

November 13, 2019

Mr. Paul M. Clark Jr, President
Composite Building Systems Inc.
938 South Orange Grove Blvd. Unit A
Pasadena CA 91105

Re: Florida Building Code Wind-borne Debris Resistance
Metal Stud Crete® Wall System

Dear Mr. Clark:

This office has conducted a review of Metal Stud Crete® (MSC) wall system to determine whether the system complies with the 2017 Florida Building Code - Building, 6th Edition (FBC), Section 1626, High Velocity Hurricane Zones – Impact Tests for Wind-Borne Debris. The MSC composite panels consist of light-gauge steel studs and a reinforced concrete facing on one side of the studs, with the MSC shear transfer strip providing a shear-flow connection between the steel studs and the concrete. The MSC shear transfer strip is evaluated in the ICC-ES Evaluation Report, ESR-2511.

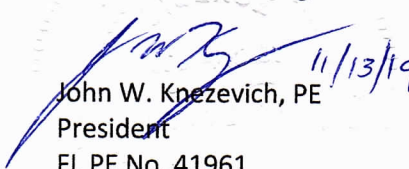
The High Velocity Hurricane Zone requirements of the FBC require solid wall panels to be impact resistant and undergo testing in accordance with FBC Section 1626 to verify compliance unless the system meets specific provisions outlined in FBC Section 1624.4, **Construction assemblies deemed to comply with Section 1626**. The MSC wall system construction is addressed in Section 1626.4.4 *“Exterior reinforced concrete elements constructed of solid normal weight concrete (no voids), designed in accordance with Chapter 19 (High-Velocity Hurricane Zones) of this code and having a minimum 2 inches (51 mm) thickness.... All connectors shall be specified by the building designer of record for all loads except impact.”*

Based on this provision, the MSC wall system is deemed to comply with the referenced impact provisions of FBC Section 1626 provided the concrete facing is composed of normal weight concrete with a minimum concrete compressive strength, $f'c$, of 3,000 psi and maintains a minimum thickness of 2 inches. The balance of the wall system shall be designed in accordance with the FBC and the ESR-2511.

If we may be of any further assistance in clarifying the specific code requirements, please do not hesitate to contact our office.

Sincerely,

Knezevich Consulting, LLC


John W. Knezevich, PE
President
FL PE No. 41961