



Project Number: U5263.014.231
January 3, 2024

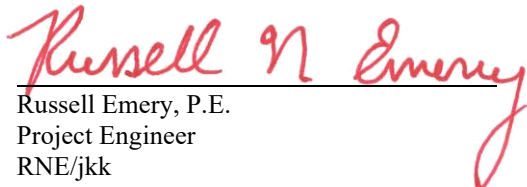
Product Approval Administrator
Building Codes & Standards Section
Department of Business & Professional Regulations
1940 North Monroe Street, Suite 90
Tallahassee, FL 32399-2100

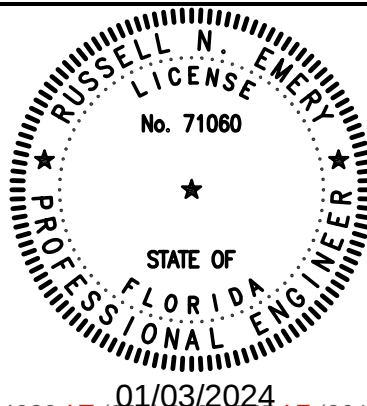
REFERENCE: **Florida Product Approval of ATAS Roof Panel: Dutch Seam (HVHZ) [FL 3556]
Product Approval Evaluation**

Manufacturer: ATAS International, Inc.
Manufacturer Address: 6612 Snowdrift Rd., Allentown, PA 18106
Model Name: ATAS Roof Panel: Dutch Seam (HVHZ) [FL 3556]
Maximum Design Load: See Attached Calculations per Configuration

Testing Summary					
TEST	DESCRIPTION	TEST LOCATION	TEST REPORT DATE	TEST REPORT #	TEST SEALED BY
UL 580	Uplift Resistance of Standing Seam Metal Roof Deck Panels	Architectural Testing Inc.	10/31/2012	C2451.01-109-44	Michael D. Stremmel, P.E.
TAS 125-03	Test Protocol for High Velocity Hurricane Zone	Architectural Testing Inc.	07/05/2007	66445.01-109-18	Joseph A. Reed, P.E.
This product complies with the High Velocity Hurricane Zone (HVHZ) testing requirements					
For maximum sizes, spans, loads and anchor types, refer to the installation drawings.					
This product is UL listed in accordance with UL580 per Architectural Testing Inc. report C2451.01-109-44					
Referenced test reports were reviewed against the most recent version and have been found to be compliant and having no impact on the performance report.					
To the best of my knowledge, the above product conforms to the requirements of the 2023 Florida Building Code when installed in accordance with the instructions and limitations outlined in the attached installation drawings.					

Sincerely,
VECTOR STRUCTURAL ENGINEERING, LLC


Russell Emery, P.E.
Project Engineer
RNE/jkk



Russell N. Emery
No. 71060

This item has been digitally signed and sealed by Russell N. Emery 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.



JOB NO.: U5263.014.231

PROJECT: ATAS FBC PRODUCT APPROVAL

PRODUCT: Dutch Seam (HVHZ)

Design Assumptions

0.032" MRD 150 and 194 aluminum panel (0.030" minimum delivered thickness)

Sloped roof from 2.33:12 to 12:12 slope

5/8" plywood roof sheathing for new construction, 1/2" sheathing for reroofing

#10 screws per clip into plywood

8" clip spacing at perimeter, 12" fastener spacing in field for HVHZ

3003-H14 aluminum sheet ($F_y = 17$ ksi, $F_u = 20$ ksi), ASTM A653 SQ Gr. 50 steel sheet ($F_y = 50$ ksi, $F_u = 65$ ksi)

Tested in accordance with RAS 111 (TAS 111 testing not required) and RAS 133 for HVHZ

Panels tested to failure according to TAS 125 protocols

F.S. = 2.0 on panel test pressures

0.032" MRD150 HVHZ Allowable Pressure Evaluation

TAS125/UL580 Test Summary				
Specimen	Clip Spacing (ft)	Failure Pressure (psf)	Clip Load (lbs)	Screw Load (lbs)
1	1	150	187.5	93.75
2	0.667	225	187.5	93.75
3	2	135	337.5	166.75

Failure in all specimens occurred when panels pulled apart at the seam

HVHZ Allowable Field Pressure

Use Specimens 1 and 3 to determine allowable field pressure. Use Specimen 1 as basis of design.

$$\begin{aligned}
 p_{ult,avg} &= 142.5 \text{ psf} \\
 p_{allow} &= 71.25 \text{ psf} \\
 \text{Clip Spacing} &= 12 \text{ in}
 \end{aligned}$$

HVHZ Allowable Perimeter (Corner) Pressure

Use Specimen 2 to determine allowable perimeter and corner pressure

$$\begin{aligned}
 p_{ult,avg} &= 225 \text{ psf} \\
 p_{allow} &= 112.5 \text{ psf} \\
 \text{Clip Spacing} &= 8 \text{ in}
 \end{aligned}$$

0.032" MRD194 HVHZ Allowable Pressure Evaluation

TAS125/UL580 Test Summary				
Specimen	Clip Spacing (ft)	Failure Pressure (psf)	Clip Load (lbs)	Screw Load (lbs)
1	0.333	315	168	84

Failure occurred when panels pulled apart at the seam.

HVHZ Allowable Pressure (all zones)

$$\begin{aligned}
 p_{ult,avg} &= 315 \text{ psf} \\
 F.S. &= 2 \\
 p_{allow} &= 158 \text{ psf} \\
 \text{Clip Spacing} &= 4 \text{ in}
 \end{aligned}$$

0.032" MRD 150 HVHZ			
Zone	Allowable Pressure (psf)	Clip Spacing (in)	#10-13 Screws per Clip
Field	71	12	2
Perimeter	113	8	2

0.032" MRD 194 HVHZ			
Zone	Allowable Pressure (psf)	Clip Spacing (in)	#10-13 Screws per Clip
All	158	4	2

Test Report References

Standard	Report Number	Laboratory	Laboratory Location
TAS 125-03	66445.01-109-18	Architectural Testing	McKeepsport, PA
UL 580 (revised 7-9-09)	C2451.01-109-44	Architectural Testing, Inc.	York, PA