GENERAL NOTES:

- 1) THESE PLANS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE NCBC 2018 RESIDENTIAL CODE
- 2) THESE PLANS ARE DESIGNED TO BE USED BY A LICENSED GENERAL CONTRACTOR
 3) DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS
- 4) ALL PM\$E PLANS ARE TO BE HANDLED BY THE GENERAL CONTRACTOR UNLESS NOTED OTHERWISE
- 5) ENGINEER'S INFORMATION AND NOTES TAKE PRECEDENCE OVER TRD PLAN

GENERAL CONTRACTOR:

- 1) PRIOR TO CONSTRUCTION, REVIEW ALL PLANS VERIFYING DIMENSIONS, LOCAL CODES, ENERGY TYPES AND SITE CONDITIONS
- 2) ANY DISCREPANCY IN THE PLANS IS TO BROUGHT TO THE ATTENTION OF TRD FOR CORRECTION PRIOR TO CONSTRUCTION. OTHERWISE IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR
 3) INSURE ALL PHASES OF CONSTRUCTION COMPLY WITH BUILDING CODES IN THE AREA THE HOME IS TO BE BUILT
- 4) CONSULT WITH LOCAL ENGINEER FOR STRUCTURAL DESIGN
- 5) ONCE CONSTRUCTION BEGINS, CONTRACTOR ASSUMES ALL RESPONSIBILITY

TRIANGLE RESIDENTIAL DESIGNS:

- 1) THESE PLANS ARE THE COPYRIGHTED PROPERTY OF TRD. THEY ARE NOT TO BE REPRODUCED WHOLE OR IN PART, WITHOUT WRITTEN CONSENT FROM TRD.
- 2) THE LIABILITY OF TRD IN CONNECTION WITH THIS PLAN AND THE HOME BUILT THEREFROM IS LIMITED TO THE TOTAL FEES PAID BY THE PURCHASER OF THE PLAN.
- 3) TRD ASSUMES NO LIABILITY FOR ALTERATIONS TO THE PLANS, FIELD MODIFICATIONS OF THE PLANS OR STRUCTURAL COMPONENTS.
- THEY ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR

NON-EXCLUSIVE LICENSE:

THE PURCHASER OF THIS PLAN HAS BEEN GRANTED A NON-EXCLUSIVE, NON-TRANSFERABLE LICENSE TO USE THIS COPYRIGHTED PLAN TO BUILD ONE HOME. THE PLANS ARE NOT TO BE REPRODUCED, WHOLE OR IN PART, OR RESOLD, WITHOUT WRITTEN CONSENT FROM TRD. ANY BREACH OF THESE TERMS ENTITLE TRD TO PURSUE ALL REMEDIES BY LAW.

NOTE TO CONTRACTOR

PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR:

- 1. REVIEWING ALL PLANS
- 2. VERIFYING ALL DIMENSIONS
- 3. NOTIFY TRIANGLE RESIDENTIAL DESIGNS OF ANY DISCREPANCIES
- 4. VERIFYING PLACEMENT OF PROPOSED ADDITION WITH RESPECT TO EXISTING STRUCTURES, PROPERTY LINES AND GRADE CONDITIONS.

STRUCTURES, PROPERTY LINES AND GRADE CONDITIONS.

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CARE SHOULD BE TAKEN TO MATCH EXISTING WINDOWS, SIDINGS, ETC. TO THE EXISTING HOUSE OR AS SPECIFIED.

DUE TO A LACK OF ACCESSIBILITY, REMODELING OF AN EXISTING STRUCTURE REQUIRES CERTAIN ASSUMPTIONS BE MADE CONCERNING THE STRUCTURE'S EXISTING CONDITIONS. VERIFICATION OR REPAIR OF THESE CONDITIONS MAY REQUIRE ADDITIONAL DEMOLITION AND RENOVATION BEYOND THE SCOPE OF THIS PROJECT. THEREFORE THE HOMEOWNER AND BUILDER AGREE TO HOLD HARMLESS, INDEMNIFY AND DEFEND DAVID BENNETT AND TRD AGAINST ANY AND ALL CLAIMS ARISING OUT OF SUCH A SITUATION.

EXTERIOR MATERIALS

ROOF SHINGLES				
METAL ROOF				
HORIZONTAL SIDING				
BOARD \$ BATTEN SIDING				
VERTICAL SIDING				
SHAKE SIDING				
BRICK				
STONE				
STUCCO OR PARGING				
SCREEN				
BRICK ROUIL OCK OR 401 DIER				

DESIGN LOADS

FLOOR LIVE LOAD (SLEEPING): 30 PSF FLOOR LIVE LOAD (ALL OTHERS): 40 PSF DECKS: 40PSF BALCONIES: 60PSF ATTIC DEAD LOAD (NO STOR.): 10 PSF ATTIC LIVE LOAD (STORAGE): 20 PSF ATTIC W/STAIRS (DEVELOPABLE) 40 PSF

