

# HIGHLAND GROVE 150.1910 SALES OFFICE

WINDY FARM DRIVE LOT #2

FIXED GLASS

FUEL GAS

FLOOR LINE FLUORESCEN

FLOOR MATERIAL

FRENCH DOOR

F.G. FIN. FLR. LINE FLUOR. F.M.C.

FR. DR.

PR. P.T.D.F.

R.A.G. REF. REF. RE/S

DOUGLAS FIR

RETURN AIR GRILL

REFRIDGERATOR REFERENCE RE-SAWN

#### SHEET INDEX

#### SALES OFFICE

TITLE SHEET
CONSTRUCTION FLOOR PLAN & EXTERIOR ELEVATION

OCCUPANCY/EGRESS AND FURNITURE FIXTURE EQUIPMENT REFLECTIVE CEILING PLAN, AND UTILITY PLAN INTERIOR ELEVATIONS, FLOOR FINISH PLAN AND FINISH SCHEDULE

ADI ARCHITECTURAL DETAILS

APPROVED 12/31/2020



#### PROJECT DESCRIPTION

TEMPORARY CONVERSION OF A PRIVATE RESIDENTIAL GARAGE (U- OCCUPANCY) INTO A SALES OFFICE (B- OCCUPANCY)

#### **CODE INFORMATION** ARCHITECTURAL SYMBOLS **GENERAL DATA** APPLICABLE CODES: AREA: N.C.-B. NORTH CAROLINA BUILDING CODE SALES 180 SQ.FT. NORTH CAROLINA MECHANICAL CODE BUILDING SECTION NORTH CAROLINA PLUMBING CODE NORTH CAROLINA FUEL GAS CODE CLOSING 178 SQ. FT. A A SECTION INDICATOR COPY 25 SQ. FT. NORTH CAROLINA ELECTRICAL 383 SQ. FT. \ # #<del>+</del> N.C-E.C. NORTH CAROLINA ENERGY CODE N.E.C. NATIONAL ELECTRICAL CODE EXISTING BUILDING: I.C.B.O. INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS DETAIL REFERENCE OCCUPANCY A.S.T.M. AMERICAN SOCIETY FOR TESTING MATERIALS N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION DETAIL NUMBER TYPE OF CONSTRUCTION: V-B ADK FIRE SPRINKLER: YES AMERICAN NATIONAL STANDARDS OFFSET REFERENCE OCCUPANT LOAD PER FLOOR (NO CHANGE) INTERNATIONAL ENERGY CONSERVATION CODE DIFFERENTIAL IN FLOOR LEVEL OR FINISH SURFACE BUSINESS (383 SF / 100 OSF) 3.8 OCCUPANTS 4 OCCUPANTS INTERNATIONAL CODE COUNCIL UNDERWRITERS LABORATORIES, INC. REVISION REFERENCE REQUIRED PROVIDED **ABBREVIATIONS CONSULTANTS** NUMBER OF EXITS: REFER TO TITLE SHEET 36" MIN. EXIT MIDTH: ABV. A/C ADJ. ALT AMP. BD. APPLICANT/OWNER KB HOME NORTH CAROLINA DIVISION 4518 5. MIAMI BLVD., SUITE 180 DURHAM, NC 2TTO3 TEL. (919) 472-0582 ABOVE REQ'D. .2" PER OCCUPANT x # OCCUPANTS : GAR, DISP. GARBAGE DISPOSAL ROUGH OPENING AIR CONDITIONING SHELF AND POLE SEF EXIT TRAVEL DISTANCE: (W/ SPRINKLER SYSTEM) S.C. S.D. S.H. SHT. SHTHG. SHWR. SIM. ALTERNATE INTERRUPTER **SCALE NOTE** B OCCUPANCY 250' MAX 21'-1" SMOKE DETECTOR BOARD GL. GYP. BD. SINGLE HUNG GYPSUM BOARD € CAB. CLG. CLR. CONC CENTER LINE HOLLOW CORE SHEATHING HEADER SHOWER SIMILAR CEILING CLEAR CONCRETE HGT. OR HT HEIGHT F BOX IS I" SQ. THEN SCALE IS 1/4" = 1'-0" SLIDING SLIDING GLASS INSULATION IF BOX IS 1/2" SQ. THEN SCALE IS 1/8" = 1'-0" INTERIOR STD. S.V. STANDARD CERAMIC TILE LAMINATED SHEET VINYL LAVATORY DRYER TEMPERED GLASS LUMINOUS DBL. D.G. DIA. DIM. DISP. DP. DR. D.S. DTL. D.W. DOUBLE DUAL GLAZED DIAMETER M.C. MFR. MIN. MTD. THK. T.O.C. T.O.P. MEDICINE CABINET TOP OF CURB MANUFACTURER DIMENSION DISPOSAL TOP OF PLATE T.O.S. TYP. TOP OF SLAB TYPICAL MOUNTED U.N.O. UNLESS NOTED OTHERWISE N.I.C. N.T.S. NOT IN CONTRACT DOWNSPOUT NOT TO SCALE V.P. VAPOR PROOF DETAIL DISHWASHER WASHER ON CENTER EA. ELEV. EQ. EXH. EXT. MOOD OUTSIDE AIR ELEVATION MINDOM MATER HEATER PROPERTY LINE EXHAUST MROUGHT IRON PHONE PLT. PLYMD. PLATE PLYWOOD FAU F.G./FX FORCED AIR UNIT

#### **NORTH CAROLINA** 50' SERIES KB HOME

HOME

NORTH CAROLINA DIVISION 4518 S. MIAMI BLVD. DURHAM, NC 27703 TEL: (919) 768-7988 • FAX: (919) 472-0582

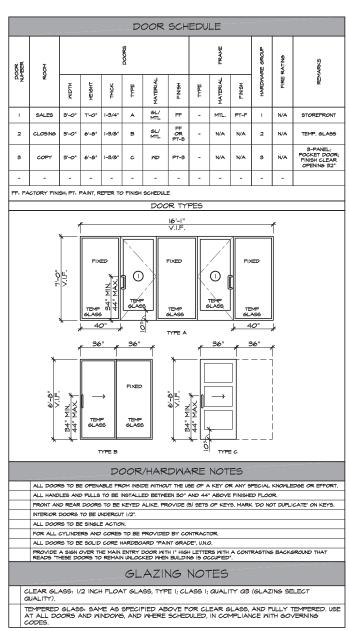
#### 2018 NORTH CAROLINA STATE **BUILDING** CODES

ISSUE DATE: 11/26/19 PROJECT No.: 1350999:57 DIVISION MGR.: D.S.

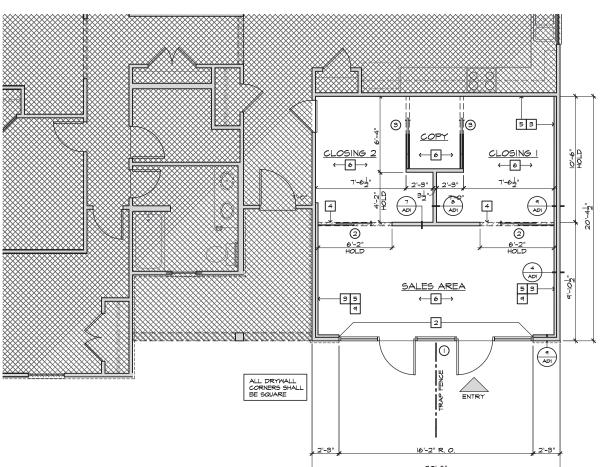
REVISIONS:



SPEC. LEVEL 1 RALEIGH-DURHAM



	HARDWARE SCHEDULE
HARDWARE GROUP #1 (ENTRY DO	DORS)
STOREFRONT SYSTEM	MFR KANNEER TRIFAB 400 FRAMING SYSTEM OR EQUAL; CENTER PLANE GLASS (ALL GLASS TO BE TEMPERED); 4" X 1-3/4" FRAME; COLOR - #29 (BLACK ANODIZED)
DOOR	MFR KAWNEER STANDARD ENTRANCE DOOR, 350 MEDIUM STYLE, SINGLE ACTION, BOTT, RAIL 10' MIN, W OVERHEAD CLOSURE (INTERIOR SIDE); W BOTTOM RAIL WEATHERING OR EQUAL, COLOR - \$29 (BLACK ANDDIZED)
HINGES	MFR KAWNEER TOP AND BOTTOM 4-1/2" X 4" BALL BEARING BUTT HINGE WITH NON-REMOVEABLE PIN (NRP) OR EQUAL; COLOR - #29 (BLACK ANODIZED)
LOCK	MFR ADAMS-RITE MS 1850A DEADLOCK MITH (2) 1-5/32" DIA. 5-PIN CYLINDERS OR EQUAL; COLOR - MATCH FRAMING COLOR
CLOSURE	MFR NORTON 1601 ADJUSTABLE OR EQUAL; COLOR - MATCH FRAMING COLOR
PUSH/PULLS	ARCHITECTS CLASSIC HARDWARE; STYLE - CO-12/CO-12; LENGTH - 12" OR EQUAL; COLOR - #29 (BLACK ANODIZED); ADA COMPLIANT
THRESHOLD	1/2" X 4" ALUMINUM MILL THRESHOLD; ADA COMPLIANT OR EQUAL; COLOR - #29 (BLACK ANODIZED)
WEATHERSTRIP	WEATHERING SYSTEM IN DOOR AND FRAME BY KAWNEER
SIGNAGE	xxxx
HARDWARE GROUP #2 (CLOSING	OFFICE) SLIDING
HINGES	N/A
LOCKSET	NONE
PUSH/PULLS	MFR TRIMCO; API2I SERIES ARCHITECTURAL STRAIGHT PULLS; 12" CENTER-TO-CENTER COLOR - MATTE BLACK; ADA COMPLIANT
CLOSER	NONE
DOOR STOP	NONE
SILENCER	NONE
HARDWARE GROUP #3 (COPY)	
POCKET ASSEMBLY	MFR JOHNSON HARDWARE; 153066 POCKET DOOR FRAME W/ #1125 BALL BEARING HANGERS/CARRIAGE ASSEMBLY; W SOFT CLOSE
DOOR	36" X 80" X I-3/8" 3-PANEL WOOD DOOR; PRIME AND PAINT
PUSH/PULLS	MFR TRIMCO; API2I SERIES ARCHITECTURAL STRAIGHT PULLS; 12" CENTER-TO-CENTER COLOR - MATTE BLACK; ADA COMPLIANT



CONSTRUCTION PLAN

SCALE I/4"=I'-0" (22"x34") - I/8"=I'-0" (II"xI7")

SALES OFFICE

SALES OFFICE

GENERAL CONSTRUCTION PLAN NOTES

A) DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. B) ALL DOOR AND OPENING LOCATIONS SHALL BE SHOWN ON FLOOR PLAN IN CASE OF CONFILICT, NOTIFY THE ARCHITECT IMMEDIATELY PRIOR TO COMMENCEMENT OF FRANING.

D) DIMENSION NOTED AS "HOLD" ARE CRITICAL. IF LAYOUT IS OFF, CONTACT ARCHITECT PRIOR TO FRAMING.

E) ALL DIMENSION ARE TO THE FACE OF STUD, U.N.O.

F) ALL GYPSUM WALLBOARD SHALL BE I/2" TYPE "X" U.N.O.

SYMBOL LEGEND

DENOTES PLAN / STOREFRONT NOTE

# DENOTES DOOR NUMBER - REFER TO DOOR SCHEDULE NEW WALL/PARTITION - FULL HEIGHT

DENOTES DROPPED CLG. / SOFFIT - SEE PLAN FOR HEIGHT

CONSTRUCTION PLAN / ELEVATION NOTES

HATCHED AREA IS PART OF THE MODEL HOME DISPLAY AND IS NOT SUBJECT TO ACCESSIBILITY REQUIREMENTS AND IS NOT TO BE USED AS A PLACE OF PUBLIC ACCOMMODATIONS OR EMPLOYMENT.

G) REFER TO THE PRODUCTION FLOOR PLAN FOR INFORMATION NOT SHOWN HERE.

2 NEW STOREFRONT - SEE EXTERIOR ELEVATIONS.

PROVIDE GYP. BRD ON ALL WALL, BEAMS, FLOOR JOISTS.

LINE OF DROPPED SOFFIT; REFER TO PLAN FOR HEIGHT.

FURR OUT THE EXTERIOR WALLS TO FLUSH WITH GARAGE CURB.

GYP. BD. CEILING; REFER TO RCP FOR HEIGHT

LOCK AND LEAVE DOOR BETWEEN GARAGE AND HOUSE. ADD DOOR SIGN - NO PUBLIC ENTRY

REFER TO INTERIOR ELEVATION FOR WINDOW GRAPHICS AND DIMENSION INFO.

9 2X SOLID BACKING; REFER TO INTERIOR ELEVATIONS FOR HEIGHT



NORTH CAROLINA 50' SERIES

HOME

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 ■ TEL: (919) 768-7988 ■ FAX: (919) 472-0582

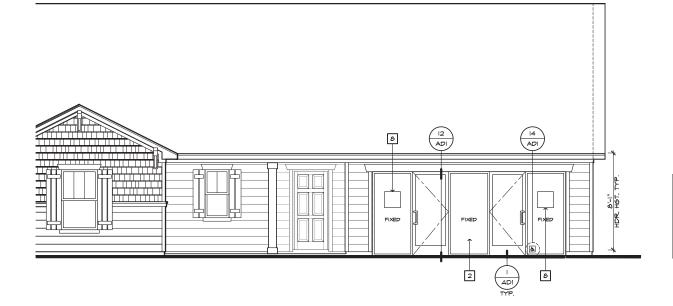
. . . . . . 2018 NORTH CAROLINA STATE **BUILDING** CODES

ISSUE DATE: 11/26/19 ■ PROJECT No.: 1350999:57 ■

D.S.

DIVISION MGR.:

**REVISIONS:** 

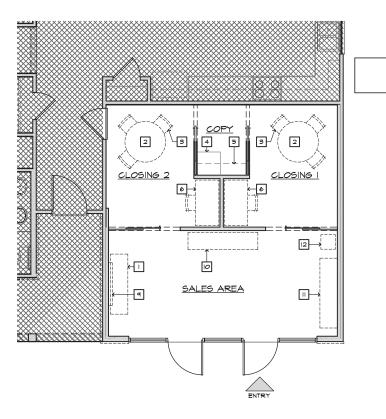


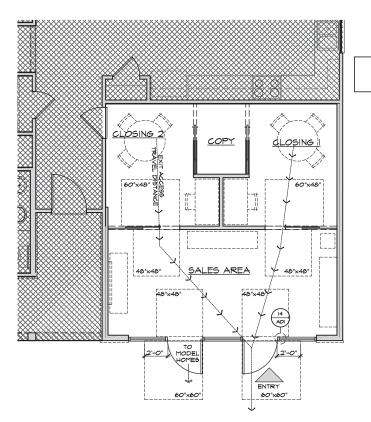
EXTERIOR ELEVATION

SCALE |/4"=|'-0" (22"x34") - |/8"=|'-0" (||"x|7")

WINDOW GRAPHICS LAYOUT SCALE |/4"=|'-0" (22"x34") - |/8"=|'-0" (||"x|7") 150.1910 HEET: SO.1

SPEC. LEVEL 1 RALEIGH-DURHAM





#### FURNITURE, FIXTURE & EQUIPMENT

SCALE I/4"=1"-0" (22"x34") - I/6"=1"-0" (II"x17") SALES OFFICE

#### OCCUPANCY AND EGRESS PLAN

SCALE 1/4"=1'-0" (22"x34") - 1/8"=1'-0" (11"x17") SALES OFFICE

SYMBOL LEGEND

DENOTES PLAN NOTE

DENOTES 44" WIDE CLEAR EGRESS PATH TO BE MAINTAINED THROUGHOUT SALES FLOOR

- - DENOTES DIRECTION OF TRAVEL

ACCESSIBLE ROUTE NOTES

44" MIDE CLEAR EGRESS PATH TO BE MAINTAINED THROUGHOUT THE SALES FLOOR

ACCESSIBLE FIXED WRITING TABLE NOT TO EXCEED 2'-10" MAX. HEIGHT

#### ACCESSIBILITY CONSTRUCTION PLAN NOTES

DOOR HARDWARE, HAND-ACTIVATED DOOR OPENING HARDWARE SHALL BE MOUNTED 2-10° AFF. AND BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE.

**DOOR EFFORT:** MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS.

SMOOTH DOOR BOTTOM. THE BOTTOM IO" OF ALL DOORS (EXCEPT SLIDING AUTOMATIC) SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.

REQUIRED DOOR OPENING. ALL REQUIRED EXIT DOORWAYS SHALL HAVE A MINIMUM 32" CLEAR OPENING WITH THE DOOR AT 90 DEGREES TO THE CLOSED POSITION. EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3"-0" IN WIDTH AND NOT LESS THAN 6"-8" IN HEIGHT.

THRESHOLD HEIGHT. MAXIMUM HEIGHT OF THRESHOLD SHALL BE 1/2" WITH VERTICAL CHANGE AT EDGE OF 1/2 WITH A MAXIMUM LEVEL OF 45 DEGREES CHANGE IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.

DOOR OPERABILITY. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVIEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.

CHANGES IN LEVEL. ABRUPT CHANGES IN LEVEL ALONG ACCESSIBLE ROUTES SHALL MOT EXCEED I/2" IN HEIGHT. WHEN CHANGES IN LEVEL DO OCCUR, THEY SHALL BE BEVELED WITH A SLOPE OF NO GREATER THAN I.12, EXCEPT THAT LEVEL CHANGES NOT EXCEEDING I/4" MAY BE VERTICAL.

DOOR LANDING AREAS. THE FLOOR OR LANDING ON EACH SIDE OF AND ENTRANCE OR PASSAGE DOOR SHALL BE LEVEL AND CLEAR IN THE LENGTH ON THE DIRECTION OF THE DOOR SHING AT LEAST 60°, AND THE LENGTH ON THE OPPOSITE SIDE OF THE DOOR SHING AT 44° AS MEASURED PERPENDICULAR TO THE PLAN OF THE DOOR IN TIS CLOSED POSITION.

AVAILABLE SIDE ACCESS TO DOORS. THE WIDTH OF THE LEVEL AND CLEAR AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 24" PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18" PATS THE STRIKE EDGE FOR INTERIOR DOORS.

FIE STRICE EDGE FOR INTERIOR DOCUMENTS. THE CENTER OF RECEPTACLE OUTLETS SHALL BE NOT LESS THAN 15" A FF. OR WORKING PLATFORM. THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS. APPLIANCES, HVAC. EQUIPMENT SHALL BE NOT LESS THAN 36" OR MORE THAN 46" ABOVE THE FLOOR OR WORKING PLATFORM. THE CENTER OF THE FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE LOCATED 46" ABOVE THE LEVEL OF THE FLOOR, WORKING PLATFORM, GROUND SURFACE, OR SIDEWALK.

FLOOR FINISHES: FLOOR SHALL BE SLIP RESISTANT.

ENTRY SIGNAGE. ALL DISABLE ACCESSIBLE ENTRANCES SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, VISIBLE FROM APPROACHING PEDESTRIAN WAYS.

#### GENERAL FURNISHINGS, FIXTURES NOTES

THE MINIMUM CLEAR AISLE WIDTH SHALL NOT BE LESS THAN 36"
THE MINIMUM CLEAR WIDTH FOR AN AISLE ACCESSMAY NOT
REQUIRED TO BE ACCESSIBLE SHALL NOT BE LESS THAN 30"

FURNISHINGS, FIXTURES & EQUIPMENT NOTES

LOOSE FURNITURE- CREDENZA

2 LOOSE FURNITURE- 36" TABLE

3 LOOSE FURNITURE- CHAIRS

4 BASE CABINET
5 UPPER CABINETS

LOOSE FURNITURE- 24"X47" DESK

NOT USED

WALL GRAPHICS BY OTHERS SEE ALSO INTERIOR ELEVATIONS FOR LOCATIONS OF GRAPHICS AND FIELD GUIDE SUPPLIED SEPARATELY.

9 VIDEO MONITOR

IO LOOSE FURNITURE- BENCH WITH DRAWERS

II FLOATING SHELF

2 NATER COOLER

kb HOME

# NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD.
SUITE 180

DURHAM, NC 27703
TEL: (919) 768-7988
FAX: (919) 472-0582

2018 NORTH
CAROLINA STATE
BUILDING
CODES

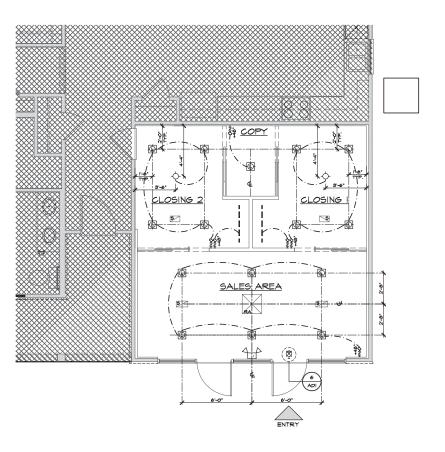
. . . . . . .

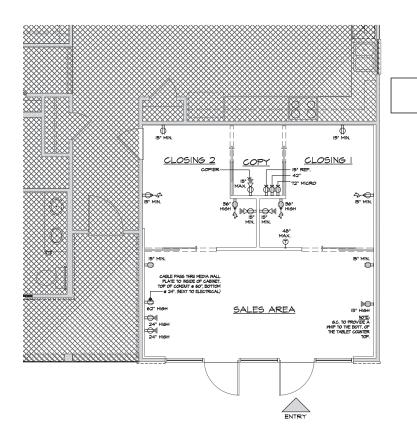
ISSUE DATE: 11/26/19
PROJECT No.: 1350999:57
DIVISION MGR.: D.S.

REVISIONS:

150.1910 SHEET: SO.2

SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES





SALES OFFICE

#### REFLECTIVE CEILING PLAN

SCALE |/4"=|'-0" (22"x34") - |/8"=|'-0" (||"x|7")

SALES OFFICE

UTILITY PLAN

SCALE |/4"=|'-0" (22"x34") - |/8"=|'-0" (||"x|7")

REFLECTED CEILING PLAN NOTES

A) ALL CEILING HEIGHTS INDICATED ON PLANS ARE FROM TOP OF FINISH FLOOR TO UNDERSIDE OF FINISH CEILING U.N.O.

B) SEE MECHANICAL DRAWINGS FOR DIFFUSER LOCATIONS, ARCHITECTURAL DRAWINGS DETERMINE LUMINARIE LOCATION AND OTHER ARCHITECTURAL ITEMS AND SUPERCEDE ALL OTHER CEILING APPURTENANCES.

C) ETHERNET CABLE TO BE RUN FROM P.O.C. TO COPY AREA.

REFLECTED CEILING NOTES QTY. WATT

RETURN AIR REGISTER. MOUNT IN GYPBD.

CEILING

SUPPLY AIR REGISTER. MOUNT IN GYPBD.

CEILING

1 
SUPPLY AIR REGISTER. MOUNT IN GYPBD.

CEILING

4

CEILING

1 
4

CEILING

1 
4

CEILING

1 
4

CEILING

A
CEIL



NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD.

SUITE 180

DURHAM, NC 27703

TEL: (919) 768-7988

FAX: (919) 472-0582

2018 NORTH
CAROLINA STATE
BUILDING
CODES

. . . . . .

ISSUE DATE: 11/26/19
PROJECT No.: 1350999:57
DIVISION MGR.: D.S.
REVISIONS:

150.1910
SHEET:
SO.3

spec level 1
RALEIGH-DURHAM
50' SERIES

FINISH SCHEDULE				
KEY	MATERIAL	MANUFACTURER	DESCRIPTION	GENERAL LOCATION
FLOOF	R FINISHES	•		
F-I	TILE	EMSER TILE WINI.emser.com	SERIES: UPTOWN COLOR: HUDSON SIZE: 12"x24"x3/8" SET: RUNNING BOND 70/30 GROUT JOINT: 1/8"; USE WITH G-I; REFER TO PLAN FOR TILE START POINT	SALES AREA
F-2	CARPET TILE	SHAW CONTRACT GROUP WMM.shawcontractgroup.com	STYLE: 54804 URBAN GEOMETRY; COLOR: 04500 (MINGLED MUSE) SIZE: 18"x36" SET: ASHLAR; REFER TO PLAN FOR START POINT	CLOSING OFFICES & COPY
GROUT	FINISHES			
<b>6-</b> I	GROUT	CUSTOM BUILDING PRODUCTS	SERIES: CEMENT GROUT PRODUCT: PRISM ULTIMATE PERFORMANCE GROUT COLOR: 185 (NEW TAUPE)	SALES AREA
BASE	FINISHES	•	•	
B-I	MOOD BASE	N/A	IX3 FINGER JOINT PINE; SQUARE EDGE; PRIME AND PAINT; USE PT-3	ALL
MALL	FINISHES	'		
M-I	GYPSUM WALLBOARD	GEORGIA PACIFIC OR EQUAL	TOUGHROCK GYPSUM WALLBOARD; LEVEL 4 FINISH	ALL AREAS AS NOTED ON PLANS.
PAINT	FINISHES	•		
PT-I	PAINT	SHERWIN WILLIAMS	COLOR: SM7021 (SIMPLY MHITE); FINISH: FLAT	ALL CEILINGS
PT-2	PAINT	SHERWIN WILLIAMS	COLOR: SM7103 (MHITETAIL) FINISH: FLAT	AS NOTED ON PLAN
PT-3	PAINT	SHERMIN MILLIAMS	COLOR: SMTIOS (MHITETAIL) FINISH: SEMI-GLOSS	AS NOTED ON PLAN
PT-4	PAINT	SHERWIN WILLIAMS	COLOR: SM7513 (SANDERLING); FINISH: FLAT	AS NOTED ON PLAN
PT-5	PAINT	SHERWIN WILLIAMS	COLOR: SM6258 (BLACK) FINISH: EGGSHELL	AS NOTED ON PLAN
MISC.	FINISHES			
∨P-I	VINYL PANELING	SHAW CONTRACT GROUP WWW.shawcontractgroup.com	RESTO PLUS; VE2IT COLOR - 00144 (MALESTIC); SET HORIZONTAL RANDOM PATTERN; END JOINTS TO BE CUT SQUARE TO THE WALL; CAULK END TO WALL.	AS NOTED ON PLAN
TS-I	FLOORING TRANSITION STRIP	SCHLUTER SYSTEMS mmm.schluter.com	RENO-TK; HEIGHT: 3/8"; FINISH:ATKIOOABGB (BRUSHED ANTIQUE BRONZE ANODIZED ALUM.)	AS NOTED ON PLAN
			IX FINGER JOINT PINE;	

COPY B-I F-2 PT-2 PT-I AT AT **9 e**-2 B-I F-2 PT-I AT CLG SALES AREA **B**<sub>T</sub> (F-1) AT (PT-1)

FLOOR FINISH PLAN

SCALE |/4"=|'-0" (22"x34") - |/8"=|'-0" (||"x|7")

PT-2

14 16 B-1

H) ALL MATERIAL MUST COMPLY WITH CURRENT LOCAL AND GOVERNING AIR POLLUTION CONTROL REGULATIONS FOR THE PROJECT SITE, SUCH AS EPA AND STATE VOC (VOLATILE ORGANIC COMPOUND) CRITERIA, AND FEDERAL LEAD CONTENT REGUIREMENTS. I) BEFORE STARTING WORK, CAREFULLY EXAMINE SURFACES TO BE FINISHED AND REPORT ANY WORK NOT CORRECTLY INSTALLED OR FINISHED, OR SO FINISHED AS NOT TO GIVE DESIRED RESULTS DO NOT APPLY FINISH UNTIL WORK HAS BEEN PROPERLY PREPARED TO RECEIVE SAME.

INTERIOR FINISH NOTES

A) CONTRACTOR SHALL VERIFY THAT THE SUB-FLOOR THROUGHOUT THE LEASE SPACE IS IN SUITABLE CONDITION TO RECEIVE FLOOR FINISHES AS SPECIFIED PER PLAN PRIOR TO INSTALLATION THEREOF.

B) ALL FINISH FLOORING SHALL BE INSTALLED LEVEL AND FLUSH BETWEEN TRANSITIONS WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/4" IN HEIGHT. PROVIDE APPROVED TRANSITION OR REDUCER STRIPS AS REQUIRED.

C) ALL FINISH FLOORING MATERIALS AND FINISHES SHALL MEET OR EXCEED ALL MINIMAM REQUIRED SLIP COEFFICIENT RATINGS AND FLAME-SPREAD RATINGS AS REQUIRED BY LOCAL GOVERNING BUILDING AND SAFETY CODES.

D) THE WORD "PAINT" AS USED HEREIN, MEANS COATING SYSTEMS MATERIALS INCLUDING PRIMERS, EMULSIONS, EPOXY, ENAMELS, SEALERS, FILLERS, URETHANES, AND OTHER APPLIED MATERIALS WHETHER USED AS PRIME, INTERWEDIATE, OR FINISH COAT.

F) DO NOT APPLY FINISH IN AREAS WHERE DUST IS BEING GENERATED. ENSURE ADEQUATE VENTILATION DURING ALL INTERIOR PAINTING, DO NOT APPLY PAINT TO DAMP OR WET SURFACES.

G) USE FACTORY MIXED MATERIALS UNLESS SPECIFICALLY APPROVED BY THE MANUFACTURER, AND COMPLY WITH APPLICABLE FEDERAL AND/OR ASTM SPECIFICATIONS.

E) COMPLY WITH MANUFACTURER'S RECOMMENDATIONS FOR ENVIRONMENTAL CONDITIONS UNDER WHICH COATINGS AND COATING SYSTEMS CAN BE APPLIED.

J) ENSURE THAT ALL SURFACES ARE CLEAN, FREE FROM FOREIGN MATTER AND DEFECTS OF ANY KIND; SMOOTHED FREE FROM DENTS, SCRATCHES, RAISED GRAIN, OR BLEMISHES; DRIED COMPLETELY AND DUSTED.

	SYMBOL LEGEND
#	DENOTES PLAN NOTE

DENOTES FLOORING/WALL FINISH - REFER TO FINISH SCHEDULE

DENOTES LAYOUT START POINT

#### FLOOR FINISH NOTES

- FULL CARPET TILE START/LAYOUT POINT
- SCHLUTER TRANSITION STRIP: ADA COMPLIANT

NORTH CAROLINA

HOME

50' SERIES KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 • FAX: (919) 472-0582

2018 NORTH **CAROLINA STATE BUILDING** CODES

ISSUE DATE:

DIVISION MGR.:

REVISIONS:

☐ INTERIOR ELEVATION NOTES

WOOD TRIM (MW-I): REFER TO FINISH SCHEDULE

WINDOW GRAPHIC: IO"XIO" KB LOGO; INSTALL ON INTERIOR SIDE WINDOW GRAPHIC: 2"X2" SQUARES; INSTALL ON INTERIOR SIDE

WINDOW GRAPHIC: 12"X12" KB LOGO; INSTALL ON INTERIOR SIDE

15" DEEP UPPER CABINET; PROVIDE 2x SOLID BACKING

18" DEEP UPPER CABINET: PROVIDE 2x SOLID BACKING

18" DEEP SHELF

SALES OFFICE

DESK; PROVIDED BY DIVISION

UNDERCOUNTER REFRIGERATOR; ADA COMPLIANT; PROVIDED BY DIVISION

COPIER; PROVIDED BY DIVISION

VIDEO MONITOR; PROVIDE 2x SOLID BACKING FOR MOUNTING BRACKET; PROVIDED BY DIVISION

STORAGE BENCH, PROVIDED BY DIVISION

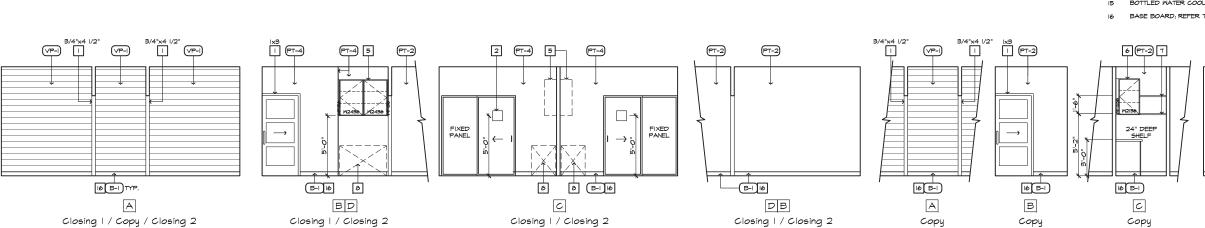
TABLET SHELF, TOP AT 32" A.F.F; PROVIDE 2x SOLID BACKING, PROVIDED BY DIVISION

PT-2 🗓

BOTTLED WATER COOLER: PROVIDED BY DIVISION

BASE BOARD; REFER TO FINISH SCHEDULE





REFER TO PLAN FOR SIZE

PT-2

15

D

Sales Area

4

150.1910 **SO.4** 

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

INTERIOR ELEVATIONS

GYPSUM BOAD FINISH:

PT-4

B

A

Sales Area

16 B-1

FIXED PANEL

LEYEL 4.

IF THE FINAL DECORATION IS TO BE A FLAT PAINT, LIGHT TEXTURE OR LIGHTWEIGHT WALL COVERING, A LEVEL 4 FINISH IS RECOMMENDED. LEVEL 4 HAS BEEN MODIFIED TO READ, "ALL JOINTS AND INTERIOR ANGLES HAVE TAPE EMPEDDED IN JOINT COMPOUND AND TWO SEPRARATE COATS OF JOINT COMPOUND APPLIED OVER ALL FLAT JOINTS AND ONE SEPARATE COATS OF JOINT COMPOUND APPLIED OVER ALL FLAT JOINTS AND ONE SEPARATE COATS OF JOINT COMPOUND APPLIED OVER INTERIOR ANDIGES, FASTENER HEADS AND ACCESSORIES SHALL BE COVERED WITH THREE SEPARATE COATS OF JOINT COMPOUND ALL JOINT COMPOUND SHALL BE SMOOTH AND FREE FROM TOOL MARKS AND RIDGES, BEFORE FINAL DECORATION IT IS RECOMMENDED THAT THE PREPARED SURFACE BE COATED WITH A DRYMALL PRIMER PRIOR TO THE APPLICATION OF FINAL FINISHES, GLOSS, SEMI-GLOSS AND ENAMEL PAINTS ARE NOT RECOMMENDED OVER A LEVEL 4 FINISH.

2

FIXED PANEL

MM-I DOOR TRIM

PT-2

PT-2 |2

₿

Sales Area

N/A

C

Sales Area

SCALE I/4"=1'-0" (22"x34") - I/8"=1'-0" (II"xI7"

B-1 16

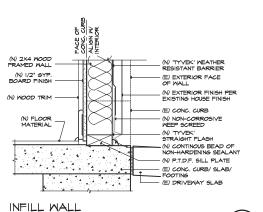
D

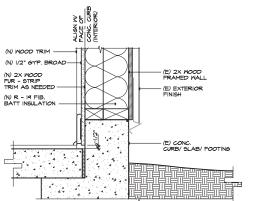
Сору

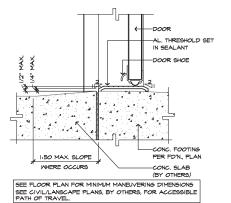
11/26/19

D.S.

■ PROJECT No.: 1350999:57 ■









FURRED WALL SALES OFFICE 13

AT CURB

(10

**THRESHOLD** SHEAR PLYWOOD AS OCCURS BUILDING PAPER GRADE "D" EXT. PLAS. O/ SELF FURRING - MOVEN WIRE ANGHOR BOLLICE

NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 ■ TEL: (919) 768-7988 ■ FAX: (919) 472-0582

2018 NORTH **CAROLINA STATE** BUILDING CODES

. . . . . .

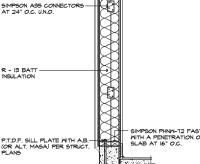
STUCCO SCREED

AT ACCESIBLE CONC.
WALKWAY

SIMPSON 'HI' CONNECTOR FROM EACH TRUSS TO TOP PLATE U.N.O. (SEE STRUCT, PLAN

ISSUE DATE: 11/26/19 ■ PROJECT No.: 1350999:57 ■ DIVISION MGR.: D.S. **REVISIONS:** 

PROVIDE 2X SOLID FIREBLOCKING IN CONCEALED SPACES OF STID WALLS AND PARTITIONS - VERTICALLY AT THE CELLING AND FLOOR LEVELS AND HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET PER C.R.C. SECTION REOSZI.



- 2X4 BLOCKING AT 24" OC - DBL. 2x TOP PL - 1/2" GYP. BRD. - 2x STUD . 16" O.C.

2X4 PT SILL PLATE W
 0.145" DIA. SHOT PINS AT 24" O.C.

R - IS BATT

150.1910 HEET: AD1

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

The International Symbol of Accessibility shall comply with Figure 11B-703.7.2.1. The symbol shall consist of a white figure on a blue background. The blue shall be FS 15090 in Federal Explants.

AT GARAGE DOOR

FIGURE 11B-703.7.2.1

ACCESSIBILITY SIGNAGE

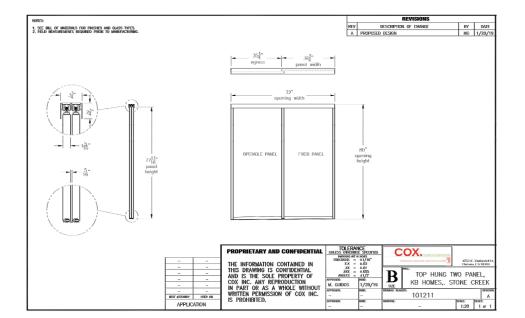
SCALE: NONE SALES OFFICE

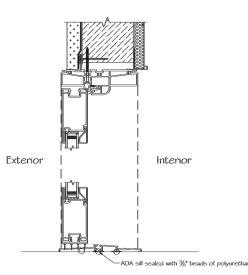
- I. SHIM MINDOW AS NECESSARY TO INSURE A SQUARE, LEVEL & PLUMB INSTALLATION.

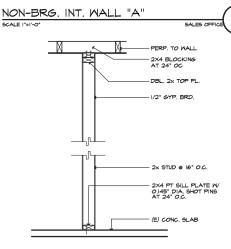
  SECURE THE HEAD & JAMPS THE MINIMUM EQUIVALENT OF 6d CORROSION RESISTANT FASTENERS ON A MINIMUM OF I6 INCH CENTERS.

  SECURE THE SILL WITH I/I "X 2 "/4" TAPCON CONCRETE ANCHORS ON A MAXIMUM OF I6 INCH CENTERS.

  IN EACH DIRECTION FROM ALL COPINERS THERE SHALE BY FASTENERS WITHIN IN KHES, BIT NO CLUES BY TO CONTROL THE PROPERTY OF THE STANCE OF T











STORE FRONT WINDOW

NON-BRG. INT. WALL "B"

TACTILE EXIT SIGN

(8

SALES OFFICE 6

SIMPSON STC TRUSS CLIP AT 24" OC

- 1/2" GYP. BRD.

- 2x4 STUDS @ 16" O.C.

