

March 20, 2013

Mr. Federico Romero
Horton Automatics
A Division of Overhead Door Corporation
4242 Baldwin Blvd.
Corpus Christi, Texas 78405

Re: Blast Resistance of the Model Proslide™ Blast Automatic Sliding Entry Doors

Dear Mr. Romero:

I am writing this letter to address the blast resistance of the Horton Automatics Model Proslide™ Blast automatic sliding entry doors in compliance with the UFC 4-010-01, 8 October 2003 (including change 1, 22 January 2007).

The Automatic Entrance System was analyzed for an OXXO system with a maximum door height of 96" and a maximum panel width of 48". Stress and deflection analyses were conducted for the vertical meeting stiles. The members were analyzed as a simple supported beam. The members received concentrated and uniform loads from the adjacent areas having rectangular, trapezoidal or triangular projections in the plane of the door. All aluminum frame components are assumed to be extruded from 6063-T5 aluminum alloy with material properties established in the *Aluminum Design Manual 2000*. Per UFC 4-010-01 Section B-3.1.1.2, deflections must be limited to $\ell/160$ inches where ℓ is the span along the pane of glass being analyzed. All of the panels were assumed to have a horizontal divider at 41" above the floor. The header used in this application is a 6.0" x 6.0" aluminum member.

The reinforcing requirements for the vertical meeting stiles to meet the stress and deflection requirements for the design pressure are listed in Table 1 (page 2). The design pressure is based on a building with a conventional standoff distance and a category I or category II explosive weight as defined in the UFC 4-010-02 (corresponds to a 68 psf equivalent 3-second load per ASTM F2248).

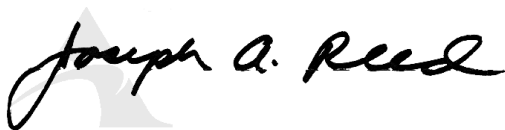
Table 1 Reinforcement Requirements

Size	X/X Meeting Stile		O/X Meeting Stile	
	Aluminum	Steel	Aluminum	Steel
3'-0" x 7'-0"	C363	TS 1-1/4"x1-1/4"x 1/8"	C335R	3/16" thick Bent Plate Channel 1-5/16" wide by 1-3/8" tall
3'-6" x 7'-0" 4'-0" x 7'-0"	C363	TS 1-1/4"x1-1/4"x 1/8"	C323	TS 1-1/4"x1-1/4"x 1/8"
3'-0" x 8'-0" 3'-6" x 8'-0"	C363	TS 1-1/4"x1-1/4"x 1/8"	C323	Two TS 1-1/4"x1-1/4"x 1/8"
4'-0" x 8'-0"	C363	TS 1-1/4"x1-1/4"x 3/16"	C323	Two TS 1-1/4"x1-1/4"x3/16

Installation conditions are dependent on the project site conditions and need to be analyzed on a per project basis.

Sincerely,

ARCHITECTURAL TESTING, INC.



Digitally Signed by: Joseph A. Reed

Joseph A. Reed, P.E.
 Director – Engineering

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cc: B2542.01-122-34