MIN. VALUES FOR ENERGY COMPLIANCE

CEILINGS: R-38

WALLS: R-15

FLOORS: R-19

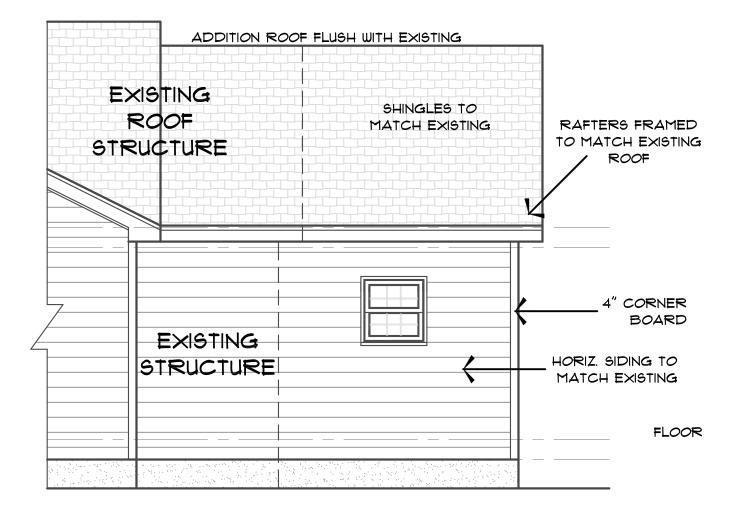
BASEMENT WALLS: R-1

CRAWL SPACE WALLS: R-8

SLAB PERIMETER @ 24" DEEP: R-4

MAX. GLAZING U-FACTOR = 0.35

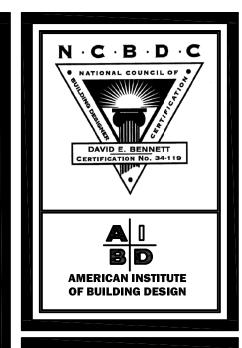
ZONE 4

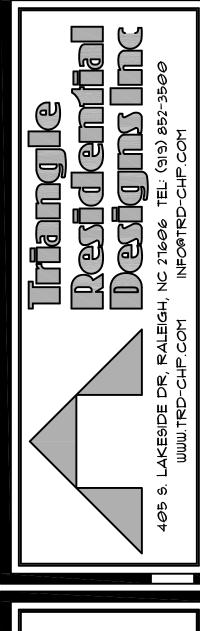




INDEX TO SHEETS

SHE	ΕT	NAME			
1		FRONT ELEVATION			
2		RIGHT \$ REAR ELEVATIONS			
3		FOUNDATION/MASONRY PLAN			
4		EXISTING \$ RENOVATED FLOOR PLAN			
5		ROOF PLAN			
E1-	2	ENGINEERING SHEETS			
DI-	-2	DETAIL SHEETS			





CLIENT:

BLACK SHEEP CONSTRUCTION

BLACK SHEEP CONSTRUCTION

PROJECT:

MOTHS RESIDENCE ADDITION

DATE:

OCT 5, 2023

DRAWN:

LDB

9HEET OF 5

NOTE TO CONTRACTOR

PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR:

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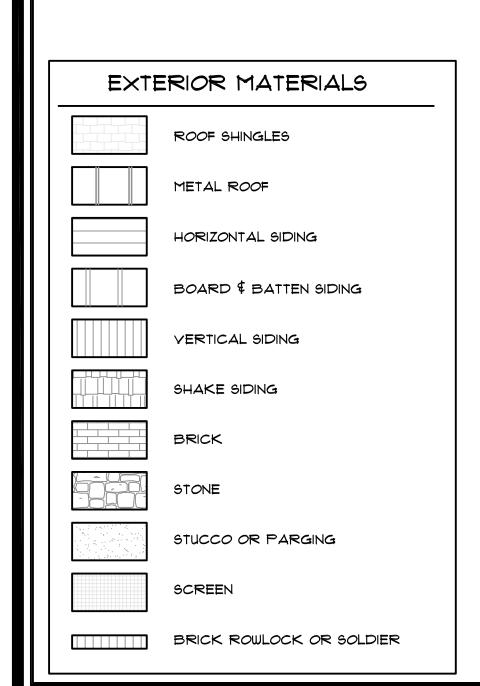
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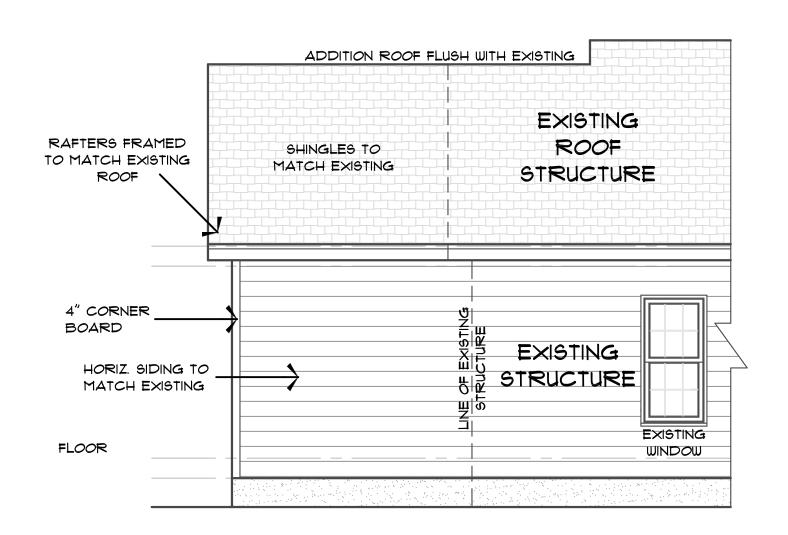
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RIGHT SIDE ELEVATION SCALE: 1/4"=1'-0"

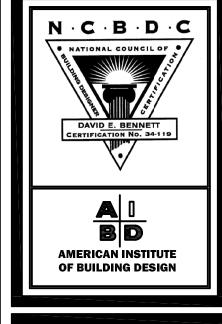
NOTE: SIDE WINDOWS ARE REUSED FROM EXISTING PLACEMENT ON SIDE OF HOUSE - SEE FLOOR PLAN

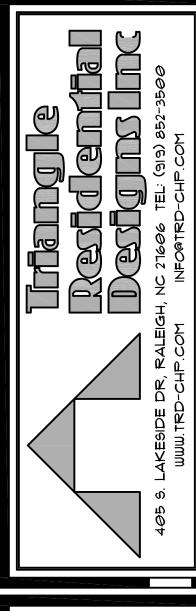




REAR ELEVATION

SCALE: 1/4"=1'-0"





CLIENT:
BLACK SHEEP CONSTRUCTION
PROJECT:
MOTHS RESIDENCE ADDITION
DATE:
OCT 5, 2023
DRAWN:
LDB

9HEET OF 5

FOUNDATION YENT CALCULATION

(AS PER 2018 NORTH CAROLINA RESIDENTIAL CODE)

MINIMUM REQUIRED

242 SQFT OF CRAWL SPACE DIVIDED BY 300 EQUALS 0.8 SQFT OF AREA

SUPPLIED:

(2) 8"X16" VENTS @ 0.44 SQFT EACH WILL BE REQUIRED (MIN.). THIS EQUALS 0.88 SQFT OF OPEN VENT.

