

# ENGINEERING EXPRESS® PRODUCT EVALUATION REPORT

April 28, 2022

Application Number: FL# 29520.1-R10

EX Project Number: 20-29829

Product Manufacturer: Crawford Tracey Corporation

Manufacturer Address: 3301 SW 13<sup>th</sup> Drive

Deerfield Beach, FL 33442

Product Name & Description: Series Protech 14SG Aluminum Structurally Glazed Curtainwall System

(LMI) - Missile Level "D" and SMI

## Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Business and Professional Regulation (Florida Building Commission) Rule Chapter 61G20-3.005, F.A.C., for statewide acceptance per Method 1 (d). The product noted above has been tested and/or evaluated as summarized herein to show compliance with the Florida Building Code Seventh Edition (2020) and is, for the purpose intended, at least equivalent to that required by the Standard and Code. Reevaluation of this product shall be required following pertinent Florida Building Code modifications or revisions.

## Substantiating Data:

#### • PRODUCT EVALUATION DOCUMENTS

EX drawing #20-29829 titled "Series Protech 14SG Aluminum Curtain Wall System – LMI (Level D) & SMI". Sheets 1-70, prepared by Engineering Express, signed & sealed by Frank Bennardo, P.E. is an integral part of this Evaluation Report.

#### • TEST REPORTS

Uniform static structural performance has been tested in accordance with TAS 202 test standards per test report(s) #0720.01-16 by American Test Lab of South Florida and signed and sealed by Stephen W. Warter, P.E as well as test report(s) M8589.01-450-32 R0 by Intertek, and signed and sealed by Vinju j. Abraham, P.E.

Large missile impact resistance and cyclic loading performance have been tested in accordance with TAS 201 & 203 test standards per test report(s) #0720.01-16 by American Test Lab of South Florida, and signed and sealed by Stephen W. Warter, P.E as well as test report(s) M8589.01-450-32 R0 by Intertek, and signed and sealed by Vinju j. Abraham, P.E.

#### • STRUCTURAL ENGINEERING CALCULATIONS

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

- 1. Glass Capacity
- 2. Maximum Allowable Size/Pressure Combinations
- 3. Anchor Spacing

No 33% increase in allowable stress has been used in the design of this product.



Series Protech 14SG Aluminum Structurally Glazed Curtainwall System (LMI) – Missile Level "D" and SMI-Crawford Tracey Corporation

The following are approved for use in the HVHZ as specified in their corresponding NOAs:

- Saflex Interlayer by Eastman Chemical Company (NOA #'s: 21-0216.01 & 20-0622.03)
- Trosifol Interlayer by Kuraray America, Inc. (NOA#: 20-0915.22)
- SentryGlas Interlayer by Kuraray America, Inc. (NOA #: 21-0324.06)

If the listed NOA has been superseded, use the most recent version.

## Impact Resistance:

Large Missile Impact Resistance has been demonstrated as evidenced in previously listed test reports and is accounted for in the engineering design of this product.

### Wind Load Resistance

This product has been designed to resist wind loads as indicated on its respective Product Evaluation Document (i.e. engineering document).

### Installation

The product listed above shall be installed in strict compliance with the Product Evaluation Document (i.e. engineering document), along with all components noted therein.

The product components shall be of the material specified in the Product Evaluation Document (i.e. engineering document

#### Limitations & Conditions of Use:

Use of each product shall be in strict accordance with its respective Product Evaluation Document (i.e. engineering document) as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in each product's respective anchor schedule. Host structure conditions which are not accounted for in each product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times. Any alteration to the respective Product Evaluation Document will invalidate it. This product has been designed for use inside and outside of the High Velocity Hurricane Zone (HVHZ & NON-HVHZ).

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Respectfully,

04/28/22

Frank Bennardo, PE

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