- 2x STUD @ 16" O.C.

- (E) CONC. SLAB

TYPICAL EXTERIOR WALL

SLIDING GLASS DOOR - SALES AREA TO CLOSING OFFICES

SCALE: NONE

SCALE: NONE

(12) SALES OFFICE \



# NORTH CAROLINA 50' SERIES PLAN 150.1910-R

LOT 2 - HIGHLAND GROVE - ELEVATION B

ARCH. SYMBOLS

**ABBREVIATIONS** 

ROOM

GAR. DISP. GARBAGE DISPOSAL

#### SHEET INDEX

# PLAN #150.1910-R TITLE SHEET GENERAL NOTES GENERAL NOTES GENERAL NOTES FLOOR PLANS FLOOR PLAN 'A' FLOOR PLAN 'A'B/C/D' W CRANL SPACE FLOOR PLAN OPTIONS SLAB INTERFACE & FOUNDATION PLANS EXTERIOR ELEVATIONS ROR ELEVATIONS ROOF PLAN, FRONT & REAR ELEVATIONS 'A' LEFT & RIGHT ELEVATIONS 'A' LEFT & RIGHT ELEVATIONS 'A' LEFT & RIGHT ELEVATIONS 'A' PARTIAL, FRONT & LEFT ELEVATIONS W OPTIONAL MASONRY AT CONCRETE PORCH REAR, LEFT & RIGHT ELEVATIONS W OPTIONAL MASONRY AT CONCRETE PORCH REAR, LEFT & RIGHT ELEVATIONS 'A' AT CRAIN, SPACE FRONT ELEVATIONS 'A' AT OPTIONAL, 9'-1" PLATE HEIGHT REONT ELEVATIONS 'A' W BRICK OFFION & PARTIAL RIGHT ELEVATION FRONT ELEVATIONS 'A' W BRICK OFFIONAL 9'-1" PLATE HEIGHT RAPITAL FOOR PLAN FOR FRONT ELEVATIONS "A" W BRICK AT OPTIONAL 9-1" PLATE HEIGHT PARTIAL FLOOR PLAN B" ROOF PLAN, FRONT & REAR ELEVATIONS "B' LEFT & RIGHT ELEVATIONS "B' PARTIAL FLOOR PLAN, FRONT & LEFT ELEVATIONS "B' AT CRAWL SPACE PARTIAL FRONT ELEVATION B" OPTIONAL MASONRY AT CONCRETE PORCH REAR, LEFT & RIGHT ELEVATIONS "B" AT CRAWL SPACE FRONT ELEVATIONS "B" AT CRAWL SPACE FRONT ELEVATIONS "B" AT OPTIONAL 9-1" PLATE HEIGHT FRONT ELEVATIONS "B" W STONE OPTION & PARTIAL RIGHT ELEVATION FRONT ELEVATIONS "B" W STONE OPTIONAL 9-1" PLATE HEIGHT FRONT ELEVATIONS 'B' IV STONE AT OPTIONAL 9-1" PLATE HEIGHT PARTIAL, FLOOR PLAN I' ROOF PLAN, FRONT & REAR ELEVATIONS 'C' LEFT & RIGHT ELEVATIONS 'C' PARTIAL FRONT & LEFT ELEVATIONS 'W OPTIONAL MASONRY AT CONCRETE PORCH PARTIAL FRONT & LIEFT ELEVATIONS 'W OPTIONAL MASONRY AT CONCRETE PORCH PERAL LEFT & RIGHT ELEVATIONS 'C' AT CRANL SPACE FRONT ELEVATIONS 'C' AT OPTIONAL 9-1", PLATE HEIGHT PRONT ELEVATIONS 'C' IN STONE AT OPTIONAL 9-1" PLATE HEIGHT PARTIAL FLOOR BY AND TO! PARTIAL FLOOR PLANS 'D' ROOF PLAN, FRONT & REAR ELEVATIONS 'D' ROOF PLAN, FRONT & REAR ELEVATIONS D' PARTIAL FLOOR PLAN, FRONT & LEFT ELEVATIONS D' AT CRANL SPACE PARTIAL FRONT ELEVATION W OPTIONAL MASONRY AT CONCRETE PORCH REAR, LEFT & RIGHT ELEVATIONS D' AT CRANL SPACE FRONT ELEVATIONS D' AT OPTIONAL 9"-!" PLATE HEIGHT FRONT ELEVATIONS D' W STONE D' PRONT ELEVATION FRONT ELEVATIONS D' W STONE D' PLATE HEIGHT FRONT ELEVATIONS D' W STONE D' PLATE HEIGHT FRONT ELEVATIONS D' W STONE AT OPTIONAL 9"-!" PLATE HEIGHT

**SOUARE FOOTAGE** 

PARTIAL PLANS & ELEVATIONS 'A/B/C/D' W/ OPT. DECK AT CRAWL SPACE PARTIAL PLANS & ELEVATIONS 'A/B/C/D' W/ OPT. EXTENDED DECK AT CRAWL SPACE 7.1 PARTIAL PLANS & ELEVATIONS 'A BIG/D' W OPT. DECK AT CRANL SPACE
PATIO OPTIONS
3 AI PARTIAL PLANS & ELEVATIONS 'A BIG/D' W OPT. EXTENDED DECK AT CRANL SPACE
PATIO OPTIONS
3 AI PARTIAL FLOOR PLAN, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED DECK 'A'
3 A2 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED DECK 'A'
3 A3 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED DECK 'A'
3 A4 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED DECK 'A'
3 A5 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED DECK 'A'
3 A6 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED DECK 'A'
3 B1 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED PATIO 'A'
3 B1 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED COVERED PATIO B'
3 B2 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED COVERED PATIO B'
3 B2 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED COVERED PATIO B'
3 B2 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED DECK B'
3 B3 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED COVERED PATIO B'
3 B4 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED DECK B'
3 B5 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED PATIO B'
3 C1 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED PATIO C'
3 C2 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED COVERED PATIO C'
3 C5 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED COVERED PATIO C'
3 C5 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED COVERED PATIO C'
3 C5 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED PATIO C'
3 D1 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED PATIO C'
3 D2 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED PATIO C'
3 D2 PARTIAL FLOOR PLANS, ROOF & ELEVATIONS W OPT. EXTENDED SCREENED-IN COVERED PATIO D' ARCHITECTURAL DETAILS
ADI ARCHITECTURAL DE
AD2 ARCHITECTURAL DE
AD3 ARCHITECTURAL DE
AD4 ARCHITECTURAL DE
AD5 ARCHITECTURAL DE
AD6 ARCHITECTURAL DE
AD7 ARCHITECTURAL DE
AD6 ARCHITECTURAL DE
AD6 ARCHITECTURAL DE ITECTURAL DETAILS
ARCHITECTURAL DETAILS

**CODE INFORMATION** 



#### NORTH CAROLINA 50' SERIES KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 FAX: (919) 472-0582 . . . . .

2018 NORTH **CAROLINA STATE BUILDING** CODES

MP

FRAMEWALK NC20019NCP/ 03-25-20 /KBA

SHEET:

TS

PLAN 150.1910-R GROUND-FAULT CIRCUIT INTERRUPTER ISSUE DATE: OWNER : APPLICABLE CODES: CODE ABBREVIATIONS AIR CONDITIONING 5 # P SHELF AND POLE PROJECT No.: 1350999:57 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE, INCLUDING REFERENCED N.C.-R. NORTH CAROLINA RESIDENTIAL CODE
N.C.-B. NORTH CAROLINA BUILDING CODE ADJUSTABLE GALVANIZED IRON S.C. SOLID CORE BUILDING SECTION TOTAL AREA 1910 SQ. F DIVISION MGR.: ALTERNATE ' S.D. SMOKE DETECTOR GI ASS 418 SQ. F 115 SQ. F 114 SQ. F SECTION INDICATOR N.C.-M. NORTH CAROLINA MECHANICAL CODE REVISIONS: AMPERAGE SECTION CODES AND STANDARDS ELEVATION 'A' GYP. BD. GYPSUM BOARD ORCH AREA(S) NORTH CAROLINA PLUMBING CODE NORTH CAROLINA FUEL GAS CODE SHEET NUMBER HOLLOW CORE ELEVATION 'B' SQ. FT CENTER LINE SHEET ELEVATION 'C HDR. HEADER N.C.-E. NORTH CAROLINA ELECTRICAL CABINET SHEATHING ELEVATION 'D' NC-EC NORTH CAROLINA ENERGY CODE N.C.-E.C. NORTH CAROLINA ENERGY COT.
NE.C. NATIONAL ELECTRICAL CODE
I.C.B.O. INTERNATIONAL CONFERENCE
OF BUILDING OFFICIALS
A.S.T.M. AMERICAN SOCIETY FOR
TESTING MATERIALS
N.F.P.A. NATIONAL FIRE PROTECTION
ASSOCIATION STRUCTURAL ENGINEER: CLG. CEIL ING SHWR SHOWER DETAIL REFERENCE HEADER HEIGHT SUMMIT ENGINEERING 120 PENMARC DRIVE, SUITE 108 RALEIGH NC, 27603 TEL. (919) 380-4991 FAX. (919) 380-4993 CLR. SIM. COVERED PATIO CLEAR SIMILAR HORIZONTAL SLIDER DETAIL NUMBER EXTENDED COVERED PATIO SCREENED-IN COVERED PATIO SQ. FT SQ. FT 240 CONCRETE SLIDING HOME OFFICE CORP20003CORP/ 07/31/20 /KBA PROJECT DESCRIPTION: CARPET IN LIEU OF SL. GL. SLIDING GLASS EXTENDED SCREENED-IN COV. PATIO
OPEN DECK 50. F INSULATION STANDARD I STORY SINGLE FAMILY DETACHED RESIDENTIAL PLAN W/ 4 ELEVATIONS SQ. FT SQ. FT DRYER INTERIOR SHEET VINYL A.N.S.I. AMERICAN NATIONAL STANDARDS INSTITUTE
I.E.C.C. INTERNATIONAL ENERGY CONSERVATION CODE KEYNOTE REFERENCE TRUSS DESIGN LAMINATED TEMPERED GLASS SCREENED-IN DECK D.G. DUAL GLAZED LAVATORY THK. THICK BUILDERS FIRST SOURCE EXTENDED SCREENED-IN DECK 288 SQ. FT OCCUPANCY: LUMINOUS T.O.C. TOP OF CURB DIAMETER REFERENCE NUMBER DIMENSION MEDICINE CABINET TOP TOP OF PLATE UNDERWRITERS LABORATORIES, INC. DISP. MANUFACTURER T.O.S. TOP OF SLAB DISPOSAL CONSTRUCTION TYPE: DIVIDED LIGHT MINIMUM TYPICAL OFFSET REFERENCE UNLESS NOTED OTHERWISE MOUNTED U.N.O. DIFFERENTIAL IN FLOOR LEVEL DOOR OR FINISH SURFACE NOT IN CONTRACT V.P. VAPOR PROOF **REVISION LIST** D.S. DOWNSPOUT N.I.C. WASHER NOT TO SCALE REVISION REFERENCE .ש.ע DISHWASHER **OVER** ON CENTER MD. MOOD REFER TO TITLE SHEET FIFV FI EVATION OPTIONAL 2 03/25/20 T5,i.i-i.3,3.A3,3.Bi,B4,3.Ci,C4,3.Di,D4,5.i,8.A5,A6,8.B5,B6,8.C5,C6,8.D5,D6 NC20019NC MATER HEATER M/H 0.S.A. OUTSIDE AIR EQUAL 07/31/20 TS 13 41 52 EXH. EXT. EXHAUST PROPERTY LINE MEATHER PROOF EXTERIOR PUSH BUTTON FORCED AIR UNIT 150.1910-R FIBER CEMENT PLATE **SCALE NOTE** FIXED GLASS PLYW00D FUEL GAS PAIR P.T.D.F. FINISH PRESSURE TREATED DOUGLAS FIR FLR. FLR. LINE FLOOR FLOOR LINE FLUORESCENT RADIUS SPEC. LEVEL 1 BOX IS I" SQ. THEN SCALE IS 1/4" = 1'-0" FR. DR FRENCH DOOR RETURN AIR GRILL R.A.G. FLOOR MATERIAL REF. REFRIGERATOR IF BOX IS 1/2" SQ. THEN SCALE IS 1/8" = 1'-0" RALEIGH-DURHAM RE-SAWN RE/S FOOTING REVERSE GAUGE 50' SERIES

UTILITY PLANS

**CONSULTANTS** 

#### GENERAL REQUIREMENTS

- THE WORD 'CONTRACTOR' AS USED HEREIN SHALL MEAN THE GENERAL CONTRACTOR, SUBCONTRACTORS AND ALL PERSONS DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM.
- CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE FOLLOWING APPLICABLE CODE REQUIREMENTS:
  - A. ALL LAWS, STATUTES, THE MOST RECENT BUILDING CODES, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES HAVING JURISDICTION OVER OWNER, CONTRACTOR, ANY SUBCONTRACTOR, THE PROJECT, THE PROJECT SITE, THE WORK, OR THE PROSECUTION OF THE MORK.
  - B. THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT AND ALL OTHER APPLICABLE CODE REQUIREMENTS RELATING TO SAFETY.
  - THE FAIR HOUSING AMENDMENTS ACT, THE AMERICANS WITH DISA-BILITIES ACT, AND ALL OTHER APPLICABLE CODE REQUIREMENTS RELATING THERETO.
- 3. CONTRACTOR SHALL CAREFULLY STUDY AND REVIEW THE CONSTRUCTION DOCUMENTS AND INFORMATION FURNISHED BY OWNER, AND SHALL PROMPTLY REPORT IN WRITING FOR OWNERS, REPRESENTATIVE ANY ERRORS, INCONSISTENCIES, OR OMISSIONS IN THE CONSTRUCTION DOCU-MENTS OR INCONSISTENCIES WITH APPLICABLE CODE REQUIREMENTS OBSERVED BY THE CONTRACTOR.
- 4. IF CONTRACTOR PERFORMS WORK WHICH HE KNOWS OR SHOULD KNOW IS CONTRARY TO APPLICABLE CODE REQUIREMENTS, WITHOUT THE AGREEMENT OF OWNER, CONTRACTOR SHALL BE RESPONSIBLE FOR SUCH WORK AND SHALL BEAR THE RESULTANT LOSSES, INCLUDING, WITHOUT LIMITATION, THE COSTS OF CORRECTING DEFECTIVE WORK.
- 5. CONTRACTOR SHALL PROVIDE CERTIFICATES OF INSURANCE ACCEPTABLE TO OWNER PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL TAKE FIELD MEASUREMENTS, VERIFY FIELD CONDITIONS, AND CAREFULLY COMPARE WITH THE CONSTRUCTION DOCUMENTS SUCH FIELD MEASUREMENTS, CONDITIONS, AND OTHER INFORMATION KNOWN TO CONTRACTOR BEFORE COMMENCING THE MORK. ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED AT ANY TIME SHALL BE PROMPTLY REPORTED IN MINING TO THE OWNER.
- CONTRACTOR SHALL PROMPTLY NOTIFY OWNER'S REPRESENTATIVE IF CONTRACTOR BECOMES AWARE DURING THE PERFORMANCE OF THE WORK THAT THE CONSTRUCTION DOCUMENTS ARE NOT IN COM-PLIANCE WITH APPLICABLE CODE REQUIREMENTS.
- BY SUBMITTAL OF BID, CONTRACTOR WARRANTS TO OWNER THAT ALL MATERIALS AND EQUIPMENT TO BE FURNISHED ARE NEW UNLESS NOTED OTHERWISE AND ALL WORK WILL BE OF GOOD QUALITY AND FREE FROM FAULTS AND DEFECTS.
- 4. SUB-CONTRACTORS SHALL INSURE THAT ALL MORK IS DONE IN A PROFESSIONAL WORKMANLIKE MANNER BY SKILLED MECHANICS AND SHALL REPLACE ANY MATERIALS OR ITEMS DAMASED BY SUB-CONTRACTOR'S PERFORMANCE. SUB-CONTRACTOR'S AND SUPPLIERS ARE HEREBY NOTHERD THAT THEY ARE TO CONFER AND COOPERATE FULLY MITH EACH OTHER DURING THE COURSE OF CONSTRUCTION TO DETERMINE THE EXACT EXTENT AND OVERLAP OF EACH OTHER'S WORK AND TO SUCCESSFULLY COMPLETE THE EXECUTION OF THE WORK. ALL SUB-CONTRACTOR WORKMANSHIP SHALL BE OF GUALITY TO PASS INSPECTIONS BY LOCAL AUTHORITIES, LENDING INSTITUTIONS, ARCHITECT OR BUILDER. ANY ONE OR ALL OF THE ABOVE MENTIONED INSPECTORS MAY INSPECT WORKMANSHIP AT ANY TIME, AND CORRECTIONS NEEDED TO ENHANCE THE GUALITY OF BUILDING MILE BE DONE INMEDIATELY. EACH SUBCONTRACTOR, UNLESS SPECIFICALLY EXPMPTED BY THE TERMS OF HIS/HERS SUB-CONTRACT AGREEMENT, SHALL BE RESPONSIBLE FOR CLEANING UP AND REMOVING FROM THE JOB SITE ALL TRASH AND DEBRIS NOT LETT BY OTHER SUB-CONTRACT AGREEMENT, SHALL BE RESPONSIBLE FOR CLEANING UP AND REMOVING FROM THE JOB SITE ALL TRASH AND DEBRIS NOT LETT BY OTHER SUB-CONTRACT OR DUILDER MILL DETERMINE HOW SOON AFTER SUB-CONTRACT OR COMPLETES EACH PHASE OF HIS MORK. THAT TRASH AND DEBRIS BE REMOVED FROM THE SITE.
- O. APPROVAL BY THE BUILDING INSPECTOR DOES NOT MEAN APPROVAL OR ALLOMABLE FAILURE TO COMPLY WITH THE PLANS AND SPECIFICATIONS. ANY DESIGN WHICH FAILS TO BE CLEAR OR IS AMBIGUOUS MUST BE REFERRED TO THE ARCHITECT OR ENGINEER FOR INTERPRETATION OR CLARIFICATION.
- ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED UNDER THESE PLANS SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK BY OWNER UNLESS STIPULATED OTHERWISE.
- ALL TRADE NAMES AND BRAND NAMES CONTAINED HEREIN ESTABLISH
  QUALITY STANDARDS. SUBSTITUTIONS ARE PERMITTED, WITH PRIOR
  APPROVAL BY THE OWNERS REPRESENTATIVE. THE CONTRACTOR SHALL
  SUBMIT FOR THE ARCHITECT'S AND BUILDERS' APPROVAL ALL MATERIALS
  OR EQUIPMENT WHICH IS CONSIDERED "OR EQUIPMENT WHICH IS CONSIDERED" OR EQUIPMENT WHICH IS CONSIDERED.
- IB. CONSTRUCTION DOCUMENTS IDENTIFIED AS "BID SET" ON ANY OR ALL SHEETS MAY BE SUBJECT TO REVIEW. THIS REVIEW MAY RESULT IN CHANGES WHICH MAY BE MADE TO THE PLANS PRIOR TO THE ISSUANCE OF THE FINAL CONSTRUCTION SET WHICH WILL CONTAIN NO "BID SET" DESIGNATIONS. CONSTRUCTION DOCUMENTS IDENTIFIED AS "BID SET" ARE NOT TO BE CONSTRUED AS BEING THE COMPLETED OR FINAL DRAWINGS AND THEY SHOULD NOT IN ANY WAY BE USED AS SUCH.
- ALL STANDARD NOTES CONTAINED HEREIN ARE TYPICAL UNLESS NOTED OTHERWISE.
- TYPICAL DETAILS AND SPECIFICATIONS ARE MINIMUM REQUIREMENTS TO BE USED WHEN CONDITIONS ARE NOT SHOWN OTHERWISE.
- 16. SPECIFIC NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.
- SEE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR PITS, TRENCHES, ROOF OPENINGS, DEPRESSIONS, ETC. NOT SHOWN ON THE OTHER DRAWINGS.
- 18. THE CONSTRUCTION DOCUMENTS AND ALL COPIES THEREOF FURNISHED TO CONTRACTOR ARE THE PROPERTY OF THE ARCHITECT AND ARE NOT TO BE USED ON OTHER WORK.

#### SITE WORK

- CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSFOOLS, CISTERNS, FOUNDATIONS, ETC., AND BURIED ARTIFACTS SUCH AS INDIAN OR DINOSAUR BONES. IF ANY SUCH ITEMS ARE FOUND THE ARCHITECT, CIVIL ENGINEER, AND SOILS ENGINEER SHALL BE NOTIFIED IMPEDIATELY.
- CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO FULLY PROTECT ADJACENT PROPERTIES.
- REFER TO THE SOILS REPORT AS PREPARED BY THE GEOTECHNICAL ENGINEER.
- 4. REFER TO CIVIL ENGINEER'S CURRENT GRADING AND PLOT PLANS.

#### SITE WORK (continued)

- REFER TO THE LANDSCAPE ARCHITECT'S CURRENT GRADING PLAN AND CONSTRUCTION DOCUMENTS.
- ALL FOOTINGS SHALL REST ON FIRM NATURAL SOIL OR APPROVED COMPACTED FILL. REFER TO GEOTECHNICAL REPORT.
- 7. EXCAVATIONS FOR FOOTINGS SHALL BE MADE TO THE WIDTH,
  LENGTH, AND DEPTH REQUIRED AND FINISHED WITH LEVEL BOTTOMS.
- 8. EXCAVATIONS SHALL BE KEPT FREE OF STANDING WATER.
- WHERE EXCAVATIONS ARE MADE TO A DEPTH GREATER THAN INDICATED, SUCH ADDITIONAL DEPTH SHALL BE FILLED WITH CONCRETE AS SPECIFIED FOR FOOTINGS.
- FILL MATERIALS SHALL BE FREE FROM DEBRIS, VEGETABLE MATTER AND OTHER FOREIGN SUBSTANCES.
- II. ALL FINISH GRADES TO DRAIN AWAY FROM THE BUILDING FOOTINGS.
- 12. THERE SHALL BE NO ON-SITE WATER RETENTION.
- 13. THERE SHALL BE NO DRAINAGE TO ADJACENT PROPERTY.
- FOR ONSITE CONTSRUCTION, PLANS TO COMPLY WITH NECESSARY INSPECTIONS APPROVED BY THE BUILDING OFFICIAL.
- 15. THE REQUIREMENTS IN THESE NOTES ARE THE MINIMUM THAT SHALL BE MET. REQUIREMENTS OF THE STRUCTURAL DRAWINGS THAT EXCEED THE REQUIREMENTS SHOWN HERE SHALL BE MET.

#### CONCRETE

- REFER TO STRUCTURAL ENGINEERING CALCULATIONS AND SOILS REPORT FOR THE PERFORMANCE REQUIREMENTS FOR CONCRETE FOUNDATIONS.
- CONCRETE SHALL BE PROPORTIONED TO PROVIDE AN AVERAGE COMPRESSIVE STRENGTH AS PRESCRIBED IN THE N.C.-R. AS WELL AS SATISFY THE DURABILITY CRITERIA OF THE N.C.-R
- MIXING OF CONCRETE SHALL BE PERFORMED IN ACCORDANCE WITH ACI 318, SECTION 5.8.
- 4. THE DEPOSITING OF CONCRETE SHALL COMPLY WITH THE PROVISIONS ACI 318, SECTION 5.10.
- THE CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318. SECTION 5.II.
- 6. ALL FORM WORK SHALL BE DESIGNED, CONSTRUCTED, UTILIZED, AND REMOVED
- CONDUIT, PIPES AND SLEEVES OF ANY MATERIAL NOT HARMFUL TO CONCRETE AND WITHIN THE LIMITATIONS OF ACI 318, SECTION 6.3, ARE PERMITTED TO BE EMPEDDED IN CONCRETE WITH APPROVAL OF THE RESISTERED DESIGN PROFESSIONAL.
- CONSTRUCTION JOINTS INCLUDING THEIR LOCATION SHALL COMPLY WITH THE PROVISIONS OF ACI 318, SECTION 6.4.
- ALL STEEL REINFORCING OF CONCRETE SHALL BE DONE IN ACCORDANCE WITH THE N.C.-R
- IO. TOP OF CONCRETE SLABS TO BE A MINIMUM 4" W/ MASONRY VENEER 6" ELSEWHERE (8" H.J.D.) ABOVE FINISH GRADE.
- II. FOUNDATION WIDTHS, DEPTHS, AND REINFORCING, AS SHOWN ON PLANS, ARE SUPERCEDED BY ANY LOCAL CODES OR ORDINANCES WHICH REQUIRE INCREASES OF THE SAME.
- 12. ALL REINFORCEMENT, CONDUIT, OVILET BOXES, ANCHORS, HANGERS, SLEVES, BOLTS OR OTHER ENDEDDED MATERIALS AND ITEMS MUST BE SECURED AND APPROPRIATELY FASTENED IN THEIR PROPER LOCATIONS PRIOR TO THE PLACEMENT OF CONCRETE. SUBJ CONTRACTOR SHALL VERIFY INSTALLATION OF HOLD-DOWNS, ANCHOR BOLTS, PA STRAPS, AND CITHER ANCHORAGE MATERIAL AND ITEMS PRIOR TO PLACEMENT OF CONCRETE.
- B. POST-TENSION SLABS, IF APPLICABLE:
- POINT AND LINE LOADS FROM STRUCTURE ABOVE TO BE PROVIDED TO POST-TENSION ENGINEER PRIOR TO POST-TENSION DESIGN.
- B. ANCHOR BOLTS AND OTHER HARDWARE TO BE SHOWN ON POST-TENSION PLANS TO AVOID MIS-LOCATION OF HARDWARE AND POSSIBLE FIELD FIXES WHICH MAY CUT TENDONS.

#### MASONRY

- ALL MASONRY DESIGN SHALL FOLLOW THE REQUIREMENTS OF THE CURRENT ADOPTED CODES.
- ANCHORED MASONRY VENEER SHALL COMPLY WITH THE PROVISIONS OF N.C.-R, AND SECTIONS 6.1 AND 6.2 OF ACI 530/ASCE 5.7119 402.
- STONE VENEER UNITS NOT EXCEEDING 5 INCHES IN THICKNESS SHALL BE ANCHORED DIRECTLY TO MASONRY, CONCRETE OR TO STUD CONSTRUCTION BY ONE OF THE APPROVED METHODS LISTED IN THE N.C.-R.
- 4. MORTAR FOR USE IN MASONRY CONSTRUCTION SHALL COMPLY WITH ASTM C 270. THE TYPE OF MORTAR SHALL BE IN ACCORDANCE WITH THE NC.-R AND SHALL MEET THE PROPORTION SPECIFICATIONS OR THE PROPERTY SPECIFICATIONS OF ASTM C 270
- GROUT SHALL CONSIST OF FIBER CEMENT MATERIAL AND AGGREGATE IN ACCORDANCE WITH ASTM C 416 AND THE PROPORTION SPECIFICATIONS PER THE N.C.-R
- AGGREGATES FOR MORTAR AND GROUT SHALL BE NATURAL SAND AND ROCK CONFORMING TO A.S.T.M. C-I44-04 (MASONRY MORTAR) AND C-404-07 (GROUT).
- 7. CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO A.S.T.M. C 150.
- 8. ALL BRICK SHALL CONFORM TO A.S.T.M. C 216, GRADE MW.
- UNLESS SPECIFICALLY SHOWN OTHERWISE ALL BRICK SHALL BE LAID IN A RUNNING BOND PATTERN.
- IO. ANCHORS, TIES AND WIRE FABRIC SHALL CONFORM TO N.C.-R
- ANCHOR TIES AND WIRE FABRIC FOR USE IN MASONRY WALL CONSTRUCTION SHALL CONFORM TO THE N.C.-R

#### METALS

- REFER TO STRUCTURAL NOTES AND SPECIFICATIONS FOR STRUCTURAL STEEL, METAL AND REINFORCING STEEL SPECIFICATIONS.
- 2. ALL STRUCTURAL STEEL SHALL CONFORM TO AISC/CRED
- ANCHOR RODS SHALL BE SET ACCURATELY TO THE PATTERN AND DIMENSIONS CALLED FOR ON THE PLANS. THE PROTRUSION OF THE THREADED ENDS THROUGH THE CONNECTED MATERIAL SHALL BE SUFFICIENT TO FLULY ENGAGE THE THREADS OF THE NITS, BUT SHALL NOT BE GREATER THAN THE LENGTH OF THE THREADS ON THE BOLTS
- 4. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER VERIPY ACCEPTABLE FASTENERS FER CHEMICALS USED IN PRESSURE PRESERVITIVELY TREATED WOOD M N.C.-R. FASTENINGS FOR MOOD FOUNDATIONS SHALL BE AS REQUIRED IN AF8PA TECHNICAL REPORT NO. T.

#### MOOD & FRAMING

#### LUMBER

- THE DESIGN AND CONSTRUCTION OF CONVENTIONAL LIGHT-FRAME WOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE N.C.-R
- CONSTRUCTION, PROJECTIONS, OPENINGS AND PENETRATIONS OF EXTERIOR WALLS OF DWELLINGS AND ACCESSORY BUILDINGS SHALL COMPLY WITH TABLE R802.1.
- ALL LUMBER SHALL MEET THE STANDARDS OF QUALITY AS STATED IN THE N.C.-R
- LUMBER AND PLYMOOD REQUIRED TO BE PRESSURE PRESERVATIVELY TREATED IN ACCORDANCE WITH THE N.C.-R AND SHALL BEAR THE QUALITY MARK OF AN APPROVED INSPECTION AGENCY THAT MAINTAINS CONTINUING SUPERVISION, TESTING AND INSPECTION OVER THE QUALITY OF THE PROPUCE TAND THAT HAS BEEN APPROVED BY AN ACCREDITATION BODY THAT COMPILES WITH THE REQUIREMENTS OF THE AMERICAN LUMBER STANDARD COMMITTEE TREATED WOOD PROGRAM.
- 5. ALL LUMBER SIZES NOTED AND SPECIFIED ON PLANS ARE NOMINAL SIZES UNLESS SPECIFICALLY INDICATED AS NET SIZE.

#### GLUE LAMINATED LUMBER

- REFER TO THE STRUCTURAL ENGINEER'S CURRENT NOTES, CALCULATIONS, AND SPECIFICATIONS.
- GLUED LAMINATED TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED IN AITC AIGO. I AND ASTM D 3737.

#### PROTECTION AGAINST DECAY & TERMITE

- . IN AREAS SUBJECT TO DECAY DAMAGE AS ESTABLISHED BY THE NC.-R 2. THE FOLLOWING LOCATIONS SHALL REQUIRE THE USE OF NATURALLY DURABLE WOOD OF WOOD THAT IS PRESERVATIVE TREATED IN ACCORDANCE WITH AWAR UI FOR THE SPECIES, PRODUCT, PRESERVATIVE 3. AND END USE, PRESERVATIVES SHALL BE LISTED IN SECTION 4 OF AMPA UI
- WOOD JOISTS OR THE BOTTOM OF WOOD FLOOR WHEN CLOSER THAN 18 INCHES, OR WOOD GIRDERS WHEN CLOSER THAN 12 INCHES TO THE EXPOSED GROUND IN CRANL SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION.
- ALL EXTERIOR SILLS &PLATES THAT REST ON CONCRETE OR MASONRY 5. EXTERIOR FOUNDATION WALLS.
- SILLS AND SLEEPERS ON A CONCRETE OR MASONRY, UNLESS THE SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND IS SEPARATE FROM THE GROUND BY AN APPROVED IMPERVIOUS MOISTURE BARRIER.
- THE ENDS OF WOOD GIRDERS ENTERING EXTERIOR MASONRY OR CONCRETE WALLS HAVING CLEARANCES OF LESS THAN 0.5 INCH ON TOPS, SIDES AND ENDS.
- MOOD SIDING AND SHEATHING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND.
- . MOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOPS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE OR MASONRY SLABS, INLESS SEPARATED FROM SUCH FLOORS OR ROOPS BY ANIMPERVIOUS MOISTURE BARRIER.
- 7. WOOD FURRING STRIPS OR OTHER WOOD FRAMING MEMBERS ATTACHED 2. DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY WALLS OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED VAPOR RETARDER IS APPLIED BETWEEN THE WALL AND THE FURRING S. STRIPS OR FRAMING MEMBERS.
- ALL PORTIONS OF A PORCH, SCREEN PORCH OR DECK FROM THE BOTTOM OF THE HEADER DOWN, INCLIDING POSTS, GUARDRAILS, PICKETS, STEPS AND FLOOR STRUCTURE, COVERINGS THAT MOULD PREVENT MOISTURE OR WATER ACCUMILATION ON THE SURFACE OR AT JOINTS BETWEEN MEMBERS ARE ALLOWED.
- B. IN AREAS SUBJECT TO DAMAGE FROM TERMITES METHODS OF PROTECTION SHALL BE ONE OF THE METHODS LISTED IN THE N.C.-R
- UNDER-FLOOR AREAS SHALL BE VENTILATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.C.-R

# MOOD \$ FRAMING (continued)

#### SHEATHING

- WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS AS SET FORTH IN THE N.C.-R
- ROOF SHEATHING PANELS SHALL BE LAID WITH FACE GRAIN OR STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND MITH PANEL CONTINUOUS OVER TWO OR MORE SPANS.
- ROOF SHEATHING SHALL BE IN ACCORDANCE WITH THE N.C.-R
- FLOOR SHEATHING PANELS SHALL BE LAID WITH FACE GRAIN OR STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS.
- 5. STRUCTURAL FLOOR SHEATHING SHALL COMPLY WITH THE PROVISIONS OF THE N.C.-R
- . REFER TO THE STRUCTURAL ENGINEER'S CURRENT SPECIFICATIONS, CALCULATIONS, AND PLANS FOR REQUIRED STRENGTH, GRADE, AND THICKNESS FOR PLYMOOD FLOOR SHEATHING PANELS AND FOR DIAPHRAGM NAILING AND ADHESIVE REQUIREMENTS.
- ALL VERTICAL JOINTS OF PANEL SHEATHING SHALL OCCUR OVER, AND BE FASTENED TO, COMMON STUDS. HORIZONTAL JOINTS IN BRACED WALL PANELS SHALL OCCUR OVER, AND BE FASTENED TO, COMMON BLOCKING OF A MINIMUM OF I I/2 INCH THICKNESS.
- WHERE APPLICABLE, REFER TO THE SHEAR WALL SCHEDULE FOR REQUIRED STRENGTH, GRADE, AND THICKNESS OF PLYMOOD SHEAR PANELS AND FOR REQUIRED SHEAR WALL NAILING SCHEDULE.
- IN ONE- AND TWO-FAMILY DWELLING CONSTRUCTION USING <u>HARD BOARD</u>
  OR ALUMINUM AS A SOFFIT MATERIAL, THE SOFFIT MATERIAL SHALL BE
  SECURELY ATTACHED TO FRAMING MEMBERS AND USE AN
  UNDERLAYMENT MATERIAL OF EITHER FIRE RETARDANT TREATED WOOD,
  23/92 INCH WOOD SHEATHING OR 5/8 INCH GYPSUM BOARD, VENTING
  REGUIREMITS APPLY TO BOTH SOFFIT AND UNDERLAYMENT AND SHALL
  BE PER SECTION ROOF OF THE NORTH CAROLINA RESIDENTIAL CODE.
  WHERE THE PROPERTY LINE IS 10 FEET OR MORE FROM THE BUILDING
  FACE, THE PROVISIONS OF THIS CODE SECTION DO NOT APPLY.

#### FLOOR FRAMING

- ALL FLOOR JOISTS SHALL BE DESIGNED I-JOIST WOOD FLOOR TRUSSES.
   REFER TO MANUFACTURER FOR ALL LAYOUTS AND CALCULATIONS.
- . REFER TO THE STRUCTURAL ENGINEER'S CURRENT PLANS & CALCULATIONS FOR SIZE, SPACING, AND ANCHORAGE OF ALL FLOOR JOISTS, SIZE, LOCATION, AND ANCHORAGE OF ALL FLOOR BEAMS AND HEADERS; AND ALL RELATED FRAMING ISSUES.

#### ROOF FRAMING

- ROOF FRAMING SHALL BE BY PRE-MANUFACTURED ROOF TRUSSES SPACED AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE.
- WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.C.-R
- THE MANUFACTURER SHALL SUPPLY TO THE ARCHITECT AND BUILDER CALCULATIONS AND SHOP DRAWINGS FOR APPROVAL OF DESIGN LOADS, CONFIGURATION (2 OR 3 POINT BEARINS), VOLUME CEILING OPTIONS, AND SHEAR TRANSFER, PRIOR TO FABRICATION.
- . THE BRACING OF WOOD TRUSSES SHALL COMPLY TO THEIR APPROPRIATE ENGINEERED DESIGN. PER THE N.C.-R
- 5. TRUSS MEMBERS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY MAY WITHOUT THE APPROVAL OF A REGISTERED DESIGN PROFESSIONAL. ALTERATIONS RESULTING IN THE ADDITION OF LOAD (E.G. HVAC EQUIPMENT, WATER HEATER) THAT EXCEEDS THE DESIGN LOAD FOR THE TRUSSES SHALL NOT BE PERMITTED WITHOUT INRITTEN VERFICATION THAT THE TRUSS IS CAPABLE OF SUPPORTING SUCH ADDITIONAL LOADING.
- ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHEREIN THE PROJECT IS TO BE BUILT.
- MANUFACTURER IS TO SECURE BUILDING DEPARTMENT APPROVAL OF CALCULATIONS AND SHOP DRAWINGS PRIOR TO FABRICATION.

#### WALL FRAMING

- I. THE SIZE, HEIGHT, AND SPACING OF STUDS SHALL BE IN ACCORDANCE
- STUDS SHALL BE PLACED WITH THEIR WIDE DIMENSION PERPENDICULAR TO THE WALL.
- NOT LESS THAN THREE STUDS SHALL BE INSTALLED AT EACH CORNER OF AN EXTERIOR WALL.
- 4. WOOD STUD WALLS SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND INTERSECTION MITH BEARING PARTITIONS, END JOINTS IN TOP PLATES SHALL BE OFFSET AT LEAST 24 INCHES, JOINTS NEED NOT OCCUR OVER STUDS, PLATES SHALL BE NOT LESS THAN 2-INCHES NOMINAL THICKNESS AND HAVE A WIDTH AT LEAST EQUAL TO THE WIDTH OF THE STUDS, SEE EXCEPTIONS.
- WHERE JOISTS, TRUSSES OR RAFTERS ARE SPACED MORE THAN 16 INCHES ON CENTER AND THE BEARING STUDS BELOW ARE SPACED 24 INCHES ON CENTER, SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES OF THE STUDS BENEATH. SEE EXCEPTIONS.
- STUDS SHALL HAVE FULL BEARING ON NOMINAL 2 BY OR LARGER PLATE OR SILL HAVING A WIDTH AT LEAST EQUAL TO THE WIDTH OF THE STUDS.
- 7. INTERIOR NONBEARING WALLS SHALL BE PERMITTED TO BE CONSTRUCTED MITH 2-INCH-BY-3-INCH STUDS SPACED 24 INCHES ON CENTER OR, WHEN NOT A PART OF A BRACED MALL LINE, 2-INCH-BY-4-STUDS SPACED 16 INCHES ON CENTER. INTERIOR NONBEARING WALLS SHALL BE CAPPED WITH AT LEAST A SINGLE TOP PLATE. INTERIOR NONBEARING WALSHALL BE FIREBLOCKED IN ACCORDANCE WITH THE NC-R.

