

# RESIDENTIAL FOUNDATIONS: 1) ALL CONTINUOUS WALL FOOTINGS ARE 8 " X 12 " FOR ONE-STORY AND 8"XIS" FOR TWO-STORY HOUSES UNLESS OTHERWISE NOTED. REINFORCING IS TO BE 46 NOTED ON PLANS. FOOTINGS ON ORIGINAL SOIL DO NOT NEED REBAR. REBAR IS REQUIRED ON ANY COMPACTED FILL REGARDLESS OF COMPACTION. COMPACTED FILL REGARDLESS OF COMPACTION. ALL INTERIOR PIERS ARE 5 "X is "CMU PT 0.4 MAXIMUM HEIGHT OF 32 ", ALL PIERS OVER 32 " HIGH MUST BE FILLED WITH TYPE 5 MORTAR, MAXIMUM HEIGHT FOR 8 "X is "FILLED PIER IS 6-5 ", PIERS LARGER THAN 8 "X is "ARE NOTED ON PLANS AND MUST BE FILLED WITH TYPE 5 MORTAR. FOR ONE-STORY STRUCTURES, PIER CAPS ARE TO BE 4 " 50LID MASONRY, FOR TWO-STORY STRUCTURES, PIER CAPS ARE TO BE 2 " OF SOLID MASONRY, FOOTINGS FOR 8 "X is "PIERS ARE 24 "X 36" X IO "NULESS NOTED OTHERWISE. REINFORCING IS TO BE 46 NOTED ON PLANS. INTERIOR THICKENED 5LAS FOOTINGS WHICH COCCUR IN BASYMENTS AND "SLAB ON GRADE FLOORS ARE 10" DEEP BY IS "WIDE WITH 2-41 REINFORCING BARS RUNNING CONTINUOUSLY UNLESS NOTED OTHERWISE. THICKENED FOOTINGS ARE REQUIRED UNDER ALL BEARNING WALLS. 5) ALL REBAR SPLICES SHALL BE A MINIMUM OF 2'-0 " UNLESS OTHERWISE NOTED. 59 ALL REDAR SPLICES SHALL BE A TIMINING TO YOUR DESCRIPTION OF THE MORE THAN 15 THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER OF RECORD IF ANY SOLIS ARE FOUND TO BE UNSUITABLE FOR THIS BEARING CAPACITY. THEE CONTRACTOR IS RESPONSIBLE FOR ON THE SOLID TO BE UNSUITABLE FOR THIS DEARING CAPACITY. THEE CONTRACTOR IS RESPONSIBLE FOR OBTAINING SOLI TESTING TO REJUGE THAT THE BEARING CAPACITY OF THE SOLIN MEETS OR EXCEEDS THIS VALUE. ALL FILL IS TO BE COMPACTED TO 95% DENSITY AS MEASURED BY THE STANDARD PROCTOR TEST (ASTM

D-698).

1) ALL SOLIS AND FILL UNDER FLOORS AND/OR WITHIN OR UNDER BUILDINGS SHALL HAVE PRECONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST TERMITES, CERTIFICATION OF COMPLIANCE SHALL BE 1684ED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL. COMPANY.

8) ALL FROTING EXCAVATIONS SHALL BE NEAT, STRAIGHT, AND LEVEL IN THE PROPER ELEVATIONS TO RECEIVE THE CONCRETE, EXCESSIVE VARIATIONS IN THE DIMENSIONS OF FOOTINGS OR SLABS WILL NOT BE PERMITTED, REINFORCING STEEL AND MESH SHALL BE ACCURATELY PLACED, AND SUPPORTED TO MAINTAIN THEIR POSITION DURING THE CONCRETE POLITING. EDGE FORMS SHALL BE USED FOR CONCRETE THAT WILL BE EXPOSED

9) ALL GLAB PENETRATIONS ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR. PENETRATIONS INTERFERING WITH REINFORCING SHALL BE AFPROVED BY THE ENGINEER OF RECORD PRICK TO THE FLACEMENT OF CONCRETE.

(D) ELEVATIONS DIFFERENCES BETWEEN THE BOTTOM OF ADJACENT FOOTHINGS SHALL BE. LESS THAN THEIR HORIZONTAL DISTANCE LESS ONE FOOT. DIFFERENTIAL HEIGHTS BETWEEN FOOTHINGS CAN BECOME EXCESSIVE USUALLY WHERE A PIER FOOTING IN A CRAWLSPACE OR GARAGE FOOTING. IS NEXT TO A BASETIENT WALL FOOTING.

SPECIAL FOUNDATION CONSIDERATIONS:

1) CAISSON FOUNDATIONS SHALL BE A HIMMUM OF 12. "DIAMETER DRILLED UNREINFORCED CONCRETE CAISSONS, CAISSONS SHALL EXTEND TO A MINIMUM DEPTH FOROURING, "ENERTRATIONS INTO GOOD ORIGINAL GROUND. DEPTH OF DRILLING IS LIMITED TO IS."

THEREFORE, NO POOR MATERIAL MORE THAN IS DEEP IS SUITABLE FOR A CAISSON FOUNDATION. A CAISSON CANNOT BE USED IF URTER RISES IMMEDIATELY INTO A DRILLED HOLE. PILES WILL HAVE TO BE USED IN SUCH CASES.