NOTES

- * ONE YENT MUST BE WITHIN 3' OF EACH CORNER OF THE BUILDING
- * POSSIBLE VENT LOCATIONS INDICATED ON THE FOUNDATION PLAN.
- * ACCESS DOORS MAY BE VENTED FOR ADDITIONAL REQUIRED VENTIL ATION
- * CRAWL SPACE MUST BE CROSS-VENTILATED AND AN APPROVED

VAPOR RETARDER COVERS 100% OF THE CRAWL SPACE.

NOTE TO CONTRACTOR

PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR:

REVIEWING ALL PLANS
 YERIFYING ALL DIMENSIONS

FOUNDATION MATERIALS
LEGEND

CONCRETE BLOCK

CONCRETE FOOTING

CONCRETE

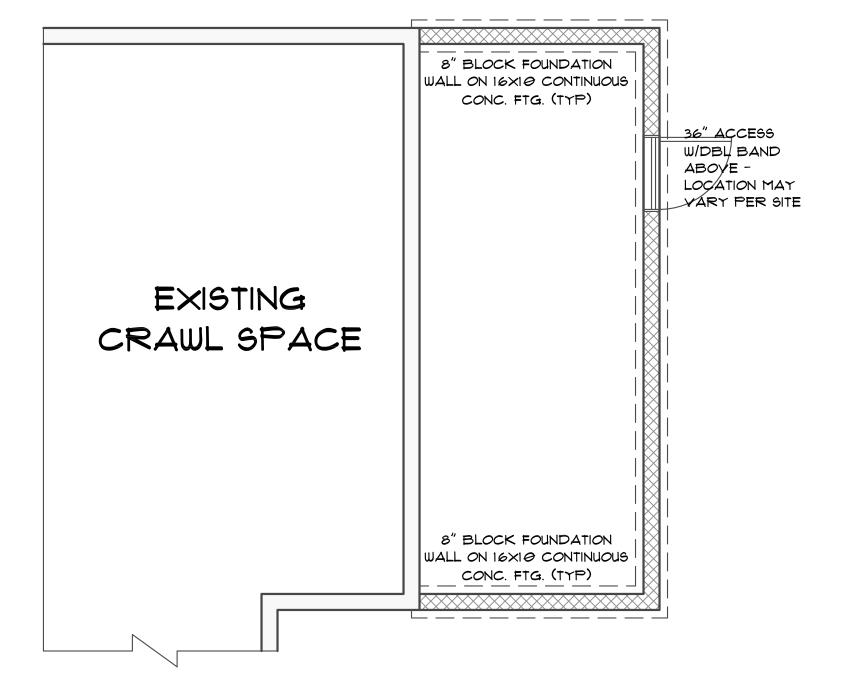
BRICK

- 2. VERIFTING ALL DIMENSIONS
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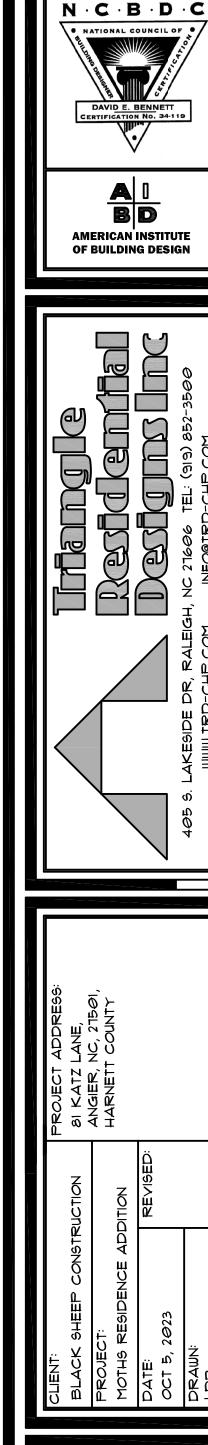
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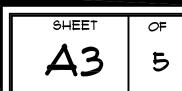
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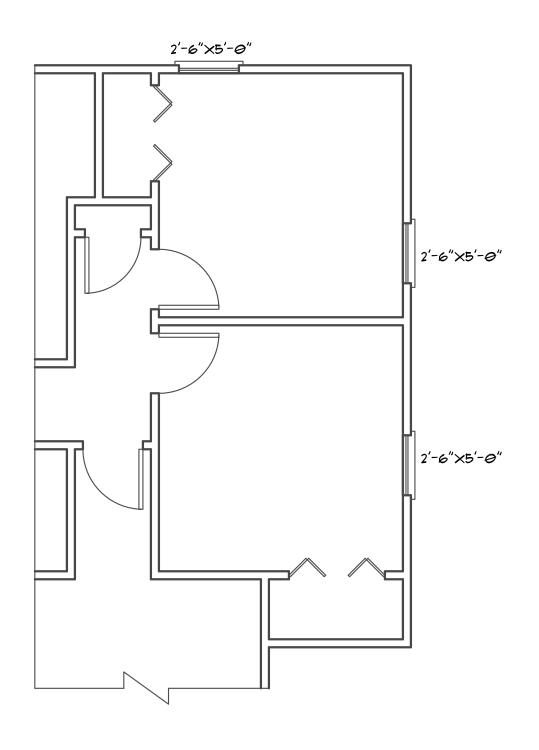


