June 4, 2019

To whom it may concern:

FACADE SYSTEMS INC.

This letter is intended to summarize the technical submittals. It does not contain marketing information.

The factory writes as introduction:
“Corium is a unique brick cladding system that combines the natural beauty of genuine brick with cost effective fast track installation. The Corium system comprises brick slip tiles specially manufactured to fix mechanically to a HPS200 galvanized steel backing section.
These profiled lengths are mounted in rows, columns or any direction, onto a support system and the brick tiles are simply clipped in place. The mechanical 'clipping' feature is unique to Corium and ensures a high strength, permanent façade whilst enabling some adjustment of tile position during installation.”

The subsystem behind Corium can be whatever you would prefer. FSI offers and understand the various choices in subsystem, thermal and moisture barriers etc. In many drawings, renderings and brochures you will see systems that are often preferred in other parts of the world. It’s a simple collaboration to translate that to subsystems more readily available and built here.

The system has been used for over 20 years with zero incidents. All have been vulnerable to freeze thaw conditions. You can see an updated listed of projects in the submittal files.

Telling, the North American venture supporting the system would provide all engineering, shop drawings and professional stamps.
Please review table attached.

Best regards,

Blair Davies P.Eng

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President

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Documents and key points.

Document	Key Points	
AAMA 501.1 Water Penetration	• Wall is approx. 10'x10'. • Real world construction • Thermal cycling +140F > 75F > -40F > +75F	No leakage or visible water: @25 psf (100 MPH)
AAMA 501.5 Thermal Cycling		No permanent damage due to expansion and contraction
ASTM E283-04 Air Leakage		0.01 CFM/ft2 @25psf Passed
ASTM 331-00(2009) Water Penetration		No leakage or visible water penetration @25 psf
ASTM E547 Water Penetration		No leakage or visible water penetration @25 psf
ASTM 330-02(2010) Structural Performance, Air Pressure Differences	• Dead loads applied as per test • Wall is approx. 8'x10'. • Real world construction • L bracket support structure, would need to be translated to other systems • Load cycling from 0 > 60 psf, -60 psf > +90 psf > -90 psf	No damage of any part of system reported. Tested to negative and positive pressures exceeding 90psf (nearly 200mph)
ASTM C67 Brick Water Absorption, Compressive Strength, Freeze Thaw	See test	ASTM C67 Strength, minimum is 3000 psi, Corium 6700 psi average Water absorption max allowed 17 %, Corium 9.8% after 5 hour boil Saturation coefficient average 67% max allowed 78%
BCRL BM1:1993 standard developed by CERAM Freeze Thaw Testing for Brick	• Procedure based on British standard BS3921:1985 • 100 cycles • Brick and mortar joint tested, installed in rails(slips) • Tested after immersion in water for 7 days • Cycle -15C and +25C • Inspected at 10, 50 and 100 cycles	No damage of brick, mortar or slips appeared
Expectation of Performance of Colorcoat HPS200 Rails in the Corium System Dr Graeme Peacock of Corus UK Ltd. Supplier of Colorcoat HPS200, Confidex and Galvalloy	• Analysis of possible failure mechanisms and evaluation of projected lifespan of coating and rail. • Explanation of product's history. • Explanation of the coating structure. • Explanation of galvanization is superior to commodity galv steel.	• HPS 200 used in protecting metal cladding and roofing for 55 years (report written in 2005) • If there was a risk its UV, and coatings and rail don't see UV • Exposed it has 30 year guarantee eg roofing • Expectation of coating, galvanization and steel system is in excess of 60 years. • Does not account for redundancy in structural system.
Technical Bulletin TAS COR 110	LEED points review	See document
Wimlas	A complete review of use of the system based on British standards as of 2001	• As much about explanation as compliance.

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