TREATED WOOD PILES WITH A MINIMUM DAISTER OR 6. "AND A HIMMUM DESIGN LOAD OF SIX TONS ARE USED FOR ALL FOUNDATIONS WITH UNSUITABLE SOIL DEEPER THAN IS "OR WITH WATER IN DRILLED CAISSON HOLES. DRIVE PER NORTH CAROLINA OR SOUTH

3) SIZES AND REINFORCING FOR FOOTING CAPS OVER CAISSONS OR PILES SHALL BE AS SHOWN ON PLANS.

3) SIZES AND REINFORCING FOR FOOTING CAPS OVER CAISSONS OR PILES SHALL BE AS SHOUN ON PLANS.

3) CHIMBEY FOOTINGS ARE TO BE IS "LARGER THAN THE CHIMBEY FOOTPRING BY IS "THICK.

5) FOUNDATION WALLS BACKFILLED WITH DIRT WHICH SUPPORT STRUCTURAL FRAMING SHALL BE CONSTRUCTED AS FOLLOWS.

A)FOR EARTH FILL UP TO A MAXIMUM HEIGHT OF 4", 105E 8", "CMI OR 8" BRICK WITH BITUTHENE MEMBRANE WATERPROOFING ON EXTERIOR. FOOTINGS ARE TO BE 8" X IS "OR 8" X 24" AS NOTED ON THE PLAN.

B)FOR EARTH FILL 4" TO A MAXIMUM HEIGHT OF 9", 105E 8" X 24" FOOTING WITH "4" AT 1" 10" DOWLES HOOKED IN FOOTING AND PROJECTING IS "ABOVE FOOTINGS. USE 12" CHU WALLS WITH "4" AT 1" 10" "VERTICAL BARS LOCATED 4" FROM NON-DIRT FILL FACE, LAF ALL SPLICES 12" "AND USE DURO-UMALL HORIZONTAL REINFORCING EVERY 8" "IN CMU JOINTS, INSTALL 1"3. LEAR WITH 24" LECT IN EVERY OTHER JOINT HORIZONTALLY AT ALL CORNERS, ILE, "3" CORNER BARS AT 1" 6" "OC, PICTALLLY, FILL ALL OPPLICES 10" LALL OPPLICALLY, FILL ALL OPPLICES OF CHIM WITH EITHER TYPE 9 OR M MORTAR OR FILL WITH 2500 PSI CONCRETE. INSTALL WATERPROOF BITUTHENE MEMBRANE OR FOLIAL.

EQUAL.

(IN LIEU OF THE PRECEDING DESIGN, BASEMENT WALLS MAY BE CONSTRUCTED IN ACCORDANCE WITH R404.1 OF THE CODE. HOWEVER, 24", 24", 15 CORNER BARS SHALL BE INSTALLED AT 16 "O/C VERTICALLY REGARDLESS OF THE WALL HEIGHT. ERECT ALL FRAMING BEFORE BACKFILLING.

1) FOR RETAINING WALLS WITHOUT FRAMING SEE SPECIAL DESIGNS ON DRAWINGS.

FRAMING CONSTRUCTION - OTHER THAN ROOF.

1) SEE TABLE RE0023/10 OF THE CODE FOR A FASTENER SCHEDULE FOR STRUCTURAL MEMBERS.

2) WOOD BEAMS SHALL BE UPPORTED BY METAL HANGERS OF ADEQUATE CAPACITY WHERE FRAMING INTO BEAMS OR LEDGERS. THE ALLOWABLE LOAD CAPACITY OF THE HANGER SHALL BE EQUAL TO OR GREATER THAN THE LOAD SPECIFIED ON THE PLAN. WHERE NO LOAD IS SPECIFIED, THE "LIGHTEST VALILABLE HANGER FOR THE APPLICATION IS ACCEPTABLE."

3) CRAWL GIRDERS AND BAND WITH 4" CURTAIN WALL AND PIER CONSTRUCTION SHALL BE 2:2 X 10 SOUTHERN YELLOW PINE "2 WILLESS VALITY OF THE WALL OF THE STRUCTURE OF THE WALL OF THE STRUCTURE OF THE STRUCTUR

NOTED OTHERWISE. MAXIMUM CLEAR SPANS ARE TO BE 4'-8 " (6'-0 " O/C SPACING OF PIERS). TO AVOID OBJECTIONABLE CRACKING IN FINISHED HARDWOOD FLOORS OVER ANY GIRDERS, USE THE FOLLOWING PROCEDURE:

ANALING

1) ALL FLOOR JOISTS MUST BE TOENALED TO THEIR SUPPORT GIRDERS WITH A MINIMUM OF 3-8D NAILS AT EACH END. LARGER NAILS WILL SPILLT AND RENDER THE TOENALE INEFFECTIVE. NO END NAILING THROUGH THE GIRDER OR BAND 16 PERHITTED.

11) IF DROPPED GIRDERS ARE USED, END LAP ALL JOISTS AND SIDE NAIL EACH WITH A MINIMUM OF 3-8D NAILS AT EACH END.

OF EACH JOIST. LEDGERS STRIPS SHOULD BE SPACED 3. "APART AND NAILED WITH 3-16D NAILS AT EACH JOIST END.