# WOOD & FRAMING (continued)

- 8. DRILLING AND NOTHCING OF STUDS SHALL BE IN ACCORDANCE WITH THE
  - I. NOTHCING, ANY STUD IN AN EXTERIOR MALL OR BEARING PARTITION MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH, STUDS IN NODEARING PARTITIONS MAY BE NOTCHED TO A DEPTH NOT TO EXCEED 40 PERCENT OF A SINGLE STUD MIDTH. NOTCHING OF BEARING STUDS SHALL BE ON ONE EDGE ONLY AND NOT TO EXCEED ONE-FOURTH THE HEIGHT OF THE STUD. NOTCHING SHALL NOT OCCUR IN THE BOTTOM OR TOP 6 INCHES OF BEARING STUDS.
  - DRILLING, ANY STUD MAY BE BORED OR DRILLED, PROVIDED THAT THE DIAMETER OF THE RESULTING HOLE IS NO MORE THAN 60 PERCENT OF THE STUD MIDTH, THE EDGE OF THE HOLE IS NO MORE THAN 50'S INCH TO THE EDGE OF THE STUD, AND THE HOLE SHALL NOT BE CLOSER THAN 6 INCHES FROM AN ADJACENT HOLE OR NOTCH. HOLES NOT EXCEEDING 3/4 INCH DIAMETER CAN BE AS CLOSE AS I I/2 INCHES ON CENTRE SPACING, STUDS LOCATED IN EXTERIOR WALLS OR BEARING PARTITIONS DRILLED OVER 40 PERCENT AND UP TO 60 PERCENT SHALL ALSO BE DOUBLED WITH NO MORE THAN TWO SUCCESSIVE DOUBLED STUDS BORED.
  - S. CUTTING AND NOTCHING OF STUDS SHALL BE PERMITTED TO BE INCREASED TO 65 FERCENT OF THE WIDTH OF THE STUD IN EXTERIOR AND INTERIOR MALLS AND EARNING PARTITIONS, PROVIDED THAT ONE OF THE FOLLOWING CONDITIONS ARE MET:

    (a) THE WALL SECTION IS REINFORCED WITH 1/2-INCH EXTERIOR GRADE PLYWOOD OR EQUIVALENT REINFORCEMENT ON THE NOTCHED SIDE OF THE WALL, PLYWOOD, IF USED, SHALL REACH FROM THE FLOOR TO CEILING AND AT LEAST ONE STUD FURTHER ON EACH SIDE OF THE SECTION THAT HAS BEEN NOTCHED OR CUT.

    (b) THE EXTERIOR WALLS OF A KITCHEN MAY BE REINFORCED BY PLACING 1/2-INCH PLYWOOD OR EQUIVALENT REINFORCEMENT ON THE NOTCHED SIDE OF THE WALL. PLYWOOD, IF USED, SHALL REACH FROM THE FLOOR TO COUNTER-TOP HEIGHT AND AT LEAST ONE STUD FURTHER ON EACH SIDE OF THE SECTION THAT HAS BEEN NOTCHED OR CUT.
- MEN PIPING OR DUCTHORK IS PLACED IN OR PARTIALY IN AN EXTERIOR OR INTERIOR LOAD-BEARING WALL, NECESSITATION CUTTING, DRILLING OR NOTCHING OF THE TOP PLATE B MORE THAN 50 PERCENT OF ITS MIDTH A GALYANIZED METAL TIE OF NOT LESS THAN 0.054 INCH THICK AND 1 1/2" INCHES MIDE SHALL BE FASTENED ACROSS AND TO THE PLATE AT EACH SIDE OF THE OPENING WITH NOT LESS THAN EIGHT IOD NAILS HAYING A MINIMM LENTH OF I I/2 INCHES (38 MIN) AT EACH SIDE OR EQUIVALENT. THE METAL TIE MUST EXTEND A MINIMM OF 6 INCHES PAST THE OPENING.
- IO. HEADERS SHALL MEET THE REQUIREMENTS OF THE N.C.-R.
- II. PROVIDE LATERAL BRACING PER THE N.C.-R
- 13. FOUNDATION CRIPPLE WALLS SHALL MEET THE REQUIREMENTS OF THE
- 14. WOOD STUD WALLS SHALL BE BRACED AS REQUIRED BY THE N.C.-F
- I5. WILESS COVERED BY INTERIOR OR EXTERIOR WALL COVERINGS OR SHEATHING MEETING THE MINIMAM REQUIREMENTS OF THIS CODE, ALL STUD PARTITIONS OR WALLS WITH STUDS HAVING A HEIGHT-TO-LEAST THICKINESS RATIO EXCEEDING BO SHALL HAVE BRIDGING NOT LESS THAN 2 INCHES IN THICKINESS AND OF THE SAME WIDTH AS THE STUDS FITTED SNUSLY AND NAILED THERETO TO PROVIDE ADEQUATE LATERAL SUPPORT.

#### FIRE BLOCKS AND DRAFT STOPS

- FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND A ROOF SPACE. FIREBLOCKING SHALL BE PROVIDED IN MOOD-FRAME CONSTRUCTION IN THE LOCATIONS SPECIFIED IN THE N.C.-R
- 2. FIRE BLOCKING SHALL CONSIST OF 2 INCHES NOMINAL LUMBER, OR TWO THICKNESSES OF I-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS, OR ONE THICKNESS OF 23/92-INCH WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 23/92-INCH WOOD STRUCTURAL PANELS OR ONE THICKNESS OF 3/4-INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH PARTICLEBOARD, I/2-INCH GYPSOM BOARD, OR I/4-INCH CEMENT-BASED
- BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE SHALL BE PERMITTED AS AN ACCEPTABLE FIRE BLOCK.
- 4. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE FERMITTED FOR COMPLIANCE WITH THE 10 FOOT HORIZONTAL FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROVE OF STUDS OR STAGGERED STUDS. LOOSE FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK WILESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE IT'S ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASSES.
- 5. WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED JOOD SQUARE FEET, DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL, AREAS, WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING MEMBRANE BELOW, DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES.

CEILING IS SUSPENDED UNDER THE FLOOR FRAMING.

- FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS.
- HANDRAIL AND GUARDRAIL

  I. GUARDRAIL OF 36" HIGH MIN. SHALL BE PROVIDED WHERE FINISHED GRADE
  OR FLOOR BELOW RAISED AREA EXCEEDS 30".
- HANDRAIL AT STAIRS SHALL BE PROVIDED WHEN 4 OR MORE STAIR RISERS



# NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD.
SUITE 180
DURHAM, NC 27703
TEL: (919) 768-7988
FAX: (919) 472-0582

2018 NORTH
CAROLINA STATE
BUILDING
CODES

. . . .

ISSUE DATE: 12/13/19
PROJECT No.: 1350999:57
DIVISION MGR.: MP

REVISIONS:

VENTILATION
NC2008NCP/ 01/17/20 /KBA

FOR INTERNAL USE ONLY

VIENCE BY:

1
2
9
4
5
6

150.1910-R
SHEET:
GN1
SPEC. LEVEL 1
RALEIGH-DURHAM

50' SERIES

#### THERMAL & MOISTURE PROTECTION

- PROVIDE ALL FLASHING, COUNTER-FLASHING, BITUTHENE, MEMBRANE WATERPROOFING, SHEET METAL, CAULKING, SEALANTS, ELASTOMERIC WALKING SURFACES, AND RAIN GUITERS AND/OR DIVERTERS WHERE REQUIRED, TO MAKE WORK COMPLETELY WATERPROOF.
- "CORROSION RESISTANCE" SHALL MEAN THE ABILITY OF A MATERIAL TO WITHSTAND DETERIORATION OF IT'S SURFACE OR IT'S PROPERTIES WHEN EXPOSED TO IT'S ENVIRONMENT.
- PROVIDE A MINIMUM 2 INCH DROP FROM FINISHED INTERIOR FLOOR ELEVATION TO THE HIGHEST FLOOR ELEVATION OF ANY ADJOINING DECK OR BALCONY.
- ELASTOMERIC OR MEMBRANE DECK COATINGS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS AT DECKS AND BALCONIES. COLOR, FINSH, AND DETAILING SHALL BE APPROVED BY OWNER/ BUILDER AND ARCHITECT.
- UNLESS DESIGNED TO DRAIN OVER DECK EDGES, DRAINS AND OVER-FLOMS OF ADEQUATE SIZE SHALL BE INSTALLED AT THE LOW POINTS OF THE DECK OR BALCONY.
- FOUNDATION WALLS WHERE THE OUTSIDE GRADE IS HIGHER THAN THE INSIDE GRADE SHALL BE WATER-PROOFED AND DAMPPROOFED IN ACCORDANCE WITH THE N.C.-R
- PARAPET WALLS SHALL BE PROPERLY COPED WITH NONCOMBUSTIBLE. PACATHERPROOF MATERIALS OF A MIDTH NO LESS THAN THE THICKNESS OF THE PARAPET WALL. PARAPET COPING SHALL EXTEND 2" MINIMUM DOWN THE FACES OF THE PARAPET

#### FLASHING

- APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANIER TO PREVENT ENTRY OF MATER INTO THE MALL IZ. CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS, SELF-ADHRED DEMORRANES USED AS FLASHING IN COMPLY WITH AAMA TII. FLUID-APPLIED MEMBRANES USED AS FLASHING IN IS. EXTERIOR WALLS SHALL COMPLY WITH AAMA TII. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH, ALLMINUM FLASHING SHALL ON THE SURFACE OF THE EXTERIOR WALL FINISH, ALLMINUM FLASHING SHALL ON THE SURFACE OF THE EXTERIOR WALL FINISH, ALLMINUM FLASHING SHALL DECENTED TO THE SURFACE OF THE EXTERIOR WALL FINISH, ALLMINUM FLASHING SHALL DECENTED TO THE SURFACE OF THE FISHER CEMENT MATERIAL EXCEPT AT COUNTER FLASHING. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE ALLED AT ALL OF THE LOCATIONS STATED IN N.C.-R
- 2. AT ALL WINDOW AND DOOR OPENINGS USE FORTIFIBER WATER-RESISTIVE BARRIERS, I.C.C. ESR-IO27, INSTALLED PER MANUFACTURER'S SPECIFICATIONS OR APPROVED EQUAL.
- ALL BEAMS, OUTLOOKERS, CORBELS, ETC. PROJECTED THROUGH EXTERIOR WALLS OR PENETRATING EXTERIOR FINISHES SHALL BE FLASHED WITH A MINIMUM O.O.I9-INCH (NO. 26 SHEET METAL GAGE) CORROSION-RESISTANT METAL AND CAULKED
- ALL SHEET METAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS AND STANDARDS OF THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION (SMACNA). THE ARCHITECTURAL SHEET METAL ANNUAL, AND SEALANT, WATERPROOFING AND RESTORATION INSTITUTE'S (SWR.I.) GUIDE -SEALANT'S: THE PROFESSIONAL'S GUIDE".
- SHEET METAL SHALL BE STEEL SHEET, HOT-DIPPED, TIGHT COATED SALE HIGHAL DE PALLE SELE SALE IN ROTH PIPE IN HOME CONTENT AND GALVANIZED, CONFORMING TO A.S.T.M. A525 AND SHALL BE A NUMBER 24 SHEET METAL GAGE UNLESS OTHERWISE NOTED IN THESE NOTES, PLANS, OR MANUFACTURER'S SPECIFICATIONS.
- SHEET ALUMINUM SHALL CONFORM WITH FEDERAL SPECIFICATIONS QQ-A-359 AND A.S.T.M. B209 ALLOY 3003.
- FABRICATE SHEET METAL WITH FLAT LOCK SEAMS AND SOLDER WITH TYPE AND FLUX RECOMMENDED BY MANUFACTURER. SEAL ALUMINUM SEAMS WITH EPOXY METAL SEAM CEMENT. WHERE REQUIRED FOR STRENGTH, RIVET SEAMS AND JOINTS.
- SHOP FABRICATE TO THE GREATEST EXTENT POSSIBLE IN ACCORDANCE WITH APPLICABLE STANDARDS TO PROVIDE A PERMANENTLY WATER-PROOF, MEATHER RESISTANT INSTALLATION.
- ASPHALT SHINGLES SHALL HAVE SELF-SEAL STRIPS OR BE INTERLOCKING, AND COMPLY WITH ASTM D 225 OR D 3462.
- BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION-RESISTANT METAL OF MINIMM MOMINAL, O/014-INCH THICKNESS OR MINERAL SURFACE ROLL ROOFING MEIGHING A MINIMM OF TI POUNDS PER IOO SOURABLE FEET. CAP FLASHING SHALL BE CORROSION-RESISTANT METAL OF MINIMM NOMINAL O/014-INCH THICKNESS
- VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS BEFORE APPLYING SHINGLES, VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED AS STATED PER THE N.C.-R
- A CRICKET OR SADDLE SHALL BE INSTALLED ON THE RIDGE SIDE OF ANY CHIMMEY OR PENETRATION MORE THAN 30 INCHES WIDE AS MEASURED PERPENDICULAR TO THE SLOPE. CRICKET OR SADDLE COVERINGS SHALL BE SHEET METAL OR OF THE SAME MATERIAL AS THE ROOF COVERING. VIDE FLASHING AT THE INTERSECTION OF CRICKET OR SADDLE AND
- FLASHING AGAINST A VERTICAL SIDEMALL SHALL BE BY THE STEP-FLASHING METHOD PER NC-R.
- FLASHING AGAINST A VERTICAL FRONT WALL, AS WELL AS SOIL STACK ASPHALT SHINGLE MANUFACTURER'S PRINTED INSTRUCTIONS
- AT THE JUNCTURE OF ROOF VERTICAL SURFACES, FLASHING AND COUNTERFLASHING SHALL BE PROVIDED IN ACCORDANCE WITH THE N.C.-R. AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND NHERE OF METAL, SHALL NOT BE LESS THAN O.O.I. INCH (NO. 26 GALVANIZED
- 16. VALLEY FLASHING FOR CONCRETE TILE ROOFS SHALL BE AS REQUIRED

#### ROOFING MATERIALS

- ROOF COVERINGS SHALL BE APPLIED IN ACCORDANCE WITH THE N.C.-R AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALLATION OF ROOF COVERINGS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF THE N.C.-R
- ROOFS AND ROOF COVERINGS SHALL BE OF MATERIALS THAT ARE COMPATIBLE WITH EACH OTHER AND WITH THE BUILDING OR STRUCTURE TO WHICH THE MATERIALS ARE APPLIED.
- ROOF COVERING MATERIALS SHALL CONFORM TO THE APPLICABLE STANDARDS LISTED IN THE N.C.-R IN THE ABSENCE OF APPLICABLE STANDARDS OR WHERE MATERIALS ARE OF QUESTIONABLE SUITABILITY, TESTING BY AN APPROVED TESTING AGENCY SHALL BE REQUIRED BY THE BUILDING OFFICIAL TO DETERMINE THE CHARACTER. QUALITY, AND LIMITATIONS OF APPLICATION OF THE MATERIALS.

#### THERMAL & MOISTURE PROTECTION (continued)

- ROOF COVERING MATERIALS SHALL BE DELIVERED IN PACKAGES BEARING THE MANUFACTURER'S IDENTIFYING MARKS AND APPROVED TESTING AGENCY LABELS WHEN REQUIRED. BULK SHIPMENTS OF MATERIALS SHALL BE ACCOMPANIED BY THE SAME INFORMATION ISSUED IN THE FORM OF A CERTIFICATE OR ON A BILL OF LADING BY THE MANUFACTURER
- COMPOSITION ROOFING SHINGLES SHALL BE OF ASPHALT OR APPROVED RELATED MATERIALS AND MEET THE REQUIREME OF THE N.C.-R
- UNDERLAYMENT FOR ASPHALT SHINGLES SHALL CONFORM TO ASTM D 226 TYPE I, ASTM D 4604, TYPE I, OR ASTM D 6 0573. SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET SHALL COMPLY WITH ASTM D 1070
- ASPHALT SHINGLES SHALL COMPLY WITH ASTM D 225 OR ASTM D 3462.
- FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED STEEL, STAINLESS STEEL, ALIMINUM, OR COPPER ROOFING NAILS, MINIMUM I2 GASE SHANK NITH A MINIMUM 38 INCH DIANETER HEAD, ASTM F 1667, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIALS AND A MINIMUM OF 34 INCH INTO THE ROOF SHEATHING, WHERE THE ROOF SHEATHING IS LESS THAN 3/4 INCH THICK, THE FASTENERS SHALL COMPLY WITH ASTM F 1667.
- ASPHALT SHINGLES SHALL HAVE THE MINIMUM NUMBER OF FASTENERS REQUIRED BY THE MANUFACTURER. FOR NORMAL APPLICATION, ASPHALT SHINGLES SHALL BE SECURED TO THE ROOF WITH NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE PER N.C.-R.
- UNDERLAYMENT FOR ASPHALT SHINGLES SHALL BE APPLIED IN ACCOR-DANCE WITH THE N.C.-R
- THE INSTALLATION OF CLAY AND CONCRETE TILE SHALL COMPLY WITH THE PROVISIONS OF N.C.-R CLAY ROOF TILE SHALL COMLY WITH ASTM C 1167.
- CONCRETE AND CLAY TILE SHALL BE INSTALLED ONLY OVER SOLID SHEATHING OR SPACED STRUCTURAL SHEATHING BOARDS
- CLAY AND CONCRETE ROOF TILE SHALL BE INSTALLED ON ROOF SLOPES OF 2 1/2 UNITS VERTICAL IN I2 UNITS HORIZONTAL (2-1/2:12)
  OR GREATER. FOR ROOF SLOPES FROM 2 1/2 UNITS VERTICAL
  IN 12 UNITS HORIZONTAL (2-1/2:12) TO FOUR UNITS VERTICAL
  IN 12 UNITS HORIZONTAL (4-1/2), DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH THE N.C.-R.
- UNDERLAYMENT FOR CLAY AND CONCRETE TILE SHALL CONFORM WITH ASTM D 226, TYPE II; ASTM D 2626 TYPE I; OR ASTM D 6380 CLASS M MINERAL SURFACED ROLL ROOFING.
- 15. CONCRETE ROOF TILE SHALL COMPLY WITH ASTM C 1492.
- NAILS SHALL BE CORROSION-RESISTANT AND NOT LESS THAN II GAGE, SIGLINGH HEAD, AND OF SUPPICIENT LENGTH TO PENETRATE THE DECK.
  A MINIMUM OF 3/4-INCH OR THROUGH THE THICKNESS OF THE DECK.
  A MINIMUM OF 3/4-INCH OR THROUGH THE THICKNESS OF THE DECK.
  HICKNESS IS LESS. ATTACHING WIRE FOR CLAY OR CONCRETE TILE
  SHALL NOT BE SHALLER THAN O.OBS-INCH. PERIMETER FASTENING AREAS
  INCLIDE THREE TILE COURSES BUT NOT LESS THAN 86 INCHES FROM EITHER SIDE OF HIPS OR RIDGES AND EDGES OF EAVES AND GABLE RAKES.
- 17. CLAY AND CONCRETE ROOF TILES SHALL BE FASTENED IN ACCORDANCE WITH THE N.C.-R
- TILE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, BASED ON CLIMATIC CONDITIONS, ROOF SLOPE, INDERLAYMENT SYSTEM, AND TYPE OF TILE BEINS INSTALLED PER THE N.C.-R.
- THE INSTALLTION OF BUILT-UP ROOFS SHALL COMPLY WITH THE N.C.-R
- 20. BUILT-UP ROOFS SHALL HAVE A DESIGN SLOPE OF A MINIMUM OF ONE-FOUTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE)
  FOR DRAINAGE, EXCEPT FOR COAL-TAR BUILT-UP ROOFS THAT SHALL
  HAVE A DESIGN SLOPE OF A MINIMUM ONE-EIGHTH UNIT VERTICAL IN
  12 UNITS HORIZONTAL (1-PERCENT SLOPE).
- 21. BUILT-UP ROOF COVERING MATERIALS SHALL COMPLY WITH THE STANDARDS PER THE N.C.-R

- SEE FINISHES IN THESE GENERAL NOTES FOR EXTERIOR PLASTER
- MATERIALS USED FOR THE CONSTRUCTION OF EXTERIOR WALLS SHALL COMPLY WITH THE PROVISIONS OF THE N.C.-R
- EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLIDE FLASHING, THE EXTERIOR WALL ENVELOPE SHA BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMILATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED AND A MEANS OF DRAINING WATER THAT ENTERS THE ASSEMBLY TO THE EXTERIOR. PROTECTION ASAINST CONDENSATION IN THE EXTERIOR WALL ASSEMBLY SHALL BE PROVIDED.
- ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D 226 FOR TYPE I FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS, SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, MITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES, WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES, THE FELT OR OTHER APPROVED MATERIAL SHALLS AND TERMINATED AT PENETRATIOS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE.
- FIBER CEMENT SIDING CONFORMING TO THE REQUIREMENTS OF THE N.C.-R AND FIBER CEMENT SIDING CONFORMING TO THE REQUIREMENTS OF THE N.C.-R. AND COMPLYING WITH ASTM D SATE 914ALL BE PERMITTED ON EXTERIOR WALLS OF BUILDINGS OF TYPE V CONSTRUCTION LOCATED IN AREAS WHERE THE ULTIMATE WIND SPEED SPECIFIED DOES NOT EXCEED ICO MILES PER HOUR AND THE BUILDINGS HEIGHT IS LESS THAN 40 FIET IN EXPOSURE C. MHERE CONSTRUCTION IS LOCATED IN AREAS WHERE THE ULTIMATE WIND SPEED EXCEEDS ISO MILES PER HOUR OR BUILDING HEIGHTS ARE IN EXCESS OF 40 FT. DATA INDICATING COMPLIANCE MIST BE SUBMITTED. FIBER CEMENT SIDIN SHALL BE SECURED TO BUILDING HE OF PROVIDE WEATHER PROTECTION FOR THE EXTERIOR WALLS OF THE BUILDING.
- THE N.C.-R FIBER CEMENT SIDING SHALL BE APPLIED TO CONFORM WITH THE WEATHER-RESISTIVE BARRIER REQUIREMENTS FIBER CEMENT SIDING AND ACCESSORIES SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED
- FIBER CEMENT SIDING FASTENERS AND ACCESSORIES SHALL MEET THE
- EXTERIOR WALLS OF WOOD CONSTRUCTION SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE N.C.-R

#### THERMAL & MOISTURE PROTECTION (continued)

- HARDBOARD SIDING SHALL CONFORM TO THE REQUIREMENTS OF AHA AISS,6 AND, WHERE USED STRUCTURALLY, SHALL BE SO IDENTIFIED BY THE LABEL OF AN APPROVED AGENCY.
- WOOD VENEERS ON EXTERIOR WALLS OF BUILDINGS OF TYPES I, II, III, AND IV CONSTRUCTION SHALL BE NOT LESS THAN I-INCH NOMINAL THICKNESS, O 498-INCH EXTERIOR HARDBOARD SIDING OR O.375-INCH EXTERIOR-TYPE WOOD STRUCTURAL PANELS OR PARTICLE-BOARD AND SHALL CONFORM TO THE REQUIREMENTS OF THE N.C.-R
- FIBER-CEMENT LAP SIDING HAVING A MAXIMUM WIDTH OF 12 INCHES SHALL COMPLY WITH THE REQUIREMENTS OF ASTM CIIB6, TYPE A, MINIMUM GRADE III. LAP SIDING SHALL BE LAPPED A MINIMUM OF III/4 INCHES (32 MM) AND LAP SIDING NOT HAVING TONGUE-AND-AROOVE END JOINTS SHALL HAVE THE ENDS SEALED WITH CAULKING, INSTALLED WITH AN H-SECTION JOINT COVER, LOCATED OVER A STRUP OF FLASHING OR SHALL BE DESIGNED TO COMPLY WITH INC-R. LAP SIDING COURSES MAY BE INSTALLED WITH THE FASTENER HEADS EXPOSED OR CONCEALED, ACCORDING TO NC-R OR APPROVED MANUFACTURERS' INSTALLATION INSTRUCTIONS.

#### INSULATION

- INSULATING MATERIALS, INCLUDING FACINGS, SUCH AS VAPOR RETARDERS OR VAPER-PERNIEABLE MEDRANES, INSTALLED WITHIN FLOOR-CEILING ASSEMBLIES, ROOF-CEILING ASSEMBLIES, RALL-ASSEMBLIES, CRANL SPACES AND ATTICS SHALL HAVE A FLAME-SPREAD INDEX NOT TO EXCEED 28 WIHTH AN ACCOMPANYING SMOKEDEVELOPED INDEX NOT TO EXCEED 280 WHEN TRESTED IN A SAME
- DUCT INSULATION MATERIALS SHALL CONFORM TO THE FOLLOWING
- INSULATION AND COYERING ON PIPE AND TUBING SHALL HAVE A FLAME-SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450. SEE EXCEPTIONS.
- ALL EXPOSED INSULATION MATERIALS INSTALLED ON ATTIC FLOORS SHALL HAVE A CRITICAL RADIANT FLUX OF NOT LESS THAN 0.12 WATT PER SQUARE IT. CENTIMETER PER N.C.-R TESTS FOR CRITIAL RADIANT FLUX SHALL BE MADE IN ACCORDANCE WITH ASTM E 970.
- THE USE OF ABOVE DECK THERMAL INSULATION SHALL BE PERMITTED PROVIDED SUCH INSULATION IS COVERED WITH AN APPROVED ROOF COVERING AND PASSES FM 4450 OR UL 1256 PER N.C.-R.
- CELLULOSE LOOSE-FILL INSULATION SHALL COMPLY WITH CPSC 16 CFR. PARTS 1209 AND 1404. EACH PACKAGE OF SUCH INSULATIN MATERIAL SHALL BE CLEARLY LABELED IN ACCORDANCE WITH CPSC 16 CFR, PARTS 1209 AND 1404.
- INSULATION IN FLOOR-CEILING ASSEMBLIES, ROOF-CEILING ASSEMBLIES, WALLS, CRAWL SPACES OR ATTICS SHALL BE EITHER OF THE BLONN-IN CELLULOSE TYPE OR FIBERGLASS BATTS OR BLANKET TYPE PER BUILDER'S SPECIFICATIONS.
- THE ENERGY EFFICIENCY REQUIREMENTS INCLUDING I.E.C.C. BUT NOT LIMITED TO INSULATION "R" VALUES, PERCENTAGE OF GLAZING "U" VALUES, ETC. SHALL BE DETERMINED BY THE ADDPTED STATE AND LOCAL ENERGY CODE EQUIREMENTS. REFER TO MECHANICAL PLANS FOR SPECIFICATIONS.
- THE BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED MITH AN AIR BARRIER SYSTEM TO LIMIT INFILTRATION THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS INFILTRATION FOR DIFFERENTIAL EXPANSION AND CONTRACTION, FOR ALL HOMES, WHERE PRESENT THE FOLLOWING SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED MITH AN AIR BARRIER MATERIAL OR SOLID MATERIAL CONSISTENT MITH APPENDIX E-2.3 AND E-2.4 OF THE NC-R; MICH SYSTEMS AND UNDER KNEE WALLS OPEN TO UNCONDITIONED OR EXTERIOR SPACE. 2. CAPPING AND SEALING SHAFTS OR CHASES, INCLUDING FLUE 31. CAPPING AND SEALING SOFFIT OR DROPPED CEILING AREAS
- FRAMED CAVITY WALLS, THE EXTERIOR THERMAL ENVELOPE WALL INSULATION SHALL BE INSTALLED IN SUBSTANTIAL CONTACT AND CONTINUOUS ALIGNMENT MITH THE BUILDING ENVELOPE AIR BARRIER, INSULATION SHALL BE SUBSTANTIALLY FREE FROM INSTALLATION GAPS, VOIDS, OR COMPRESSION, FOR FRAMED WALLS, THE CAVITY INSULATION SHALL BE ENCLOSED ON ALL SIDES WITH A RIGID MATERIAL OR AN AIR BARRIER MATERIAL, WALL INSULATION SHALL BE ENCLOSED AT THE FOLLOWING LOCATIONS WHEN INSULATION SHALL BE ENCLOSED AT THE FOLLOWING LOCATIONS WHEN NSTALLED ON EXTERIOR WALLS PRIOR TO BEING COVERED BY SUBSEQUENT CONSTRUCTION, CONSISTENT WITH APPENDIX E-2.3 AND E-2.4 OF NC-R:

# I. TUBS 2. SHOWERS 3. STAIRS 4. FIREPLACE UNITS ENCLOSURE OF WALL CAVITY INSULATION ALSO APPLIES TO WALLS THAT ADJOIN ATTIC SPACES BY PLACING A RIGID MATERIAL OR AIR BARRIER MATERIAL ON THE ATTIC SIDE.

#### DOORS & WINDOWS SEE FLOOR PLANS AND ELEVATIONS FOR SIZES AND TYPES OF DOORS AND WINDOWS AND FOR ANY DIVIDED LITE PATTERNS, COLORS SHALL BE APPROVED BY THE BUILDER AND ARCHITECT.

- OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS DETIVED HE GARAGE AND RESIDENCE SHALL COUPPED WITH SOLID MOOD DOORS NOT LESS THAN I 3/9 INCHES IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN I 3/9 INCHES THICK, OR 20-MINUTE FIRE-RATED DOORS.
- NO DOUBLE FRENCH DOORS SHALL BE USED UNLESS THERE IS A SUFFICIENT OVERHANG OR COVERED PATIO COVERING THESE DOORS. NO DOUBLE WOOD FRENCH DOORS SHALL BE USED IN ANY CASE.
- PROVIDE SECURITY HARDWARE FOR ALL DOORS AND WINDOWS IANCE WITH ALL STATE AND LOCAL CODE REQUIREMENTS.
- ALL AUTOMATIC GARAGE DOOR OPENERS REQUIRE THE INCLUSION OF A PHOTOELECTRIC SENSOR, EDGE SENSOR OR SOME OTHER SIMILAR DEVICE FOR REMOTE OPERATION AND AS A SAFETY PRECAUTION TO PREVENT THE DOOR FROM CLOSING WHEN SOMETHING IS BLOCKING THE PATH OF THE DOOR. SEE MANUFACTURER'S
- ALL MANUFACTURED WINDOWS AND SLIDING GLASS DOORS SHALL MEET THE AIR INFILTRATION STANDARDS OF THE CURRENT AMERICAN
  FIBER CEMENT SIDING SHALL BE APPLIED OVER SHEATHING OR MATERIALS LISTED INATIONAL STANDARDS INSTITUTE A.S.T.M. E288-73 WITH A PRESSURE DIFFERENTIAL OF 1.57 POUNDS PER SQUARE FOOT AND SHALL BE CERTIFIED AND LABELED
  - BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPENABLE EMERGENCY ESCAPE AND RESCUE OPENING
  - WHERE EMERGENCY ESCAPE AND RESCUE OPENINGS ARE PROVIDED HEY SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE
  - EMERGENCY ESCAPE AND RESCUE OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A MINDOM WELL

#### DOORS & WINDOWS (continued)

- ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUNET CLEAR OPENING OF NOT LESS THAN 5 SQUARE FEET IN THE CASE OF ROUND FLOOR LEVEL WINDOW AND NOT LESS THAN 5.7 SQUARE FEET IN THE CASE OF AN UPPER STORY WINDOW.
- \_ EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM CLEAR OPENING HEIGHT OF 24 INCHES.
- ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING WIDTH OF  $20\,$  INCHES.
- EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM MITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE.
- THE MINIMUM HORIZONTAL AREA OF THE WINDOW WELL SHALL BE 9 SQUARE FEET, MITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36 INCHES. THE AREA OF THE MINDOW WELL SHALL ALLOW ENERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED PER THE N.C.-R. THE LADDER OR STEPS REQUIRED SHALL BE PERMITTED TO ENCROACH A MAXIMUM OF 6" INTO THE REQUIRED DIMENSIONS OF THE MINDOW WELL.
- MINDOW WELLS MITH A VERTICAL DEPTH GREATER THAN 44 INCHES SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STEPS USABLE WITH THE MINDOW IN THE FULLY OPEN POSITION.
- BARS GRILLES COVERS SCREENS OR SIMILAR DEVICES ARE PERMITTED TO BARS, GRILLES, COVERS, SCREENS OR SIMILAR DEVICES ARE PERMITTED TO BE PLACED OVER EMERGENCY ESCAPE AND RESCUE OPENINGS, BULKHEAD ENCLOSURES, OR MINDOM WELLS THAT SERVE SUCH OPENINGS, PROVIDED THE MINIMUM NET CLEAR OPENING SIZE COMPLIES WITH THE NC.-R AND SUCH DEVICES SHALL BE RELEASABLE OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL KNOWLEDGE OR FORCE GREATER THAN THAT WHICH IS REQUIRED FOR NORMAL OPERATION OF THE ESCAPE AND RESCUE OPENING
- ALL INTERIOR EGRESS DOORS AND A MINIMUM OF ONE EXTERIOR EGRESS DOOR SHALL BE READILY OPENABLE FROM THE SIDE FROM WHICH ESPE 19 TO BE MADE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

#### GLAZING & SAFETY GLAZING

- HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN & PERCENT OF THE FLOOR AREA OF SUCH ROOMS. NATURAL VENTILATION SHALL BE THROUGH WINDOWS, SKYLIGHTS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOOR AIR, SUCH OPENINGS SHALL BE PROVIDED WITH READY ACCESS OR SHALL OTHERWISE BE READILY CONTROLLABLE BY THE BUILDING LESS THAN 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.
- BATHROOMS, WATER CLOSET COMPARTMENTS AND OTHER SIMILAR MINDONS OF NOT LESS THAN 3 SQUARE FEET, ONE-HALF OF WHICH MUST BE OPENABLE.
- EXCEPT AS INDICATED, EACH PANE OF GLAZING INSTALLED IN HAZARDOUS LOCATIONS SHALL BE PROVIDED WITH MANUFACTURER'S DESIGNATION SPECIFYING WHO APPLIED THE DESIGNATION, DESIGNATING THE TYPE OF GLASS AND THE SAFETY GLAZING STANDARD WITH WHICH IT COMPLIES, WHICH IS VISIBLE IN THE FINAL INSTALLATION. THE DESIGNATION SHALL BE ACID ETCHED, SANDBLASTED, CERAWIC-FIRED, LASER ETCHED, EMBOSSED, OR BE OF A TYPE WHICH ONCE APPLIED CANNOT BE REMOVED WITHOUT BEING DESTROYED.
- INDIVIDUAL GLAZED AREAS, INCLUDING GLASS MIRRORS IN HAZARDOUS LOCATIONS SHALL PASS THE TEST REQUIREMENTS OF CPSC 16 CFR, PART 1201. GLAZING SHALL COMPLY WITH CPSC 16.
- THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSES OF GLAZING:
- GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING,
- SUDING AND BIFOLD DOORS

  SLIDING AND BIFOLD DOORS

  SLAXING IN AN INDIVIDUAL PIXED OR OPERABLE PANEL IN THE SAME
  PLANE AS A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN
  24-INCHES OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM
  EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR MALKING
- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
- 3.1 EXPOSED AREA OF AN INDIVIDUAL PANE LARGER THAN 9 SQUARE
- 3.2 BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR 3.3 TOP EDGE MORE THAN 36 INCHES ABOVE THE FLOOR
- ONE OR MORE WALKING SURFACES WITHIN 36 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.
- GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS, REGARDLESS OF AREA OR HEIGHT ABOYE A MALKING SURFACE.
- GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS, GLAZING ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE.
- GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SWIFFACE AND WITHIN 60 INCHES HORIZONTALLY OF THE WATER'S EDGE. THIS LL APPLY TO SINGLE GLAZING AND ALL PANES IN MULTIPLE
- GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36 INCHES HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
- GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF STAIRWAYS WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN A 60-INCH HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING.
- HINGED SHOWER DOORS SHALL OPEN OUTWARD.
- GLAZING SHALL BE IN ACCORDANCE WITH ENERGY COMPLIANCE CALCULATIONS BASED ON A LOCALLY ADOPTED ENERGY CODE, THE MODEL ENERGY CODE OR THE INTERNATIONAL ENERGY CONSERVATION CODE.
- LOCATED MORE THAN 12 INCHES (1629 MM) ABOVE THE FINISHED GRADE OR SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24 INCHES (610 MM) ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED, OPERABLE SECTIONS OF WINDOWS SHALL NOT PERMIT OPENINGS THAT ALLOW PASSAGE OF A 4 INCH (IO2 MM) DIAMETER SPHERE WHERE SUCH OPENINGS ARE LOCATED WITHIN 24 INCHES (610 MM) OF THE FINISHED FLOOR

IN DWELLING UNITS, WHERE THE OPENING OF AN OPERABLE WINDOW IS

#### FINISHES

- GYPSUM WALLBOARD SHALL BE INSTALLED IN CONFORMANCE WITH THE CURRENT EDITION OF THE NORTH CAROLINA RESIDENTIAL CODE AND ALL STATE AND LOCAL BUILDING CODES. THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
- MATERIALS. ALL SYPSUM BOARD MATERIALS AND ACCESSORIES SHALL CONFORM TO ASTM C 22, C 41%, C 94, C 1002, C 1041, C 1171, C 111%, C 1218, C 1946, OR C 1658 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE N.C.-R ADHESIVES FOR THE INSTALLATION OF GYPSUM BOARD SHALL CONFORM TO ASTM C 551.
- GYPSUM BOARD MATERIALS SHALL CONFORM TO THE APPROPRIATE STANDARDS LISTED IN THE NC.-R WHERE REQUIRED FOR FIRE PROTECTION, CONFORM TO THE NC.-R
- INTERIOR GYPSUM BOARD SHALL NOT BE INSTALLED WHERE IT IS DIRECTLY EXPOSED TO THE WEATHER OR TO WATER.
- ALL EDGES AND ENDS OF GYPSUM BOARD SHALL OCCUR ON THE FRANING MEMBERS, EXCEPT THOSE EDGES AND ENDS THAT ARE PERPENDICULAR TO THE FRANING MEMBERS. EDGES AND ENDS OF GYPSUM BOARD SHALL BE IN MODERATE CONTACT EXCEPT IN CONCEALED SPACES WHERE FIRE-RESISTACE-RATED CONSTRUCTION, SHEAR RESISTANCE, OR DIAPHRAGM ACTION IS NOT REQUIRED, CEALED SPACES WHERE FIRE-RESISTACE-RATED CONSTRUCTION.
- FASTENERS AT THE TOP AND BOTTOM PLATES OF VERTICAL ASSEMBLIES, FASTENERS AT THE TOP AND BOTTOM PLATES OF VERTICAL ASSEMBLLES, OR THE EDGES AND ENDS OF HORIZONTAL ASSEMBLLES PERFENDICULAR TO SUPPORTS, AND AT THE WALL LINE MAY BE OMITTED EXCEPT ON SHEAR-RESISTING ELEMENTS OR FIRE- REGISTIVE ASSEMBLIES, FASTENERS ALL BE APPLIED IN SUCH A MANNER AS NOT TO FRACTURE THE FACE PAPER WITH THE FASTENER HEAD.
- GYPSUM BOARD USED AS THE BASE OR BACKER FOR ADHESIVE APPLICATION OF CERAMIC TILE OR OTHER REQUIRED NON-ABSORBENT FINISH MATERIAL SHALL CONFORM TO ASTM C 1996, C 1175 OR C1275. USE OF WATER-RESISTANT GYPSUM BACKING BOARD SHALL BE PERMITTED ON CEILINGS WHERE FRAMING SPACING DOES NOT EXCEED 12 INCHES ON CENTER FOR 1/2-INCH-THICK OR 16 INCHES FOR 5/8-INCH-THICK GYPSUM BOARD WATER-RESISTANT GYPSUM BOARD SHALL NOT BE INSTALLED OVER A VAPOR RETARDER IN A SHOWER OR TUB COMPARTMENT, GUT OR EXPOSED EDGES, INCLUDING THOSE AT WALL INTERSECTIONS, SHALL BE SEALED AS RECOMMENDED BY THE MANUFACTURER.
- MATER RESISTANT GYPSUM BACKING BOARD SHALL NOT BE USED WHERE THERE WILL BE DIRECT EXPOSURE TO WATER, OR IN AREAS SUBJECT TO CONTINUOUS HIGH HUMIDITY
- WHEN APPLYING A WATER-BASED TEXTURE MATERIAL. THE MINIMUM SYPSUM BOARD THICKNESS SHALL BE INCREASED FROM 3/6 INCH TO 1/2 INCH FOR I6-INCH ON CENTER FRAMING, AND FROM I/2 INCH TO 5/6 INCH FOR 24-INCH ON CENTER FRAMING OR I/2 INCH SAG-RESISTANT GYPSUM CEILING BOARD SHALL BE USED.