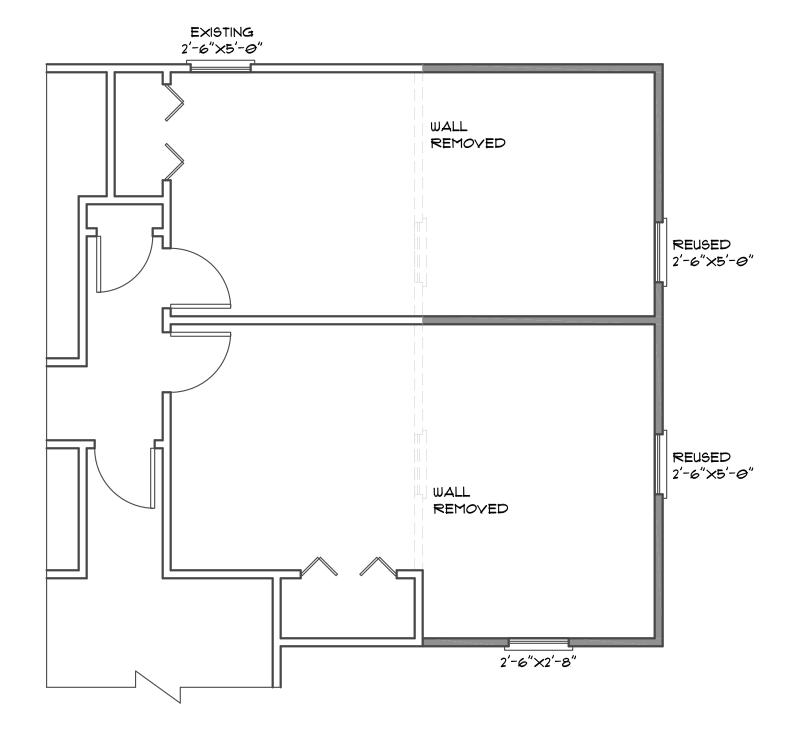












EXISTING FLOOR PLAN SCALE: 1/4"=1'-0"

8'-0" CEILING ON THIS FLOOR

RENOVATION LEGEND

REMOVED WALLS

Z EXISTING WALLS - SAVED

NEW WALLS OR RENOVATED SPACE

FLOOR PLAN SCALE: 1/4"=1'-0"

ADDITION: 242 SQFT

8'-0" CEILING ON THIS FLOOR

DEMOLITION NOTES

- 1) CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY OF ANY DISCREPANCIES BEFORE BEGINNING WORK
- 2) CONTRACTOR SHALL REMOVE ALL DEMOLITION AND CONSTRUCTION DEBRIS FROM JOB SITE
 3) CONTRACTOR SHALL COORDINATE LOCATION OF ALL DUMPSTERS AND MEANS OF REMOVAL OF DEBRIS
- 4) ALL WORK IS TO BE ACCOMPLISHED TO MEET LOCAL, STATE AND FEDERAL CODES AND AUTHORITIES
- 5) REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION
- 6) THE SCOPE OF ELECTRICAL DEMOLITION SHALL INCLUDE BUT NOT BE LIMITED TO THE REMOVAL OF ALL ELECTRICAL DEVICES WITHIN THE AREA OF WORK.
- 1) MAINTAIN EXISTING ELECTRICAL SERVICE UNTIL NEW SERVICE IS COMPLETE AND READY FOR SERVICE.
- 8) COORDINATE ALL ELECTRICAL SERVICE OUTAGES WITH OWNER PRIOR TO BEGINNING WORK.
- 9) PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN WORK AND ADJACENT AREAS DURING CONSTRUCTION.
- 10) REMOVE ALL ABANDONED CONDUIT, TELEPHONE WIRING, ELECTRICAL, DUCTWORK ETC. NOT TO BE REUSED AS PART OF THE CONSTRUCTION PROJECT.
- 11) FIELD YERIFY ALL MEASUREMENTS AND CIRCUITING WITHIN THE AREA OF WORK.

NOTE TO CONTRACTOR

PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR:

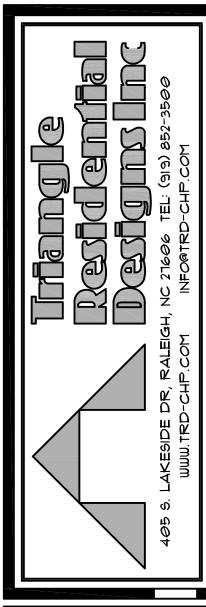
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CLIENT:

BLACK SHEEP CONSTRUCTION
PROJECT:

MOTHS RESIDENCE ADDITION
DATE:

OCT 5, 2023

DRAWN:
LDB

9HEET 0F 5

COPYRIGHT 2023 DAVID BENNETT \$ TRIANGLE RESIDENTIAL DESIGNS. ALL RIGHTS RESERVED. DO NOT REPRODUCE WITHOUT PERMISSION.

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ROOF NOTES

THICKNESS OF THE RIDGE.

1) RAFTER SIZES ARE SHOWN AT MINIMUM STRUCTURAL REQUIREMENTS. SIZES MAY BE INCREASED TO PROVIDE MINIMUM INSULATION VALUES OR AIR PASSAGES.

2) RAFTER SPANS ARE CALCULATED ON #2 GRADE SPRUCE PINE FIR.

3) RAFTERS SHALL BE FRAMED TO RIDGE BOARD OR TO EACH OTHER WITH A GUSSET PLATE.

4) RIDGE BOARDS SHALL BE AT LEAST I" NOMINAL THICKNESS AND LOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER.
5) OPPOSING RAFTERS AT THE RIDGE MUST ALIGN WITHIN THE

6) IF CLG JSTS ARE NOT PARALLEL TO RAFTERS, SUBFLOORING OR METAL TIES SHALL BE ATTACHED TO RAFTERS ENDS TO SUPPLY A CONTINUOUS TIE ACROSS THE BUILDING OR RAFTERS SHALL BE ATTACHED TO 1"X 4" CROSSTIES.

1) ATTACH 1" \times 6" OR 2" \times 4" COLLAR TIES IN THE UPPER THIRD OF THE ROOF TO EVERY THIRD PAIR OF RAFTERS, NOT TO EXCEED 4"-0" O.C.

8) ALL DORMERS SHALL HAVE DOUBLE HEADERS AND TRIMMERS.