III) NAIL MULTIPLE MITHER BERE BUILT-UP GIRDERS WITH TWO ROWS OF 16D NAILS STAGGERED AT 32. "O/C, 2" DOWN FROM THE TOP AND 2" UP FROM THE BOTTOM WITH 3-16D NAILS ACAL PRICE OF EACH PIECE BY THE JOIST THROUGH THE MITHERS MAKING UP THE MULTIPLE GIRDER.

II) THIS NAILING PATTERN WILL ENSURE A TIGHT FLOOR FROM THE OUTSIDE OF THE HOUSE TO THE OUTSIDE SO THAT WHEN THE FRAMING SHRINKS DURING THE FIRST HEATING SEASON, THE SHRINKAGE WILL BE UNFORMLY DISTRIBUTED OVER THE ENTIRE FLOOR, IF THE GIRDER NAILING FATTERN IS ONLY THE CHORD OF THE HARDERS MAD AND SECTIONABLE GRACK WILL DEVELOP IN THE FINSHED HARDWOOD FLOOR OVER THE GIRDER LINE.

B) AT ALL GIRDERS WHERE THE JOISTS CHANGE DIRECTION, INSTALL BETTOMING AT 8" O/C FOR A MINIMUM OF SIX JOIST SPACINGS BEYOND ANY JOIST DIRECTION CHANGE. THIS WILL INSURE SHRINKAGE DISTRIBUTION OVER THE FLOOR AND NOT LET IT ACCUMULATE AT THE GIRDER.

GINDER.

C) THERE HUST BE WOOD BLOCKING THRU BOLTED TO THE STEEL BEAM WITH JOISTS TOENAILED OR ATTACHED TO THE BEAM WITH METAL
HANGERS UNDER ANY HARDWOOD FLOORS THAT PASS OVER A STEEL BEAM SUPPORTING FLOOR JOISTS. THIS CONDITION OFTEN EXISTS
OVER BASEMENT AREAS.

4) ALL OTHER LUMBER MAY BE SPRUCE \*\* UNLESS NOTED OTHERWISE.

5) "LAM" BEAMS MUST HAVE 3-2244 STUD JACKS UNDER EACH DIS SUPPORT UNLESS NOTED OTHERWISE.

6) MASONRY LINTELS:

CIPOR SPANS FROM 9 TO 18', USE A PAIR OF S-CAUGE WIRES IN EACH OF THE IRST 3 COURSES OF BRICK ON A 5 "X 3 "X X 516" STEEL, ANGIE, LAP ALL S-CAUGE WIRE SPLICES A MINIMUM OF 12 "AND EXTRINO WIRES A MINIMUM OF 12 "INTO JAM'96, TEMPORARILY SUPPORT THE STEEL ANGIES BEFORE LAYING MASONRY. THE SHORING MAY BE REMOVED FIVE DAYS FOLLOWING THE INSTALLATION OF MASONRY.

DIMEN STRUCTURAL STEEL BEAMS WITH BOTTOM PLATES ARE USED TO SUPPORT MASONRY, THE DOTTOM PLATE MUST EXTEND THE FULL LENGTH OF THE STEEL BEAMS WITH BOOK SUPPORT TO THE STEEL BEAMS WITH BOOK SHORY JAM'98, THE BEAM SHOULD BE TEMPORARILY SHORED PRIOR TO LAYING THE MASONRY. THE SHORING MAY BE REMOVED FIVE DAYS AFTER LAYING THE MASONRY AND SHORED PRIOR TO LAYING THE MASONRY. THE SHORING MAY BE REMOVED FIVE DAYS AFTER 18 LARING CONTROL OF THE PLATE BY SHOULD BE TEMPORARILY SHORED PRIOR TO LAYING THE MASONRY.

3) ALL BRICK VENEER OVER LOWER ROOFS (BRICK CLIMBS) MUST HAVE A STRUCTURAL ANGLE LAG SCREWED TO AN ADJACENT STUD WALL IN ACCORDANCE WITH DETAIL, WITH STEEL BRICK STOPS TO PREVENT SLIDING OF BRICK.

3) ALL RAFTER BRACES MUST HAVE TWO STUDS FROM PLATE THROUGH ALL PLOORS TO THE POUNDATION OR SUPPORTING BEAM BELOW.

NO BRACES SHALL BE ATTACHED TO TOP WALL PLATE THROUGH ALL PLOORS TO THE POUNDATION OR SUPPORTING BEAM BELOW.

CONCRETE GENERAL NOTES:

DESCRIPTE GENERAL NOTES:

1) EXCEPT IMPRECIONERUISE NOTED, FOR ALL CONCRETE, THE PROPORTIONS OF CEMENT, AGGREGATE, AND UMATER TO ATTAIN REQUIRED FLASTICITY AND COMPRESSIVE STRENGTH SHALL BE 250 OPS 10 720 DAYS FOR FOOTINGS AND 3,000 PSI FOR WALLS, BEAMS, AND COLUMNS, INLESS NOTED OTHERWISE.