- ALL LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-
- BACKING OR A LATH SHALL PROVIDE SUFFICIENT RIGIDITY TO PERMIT PLASTER APPLICATION.
- WHERE LATH ON VERTICAL SURFACES EXTENDS BETWEEN RAFTERS OR OTHER SIMILAR PROJECTING MEMBERS, SOLID BACKING SHALL BE INSTALLED TO PROVIDE SUPPORT FOR LATH AND ATTACHMENTS. GYPSUM LATH OR GYPSUM BOARD SHALL NOT BE USED, EXCEPT THAT ON HORIZONTAL SUPPORTS OF CEILINGS OR ROOF SOFFITS IT MAY BE USED AS BACKING FOR METAL LATH OR WIRE FABRIC LATH AND
- CEMENT PLASTER UNLESS SPECIFIED OTHERWISE, ALL WALL COVERINGS SHALL BE SECURELY UNLESS SPECIFIED OF HERWISE, ALL WALL COVENINGS SHALL BE SECURELY FASTENED PER THE N.C.-R. OR NITH OTHER APPROVED ALUMINUM, STAINLESS STEEL, ZINC-COATED OR OTHER APPROVED CORROSION-RESISTIVE FASTENERS, WHERE THE BASIC MIND SPEED IS 110 MILES PER HOUR OR HIGHER, THE ATTACHMENT OF WALL COVERINGS SHALL BE DESIGNED TO RESIST THE COMPONENT AND CLADDING LOADS SPECIFIED AND ADJUSTED FOR HEIGHT AND EXPOSURE.
  - A MINIMUM O.019-INCH (NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT MEEP SCREED OR PLASTIC WEEP SCREED, WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 31/2 INCHES SHALL BE PROVIDED AT OR BELOM THE FOUNDATION PLATE LINE ON EXTERIOR STUD MALLS IN ACCORDANCE WITH ASTM C 926. THE WEEP SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAYED AREAS AND SHALL BE OF A TYPE THAT MILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE MEATHER-RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE MEATTACHMENT FLANGE OF THE MEEP SCREED. A MINIMUM O.O.I9-INCH (NO. 26 GALVANIZED SHEET GAGE),

PLASTERING WITH PORTLAND CEMENT PLASTER SHALL BE NOT LESS THAN THREE COATS WHEN APPLIED OVER METAL LATH OR WIRE LATH AND SHALL BE NOT LESS THAN TWO COATS WHEN APPLIED OVER MASONRY, CONCRETE, PRESSURE-PRESERVATIVE TREATED WOOD OR DECAY-RESISTANT WOOD OR SYPSUM BACKING. IF THE PLASTER SURFACE IS COMPLETELY COVERED BY VENEER OR OTHER FACING MATERIAL OR IS COMPLETELY CONCEALED, PLASTER APPLICATION NEED BE ONLY TWO COATS, PROVIDED THE TOTAL THICKNESS IS AS SET FORTH PER THE N.C.-R.

ON MOOD-FRAME CONSTRUCTION WITH AN ON-GRADE FLOOR SLAB SYSTEM, EXTERIOR FLASTER SHALL BE APPLIED TO COVER, BUT NOT EXTEND BELOW LATH, PAPER AND SCREED. THE PROPORTION OF AGGREGATE TO FIBER CEMENT MATERIALS SHALL BE

- ONLY APPROVED PLASTICITY AGENTS AND APPROVE AMOUNTS THEREOF MAY BE ADDED TO PORTLAND CEMENT. WHEN PLASTIC CEMENT IS USED, NO ADDITIONAL LINE OR PLASTICIZERS SHALL BE ADDED. HYDRATED LIME OR THE EQUIVALENT AMOUNT OF LIME PUTTY USED AS A PLASTICIZER MAY BE ADDED TO CEMENT PLASTER. OR CEMENT AND LIME PLASTER IN AN AMOUNT NOT TO EXCEED THAT
- GYPSUM PLASTER SHALL NOT BE USED ON EXTERIOR SURFACES
- PLASTER COATS SHALL BE PROTECTED FROM FREEZING FOR A PERIOD OF NOT LESS THAN 24 HOURS AFTER SET HAS OCCURRED PLASTER SHALL BE APPLIED WHEN THE AMBIENT TEMPERATURE IS HIGHER THAN 40 DEGREES F (4 DEGREES C), UNLESS PROVISIONS ARE MADE TO KEEP CEMENT PLASTER WORK ABOVE 40 DEGREES I (4 DEGREES C), PRIOR TO & DURING APPLICATION AND 48 HOURS
- COLOR AND FINISH TO BE SELECTED AND APPROVED BY OWNER/ BUILDER AND ARCHITECT
- A I-COAT EXTERIOR PLASTER SYSTEM SUCH AS "MAGNA WALL" I.C.C. NO. ER-4776. "EXPO FIBREWALL" I.C.C. NO. ER-4368. OR APPROVED EQUAL MAY BE USED IN LIEU OF A 3-COAT EXTERIOR



. . . . . .

. . . . . .

. . . . . .

# **NORTH CAROLINA**

50' SERIES KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 FAX: (919) 472-0582

#### 2018 NORTH CAROLINA STATE BUILDING CODES

. . . . . .

ISSUE DATE: 12/13/19 PROJECT No.: 1350999:57

MP

REVISIONS: VENTILATION NC2008NCP/ 01/17/20 /KBA

DIVISION MGR.:



150.1910-R HEET: GN<sub>2</sub> SPEC. LEVEL 1

RALEIGH-DURHAM

50' SERIES

#### MECHANICAL & PLUMBING

- ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN CONFORMANCE NITH THE NORTH CAROLINA RESIDENTIAL AND MECHANICAL CODE. INSTALLATIONS OF MECHANICAL APPLIANCES, EQUIPMENT AND SYSTEMS NOT ADDRESSED BY THIS CODE SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF THE NORTH CAROLINA RESIDENTIAL AND FUEL GAS CODE.
- CONTRACTOR SHALL DESIGN ENTIRE H.V.A.C. SYSTEM AND SUBMIT DRAWINGS FOR OWNER/BUILDER'S APPROVAL PRIOR TO ORDERIN MATERIALS OR EQUIPMENT.
- WHERE AIR CONDITIONING IS AN OPTIONAL FEATURE, HEATING SYSTEMS MUST BE DESIGNED AND DUCT WORK SIZED TO ACCOMMODATE FUTURE AIR CONDITIONING NEEDS.
- WHERE THE PRIMARY HEATING SYSTEM IS A FORCED-AIR FURNACE, AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY, THIS THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55 DEG. F (19 C) OR UP TO 85 DEG. F (29 C).
- 5. ALL DUCTWORK SHALL CONFORM TO THE REQUIREMENTS OF THE N.C.-R
- COMBUSTION AIR SHALL BE PROVIDED FOR FORCED AIR UNITS IN ACCORDANCE WITH N.C.-R
- CONTRACTOR TO PROVIDE BOOT IN DUCTWORK WHEN OPTIONAL "HONEYWELL" OR "CARRIER" ELECTRONIC AIR CLEANER IS PROVIDED.
- 8. DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CELLINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE
- EXTERIOR-GRADE INSTALLATIONS. EQUIPMENT AND APPLIANCES INSTALLED ABOVE GRADE LEVEL SHALL BE SUPPORTED ON A SOLID BASE OR APPROVED MATERIAL A MINIMUM OF 2 INCHES THICK.
- IO. UNDER-FLOOR INSTALLATION, SUSPENDED EQUIPMENT SHALL BE A MINIMUM OF 6 INCHES ABOVE THE ADJOINING GRADE.
- CRAWL SPACE SUPPORTS. IN A CRAWL SPACE, A MINIMUM OF 2-INCH THICK SOLID BASE, 2-HOH (SI MM) THICK FORMED CONCRETE, OR STACKED MASONRY UNITS HELD IN PLACE BY MORTAR OR OTHER APPROVED METHOD. THE MATER HEATER SHALL BE SUPPORTED NOT LESS THAN 2
- 12. DRAINAGE, BELOW-GRADE INSTALLATIONS SHALL BE PROVIDED WITH A NATURAL DRAIN OR AN AUTOMATIC LIFT OR SUMP PUMP. FOR PIT REQUIREMENTS REFER TO N.C.-M

#### VENTING

- IN LIEU OF REQUIRED EXTERIOR OPENINGS FOR NATURAL VENTILATION IN LIEU OF REQUIRED EXTENSION OPENINGS FOR NATURAL VENTILATION IN BATHROOMS CONTAINING A BATHROOM FOR OR COMBINATION THEREOF, A MECHANICAL VENTILATION SYSTEM MAY BE PROVIDED. THE MINIMAY VENTILATION RATES SHALL BE 50 CPM FOR INTERMITTENT VENTILATION OR 20 CPM FOR CONTINUOUS VENTILATION. VENTILATION AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTSIDE FER NO.—TR
- 2. EXHAUST DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND SHALL BE EQUIPPED WITH BACKDRAFT DAMPERS.
- RANGE HOODS SHALL DISCHARGE TO THE OUTDOORS THROUGH A DICT.
  THE DUCT SERVING THE HOOD SHALL HAVE A SMOOTH INTERIOR SURFACE,
  SHALL BE AIR TIGHT, SHALL BE EQUIPPED WITH A BACK-DRAFT DAMPER
  AND SHALL BE INDEPENDENT OF ALL OTHER EXHAUST SYSTEMS, DUCTS
  SERVING RANGE HOODS SHALL NOT TERMINATE IN AN ATTIC OR CRANL
  SPACE OR AREAS INSIDE THE BUILDING, DUCTS SERVING RANGE HOODS
  SHALL BE CONSTRUCTED OF GALVANIZED STEEL, STAINLESG STEEL OR
- MHERE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND WHERE MECHANICAL OR NATURAL VENTILATION IS OTHERWISE PROVIDED, LISTED AND LABELED DUCTLESS RANGE HOODS SHALL NOT BE REQUIRED TO DISCHARGE TO THE OUTDOORS PER N.C.-M
- DUCTS FOR DOMESTIC KITCHEN COOKING APPLIANCES EQUIPPED MITH DOWN DRAFT EXHAUST SYSTEMS SHALL BE PERMITTED TO BE CONSTRUCTED OF SCHEDULE 40 PVC PIPE PROVIDED THAT THINSTALLATION COMPLIES WITH ALL OF THE FOLLOWING PER N.C.
- THE DUCT SHALL BE INSTALLED UNDER A CONCRETE SLAB POURED ON GRADE.
- THE UNDERFLOOR TRENCH IN WHICH THE DUCT IS INSTALLED SHALL BE COMPLETELY BACKFILLED WITH SAND OR GRAVEL.
- THE PVC DUCT SHALL EXTEND NOT GREATER THAN I INCH ABOVE THE INDOOR CONCRETE FLOOR SURFACE.
- THE PVC DUCT SHALL EXTEND NOT GREATER THAN I INCH ABOVE GRADE OUTSIDE THE BUILDING.
- THE PVC DUCTS SHALL BE SOLVENT CEMENTED.
- EXHAUST HOOD SYSTEMS CAPABLE OF EXHAUSTING IN EXCESS OF 400 CPM SHALL BE PROVIDED WITH MAKEUP AIR AT A RATE APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE THAT IS IN EXCESS OF 400 CUBIC FEET PER MINUTE, SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH A MEANS OF CLOSURE AND SHALL BE AUTOMATICALLY CONTROLLED TO START AND OPERATE SIMULTANEOUSLY WITH THE EXHAUST SYSTEM. DAMPERS SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION
- DOMESTIC WATER HEATERS, UNLESS SPECIFIED OTHERWISE BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, SHALL BE VENTED TO THE OUTSIDE AIR BY A TYPE B' VENT AND COMPLY WITH THE REQUIREMENTS OF THE N.C.-M

#### PLUMBING

- A POTABLE WATER SUPPLY SYSTEM SHALL BE DESIGNED, INSTALLED CONTAMINATION FROM NONPOTABLE LIQUIDS, SOLIDS OR GASES BEING INTRODUCED INTO THE POTABLE MATER SUPPLY THROUGH CROSS-CONNECTIONS OR ANY OTHER PIPING CONNECTIONS TO THE SYSTEM. BACKFLOW PRE- VENTER APPLICATIONS SHALL CONFORM TO
- 2. THE SUPPLY LINES OR FITTINGS FOR EVERY PLUMBING FIXTURE SHALL BE INSTALLED SO AS TO PREVENT BACKFLOW, PLUMBING FIXTURE FITTINGS SHALL PROVIDE BACKFLOW PROTECTION IN ACCORDANCE WITH ASME All2.18.1.

#### MECHANICAL & PLUMBING (continued)

- WATER SERVICE PIPING SHALL BE PROTECTED IN ACCORDANCE WITH N.C.-P SECTIONS AND EXCEPTIONS)
- FIXTURE FITTINGS, FAUCETS AND DIVERTERS SHALL BE CONNECTED TO THE WATER DISTRIBUTION SYSTEM SO THAT HOT WATER CORRESPONDS TO THE LEFT SIDE OF THE FITTINGS.
- DIVERTERS FOR SINK FAUCETS WITH A SECONDARY OUTLET CONSISTING OF A FLEXIBLE HOSE AND SPRAY ASSEMBLY SHALL CONFORM TO ASTM A12.16.1 IN ADDITION TO THE REQUIREMENTS IN N.C.-P
- THE INSTALL ATION OF A WATER SERVICE OR WATER DISTRIBUTION PIPE THE INSTALLATION OF A MATER SERVICE OR MATER DISTRIBUTION PIPE SHALL BE PROHIBITED IN SOIL AND SEROUND WATER THAT IS CONTAMINATED. SROUND WATER CONDITIONS SHALL BE REQUIRED TO ACCERTAIN THE ACCEPTABILITY OF THE MATER SERVICE OR WATER DISTRIBUTION PIPING MATERIAL FOR THE SPECIFIC INSTALLATION. WHERE DETRIMENTAL CONDITIONS EXIST, APPROVED ALTERNATIVE MATERIALS OR ROJING SHALL BE REQUIRED.
- MATER DISTRIBUTION PIPE SHALL CONFORM TO NSF 61 AND SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN N.C.-PILMBING. ALL MATER DISTRIBUTION PIPE AND TUBING SHALL HAVE A MINIMUM PRESSURE RATING OF IOO PSI AT 180 DEGREES F.
- PIPE PASSING THROUGH CONCRETE OR CINDER WALLS AND FLOORS OR OTHER CORROSIVE MATERIAL SHALL BE PROTECTED AGAINST EXTERNAL CORROSION BY A PROTECTIVE SHEATHING OR WRAPPING OR OTHER MEANS THAT WILL WITHSTAND ANY REACTION FROM THE LIME AND ACID OF CONCRETE, CINDER OR OTHER CORROSIVE MATERIAL SHEATHING OR WRAPPING SHALL ALLOW FOR EXPANSION AND CONTRACTION OF PIPING TO PREVENT ANY RUBBING ACTION. MINIMUM WALL THICKNESS OF MATERIAL SHALL BE 0.025-INCH
- PIPES PASSING UNDER OR THROUGH WALLS SHALL BE PROTECTED FROM
- PIPING SHALL BE INSTALLED SO AS TO PREVENT DETRIMENTAL STRAINS AND STRESSES IN THE PIPE. PROVISIONS SHALL BE MADE TO PROTECT PIPING FROM DAMAGE RESULTING FROM EXPANSION, CONTRACTION AND STRUCTURAL SETTLEMENT. PIPING SHALL BE INSTALLED TO AVOID STRUCTURAL STRESSES OR STRAINS WITHIN BUILDING COMPONENTS.
- WATER PIPES INSTALLED IN A MALL EXPOSED TO THE EXTERIOR SHALL BE LOCATED ON THE HEATED SIDE OF THE WALL INSULATION, IN OTHER CASES, WATER, SOIL, AND PASTE PIPES SHALL NOT DE INSTALLED OUTSIDE OF A BUILDING, IN INCONDITIONED ATTICS, INCONDITIONED UTILLITY ROOMS OR IN ANY OTHER PLACE SUBJECTED TO FREEZING TEMPERATURES UNLESS ADEQUATE PROVISION IS MADE TO PROTECT SUCH PIPES FROM FREEZING BY A MINIMAM OF R-65 INSULATION DETERMINED AT 15 DEG. F IN ACCORDANCE WITH ASTM CITY OF HEAT OR BOTH OR BOTH.

  EXTERIOR WATER SUPPLY SYSTEM PIPING SHALL BE INSTALLED NOT
  LESS THAN 6 INCHES BELOW THE FROST LINE AND NOT LESS
  THAN 12 INCHES BELOW GRADE.
- BUILDING SEWER PIPE SHALL CONFORM TO ONE OF THE STANDARDS
- BUILDING SEMER PIPE FITTINGS SHALL BE APPROVED FOR INSTALLATION WITH THE PIPING MATERIAL INSTALLED AND SHALL CONFORM TO THE RESPECTIVE PIPE STANDARDS OR ONE OF THE STANDARDS LISTED IN
- WHERE WASTE LINE DROPS OCCUR IN A LOCATION WHERE THE SOUND OF A FLUSHED TOILET MAY BE UNDESIRABLE, SUCH AS IN WALLS OR PARTITIONS ADJACENT TO EATING ROOMS, USE CAST IRON PIPING OR SIMILAR APPROVED HARD OR DENSE PIPING TO MITIGATE SOUND.
- CLEANOUTS ON BUILDING SEWERS SHALL BE LOCATED AS SET FORTH IN
- THE MAXIMUM WATER CONSUMPTION FLOW RATES AND QUANTITIES FOR ALL PLUMBING FIXTURES SHALL BE IN ACCORDANCE WITH N.C.-R.
- INDIVIDUAL SHOWER AND TUB/SHOWER COMBINATION VALVES SHALL BE EQUIPPED NITH CONTROL VALVES OF THE PRESSURE-BALANCE, THERMOSTATIC-MIXING OR COMBINATION PRESSURE-BALANCE/THERMOSTATIC-MIXING VALVE TYPES WITH A HIGH LIMIT STOP IN ACCORDANCE WITH ASSEL 1006 / ASPE AIL2/1016/CSA BIZEJS AND SHALL E INSTALLED AND ADJUSTED PER MANUFACTURE'S INSTRUCTIONS.
- GAS AND ELECTRIC WATER HEATERS HAVING AN IGNITION SOURCE SHALL ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 10 INC ABOVE THE GARAGE FLOOR. REFER TO N.C.-R FOR EXCEPTION.
- MATER HEATERS, (USING SOLID, LIQUID OR GAS FUEL) WITH THE EXCEPTION OF THOSE HAVING DIRECT VENT SYSTEMS, SHALL NOT BE INSTALLED IN BATHROOMS AND BEDROOMS OR IN A CLOSET WITH ACCESS ONLY THROUGH AS BEDROOM OR BATHROOM, HOWEVER, WATER HEATERS OF THE AUTOMATIC STORAGE TYPE MAY BE INSTALLED AS REPLACEMENT IN A BATHROOM, WHEN APPROVED BY THE PLUMBING OFFICIAL, PROVIDED THEY ARE VENTED AND SUPPLIED WITH ADEQUATE COMBUSTION AIR.
- IN SEISMIC DESIGN CATEGORIES DO, DI AND D2 AND TOWNHOUSES IN SEISMIC DESIGN CATEGORY C, WATER HEATERS SHALL BE ANCHORED OR STRAPPED IN THE UPPER ONE-THIND AND IN THE LOWER ONE-THIRD OF THE APPLIANCE TO RESIST A HORIZONTAL FORCE EQUAL TO ONE-THIRD OF THE OPERATING PICHORY OF THE WATER HEATER, ACTING IN ANY HORIZONTAL DIRECTION, OR IN ACCORDANCE WITH THE APPLIANCE MANUFACTURER'S RECOMMENDATIONS.
- 22. APPLIANCES LOCATED IN A GARAGE OR CARPORT SHALL BE PROTECTED FROM IMPACT BY A MOVING VEHICLE.
- 23. WHERE WATER HEATERS OR HOT WATER STORAGE TANKS ARE INSTALLED IN: WHERE MATER HEATERS OR HOT MATER STORAGE TAMES ARE INSTALLED IN.
  REMOTE LOCATIONS SUCH AS SUSPENDED CEILING, ATTICS, ABOVE OCCUPIED
  SPACES, OR UNVENTILATED CRANL SPACES, A LOCATION WHERE WATER
  LEAKAGE FROM THE TANK WILL CAUSE DAMAGE TO PRIMARY STRUCTURAL
  MEMBERS, THE TANK OR WATER HEATER SHALL BE INSTALLED IN A GALVANIZED STEEL PAN HAVING A MINIMUM THICKNESS OF 24 GAGE, OR OTHER PANS APPROVED FOR SUCH USE.
- WHERE CLOTHES WASHING MACHINES ARE LOCATED ON WOOD FRAMED FLOORS WHERE LEAKAGE WOULD CAUSE DAMAGE, A GALVANIZED STEEL PAN HAVING A MINIMUM THICKNESS OF 24 GAGE, OR OTHER PANS APPROVED FOR SUCH USE SHALL BE PROVIDED

#### MECHANICAL & PLUMBING (continued)

- APPLIANCES AND EQUIPMENT USED FOR HEATING WATER OR STORING HOT WATER SHALL BE PROTECTED BY A SEPARATE PRESSURE-RELIEF VALVE AND A SEPARATE TEMPERATURE-RELIEF VALVE OR A COMBINATION PRESSURE-AND-TEMPERATURE RELIEF VALVE, RELIEF VALVE SHALL HAVE A MINIMUM RATED CAPACITY FOR THE EQUIPMENT SERVED AND SHALL CONFORM TO ANSI 221.22. THE RELIEF VALVE SHALL NOT BE USED AS A MEANS OF CONTROLLING THERMAL EXPANSION.
- THE WATER SUPPLY TO A DISHMASHER SHALL BE PROTECTED AGAINST BACKFLON BY AN AIR GAP COMPLYING WITH ASME AII2.13 OR AII2.12 THAT IS INSTALLED INTEGRALLY WITHIN THE MACHINE OR A BACKFLOW PREVENTER IN ACCORDANCE WITH THE NC-R.
- SINK AND DISHWASHER. THE COMBINED DISCHARGE FROM A DISHWASHER AND A ONE- OR TWO-COMPARTMENT SINK, WITH OR WITHOUT A FOOD-WASTE DISPOSER, SHALL BE SERVED BY A TRAP OF NOT LESS THAN 1/2 INCHES (36 MM) IN OUTSIDE DIAMETER. THE DISHWASHER DISCHARGE PIPE OR TUBING SHALL RISE TO THE WIDERSIDE OF THE COUNTER AND SHALL BE SECURELY FASTENED TO THE WIDERSIDE OF THE COUNTER AND SHALL BE SECURELY CONNECTING TO THE WIDERSIDE OF THE SINK RIM OR COUNTER BEFORE CONNECTING TO THE HEAD OF THE FOOD-WASTE DISPOSER OR TO A WYE FITTING IN THE SINK TAILPIECE.

- FACTORY-BUILT FIREPLACES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH U. 127.
- 2. FIREPLACES ARE TO BE PROVIDED WITH AN EXTERIOR AIR SUPPLY

#### ELECTRICAL

- ALL MATERIALS AND APPLIANCES, INSTALLATION AND CONSTRUCTION METHODS SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE OR CURRENT SAE REQUIREMENTS.
- ALL ELECTRICAL SYSTEMS, CIRCUITS, FIXTURES AND EQUIPMENT SHALL BE GROUNDED IN A MANNER COMPLYING WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- ALL WIRING SHALL BE SO INSTALLED THAT, WHEN COMPLETED, THE SYSTEM WILL BE FREE FROM SHORT CIRCUITS AND FROM GROUNDS OTHER THAN AS REQUIRED OR PERMITTED IN N.E.C. ARTICLE 250.
- ELECTRIC EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORK-
- ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES THE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.
  THE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.
  THE GROUND-FAULT CIRCUIT-INTERRUPTER SHALL BE INSTALLED IN A
  READILY ACCESSIBLE LOCATION.
  - A. BATHROOMS.
  - B. GARAGES AND ALSO ACCESSORY BUILDINGS THAT HAVE A FLOOR LOCATED AT OR BELOW GRADE LEVEL NOT INTENDED AS HABITABLE ROOMS AND LIMITED TO STORAGE AREAS, WORK AREAS, AND AREAS OF SIMILAR USE.

  - CRAWL SPACES. WHERE THE CRAWL SPACE IS AT OR BELOW GRADE LEVEL.
  - UNFINISHED PORTIONS OR AREAS OF THE BASEMENT NOT INTENDED AS HABITABLE ROOMS.
  - KITCHENS. WHERE THE RECEPTACLES ARE INSTALLED TO SERVE
  - SINKS, WHERE RECEPTACLES ARE INSTALLED MITHIN 6 FT FROM THE TOP INSIDE EDGE OF THE BOWL OF THE SINK.
- BATHTUBS OR SHOWER STALLS WHERE RECEPTACLES ARE INSTALLED MITHIN 6' OF THE OUTSIDE EDGE OF THE BATHTUB OR SHOWER STALL.
- DISHWASHER GFCI PROTECTION IS NOT REQUIRED FOR OUTLETS THAT SUPPLY DISHWASHERS INSTALLED IN DWELLING UNIT
- CRAML SPACE LIGHTING OUTLETS, GFCI PROTECTION SHALL BE PROVIDED FOR LIGHTING OUTLETS NOT EXCEEDING 120 VOLTS INSTALLED IN CRAML SPACES.
- APPLIANCE RECEPTACLE OUTLETS INSTALLED IN A DWELLING UNIT FOR SPECIFIC APPLIANCES, SUCH AS LANDRY EQUIPMENT, SHALL BE INSTALLED WITHIN 6 FEET OF THE INTENDED LOCATION OF THE APPLIANCE.
- IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUNROOM, BEDROOM, RECREATION ROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS, RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FEET OR MORE IN WIDTH (INCLUDING SPACE WALL SPACE 2 FEET OR MORE IN WIDTH (INCLUDING SPACE MEASURED AROUND CORNERS) AND UNBROKEN ALONS THE FLOOR LINE BY DOORWAYS AND SIMILAR OPENINGS, FIREPLACES, AND FIXED CABINETS, AND THE WALL SPACE OCCUPIED BY FIXED PAINELS IN EXTERIOR WALLS, BUT EXCLUDING SLIDING PANELS IN EXTERIOR WALLS, THE WALL SPACE AFFORDED BY FIXED ROOM DIVIDERS, SUCH AS FREESTANDING BARSTYPE COUNTERS OR RAILINGS, SHALL BE INCLUDED IN THE 6 FOOT MEASUREMENT.
- IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREA OF A DWELLING UNIT, THE TWO OR MORE 20-AMPERE SMALL-APPLIANCE BRANCH CIRCUITS REQUIRED SHALL SERVE ALL WALL AND FLOOR RECEPTACLE OUTLETS, ALL COUNTERTOP OUTLETS, AND RECEPTACLE OUTLETS FOR REFRIGERATION EQUIPMENT. THE TWO OF MORE SMALL-APPLIANCE BRANCH CIRCUITS SHALL HAVE NO OTHER OUTLETS
- IN KITCHENS, PANTRIES, BREAKFAST ROOMS, DINING ROOMS AND SIMILAR AREAS OF DWELLING UNITS, RECEPTACLE OUTLETS FOR COUNTER SPACES SHALL BE INSTALLED IN ACCORDANCE WITH THE
- (I) A RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE 12 INCHES OR WIDER. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONS THE WALL LINE IS MORE THAN 24 INCHES MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE.

#### ELECTRICAL (continued)

- (2) AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTER SPACE NITH A LONG DIMENSION OF 24 INCHES OR GREATER AND A SHORT DIMENSION OF 12 INCHES OR GREATER.
- AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH PENINSULAR COUNTER SPACE WITH A LONG DIMENSION OF 24 INCHES OR GREATER. AT DAY SHORT DIMENSION OF 12 INCHES OR GREATER. A PENINSULAR COUNTERTOP IS MEASURED FROM CONNECTING PERPENDICULAR WALL.
- COUNTERTOP SPACES SEPARATED BY RANGE TOPS, REFRIGERATORS, OR SINKS SHALL BE CONSIDERED AS SEPARATE COUNTERTOP SPACES IN APPLYING THE REQUIREMENTS OF (I), (2), AND (3),
  ABOVE. IF A RANGE, COUNTER-MOUNTED COOKING UNIT, OR SINK
  IS INSTALLED IN AN ISLAND OR PENINSULAR COUNTERTOP AND THE
  DEPTH OF THE COUNTER BEHIND THE ITEM IS LESS THEN IS NOTHE.
  IT WILL BE CONSIDERED TO DIVIDE THE COUNTERTOP SPACE INTO
  THE GENERAL COUNTERTOP SPACE FACE. COUNTERTOP SPACE INTO TWO SEPARATE COUNTERTOP SPACES. EACH COUNTERTOP SPACE SHALL COMPLY WITH APPLICABLE REQUIREMENTS.
- (5) RECEPTACLE OUTLETS SHALL BE LOCATED NOT MORE THAN 20 INCHES ABOVE THE COUNTERTOP, RECEPTACLE OUTLETS RENDERED NOT READILLY ACCESSIBLE BY APPLIANCE FASTENED IN PLACE, APPLIANCE GARAGES, SINKS, OR RANGETOPS AS COVERED IN 4) ABOVE, OR APPLIANCES OCCUPYING DEDICATED SPACE SHALL NOT BE CONSIDERED AS THESE REQUIRED OUTLETS.
- AT LEAST ONE WALL RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS WITHIN 3 FEET OF THE OUTSIDE EDGE OF EACH BASIN. THE RECEPTACLE OUTLET SHALL BE LOCATED IN WALL OR PARTITION THAT IS ADJACENT TO THE BASIN OR BASIN COUNTERTOP, OR INSTALLED ON THE SIDE OR FACE OF THE BASIN CABINET NOT MORE THAN 12" BELOW THE COUNTERTOR
- 12. IN DWELLING UNITS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN AREAS DESIGNATED FOR THE INSTALLATION OF LAUNDRY EQUIPMENT.
- IN EACH ATTACHED GARAGE AND IN EACH DETACHED GARAGE WITH ELECTRIC POWER, THE BRANCH CIRCUIT SUPPLYING THI RECEPTACLE(S) SHALL NOT SUPPLY OUTLETS OUTSIDE OF THE GARAGE. AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN EACH VEHICLE BAY.
- 14. CABLE- OR RACEWAY-TYPE WIRING METHODS INSTALLED IN A GROOVE. TO BE COVERED BY MALLBOARD, SIDING, PANELING, CARPETING, OR SIMILAR FINISH, SHALL BE PROTECTED Y 1/16 INTO HICK STEEL PLATE, SLEEVE, OR EQUIVALENT OR BY NOT LESS THAN 1-1/4 INCH FREE SPACE FOR THE FULL LENGTH OF THE GROOVE IN WHICH THE CABLE OR RACEWAY
- 15. RECEPTACLES IN DAMP OR WET LOCATIONS.
  - A RECEPTACLE INSTALLED OUTDOORS IN A LOCATION PROTECTED FROM WEATHER OR IN OTHER DAMP LOCATIONS SHALL HAVE AN ENCLOSURE FOR THE RECEPTACLE THAT IS WEATHER-ROOF WHEN THE RECEPTACLE IS COVERED (ATTACHENT PLUS CAP NOT INSERTED AND RECEPTACLE COVERS CLOSED.)
  - ALL 15- AND 20- AMPERE, 125- AND 250-VOLT RECEPTACLES
    INSTALLED IN A WET LOCATION SHALL HAVE AN ENCLOSURE THAT IS
    WEATHER PROOF WHETHER OR NOT THE ATTACHMENT PLIGS CAP IS
    INSERTED. AN OUTLET BOX HOOD INSTALLED FOR THIS PURPOSE
    SHALL BE LISTED AND SHALL BE IDENTIFIED AS "EXTRA DUTY". ALL
    IS- AND 20- AMPERE, 125- AND 250-VOLT NONLOCKING
    RECEPTACLES SHALL BE LISTED WEATHER RESISTANT TYPE.
- LIGHT FIXTURES WITHIN CLOTHES CLOSETS SHALL BE INSTALLED IN ACCORDANCE WITH N.E.C.
- ALL 120-VOLT, SINGLE PHASE, IB- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALIMAYS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTERS(), COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. THE ARC-FAULT CIRCUIT INTERBUSTERS ALL IN INSTALLED TO IN A SPEADING ALL INTERBUSTERS ALL IN INSTALLED TO IN A SPEADING ALL INTERBUSTERS ALL IN INSTALLED TO IN A SPEADING ALL INTERBUSTERS ALL IN INSTALLED TO IN A SPEADING ALL INTERBUSTERS ALL IN INSTALLED TO IN A SPEADING ALL INTERBUSTERS ALL IN INSTALLED TO IN A SPEADING ALL INTERBUSTERS ALL IN INSTALLED TO IN A SPEADING ALL INTERBUSTERS ALL IN INSTALLED TO INTERBUSTERS ALL INTERBUSTERS ALL IN INSTALLED TO INTERBUSTERS ALL INTERBUST ALL INTERBUSTERS ALL INTERBUST ALL INTERBUST ALL INTERBUST NTERRUPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE
- BUILDINGS SHALL BE PROVIDED WITH APPROVED ADDRESS IDENTIFICATION. THE ADDRESS IDENTIFICATION SHALL BE LEGIBLE AND PLACED IN A POSITION THAT IS VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.
- TAMPER-RESISTANT RECEPTACLES IN DWELLING UNITS IN ALL AREAS.
   ALL NON-LOCKING TYPE I25-VOLT I5-AND 20-AMPERE RECEPTACLES.
   SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. EXCEPTIONS LISTED BELON.
  - RECEPTACLES LOCATED MORE THAN 5½ ABOVE THE FLOOR. 2. RECEPTACLES THAT ARE PART OF A LUMINAIRE OR APPLIANCE
  - 3. A SINGLE RECEPTACLE OR A DUPLEX RECEPTACLE FOR TWO APPLIANCES LOCATED WITHIN DEDICATED SPACE FOR EACH APPLIANCE THAT, IN NORMAL USE, IS NOT EASILY MOVED FROM ONE PLACE TO ANOTHER, AND THAT IS CORD-AND-PLUS CONNECTED.
  - 4. NON-GROUNDING RECEPTACLES USED FOR REPLACEMENTS
- DIMMER-CONTROLLED RECEPTACLES. A RECEPTACLE SUPPLYING LIGHTING LOADS SHALL NOT BE CONNECTED TO A DIMMER UNLESS THE PLUS-RECEPTACLE COMBINATION IS A NONSTANDARD CONFIGURATION TYPE THAT IS SPECIFICALLY LISTED AND IDENTIFIED FOR EACH SUCH

#### SMOKE DETECTORS

- SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S INSTRUCTIONS AND NC-R R314
- ALL SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE AND THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72

HOUSEHOLD FIRE ALARM SYSTEMS INSTALLED IN ACCORDANCE WITH NEPA AND AUDIBLE NOTIFICATION DEVICE INSTALLED AS REQUIRED BY THE NC-R R314.3 FOR SMOKE ALARMS, SHALL BE PERMITTED. THE HOUSEHOLD FIRE ALARM SYSTEM SHALL PROVIDE THE SAME LEVEL OF SMOKE DETECTION AND ALARM AS REQUIRED BY THE NG-R FOR SMOKE ALARMS IN THE EVENT THE FIRE ALARM PANEL IS REMOVED OR THE SYSTEM IS NOT CONNECTED TO A CENTRAL STATION

REQUIRED SMOKE DETECTORS SHALL BE LOCATED IN ACCORDANCE

#### ELECTRICAL (continued)

#### CARBON MONOXIDE ALARMS

- CARBON MONOXIDE ALARMS IN DMELLING UNITS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE INMEDIATE VICINITY OF THE BEDROOMS, WHERE A FUEL-BURNING APPLIANCE IS LOCATED WITHIN A BEDROOM OR ITS ATTACHED BATHROOM, A CARBON MONOXIDE ALARM SHALL BE INSTALLED WITHIN THE BEDROOM
- SINGLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING MITH UL 2094 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE NC-R R3I5 AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE PERMITTED TO BE USED IN LIEU OF INDIVIDUAL CARBON MONOXIDE OR SMOKE ALARMS.

#### DRYER VENT

THE DRYER DUCT IS REQUIRED TO IDENTIFY THE LENGTH IN ACCORDANCE WITH SECTION MI502.4.5



. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . .

**NORTH CAROLINA** 50' SERIES KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 ■ TEL: (919) 768-7988 ■ FAX: (919) 472-0582

2018 NORTH CAROLINA STATE BUILDING CODES

. . . . .

