

PRODUCT APPROVAL EVALUATION REPORT

PER 553.842 F.S. AND RULE CHAPTER 61G20-3

DATE: September 10, 2026

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COMPLIANCE METHOD: 61G20-3.005 (1)(d)
Evaluation Report from a Licensed Professional Engineer

PRODUCT DESCRIPTION: APPLICATION FL # 44674.2

Manufacturer	E.S. Windows, Inc.
Address	3550 NW 49th St, Miami, FL 33142
Product Name	SERIES ES-8860i ALUMINUM WINDOW WALL
Window Width	Maximum Width: 74 in.
Window Height	Maximum Height: 213 in.
Design Pressure	+ 189 PSF / - 189 PSF
Impact Rating	Small Missile Impact (SMI)
Installation Drawing	DT-PA-ESW-002
Use in HVHZ	This product complies with the testing requirements of the High Velocity Hurricane Zones.
Comparative Analysis	Comparative analysis in compliance with Section 2411.3.2.4, FBC 2023 has been included based of tested sizes, design and cycling pressures.

TESTS PERFORMED: Mandatory in compliance with AAMA 101/I.S.2/NAFS/TAS-202, TAS-201 and TAS 203, supplemental tests in compliance with TAS 202, AAMA 501 following test load sequence and test load duration in TAS 202 and ANSI Z97.1 Impact Test.

Test Report	Test Lab.	Report Date	Test Standard	Description	Lab. Engineer
BT-ESW-19-002	Blackwater Testing Inc.	02/07/2019	ASTM E283	Air Infiltration	Constantin Bortes, PE
BT-ESW-19-002	Blackwater Testing Inc.	02/07/2019	ASTM E331	Water Infiltration	Constantin Bortes, PE
BT-ESW-19-002	Blackwater Testing Inc.	02/07/2019	TAS 202 & ASTM E330	Uniform Structural Load Tests (Positive and Negative).	Constantin Bortes, PE
BT-ESW-19-002	Blackwater Testing Inc.	02/07/2019	TAS 201	Small Missile Impact Test	Constantin Bortes, PE
BT-ESW-19-002	Blackwater Testing Inc.	02/07/2019	TAS 203	Cyclic Pressure Test (Positive and Negative).	Constantin Bortes, PE
BT-ESW-19-002	Blackwater Testing Inc.	02/07/2019	ANSI Z97.1	Impact Test for Safety Glass	Constantin Bortes, PE
BT-ESW-23-005	Blackwater Testing Inc.	12/27/2023	ASTM E283	Air Infiltration	Michael D. Caldwell, PE
BT-ESW-23-005	Blackwater Testing Inc.	12/27/2023	ASTM E331	Water Infiltration	Michael D. Caldwell, PE
BT-ESW-23-005	Blackwater Testing Inc.	12/27/2023	TAS 202 & ASTM E330	Uniform Structural Load Tests (Positive and Negative).	Michael D. Caldwell, PE
BT-ESW-23-005	Blackwater Testing Inc.	12/27/2023	TAS 201	Small Missile Impact Test	Michael D. Caldwell, PE
BT-ESW-23-005	Blackwater Testing Inc.	12/27/2023	TAS 203	Cyclic Pressure Test (Positive and Negative).	Michael D. Caldwell, PE