2) BEFORE PLACING CONCRETE, ALL DEERIS IMATER AND OTHER DELETERIOUS HATERIAL SHALL BE REMOVED FROM THE PLACES TO BE OCCUPIED BY THE CONCRETE HE PLACING OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH ACI 398 AND ASTIT CAS REQUIREMENTS. PUMPING OF CONCRETE WILL BE PERMITTED ONLY WITH THE ENGINEER OF RECORDS APPROVAL OF PROPOSED CONCRETE MY AND METHOD OF PUMPING, CONCRETE SHALL BE IN ACCORDANCE WITH ACI 398 AND ASTIT CAS REQUIREMENTS. PUMPING SO CONCRETE ONLY BE REPORTED ON THE MIXER TO FORMS AND DEPOSITED AS NEARLY AS POSSIBLE TO INSTANCE. OF A THE CONCRETE TO BE SHAPED AND WORKED BY HAND AND VIBRATED TO ASSURE CLOSE CONTACT WITH ALL SURFACES OF FORMS AND REPORTED SHEAL AND LEVELED OFF A THE DESCRIPTION OF THE MIXER SHALL BE ASSURED TO CAUSE FIGURE OF THE MIXER OF THE MIXE

CONTS, IN SLASS ON GRADE SAID CONTRACTION JOINS SHALL NOT BE OTHE JOINS SHALL COMMENCE AS SOON AS THE CONCRETE HAS LARDENED SUFFICIENTLY TO PERINT SAUMS DITTOUT EXCESSIVE RAVELING. FILL THE SAID CITS WITH APPROVED JOINT FILLER AFTER THE CONCRETE HAS LARDENED SUFFICIENTLY TO PERINT SAUMS WITHOUT EXCESSIVE RAVELING. FILL THE SAID CITS WITH APPROVED JOINT FILLER AFTER THE CONCRETE HAS LARDENED SUPED.

CONCRETE, WHEN DEPOSITED, SHALL HAVE A TEMPERATURE NOT BELOW BO. "SWADN NOT ABOVE 90 WINTHE METURED AND RECOMMENDED PRACTICES AS DESCRIBED IN ACI 305 BHALL BE FOLLOWED FOR COLD WEATHER CONCRETING AND ACI 305 FOR HOT WEATHER.

5) FRESHLY PLACED CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING BY ONE OF THE FOLLOWING METHODS:

5) PRESHLY PLACED CONCRETE SHALL BE FRUTELED FOR THE BENEFICE OF THE BENEFICE OF CONTROL OF SHERING BY A PROVINCE OF CONTROL OF SHERING AND A SHERING BY A PROVINCE OF FACER CONCRETING TO ASTYLLING COMPOUND.

D) APPLICATION OF AN APPROVED CHEMICAL CURING COMPOUND.

THE CURING SHALL CONTROL BYILL FURTHER WITH EARLY SHALL SHALL SHALL BY THE AMBIENT TEMPERATURE ABOVE BO

"SHADS TOTALED SEVEN. DURING CURING, THE CONCRETE SHALL BE PROTECTED FROM ANY MECHANICAL INJURY, LOAD STRESSES, SHOCK, VIBRATION,

ON MAKES TO ABBIENDE QUERNING. THE CONCRETE SHALL BE PROTECTED FROM ANY MECHANICAL INJURY, LOAD STRESSES, SHOCK, VIBRATION, OR DAMAGE TO FINISHED SURFACES.

OR DATAGE TO FINISHED SURFACES.

S TERMOROUS STEEL BARS SHALL BE DEFORMED IN ACCORDANCE WITH ASTM A305 AND OR A406 AND FORMED OF ASTM A68-T8 GRADE 60 STEEL.

WELDED WIRE FABRIC REINFORCING TO BE ASTM A88 STEEL WIRE. ACCESSORIES SHALL CONFORM TO THE CRSI TANNALO OF STANDARD PRACTICE. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED WER REINFORCING BARS.

EXPOSED TO EARTH	3"
EXPOSED TO WEATHER	1 ½°
BLABS NOT EXPOSED TO WEATHER	3/4"
BEAMS AND COLUMNS	1/2"

### GENERAL NOTES

MASONRY GENERAL NOTES:

1) MASONRY WALLS ARE TO BE OF THE SIZES AND IN THE LOCATIONS SHOWN ON THE PLANS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF ACI 530.

2) HOLLOW LOAD BERRING WITTS, ASTM CSG MADE WITH LIGHTWEIGHT OR NORMAL WEIGHT AGGREGATES. GRADE NI WITTS SHALL BE PROVIDED FOR EXTERIOR AND FOUNDATION WALLS, GRADE NI OR SI WITTS SHALL BE PROVIDED FOR OTHER LOAD-BEARING WALLS

OR PARTITIONS.

CONCRETE BUILDING BRICK, ASTM CS5 MADE WITH LIGHTWEIGHT OR NORMAL AGGREGATES, GRADE NI OR SI EXCEPT THAT BRICK EXPOSED TO WEATHER SHALL BE NI.

MORTAR: ASTM C270-93, TYPE S PREPACKAGED MORTAR MX WHICH SHALL NOT CONTAIN ANY NON-CEMENTITIOUS FILLERS COMBINED WITH NOT MORE THAN THREE PARTS SAND PER ON PART MIX.