9) TRUSS ROOF DRAWINGS SHALL BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL.

10) SHINGLED ROOFS WITH PITCHES 2/12 TO 4/12 SHALL HAVE DOUBLE UNDERLAYMENT.

11) A CRICKET OR SADDLE IS REQUIRED FOR CHIMNEYS OVER 30" WIDE. THE COVERING SHALL BE METAL OR THE SAME MATERIAL AS THE ROOF COVERING.

ATTIC YENTILATION CALCULATION

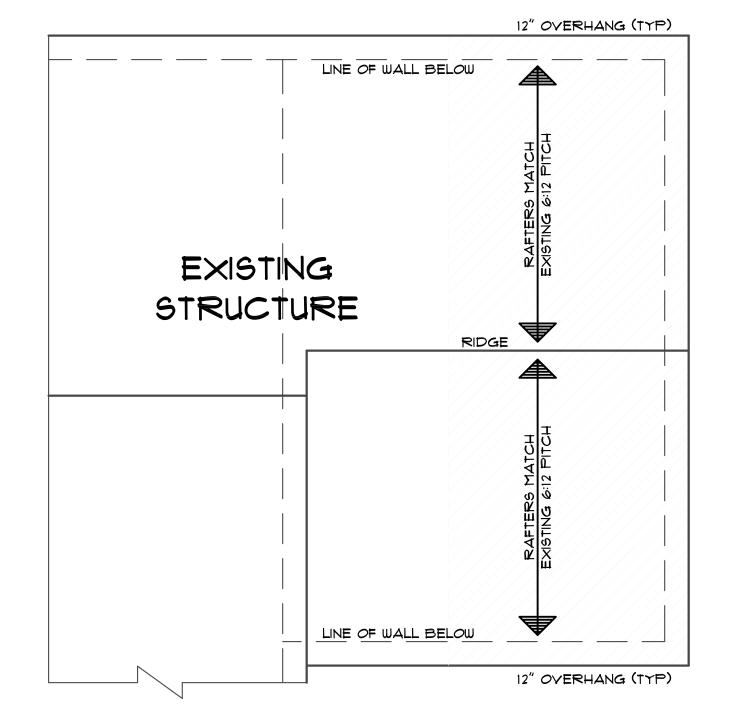
(AS PER 2018 NORTH CAROLINA RESIDENTIAL CODE)

222 SQFT. OF ATTIC/150 REQUIRES = 1.48 SQFT. OF FREE VENT = 0.74 SQFT. IN/0.74 SQFT. OUT.

8 LINEAR FT. OF RIDGE VENT AT 18 SQ. IN./FT. DIVIDED BY 144 SQ. IN./SQ. FT. EQUALS 1 SQ. FT. OF FREE AREA.

- EAVES TO HAVE 2" CONTINUOUS EAVE/SOFFIT VENT
- IF ROOF VENTING IS INADEQUATE, SUPPLEMENT WITH POWER ROOF VENTILATORS.
- VENTILATION REQUIREMENT MAY BE REDUCED TO I
 SF/300 SF PROVIDED AT LEAST 50% AND NOT MORE
 THAN 80% OF THE REQUIRED VENTILATING AREA IS
 PROVIDED BY VENTILATORS LOCATED IN THE UPPER
 PORTION OF THE SPACE TO BE VENTILATED, ATLEAST
 THREE (3) FEET ABOVE THE EAVE OR CORNICE VENTS,
 AND WITH THE BALANCE OF THE VENTILATION TO BE
 PROVIDED BY THE EAVE AND CORNICE VENTS.

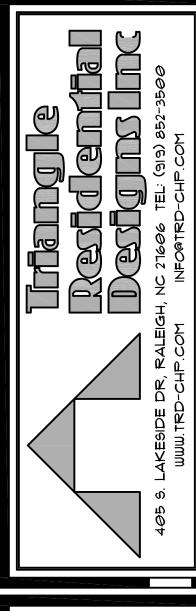
NOTE: REFER TO SECTION 806 (ROOF VENTILATION) OF THE NC STATE RESIDENTIAL CODE

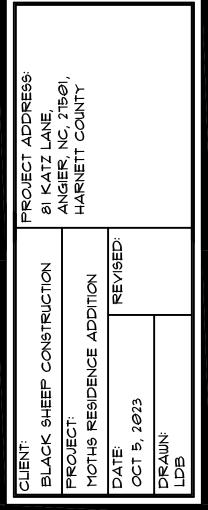




NEW ROOF STRUCTURE







DESIGN TO IRC 2015 NCRC 2018

IRC 2015 NCRC 2018 REQUIRES VAPOR BARRIER

OVER 100 PERCENT OF CRAWL AREA

ALL FLOOR JOISTS 11 7/8 BCI 5000 @ 19.2

11 7/8 LPI 20 @ 19.2 or 2' x 10 @ 16 # 2 SPF or Better

ORIENTED Left to Right



DENOTES 12"x16" -or- 16"x16"
CMU PIER WITH 8" SOLID CAP
ON 30"x30"x10" CONC. FTR.

