



**TEST REPORT**

**Report No.:** H2299.02-801-44

**Rendered to:**

C.R. LAURENCE CO., INC.  
Los Angeles, CA

**PRODUCT TYPE:** Aluminum Side Hinged Single Door  
**SERIES/MODEL:** 375TC Thermal Composite Door

Title	Summary of Results
Cycle Test @ 500,000 cycles	Pass

**Test Completion Date:** 08/10/2017

Reference must be made to Report No. H2299.01-801-47 dated 07/26/17 for complete test specimen description and detailed test results.

**1.0 Report Issued To:** C.R. Laurence Co., Inc.  
2503 E. Vernon Ave.  
Los Angeles, California 90058

**2.0 Test Laboratory:** Architectural Testing, Inc.,  
an Intertek company ("Intertek-ATI")  
1909 10<sup>th</sup> St. Suite 100  
Plano, Texas 75074  
(469) 814-0687

### 3.0 Project Summary:

**3.1 Product Type:** Aluminum Side Hinged Single Door

**3.2 Series/Model:** 375TC Thermal Composite Door

**3.3 Compliance Statement:** Results obtained are tested values and were secured by using the designated test method(s). Test specimen description and results are reported herein.

This product was originally tested as the Oldcastle BuildingEnvelope® products series/model MS-375TC Thermal Composite Door and is a reissue of the original report No. H2299.01-801-44. This report is reissued in the name of C.R. Laurence Co., Inc. through written authorization by Oldcastle BuildingEnvelope®.

**3.4 Test Dates:** 07/03/17-08/10/17

**3.5 Test Location:** Intertek/ATI test facility in Plano, Texas.

**3.6 Test Sample Source:** The test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek/ATI for a minimum of four years from the test completion date.

**3.7 Drawing Reference:** The test specimen drawings have been reviewed by Intertek/ATI and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek/ATI per the drawings located in Appendix A. Any deviations are documented herein or on the drawings.

### 3.8 List of Official Observers:

<u>Name</u>	<u>Company</u>
Phil Clark	Oldcastle BuildingEnvelope®
Jeffrey Crump	Intertek/ATI

**4.0 Test Specification(s):**

AAMA 920-16, *Specification for Operating Cycle Performance of Side-Hinged Exterior Door Systems*

**5.0 Test Specimen Description:**

**5.1 Product Sizes:**

Overall Area: 2.2 m <sup>2</sup> (24 ft <sup>2</sup> )	Width		Height	
	millimeters	inches	millimeters	inches
Overall size	1016	40	2184	86
Leaf size	910	35-13/16	2115	83-1/4
Leaf Daylight Opening	673	26-1/2	1765	69-1/2

**5.2 Frame Construction:**

Frame Member	Material	Description
Head, jamb and threshold	Aluminum	Extruded aluminum thermally broken with thermal strut.

	Joinery Type	Detail
Head to jamb connections	Mechanical	Corners are square cut, end coped and mechanically fastened using frame shear block (part #AC13401) at the lock side interior and exterior. Header (part #FG3534) is connected to header shear block (part #AC13401) on the interior side with two (2) #10 x 3/8" PFH at each end and angle clip AN102 angle clip on the pivot side with two (2) #12 x 1/2" PFHUC). Corners sealed.
Threshold (part #TH65) to jamb connections	Mechanical	Jambs are attached to threshold with clip (part# TH6401). Threshold set in sealant and ends sealed.

Corner Connection	Mechanical	Corners are square cut, end coped and mechanically fastened, frame head (part #FG-3495) connected with jambs with (2) #12 x 1/2" PFHUC. Horizontal intermediate (part #FG3575) shear block connected with four (4) #12 x 1/2" PFHUC, intermediate is connected to shear blocks with #10 x 3/8" PFH at each end. Corners sealed.
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### 5.3 Leaf Construction:

Vent Member	Material	Description
Top rail, Bottom rail and stiles	Aluminum	Extruded aluminum.

### 5.0 Test Specimen Description: (Continued)

	Joinery Type	Detail
All corners	Mechanical	Vertical door stile slots milled in mating surface with B140 corner block inserted through stile and into horizontal door rail. One (1), 1/4"-20 x 7/16" HWH Type F screw (part #10544) installed through the door stile into B140 to retain block to the vertical stile. Door corners are attached with two (2) #12-24 x 1.343" HWH Self Drilling Screws (FS-325) and fillet welds at corner to vertical stile.

### 5.4 Weather-stripping:

Description	Quantity	Location
Bulb Gasket (part #375TD125)	3	Full span at head and jamb door stops (part #TD105), interior face.
Sweep (part #GP305)	1	Attached to interior and exterior face of door bottom rail.
Rigid polypropylene plastic filler with Santoprene fin seal (GP300)		Inserted into jamb door stops (part #TD105) which contacts door vertical stile.
Rigid polypropylene plastic filler (GP302)		Inserted into head door stop (part #TD105) which fills in header pocket. Part GP302 runs long at each end to fill in jamb to head connection.

