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by Robert M Latimer

Date: 2021.08.24

NO. 21D-0059

CHART A VERTICAL BAR PLACEMENT FOR

BLOCK WALL WITH CONCRETE FLOOR SLAB OR JOIST DESIGN

FOR FLOOR JOIST DESIGN USE BOND BEAM WITH 1 #5 REINFORCED BAR CONTINUOUS FOR SLAB FLOOR, POUR INTO BLOCK WITH WELDED WIRE MESH. (SEE CHART BELOW.)

**IN ALL CASES VERTICAL BARS SHALL BE PLACED AT EITHER SIDE OF OPENINGS IN WALL AND AT EACH CORNER. VERTICAL BARS SHALL BE BENT 24" INTO SLAB EACH REINFORCED CELL SHALL BE FILLED WITH CONCRETE

*** FLOOR SYSTEM TO BE PLACED BEFORE BACKFILLING

HHEIGHT OF WALL	WIDTH OF BLOCK	VERTICAL BAR SPACING		
H < 32	8"	NO. 5 @ 72" O.C.		
32 < H < 56	8"	NO. 5 @ 48" O.C.		
56 < H < 72	8"	NO. 5 @ 32" O.C.		
72 < H < 88	12"	NO. 5 @ 32" O.C. W/ BOND BEAM W/ 1 #5 @ MID—HEIGHT		
	8" *	NO. 5 @ 32" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1— #5 SHALL BE PROVIDED @ MID—HEIGHT)		
88 < H < 96	12"	NO. 5 @ 24" O.C. W/ BOND BEAM W/ 1 #5 @ MID—HEIGHT		
	8"*	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID—HEIGHT)		
96 < H < 120	12"	NO. 5 @ 16" O.C. (ALL CELLS FILLED W/3000 PSI CONC.) W/ BOND BEAM W/ 1 #5 @ 48" O.C. OR LESS ***		
	8"*	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID—HEIGHT)		
120 < H < 132	12"	NO. 6 @ 8" O.C. (ALL CELLS FILLED W/3000 PSI CONC.) W/ BOND BEAM W/ 1 #6 @ MID—HEIGHT		
	8"*	NO. 5 @ 24" O.C. *(8" BLOCK MAY BE USED ONLY IF NEITHER SIDE OF WALL HAS SOIL BEARING PRESSURE. A BOND BEAM WITH 1 #5 SHALL BE PROVIDED @ MID—HEIGHT)		

<u>CHART B</u> PHYSICAL PROPERTIES OF MASONRY CEMENTS

MASONRY CEMENT TYPE	N	* 5	* M
	.,)	
TIME OF SETTING INITIAL SET, MINIMUM, HR. FINAL SET, MAXIMUM, HR.	2 24	1 1/2 24	1 1/2 24
COMPRESSIVE STRENGTH (AVERAGE OF 3 CUBES), MIN. 7 DAYS, PSI (MPa) 28 DAYS, PSI (MPa)		1300 (9.0) 2100 (14.5)	

* FOR THE PURPOSE OF THESE PLANS USE GRADE 'S' OR 'M'

GENERAL NOTES FOR SPECIAL FOUNDATION

- . ALL CONSTRUCTION SHALL CONFORM TO THE 2020 (7th ADDITION) FLORIDA BUILDING CODE.
- IN THE EVENT OF A CONFLICT BETWEEN PLANS AND THE CODES, THE CODES SHALL GOVERN.
- . LOT SHALL BE LANDSCAPED TO PREVENT THE DETENTION OF SURFACE WATER.
- 4. CONCRETE: 3000 PSI STEEL: GRADE 60
- ALL FILL SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST.

