

Product Evaluation

EC126 | 1021

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: EC-126

Effective Date: October 1, 2021

Re-evaluation Date: July 2025

Product Name: Architectural Ultra High Performance Concrete (A/UHPC) Façade Panel System

Manufacturer: TAKTL, LLC
230 Braddock Avenue
Keystone Commons
Portal 9
Turtle Creek, PA 15145
(412) 486-1600

General Description:

The Architectural Ultra High Performance Concrete (A/UHPC) Façade Panel System is used as an exterior cladding. The wall panels are considered non-load bearing. The panels are part of a ventilated cavity wall assembly that allows air to circulate between the panels and the exterior face of the building substrate. The panels are glass fiber-reinforced, ultra high performance concrete panels manufactured from Portland cement, silica fume and fine sands, alkali-resistant glass reinforcing fibers; two layers of alkali-resistant glass mesh; and additives.

Limitations:

General: This evaluation report is for the panel system only. Evaluation of the supporting structure is separate from this evaluation report.

Allowable Dimensions: The maximum dimension for an individual panel is 143-1/2" by 59-1/2". The width and length of the panels can be changed so that the panels may be oriented vertically or horizontally. Multiple panels may be placed side by side.

Wall Construction: The panels may be secured to wall constructed of wood studs, steel studs, concrete, or concrete masonry units.

Allowable Design Pressure: +120 psf; -120.0 psf

Wall Bracing: The panels may not be used for lateral resistance. Wall bracing must be installed by others as required for the structure.

Installation:

General Installation Requirements:

The wall panel system must be installed in accordance with the manufacturer's published installation instructions and this product evaluation report. Where differences occur between the installation instructions and this evaluation report, this evaluation report must be followed. Use corrosion resistant fasteners as specified in the IRC and the IBC.

Design Drawings: Install in accordance with "Architectural Ultra High Performance Concrete (A/UHPC) Façade Panel Sys;" Drawing No. 21-30T; Sheets 1 through 9 of 9; dated April 5, 2021; with each sheet signed and sealed by Jalal Farooq, P.E. on May 10, 2021. The stated drawings are referred to as approved drawings in this evaluation report. A copy of the approved drawings must be available at the job site.

Installation: The wall panels are mechanically fastened to the structure. Refer to the approved drawings for the specific attachment requirements.

Wall Sheathing: Structural and non-structural wall sheathing may be applied to the wall framing before the application of the panel system. In either case, the panel system is not to be secured to the wall sheathing. Fasteners used to secure the panel system to the wall framing must be long enough to penetrate through the wall sheathing and into the wall framing as required in the approved drawing.

Note: Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.