**5.5 Glazing:** *No conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made.*

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
1" IG	Aluminum box	1/4" tempered	1/4" tempered	Secured with glass stops (part #TD103) with glazing gasket attached to stops

**5.6 Drainage:** Sloped threshold was utilized.

**5.7 Hardware:**

Description	Quantity	Location
Offset Pivots	1-1/2 sets of Pivots	OP-6, OP-7, OP-9, OP-10, OP-11
1-1/2" Backset Hook Bolt Lock (part #DH22900)	1	Located at the interior of door panel
Cylinder kit (part #375 TLC)	1	
Push/Pull handle set (part #PR032/PR034)	2	Located at the interior and exterior of panel.
Surface closure (part #1280)	1	
Drop plate (part #1286)	1	

**5.8 Reinforcement:** No reinforcement was utilized.

**6.0 Installation:**

The specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/8" shim space. The exterior perimeter of the window was sealed with sealant.

**Test Specimen #1**

Location	Anchor Description	Anchor Location
Frame members and threshold	5/16"-18 x 1-1/2" PFH Type F screws	6" from each end and 4" off center at frame head, 12" from each end and one (1) at center of each jamb member. Two at each end and center of frame threshold.

**7.0 Test Results:** The temperature during testing was 19°C (66°F). The results are tabulated as follows:

Title of Test	Results	Allowed	Note
Operation/Cycling Performance, per AAMA 920, 500,000 cycles	Pass	Meets as stated	1

*Note 1: Inspection for damage completed every 25,000 cycles up to 100,000 cycles, and then every 50,000 cycles thereafter.*

This report is reissued in the name of C.R. Laurence Co., Inc. through written authorization by Oldcastle BuildingEnvelope® to whom the original report was rendered. The original Oldcastle BuildingEnvelope® report No. is H2299.01-801-44.

The service life of this report will expire on the stated Test Record Retention End Date, at which time such materials as drawings, data sheets, samples of test specimens, copies of this report, and any other pertinent project documentation, shall be discarded without notice.

If test specimen contains glazing, no conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Intertek/ATI.

For Intertek-ATI:

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Jeffrey Crump  
 Sr. Project Manager

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Andy Cost  
 Laboratory Manager

JC:cm  
 Appendix-A: Drawings (3)  
 Attachments (pages): This report is complete only when all attachments listed are included.

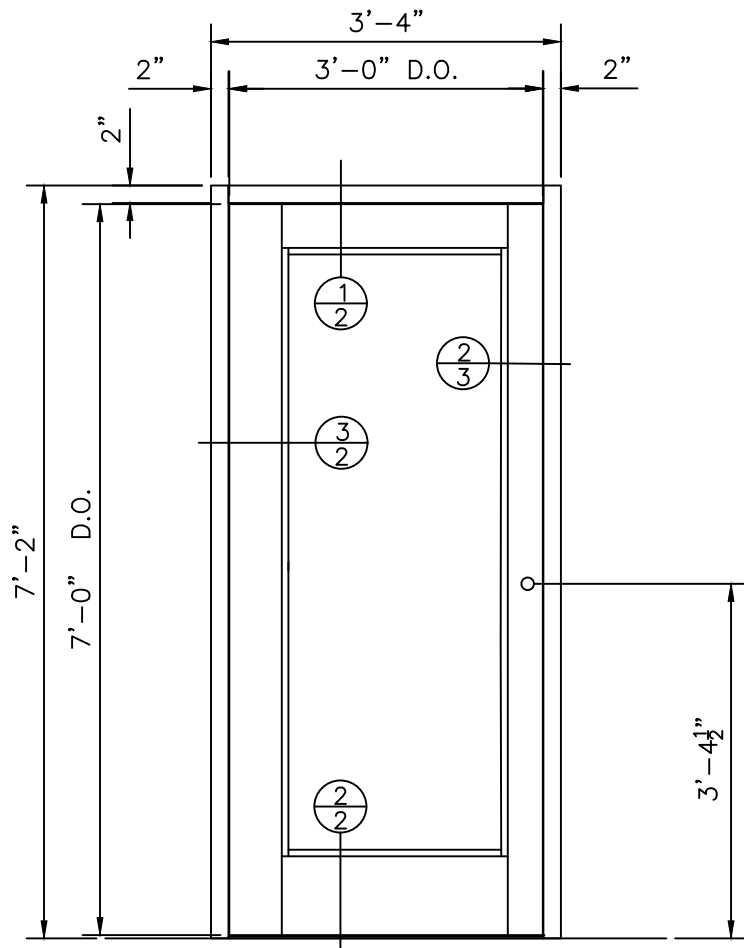
### Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
1	08/27/18	NA	Reissue Report

## **Appendix A**

### **Drawings**





Test:  
AAMA 920 Cycle Test

Door Hardware Test # 2		
Qty:	Hardware #:	Description:
1 Set	OP-6, OP-7, OP-9, OP-10	Offset Pivots
1	OP-11	Intermediate Pivot
1	DH22900	1-1/2" Back Set Hook Bolt Lock
1	375TLC	Cylinder Kit
1 Set	PR032/PR034	Push/Pull
1	1280	Surface Closure
1	375TG159	Bulb Gasket-Door Stops
1	70-3/4" x 27-13/16"	1" Clear Insulated