REINFORCING STEEL. ASTM AGIS GRADE 60 STEEL DEPORTED BARS WHERE INDICATED ON THE PLANS. WHERE REINFORCING BARS ARE INSTALLED IN THE CELLS OF CONCRETE MASONEY UNITS, THEY SHALL BE SECURED WITH WIRE TIES AT INTERVALS NOT EXCEEDING

SERINORCING STELL. ASTM 4615 GRADE 60 STELL DEFORMED BARG WHERE INDICATED ON THE PLANS. WHERE RENFORCING BARG ARE INSTALLED IN THE CHILL OF CONCRETE MASONRY UNITS, THEY SHALL BE SECURED UITH URE TIEST INTERVALS NOT EXCEEDING 24" O/C TO MAINTAIN THE BARG LOCATION IN THE CELL. THE TOLERANCE FOR SPACING OF VERTICAL BARG 16 % SERICHES ALONG THE LENGTH OF THE WALL. THE TOLERANCE FOR THE DISTANCE BETWEEN THE FACE OF THE CONCRETA MASONRY UNIT AND THE CENTER OF THE BARG BHALL NOT EXCEED "NIM".

MORTIAR PROTRIGION SHALL BE LESS THAN "X". A PROTRUSION OF "X" OR GREATER MUST BE REMOVED BEFORE GROUTING.

HORIZONTAL JOINT REINFORCEPIENT: ASTM 482 FASRICATED FROM COLD DRAWN STELL WIRE AND HOT DIP ZINC COATED (ASTM 485).

TI SHALL CONSIST OF TWO OR MORE PRAFILLE, LONGTUDINAL WIRES O. 1915 "IN DIAMPIER AT A MINITURY OF 16" "CO". JOINT REINFORCEPIENT 15 TO BE INSTALLED IN EVERY OTHER COURSE AND IN THE RIST TWO COURSES AT THE OPTION AND TO OF WALL DEFENDED AND SHALL EXTEND NOT LESS THAT ALL "PLAST THE OPTION AS PALLED. THE OPTION AND PATTERN UNLESS NOTED OTHERWISE. THE WALLE SHALL DEFORMED HE SHALL COVERLAR NOT LESS THAN 15 AND PATTERN UNLESS NOTED OTHERWISE. THE WALLE SHALL DEFORMED HE SHALL DEFORMED AND THE SHALL DEFORMED AND THE SHALL BE CUT THE OPTION AND THE THE THE ABOUNT OF THE THE WALLE SHALL DEFORMED AND THE SHALL DEFORMED AND THE SHALL BE CUT THE OPTION OF THE

DEVICE.

ALL WOOD I-JOISTS AND OPEN JOISTS MUST BE BRACED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS PUBL DETAILS
SHOWN ON PLANS. LOAD-BEARING PARTITIONS, JACKS BEAMS AND COLUMN SUPPORTS MUST BE SOLD BLOCKED THROUGH FLOOR.
TRUSSES AND PLYMUOD SHALL NOT CARRY CONCENTRATED POINT LOADS. LOSS MATERIAL SHOULD NOT BE USED AS BLOCKING
UNDER CONCENTRATED POINT LOADS. ALL POINT LOADS MUST BE CARRIED TO FOUNDATIONS WITH ADEQUATE BLOCKING AND/OR
BEAMS.

BEAMS. ALL STEEL COLUMNS WHERE STEEL COLUMNS BEAR ON CONCRETE OR MASONRY, UNLESS OTHERWISE NOTED, A 5/8 OR 5/8  $^{\circ}$  X 3  $^{\circ}$  X 5  $^{\circ}$  X 6  $^{\circ}$  X 6  $^{\circ}$  X 6  $^{\circ}$  X 6  $^{\circ}$  X 7  $^{\circ}$  X 6  $^{\circ}$  X 6  $^{\circ}$  X 6  $^{\circ}$  X 6  $^{\circ}$  X 7  $^{\circ}$  X 6  $^{\circ}$  X 6  $^{\circ}$  X 6  $^{\circ}$  X 7  $^{\circ}$  X 6  $^{\circ}$  X 7  $^{$ 

OF EACH OFENING NAILED SECURELY TO THE HEADER.

WALLS BY TO 20 HIGH. BALLOON FRAME 2 % 6 STUDG AT 16 "O/C ( ½' 06B SHEATHING REQUIRED FOR WALL HEIGHTÉ ) IT').

FROVIDE 2-1 ½' X 8 ½' LVL KING 6TUDG ON EACH BIDG OF OFENINGS 3 TO 6 WIDE AND 2-2 % 6 KING 6TUDG FOR OPENINGS.

LEGS THAN 3' WIDE. FASTEN KING 5TUDG SECURELY TO ALL HEADERS WITH A MINIMUM OF 12-16D NAILE OR 4-3/16 "DIAMETER LAG 6CREUS EMBEDDED A MINIMUM OF 4 "INTO THE HEADER.

GABLE END WALLS OR ROOMS WITH VAULTED CEILING JOISTS: BALLOON FRAME WALL AND PROVIDE TRIPLE KING 5TUD ON EACH SIDE OF OPENINGS, NAILED BECURELY TO THE HEADER.

OF OPENINGS, NALED SECURELY TO THE HEADER.
D) TWO-STORY HIGH POYER WALLS LESS THAN 3' WIDE. EXTEND 3 %' X 9 %' PBL MEMBER WITH 3-2 X 4 FLAT PLATES ACROSS THE ENTIRE WALL. LOCATE THE BEAM NEAR MICH-HEIGHT OF THE WALL AT OR NEAR RIRST FLOOR TOP PLATE.
NOTE: SEE SPECIAL DESIGN OR ENGINEER FOR WALLS TALLER THAN 20, WHEN OPENINGS IN HIGH WALLS EXCEED 6' IN WIDTH, OR IF THE WALL CANNOT BE CONSTRUCTED USING ANY OF THE METHODS MENTIONED.
If CONTINUOUS 2 X 6 BRIDGINGS SHALL BE NALED TO DIAGONAL OR VERTICAL. WER MEMBERS OF ALL OPEN-WEB FLOORS TRUSSES OVER 10' LONG. THEY SHALL BE INSTALLED NEAR THO-SPAN AS A LOAD DISTRIBUTION MEMBER. IF THE 2 X 6 BRIDGING IS NOT CONTINUOUS, LAB ENDS OF BRIDGING ONE TRUSS SPACE.

