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September 19, 2023

Haas Door
**Mark Schweitzer**
320 Sycamore St.
Wauseon, OH 43567

Re: FL 16650
**Evaluation Report for Pan**

To Whom It May Concern:

At the request of Haas Door Company, I have reviewed the drawings and tests listed below. These tests were conducted at Haas Door Company Test Lab according to ANSI/DASMA 108 and ANSI/DASMA 115 test procedures. The pressures listed on the drawings are direct results of these tests or conservative engineering rational analysis from the actual tests, except that no extrapolation of impact pressures were used. I have concluded that the construction shown on these drawings comply with the structural requirements of the 8th edition (2023) of the Florida Building Code. I certify that I meet the requirements of "independence" as detailed in Florida Statutes.

## Drawings

**These products were tested to DASMA 108 (static):**

| | | |
|---|---|---|
| WL-2000-0110-08-21-24L | RevK | PAN 2000 Series 9'-2'' wide, +21.3/-24.1 PSF |
| WL-2000-0110-08-25-28L | RevG | PAN 2000 Series 9'-2'' wide, +24.8/-28.0 PSF |
| WL-2000-0110-25-28L | RevL | PAN 2000 Series 9'-2'' wide, +24.8/-28.0 PSF |
| WL-2000-0110-35-39 | RevK | PAN 2000 Series 9'-2'' wide, +35.0/-39.0 PSF |
| WL-2000-0122-08-21-24 | RevG | PAN 2000 Series 10'-2'' wide, +21.3/-24.1 PSF |
| WL-2000-0122-08-21-24L | RevG | PAN 2000 Series 10'-2'' wide, +21.3/-24.1 PSF |
| WL-2000-0194-08-18-20 | RevI | PAN 2000 Series 16'-2'' wide, +18.3/-20.4 PSF |
| WL-2000-0194-08-18-20L | RevI | PAN 2000 Series 16'-2'' wide, +18.3/-20.4 PSF |
| WL-2000-0194-08-20-23L | RevK | PAN 2000 Series 16'-2'' wide, +20.4/-22.7 PSF |
| WL-2000-0194-08-24-27L | RevH | PAN 2000 Series 16'-2'' wide, +23.9/-26.7 PSF |
| WL-2000-0194-08-25-28L | RevG | PAN 2000 Series 16'-2'' wide, +24.8/-27.6 PSF |
| WL-2000-0194-08-28-31L | RevD | PAN 2000 Series 16'-2'' wide, +28.2/-31.4 PSF |
| WL-2000-0194-18-20L | RevI | PAN 2000 Series 16'-2'' wide, +18.3/-20.4 PSF |
| WL-2000-0194-24-27L | RevM | PAN 2000 Series 16'-2'' wide, +23.9/-26.7 PSF |
| WL-2000-0218-08-20-23L | RevK | PAN 2000 Series 18'-2'' wide, +20.4/-22.7 PSF |
| WL-2000-0218-24-27L | RevM | PAN 2000 Series 18'-2'' wide, +23.9/-26.7 PSF |
| WL-2000-0218-08-34-38L | RevC | PAN 2000 Series 18'-2'' wide, +34.1/-37.9 PSF |

**These products were tested to DASMA 108 (static) and DASMA 115 (impact):**

| | | | |
|---|---|---|---|
| (+TAS) | WL-2000-0110-26-30 | RevJ | PAN 2000 Series 9'-2" wide, +26.7/-30.2 PSF |
| | WL-2000-0110-08-35-39 | RevK | PAN 2000 Series 9'-2'' wide, +35.0/-39.0 PSF |
| | WL-2000-0110-41-46 | RevJ | PAN 2000 Series 9'-2'' wide, +41.1/-46.4 PSF |
| | WL-2000-0122-08-35-39L | RevE | PAN 2000 Series 10'-2'' wide, +35.0/-39.0 PSF |
| | WL-2000-0194-08-31-35 | RevJ | PAN 2000 Series 16'-2'' wide, +31.3/-34.9 PSF |
| | WL-2000-0194-08-31-35L | RevE | PAN 2000 Series 16'-2'' wide, +31.3/-34.9 PSF |
| (+TAS) | WL-2000-0194-25-28 | RevJ | PAN 2000 Series 16'-2" wide, +25.6/-28.5 PSF |
| | WL-2000-0194-31-35 | RevK | PAN 2000 Series 16'-2'' wide, +31.3/-34.9 PSF |
| | WL-2000-0194-31-35L | RevE | PAN 2000 Series 16'-2'' wide, +31.3/-34.9 PSF |
| | WL-2000-0194-37-42 | RevJ | PAN 2000 Series 16'-2'' wide, +37.4/-41.7 PSF |
| | WL-2000-0194-08-37-42 | RevH | PAN 2000 Series 16'-2'' wide, +37.4/-41.7 PSF |
| | WL-2000-0218-08-30-33 | RevJ | PAN 2000 Series 18'-2'' wide, +30.0/-33.1 PSF |
| | WL-2000-0218-08-30-34L | RevD | PAN 2000 Series 18'-2'' wide, +30.0/-33.9 PSF |
| | | | |
| | WLF-2000-0122-08-48-52 | RevE | PAN C2000 Series 10'-2'' wide, +48.0/-52.0 PSF |
| | WLF-2000-0194-08-31-35 | RevE | PAN C2000 Series 16'-2'' wide, +31.3/-34.9 PSF |
| | WLF-2000-0218-08-30-34 | RevE | PAN C2000 Series 18'-2'' wide, +30.0/-33.9 PSF |