**intertek**  
Total Quality Assured.

Report #:	H2299.02-801-44
Date:	08/27/18
Verified by:	J. Crump

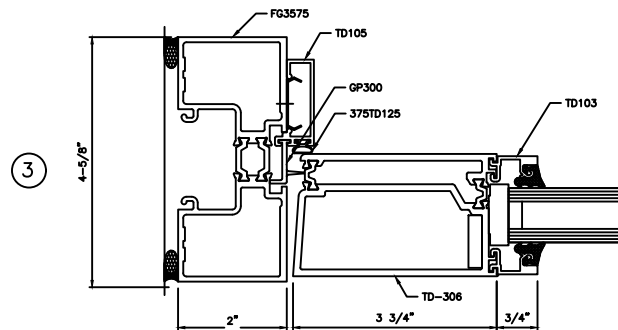
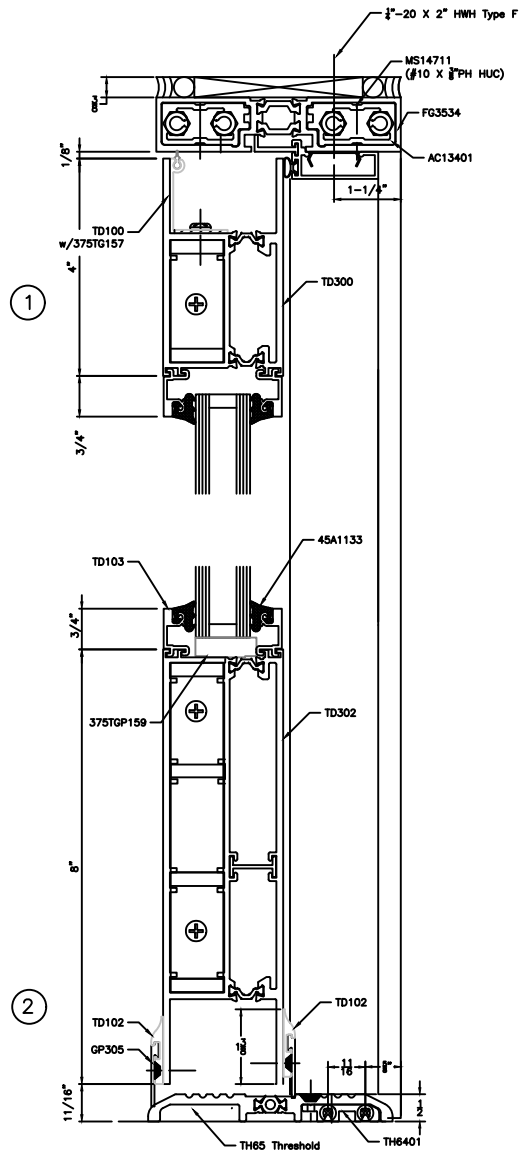
REVISIONS



Job Name:  
375TC  
THERMAL COMPOSITE DOOR  
AAMA 920 Cycle Test

Glazing Contractor:

DATE: 6.25.2018  
DRAWN BY: GDO  
CHECKED BY: XX  
SCALE: AS SHOWN  
JOB #: PTC768309



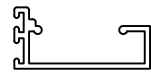
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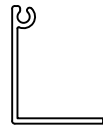
**C.R. LAURENCE CO.**  
ARCHITECTURAL PRODUCTS  
2100 E. 38TH Street, Los Angeles, CA 90058  
www.crlaurence.com

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TD105



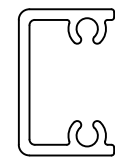
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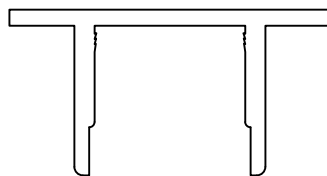
TD103



TD102



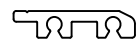
AC130



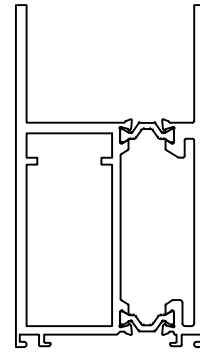
B140



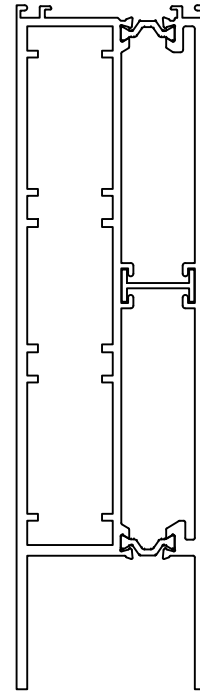
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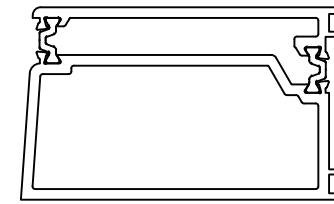
TH64



TD300



TD301



TD306



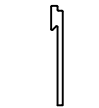
GP300



GP302



GP303



GP305

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**CRL**  
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