

L. Roberto Lomas P.E.

1432 Woodford Rd
Lewisville, NC 27023
434-688-0609

rlomas@lrlomaspe.com

Client: stergis
Report #: 514372-1

Date: 01/10/2019

Maximum design pressure per comparison

Series 143.191AW

Procedure:

Tributary areas are identified and calculated for tested unit. These areas are used to determine the maximum uniform load distribution (ULD) and concentrated load. The maximum ULD and the concentrated load are used to determine the maximum load and maximum design pressure rating of sample unit. These calculations are performed in accordance with Rule 61G20-3, AAMA103, AAMA2502. These calculations comply with requirements of the Florida Building Code.

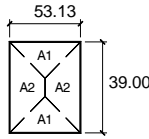
Test report No.: ESP014395P-3

Standards used for testing: AAMA/WDMA/CSA 101/I.S.2/A440

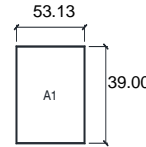
Tested Unit:

ULD Calculations

Unit width: 53.1 in
Unit height: 39.0 in
Design pressure: + 70.0 psf
 - 70.0 psf
Water test pressure: + 12.0 psf
Maximum cyclic pressure: N/A psf
 N/A psf



Concentrated load calculations



Tributary area: A₁ = 14.4 ft²

	Zone	Area (ft ²)	Load (lbs)	ULD (lbs/in)
Positive	A ₁	4.55	319	6.00
	A ₂	2.64	185	4.74
Negative	A ₁	4.55	319	6.00
	A ₂	2.64	185	4.74

Design pressure limitations:	+	80.0 psf
	-	105.0 psf

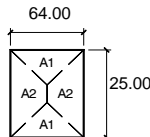
Concentrated load formulas:

$$A_1 D_1 = A_2 D_2 \quad D_2 = \frac{A_1 D_1}{A_2}$$

Sample Unit:

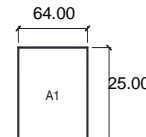
ULD Calculations

Unit width: 64.0 in
Unit height: 25.0 in



	Zone	Area (ft ²)	ULD (lbs/in)	Max. Dp (psf)	Load (lbs)
Positive	A ₁	4.47	6.00	85.9	384
	A ₂	1.09	6.00	138.2	150
Negative	A ₁	4.47	6.00	85.9	384
	A ₂	1.09	6.00	138.2	150

Concentrated load calculations

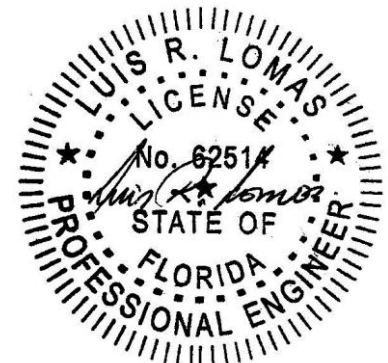


Tributary area: A₂ = 11.1 ft²
Positive rating per concentrated: D_p = 90.6 psf
Negative rating per concentrated: D_p = 90.6 psf

Sample unit rating:	+	80.0 psf
	-	85.9 psf

Check Glazing:

Glass Type	Width (in)	Height (in)	Area (ft ²)	Load Resistance per ASTM E1300-02/03/04/09 (psf)
3/4" IGU: 1/8" Ann - air - 1/8" Ann	59.06	20.06	8.23	63.6



Luis R. Lomas P.E.
FL No. 62514
1/17/2019