

CLIENT: **Grand View Distribution Corp.**
2386 Oak Street, Vancouver
British Columbia, Canada, V6H 4J1

Report No: RJ5599P-1

Date: August 2, 2017

SAMPLE ID: The sample was identified as "Limestone Faced, Alucomb Honeycomb Composite Panel".

DATE OF RECEIPT: Sample was received at QAI Laboratories on July 17, 2017.

TESTING PERIOD: July 25, thru July 28, 2017.

AUTHORIZATION: QAI Test Proposal 17MM07121 signed by Cherie Ho on July 12, 2017.

TESTS REQUESTED: ASTM C297/C297M-16, *Standard Test Methods for Flatwise Tensile Strength of Sandwich Construction.*

TEST RESULTS: Test results are provided on subsequent pages of this report.

Prepared By



Delmy Elias
Test Technician

**Signed for and on behalf of
QAI Laboratories Inc.**



Jose Elias
Operations Manager

ASTM C297/C297M-16, Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions.

Test Procedure: Testing was performed in accordance with ASTM C 297/C 297M-16, *Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions*. Five specimens were prepared for this test. 2” x 2” square specimens were cut from a large panel provided by the client using a water saw and bonded to aluminum blocks using Epoxy Adhesive. The test specimens were allowed to cure at standard laboratory conditions for a minimum of 24 hours before proceeding with testing. The specimens were individually placed in a United Tension/Compression Machine and pulled in tension at a constant rate of 0.02 inches per minute to failure.

Test Results

Specimen NO.	Tensile Strength (psi)	Peak Force (Lbs)	Mode of Failure
1	62	253	100% adhesive failure between honeycomb and aluminum skin
2	191	761	100 % cohesive failure within FRP tile
3	127	526	100% adhesive failure between honeycomb and aluminum skin
4	249	999	100% cohesive failure within FRP tile
5	91	369	100% adhesive failure between honeycomb and aluminum skin
Average	144	582	

Photographs

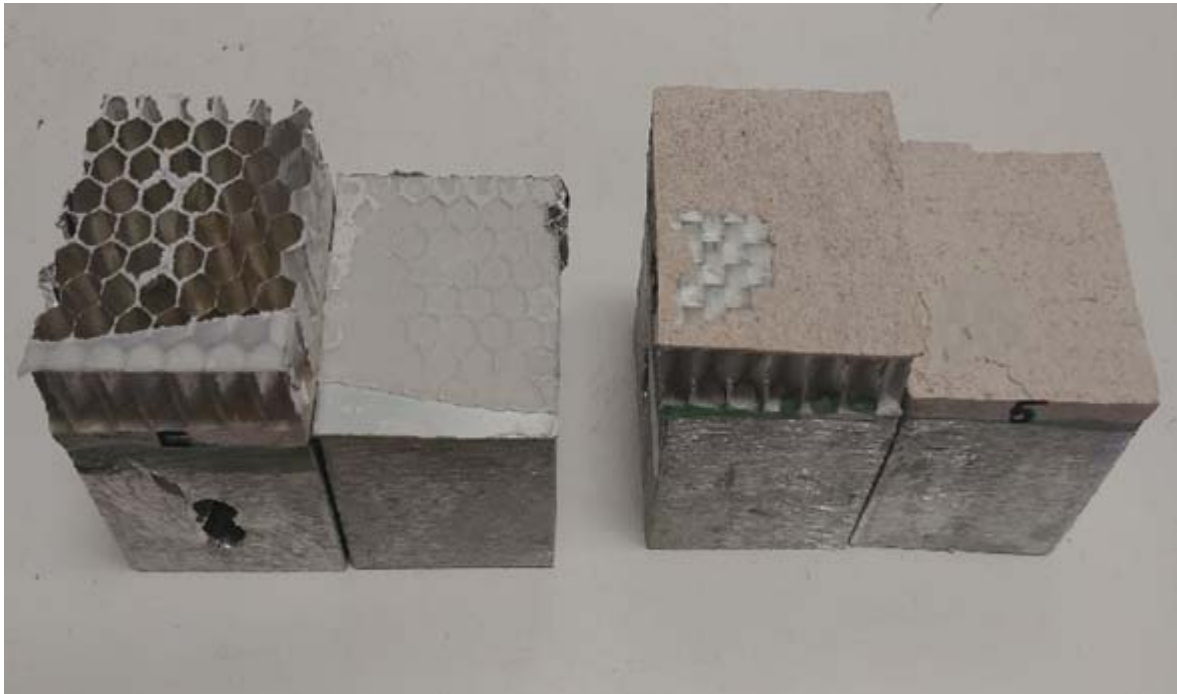


Photograph 1: Specimens were pulled in tension to failure.

Photographs



Photograph 2: Mode of failure Specimens 1,2,3.



Photograph 3: Mode of failure Specimens 4 and 5.

******End of Report******

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