19) LOURE STID WALLS FOR BUILDINGS OVER TWO STORIES, BUT NOT MORE THAN THREE STORIES.

LOAD BEARING ...... NON LOAD BEARING ......

EXTERIOR WALLS

WES 2 % 6 AT 16 "O/C WITH "%" X 4' X 8' FLYWOOD SHEATHING AT ALL CORNERS AND EVERY 25', OR USE 2 X 4 AT 12 "O/C WITH

"%" FLYWOOD SHEATHING SOLID ON WALLS.

HEADERS SHALL BE AS SHOWN UNLESS NOTED DIFFERENTLY ON PLANS,

INTERIOR AND EXTERIOR

"2.2 X 4'A

SPANS UP TO 2'-6

SPANS UP TO 2'-6 ", ..... SPANS 2'-6 "TO 3'-6 " ... SPANS 3'-6 "TO 6'-6 " ... ..... 2-2 × 10'8

III. 9 PANS 3'-6 'TO 6'-6 '

"PANS 6'-6 'C M FORE

"SEE PLAN

3). HEADERS WIDER THAN 5' SHALL HAVE A MINIMUM OF THERE KING STUDS ON EACH SIDE UNLESS NOTED OTHERWISE.

3). HEADERS WIDER THAN 5' SHALL HAVE A MINIMUM OF THERE KING STUDS ON EACH SIDE UNLESS NOTED OTHERWISE.

3). HEADERS WIDER THAN 5' SHALL HAVE A MINIMUM OF 6' LONG AT A FEET ON CENTER ACROSS THE TOP OF THE CEILING JOISTS. 2 X 4 RAFTER TIES SHALL BE RASTERN AND THE STERNON-BACK.

8). AT ALL EXTERIOR DIAGONAL WALL PANELS, EACH PANEL SHALL BE NAILED TO EACH ADJACENT PANEL WITH 5' ISO NAILS OR TIED TOGETHER WITH METAL STRIPPING NAILED AT FOUR COATIONS BETWEEN FLOORS WITH A MINIMUM OF ACH PANEL.

AT EACH STRAP, THIS WILL AVOID VERTICAL CRACKING IN PANEL JOINTS DUE TO HORIZONTAL OSCILLATING PARELS.

AT ALL STARE, EVERYS TOUD AT EACH STRINGER MUST BE NAILED TO EACH STRINGER WITH A SHINDHOT OF 1950 NAILS. THIS WILL AVOID CRACKING BETWEEN WALLBOARD AND TOP OF BASE MOLDING DUE TO VERTICAL OSCILLATION OF STAR STRINGERS.

10) ROOF TRUSSESS THAT HAVE NON-BEARING PARTITIONS PASSING UNDER THEM SHOULD BE NAILED TO THE PARTITION PLATES TO AVOID CEILING-WALL CRACKING.

ROOF TRUSSES CLOSE TO SIDE WALLS FRAMING AND USED AS DEAD WOOD FOR SHEETROCK BOARDS SHOULD BE NAILED TO THE

21) ROOF TRUBSES CLOSE TO SIDE WALLS FRAMING AND USED AS DEAD WOOD FOR SHEETROOK BOARDS SHOULD BE NAILED TO THE WALL STRUCTURAL FRAMING TO FREVENT CELINGHALL CRACKING, TO THE WEATHER OR BEARING DIRECTLY ON EXTERIOR MASONRY PIERS OR CONCRETE SHALL BE TREATED. ALL WOOD IN CONTACT WITH THE GROUND IS TO BE GROUND-CONTACT APPROVED. ALL WOOD EXPOSED DIRECTLY TO THE WEATHER SHALL BE PROTECTED TO PREVENT THE OCCURRENCE OF ROT.

3) WILESS OTHERWISE DETAILED, ALL STOKE-SHULT "FALSE CHINNEYS" SHALL BE CONSTRUCTED WITH 2 X 4 STUDS AT 12 "O'C, BALLCONFRAMED FROM ATTIC CEILING OR FLOOR. FASTEN 15/32 "CDX PLYWOOD ON ALL SIDES OF THE CHINNEY ALONG THE FILL ENGTH OF THE STUDS, FASTEN EACH STUD TO THE SUPPORTING BEAM OR CEILING JOIST WITH A 1 "X" X 24 ", IS-GAUGE METAL STRAP, OR A SIMILAR CONNECTOR.

LENGTH OF THE BILDS. FASTEN EACH STUD TO THE SUPPORTING BEAM OR CEILING JOIST WITH A 1 1/4" X 24", IS-GAUGE METAL STRAP, OR A SIMILAR CONNECTOR.