MP

ISSUE DATE: 12/13/19 PROJECT No.: 1350999:57

DIVISION MGR.:

REVISIONS:

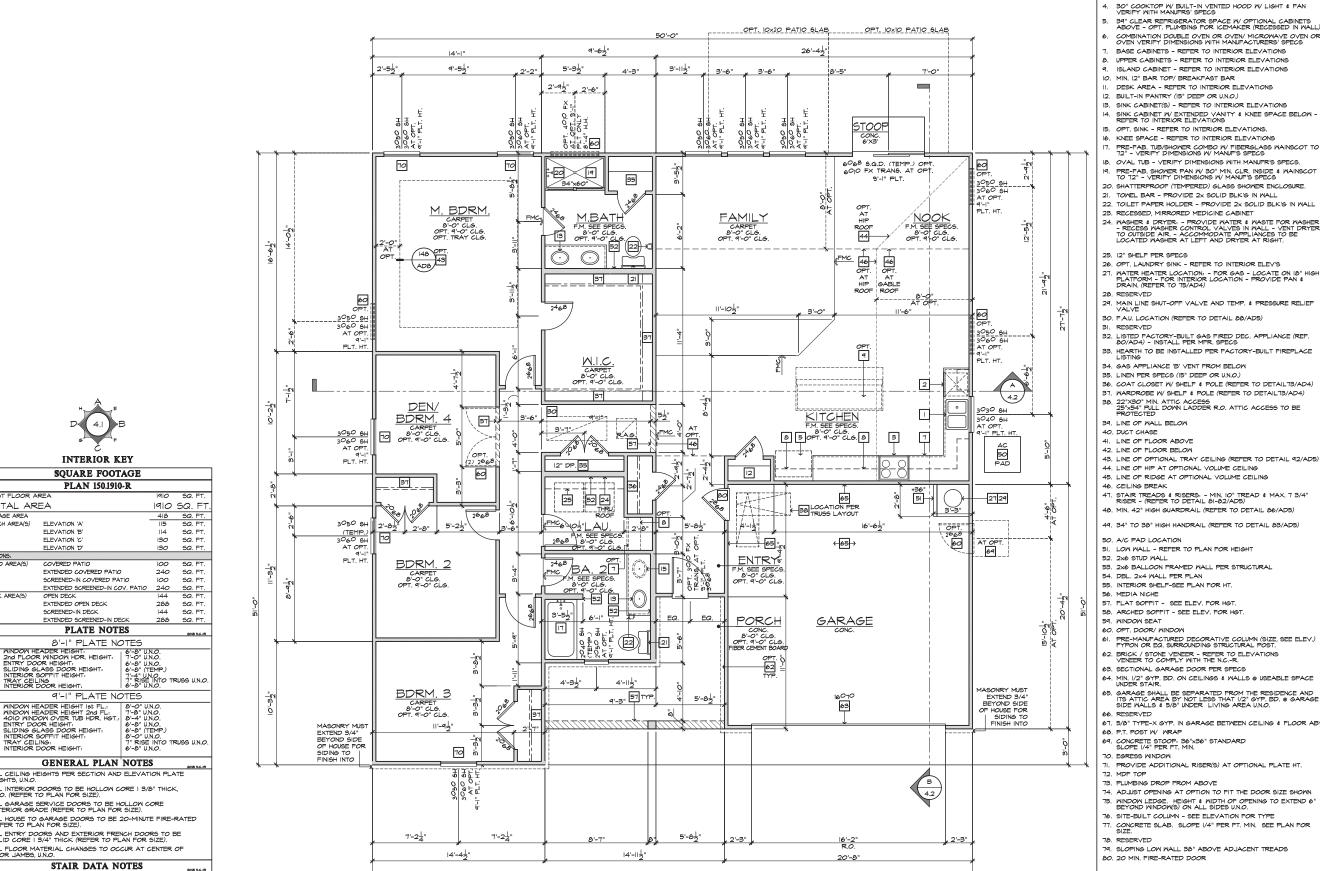
. . . . . .

■ /1 VENTILATION NC2008NCP/ 01/17/20 /KBA

FOR INTERNAL USE ONL

150.1910-R HEET: GN3 SPEC. LEVEL 1

RALEIGH-DURHAM 50' SERIES



HOME

FLOOR PLAN NOTES

SINK - GARBAGE DISPOSAL OPTIONAL - VERIFY DIMENSIONS WITH MANUFACTURERS' SPECS DISHMASHER - PROVIDE AIR GAP - VERIFY SPACING & DIMENSIONS PER MANUFACTURERS' SPECS SLIDE-IN RANGE/OVEN COMBINATION W/ BUILT-IN NON-VENTED HOOD W/LIGHT & FAN. - VERIFY WITH MANUFACTURERS' SPECS

NOTE: NOT ALL KEY NOTES APPLY.

**NORTH CAROLINA** 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 • FAX: (919) 472-0582

2018 NORTH **CAROLINA STATE BUILDING** CODES

ISSUE DATE: 12/13/19 PROJECT No.: 1350999:57 DIVISION MGR.:

> REVISIONS: VENTILATION NC2008NCP/ 01/17/20 /KBA

FRAMEWALK NC20019NCP/ 03-25-20 /KBA

150.1910-R

1.1

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

FLOOR PLAN 'A'

SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XIT")

INTERIOR KEY

SQUARE FOOTAGE

PLAN 150.1910-R

1910 SQ. FT

SQ. FT

SQ. FT

SQ. F

50. F1

50. FT 50. FT

288 SQ. FT

100

288

FIRST FLOOR ARE

GARAGE AREA

TOTAL AREA

ELEVATION 'A'

ELEVATION 'B'

ELEVATION 'C'

ELEVATION 'D'

COVERED PATIO

EXTENDED GOVERED PATIO

EXTENDED OPEN DECK

SCREENED-IN COVERED PATIO

SCREENED-IN DECK EXTENDED SCREENED-IN DECK

EXTENDED SCREENED-IN COV. PATIO

PLATE NOTES

8'-1" PLATE NOTES

9'-1" PLATE NOTES

GENERAL PLAN NOTES

ALL HOUSE TO GARAGE DOORS TO BE 20-MINUTE FIRE-RATED (REFER TO PLAN FOR SIZE).

STAIR DATA NOTES

ALL CEILING HEIGHTS PER SECTION AND ELEVATION PLATE HEIGHTS, U.N.O.

ALL INTERIOR DOORS TO BE HOLLOW CORE | 3/8" THICK, U.N.O. (REFER TO PLAN FOR SIZE).

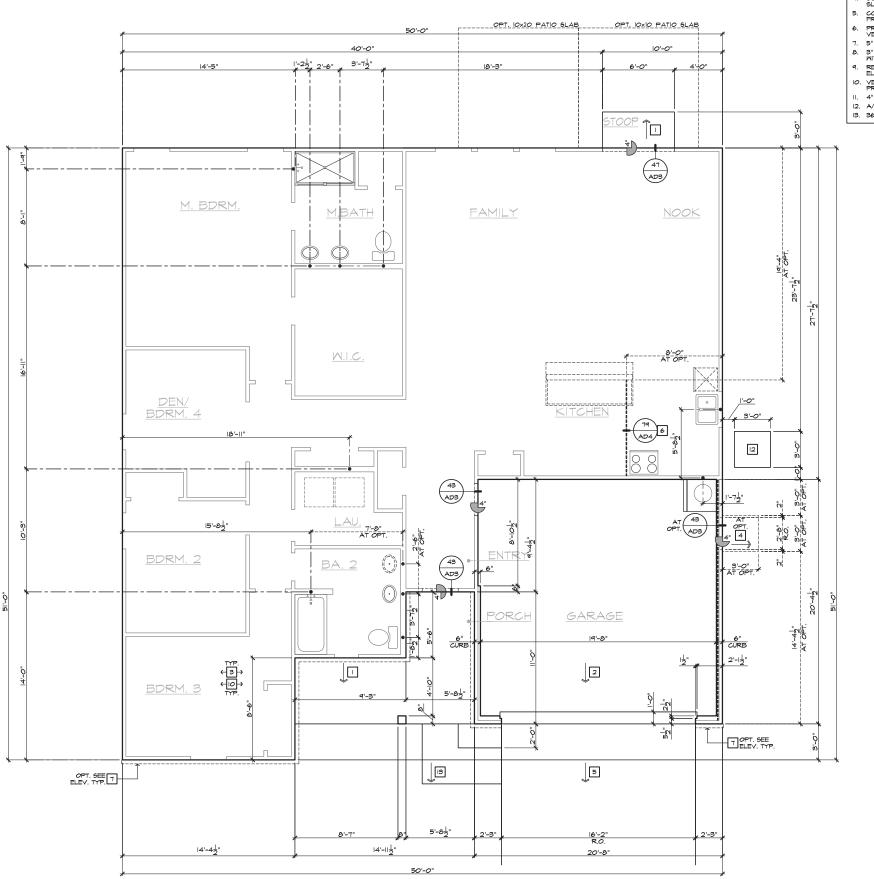
ALL ENTRY DOORS AND EXTERIOR FRENCH DOORS TO BE SOLID CORE | 3/4" THICK (REFER TO PLAN FOR SIZE).

ALL FLOOR MATERIAL CHANGES TO OCCUR AT CENTER OF DOOR JAMBS, U.N.O.

FIRST FLOOR WITH \$-1" PLATE HEIGHT:
14" DEEP T.J.I. FLOOR JOISTS MITH 3/4" T&G DECKING.
14 TREADS AT 10" EACH
15 RISERS AT 7-71/6" EACH

FIRST FLOOR WITH 9-1" PLATE HEIGHT:
14" DEEP T.J.I. FLOOR JOISTS WITH 3/4" T&G DECKING.
15 TREADS AT 10" EACH
16 RISERS AT 7-3/4" EACH

ALL GARAGE SERVICE DOORS TO BE HOLLOW CORE EXTERIOR GRADE (REFER TO PLAN FOR SIZE).



#### SLAB INTERFACE PLAN 'A'

SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XI7")

NOTE: NOT ALL KEY NOTES APPLY.

- CONCRETE PATIO/PORCH SLAB PER STRUCTURAL- SLOPE I/4" PER FT. MIN.
- 2. CONCRETE GARAGE SLAB PER STRUCTURAL- SLOPE 1/8" PER. 1-0" MIN. TOMARD DOOR OPENING.
  3. CONCRETE FOUNDATION PER STRUCTURAL.

SLAB PLAN NOTES

- CONCRETE STOOP, 36',36' STANDARD
  SLOPE I/4" PER FT. MIN.
  CONCRETE DRIVENAY SLOPE I/4" PER FT. MIN. AWAY
  FROM GARAGE DOOR OPENING.
- 6. PROVIDE ELECTRICAL CONDUIT UNDER SLAB AT ISLAND. VERIFY LOCATION.
- 7. 5" BRICK LEDGE FOR MASONRY VENEER.
  8. 3" DIAMETER CONCRETE FILLED PIPE BOLLARD 36" HIGH WITH MIN, 12" EMBEDMENT INTO CONCRETE.
- REFER TO CIVIL DRAWINGS FOR ALL FINISH SURFACE ELEVATIONS.
- IO. VERIFY ALL PLUMBING STUB DIMENSIONS SHOWN HERE PRIOR TO POUR OF SLAB.

- | 11. 4" MIN. 8 | /4" MAX. TO HARD SURFACE. | 12. A/C PAD. VERIFY LOCATION. | 13. 36" WIDE WALKWAY- SLOPE | /4" PER FT. MIN.

HOME

#### NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 ■ TEL: (919) 768-7988 ■ FAX: (919) 472-0582

## 2018 NORTH CAROLINA STATE BUILDING CODES

ISSUE DATE:

■ PROJECT No.: 1350999:57 ■ DIVISION MGR.: **REVISIONS:** 

VENTILATION NC2008NCP/ 01/17/20 /KBA

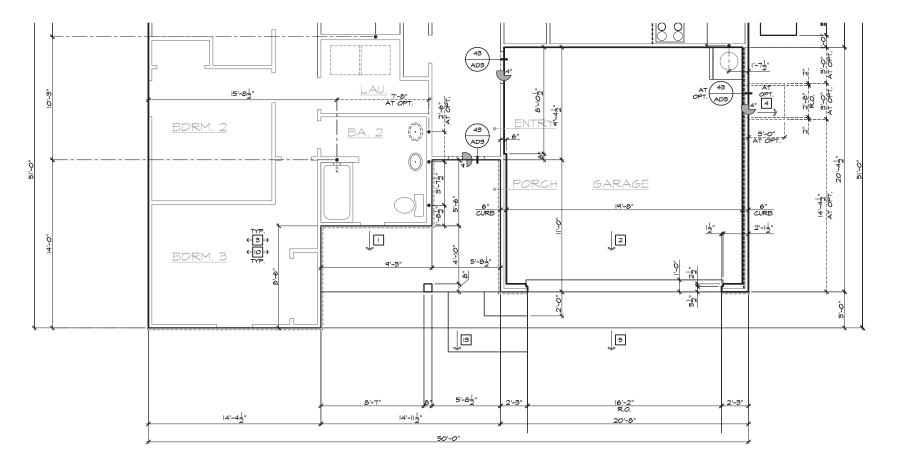


150.1910-R 2.1

SPEC. LEVEL 1

RALEIGH-DURHAM 50' SERIES

BASIC PLAN AT SLAB-ON-GRADE



#### PARTIAL SLAB INTERFACE PLAN 'B'

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

BASIC PLAN AT SLAB-ON-GRADE

#### SLAB PLAN NOTES

- \*\* SLAD .\_\_\_
  NOTE: NOT ALL KEY NOTES APPLY. CONCRETE PATIO/PORCH SLAB PER STRUCTURAL- SLOPE I/4" PER FT. MIN.
- 2. CONCRETE GARAGE SLAB PER STRUCTURAL- SLOPE 1/8" PER. 1-0" MIN. TOWARD DOOR OPENING.
  3. CONCRETE FOUNDATION PER STRUCTURAL.

- CONCRETE STOOP, 36 'X36" STANDARD
   SLOPE (14" PER FT. MIN.
   CONCRETE DRIVENAY SLOPE (14" PER FT. MIN. AMAY
   FROM GARAGE DOOR OPENING.
- 6. PROVIDE ELECTRICAL CONDUIT UNDER SLAB AT ISLAND. VERIFY LOCATION.
- 7. 5" BRICK LEDGE FOR MASONRY VENEER.
  8. 3" DIAMETER CONCRETE FILLED PIPE BOLLARD 36" HIGH WITH MIN. 12" EMBEDMENT INTO CONCRETE.
- REFER TO CIVIL DRAWINGS FOR ALL FINISH SURFACE ELEVATIONS.
- ELEVATIONS.

  IO. VERIFY ALL PLIMBING STUB DIMENSIONS SHOWN HERE PRIOR TO POUR OF SLAB.

  II. 4" MIN. 8 I/4" MAX. TO HARD SURFACE.

  II. 4"C PAD, VERIFY LOCATION.

  IB. 36" WIDE WALKWAY- SLOPE I/4" PER FT. MIN.



#### NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

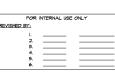
4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 ■ TEL: (919) 768-7988 ■ FAX: (919) 472-0582

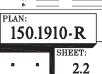
## 2018 NORTH CAROLINA STATE BUILDING CODES

ISSUE DATE: 12/13/19 PROJECT No.: 1350999:57

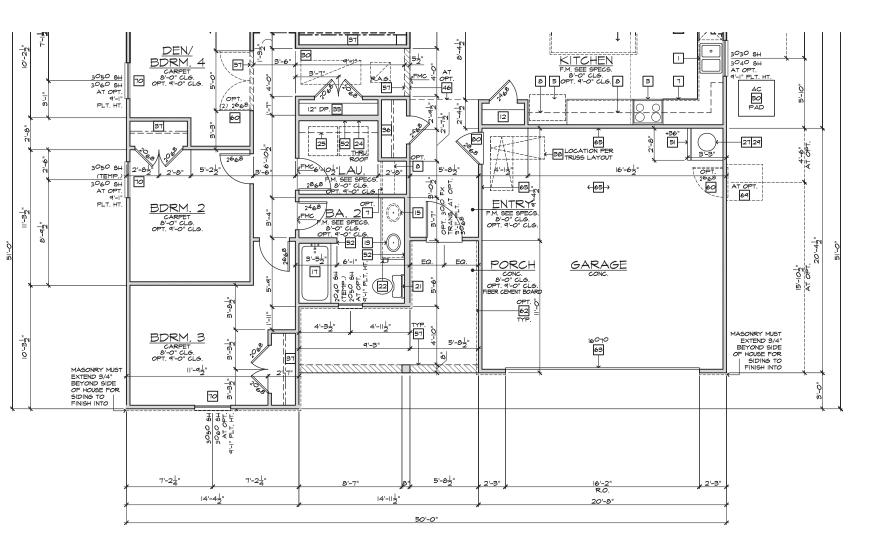
DIVISION MGR.: REVISIONS:

VENTILATION NC2008NCP/ 01/17/20 /KBA





SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES



PARTIAL FLOOR PLAN 'B'

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

SIC PLAN



kb HOME

# NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD.

SUITE 180

DURHAM, NC 27703

TEL: (919) 768-7988

FAX: (919) 472-0582

# 2018 NORTH CAROLINA STATE BUILDING CODES

ISSUE DATE: 12/13/19
PROJECT No.: 1350999:57
DIVISION MGR.: MP
REVISIONS:

■ 1 VENTILATION NC2008NCP/ 01/17/20 /KBA

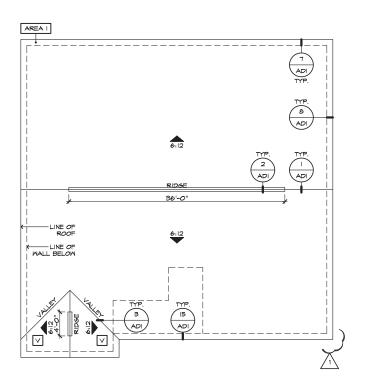
FRAMEWALK NC20019NCP/ 03-25-20 /KBA



SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

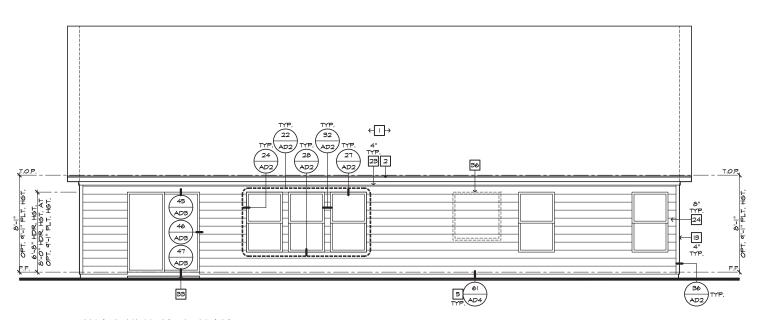
3.B1

NOTE: REFER TO BASIC FLOOR PLAN FOR INFORMATION NOT SHOWN HERE

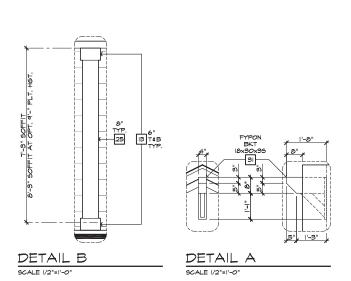


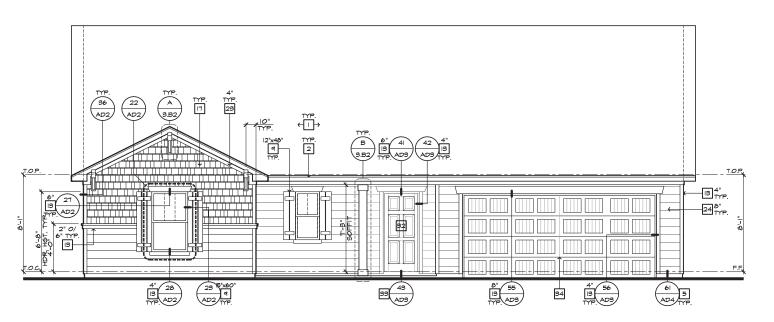
ROOF PLAN 'B'

SCALE 1/8"=1'-0" (22"X34") - 1/16"=1'-0" (11"X17")



REAR ELEVATION 'B' SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XI7")





FRONT ELEVATION 'B' SCALE I/4"=1'-0" (22"×34") - I/8"=1'-0" (II"×I7")



ATTIC VENT CALCULATIONS

PROVIDE I 50, IN, OF VENTILATION PER 300 90, IN, OF ATTIC

SPACE PROVIDE THAT AT LEAST 50% & NO MORE THAN 80% OF

THE REQ. VENTILATING AREA IS PROVIDED BY VENTILATORS

LOCATED IN THE UPPER PORTION OF THE ATTIC, (HIGH VENTING)

AT 3"-0" ABOVE EAVE VENT WITH THE BALLANCE BEING PROVIDED

BY EAVE VENTS, (LOW VENTING) (2018 NG.-R 806.2)

\*\*\* CALCULATION BY 1150, HIGH/LOW VENTING NOT REGUIRED.

APPROXIMATE RIDGE VENT LOCATIONS SHOWN.

ACTUAL LOCATIONS TO BE DETERMINED IN THE FIELD.

AREA I / MAIN.

VENTILATION REGUIRED.

ATTIC AREA = 2443

50, FT. / 900 814 50, FT.

ATTIC AND	- 2445		30. F1. / 300	D.14 SQ. FT.
			× 144 =	1173 SQ. IN.
		TOT	AL HIGH & LOW =	1173 SQ. IN.
			× 50% =	586 SQ. IN.
VENTILATION	PROVIDED:			
HIGH				
40	LF RIDGE VENT(S) AT	18	SQ. IN. / LF. =	720 SQ. IN.
0	ROOF VENT(S) AT	50	SQ. IN. EA. =	0 SQ. IN.
SUB-TOTAL HIGH VENTILATION:			720 SQ. IN.	
LOM				
90	LF VENTILATED SOFFIT AT	6.9	5Q. IN. / LF. =	621 SQ. IN.
2	ROOF VENT(S) AT	50	SQ. IN. EA. =	100 SQ. IN.
TOTAL VENTILATION PROVIDED:				1341 SQ. IN.

ALL VENT OPENINGS SHALL BE COVERED WITH 1/4" CORROSION RESISTANT METAL MESH.

WHEN GABLE END TRUSS MEMBERS BLOCK GABLE END VENTS PROVIDE ADEQUATE ADDITIONAL VENTILATION BY MEANS OF ROOF TILE VENTS.

ISSUE DATE:

REVISIONS:

DIVISION MGR.:

12/13/19

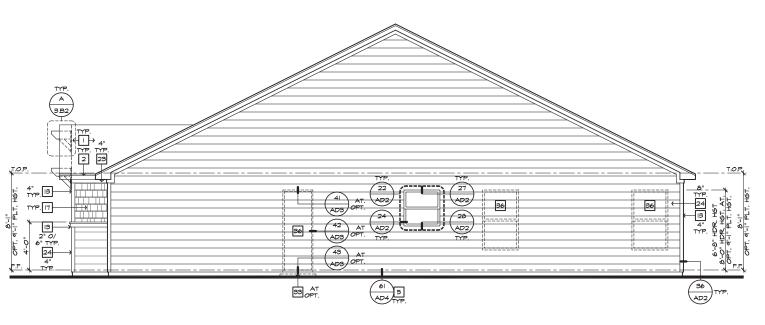
MP

PROJECT No.: 1350999:57

VENTILATION NC2008NCP/ 01/17/20 /KBA

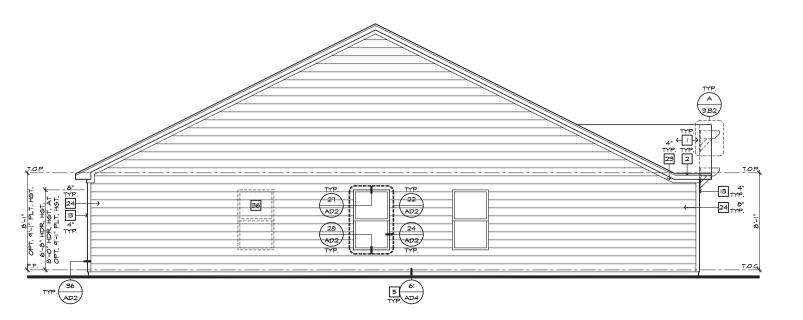
150.1910-R 3.B2

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES



#### RIGHT ELEVATION 'B'

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")



LEFT ELEVATION 'B'

SCALE |/4"=|'-0" (22"X34") - |/6"=|'-0" (||"X|7")

2. 2X FASCIA/BARGE BOARD WITH FASCIA CAP

4. G.I. FLASHING & SADDLE/CRICKET
5. G.I. DRIP SCREED

6. 24"x24" CHIMNEY
7. DECORATIVE VENT

8. DECORATIVE CORBEL
9. DECORATIVE SHUTTERS

IO. PEDIMENT. SEE ELEVATION FOR TYPE

II. RECESSED ELEMENT 12. DECORATIVE TRIM FYPON OR EQ. SEE ELEVATION FOR TYPE

13. TRIM PER SPEC- SEE ELEVATION FOR SIZE 14. SYNTHETIC MATERIAL

 PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYPON OR EQ. SURROUNDING STRUCTURAL POST. 16. SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE

SHAKE SIDING
 STONE VENEER PER SPECS
 BRICK/MASONRY VENEER PER SPECS

20. BUILT UP BRICK COLUMN

21. SOLDIER COURSE 22. ROWLOCK COURSE

23. FRIEZE BOARD
24. SIDING W/ 4" CORNER TRIM PER SPECS

24. SIDING W 4" CORNER TRIM PER SPECS
25. P.T. POST W WRAP - SEE STRUCTURAL FOR SIZE
26. PRE-FAB DECORATIVE TRIM
27. LIGHT WEIGHT PRECAST STONE TRIM
28. P.T. LIMBER RAILINGS (+36" UN.O.)
29. WRAP
30. DECORATIVE WINDOWDOOR TRIM - FYPON OR EQ. SEE
ELEVATION FOR SIZE.

31. BRACKET OR KICKER - FYPHON OR EQ. 32. ENTRY DOOR

33. CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN.

34. SECTIONAL GARAGE DOOR PER SPECS

35. ALUMINUM WRAP

36. OPTIONAL DOOR/MINDOM - REFER TO PLAN OPTIONS 37. OPTIONAL STANDING SEAM METAL ROOF

38. KEYSTONE 39. SOLDIER CROWN

40. JACK SOLDIER COURSE
41. WATER TABLE

42. ATRIUM DOOR

43. PILASTER - SEE ELEVATION FOR TYPE

HOME

NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 • FAX: (919) 472-0582

2018 NORTH CAROLINA STATE BUILDING CODES

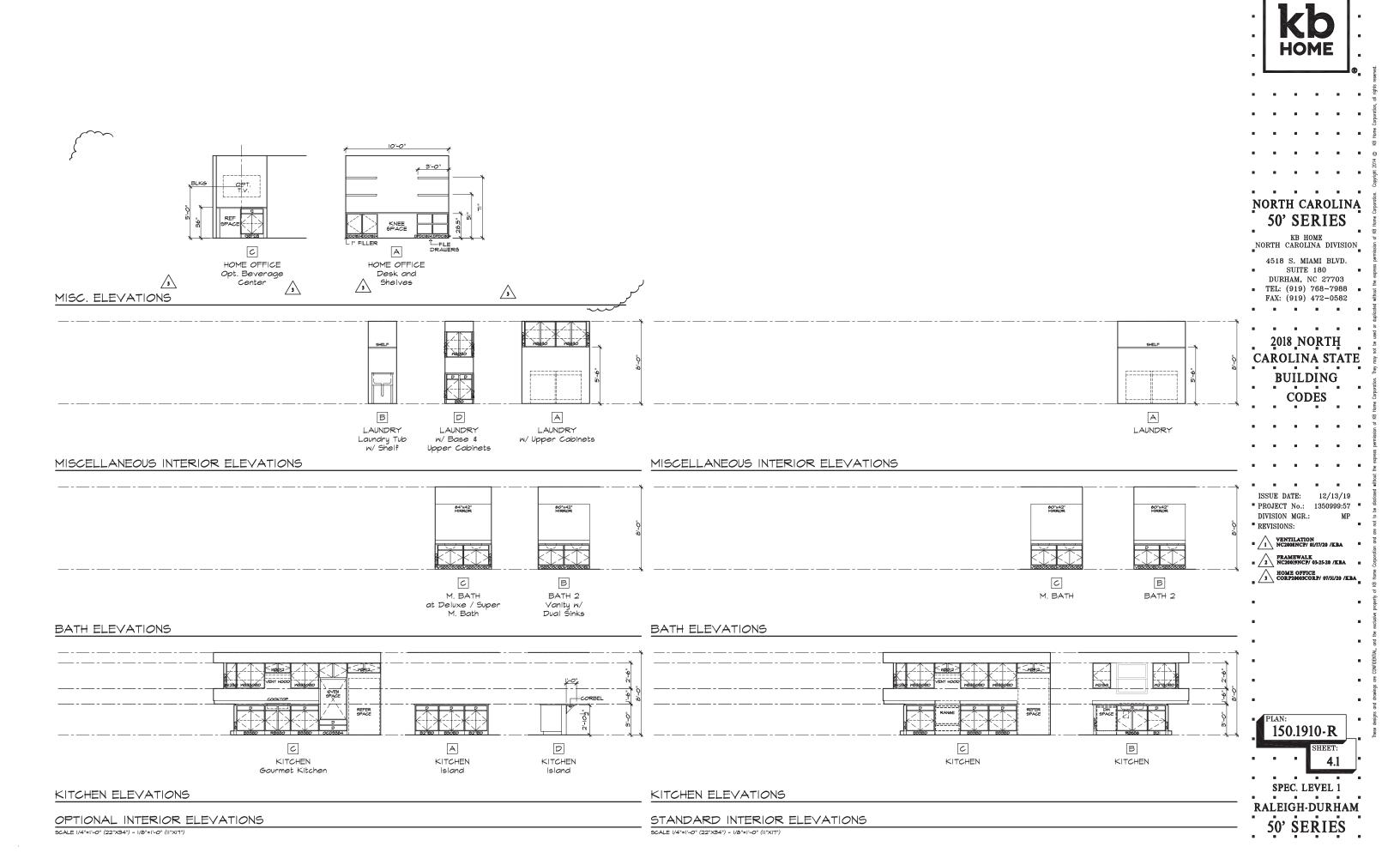
ISSUE DATE: 12/13/19 ■ PROJECT No.: 1350999:57 ■

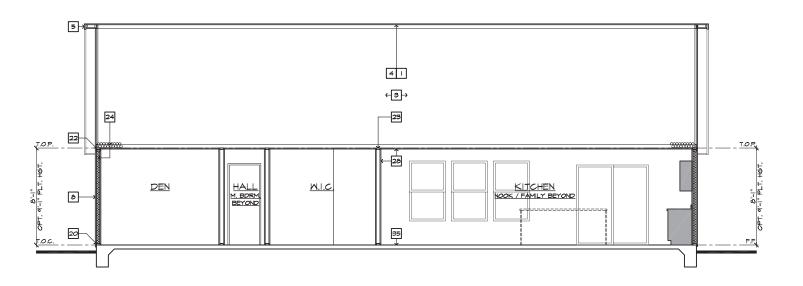
DIVISION MGR.: REVISIONS: VENTILATION NC2008NCP/ 01/17/20 /KBA

PLAN: 150.1910-R

3.**B**3

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

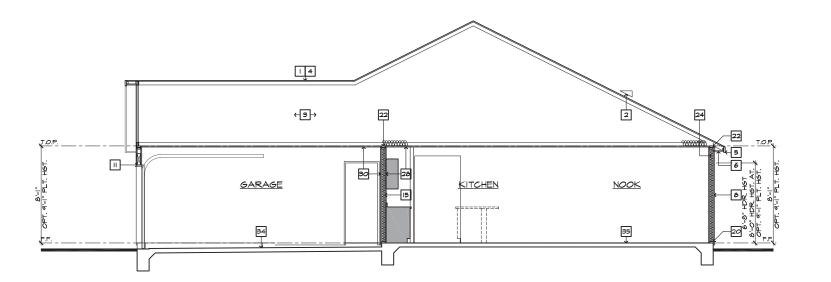




#### SECTION 'A'

SCALE I/4"=I'-O" (22"X34") - I/8"=I'-O" (II"XI7")

AT SLAB-ON-GRADE



SECTION 'B'

SCALE I/4"=1'-0" (22"X34") - I/8"=1'-0" (II"XI7") AT SLAB-ON-GRADE SECTION NOTES

# SECTION I

ROOF MATERIAL - REFER TO ROOF NOTES 2. ROOF PITCH - REFER TO ROOF NOTES

2. PRE-MANUFACTURED WOOD ROOF TRUSS SYSTEM - SEE STRUCTURAL & TRUSS CALCS

4. ROOF SHEATHING PER STRUCTURAL

5. 2x FASCIA/BARGE BOARD

6. CONT. SOFFITED EAVE W/ VENTING

G.I. FLASHING - ROOF TO WALL

8. EXTERIOR FINISH PER ELEVATIONS

9. FLOOR FRAMING PER STRUCTURAL

IO. FLOOR SHEATHING PER STRUCTURAL

II. HEADER PER STRUCTURAL

12. FLUSH BEAM PER STRUCTURAL IS. DROPPED BEAM PER STRUCTURAL

14. FLAT/ ARCHED SOFFIT PER PLAN

15. 2x4 STUD WALL 16. 2x6 STUD WALL

17. 2x6 BALLOON FRAMED WALL PER STRUCTURAL18. DBL. 2x4 WALL PER PLAN

I9. 2x CRIPPLES @ 16" O.C. 20. 2x PRESSURE TREATED SILL PLATE

2I. 2x SOLE PLATE

22. DBL. 2x TOP PLATE @ EXTERIOR & BEARING WALLS

23. IX OVER 2X TOP PLATE @ INTERIOR & NON-BEARING WALLS 24. INSULATION MATERIAL PER ENERGY CALCULATIONS

25. MIN. 36" HIGH GUARD - SEE PLAN FOR HEIGHT 26. LOW WALL - SEE PLAN FOR HEIGHT

27. STAIR TREADS AND RISERS PER PLAN: - MIN. IO" TREAD & MAX. 7 3/4" RISER

28. INTERIOR FINISH: - MIN. 1/2" GYP. BD. @ MALLS & SAG RESISTANT OR 5/8" DRYMALL @ CEILING

29. MIN. 1/2" GYP. BD. ON CEILING & WALLS @ USEABLE SPACE UNDER STAIRS.

30. GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAT 1/2" GYP. BD. @ GARAGE SIDE WALLS & 5/8" UNDER LIVING AREA U.N.O.

31. MATERIAL TO UNDERSIDE OF ROOF SHEATHING 32. INTERIOR SHELF - MIN. I/2" GYP. BD. OVER 3/8" PLY WD.

33. CONCRETE PATIO/ PORCH SLAB PER STRUCTURAL - SLOPE I/4" PER FT. MIN.

34. CONCRETE GARAGE SLAB PER STRUCTURAL - SLOPE 2" MIN.

35. CONCRETE FOUNDATION PER STRUCTURAL 36. LINE OF OPTIONAL TRAY CEILING STEP CEILING

37. LINE OF OPTIONAL VOLUME CEILING
38. PROFILE OF OPTIONAL COVERED PATIO

39. EXTERIOR SOFFIT MATERIAL - REFER TO ELEVATIONS.

40. 8" BLOCK WALL

CEILING
42. WHEN THERE IS USABLE SPACE ABOVE AND BELOW THE
CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY IN A
SINGLE-FAMILY DWILLING, DRAFT STOPS SHALL BE INSTALLED
SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT
EXCEED 1,000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE
THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS.

HOME

#### NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 . FAX: (919) 472-0582

2018 NORTH CAROLINA STATE BUILDING CODES

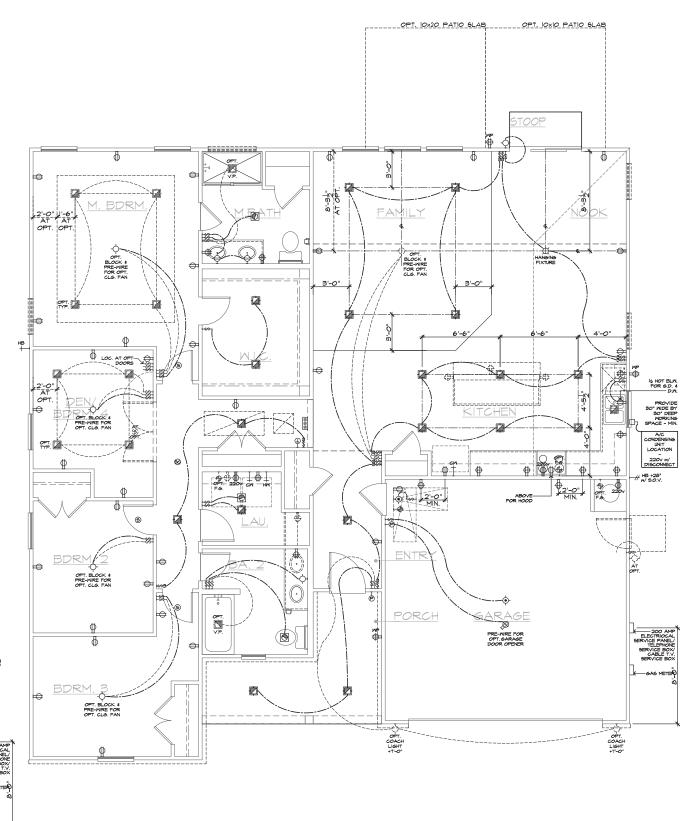
ISSUE DATE: 12/13/19 PROJECT No.: 1350999:57 DIVISION MGR.:

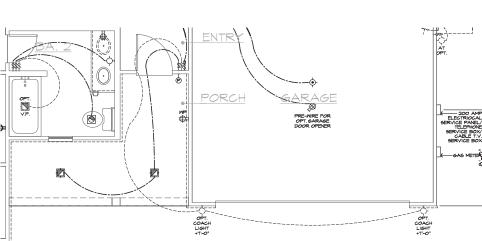
■ REVISIONS: VENTILATION NC2008NCP/ 01/17/20 /KBA

150.1910-R

4.2 SPEC. LEVEL 1

RALEIGH-DURHAM 50' SERIES





PARTIAL UTLITY PLAN 'B'

SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XIT")

UTLITY PLAN 'A'

SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XIT")

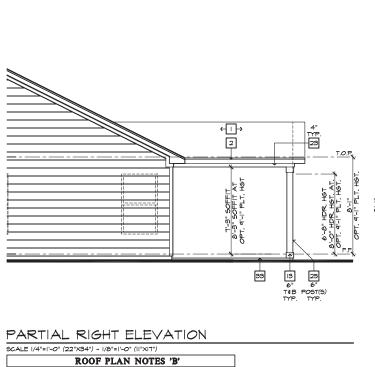
UTILITY LEGEND 120V DUPLEX CONVENIENCE RECEPTACLE ARC FAULT(AFCI) AND TAMPER RESISTANT(TR) 12" ABV. FIN. FLR. TYPICAL U.N.O. HE WP 6F1 120V (TR) RECEPTACLE W 6F1 CIRCUIT W WATER RESISTANT HOUSING ⊕ 6FI 120v (TR) RECEPTACLE W 6FI CIRCUIT ㅁ HOME FUSED DISCONNECT 120v (AFCI & TR) RECESSED FLOOR RECEPTACLE W COVER 0 120v (AFCI & TR) DUPLEX CONVENIENCE RECEPTACLE SMITCH CONTROLLED, 1/2 HOT  $\Longrightarrow$  220 v Single convenience receptacle height noted as per plan TWO-POLE LIGHT SWITCH AT 42" ABV. FIN. FLR. 8" ABOVE COUNTER U.N.O. THREE-POLE LIGHT SWITCH FOUR-POLE LIGHT SWITCH WALL MOUNTED LIGHT FIXTURE W/ WATER RESISTANT HOUSING ₩.P. ф WALL MOUNTED INCANDESCENT LIGHT FIXTURE WALL MOUNTED FLUORESCENT LIGHT FIXTURE **\( \rightarrow \)** CEILING MOUNTED INCANDESCENT LIGHT FIXTURE CEILING MOUNTED FLUORESCENT LIGHT FIXTURE NORTH CAROLINA HANGING INCANDESCENT LIGHT FIXTURE Ø 50' SERIES **D** RECESSED INCANDESCENT DIRECTION LIGHT FIXTURE (EYE BALL) KB HOME  $\bigcirc$ RECESSED INCANDESCENT LIGHT FIXTURE NORTH CAROLINA DIVISION LIGHTING - TRAVERSE II LED FIXTURE - PER SPECS 4518 S. MIAMI BLVD. RECESSED INCANDESCENT LIGHT FIXTURE W/ WATER RESISTANT HOUSING SUITE 180 DURHAM, NC 27703 RECESSED FLUORESCENT LIGHT FIXTURE TEL: (919) 768-7988 RECESSED EXHAUST FAN FAX: (919) 472-0582 RECESSED EXHAUST FAN/ INCANDESCENT LIGHT COMBINATION RECESSED EXHAUST FAN/ FLUORESCENT LIGHT COMBINATION INCANDESCENT WALL SCONCE 2018 NORTH ILLUMINATED ADDRESS SIGN - VISIBLE FROM STREET **CAROLINA STATE** BUILDING 24"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED) CODES 12"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED) OPTIONAL PRE-WIRED CEILING FAN AND SWITCH - LOCATED IN CENTER OF ROOM U.N.O. WALL MOUNTED JUNCTION BOX 888 DOOR CHIME ISSUE DATE: +CATY RECEPTACLE PROJECT No.: 1350999:57 H® PUSH BUTTON DIVISION MGR.: REVISIONS: SERVICE BOX VENTILATION NC2008NCP/ 01/17/20 /KBA HOSE BIB W/ S.O.V. FRAMEWALK NC20019NCP/ 03-25-20 /KBA WATER STUB FOR ICE MAKER APPROVED CEILING MOUNTED SMOKE DETECTOR TO BE HARD WIRED WITH BATTERY BACK-UP AND INTERCONNECTED APPROVED CARBON MONOXIDE ALARM/ SMOKE DET. THERMOSTAT (VERIFY LOCATION W HVAC PLAN) GAS TAP 24" MIN. SEPERATION OF ELECTRICAL BOXE AS SHOWN BELOW DWELLING 2'-0" GFI SECONDARY MASTER NOTES MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENSINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT. ALL HEIGHTS SHOWN ARE TO CENTERLINE OF FIXTURE. 150.1910-R SHEET: 5.1 SPEC. LEVEL 1  $RALEIGH \cdot DURHAM$ 200 AMP ELECTRICAL PANEL (DEFAULT). ELECTRICAL PLAN CHECK PERMIT REQUIRED IF LOAD EXCEED 400 AMPS.

