



BUILDINGS BULLETIN 2014-022

OTCR

Supersedes: None

Issuer: Alan Price, P.E.
Director, Office of Technical Certification and Research

Issuance Date: November 20, 2014

Purpose: This document establishes acceptance criteria for porcelain tile ventilated façade systems as an alternative material in accordance with the NYC Construction Codes.

Related Code/Zoning Section(s):	AC 28-113	BC 1403	BC 1704.10
	BC 1404.1	BC 1405	

Subject(s): Exterior walls, exterior wall coverings, porcelain tile façade; Interior wall finish, porcelain tile ventilated system

Background: Section BC 1404 prescribes the use of specific materials used for the construction of exterior walls. Materials not prescribed in the NYC Construction Codes may be permitted when such alternative materials have been approved by the Department. Porcelain tile ventilated façade systems are not prescribed in the code. This bulletin establishes acceptance criteria for porcelain tile ventilated façade systems.

Description: Porcelain tile ventilated façade systems are exterior wall cladding systems made of porcelain tiles which is installed with a substructure that allows air to circulate between the tiles and the exterior face of the approved water-resistive barrier.

Evaluation Scope: NYC Construction Codes

Evaluation Criteria: Pursuant to section AC 28-113, the Office of Technical Certification and Research recognizes porcelain tile ventilated façade systems tested and evaluated in accordance with the referenced standards listed in the bulletin.

Alternatively, an evaluation or code compliance report from an accredited agency will satisfy this requirement. The evaluation or code compliance report shall be based on testing and evaluation in accordance with the referenced standards listed in this bulletin.

Uses: Porcelain tile ventilated façade systems are used as nonload-bearing exterior wall coverings on buildings. The system may also be used for interior applications as part of a Class "A" interior wall finish.

Conditions of Acceptance: Porcelain tile ventilated façade systems shall be designed, installed, and inspected in accordance with the NYC Construction Codes, applicable conditions as published in appropriate evaluation reports, and including but not limited to the following conditions:

A. Design

Porcelain tile ventilated façade systems shall be designed in accordance with the NYC Building Code including:

1. Applicable performance requirements per section BC 1403.
2. Applicable loading conditions in accordance with BC chapter 16.

Porcelain tile ventilated façade systems shall comply with the NYC Zoning Resolution where applicable.

B. Installation

1. The installation of the porcelain tile ventilated façade systems must comply with applicable sections of NYC Construction Codes, and the manufacturer instructions.
2. Porcelain tile ventilated façade systems shall be installed as wall coverings in accordance with section BC 1405.
3. If an evaluation report was used to satisfy the evaluation criteria as required by the bulletin then the installation shall further comply with installation conditions specified in the evaluation report.

C. Special Inspection

Pursuant to section BC 1704.10, the installation of porcelain tile ventilated façade systems described in this bulletin shall be subject to special inspection requirements of Chapter 17 of the Building Code and Department Rules covering special inspection.

D. Labeling

Porcelain tile ventilated façade systems shall be labeled as per section BC 28-113.4. All shipments and deliveries of materials shall be accompanied by a certificate or label certifying that the materials shipped or delivered are equivalent to those tested and approved.

Referenced Standards:

1. *ASTM E136-99 "Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C"*
2. *ASTM E84-01 "Test Methods for Surface Burning Characteristics of Building Material"*,
3. *ANSI A137.1-88 "American National Standard Specifications for Ceramic Tile"*
4. *NFPA 285-06 "Standard Fire Test method for evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Combustible Components"*
5. *ASTM C1026 "Standard Test Method for Measuring the Resistance of Ceramic and Glass Tile to Freeze-Thaw Cycling"*
6. *ASTM E330-02 "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference"*
7. *ASTM C880 "Standard Test Method for Flexural Strength of Dimension Stone"*
8. *ASTM C1354 "Standard Test Method for Strength of Individual Stone Anchorages in Dimension Stone"*