(3) ITEM UNCHANGED, BUT MOYED FROM INDER 14 ON OLD PAGE 2:

VOTE: ALL POINT LOADS FROM ROOF BEACES, JACK STUDS, BEAM SUPPORTS - WHETHER WOOD OR STEEL - CANNOT BEAR ON SHEATHING ALONE. BLOCKING BOULD TO OR BETTER THAN THE POINT LOAD SUPPORTS ABOVE MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION.

5) NOTE TO APPLY TO ALL HARD COAT STUCCO EXTERIOR FINISHES:

4) JOINTS ARE NECESSARY AT THE FOLLOWING LOCATIONS:

1) HORIZONTALLY AT EACH FLOOR LUNE.

1) NO APPLATION ENGER THAN 18', SUPFACE EXPOSED.

10) NO APPLAS LARGER THAN 18', STIMES THE SHORTEST DIMENSION.

3) PERF SORED REQUIRED AT THE BOTH ALLES 2" ABOVE PAYED AREAS AND 4 ABOVE GRADE.

1) SEE ASTIM 356 AND 1635 FOR FURTHER INFORMATION.

3) APPLICATION OF AN APPROVED CHEMICAL CURING COMPOUND.

THE CURING SHALL CONTINUE UNTIL THE CUMULATIVE NUMBER OR DAYS WHEN THE AMBIENT TEMPERATURE ABOVE 50 1990AS TOTALED SEVEN. DURING CURING, THE CONCRETE SHALL BE PROTECTED FROM ANY MECHANICAL INJURY, LOAD STRESSES, SHOCK, VIBRATION, OR DAMAGE TO FINISHED SURFACES.

## DESIGN CRITERIA: I. DESIGN LOADS ARE ALL DEAD LOADS PLUS:

A SI FERING ROOMS 3O PAE B. ALL OTHER FLOORS 40 PSF BALCONIES 60 PSF D. ATTIC FLOOR LIVE LOADING WITH THE FOLLOWING: AREA ACCESSIBLE BY STAIRS 40 PSF

ROOF 6LOPE6 >3:12 III. ROOF SLOPES (3:12 10 P6F E. ROOF LIVE LOAD 20 PSF II5 MPH F. WIND LOAD G. SNOW LOAD 20 PSF

JOB COPY Reviewed by Lincoln County

APPROVED. Limited Building Only Review Permit Holder Responsible For Full Compliance With The 2018 NC Residential Code

ROOF CONSTRUCTION:

ALL ROOF TRUBERS PUIGT BE BUILT IN ACCORDANCE WITH TRUSS MANUFACTURERS' REQUIREMENTS. TIE-DOWN CONNECTIONS TO REBIST UPLIET SHALL BE INSTALLED WHERE REGUIRED, WHEN ROOF TRUSS BY MANUFACTURERS DO NOT PROVUDE THE REQUIRED CONNECTORS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ROOF TRUSS ENERGE OR THE BRIGHER OF RECORD TO PROVIDE AN ADEQUATE CONNECTOR.

WITH ADDITIONAL METAL CONNECTORS AS FOLLOWS:

A) STICK-FRAMED RAFTER MEMBERS EXCEEDING IO' IN LENGTH, AS MEASURED FROM THEIR HORIZONTAL PROJECTION, AND ALL ROOFS
OVER UNENCLOSED AREAS SUCH AS PORCHES USE SIMPSON H2.5 CONNECTORS EVERY 4' OR AT EVERY THIRD RAFTER TO FASTEN
THE LOWER END OF THE RAFTER TO THE TOP PLATE.

THE LOWER ENDS OF VALLEY AND HE MEMBERS WHICH BEAR ON A TOP PLATE USE A SIMPSON HCP OR EQUIVALENT CONNECTOR. RAFTERS SHALL BE 2 × 6 AT 16 "OC SPRUCE-PINE-PUR" FOR SHINGLES EXCEPT AS NOTED. THEY ARE TO BE CUT INTO HIPS, RIDGES, ETC, UNLESS NOTED OTHERWISE. THE SLATE AND OTHER HEAVY ROOF COYERINGS SHALL USE 2 × 9 AT 16 "O/C SPRUCE-PINE-FUR \*2 RAFTERS UNLESS NOTED OTHERWISE.

SPRUCE-PINE-FUR ° RAFTERS UNLESS NOTED OTHERWISE.

COLLAR TIES SHALL BE 2 × 6 4 48 ° 0.0 AT ALL RIDGES UNLESS NOTED OTHERWISE AND LOCATED A NOMINAL 3' BELOW THE RIDGE.

VAULTED CEILINGS REQUIRE SPECIAL COLLAR TIE OR RIDGES BEAM DETAILS. SEE THE END OF TABLE REOLS.1. IN THE CODE UNLESS

A TINIMIM OF THREE COLLAR TIES SHALL BE USED AT ALL RIDGES EVEN IF TWO TIES MUST BE PUT ON ONE SET OF RAFTERS.

ALL HIPS AND RIDGES ARE A SIZE LARGES THAN RAFTERS UNLESS NOTED OTHERWISE. RAFTERS MAY BE SPLICED OVER

ALL HOGS ON CEILING JOISTS OR RAFTERS ARE 1 (LONG AND 2 × 8) UNLESS NOTED OTHERWISE. RAFTERS MAY BE SPLICED OVER

HOGS. SPLICE RAFTER HOGS ONLY.

HOGS. SPLICE RAFTER HOGS ONLY AT A ROOF BRACE.