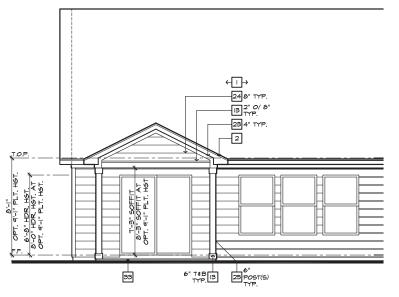
50' SERIES

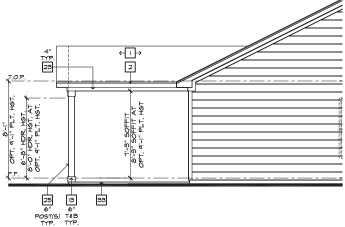
ф **\( \rightarrow \)** Ø **D**  $\bigcirc$ **(** €  $+ \bigcirc$ 888 +HO HT COVERED FAMILY NOOK COVERED PATIO AT NOOK

UTILITY LEGEND 2019 N.G.-R/ 2017 N.E.G 120V DUPLEX CONVENIENCE RECEPTACLE ARC FAULT(AFCI) AND TAMPER RESISTANT(TR) 12" ABV. FIN. FLR. TYPICAL U.N.O. MP 6FI 120V (TR) RECEPTACLE W/ GFI CIRCUIT
MW WATER RESISTANT HOUSING ⊕ 6FI 120v (TR) RECEPTACLE W/ 6FI CIRCUIT ㅁ HOME FUSED DISCONNECT 0 120v (AFCI & TR) RECESSED FLOOR RECEPTACLE W COVER 120v (AFCI & TR) DUPLEX CONVENIENCE RECEPTACLE SWITCH CONTROLLED, 1/2 HOT  $\Rightarrow$  $\Longrightarrow$  220  $\vee$  220  $\vee$  SINGLE CONVENIENCE RECEPTACLE HEIGHT NOTED AS PER PLAN TWO-POLE LIGHT SMITCH AT 42" ABV. FIN. FLR. 8" ABOVE COUNTER U.N.O. THREE-POLE LIGHT SWITCH <del>169-</del> 4 FOUR-POLE LIGHT SWITCH +Q-M.P. WALL MOUNTED LIGHT FIXTURE W/ WATER RESISTANT HOUSING WALL MOUNTED INCANDESCENT LIGHT FIXTURE WALL MOUNTED FLUORESCENT LIGHT FIXTURE CEILING MOUNTED INCANDESCENT LIGHT FIXTURE CEILING MOUNTED FLUORESCENT LIGHT FIXTURE NORTH CAROLINA HANGING INCANDESCENT LIGHT FIXTURE 50' SERIES RECESSED INCANDESCENT DIRECTIONAL LIGHT FIXTURE (EYE BALL) KB HOME RECESSED INCANDESCENT LIGHT FIXTURE NORTH CAROLINA DIVISION LIGHTING - TRAVERSE II LED FIXTURE - PER SPECS 4518 S. MIAMI BLVD. RECESSED INCANDESCENT LIGHT FIXTURE W/ WATER RESISTANT HOUSING SUITE 180 DURHAM, NC 27703 RECESSED FLUORESCENT LIGHT FIXTURE TEL: (919) 768-7988 • RECESSED EXHAUST FAN FAX: (919) 472-0582 RECESSED EXHAUST FAN/ INCANDESCENT LIGHT COMBINATION RECESSED EXHAUST FAN/ FLUORESCENT LIGHT COMBINATION . . . . INCANDESCENT WALL SCONCE 2018 NORTH ILLUMINATED ADDRESS SIGN - VISIBLE FROM STREET **CAROLINA STATE** BUILDING 24"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED) CODES 12"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED) OPTIONAL PRE-MIRED CEILING FAN AND SMITCH - LOCATED IN CENTER OF ROOM U.N.O. WALL MOUNTED JUNCTION BOX DOOR CHIME ISSUE DATE: 12/13/19 CATY RECEPTACLE PROJECT No.: 1350999:57 PUSH BUTTON DIVISION MGR.: PHONE OUTLET REVISIONS: SERVICE BOX VENTILATION NC2008NCP/ 01/17/20 /KBA HOSE BIB W/ S.O.V. WATER STUB FOR ICE MAKER APPROVED CEILING MOUNTED SMOKE DETECTOR TO BE HARD WIRED WITH BATTERY BACK-UP AND INTERCONNECTED APPROVED CARBON MONOXIDE ALARM/ SMOKE DET. THERMOSTAT (VERIFY LOCATION W/ HVAC PLAN) GAS TAP GAS KEY - FIREPLACE GAS VALVES SHALL BE LOCATED OUTSIDE OF REQUIRED HEARTH AREA, BUT NO MORE THAN 48" FROM GAS OUTLET SMITCHING FOR ROOMS W/ CLG. FAN OPTIONS 24" MIN. SEPERATION OF ELECTRICAL BOXE AS SHOWN BELOW DWELLING ↑FAN ↑½ HOT ½ HOT ↑ REVIEWED BY: 2'-0" GFI \$ \$ \$ \$ SECONDARY MASTER NOTES MECHANICAL ELECTRICAL AND PLIMBING SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT, ALL HEIGHTS SHOWN ARE TO CENTERLINE OF FIXTURE. 150.1910-R SHEET: 5.3 SMOKE DETECTORS IN ROOMS WITH VOLUME CEILING TO BE LOCATED AT HIGHEST POINT OF CEILING SPEC. LEVEL 1 20 FOOT #4 REBAR FOR UFER GROUND AND ADDITIONAL COLD WATER GROUND, REFER TO SLAB INTERFACE PLAN FOR LOCATION. RALEIGH-DURHAM 200 AMP ELECTRICAL PANEL (DEFAULT). ELECTRICAL PLAN CHECK PERMIT REQUIRED IF LOAD EXCEED 400 AMPS. 50' SERIES

NOTE: REFER TO BASIC <u>UTILITY PLAN</u> FOR INFORMATION NOT SHOWN HERE







PARTIAL REAR ELEVATION

PARTIAL LEFT ELEVATION SCALE I/4"=1'-0" (22"X34") - I/8"=1'-0" (II"XIT")

SCALE 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")

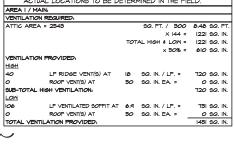
#### INDICATES ROOF SLOPE AND DIRECTION, U.N.O. 6:12

ROOF MATERIAL: COMPOSITION SHINGLE 12" (INCHES) TYPICAL ROOF OVERHANG AT RAKE, U.N.O. 12" (INCHES) TYPICAL ROOF OVERHANG AT EAVE, U.N.O. LOCATE EAVE/ RAFTER VENTS EQUALLY BALANCED AROUND HOUSE EXCEPT ABOVE SHEARWALL PANELS.

#### ATTIC VENT CALCULATIONS

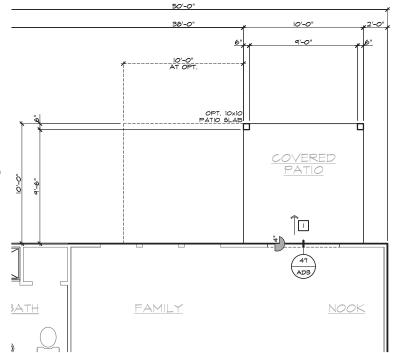
PROVIDE I SQ. IN. OF VENTILATION PER 300 SQ. IN. OF ATTIC SPACE. PROVIDE THAT AT LEAST 50% \$ NO MORE THAN 80% OF THE REQ. VENTILATING SAREA IS PROVIDED BY VENTILATING SOLD LOCATED IN THE UPPER PORTION OF THE ATTIC, (HIGH VENTING) AT 30°0 ABOVE EAVE VENT WITH THE BALANCE BEING PROVIDED BY EAVE VENTS, (LOW VENTING VOL VENTING VOLTIME OF CALCULATION BY (1950, HIGHLDOW VENTING NOT PEGUIRED.

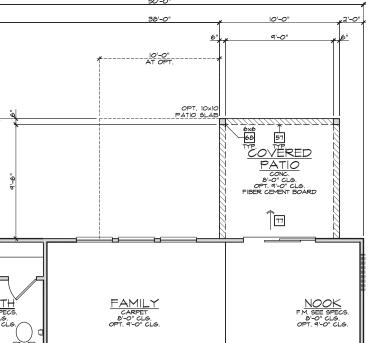
APPROXIMATE RIDGE VENT LOCATIONS SHOWN.
ACTUAL LOCATIONS TO BE DETERMINED IN THE FIELD.



I5 7 ADI ADI

MP. S



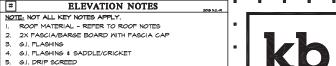


PARTIAL ROOF PLAN PARTIAL SLAB INTERFACE PLAN SCALE 1/8"=1'-0" (22"X34") - 1/16"=1'-0" (11"X17") SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

PARTIAL FIRST FLOOR PLAN

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

#### COVERED PATIO 'B'



HOME IO. PEDIMENT. SEE ELEVATION FOR TYPE 12. DECORATIVE TRIM FYPON OR EQ. SEE ELEVATION FOR TYPE

13. TRIM PER SPEC- SEE ELEVATION FOR SIZE 14. SYNTHETIC MATERIAL

PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYPON OR EQ. SURROUNDING STRUCTURAL POST.

6. SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE

17. SHAKE SIDING

18. STONE VENEER PER SPECS

3. G.I. FLASHING

6. 24"x24" CHIMNEY 7. DECORATIVE VENT

8. DECORATIVE CORBEL 9. DECORATIVE SHUTTERS

I. RECESSED ELEMENT

19. BRICK/MASONRY VENEER PER SPECS

21. SOLDIER COURSE

22. ROWLOCK COURSE 23. FRIEZE BOARD

24. SIDING W/ 4" CORNER TRIM PER SPECS

25. P.T. POST W WRAP - SEE STRUCTURAL FOR SIZE

26. PRE-FAB DECORATIVE TRIM

27. LIGHT WEIGHT PRECAST STONE TRIM 28. P.T. LUMBER RAILINGS (+36" U.N.O.) 29. WRAP

30. DECORATIVE WINDOW/DOOR TRIM - FYPON OR EQ. SEE ELEVATION FOR SIZE.

31. BRACKET OR KICKER - FYPHON OR EQ.

32. ENTRY DOOR

33. CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN. 34. SECTIONAL GARAGE DOOR PER SPECS

35. ALUMINUM WRAP

36. OPTIONAL DOOR/WINDOW - REFER TO PLAN OPTIONS

37. OPTIONAL STANDING SEAM METAL ROOF

38. KEYSTONE 39. SOLDIER CROWN

40. JACK SOLDIER COURSE 4I. WATER TABLE

42. ATRIUM DOOR

43. PILASTER - SEE ELEVATION FOR TYPE

#### PARTIAL PLAN NOTES

### 2018 NORTH **CAROLINA STATE BUILDING**

NORTH CAROLINA

50' SERIES

кв номе

NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD.

SUITE 180

DURHAM, NC 27703

FAX: (919) 472-0582

8 8 8 8

TEL: (919) 768-7988 •

CODES

ISSUE DATE: 12/13/19 PROJECT No.: 1350999:57 DIVISION MGR.: MP

REVISIONS:

VENTILATION NC2008NCP/ 01/17/20 /KBA

SLAB PLAN NOTES NOTE: NOT ALL KEY NOTES APPLY.

CONCRETE PATIO/PORCH SLAB PER STRUCTURAL- SLOPE 1/4" PER FT. MIN. 2. CONCRETE GARAGE SLAB PER STRUCTURAL- SLOPE I/8" PER. I'-0" MIN. TOWARD DOOR OPENING.
3. CONCRETE FOUNDATION PER STRUCTURAL.

CONCRETE STOOP: 36"x36" STANDARD SLOPE I/4" PER FT. MIN.

CONCRETE DRIVEWAY SLOPE I/4" PER FT, MIN. AWAY FROM GARAGE DOOR OPENING.

PROVIDE ELECTRICAL CONDUIT UNDER SLAB AT ISLAND. VERIFY LOCATION.

5" BRICK LEDGE FOR MASONRY VENEER.

8. 3" DIAMETER CONCRETE FILLED PIPE BOLLARD 36" HIGH WITH MIN. 12" EMBEDMENT INTO CONCRETE. REFER TO CIVIL DRAWINGS FOR ALL FINISH SURFACE ELEVATIONS.

VERIFY ALL PLUMBING STUB DIMENSIONS SHOWN HERE PRIOR TO POUR OF SLAB.

I. 4" MIN. 8 I/4" MAX. TO HARD SURFACE.

12. A/C PAD. VERIFY LOCATION.

13. 36" MIDE WALKWAY- SLOPE 1/4" PER FT. MIN.

NOTE: REFER TO BASIC ROOF PLAN FOR INFORMATION NOT SHOWN HERE

NOTE: REFER TO BASIC <u>ELEVATIONS</u> FOR INFORMATION NOT SHOWN HERE

NOTE: REFER TO BASIC FLOOR PLAN FOR INFORMATION NOT SHOWN HERE

NOTE: REFER TO BASIC SLAB PLAN FOR INFORMATION NOT SHOWN HERE

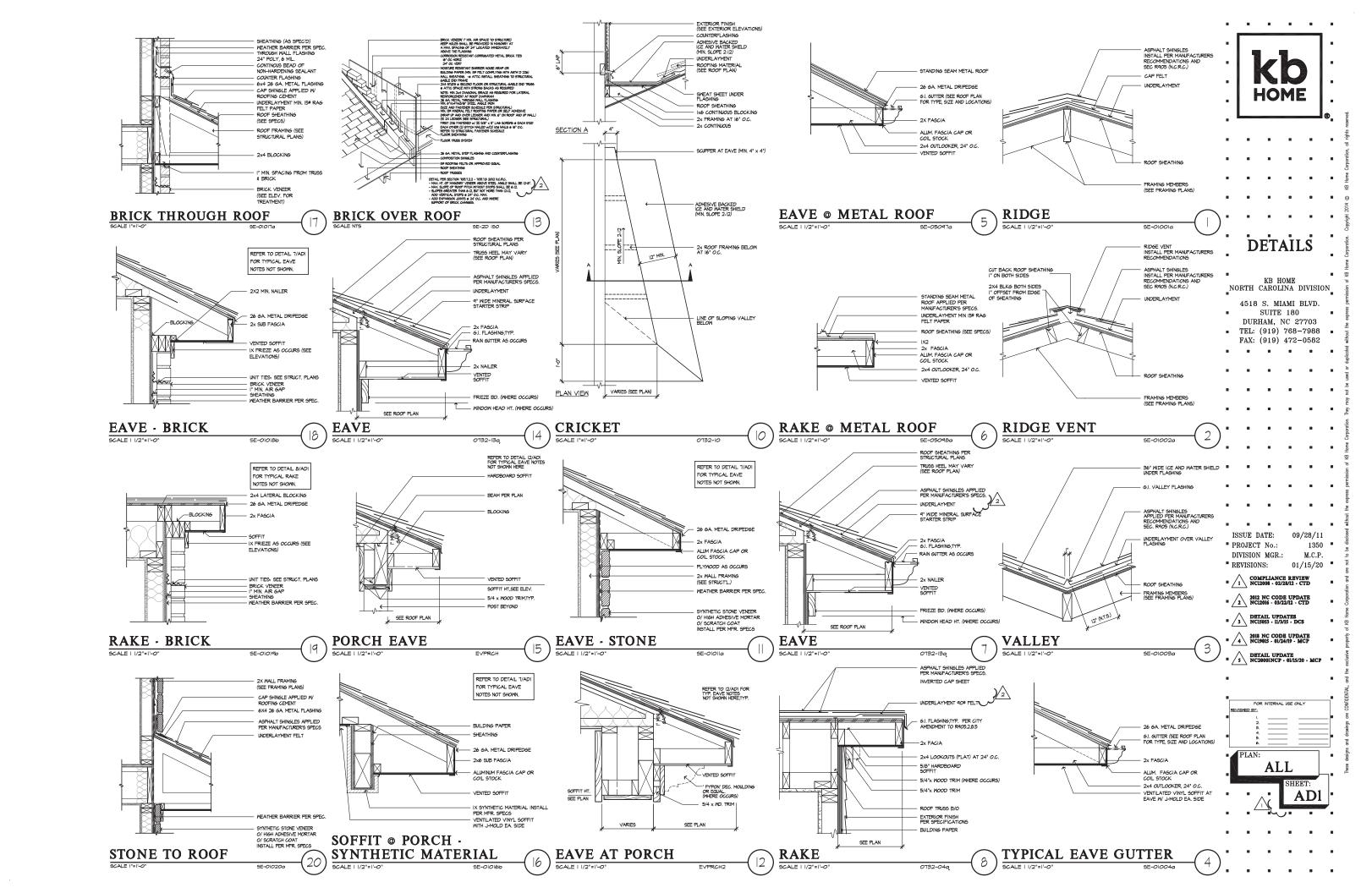
150.1910-R

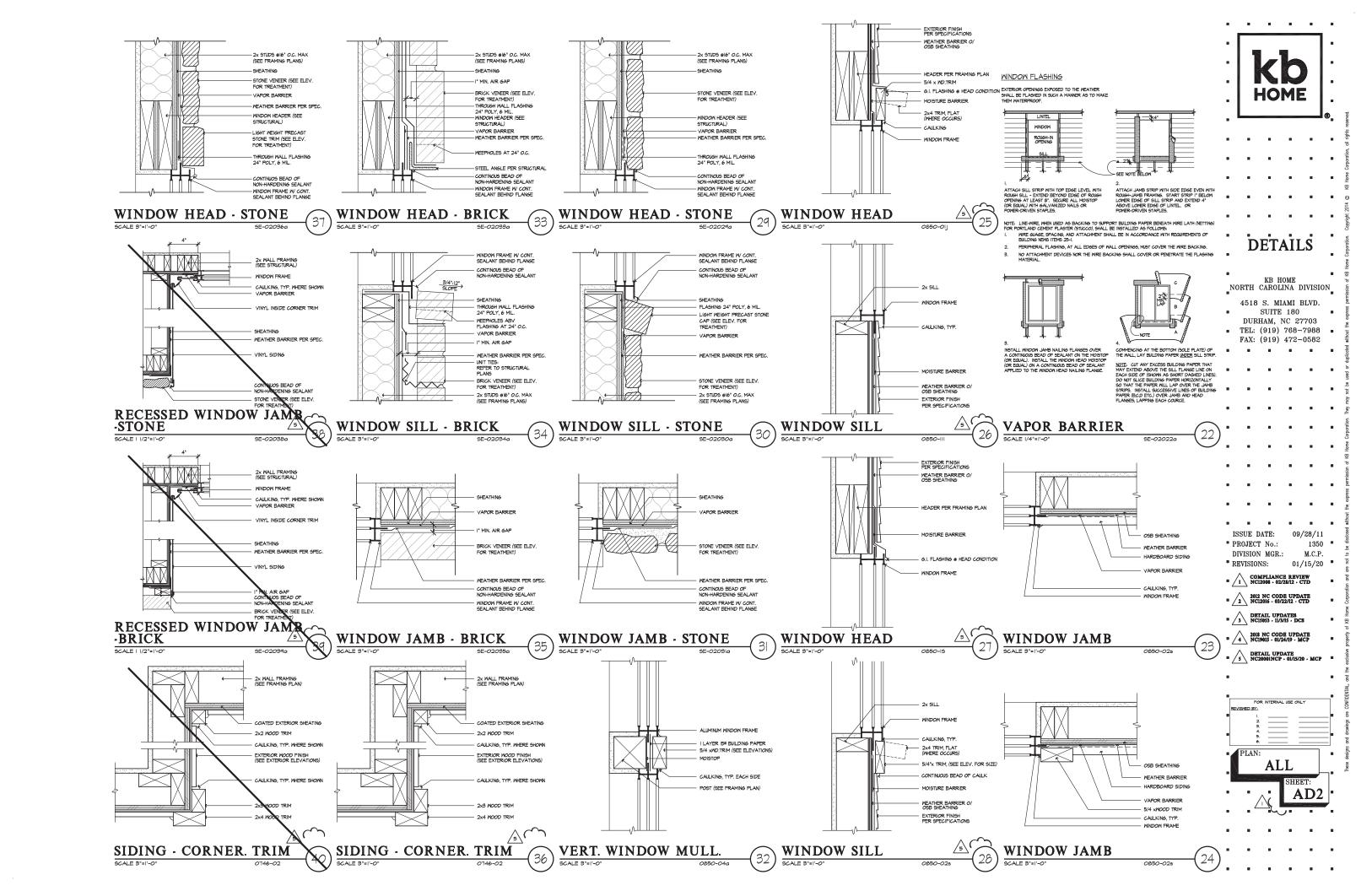
HEET: 8.B1

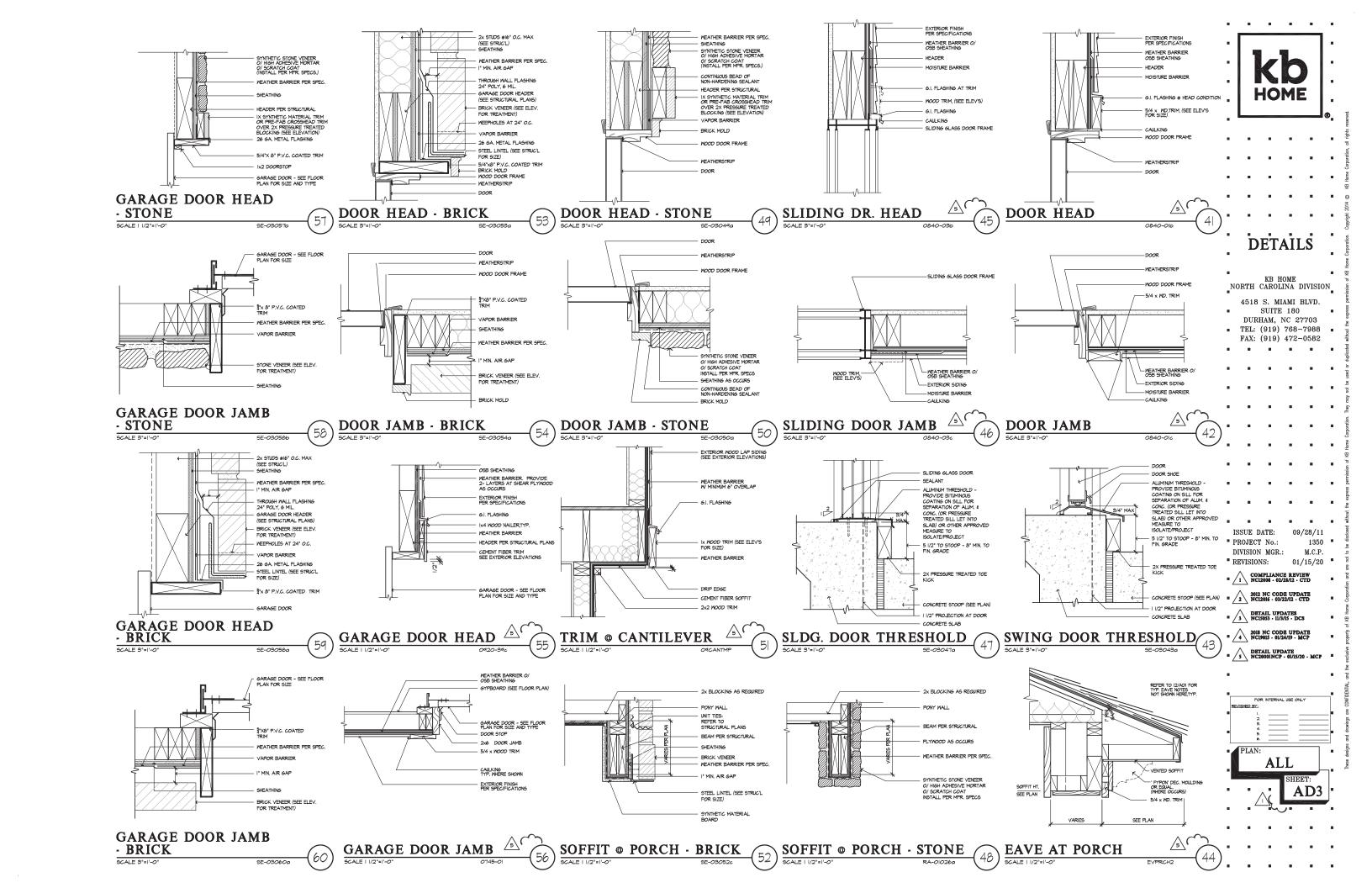
SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

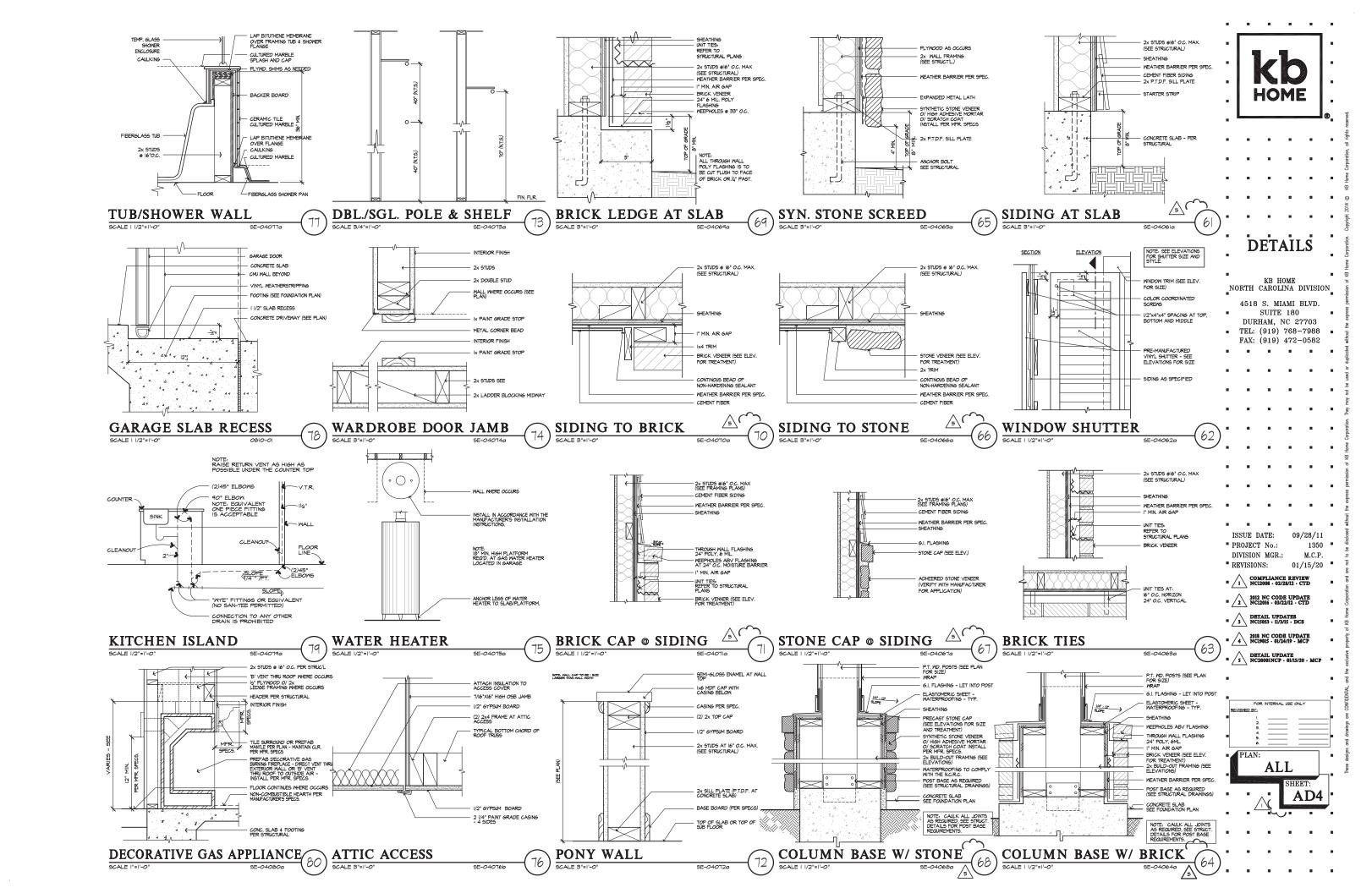
SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XI7")