CONCRETE PIER SIZES

Size Hollow Masonry 12"x16" Up to 48" High 16"x16" Up to 64" High Solid Masonry Up to 9'-0" High Up to 12'-0" High

FOUNDATION WALLS
ALL FOUNDATION WALLS 8" BLOCK
PARGED -or- 4" BRICK w/ 4" BLOCK
w/ 8" SOLID CAP ON 16" x 8" CONTINUOUS
CONCRETE FOOTER

20" x 10" in areas of brick veneer

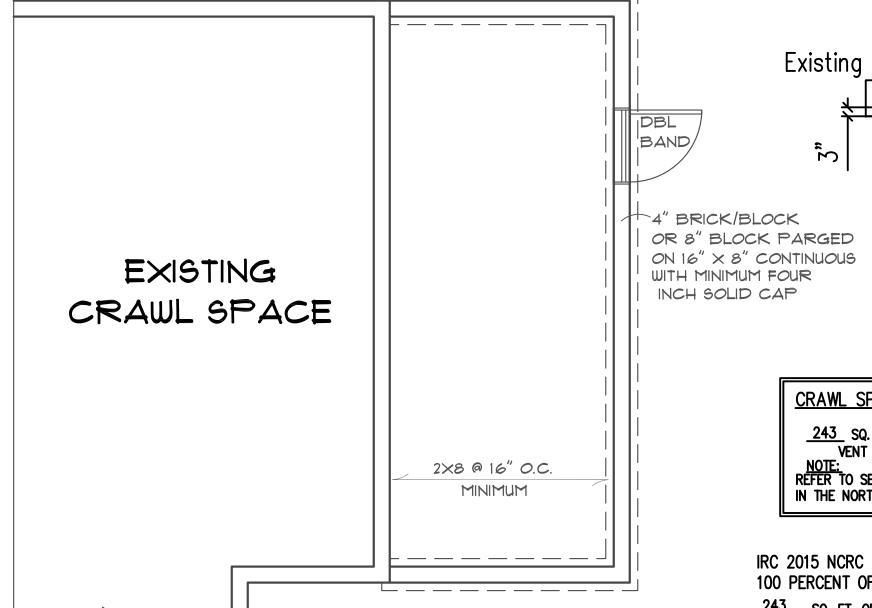
GIRDERS

 $\overline{(3)}$ 2"x10" #2 SYP -or-NEW SFPA SYP Values Used

(4) 2x 10 # 2 SPF or Better

Anchor bolts required <u>ALL</u> foundation walls provide 1/2" x 10" with $\overline{7}$ inch embedment 6' on center and 12 inches from ends / corners

DESIGN TO IRC 2015 NCRC 2018



1/4"=1'-0"

FOUNDATION PLAN

3" embed 12" Minimum Two #4 bar dowel tie-in

> Anchor Bolts ALL foundation walls 1/2" x 10" with seven inch embed at 12 inches from ends / corners and six feet o.c.

(NC C-2298)

lohn

date:

drawn by:

10 SEPTEMBER 2023

J A McRae

RESIDENTIAL AND COMMERCIAL B 218 Coley Farm Road Fuquay-Varina P O Box 1466 Apex, NC 27502

27501

CRAWL SPACE VENTILATION

 $\underline{243}$ SQ. FT. OF CRAWL / 150= $\underline{1.62}$ SQ. FT. OF FREE VENT REQUIRED

REFER TO SECTION 409.1 (CRAWL SPACE VENTILATION) IN THE NORTH CAROLINA STATE BUILDING CODE (IRC)

IRC 2015 NCRC 2018 REQUIRES VAPOR BARRIER OVER 100 PERCENT OF CRAWL AREA REDUCING VENTING 243 SQ. FT. OF CRAWL / 300 = 1 SQ. FT. OF FREE VENT REQUIRED

 $1 / 0.44 = 2 - 8 \times 16 \text{ vents (64 SQ IN FREE)}$ USE (5) $- 8 \times 16 \text{ vents (64 SQ IN FREE)}$

CONSTRUCTION

Structural Design By: John Alexander McRae, PE, Inc 218 Coley Farm Road Fuquay-Varina North Carolina 27526 jampe@nc.rr.com (919) 210-5749 P O Box 1466 Apex, NC 27502 Report deficiencies immediately 2310-15 (NC C-2298)

sheet no.

plan no.

SCALE:

NOTE TO BUILDER: It is the sole responsibility of the builder to review and the north carolina building code (IRC) and to understand every part of these plans herein

ALL FLOOR JOISTS 2 X 10 @16

#2 SPF OR BETTER

Or 11 7/8 | Joists at 16" or 19.2" By MFR

ALL CEILING JOIST 2 X 8 @ 16 Up To 15'

2 X 6 @ 16 Up To 11'

ALL EXTERIOR AND BEARING HEADER (2) 2"x10" u.n.o.

ALL ERAMING #2 SPE OR BETTER 11.7.0 ALL FRAMING #2 SPF OR BETTER u.n.o.

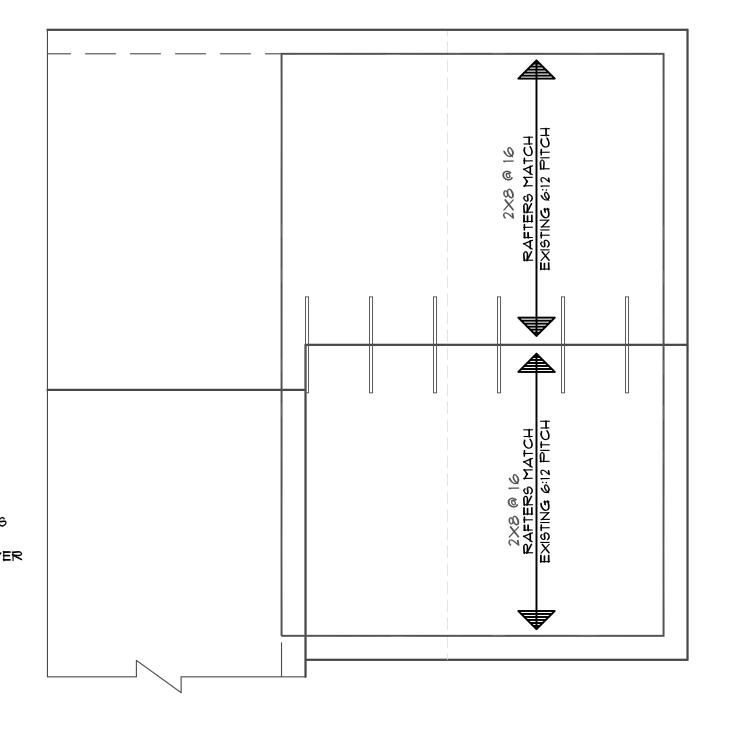
SAWN LUMBER 40 PSF FLOOR LOADS 2 × 10 0 16 UP TO 14'-2" 2 × 10 @ 16 DOUBLE EVERY THIRD 15'-4" 2 × 10 @ 16 DOUBLE EVERY OTHER 16'-5" (2) 2 × 10 @ 16 DOUBLE ALL UP TO 17'-6"

