



THE GARLAND COMPANY, INC.

HIGH-PERFORMANCE BUILDING ENVELOPE SOLUTIONS

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Preliminary Pressure Calculations

Date: 1/30/2024
 Sales Rep: Tom Chapman
 City: Soledad
 State: CA

Project Name: Soledad USD
 Roof Sections: District Office

Design Code: ASCE 7-16 ASD
 Exposure Category: C
 Risk Cat. , Importance Factor: III , 1
 Wind Speed: 99 mph
 Design Roof Height: 19 ft
 Minimum Building Width: 60 ft
 Roof Pitch (X, Y): 3 : 12
 Roof Angle: 14.04 deg
 Parapet ≥ 36" Entire Roof: No

Base Velocity Pressure: 11.4 psf Gcpi = 0.55
 Roof Type: Gable

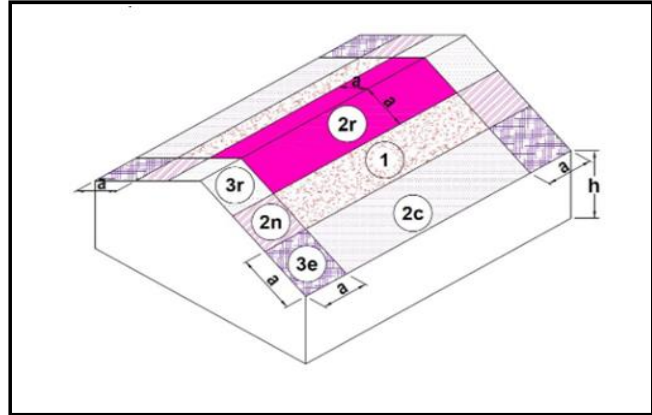
Edge Zones
 Zone 2 width = 6'-0"
 Zone 3 width = 6'-0"
 Zone 3 length = 6'-0"
 =
 =
 =

Deck Type: Wood
 Deck Thickness: 0.5 in

Panel Type: R-Mer Span
 Width: 18 in
 Material: 24/24 GA Steel

Fastener: Wood: Concealor #14-13 DP1
 # per clip: 2
 Safety Factor: 6
 Clip Pry Coefficient: 1.25
 Ultimate Pullout: 434 psf
 Allowable Clip Load: 116 psf
 Panel Safety Factor: 1.67

Zone Image a = 6'-0"



Zone Pressures (psf)

ZONE 1	ZONE 2e	ZONE 2n	ZONE 2r	ZONE 3e	ZONE 3r	Wall	
						Perimeter	Wall Corner
29.1	29.1	40.5	40.5	40.5	47.4	18.8	22.3

Clip Spacing ft / in

ZONE 1	ZONE 2e	ZONE 2n	ZONE 2r	ZONE 3e	ZONE 3r	Zone 4	Zone 5
2'-7"	2'-7"	1'-10"	1'-10"	1'-10"	1'-7"	4'-1"	3'-5"

Notes: