

Product Evaluation Report

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Product Manufacturer

Mitsubishi Chemical America, Alpolic Division
401 Volvo Parkway
Chesapeake, VA 23320

Product Name, Model and/or Description

Alpolic and Alpolic/FR Aluminum Composite Wall
Panel Systems - Series 20

Code: Current Edition of the Florida Building Code including the 9th Edition (2026)) Florida Building Code

Compliance Method: 61G20-3.005(1)(d) – Product Evaluation Report by a Licensed Professional Engineer

Product Name, Model and/or Designation: Products covered by this evaluation include the following.

- Mitsubishi Chemical America, Alpolic Division Alpolic and Alpolic/FR Aluminum Composite Wall Panel Systems, Series 20 Using Metal Design Systems, Inc. Aluminum Extrusions

Product Testing, Materials and Certification:

- Performance Testing per TAS 202 and TAS 203:
 - Intertek/ATI Inc. Test Report No. D9531.09-602-18 and associated laboratory drawings, dated 10/10/14 signed by Shawn Collins, PE on 10/14/14. Performance testing to TAS 202 and TAS 203 using 5/8" Exterior Grade Plywood on 16 GA. Steel Stud.
- Material Testing:
 - Southwest Research Institute, Report No. 01-8361-320d, ASTM E84-97 for Flame Spread Index and Smoke Developed Index, 4mm Alpolic
 - Southwest Research Institute, Report No. 01-7520-359a, ASTM E84-95 for Flame Spread Index and Smoke Developed Index, 4mm Alpolic/FR
 - Southwest Research Institute, Report No. 01-8361-038, ASTM D1929-91a for Ignition Properties, 4mm Alpolic/FR
 - United States Testing Co. Inc., Report No. 100727-3, ASTM D1929-91a for Ignition Properties, 4mm Alpolic
 - ATI, Report No. 01-35789.03, ASTM E8-96 for Tensile Strength, 4mm Alpolic and 4mm Alpolic/FR
 - ATI, Report No. 01-43055.02, ASTM E8-00 for Tensile Strength, 4mm Alpolic
- Materials:
 - Alpolic and Alpolic/FR aluminum composite metal panel 4mm thick (0.157") as manufactured by Mitsubishi Chemical America, Alpolic Division, Chesapeake, VA. Core comprised of thermoplastic material. Face sheet comprised of 0.020" aluminum 3105-H14 alloy.
 - Aluminum extrusions (6063-T6).

Product Installation Instructions:

- Installation Drawing No. MCCA0004, Rev. 3, dated 8/2/26, Alpolic and Alpolic/FR, Mitsubishi Chemical America, Alpolic Division Aluminum Composite Wall Panel Systems, Series 20, signed and sealed by Robert. J. Amoruso, P.E. Florida No. 49752.

Engineering Analysis & Evaluation: The following evaluations, engineering and/or rational analysis/calculations have been performed.

- Wall Panel Extrusion Supports to 16 GA Fty = 50 ksi Steel Stud anchorage has been verified by calculation (Calc. No. 1223) prepared by Robert J. Amoruso, P.E. in accordance with the current edition of the Florida Building Code.

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Limitations & Conditions of Use:

- This product has been evaluated for use inside the HVHZ (High Velocity Hurricane Zone).
- Refer to Product Installation Instructions noted above for:
 - Maximum allowable wind loads at related maximum allowable size(s).
 - Overall dimensions and material/grade of main product components, accessories, etc.
 - Illustrated diagrams of the attachment of the product to substrate structure of 16 GA. steel studs of 50 ksi yield strength.
 - Anchor type(s), size(s), substrate(s), embedment, edge distance, and spacing/locations.
- Site wind pressures shall be determined by a licensed professional engineer in accordance with the current edition of the Florida Building Code (and/or ASCE 7 as referenced in the current edition of the Florida Building Code) for components and cladding based on allowable stress design.
- Site conditions not covered in this product evaluation document are subject to additional engineering analysis by a licensed professional engineer or registered architect as required by the authority having jurisdiction.
- Adequacy of the existing structural substrates as a main wind force resisting system capable of withstanding and transferring applied product loads to the foundation is the responsibility of the licensed professional engineer or registered architect acting as the design professional of record for the project of installation.

Certificate of Independence per Product Approval Rule 61G20-3.009

Robert J. Amoruso, P.E., does not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report.

Robert J. Amoruso, P.E., does not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by this Product Evaluation Report.



Digitally signed
by Robert J
Amoruso
Date:
2026.08.05
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Evaluated By:
Robert J. Amoruso, P.E.
FL PE License No. 49752