

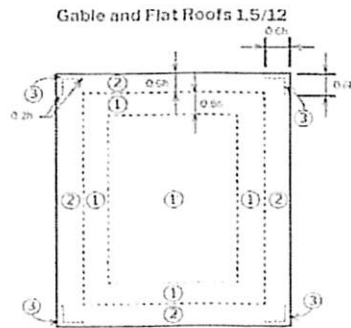


COMPONENTS AND CLADDING WORST CASE DESIGN PRESSURES.

Charts are for 1 & 2 Family Dwellings Only

Component and cladding external pressure coefficients, G_{Cp} , have been revised again in ASCE 7-22 for buildings with gabled and hipped roofs and roof slopes greater than 7° . The changes represent simplifications to the zones on the roofs and lower pressure coefficients for some zones. The external pressure coefficients for flat roofs ($\theta \leq 7^\circ$) are unchanged from ASCE 7-16. For buildings with gable and hip roofs and slopes of $7^\circ < \theta \leq 45^\circ$, the changes include: Simplified log graphs with three zones, All zones truncated at effective wind areas of 10 square feet (ft²), Roof overhang loads determined by summing the roof surface G_{Cp} with the adjacent wall surface G_{Cp}

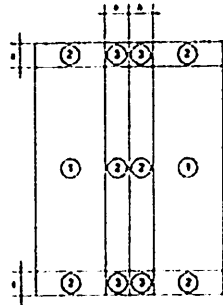
**Gable or Flat Roof 0 to 7 degrees
(0-1½:12 Pitch)**



Roof Slope	Zones	160 Exp. C One Story	160 Exp. C Two Story	160 Exp. D One Story	160 Exp. D Two Story
Roof Slope >0 to 1 ½ :12 1 1/2/12 pitch)	Zone 1, 1'	-53.3	-61.6	-64.7	-73.1
	Zone 2	-70.4	-81.4	-85.5	-96.5
	Zone 3	-95.8	-110.8	-116.3	-131.4

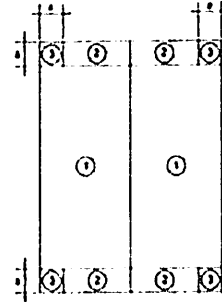
Roof coverings installed on building with a Mean Roof Height of 30' or less Exposures C or D. Table R301.2 [2] altered per R301.2.1.6 of the FBC Residential. One Story max, roof height of 15', Two Story max. roof height of 30 ft. Zone 3 based on Figure R301.2 [7] 160 mph winds east of I 95 per current IRC Wind Speed map.

Gable Roofs >7 degrees to 45 degrees (>1½:12 to 12:12)



Gable Roof 1 ½ to 6 ½

a = 4 Feet

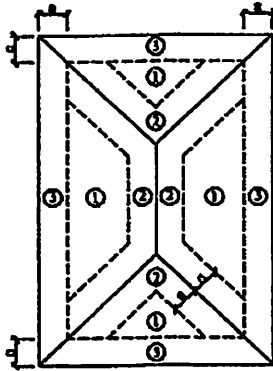


Gable Roof >6 ½ Slope to 12 Slope

Roof Slope	160 Exp. C One Story	160 Exp. C Two Story	160 Exp. D One Story	160 Exp. D Two Story
>1 ½ :12 to 4 ½: 12	-61.7 -81.6 -101.1	-71.4 -94.4 -116.9	-75.0 -99.1 -122.8	-84.7 -111.9 -138.7
>4 ½:12 to 6:12	-47.6 -76.0 -84.7	-55.1 -88.0 -98.0	-57.8 -92.4 -102.9	-65.3 -104.3 -116.2
>6:12 to 12:12	-56.2 -61.8 -72.2	-65.0 -71.4 -83.5	-68.3 -75.0 -87.7	-77.1 -84.7 -99.0

Roof coverings installed on building with a Mean Roof Height of 30' or less Exposures C or D. Table R301.2 [2] altered per R301.2.1.6 of the FBC Residential. One Story max, roof height of 15', Two Story max. roof height of 30 ft. Zone 3 based on Figure R301.2 [7] 160 mph winds east of I 95 per current IRC Wind Speed map.

Hip Roofs >7 degrees to 45 degrees (>1½:12 to 12:12 Pitch)



a = 4 Feet

Roof Slope	Zones	160 Exp. C One Story	160 Exp. C Two Story	160 Exp. D One Story	160 Exp. D Two Story
>1 ½ :12 to 4 ½ :12	Zone 1	-56.2	-65.0	-68.3	-77.1
	Zone 2	-73.1	-84.6	-88.8	-100.3
	Zone 3	-75.7	-87.5	-92.0	-103.8
>4 ½ :12 to 6:12	Zone 1	-44.8	-51.8	-54.4	-61.5
	Zone 2,3	-58.4	-67.5	-70.9	-80.1
>6:12 to 12:12	Zone 1	-47.6	-55.1	-57.8	-65.3
	Zone 2	-56.2	-65.0	-63.3	-77.1
	Zone 3	-68.3	-79.1	-83.0	-93.7

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