Note: The drawing titles above are simply descriptive, and do not represent any limitation on the sizes and pressures. Each drawing contains a table with the full sizes vs. psf ratings.

## Test Reports

All testing was conducted in a manner that complied with **DASMA 108-2017** and/or **115-2017**.

Tests were conducted at Haas Door Company Test Lab in Wauseon, OH. This facility was independently accredited per ISO/IEC 17025:2017 by ANAB (Certificate L2378) to perform these test procedures at the time of testing. I personally witnessed the testing.

Static pressure testing was conducted in accordance with ANSI/DASMA 108-2005 (and -2012, and -2017).

Large Missile impact and cycling tests were conducted in accordance with ANSI/DASMA 115-05 (and -2012, and -2017).

| **Drawing** | **HAAS Report #** |
|---|---|
| WL-2000-0110-08-21-24L | Test 080717004 (DASMA 108) |
| WL-2000-0110-08-35-39 | Test 070615016 (DASMA 108) 070615017 (DASMA 115) |
| WL-2000-0110-08-25-28L | Test 080717003A (DASMA 108) |
| WL-2000-0110-25-28L | Test 080717001 (DASMA 108) |
| WL-2000-0110-35-39 | Test 020314003 (DASMA 108) |
| WL-2000-0110-41-46 | Test 033114005 (DASMA 108) 033114006 (DASMA 115) |
| WL-2000-0122-08-21-24 | Test 061316019 (DASMA 108) |

| | | |
|---|---|---|
| WL-2000-0122-08-21-24L | Test 061316020 (DASMA 108) | |
| WL-2000-0122-08-35-39L | Test 030518007 (DASMA 108) | 030518008 (DASMA 115) |
| | Test 070918007 (DASMA 108) | 070918008 (DASMA 115) |
| WL-2000-0194-18-20L | Test 070615008 (DASMA 108) | |
| WL-2000-0194-24-27L | Test 080717012 (DASMA 108) | |
| WL-2000-0194-31-35 | Test 020314006 (DASMA 108) | 020314015 (DASMA 115) |
| WL-2000-0194-31-35L | Test 030518021 (DASMA 108) | 030518022 (DASMA 115) |
| WL-2000-0194-37-42 | Test 033114007 (DASMA 108) | 033114008 (DASMA 115) |
| WL-2000-0194-08-18-20 | Test 070615010 (DASMA 108) | |
| WL-2000-0194-08-18-20L | Test 070615009 (DASMA 108) | |
| WL-2000-0194-08-20-23L | Test 052714011 (DASMA 108) | |
| WL-2000-0194-08-24-27L | Test 061316006 (DASMA 108) | |
| WL-2000-0194-08-25-28L | Test 080717011 (DASMA 108) | |
| WL-2000-0194-08-28-31L | Test 051319008 (DASMA 108) | |
| WL-2000-0194-08-31-35 | Test 052714009 (DASMA 108) | 052714010B (DASMA 115) |
| WL-2000-0194-08-31-35L | Test 030518017 (DASMA 108) | 030518018 (DASMA 115) |
| | Test 012523011 (DASMA 108) | 012523012 (DASMA 115) |
| WL-2000-0194-08-37-42 | Test 061316004 (DASMA 108) | 061316005 (DASMA 115) |
| WL-2000-0218-08-20-23L | Test 070615001 (DASMA 108) | |
| WL-2000-0218-08-30-33 | Test 080717015 (DASMA 108) | 080717016 (DASMA 115) |
| WL-2000-0218-08-30-34L | Test 070918013 (DASMA 108) | 070918014 (DASMA 115) |
| | Test 012523018 (DASMA 108) | 012523019 (DASMA 115) |
| WL-2000-0218-08-34-38L | Test 051319012 (DASMA 108) | |
| WL-2000-0218-24-27L | Test 080717013 (DASMA 108) | |
| WLF-2000-0122-08-48-52 | Test 050718005 (DASMA 108) | 050718006 (DASMA 115) |
| WLF-2000-0194-08-31-35 | Test 050718009 (DASMA 108) | 050718010 (DASMA 115) |
| WLF-2000-0218-08-30-34 | Test 050718013 (DASMA 108) | 050718014 (DASMA 115) |

**TAS 201/202/203 Testing at ATI**

Additional tests were conducted by Architectural Testing at Lithia Springs (Atlanta), GA. This facility location is listed as an approved test facility on Florida's website as "Architectural Testing, Inc. (Atlanta, GA)."

Static pressure testing was conducted in accordance with ANSI/DASMA 108-05 (and 108-2012) and TAS 202-94.

Large Missile impact and cycling tests were conducted in accordance with ANSI/DASMA 115-05 (and 115-2012) and TAS 201/203-94.

| **Drawing** | **ATI Report #** | |
|---|---|---|
| WL-2000-194-25-28 | D2434.01-550-18 | TAS 201/202/203 |
| WL-2000-110-26-30 | D2434.02-550-18 | TAS 201/202/203 |

## Installation

**Anchorage Requirements:**

The door drawings include means to attach the doors to the building structure as detailed on Sheet 3 of each drawing using an added 2x6 to the face of the garage wall.

The direct mounting of door track on top of drywall or other non-structural material is outside of the scope of this wind load evaluation.

This Evaluation Report does not address design of the wall/jambs themselves. These attachment drawings only illustrate common means to attach the jambs to the wall. Walls and Jambs should be designed (by others) to withstand the loads imposed by door onto the building.

## Model Descriptions

In each family of doors, the weakest or thinnest skin product was tested to prove the entire family line. Thus, these door model variations are approved for each family of the drawings:

The PAN 2000 family of doors are Pan doors

These variations are included in this approval:

25 gage: C2511, R2560 (tested), R2561, R2570, R2571, R2572, R2580, R2581, R2582
24 gage: C2410, R2410, C2411, C2415, C2460, R2460, C2461, R2461, C2470, R2470, C2471, R2471, C2472, R2472, C2480, R2480, C2481, R2481, C2482, R2482
20 gage: C2011, C2015

The PAN C2000 family of doors are Pan Full View doors: Pan mixed with Aluminum Full View

These variations are included in this approval:

25 gage: "PAN C2511" (tested)
24 gage: "PAN C2411", "PAN C2415", "PAN C2480"
20 gage: "PAN C2011", "PAN C2015"

## Additional Limitations

The drawings cited above are an explicit part of this evaluation report. The text of this report does not attempt to address all design details but relies upon the illustrations and text of these drawings and instructions as well.

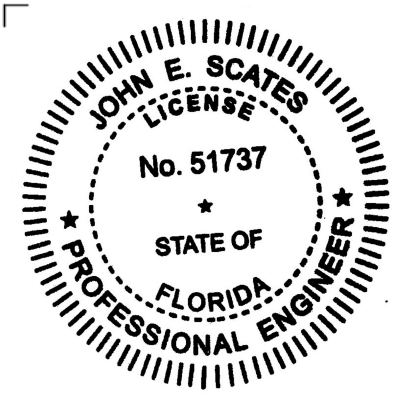
Each door should be chosen based on the "psf" requirement determined for a specific installation or locale.

The maximum door width approved with this report is listed on each drawing.
The maximum door height approved with this report is 16' nominal.

The horizontal track may be reinforced with an angle as needed to support the door weight. The construction of the horizontal track, including the track thickness, is determined by Haas Door Company and does not affect this windload evaluation.

The rated pressures may not be achieved unless the door is held closed during the wind event. Both tracks must be engaged with a lock (right and left side), or alternately an electric drawbar operator attached to the door prior to the wind event.

Some of these doors have been tested to Large Missile Impact requirements per ANSI/DASMA 115 or TAS 201/203. However, they have not been fully evaluated for use in the Florida High Velocity Hurricane Zone (HVHZ).

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John E. Scates, P.E.
**Florida PE # 51737**

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