in proper order to minimize the possibility of damage during the construction period.

## **PART 2 - PRODUCTS**

### **2.0 MANUFACTURED PRODUCTS**

- A. Support panel shall be corrosive resistant
  - 1. Various sizes shall be available to facilitate installation.
  - 2. Panel shall have support ledges to support and space veneer.
- B. Veneer shall meet appropriate code requirements ( Thin Brick ASTM C-1088 )
  - 1. Veneer size and bond pattern shall be as specified.
  - 2. Color shall meet project specified code level.
- C. Adhesive of veneer shall meet minimum requirement for adhered material per code of 50 p.s.i. of surface area.
- D. Mortar material shall comply with code requirements of an S-Grade mortar.
- E. Fasteners shall be non-corrosive screws, nails with a flat back.

- F. Flashings and trims will be corrosive resistant to the elements and non-reactive to mortar.
- G. Water infiltration barrier - Building wrap, felt paper, and Home Slicker with Typar as approved by local building codes.

## **PART 3 - EXECUTION**

### **3.1 INSPECTION**

Installer must examine conditions under which the Thin Brick System is to be installed and notify Contractor in writing of any unsatisfactory conditions. Do not proceed with installation of the Thin Brick System until the unsatisfactory conditions have been corrected in a manner acceptable to the installer and general contractor.

Installer shall consult the other trades and contractors involved prior to start of the Thin Brick System installation. This is to determine any areas of potential interference. Do not start the installation until interferences have been resolved to the satisfaction of the installer or general contractor.

Coordinate layout with other work to determine that work schedule is satisfactory with other contractors.

### **3.2 PREPARATION**

Whenever possible, take field measurements prior to the preparation of shop drawings and fabrication to insure proper fitting and installation of the product.

Verify that materials are those specified before installing.

Insure walls are plumb and corners are braced to specifications.

Maximum wall frame spacing for stud walls = 60mm (24") O.C. Girts = 75mm (30") O.C.

Walls must be structurally sound and the substrate system designed with a wall deflection not greater than  $L/360$ . Substrate shall have no planer irregularities greater than 7mm in 3.05 m (1/4" in 10').

Water infiltration barrier (if required), must be installed prior to placement of panel.

Trim or flash in place per manufacturer's details and/or BIA Technical Note 7A on flashing of Brick Walls.

### **3.3 INSTALLATION**

#### **PANELS**

Exterior walls shall be constructed of structurally sound masonry, wood, or steel studs, with an approved building sheathing and a water infiltration barrier placed over it if needed. This should be done prior to the installation of the panel system.

Panels shall be mechanically secured to a structural wall with a manufacturer's approved fastener in accordance with the manufacture's recommendation. Panels shall be attached with a minimum of one fastener per 900 cm<sup>2</sup> (square foot). All fastening devices shall be of a corrosion resistant type.

Panels applied to an oblique wall shall be installed with the support ties aligned and level to each other.

Panel joint shall be staggered over sheathing joints.

Control joints in the panel system (including pre-fabricated panels) are required to coincide with the building control joints where substrates change, within 600 mm - 1200 mm (2-4 ft.) of corners, per Technical Note 18A Revised as recommended by the BIA or where significant structural, substrate or frame movement occurs.

Panels shall be clean, free of dirt, oil or any other foreign contaminant.

#### **THIN VENEERS**

Thin veneers shall be either field applied, factory installed, or panelized into components or curtain walls. (select as required)

Thin veneers shall be initially adhered to panel using specially formulated adhesive in "Quarter" sized dabs or vertical stripes 10mm (3/8") wide.

Thin veneers shall be applied within 5 to 10 minutes after adhesive has been applied. Thin veneers shall be placed in the bond pattern called for.

#### **MORTAR**

When all applied veneers are secured in place, fill joints and seams with an approved latex modified mortar or industry accepted grout for tile or stone.

Mortar vertical joints immediately following each fourth horizontal joint.

Mortar only an area that can be tooled before mortar becomes too stiff. Mortar should have a dull finish and be moist, but not wet.

## **WEATHER REQUIREMENTS**

In cold weather do not use frozen materials in mortar mix. Do not apply mortar to frozen surfaces containing frost. Do not apply mortar when ambient is less than 2 degrees Celsius (35 degrees Fahrenheit) without sufficient protection and supplemental heat.

In hot weather, protect mortar from uneven and excessive evaporation. Where conditions are hot, dry and/or windy and evaporation is great, veneer shall be fogged with water to allow the mortar enough time to set. Moist curing is not recommended for latex modified mortar.

## **CAULKING**

All areas where thin veneer meets non-veneer surfaces must be caulked with the proper approved sealant for conditions.

Thoroughly and neatly caulk joints between thin veneer and abutting material.

## **CLEANING**

Thin veneer shall be cleaned per the appropriate method established by the Brick Institute of America for Brick ( see Technical Bulletin "#20 Revised" ), or the Association of Tile, Terrazzo and Marble Contractors and Affiliates Bulletin entitled "Grouting and Cleaning Ceramic Floors With Latex Grout".

### **3.4 MAINTENANCE**

When applied according to manufacturer's specifications, Thin Brick Panel Systems installations should last indefinitely and be maintenance free. However, if for any reason, the Thin Brick Panel System should become unattached from its surface, or damaged by severe impact, the affected areas should be cleaned of old mortar and adhesive and a new panel system applied with its approved adhesive and mortar.

(end of section)