8) GABLE END FRANING MUST BE BRACED PARALLEL TO RIDDES WITH A MINIMUM OF 2 X 6 DIAGONAL BRACES AT 6' O/C ALONG THE GABLE WALL TO INTERIOR CEILING JOISTS. BRACES TO BEAR ON 2 X 6 HOGS AND TO THE GABLE WALL AT APPROXIMATELY MID-HEIGHT OF GABLE WALLS. BRACES SHALL BE AT AN ANGLE OF APPROXIMATELY 45%D. OTHER BRACING MAY BE USED WITH THE DESIGN BKINGER'S APPROVAL.

LUMBER GENERAL NOTES:
1) ALL COMMON FRAMING LUMBER IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS AT 19% MOISTURE CONTENT:
10 ALL COMMON FRAMING LUMBER IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS AT 19% MOISTURE CONTENT:
10 FOLIA COMMON FRAMING LUMBER IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS AT 19% MOISTURE CONTENT:
10 FOLIA COMMON FRAMING LUMBER IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS AT 19% MOISTURE CONTENT:
11 FOLIA COMMON FRAMING LUMBER IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS AT 19% MOISTURE CONTENT:
12 FOLIA COMMON FRAMING LUMBER IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS AT 19% MOISTURE CONTENT:
13 FOLIA COMMON FRAMING LUMBER IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS AT 19% MOISTURE CONTENT:
14 FOLIA COMMON FRAMING LUMBER IS TO MEET THE FOLIA COMMON SPECIFICATIONS AT 19% MOISTURE CONTENT:
15 FOLIA COMMON FRAMING LUMBER IS TO MEET THE FOLIA COMMON SPECIFICATIONS AT 19% MOISTURE CONTENT:
16 FOLIA COMMON FRAMING LUMBER IS TO MEET THE FOLIA COMMON SPECIFICATIONS AT 19% MOISTURE CONTENT:
17 FOLIA COMMON SPECIFICATIONS AT 19% MOISTURE CONTENT:
18 FOLIA COMMON SPECIFICATION SPECIFI | MATERIAL | FD (P3) | FT (P3) | E (P3)/FERP) | E (P3)/FERP | E (P3)/FER 1,400,000

ALL STRUCTURAL COMPOSITE LUMBER (LVL, LSL, PSL) IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS: <u>APPLICATION</u> <u>FB (P6I)</u> GIRDER6 4 BEAMS (LVL.P6L) 2,600 FC (P91XPARALLEL) FC (P91XPERP.) E (P91)
2310 650 1900,000 COLUMNS (LSL) 4 RIMBOARDS 1,700 1,400 400

ALL GLUE LAMINATED TIMBER (GLU-LAM) IS TO MEET THE FOLLOWING MINIMUM SPECIFICATIONS: FB (PSI) 2,400 1,600 FC (PSIXPARALLEL) FC (PSIXPERP.)
1,700 140
1,550 560 APPLICATION GIRDERS 4 BEAMS

4) OPEN WEB FLOOR TRUSSES: DS 2,500 BOARDS 950 APPLICATION TOP 4 BOTTOM CHORDS I.9E MSR LUMBER

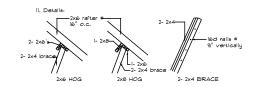
5) WHERE THREE OR FOUR-PLY "LAM BEAMS ARE SIDE-LOADED (JOISTS FRAME INTO THE SIDE AT THE OUTSIDE PLIES), FASTEN ALL PLIES TOGETHER WITH TWO ROWS OF "X" DIAMETER BOLTS AT 16 " O/C, THE BOLTS SHALL BE LOCATED A MINIMUM OF 2 MAXIMUM OF 3 "X" FROM THE TOP OR BOTTOM OF THE BEAM.

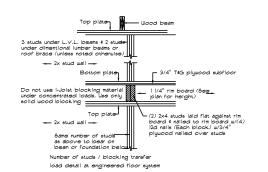
BUILT-UP WOOD COLUMNS CONSISTING OF MULTIPLE STUDS SHALL HAVE EACH LAMINATION NAILED WITH 16D NAILS AT 9 "O/C

PLANS PERMITTED IN NORTH CAROLINA ARE DESIGNED TO MEET THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE, LATEST EDITION W/AMENDMENTS AS ISSUED BY THE STATE OF NORTH CAROLINA

PLANS PERMITTED IN SOUTH CAROLINA DEBIGNED TO MEET 2018 INTERNATIONAL RESIDENTIAL BUILDING CODE AS ISSUED BY THE STATE OF SOUTH CAROLINA, WITH MODIFICATIONS AS REQUIRED TO MEET LOCAL BUILDING CODES FOR EACH APPLICABLE ARIBIDITION.

REFER TO THE RELEVANT CODE FOR ANY ADDITIONAL INFORMATION NOT COVERED IN THESE NOTES OR THE DESIGNS, ENGINEERING DESIGN IS FOR STRUCTURAL INFORMATION ONLY. THE ENGINEER OF RECORD DOES NOT ACCEPT RESPONSIBILITY FOR DIFFUSION. ERRORS, ARCHITECTURAL ERRORS, DETAILING OF WATERPROPORTS, FLUMBING, ELECTRICAL, OR MECHANICAL INFORMATION OR ANY PART OF THE PLAN NOT RELEVANT TO THE STRUCTURAL INFORMATION.





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