SAWN LUMBER (20 + 10) CEILING LOADS 2 × 6 @ 16 UP TO 11'-4" 2 × 8 @ 16 UP TO 15'-6" 2 × 10 @ 16 UP TO 17'-4" ALL #2 SPF OR BETTER

ALL RAFTERS 2 × 8 @ 16 #2 SPF OR BETTER ALL RIDGES 2 × 10 U.N.O. FUR RIDGE AS REQUIRED TO PROVIDE FULL RAFTER CONTACT FUR RAFTERS AS REQUIRED TO MEET INSULATION CODE LAP ALL RAFTERS AT KNEEWALL SPLICES 18" MINIMUM NAIL WITH 5-12D NAILS FROM EACH SIDE IRC 2015 / NCRC 2018 INCREASES

ATTIC / CEILING INSULATION TO R-38

2x6 @ 16" o.c. VARIES TO FLAT PLATE OVER



SCALE:

THE NUMBER OF KINGS SHALL EQUAL HALF THE NUMBER OF KINGS SHALL EQUAL HALF
THE CRIPPLE STUDS ABOVE OR BELOW THEROOF PLAN OPENING.

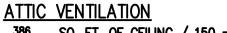
1/4"=1'-0" SCALE:

All stories to be sheathed with 7/16" OSB nailed @ six inches on center edges and ends with additional nailing of "braced" panels as noted below:

> ALL EXTERIOR BEARING AND NON LOAD BEARING WALLS FOUR FOOT PANEL AT CORNERS AND MAXIMUM 12' O.C.

Wall Bracing 7/16" OSB Lap OSB MINIMUM PANEL from top plate down full eight foot sheet WIDTH 48" U.N.O. prior to opening cut-out. Nail with 8d nails at THREE inches on center edges/ends six inches in field. Purlins at panel

 $2 \times 4 \times 48$ @ 32 COLLAR TIES (115 MPH ZONES)



386 SQ. FT. OF CEILING / 150 = $\frac{2.57}{1.00}$ SQ. FT. OF FREE VENT REQUIRED = 1 SQ. FT. IN/1 SQ. FT. OUT

REFER TO SECTION 806 (ROOF VENTILATION) IN THE NORTH CAROLINA STATE BUILDING CODE (IRC)

All framing #2 SPF or better

Structural Design By: John Alexander McRae, PE, Inc 218 Coley Farm Road Fuquay-Varina North Carolina 27526 jampe@nc.rr.com (919) 210-5749 P O Box 1466 Apex, NC 27502

Report deficiencies immediately 2310-15 (NC C-2298)

sheet no. plan no.

(NC C-2298)

27501

RNET

GER.

A

date:

10 SEPTEMBER 20

J A McRae

drawn by:

FOUNDATION NOTES

- 1) CRAWL SPACE IS TO BE LEVEL \$ CLEAN OF CONSTRUCTION DEBRIS, VEGETATION AND ANY ORGANIC MATERIAL.
- 2) ONE VENT MUST BE WITHIN 3' OF EACH CORNER OF THE BUILDING
- 3) VENT LOCATIONS TO BE DETERMINED ON SITE WITH REGARD TO GRADE AND FLOOR FRAMING

APPROVED VAPOR RETARDER TO COVER 100% OF THE CRAWL SPACE

FOOTINGS

- 1) FOOTING PROJECTIONS SHALL BE AT LEAST $2^{\prime\prime}$ AND SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.
- 2) THE TOP SURFACE OF FOOTINGS SHALL BE LEVEL W/MASONRY UNITS WITH FULL MORTAR JOINTS. BOTTOM SURFACE OF FOOTINGS MAY SLOPE NO MORE THAN 10%. FOOTINGS SHALL BE STEPPED TO CHANGE THE ELEVATION OF THE TOP SURFACE OR WHERE THE SLOPE OF THE BOTTOM OF THE FOOTING WILL EXCEED 10%.
- 3) FINISHED GRADE OF THE UNDER FLOOR SURFACE MAY BE LOCATED AT THE BOTTOM OF THE FOOTINGS.
- 4) MINIMUM 8" WALL FOOTING TO BE NO LESS THAN 16" \times 8"
- 5) MINIMUM CONCRETE FOOTING STRENGTH = 3000 PSI

DRAINAGE

- 1) INSTALL AROUND FOUNDATION, DRAIN TILES, GRAVEL OR CRUSHED STONE DRAINS, PERFORATED PIPES OR OTHER APPROVED SYSTEM AS REQUIRED BY GRADE.
- 2) FOUNDATION DRAINAGE MAY BE OMITTED WHEN THE INTERIOR GRADE IS LESS THAN 12" BELOW THE EXTERIOR GRADE.
- 3) GRADE LOT SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS AT A MINIMUM OF 6" WITHIN THE FIRST 10".

WATERPROOFING:

1) FOUNDATION WALLS, WHERE THE OUTSIDE GRADE IS HIGHER THAN THE INSIDE GRADE, SHALL BE DAMPROOFED FROM THE TOP OF THE FOOTING TO THE FINISHED GRADE. USE CODE APPROVED METHOD

ANCHORAGE

- 1) THE WOOD SOLE PLATE AT EXTERIOR WALLS ON MONOLITHIC SLABS AND WOOD SILL PLATE SHALL BE ANCHORED TO THE FOUNDATION W/ANCHOR BOLTS SPACED A MAXIMUM OF 6'-0" ON CENTER AND LOCATED WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. BOLTS SHALL BE AT LEAST 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 1" INTO MASONRY OR CONCRETE.
- 2) BOLTS MAY BE REPLACED BY ANCHOR STRAPS, SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE.
- 3) INTERIOR BEARING WALL SOLE PLATES ON MONOLITHIC SLABS SHALL BE ANCHORED W/APPROVED FASTENERS.