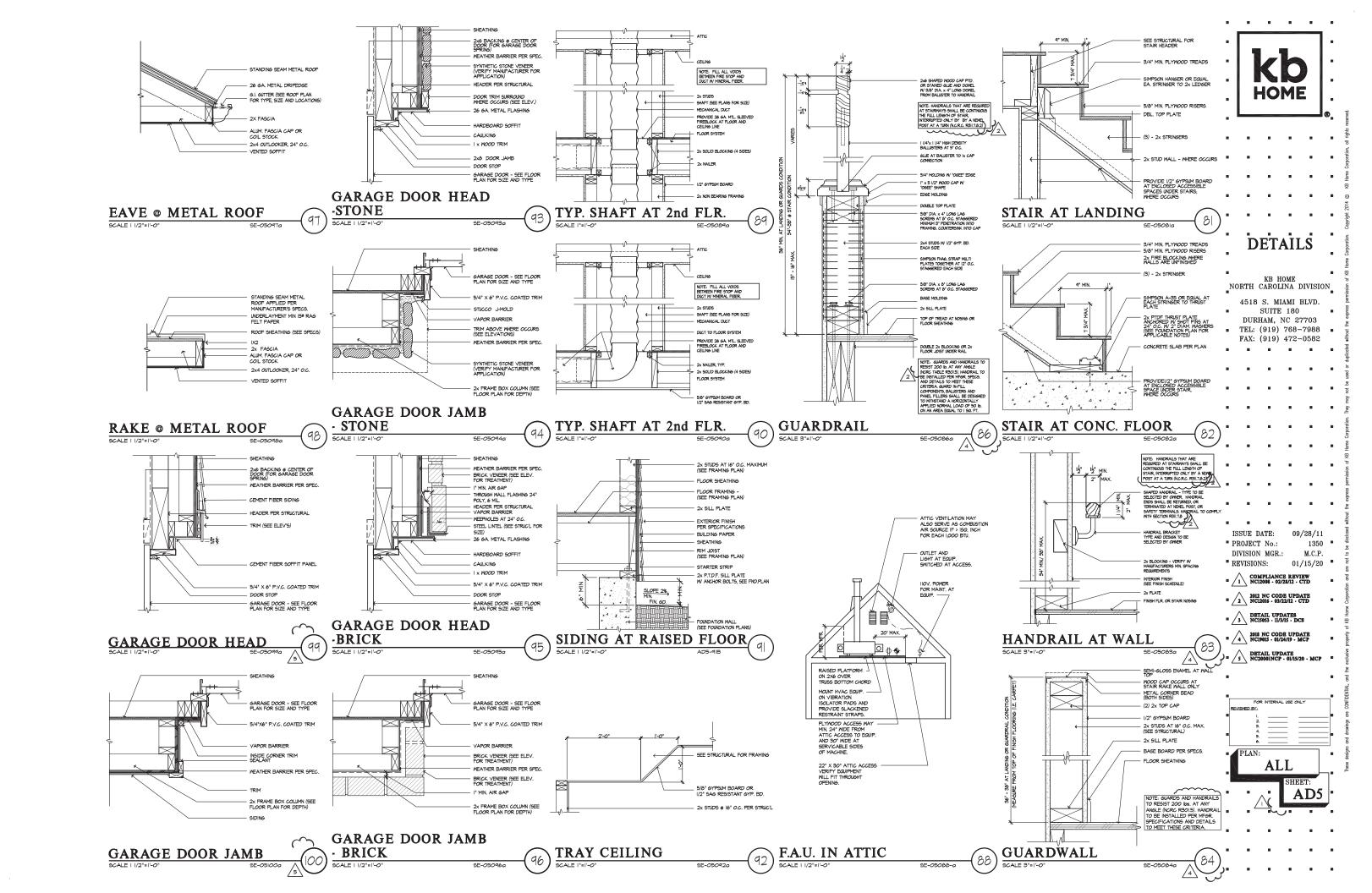
AREA I

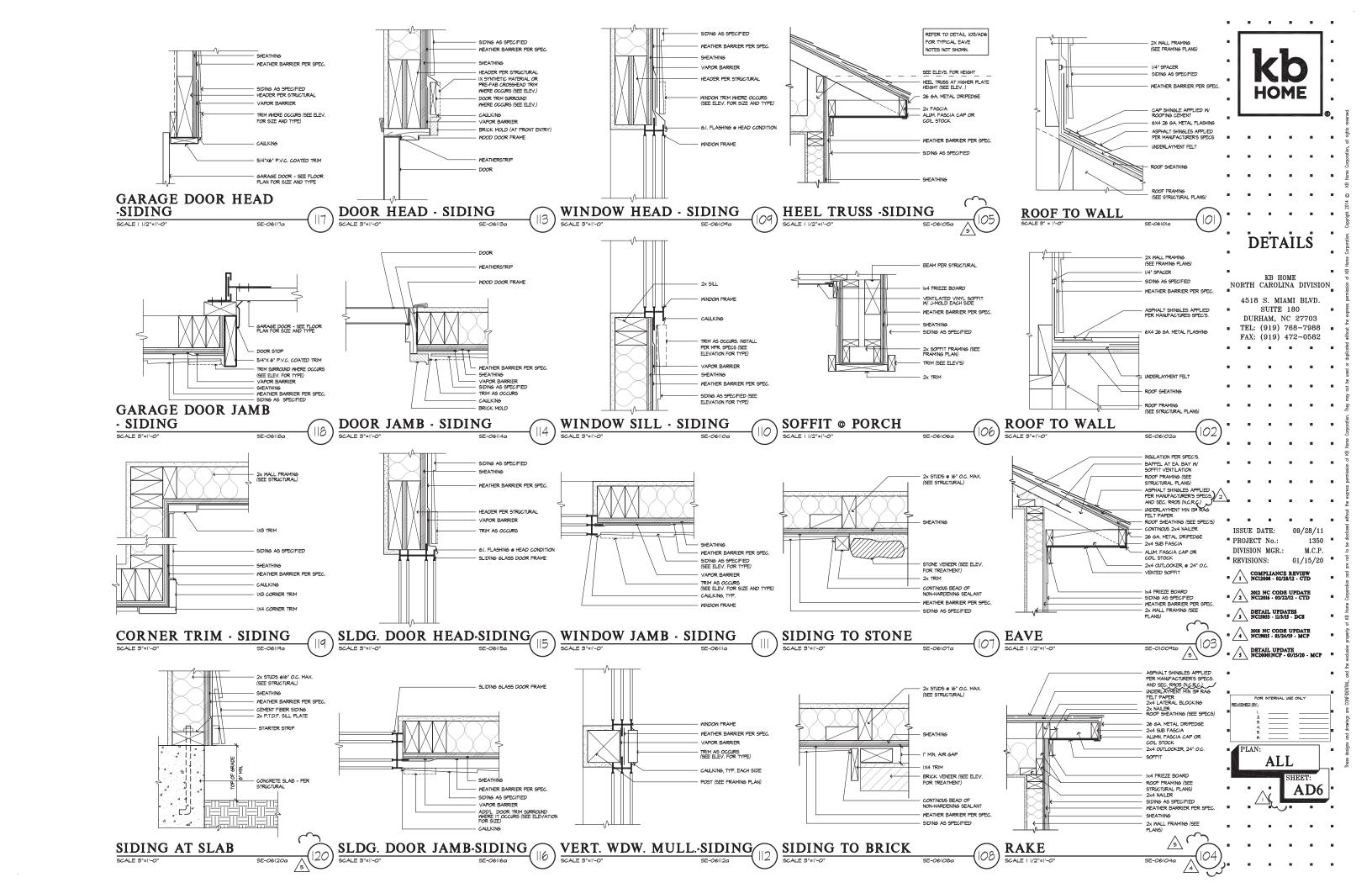


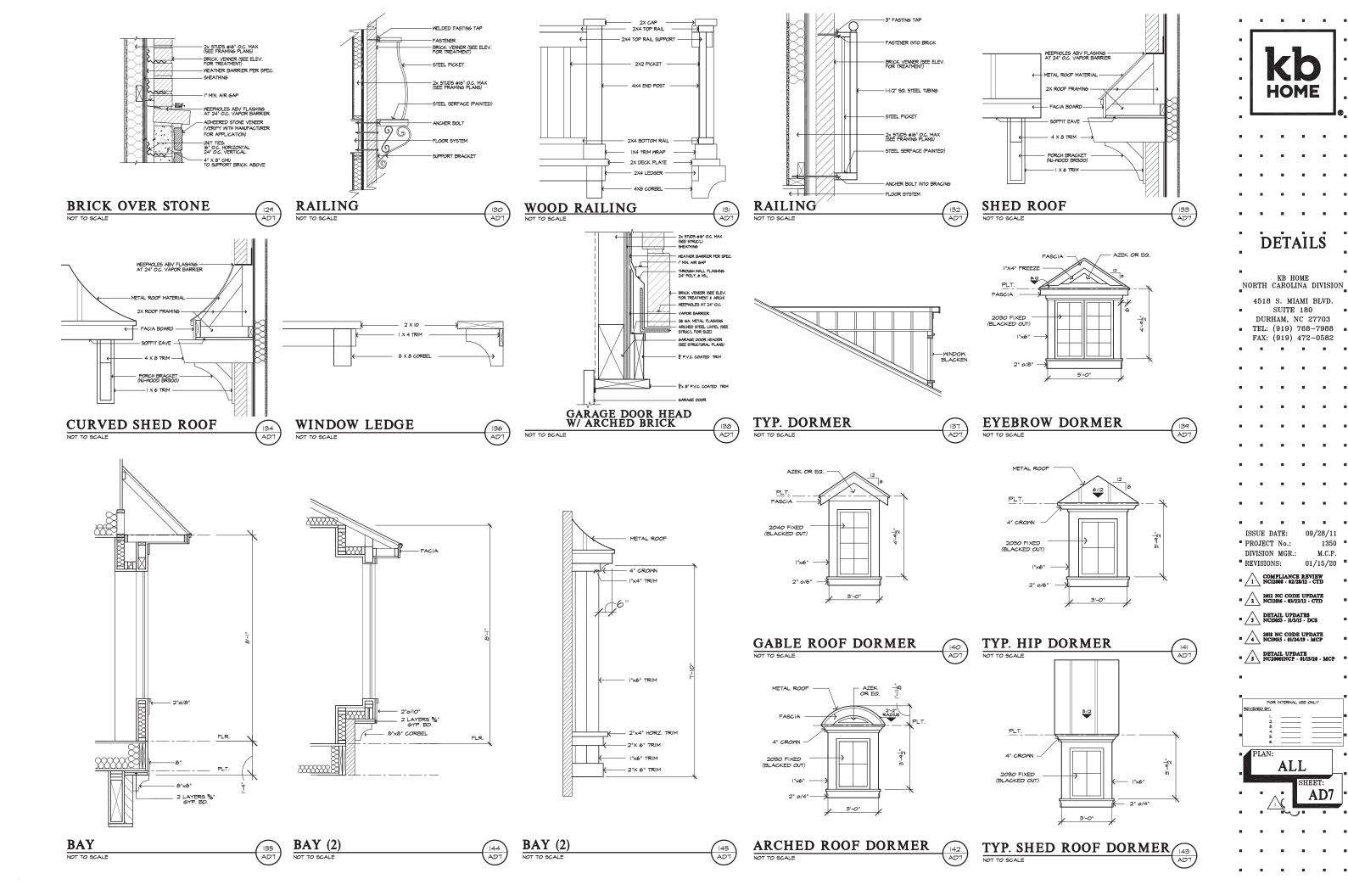


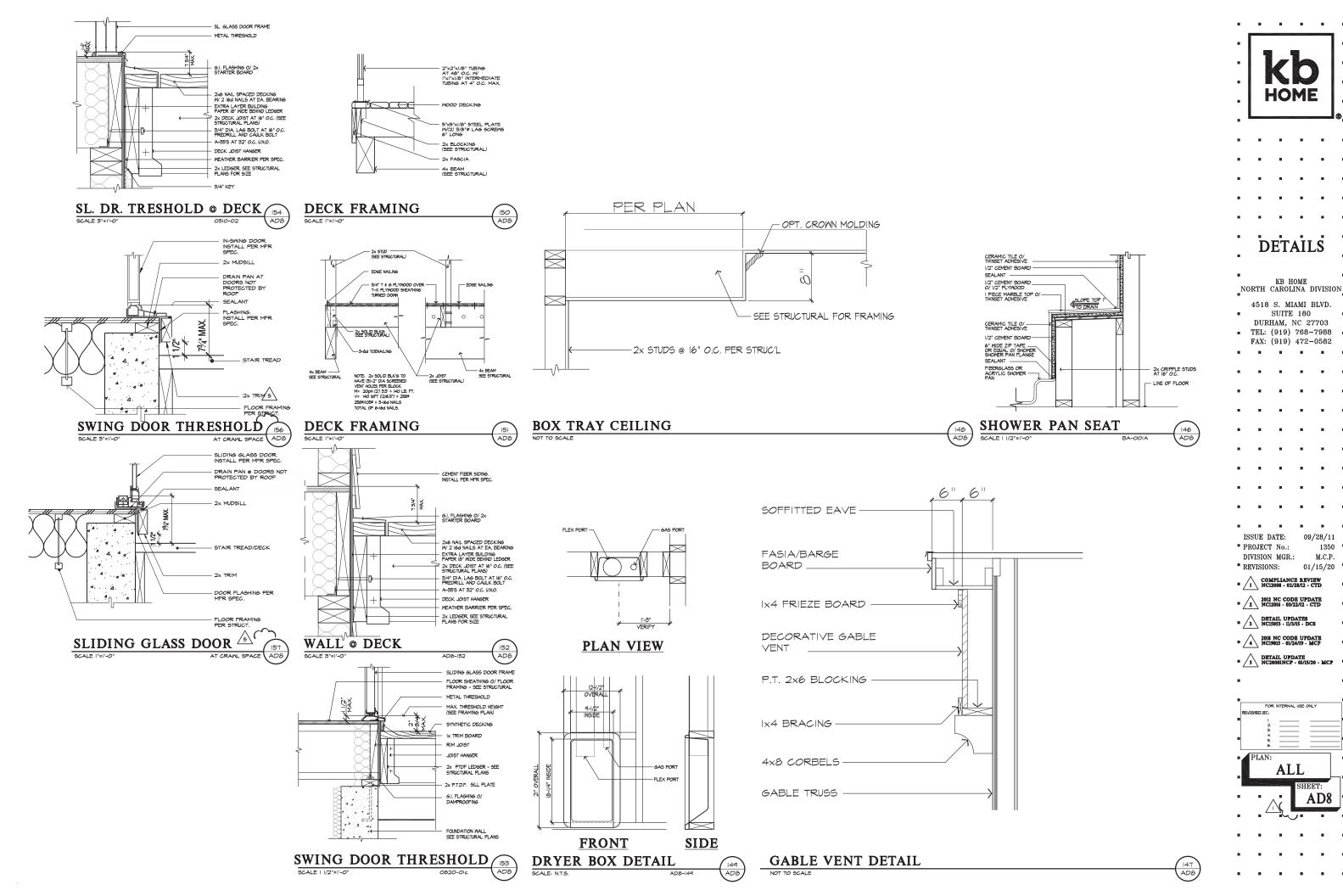










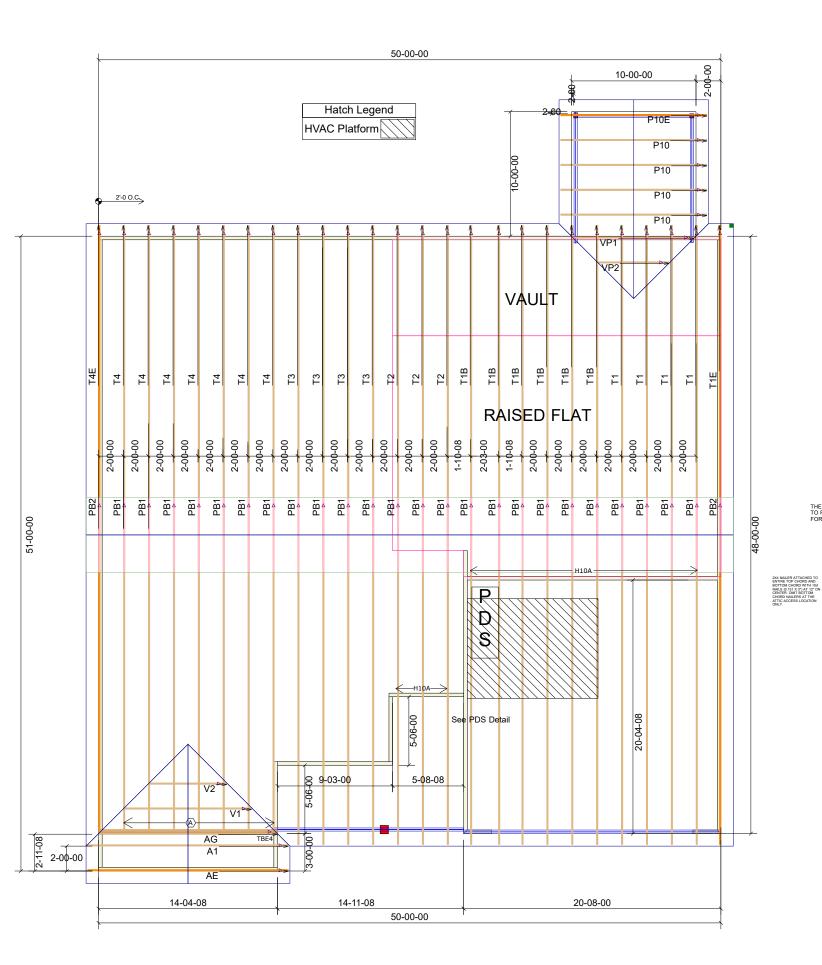


M.C.P.

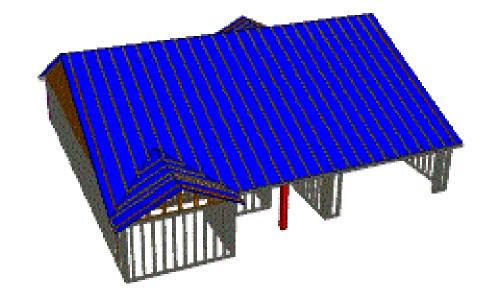
01/15/20

SHEET:

AD8



THIS LAYOUT IS INTENDED FOR THE PURPOSE OF TRUSS LOCATION AND PLACEMENT ONLY. REFER TO THE BUILDING PLANS FOR ACTUAL BUILDING CONSTRUCTION.



THE PURPOSE OF THIS DETAIL IS TO ILLUSTRATE HOW TO PROPERLY SPACE 24" O.C. ROOF TRUSSES TO ALLOW FOR A 25 1/2" OPENING FOR PULL DOWN ATTIC ACCESS

TRUSSES TO BE DESIGNED AT 24" ON CENTER

Truss Connector List			
Symbol Manuf Product Qty			
Α	Simpson	HUS26	14
	Simpson	H10A	13
TBE4	Simpson	TBE4	1 set

Use TBE4 for bearing at AG, use 1 set at porch side of truss
Use H10A on T1, T1B & T2 Trusses as bearing enhancer

Rev1- Chg. loc. of CP Posts by 2" typ.



DEDICATED TO QUALITY AND EXCELLENCE 200 EMMETT ROAD DUNN, NORTH CAROLINA 28334 PHONE: 910-892-8400 FAX: 910-892-8384

Lot 2 Highland Grove- Sales Office		GR-	ORDER: 24641A	SHIP DATE: 2020
irove- Sa	<b>KB HOME</b>	x 10x10	P.O. NUMBER: PO #	REV: 10/1/20
lighland G	KB	150.1910 "B" x 10x10 GR-		PRINT DATE: 9/17/20
Lot 2 H	CUSTOMER:	MODEL: 150	SCALE: NOT TO SCALE	DRAWN BY:  MWM

TOP LIVE: 20 PSF

TOP DEAD: 10 PSF

BOTM DEAD: 10 PSF

WIND SPD: 120 MPH

#### GENERAL NOTES:

DO NOT CUT OR MODIFY TRUSSES.

TRUSSES ARE SPACED 24" ON CENTER UNLESS NOTED OTHERWISE.

REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR THE LOCATION OF LATERAL BRACING AND MULTI-PLY CONNECTION REQUIREMENTS.

PER ANSI TPI 1-2002 THE TRUSS ENGINEER IS RESPONSIBLE FOR TRUSS TO TRUSS CONNECTIONS AND TRUSS PLY TO PLY CONNECTIONS. THIS TRUSS PLACEMENT PLAN RECCOMENDS TRUSS TO BEARING CONNECTIONS AND TRUSS TO BEAM CONNECTIONS WHICH SHALL BE REVIEWED BY THE BUILDING DESIGNER. IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER TO RESOLVE ALL ROOF FORCES ADEQUATELY TO THE FOUNDATION.

## STRUCTURAL PLANS FOR:



# 150.1910 - RH GARAGE

PLAN RELEASE / REVISIONS			
REV DATE	ARCH PLAN VERSION	REVISION DESCRIPTION	DRFT
09/08/2020	1910.150.01350 RH D3 - 073120	INITIAL SETUP OF LAYOUT	ABS
09/08/2020	1910.150.01350 RH D3 - 073120	CREATED LOT-SPECIFIC STRUCTURAL LAYOUT FROM MASTER PLAN AND EWP LAYOUT	ABS

#### **NOTES**

- 1. ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY, ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT, INCLUDING ROOF GEOMETRY, JDSfaulkner, PLLC ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. ENGINEER TO BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS
- 2. DIMENSIONS SHALL GOVERN OVER SCALE, AND CODE SHALL GOVERN OVER DIMENSIONS.
- 3. PLANS MUST HAVE SIGNED SEAL TO BE VALID AND ARE LIMITED TO THE FOLLOWING USES:
  - A. IF THESE PLANS ARE ISSUED AS A MASTER-PLAN SET, THE SET IS VALID FOR 18 MONTHS FROM THE DATE ON THE SEAL, UNLESS ANY CODE-REQUIRED UPDATES ARE PLACED IN EFFECT BY THE MUNICIPALITY.
  - B. IF THESE PLANS ARE NOT ISSUED AS A MASTER-PLAN SET, THE SET IS VALID FOR A CONDITIONAL, ONE-TIME USE FOR THE LOT OR ADDRESS SPECIFIED ON THE TITLE BLOCK.

#### CODE

ALL CONSTRUCTION, WORKMANSHIP, AND MATERIAL QUALITY AND SELECTION SHALL BE PER:

2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE

#### **ENGINEER OF RECORD**

JDSfaulkner, PLLC
ENGINEERING, BUILDING DESIGN, & CONSTRUCTION
CONSULTING SERVICES
8600 'D' JERSEY COURT
RALEIGH, NC 27617
FIRM LIC. NO: P-0961
PROJECT REFERENCE: 20901547



KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 FAX: (919) 472-0552

SEAL O45403

ON GINEER A

P-0961

JDSfaulkner, PLLC HAS PERFORMED A STRUCTURAL REVIEW OF THESE PLANS. THE STRUCTURAL COMPONENTS COMPLY WITH THE 2018 NORTH CAROLINA RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS FOR NC PLAN REVIEW. DEVIATION OF ANY STRUCTURAL REQUIREMENTS OF THESE PLANS WITHOUT THE APPROVAL OF THE EOR IS PROHIBITED.



DATE: 10/02/2020

. . . .

PLAN: 150.1910

TITLE SHEET

1

NOTE: ALL CHAPTERS, SECTIONS, TABLES, AND FIGURES CITED WITHOUT A PUBLICATION TITLE ARE FROM THE APPLICABLE RESIDENTIAL CODE (SEE TITLE SHEET).

#### **GENERAL**

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. FURTHERMORE, CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, AND SAFETY ON SITE. NOTIFY JDSfaulkner, PLLC IMMEDIATELY IF DISCREPANCIES ON PLAN EXIST.
- BRACED-WALL DESIGN IS BASED ON <u>SECTION R602.10 WALL</u> BRACING. PRIMARY PRESCRIPTIVE METHOD TO BE CS-WSP. SEE WALL BRACING PLANS AND DETAILS FOR ADDITIONAL INFORMATION.

ALL NON-PRESCRIPTIVE SOLUTIONS ARE BASED ON GUIDELINES ESTABLISHED IN THE AMERICAN SOCIETY OF CIVIL ENGINEERS PUBLICATION ASCE 7 AND THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC.

2.000 PSF

200 (pounds, concentrated)

SEISMIC DESIGN SHALL BE PER SECTION R301.2.2 - SEISMIC PROVISIONS, INCLUDING ASSOCIATED TABLES AND FIGURES, BASED ON LOCAL SEISMIC DESIGN CATEGORY.

#### **DESIGN LOADS**

FIRE ESCAPES

**GUARDS AND HANDRAILS** 

ASSUMED SOIL BEARING-CAPACITY

	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
ULTIMATE DESIGN WIND SPEED GROUND SNOW ROOF	LIVE LOAD 115 MPH, EXPOSURE B 15 PSF 20 PSF
RESIDENTIAL CODE TABLE R301.5	LIVE LOAD (PSF)
DWELLING UNITS	40
SLEEPING ROOMS	30
ATTICS WITH STORAGE	20
ATTICS WITHOUT STORAGE	10
STAIRS	40
DECKS	40
EXTERIOR BALCONIES	60
PASSENGER VEHICLE GARAGES	50

COMPONENT AND CLADDING LOADS, INCLUDING THOSE FOR DOORS AND WINDOWS, SHALL BE DERIVED FROM TABLES R301.2(2) AND R301.2(3) FOR A BUILDING WITH A MEAN ROOF HEIGHT OF 35 FEET, LOCATED IN EXPOSIGE B.

ABBR	REVIATIONS	KS	KING STUD COLUMN
<u> </u>		LVL	LAMINATED VENEER
ABV	ABOVE		LUMBER
	ABOVE FINISHED FLOOR	MAX	MAXIMUM
	ALTERNATE	MECH	MECHANICAL
	BEARING	MFTR	MANUFACTURER
		MIN	MINIMUM
CANT	BASEMENT CANTILEVER	NTS	NOT TO SCALE
CJ	CEILING JOIST	OA	OVERALL
CLG	CEILING	ОС	ON CENTER
CMU	CONCRETE MASONRY UNIT	PT	PRESSURE TREATED
co	CASED OPENING	R	RISER
COL	COLUMN	REF	REFRIGERATOR
CONC	CONCRETE	RFG RO	ROOFING
CONT	CONTINUOUS		
D	CLOTHES DRYER	RS	ROOF SUPPORT
DBL	DOUBLE	SC	STUD COLUMN
DIAM	DIAMETER	SF	SQUARE FOOT (FEET)
DJ	DOUBLE JOIST	SH	
DN	DOWN		SHEATHING
DP	DEEP	SHW	
DR	DOUBLE RAFTER	SIM	
DSP	DOUBLE STUD POCKET	SJ	SINGLE JOIST
EA	EACH	SP	
EE	EACH END		SPECIFIED
EQ	EQUAL	SQ	SQUARE
EX	EXTERIOR	T	TREAD
	FORCED-AIR UNIT	TEMP	TEMPERED GLASS
FDN	FOUNDATION	THK	THICK(NESS)
FF	FINISHED FLOOR	TJ	TRIPLE JOIST
FLR	FLOOR(ING)	TOC	TOP OF CURB / CONCRETE
FP	FIREPLACE	TR	TRIPLE RAFTER
FTG	FOOTING	TYP	TYPICAL
	HOSE BIBB	UNO	UNLESS NOTED OTHERWISE
	HEADER	W	CLOTHES WASHER
	HANGER	WH	WATER HEATER
JS	JACK STUD COLUMN	XJ	WELDED WIRE FABRIC EXTRA JOIST
		ΛJ	EATRA JUIST

#### **MATERIALS**

 INTERIOR / TRIMMED FRAMING LUMBER SHALL BE #2 SPRUCE PINE FIR (SPF) WITH THE FOLLOWING DESIGN PROPERTIES (#2 SOUTHERN YELLOW PINE MAY BE SUBSTITUTED):

Fb = 875 PSI Fv = 70 PSI E = 1.4E6 PSI

 FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE, OR MASONRY SHALL BE PRESSURE TREATED #2 SOUTHERN YELLOW PINE (SYP) WITH THE FOLLOWING DESIGN PROPERTIES:

Fb = 975 PSI Fv = 95 PSI E = 1.6E6 PSI

3. LVL STRUCTURAL MEMBERS TO BE LAMINATED VENEER LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2600 PSI Fv = 285 PSI E = 1.9E6 PSI

4. PSL STRUCTURAL MEMBERS TO BE PARALLEL STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2900 PSI Fv = 290 PSI E = 2.0E6 PSI

5. LSL STRUCTURAL MEMBERS TO BE LAMINATED STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2250 PSI Fv = 400 PSI E = 1.55E6 PSI

- 6. STRUCTURAL STEEL WIDE-FLANGE BEAMS SHALL CONFORM TO ASTM A992. Fy = 50 KSI
- 7. REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615, GRADE 60.
- 8. POURED CONCRETE COMPRESSIVE STRENGTH TO BE A MINIMUM 3,000 PSI AT 28 DAYS. MATERIALS USED TO PRODUCE CONCRETE SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN AMERICAN CONCRETE INSTITUTE STANDARD ACI 318 OR ASTM C1157.
- 9. CONCRETE SUBJECT TO MODERATE OR SEVERE WEATHERING PROBABILITY PER TABLE R301.2(1) SHALL BE AIR-ENTRAINED WHEN REQUIRED BY TABLE R402.2.
- 10. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE PUBLICATION 530: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMPANION COMMENTARIES AND THE MASONRY SOCIETY PUBLICATION TMS 402/602: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES
- 11. MORTAR SHALL COMPLY WITH ASTM INTERNATIONAL STANDARD C270.
- INDICATED MODEL NUMBERS FOR ALL METAL HANGERS, STRAPS, FRAMING CONNECTORS, AND HOLD-DOWNS ARE SIMPSON STRONG-TIE BRAND. EQUIVALENT USP BRAND PRODUCTS ARE ACCEPTABLE.
- 13. REFER TO I-JOIST EQUIVALENCE CHART ON I-JOIST DETAIL SHEET FOR SUBSTITUTION OF MANUFACTURER SERIES.

#### FOUNDATION

- MINIMUM ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED TO BE 2,000 PSF. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SOIL BEARING CAPACITY IF UNSATISFACTORY CONDITIONS EVICT
- CONCRETE FOUNDATION WALLS TO BE SELECTED AND CONSTRUCTED PER SECTION R404 OR AMERICAN CONCRETE INSTITUTE STANDARD ACI 318.
- 3. MASONRY FOUNDATION WALLS TO BE SELECTED AND CONSTRUCTED PER SECTION R404 AND/OR AMERICAN CONCRETE INSTITUTE PUBLICATION 530: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMPANION COMMENTARIES AND/OR THE MASONRY SOCIETY PUBLICATION TMS 402/602: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES
- . CONCRETE WALL HORIZONTAL REINFORCEMENT TO BE PER TABLE R404.1.2(1) OR AS NOTED OR DETAILED. CONCRETE WALL VERTICAL REINFORCEMENT TO BE PER TABLES R404.1.2(3 AND 4) OR AS NOTED OR DETAILED. ALL CONCRETE WALLS SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 6.
  - A. TABLES ASSUME THAT WALLS HAVE PERMANENT LATERAL SUPPORT AT THE TOP AND BOTTOM.
  - B. FOUNDATION DRAINS ARE ASSUMED AT ALL WALLS PER SECTION R405.
- 5. PLAIN-MASONRY WALL DESIGN TO BE PER TABLE R404.1.1(1) OR AS NOTED OR DETAILED. MASONRY WALLS WITH VERTICAL REINFORCEMENT TO BE PER TABLES R404.1.1 (2 THROUGH 4) OR AS NOTED OR DETAILED. ALL MASONRY WALLS SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 6.
  - A. TABLES ASSUME THAT WALLS HAVE PERMANENT LATERAL SUPPORT AT THE TOP AND BOTTOM.
  - B. WALL REINFORCING SHALL BE PLACED ACCORDING TO FOOTNOTE (c) OF THE TABLES (REINFORCING IS NOT CENTERED IN WALL).
  - C. FOUNDATION DRAINS ARE ASSUMED AT ALL WALLS PER SECTION R405.
- 6. WOOD SILL PLATES TO BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM OF 6'-0" OC AND WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. INSTALL MINIMUM (2) ANCHOR BOLTS PER SECTION. SEE SECTION R403.1.6 FOR SPECIFIC CONDITIONS.
- 7. THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION. UNFILLED, HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.
- 8. CENTERS OF PIERS TO BEAR IN THE MIDDLE THIRD OF THE FOOTINGS, AND GIRDERS SHALL CENTER IN THE MIDDLE THIRD OF THE PIERS.
- 9. ALL FOOTINGS TO HAVE MINIMUM 2" PROJECTION ON EACH SIDE OF FOUNDATION WALLS (SEE DETAILS).
- 10. ALL REBAR NOTED IN CONCRETE TO HAVE AT LEAST 2" COVER FROM EDGE OF CONCRETE TO EDGE OF REBAR.
- 11. FRAMING TO BE FLUSH WITH FOUNDATION WALLS.
- 12. WITH CLASS 1 SOILS, VAPOR BARRIER AND CRUSHED STONE MAY BE OMITTED.

#### FRAMING

- ALL BEARING HEADERS TO BE (2) 2x6 SUPPORTED W/ MIN (1) JACK STUD AND (1) KING STUD EACH END, UNO.
- 2. ALL NON-BEARING HEADERS TO BE (2) 2x4, UNO.
- 3. NON-BEARING INTERIOR WALLS NOT MORE THAN 10' NOMINAL HEIGHT AND NOT SHOWN AS BRACED WALLS MAY BE FRAMED WITH 2x4 STUDS @ 24" OC.
- SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.
- 5. ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
- 6. ALL EXTERIOR WALLS TO BE FULLY SHEATHED WITH 7/16" OSB.
- . PORCH / PATIO COLUMNS TO BE 4x4 MINIMUM PRESSURE-TREATED LUMBER.
  - A. ATTACH PORCH COLUMNS TO SLAB / FDN WALL USING ABA, ABU, ABW, OR CPT SIMPSON POST BASES TO FIT COLUMN SIZES NOTED ON PLAN -OR- ANY OTHER COLUMN CONNECTION WITH 500# UPLIFT CAPACITY.
  - B. ATTACH PORCH COLUMNS TO PORCH BEAMS USING AC OR BC SIMPSON POST CAPS TO FIT COLUMN SIZES NOTED ON PLAN -OR- ANY OTHER COLUMN CONNECTION WITH 500# UPLIFT CAPACITY.
  - C. TRIM OUT COLUMN(S) AND BEAM(S) PER BUILDER AND DETAILS.
- ALL ENGINEERED WOOD PRODUCTS (LVL, PSL, LSL, ETC.) SHALL BE INSTALLED WITH CONNECTIONS PER MANUFACTURER SPECIFICATIONS.
- ENGINEERED WOOD FLOOR SYSTEMS AND ROOF TRUSS SYSTEMS:
- A. SHOP DRAWINGS FOR THE SYSTEMS SHALL BE PROVIDED TO THE ENGINEER OF RECORD FOR REVIEW AND COORDINATION BEFORE CONSTRUCTION.
- B. TRUSS PROFILES SHALL BE SEALED BY THE TRUSS MANUFACTURER.
- C. INSTALLATION OF THE SYSTEMS SHALL BE PER MANUFACTURER'S INSTRUCTIONS.
- D. TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN IN THESE DRAWINGS.
- 10. ALL BEAMS TO BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED, WITH A MINIMUM OF THREE STUDS, UNO.
- 1. ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MIN BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR TWO 1/2" x 4" LAG SCREWS, UNO.
- 12. STEEL FLITCH BEAMS TO BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM 307) WITH WASHERS PLACED UNDER THE THREADED END OF THE BOLT. BOLTS TO BE SPACED AT 24" OC (MAX) AND STAGGERED TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH TWO BOLTS TO BE LOCATED AT 6" FROM EACH END OF FLITCH BEAM.
- I3. WHEN A 4-PLY LVL BEAM IS USED, ATTACH WITH (1) 1/2" DIAMETER BOLT, 12" OC, STAGGERED TOP AND BOTTOM, 1 1/2" MIN FROM ENDS. ALTERNATE EQUIVALENT ATTACHMENT METHOD MAY BE USED, SUCH AS SDS, SDW, OR TRUSSLOK SCREWS (SEE MANUFACTURER SPECIFICATIONS).
- 14. FOR STUD COLUMNS OF 4-OR-MORE STUDS, INSTALL SIMPSON STRONG-TIE CS16 STRAPS ACROSS STUDS @ 30" OC, 6" MAX FROM PLATES, ON INSIDE FACE OF COLUMN (EXTERIOR WALL), ON BOTH FACES OF COLUMN (INTERIOR WALL).
- 15. FLOOR JOISTS ADJACENT AND PARALLEL TO THE EXTERIOR FOUNDATION WALL SHALL BE PROVIDED WITH FULL-DEPTH SOLID BLOCKING, NOT LESS THAN TWO (2) INCHES NOMINAL IN THICKNESS, PLACED PERPENDICULAR TO THE JOIST AT SPACING NOT MORE THAN FOUR (4) FEET. THE BLOCKING SHALL BE NAILED TO THE FLOOR SHEATHING, THE SILL PLATE, THE JOIST, AND THE EXTERIOR RIM JOIST / BOARD.
- 16. BRACED WALL PANELS SHALL BE FASTENED TO MEET THE UPLIFT-RESISTANCE REQUIREMENTS IN CHAPTERS 6 AND 8 OF THE APPLICABLE CODE (SEE TITLE SHEET). REQUIREMENTS OF THE STRUCTURAL DRAWINGS THAT EXCEED THE CODE MINIMUM SHALL BE MET.



. . .

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD.
SUITE 180
DURHAM, NC 27703
TEL: (919) 768-7988

■ FAX: (919) 472-0582 ■

SEAL TO SEAL T

P-0961

JDSfaulkner, PLLC HAS PERFORMED A STRUCTURAL REVIEW OF THESE PLANS. THE STRUCTURAL COMPONENTS COMPLY WITH THE 2018 NORTH CAROLINA RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS FOR NC PLAN REVIEW. DEVIATION OF ANY STRUCTURAL REQUIREMENTS OF THESE PLANS WITHOUT THE APPROVAL OF THE EOR IS PROHIBITED.



PROJECT NO.: 20901547 DATE: 10/02/2020

150.1910

. . . . .

GENERAL NOTES

**GN1.0** 

FASTENER SCHEDULE				
CONNECTION	3" x 0.131" NAIL	3" x 0.120" NAIL		
JOIST TO SILL PLATE	(4) TOE NAILS	(4) TOE NAILS		
SOLE PLATE TO JOIST / BLOCKING	NAILS @ 8" OC (typical) (4) PER 16" SPACE (at braced panels)	NAILS @ 8" OC (typical) (4) PER 16" SPACE (at braced panels)		
STUD TO SOLE PLATE	(4) TOE NAILS	(4) TOE NAILS		
TOP OR SOLE PLATE TO STUD	(3) FACE NAILS	(4) FACE NAILS		
RIM JOIST OR BAND JOIST TO TOP PLATE OR SILL PLATE	TOE NAILS @ 6" OC	TOE NAILS @ 4" OC		
BLOCKING BETWEEN JOISTS TO TOP PLATE OR SILL PLATE	(4) TOE NAILS	(4) TOE NAILS		
DOUBLE STUD	NAILS @ 8" OC	NAILS @ 8" OC		
DOUBLE TOP PLATES	NAILS @ 12" OC	NAILS @ 12" OC		
DOUBLE TOP PLATES LAP (24" MIN LAP LENGTH)	(12) NAILS IN LAPPED AREA, EA SIDE OF JOINT	(12) NAILS IN LAPPED AREA, EA SIDE OF JOINT		
TOP PLATE LAP AT CORNERS AND INTERSECTING WALLS	(3) FACE NAILS	(3) FACE NAILS		
OPEN-WEB TRUSS BOTTOM CHORD TO TOP PLATES OR SILL PLATE (PARALLEL TO WALL)	NAILS @ 6" OC	NAILS @ 4" OC		
BOTTOM CHORD OF TRUSS TO TOP PLATES OR SILL PLATE (PERPENDICULAR TO WALL)	(3) TOE NAILS	(3) TOE NAILS		

SEE TABLE R602.3(1) FOR ADDITIONAL STRUCTURAL-MEMBER FASTENING REQUIREMENTS.

DETAILS AND NOTES ON DRAWINGS GOVERN.

BALLOON WALL FRAMING SCHEDULE (USE THESE STANDARDS UNLESS NOTED OTHERWISE ON THE FRAMING PLAN SHEETS)

FRAMING MEMBER SIZE	MAX HEIGHT (PLATE TO PLATE) 115 MPH ULTIMATE DESIGN WIND SPEED
2~4 @ 46" 00	10'-0"
2x4 @ 16" OC	
2x4 @ 12" OC	12'-0"
2x6 @ 16" OC	15'-0"
2x6 @ 12" OC	17'-9"
2x8 @ 16" OC	19'-0"
2x8 @ 12" OC	22'-0"
(2) 2x4 @ 16" OC	14'-6"
(2) 2x4 @ 12" OC	17'-0"
(2) 2×6 @ 46" OC	21'-6"
(2) 2x6 @ 16" OC	
(2) 2x6 @ 12" OC	25'-0"
(2) 2x8 @ 16" OC	27'-0"
(2) 2x8 @ 12" OC	31'-0"

- a. ALL HEIGHTS ARE MEASURED SUBFLOOR TO TOP OF WALL PLATE.
- b. WHEN SPLIT-FRAMED WALLS ARE USED FOR HEIGHTS OVER 12', THE CONTRACTOR SHALL ADD 6' MINIMUM OF CS16 COIL STRAPPING (FULLY NAILED), CENTERED OVER THE WALL BREAK.
- C. FINGER-JOINTED MEMBERS MAY BE USED FOR CONTINUOUS HEIGHTS WHERE TRADITIONALLY MILLED LUMBER LENGTHS ARE
- d. FOR GREATER WIND SPEED, SEE ENGINEERED SOLUTION FOR CONDITION IN DRAWINGS.

#### **ROOF SYSTEMS**

TRUSSED ROOF - STRUCTURAL NOTES

 PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.



DENOTES OVER-FRAMED AREA

- 3. MINIMUM 7/16" OSB ROOF SHEATHING
- 4. TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN. TRUSS PROFILES SHALL BE SEALED BY THE TRUSS MANUFACTURER. TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- 5. MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTION.
- 6. PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH TRUSS-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, UNLESS NOTED OTHERWISE.
- 7. UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR SYSTEM

#### STICK-FRAMED ROOF - STRUCTURAL NOTES

- PROVIDE 2x4 COLLAR TIES AT 48" OC AT UPPER THIRD OF RAFTERS, UNLESS NOTED OTHERWISE.
- 2. FUR RIDGES FOR FULL RAFTER CONTACT.
- 3. PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.



DENOTES OVER-FRAMED AREA

- 5. MINIMUM 7/16" OSB ROOF SHEATHING
- PROVIDE 2x4 RAFTER TIES AT 16" OC AT 45° BETWEEN RAFTERS AND CEILING JOISTS. USE (4) 16d NAILS AT EACH CONNECTION. RAFTER TIES MAY BE SPACED AT 48" OC AT LOCATIONS WHERE NO KNEE WALLS ARE INSTALLED.
- 7. PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH RAFTER-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, UNLESS NOTED OTHERWISE.
- 8. UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR SYSTEM.

BRICK VENEER LINTEL SCHEDULE			
SPAN	STEEL ANGLE SIZE	END BEARING LENGTH	
UP TO 42"	L3-1/2"x3-1/2"x1/4"	8" (MIN. @ EACH END)	
UP TO 72"	L6"x4"x5/16"* (LLV) 8" (MIN. @ EACH END)		
OVER 72"	L6"x4"x5/16"* (LLV) ATTACH LINTEL w/ 1/2" THRU BOLT @ 12" OC, 3" FROM EACH END		

\* FOR QUEEN BRICK: LINTELS AT THIS CONDITION MAY BE 5"x3-1/2"x5/16"

NOTE: BRICK LINTELS AT SLOPED AREAS TO BE 4"x3-1/2"x1/4" STEEL ANGLE WITH 16D NAILS IN 3/16" HOLES IN 4" ANGLE LEG AT 12" OC TO TRIPLE RAFTER. WHEN THE SLOPE EXCEEDS 4:12 A MINIMUM OF 3"x3"x1/4" PLATES SHALL BE WELDED AT 24" OC ALONG THE STEEL ANGLE.



KB HOME
NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988

■ FAX: (919) 472-0582 ■

SEAL O45403

OLIVER OF THE SEAL OF THE SEA

P-0961

JDSfaulkner, PLLC HAS PERFORMED A STRUCTURAL REVIEW OF THESE PLANS. THE STRUCTURAL COMPONENTS COMPLY WITH THE 2018 NORTH CAROLINA RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS FOR NC PLAN REVIEW. DEVIATION OF ANY STRUCTURAL EAPPROVAL OF THE EOR IS PROHIBITED.



