

BUILDBLOCK® BUILDING SYSTEMS U.S. ENGINEERING TABLES

HIGH WIND LOAD REINFORCEMENT REQUIREMENTS FOR 4" ICF WALLS

Reinforcement in Above Grade 4" Walls FBC 2004/ACI 318-05

Wall Height	Wind Speed			
	120 mph		160 mph	
	Vertical	Horizontal	Vertical	Horizontal
8'	#4 @ 24"	#4 @ 16"	#4 @ 18"	#4 @ 16"
9'	#4 @ 24"	#4 @ 16"	#4 @ 12"	#4 @ 16"
10' ¹	#4 @ 24"	#4 @ 16"	#5 @ 12"	#4 @ 16"
11'	#4 @ 24"	#4 @ 16"	N/A	N/A
12'	#4 @ 18"	#4 @ 16"	N/A	N/A

Assumptions:

120 mph at exposure category B

160 mph at exposure category C

Max clear span for floor trusses is 24'

Max clear span for roof trusses is 40'

Max mean roof height is 30'

Max 2 stories

$f_c' = 3,000$ psi Concrete

$f_y = 60,000$ psi Rebar

Dead load = 25 psf

Live floor load = 40 psf

Live roof load = 20 psf

No snow load

No seismic load

Wall openings 2 - #4 all around²

*Doesn't apply to bottom steel for lintels

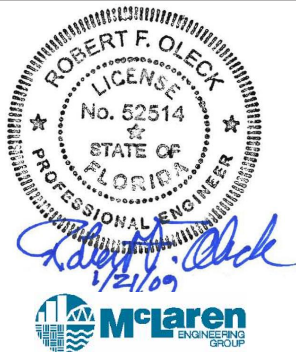
¹ At 160 mph must use:

Max clear span for floor trusses is 20'

Max clear span for roof trusses is 36'

Max mean roof height is 25'

² See typical opening detail and also Prescriptive Method



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TABLE NUMBER

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