



# 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: Gabilan Elementary School  
 Roof Sections: Multi-Purpose Building

Design Code: ASCE 7-16 ASD  
 Exposure Category: C  
 Risk Cat. , Importance Factor: IV , 1  
 Wind Speed: 103 mph  
 Design Roof Height: 15 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: 11.8 psf  
 Roof Type: Gable  
 Gcpi = 0.55

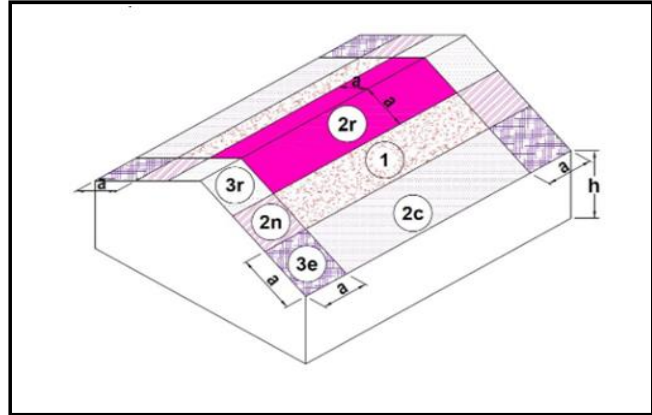
Edge Zones:  
 Zone 2 width = 6'-0"  
 Zone 3 width = 6'-0"  
 Zone 3 length = 6'-0"  
 =  
 =  
 =

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
30.0	30.0	41.7	41.7	41.7	48.8	Zone 4 19.4	Zone 5 22.9

### Clip Spacing ft / in

ZONE 1	ZONE 2e	ZONE 2n	ZONE 2r	ZONE 3e	ZONE 3r	Zone 4	Zone 5
2'-6"	2'-6"	1'-10"	1'-10"	1'-10"	1'-7"	3'-11"	3'-4"

### Notes: