

TABLE 3A

**8" 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 (Note 1) (f'i = 750 psi)	f' m = 2000 psi (Note 2) (f'i = 1000 psi)	f' m = 2500 psi (Note 3) (f'i = 1250 psi)
#4	8	22'-0"	24'-8"	26'-8"
	16	20'-0"	22'-0"	24'-0"
	24	18'-8"	20'-8"	20'-8"
	32	18'-0"	18'-0"	18'-0"
	40	16'-0"	16'-0"	16'-0"
	48	14'-8"	14'-8"	14'-8"
#5	8	23'-4"	26'-0"	28'-0"
	16	21'-4"	23'-8"	25'-4"
	24	20'-0"	22'-0"	24'-0"
	32	19'-4"	21'-4"	22'-8"
	40	18'-8"	20'-0"	20'-0"
	48	18'-0"	18'-0"	18'-8"
#6	8	24'-0"	27'-4"	30'-0"
	16	22'-0"	24'-8"	26'-8"
	24	20'-8"	23'-4"	25'-4"
	32	20'-0"	22'-8"	24'-0"
	40	19'-4"	22'-0"	23'-4"
	48	18'-8"	20'-8"	22'-0"

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.

Produced for educational purposes only.

By: Todd Dailey, PE

Dailey Engineering, Inc.

www.daileyengineeringinc.com

todddailey@me.com

DISCLAIMER: The decision to utilize this information is not within the purview of Dailey Engineering, Inc. and persons making use of this information do so at their own risk. Dailey Engineering, Inc. makes no representation or warranties, expressed or implied, with respect to the accuracy or suitability of this information. Dailey Engineering, Inc. disclaim liability for damages of any kind, including any special, indirect, incidental, or consequential damages, which may result from the use of this information. This information is not to be interpreted as indicating compliance with, or waiver of, any provision of any applicable building code, ordinance, standard or law.

DISCLAIMER: This table is intended for use by those persons who are qualified and competent to evaluate the significant and limitations of its content. Dailey Engineering, Inc. disclaims any and all responsibility for the application of the stated material.