



## DIVISION 1: GENERAL REQUIREMENTS

- ALL STRUCTURAL ELEMENTS AND DETAILS NOT SPECIFIED ON THE DRAWINGS SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL BUILDING CODE
- THESE WRITTEN NOTES AND SPECIFICATIONS ARE GENERAL IN NATURE. IN THE EVENT OF A CONFLICT, THE SPECIFIC NOTES ON THE DRAWINGS SHALL GOVERN.

1.3	DESIGN LOADS:	(PSF)	DEAD LOAD (PSF)	
	FLOOR (PRIMARY DWELLING)	40	10	
	FLOOR (SLEEPING AREAS)	30	10	
	ATTIC (WITH STORAGE)	20	7	
	ATTIC (NO ACCESS)	10	7	
	DECKS	40	10	
	EXTERIOR BALCONIES	60	10	
	STAIRS	40	10	
	ROOF	20	10	
	ROOF TRUSSES	20	17	

- 1.4 EXTERIOR WALLS SHALL BE FULLY-SHEATHED W. MIN. 7/16" SWP.
- THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS IN THE FIELD.

# **DIVISION 2: FOUNDATIONS**

- ALL EXCAVATIONS SHALL BE MADE TO FIRM SUITABLE BEARING SOILS CLEAR OF ORGANIC OR OTHER DELATERIOUS MATERIALS A MINIMUM OF 12" BELOW PROJECTED FINAL GRADE. EXCAVATED SOILS TO BE REUSED SHALL BE STORED ON SITE AND PROTECTED FROM THE WEATHER.
- 2.2 STRUCTURAL FILL SHALL BE PLACED IN LIFTS OF NO MORE THAN 8" THICKNESS AND COMPACTED TO 95% PROCTOR DENSITY.
- PROVIDE AND INSTALL 5/8" DIAM., 4" HOOK FOUNDATION ANCHOR BOLTS AS REQUIRED BY CODE FOR THE WIND ZONE WITH BOLT LENGTHS AS REQUIRED FOR EMBEDMENT IN FOOTINGS.
- 2.4 THE FOUNDATION DESIGN IN THIS DOCUMENT IS NOT SUITABLE FOR CONSTRUCTION IN 'SHRINK-SWELL' CLAY SOILS.
- 4.4 FLASHING SHALL BE NON-CORROSIVE.

- ALL CONCRETE SHALL CONFORM TO ASTM C 301 AND SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 3 000 PSI AND A MAXIMUM SI LIMP OF 5". SLABS EXPOSED TO THE ELEMENTS SHALL CONTAINED 5% AIR ENTRAINMENT +/- 1%.
- REINFORCING DEFORMED STEEL BARS SHALL BE GRADE 60 AND COMPLY WITH ASTM A 615. INSTALLATION AND SUPPORT MATERIALS AND DETAILS SHALL COMPLY WITH THE ACI REQUIREMENTS.
- WELDED WIRE MESH SHALL BE 6X6 W1.4/1.4 AND SHALL BE PLACED 1" BELOW THE TOP OF THE SLAB.

- DIVISION 4: MASONRY
  4.1 CONCRETE MASONRY UNITS (CMU) SHALL BE LIGHTWEIGHT UNITS CONFORMING TO ASTM C 90.
- BRICK UNITS SHALL CONFORM TO ASTM C 62-08.
- 4.3 MORTAR SHALL BE TYPE 'S'.

DIVISION 5: STRUCTURAL STEEL
5.1 ALL STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING ASTM STANDARDS:

STEEL BOLTS A 325 - N WASHERS F 436 STEEL SHAPES AND PLATES A 572 GRADE 50 ANCHOR BOLTS A 307 TUBE STEEL A 500 WELDING ELECTRODES E70, LOW HYDROGEN

- 5.2 STEEL BEAMS SHALL BE SUPPORTED A MINIMUM OF 3" AND FULL FLANGE WIDTH. WHERE BEARING ON WOOD, FASTEN BEAM TO WOOD W/(4) 3/8\* X 4\* LAG BOLTS. PROVIDE CONTINUOUS LOAD PATH FROM BEAM BEARING TO FOUNDATION.
- ALL STRUCTURAL SHAPES SUPPORTING BRICK OR MASONRY SHALL BE PRIMED WITH A ZINC-RICH PRIMER AND PAINTED PRIOR TO INSTALLATION.

- DIVISION 6: WOOD

  6.1 RAFTERS AND JOISTS SHALL BE No. 2 SOUTHERN YELLOW PINE (SYP). MAX 19% MOISTURE CONTENT (MC). STUDS SHALL BE STUD-GRADE SPRUCE PINE FIR (SPF), MAX 19% MC. HEADERS SHALL BE MIN. 2-PLY
- 6.2 MULTIPLE PLY TIMBER GIRDERS SHALL BE FASTENED TOGETHER ACCORDING TO THE FOLLOWING SCHEDULE:
  - (2) MEMBERS (3) ROWS OF 8d (0.131 X 3) NAILS AT 16" OC. (3) MEMBERS - (3) ROWS OF 16d (0.162 X 3.5" NAILS AT 16" OC,
  - (4) MEMBERS (2) ROWS OF SST SDS250450 SELF-DRILLING LAG SCREWS AT 12" OC
- 6.3 LAMINATED VENEER LUMBER (LVL) BEAMS WIDER THAN 1.75" MAY BE MULTI-PLY UNO. BEAMS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

Fb = 2800 psi Fv = 285 psi

- E = 2.000,000 psi
- 6.4 MULTIPLE PLY LVL BEAMS SHALL BE FASTENED TOGETHER ACCORDING TO THE FOLLOWING SCHEDULE:
  - (2) MEMBERS (3) ROWS OF 16d (0.162 X 3.5) NAILS AT 8" OC. (3) MEMBERS - (3) ROWS OF 16d NAILS AT 12" OC. FACH SIDE (4) MEMBERS - (2) ROWS OF SST SDS250500 SELF-DRILLING LAG SCREWS AT 12" OC.
- 6.5 STRUCTURAL SHEATHING SHALL BE APA-RATED COMPOSITE PANELS (PLYWOOD OR OSB), 7/16" FOR ROOF AND WALL SHEATHING, 3/4" FOR FLOOR SHEATHING
- 6.6 METAL FRAMING CONNECTORS SHALL BE BY SIMPSON STRONG-TIE
- METAL-PLATE-CONNECTED WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE TRUSS PLATE
- 6.8 THE ROOF TRUSS MANUFACTURER SHALL PROVIDE A PERMANENT BRACING DESIGN TO ACCOMODATE ALL REQUIRED PERMANENT BRACING LOADS WITHIN THE TRUSS SYSTEM.

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AWN BY: JOM REVISIONS

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