

12" CMU – REINFORCED INTERNALLY BRACED ALLOWABLE WALL HEIGHTS (INTERMEDIATE PERIOD)

Bars Centered		Type M or S Mortar		
Rebar Size (Grade 60) (Note 4)	Rebar Spacing	Allowable Wall Heights		
		f'm = 1500 psi (f'i = 750 psi)	f'm = 2000 psi (f'i = 1000 psi)	f'm = 2500 psi (f'i = 1250 psi)
#4	8	32'-0"	35'-4"	38'-0"
	16	28'-0"	31'-4"	32'-0"
	24	26'-0"	26'-0"	26'-0"
	32	22'-8"	22'-8"	22'-8"
	40	20'-0"	20'-0"	20'-0"
	48	18'-8"	18'-8"	18'-8"
#5	8	34'-0"	38'-0"	41'-4"
	16	30'-0"	33'-4"	36'-0"
	24	28'-0"	31'-4"	32'-0"
	32	26'-8"	28'-0"	28'-0"
	40	24'-8"	25'-4"	25'-4"
	48	22'-8"	22'-8"	23'-4"
#6	8	35'-4"	40'-0"	43'-4"
	16	31'-4"	34'-8"	38'-0"
	24	29'-4"	32'-8"	35'-4"
	32	28'-0"	31'-4"	33'-4"
	40	27'-4"	30'-0"	30'-0"
	48	26'-8"	27'-4"	27'-4"
#7	8	36'-8"	41'-4"	42'-8"
	16	32'-0"	36'-0"	39'-4"
	24	30'-0"	34'-0"	36'-8"
	32	29'-4"	32'-8"	35'-4"
	40	28'-0"	31'-4"	34'-8"
	48	27'-4"	30'-8"	32'-0"
#8	8	38'-0"	42'-8"	44'-0"
	16	32'-8"	37'-4"	40'-8"
	24	30'-8"	34'-0"	38'-0"
	32	30'-0"	33'-4"	36'-8"
	40	29'-4"	32'-8"	35'-4"
	48	28'-8"	32'-0"	34'-8"

Notes

- 1) f'm = 1500 psi is achieved simply by specifying block to be in accordance with ASTM C90 and limiting mortar to Type M or S. (Per ASTM C90, the minimum concrete masonry unit compressive strength is 1900 psi on the net area.)
- 2) f'm = 2000 psi may be achieved by either Prism Testing or the Unit Strength Method (compressive strength of the concrete masonry units shall be 2,800 psi minimum on the net area.)
- 3) f'm = 2500 psi may be achieved by either Prism Testing or the Unit Strength Method (compressive strength of the units shall be 3,750 psi minimum on the net area.)
- 4) All Reinforcement lap splices, including the foundation dowels, shall be minimum 48 bar diameters in length.

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