

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

Test Report No: RJ5272P-1	Date: March 13, 2017
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SUBJECT: Bond Strength Testing on: Alucolam Metal Composite Material.

SAMPLE ID: 6 mm thick injection molded metal composite material (MCM) core panels.

SAMPLING DETAIL: Test samples were submitted to the laboratory directly by the client. No special sampling conditions or sample preparation were observed by QAI.

DATE OF RECEIPT: Samples were received at QAI Laboratories on February 8, 2017.

TESTING PERIOD: February 27, 2017.

AUTHORIZATION: QAI Test Proposal 17MM01232 signed by Cherie Ho on January 24, 2017.

TESTS REQUESTED: Bond Strength Test per ASTM C 297/C 297M-04, *Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions.*

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

Prepared By


David Royer
Physical Testing

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


Drew Mersereau
Project Manager

BOND STRENGTH TEST PER ASTM C 297/ C 297M-04

Test Procedure

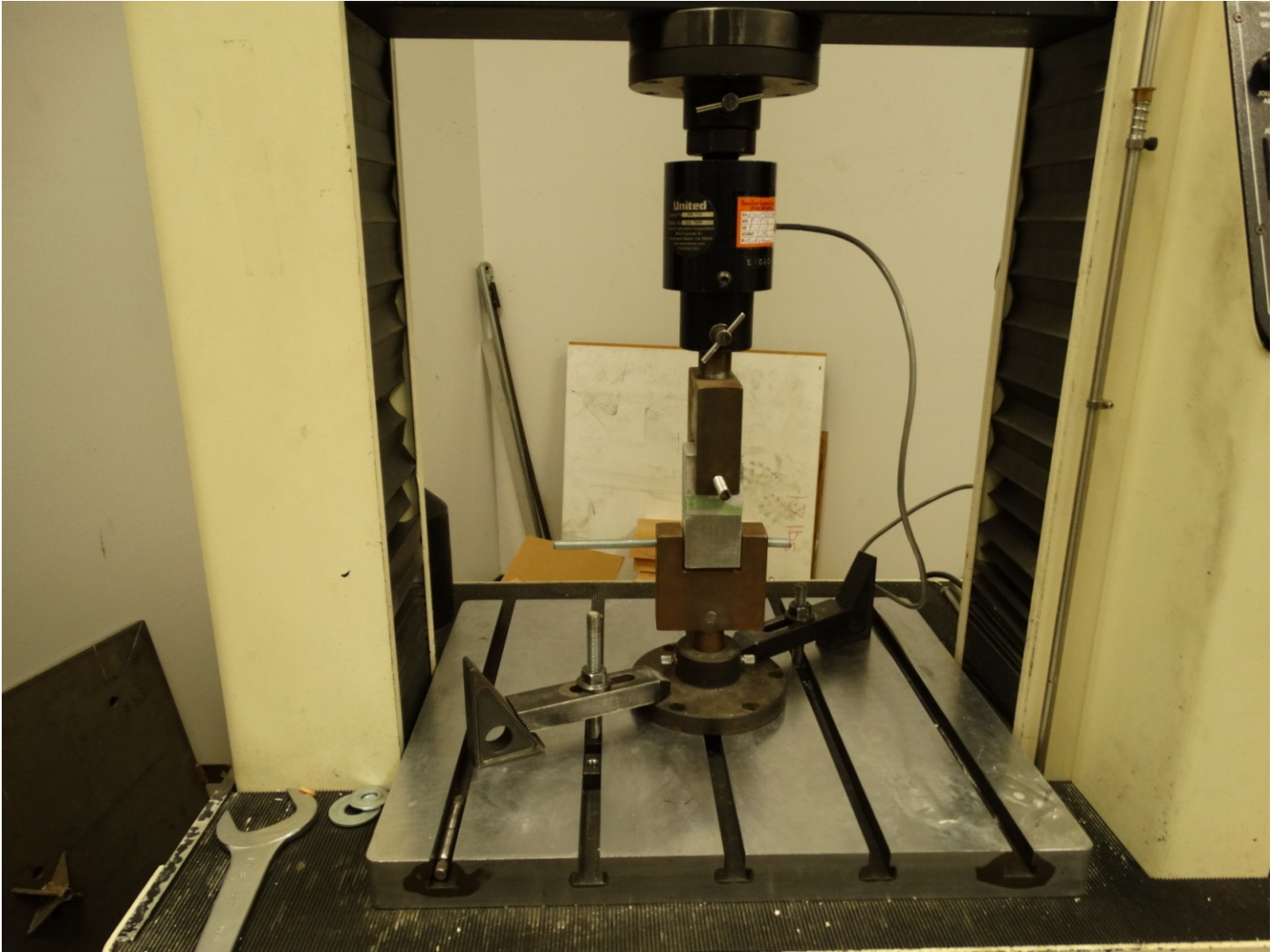
Testing was performed in accordance with ASTM C 297/C 297M-04, *Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions*. The sample was conditioned to 70 ± 3°F and 50 ± 4% relative humidity for not less than 72 hours prior to testing. After conditioning, 2” square specimens were cut from the submitted sample and bonded to aluminum test blocks. The specimens were then 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

Sandwich Construction Bond Strength Test				
Specimen	Area (in²)	Max Load (lbs)	Tensile Strength (psi)	Failure Mode
1	4.02	2986	743	Internal Panel-Cohesive
2	4.02	2783	692	Internal Panel-Cohesive
3	4.00	2648	661	Internal Panel-Cohesive
4	4.01	2607	650	Internal Panel-Cohesive
5	4.03	2833	703	Internal Panel-Cohesive
Average	4.02	2771	690	

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Photograph



Photograph No 1: Test Setup

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Photograph



Photograph No 2: Typical Mode of Failure: Cohesive Failure Within the Specimen

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