DATE: 10/02/2020

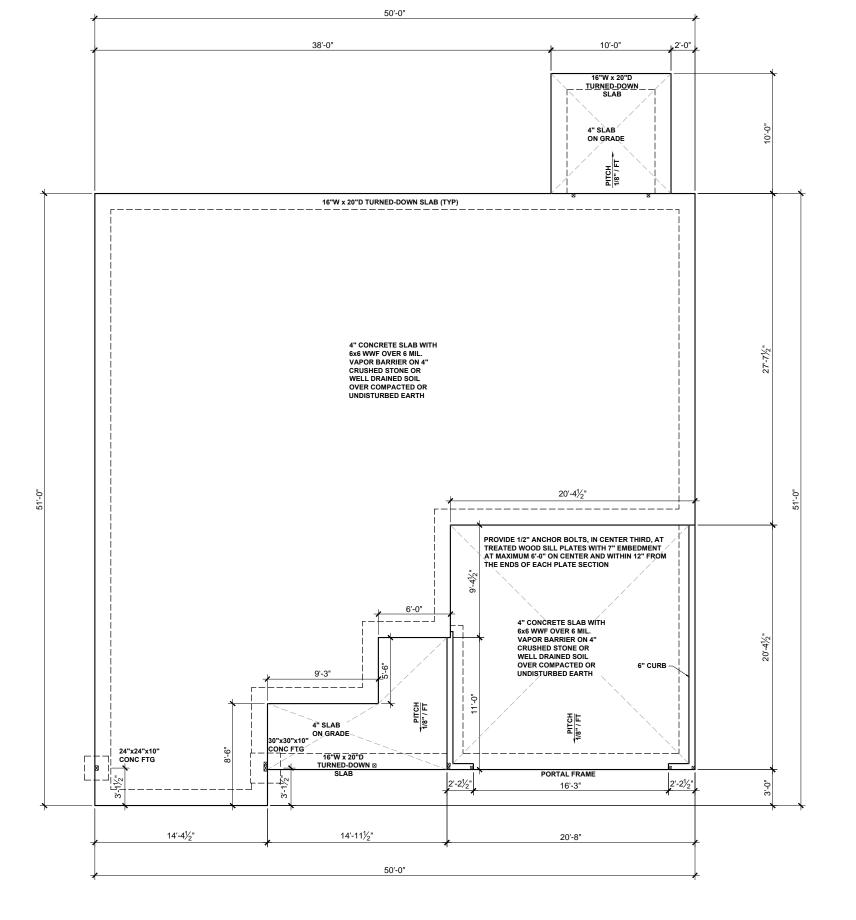
. . . .

PLAN: **150.1910** 

GENERAL NOTES

. . . . .

GN1.1



BEAM & POINT LOAD LEGEND

INTERIOR LOAD BEARING WALL

---- ROOF RAFTER / TRUSS SUPPORT

WINDOW / DOOR HEADER

■ POINT LOAD FROM ABOVE BEARING ON BEAM / GIRDER

(1) #5 REBAR @ CENTER OF ALL PERIMETER AND INTERNAL LOAD BEARING FOOTINGS. (2" C.C. MIN)

ALL CONCRETE CURBS SUPPORTING PORTAL FRAMED OR ENGINEERED OPENINGS IN GARAGES WITH A PONY WALL OVER 24" ABOVE THE GARAGE DOOR HEADER SHALL BE REQUIRED TO BE AT LEAST 8" WIDE. KB HOME

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988

FAX: (919) 472-0582

P-0961

JDSfaulkner, PLLC HAS PERFORMED A
STRUCTURAL REVIEW OF THESE PLANS. THE
STRUCTURAL COMPONENTS COMPLY WITH THE
2018 NORTH CAROLINA RESIDENTIAL CODE FOR
ONE- AND TWO-FAMILY DWELLINGS FOR NC
PLAN REVIEW. DEVIATION OF ANY STRUCTURAL
REQUIREMENTS OF THESE PLANS WITHOUT THE
ADDROVAL OF THE EARLY IS PROMIBITED.



FO@JDSfaulkner.COM; WWW.JDSfaulkner.CO PROJECT NO.: 20901547

DATE: 10/02/2020

PI AN

150.1910

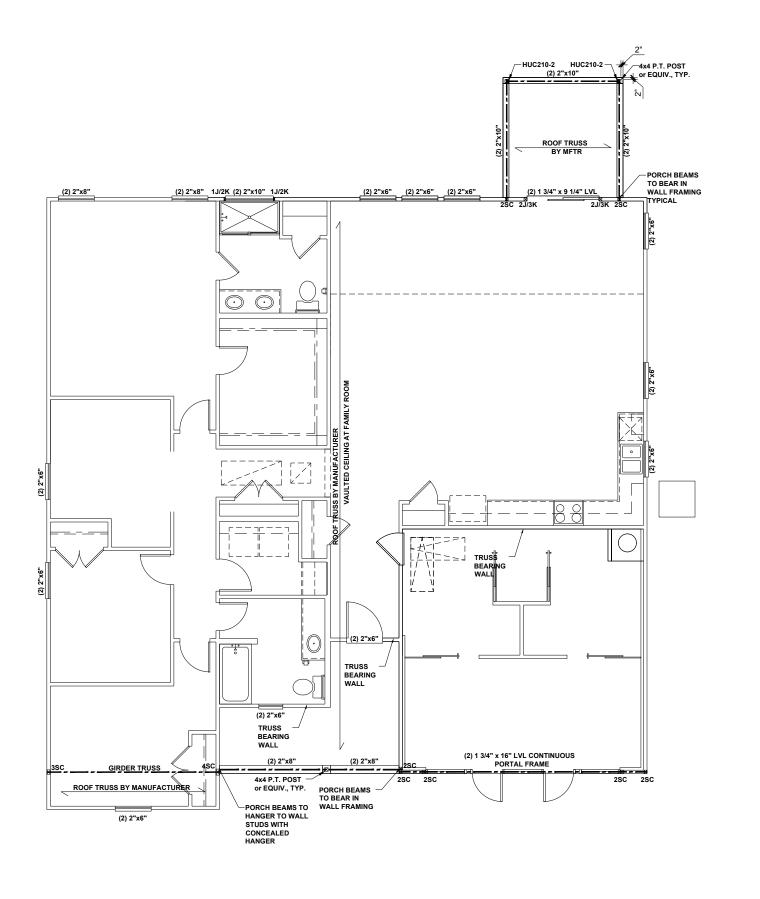
. . . . .

SLAB FOUNDATION PLAN

**S.10B** 

**SLAB FOUNDATION PLAN - 'B'** 

SCALE: 1/8"=1'-0"



#### BEAM & POINT LOAD LEGENI

INTERIOR LOAD BEARING WALL

- ROOF RAFTER / TRUSS SUPPORT

· - · - · DOUBLE RAFTER / DOUBLE JOIST

STRUCTURAL BEAM / GIRDER

WINDOW / DOOR HEADE

■ POINT LOAD FROM ABOVE BEARING ON BEAM / GIRDER

STRUCTURAL FRAMING NOTES - (SEE GENERAL NOTES SHEET FOR ADDITIONAL REQUIREMENTS.)

- ALL FRAMING TO BE #2 SPF MINIMUM.
- 2. ALL BEARING HEADERS TO BE (2) 2x6 SUPPORTED W/ MIN (1) JACK AND (1) KING EACH END, UNO.
- . EXTERIOR WALL OPENINGS OVER 3' TO HAVE MULTIPLE KING STUDS AS NOTED ON PLAN.
- ALL NON-BEARING HEADERS TO BE (2) 2x4 (1) J / (1) K, UNO.
- 5. PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.
- S. ALL HANGERS AND CONNECTORS SPECIFIED ARE TO BE SIMPSON STRONG-TIE OR EQUIVALENT.
- ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY.
  LARGER MEMBERS MAY SUBSTITUTED AS
  NEEDED FOR EASE OF CONSTRUCTION. MINIMUM
  BEAM SUPPORT IS (1) 2x4 STUD.
- ALL EXTERIOR WALLS TO BE FULLY SHEATHED WITH 7/16" OSB.
- FRONT PORCH COLUMNS TO BE MIN 4x4 PT ATTACHED AT TOP AND BOTTOM USING SIMPSON (OR EQUIV) COLUMN BASE OR SST A24 BRACKETS. TRIM OUT PER BUILDER.
- PORCH COLUMNS TO BE MIN 4x4 PT ATTACHED AT BOTTOM USING SIMPSON (OR EQUIV) ABA44 AND AT TOP USING CS 16 STRAPPING (12" MIN) TO PORCH HEADER / BAND.
- I. WHEN A 4-PLY LVL IS USED, ATTACH WITH (1) 1/2" Ø BOLT 12" OC STAGGERED, TOP AND BOTTOM, 1-1/2" MIN FROM ENDS. ALTERNATE ATTACHMENT EQUIVALENT METHOD MAY BE USED, SUCH AS SDW OR TRUSSLOK SCREWS (SEE MANUFACTURER'S SPECIFICATIONS).
- 2. FOR STUD COLUMNS OF 4 OR MORE, INSTALL SST CS16 STRAPS @ 30" OC, 6" MAX FROM PLATES, ON INSIDE FACE OF COLUMN (EXTERIOR WALL), ON BOTH FACES OF COLUMN (INTERIOR WALL).

I-JOIST SPACING NOT TO EXCEED 19.2" OC IN LOCATIONS WITH TILE FINISH FLOOR

ALL FLUSH BEAMS TO BE DIRECTLY SUPPORTED BY (2) 2X\_STUDS UNLESS OTHERWISE NOTED. STUD COLUMNS TO BE SUPPORTED BY SOLID BLOCKING TO FOUNDATION OR TO BEARING COMPONENT BELOW.

FLOOR FRAMING TO BE 14" DEEP TJI 210 SERIES OR EQUAL, 19.2" OC MAXIMUM SPACING

# KB

•	•	•	•	•
_				

NORTH CAROLINA DIVISION

- 4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988
- FAX: (919) 472-0582 ■



#### P-0961

JDSfaulkner, PLLC HAS PERFORMED A STRUCTURAL REVIEW OF THESE PLANS. THE STRUCTURAL COMPONENTS COMPLY WITH THE 2018 NORTH CAROLINA RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS FOR NC PLAN REVIEW. DEVIATION OF ANY STRUCTURAL REQUIREMENTS OF THESE PLANS WITHOUT THE APPROVAL OF THE FOR IS PROHIBITED.



8800 °D' JERSEY CT, RALEIGH, NC 27617;919.480.1075 INFO@JDSfaulkner,COM; WWW.JDSfaulkner.COM PROJECT NO.: 20901547

DATE: 10/02/2020

PLAN: 150.1910

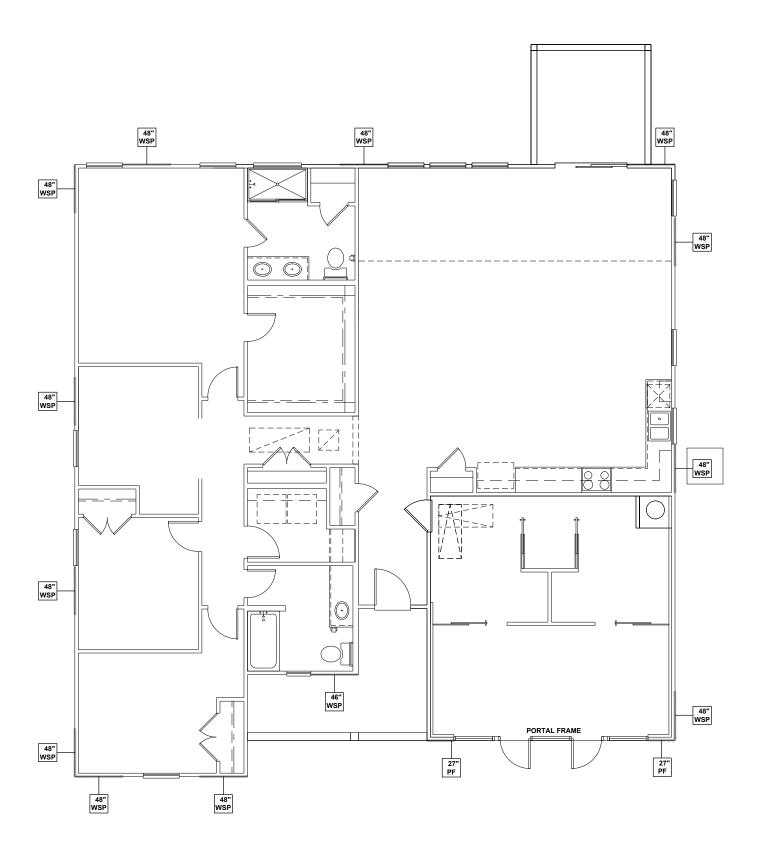
. . . .

FIRST FLOOR CEILING FRAMING PLAN

**S1.0B** 

FIRST FLOOR CEILING FRAMING PLAN - 'B'

SCALE: 1/8"=1'-0"



#### WALL BRACING REQUIREMENTS

- MINIMUM PANEL WIDTH IS 24"
   FIGURES BASED ON THE CONTINUOUS SHEATHING METHOD USING THE RECTANGLE CIRCUMSCRIBED AROUND THE FLOOR PLAN OR PORTION OF THE FLOOR PLAN. IF NO RECTANGLE IS NOTED, THE STRUCTURE HAS BEEN FIGURED ALL WITHIN ONE RECTANGLE.
  - PANELS MAY SHIFT UP TO 36" EITHER DIRECTION
- FOR EASE OF CONSTRUCTION (NAILING & BLOCK REQUIREMENTS STILL APPLY).
- FOR ADDITIONAL WALL BRACING INFORMATION,
  REFER TO WALL BRACING DETAIL SHEET(S).
   SCHEMATIC BELOW INDICATES HOW SIDES OF RECTANGLE ARE TO BE INTERPRETED IN BRACING CHART WHEN APPLIED TO STRUCTURE:



CS16 STRAP FROM STUD, CROSS HEADER, TO WALL TOP PLATE, 36" LONG MINIMUM

SIMPSON MSTA15 HOLD DOWN CAPACITY OF 970 POUNDS PER ANCHOR WITH (12) 10d NAILS. STRAF TO BE LOCATED AT EDGE OF BRACED WALL PANEL. (CS16 STRAPPING MAY BE SUBSTITUTED W/ SIMILAR LENGTH AND NAILING PATTERN.) USE HTT4 FOR ATTACHMENT TO CONCRETE.

SCALED LENGTH OF WALL PANEL AT LOCATION —

OF PANEL

#### WALL BRACING: RECTANGLE 1

SIDE	REQUIRED LENGTH	PROVIDED LENGTH			
FRONT	6.5 FT.	18.6 FT.			
RIGHT	6.5 FT.	12.0 FT.			
REAR	6.5 FT.	12.0 FT.			
LEFT	6.5 FT.	16.0 FT.			

NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD.
SUITE 180
DURHAM, NC 27703
TEL: (919) 768-7988 FAX: (919) 472-0582

P-0961

JDSfaulkner, PLLC HAS PERFORMED A STRUCTURAL REVIEW OF THESE PLANS. THE STRUCTURAL COMPONENTS COMPLY WITH THE 2018 NORTH CAROLINA RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS FOR NC PLAN REVIEW. DEVIATION OF ANY STRUCTURAL REQUIREMENTS OF THESE PLANS WITHOUT THE

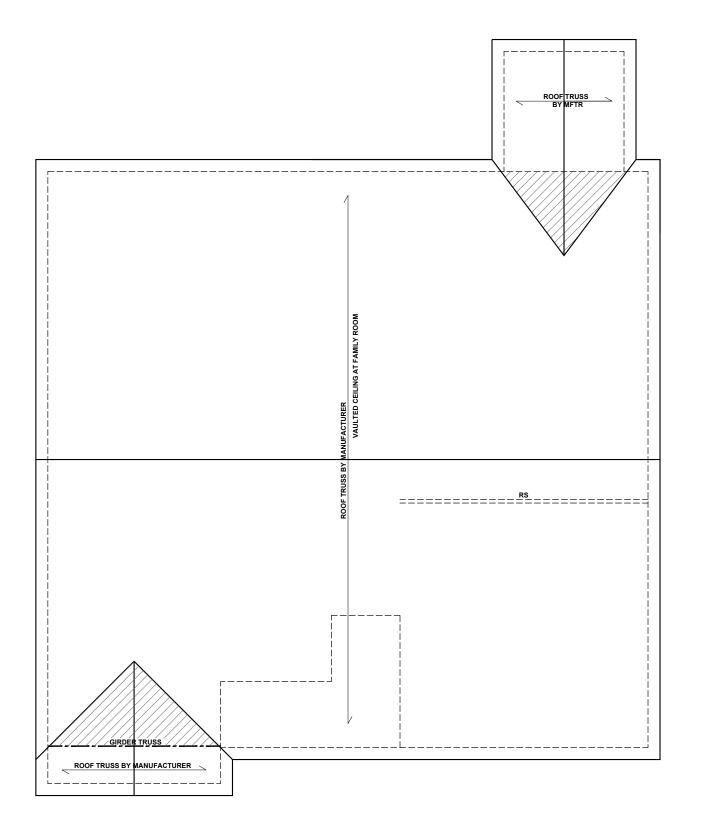


150.1910

FIRST FLOOR WALL BRACING PLAN

FIRST FLOOR WALL BRACING PLAN - 'B'

SCALE: 1/8"=1'-0"



### **ROOF FRAMING PLAN - 'B'**

SCALE: 1/8"=1'-0"

#### BEAM & POINT LOAD LEGEND

INTERIOR LOAD BEARING WALL

- ROOF RAFTER / TRUSS SUPPORT

----- DOUBLE RAFTER / DOUBLE JOIST

- STRUCTURAL BEAM / GIRDER

WINDOW / DOOR HEADER

POINT LOAD TRANSFER

POINT LOAD FROM ABOVE BEARING ON BEAM / GIRDER

DENOTES OVER-FRAMED AREA

3. MINIMUM 7/16" OSB ROOF SHEATHING

MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN. TRUSS PROFILES SHALL BE SEALED BY THE TRUSS MANUFACTURER. TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S

5. MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTION.

#### TRUSS UPLIFT CONNECTORS: EXPOSURE B, 115 MPH, ANY PITCH, 24" O.C. MAX ROOF TRUSS SPACING

TRUSSES SHALL BE ATTACHED TO SUPPORT WALL FOR UPLIFT RESISTANCE. CONTINUOUS OSB WALL SHEATHING BELOW PROVIDES CONTINUOUS UPLIFT RESISTANCE TO FOUNDATION. ALL TRUSSES SUPPORTED BY INTERMEDIATE SUPPORT WALLS. KNEEWALLS, OR BEAMS SHALL BE ATTACHED TO

CONNECTOR NAILING PER TABLE 602.3(1)

**OVER 28'** 

(1) SIMPSON H2.5A HURRICANE CLIP TO DBL TOP PLATE OR

OR (1) SIMPSON H3 CLIP TO SINGLE 2x4 PLATE

#### TRUSSED ROOF - STRUCTURAL NOTES

I. PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.



4. TRUSS LAYOUT AND PLACEMENT BY

6. PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH TRUSS-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, UNLESS NOTED

UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR SYSTEM.

SUPPORTING MEMBER PER SCHEDULE:

ROOF SPAN IS MEASURED HORIZONTALLY BETWEEN FURTHEST SUPPORT POINTS.

KB HOME

NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 FAX: (919) 472-0582

045403 

P-0961

JDSfaulkner, PLLC HAS PERFORMED A STRUCTURAL REVIEW OF THESE PLANS. THE STRUCTURAL COMPONENTS COMPLY WITH THE 018 NORTH CAROLINA RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS FOR NC PLAN REVIEW. DEVIATION OF ANY STRUCTURAL REQUIREMENTS OF THESE PLANS WITHOUT THE APPROVAL OF THE EOR IS PROHIBITED.

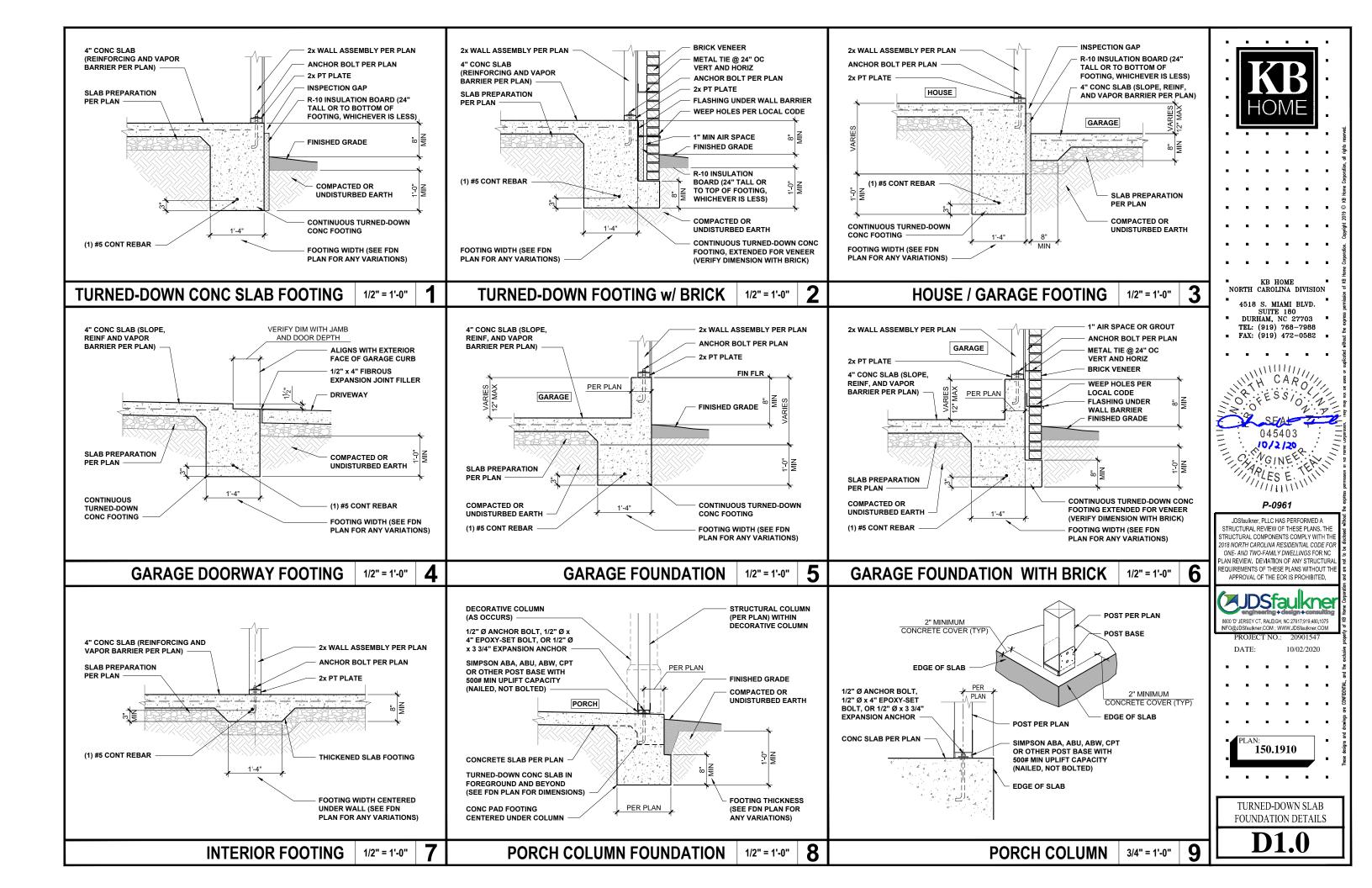


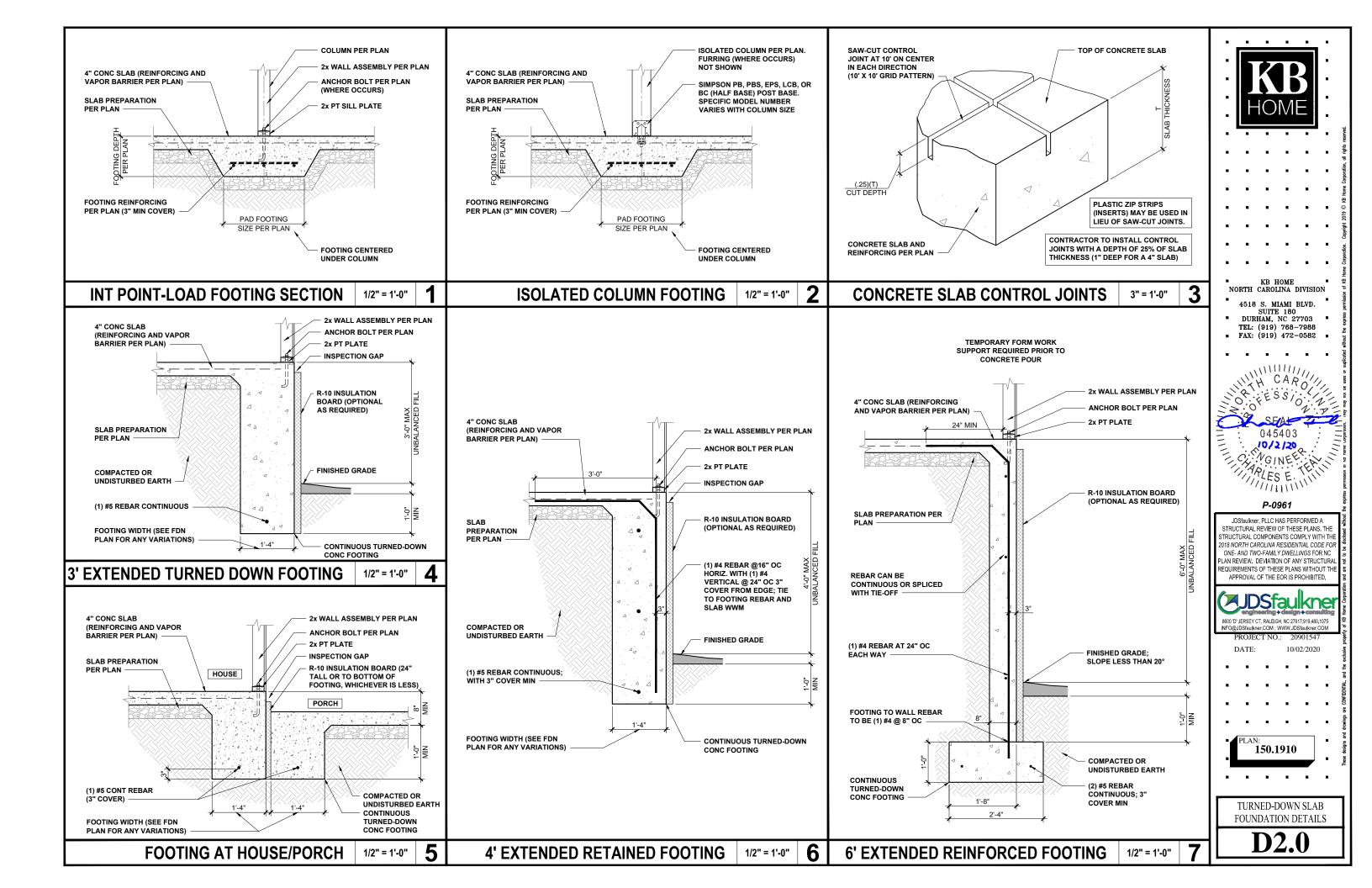
10/02/2020

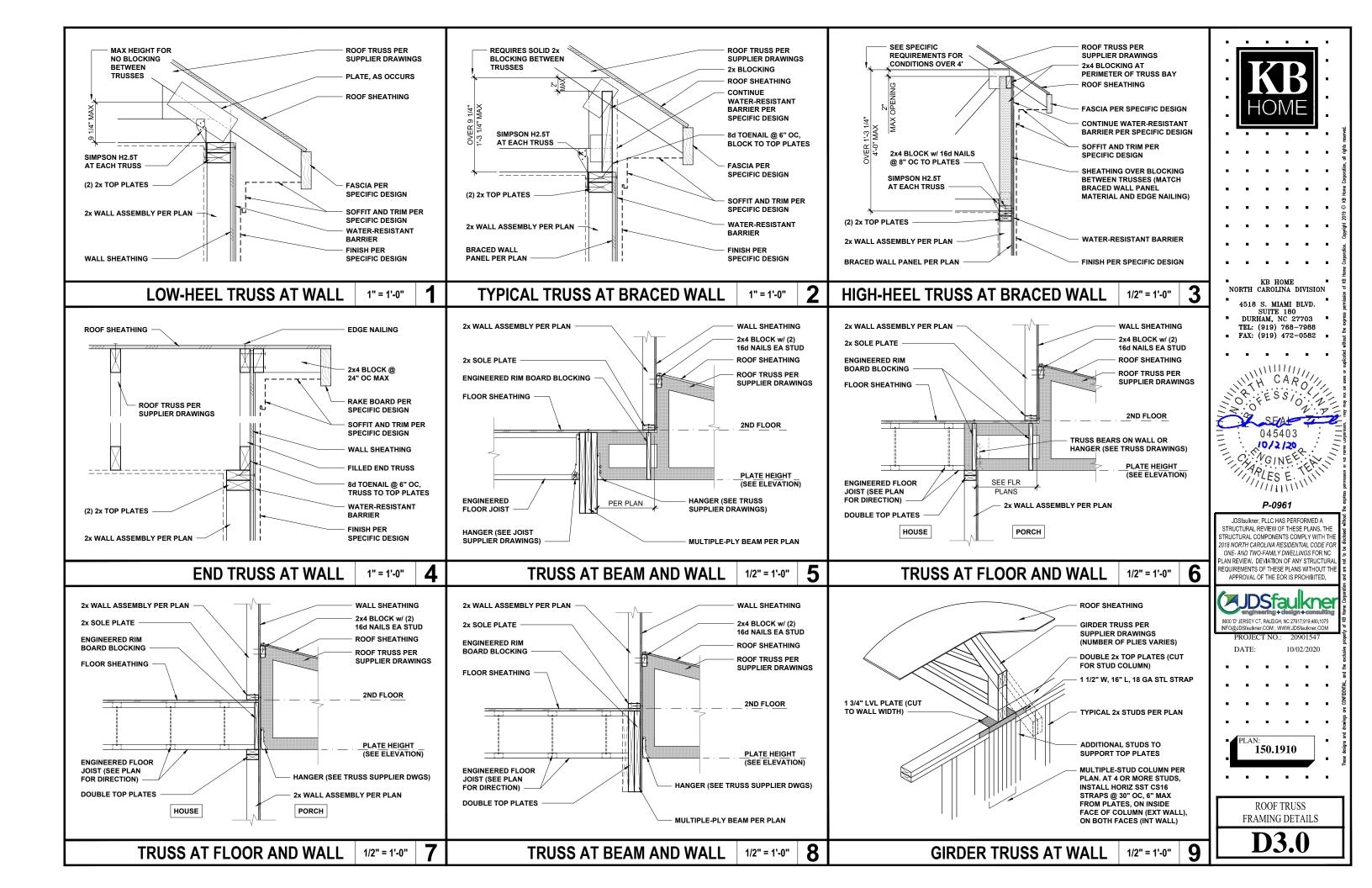
150.1910 . . . . .

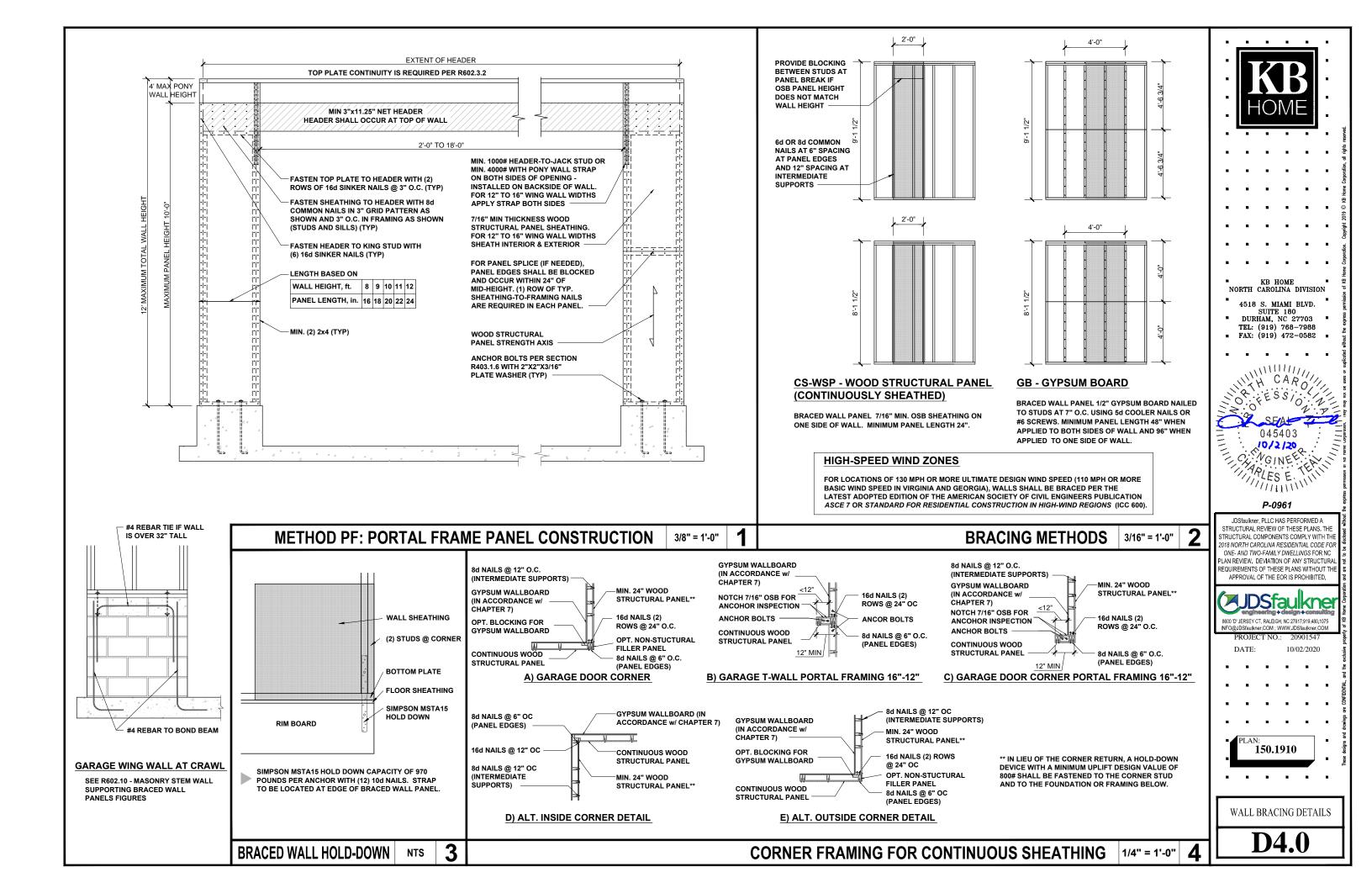
ROOF FRAMING PLAN

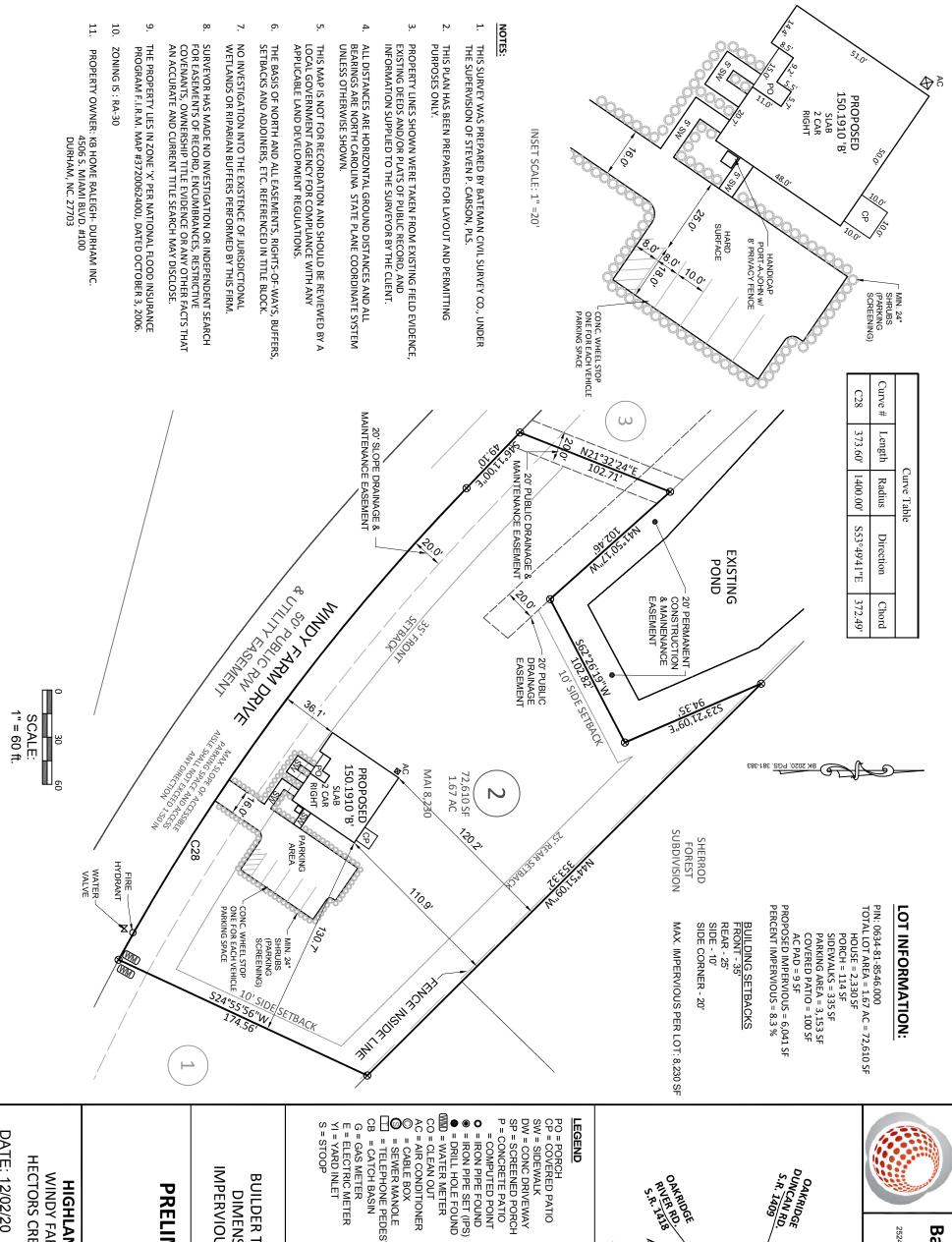
**S7.0B** 











# **Bateman Civil Survey Company**

Engineers • Surveyors • Planners

Reliance Avenue, Apex, NC 27539 Ph: 919.577.1080 Fax: 919.577.1081 www.batemancivilsurvey.com info@batemancivilsurvey.com

NCBELS Firm No. C-2378

CHRISTIAN LIGHT

SITE

VICINITY MAP

(Not to Scale)

- = COMPUTED POINT
- = TELEPHONE PEDESTAL

BLOCK); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION LISTED UNDER REFERENCES; THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000+; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARD OF PRACTICE FOR LAND I, STEVEN P. CARSON, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY DIRECT SUPERVISION FROM A SURVEY MADE UNDER MY SUPERVISION (PLAT BOOK REFERENCED IN TITLE



and is only intended for the parties and This map is of an existing parcel of land recordation. No title report provided. purposes shown. This map not for

IMPERVIOUS NOTED ON THIS PLOT PLAN **BUILDER TO VERIFY HOUSE LOCATION DIMENSIONS AND REVIEW TOTAL** 

# PRELIMINARY PLOT PLAN

FOR

# **KB HOMES**

HECTORS CREEK TOWNSHIP, HARNETT COUNTY WINDY FARM DRIVE, FUQUAY-VARINA, NC **HIGHLAND GROVE - PHASE 1 - LOT 2** 

DATE: 12/02/20 DRAWN BY: JKF CHECKED BY: SPC

BCS# 200597

SCALE: 1" = 40'

REFERENCE: BK 2020, PGS. 381-383