DEFINITION:

- a. COMPACTION TEST WILL NOT BE REQUIRED WHEN THE FILL IS LESS THAN 12 INCHES IN DEPTH. THE INSPECTOR'S SHALL USE BEST JUDGEMENT.
- b. WHEN THE FILL IS 12 INCHES TO 18 INCHES IN DEPTH, COMPACTION TEST WILL BE REQUIRED ONLY IF THE INSPECTOR'S JUDGEMENT IS THAT THE COMPACTION IS QUESTIONABLE.
- c. WHEN THE FILL IS 18 INCHES IN DEPTH OR MORE COMPACTION TEST WILL BE REQUIRED.
- 6. ALL SPLICES IN FOOTING STEEL SHALL BE LAPPED 40 BAR DIAMETERS IN CONCRETE BLOCK AND 30 BAR DIAMETERS IN MONOLITHIC SLAB.
- 7. STEEL IN INTERIOR GRADE BEAMS SHALL BE SPLICED TO STEEL IN EXTERIOR GRADE BEAMS TO ASSURE CONTINUITY OF FOOTING THROUGHOUT STRUCTURE.
- 8. EXTERIOR GRADE BEAMS SHALL RUN CONTINUOUS AROUND THE PERIMETER OF THE STRUCTURE TO ASSURE CONTINUITY.
- ALL CONCRETE SLABS SHALL HAVE CONTROL JOINTS TO CONTROL CRACKING SPACED MAXIMUM 15 FEET IN EACH DIRECTION.
- 10. SOIL SHALL BE CHEMICALLY TREATED FOR TERMITES PER F.B.C. (SEE NOTE 23 FOR ALTERNATE)

- 11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE PRIOR TO BEGINNING CONSTRUCTION.
- 12. ALL REINFORCING STEEL SHALL BE LOCATED MIN. 3" FROM CONCRETE SURFACE.
- A CLEAN COMPACTED SAND FILL AT LEAST 18 INCHES THICK SHALL BE PLACED UNDER ALL EXTERIOR AND INTERIOR GRADE BEAMS.

NOTF:

THIS MAY BE OMITTED IN AREAS THAT HAVE AT LEAST 30 INCHES OF CLEAN PACTED NATURAL SOIL THAT HAS A MINIMUM BEARING CAPACITY OF 2000 PSF AND IS FREE OF MULCH, ORGANIC MATERIAL AND PLASTIC CLAYS AND CONSIST OF AT LEAST 50% SAND (EST.)

- 14. ANY ORGANIC MATERIAL UNDER FOUNDATION SHALL BE REMOVED PRIOR TO CONSTRUCTION, UNLESS OTHERWISE SPECIFIED.
- 15. FOR STEM WALLS 56" OR HIGHER, FORMWORK SHALL BE BRACED BEFORE BACKFILLING.
- 16. CONCRETE BLOCK SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI.
- 17. ADDITIONAL #5 W/ FILLED CELLS

 © LOAD BEARING POINTS ON WALL
- 18. INCREASE OVERALL STEMWALL FOOTER WIDTH BY 4" WHEN BLOCK SIZE IS INCREASED FROM 8" BLOCK TO 12" BLOCK.
- 19. FOUNDATION DESIGN UNLESS NOTED IN SOILS REPORT IS A MIN. BEARING CAPACITY OF 2000 PSF.
- 20. USE 3#5's @ FOOTER FOR ANY SECOND STORY LOADING PER DETAIL.
- 21. IF WIND LOAD REQUIREMENTS FOR ANCHOR BOLTS EXCEED 7" THEY WILL GOVERN.
- 22. FOOTER @ A 12" MIN. INTO UNDISTURBED SOIL.
- 23. APPLICATION OF WOOD-TREATMENT TERMITCIDE SHALL BE AS REQUIRED BY LABEL DIRECTIONS FOR USE, AND MUST BE COMPLETED PRIOR TO FINAL BUILDING APPROVAL. CHANGES IN FRAMING OR ADDITIONS TO FRAMING IN AREAS OF THE STRUCTURE REQUIRING TREATMENT THAT OCCUR AFTER WOOD TREATMENT MUST BE TREATED PRIOR TO FINAL BUILDING APROVAL.

SOIL REPORT BY EARTHWORKS GEOTECHNICAL, INC. FILE NUMBER TAL21E-0051, AUGUST 16, 2021 REVIEWED PRIOR TO FOUNDATION DESIGN.



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