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BT-ESW-23-005	Blackwater Testing Inc.	12/27/2023	ANSI Z97.1	Impact Test for Safety Glass	Michael D. Caldwell, PE
BT-GMP-19-008	Blackwater Testing Inc.	06/20/2019	ASTM E283	Air Infiltration	Constantin Bortes, PE
BT-GMP-19-008	Blackwater Testing Inc.	06/20/2019	ASTM E331	Water Infiltration	Constantin Bortes, PE
BT-GMP-19-008	Blackwater Testing Inc.	06/20/2019	TAS 202 & ASTM E330	Uniform Structural Load Tests (Positive and Negative).	Constantin Bortes, PE
BT-GMP-19-008	Blackwater Testing Inc.	06/20/2019	TAS 201	Small Missile Impact Test	Constantin Bortes, PE
BT-GMP-19-008	Blackwater Testing Inc.	06/20/2019	TAS 203	Cyclic Pressure Test (Positive and Negative).	Constantin Bortes, PE
BT-GMP-19-008	Blackwater Testing Inc.	06/20/2019	ANSI Z97.1	Impact Test for Safety Glass	Constantin Bortes, PE
BT-ESW-17-015A	Blackwater Testing Inc.	05/31/2017	ASTM E283	Air Infiltration	Constantin Bortes, PE
BT-ESW-17-015A	Blackwater Testing Inc.	05/31/2017	TAS 202 & ASTM E330	Uniform Structural Load Tests (Positive and Negative).	Constantin Bortes, PE
BT-ESW-17-015A	Blackwater Testing Inc.	05/31/2017	ASTM E331	Water Infiltration	Constantin Bortes, PE
BT-ESW-17-015A	Blackwater Testing Inc.	05/31/2017	TAS 201	Small Missile Impact Test	Constantin Bortes, PE
BT-ESW-17-015A	Blackwater Testing Inc.	05/31/2017	TAS 203	Cyclic Pressure Test (Positive and Negative).	Constantin Bortes, PE
BT-ESW-17-015	Blackwater Testing Inc.	07/26/2015	ASTM E283	Air Infiltration	Constantin Bortes, PE
BT-ESW-17-015	Blackwater Testing Inc.	07/26/2015	TAS 202 & ASTM E330	Uniform Structural Load Tests (Positive and Negative).	Constantin Bortes, PE
BT-ESW-17-015	Blackwater Testing Inc.	07/26/2015	ASTM E331	Water Infiltration	Constantin Bortes, PE
BT-ESW-17-015	Blackwater Testing Inc.	07/26/2015	TAS 201	Small Missile Impact Test	Constantin Bortes, PE
BT-ESW-17-015	Blackwater Testing Inc.	07/26/2015	TAS 203	Cyclic Pressure Test (Positive and Negative).	Constantin Bortes, PE
13014	QAI Laboratories	03/04/2022	ASTM E283	Air Infiltration	Idalmis Ortega, PE
13014	QAI Laboratories	03/04/2022	TAS 202	Uniform Structural Load Tests (Positive and Negative).	Idalmis Ortega, PE
13014	QAI Laboratories	03/04/2022	ASTM E331	Water Infiltration	Idalmis Ortega, PE
13014	QAI Laboratories	03/04/2022	TAS 201	Small Missile Impact Test	Idalmis Ortega, PE
13014	QAI Laboratories	03/04/2022	TAS 203	Cyclic Pressure Test (Positive and Negative).	Idalmis Ortega, PE
BT-ESW-25-040	Blackwater Testing Inc.	07/29/2026	ASTM E283	Air Infiltration	Michael D. Caldwell, PE
BT-ESW-25-040	Blackwater Testing Inc.	07/29/2026	ASTM E331	Water Infiltration	Michael D. Caldwell, PE
BT-ESW-25-040	Blackwater Testing Inc.	07/29/2026	TAS 202	Uniform Structural Load Tests (Positive and Negative).	Michael D. Caldwell, PE

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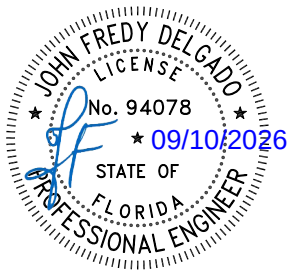
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BT-ESW-25-040	Blackwater Testing Inc.	07/29/2026	TAS 201	Large Missile Impact Test	Michael D. Caldwell, PE
BT-ESW-25-040	Blackwater Testing Inc.	07/29/2026	TAS 203	Cyclic Pressure Test (Positive and Negative).	Michael D. Caldwell, PE

Under the limitations of the referenced installation drawings DT-PA-ESW-002, to the best of my knowledge, the product herein evaluated complies with the requirements of the Florida Building Code 8th edition (2023).

Evaluation performed by:



John F. Delgado, P.E.
FL Reg. # 94078
Deerfield Technical Inc.
CA # 36112

This item has been Digitally Signed and sealed by John Delgado, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.