FOUNDATION WALLS

- 1) VERTICAL REINFORCEMENT OF MASONRY WALLS SHALL BE TIED TO THE HORIZONTAL REINFORCEMENT OF THE FOOTINGS.
- 2) FOUNDATION WALL IS TO BE 8" CONC. BLOCK OR 8" BRICK \$ BLOCK ON CONTINUOUS CONCRETE FOOTING.
- 3) FOUNDATION WALL IS TO HAVE A SOLID 8" MASONRY CAP.
- 4) WALL HEIGHT ABOVE FINISHED SHALL BE 4" WHERE MASONRY VENEER IS USED AND 6" ELSEWHERE.
- 5) WALL SUPPORTING OVER 4' OF UNBALANCED BACKFILL MUST BE BRACED TO PREVENT DAMAGE BY THE BACKFILL.
- 6) CAVITY WALL OR MASONRY VENEER CONSTRUCTION MAY BE SUPPORTED ON AN 8" FOUNDATION WALL, PROVIDED THE WALL IS CORBELED WITH SOLID MASONRY TO THE WIDTH OF THE WALL SYSTEM ABOVE. THE TOTAL HORIZONTAL PROJECTION OF THE CORBEL SHALL NOT EXCEED 2" WITH INDIVIDUAL CORBELS PROJECTING NOT MORE THAN 1/3 THE THICKNESS OF THE UNIT OR 1/2 THE HEIGHT OF THE UNIT. THE TOP COURSE OF ALL CORBELS SHALL BE A HEADER COURSE. 1) VENTS ARE INTENDED TO BE 16" × 8" ALUMINUM.

PIERS

- 1) MASONRY PIERS HEIGHT SHALL NOT EXCEED 10 TIMES THEIR LEAST DIMENSION.
 2) WHEN STRUCTURAL CLAY OR HOLLOW CONCRETE MASONRY UNITS ARE USED TO SUPPORT BEAMS \$ GIRDERS, THE CELLULAR SPACES MUST BE FILLED SOLIDLY WITH CONCRETE OR TYPE "M" OR "S" MORTAR.
- 3) UNFILLED UNITS MAY BE USED IF THE HEIGHT IS NOT MORE THAN 4 TIMES THE LEAST DIMENSION.
- 4) HOLLOW PIERS SHALL BE CAPPED WITH 4" OF SOLID MASONRY OR CONCRETE, OR SHALL HAVE CAVITITES OF THE TOP COURSE FILLED WITH
- 5) PIERS INDICATED ON PLAN ARE TYPICALLY 16" \times 16" ON 24" \times 24" \times 8" FOOTINGS.
- 6) TIE ALL HALF PIERS INTO WALLS

ANCHOR BOLTS

1/2" DIA \times 10" ANCHOR BOLTS W/ 1" MIN EMBEDMENT @ 6'-0" OC AND 12" FROM EACH PLATE SPLICE AND CORNER.

FLOOR PLAN NOTES

- 1) ALL JOIST SPANS ARE CALCULATED USING #2 GRADE SPRUCE PINE FIR.
 2) JOIST SIZES ARE SHOWN AT MINIMUM TO MEET STRUCTURAL REQUIREMENTS.
 SIZES MAY BE INCREASED TO PROVIDE MINIMUM INSULATION VALUES OR AIR
 PASSAGES.
- 3) PROVIDE DOUBLE FLOOR JOISTS AT ALL NON LOAD BEARING PARTITION WALLS RUNNING PARALLEL TO FLOOR JOISTS. ALSO UNDER ALL BOOKCASES, CABINETS, TUBS AND WASHING MACHINES (RECOMMENDED NOT REQUIRED)
 4) FLOOR JOISTS MUST BEAR 1.5" MIN. ON WOOD OR METAL AND 3" MIN. ON MASONRY OR CONCRETE.
- 5) PROVIDE 1"X4" CROSS-BRACING OR SOLID BLOCKING BETWEEN FLOOR JOISTS AT 6"-0" O.C. MAX. (RECOMMENDED BUT NOT REQUIRED.)
- 6) ALL EXTERIOR AND LOAD BEARING HEADERS ARE TO BE (2)-2XIO.
- 7) MINIMUM LVL DE9IGN 9TRENGTH: E=2.0 \times 2 MILLION P9I, FB=2800 P9I, FX=285 P9I
- 8) ALL LYL BEAMS TO HAVE 3 STUDS EACH END.
- 9) LOAD BEARING HEADER JACKS MUST REST ON DOUBLE JOISTS SUPPLY EXTRA JOISTS AS REQUIRED
- 10) DRAFTSTOPPING AND FIREBLOCKING AS REQUIRED PER CODE.
- II) DESIGNS FOR WOOD FLOOR TRUSSES MUST BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL.

WOOD WALL CONSTRUCTION

- 1) ALL STUDS ARE TO BE #3 GRADE STANDARD OR STUD GRADE LUMBER. #2 GRADE RECOMMENDED BUT NOT REQUIRED.
- 2) ALL INTERIOR LOAD-BEARING WALLS SHALL BE CONSTRUCTED, FRAMED \$ FIREBLOCKED AS SPECIFIED FOR EXTERIOR WALLS.
- 3) WALLS ARE 2×4 STUDS @ 16" O.C.
- 4) ALL OPEN AREA, TWO STORY WALLS ARE TO BE BALLOON FRAMED, $2^{\prime\prime}\times$ 6" STUDS AT 12" O.C.
- 5) DRAFTSTOPPING AND FIREBLOCKING REQUIRED AS PER CODE.
- 6) ALL OPEN AREA, TWO STORY WALLS ARE TO BE BALLOON FRAMED, $2^{\prime\prime}\times$ 6" STUDS AT 12" O.C.
- 7) WINDOWS SHOULD BE RATED FOR 25PSI.

CAVITY ACCESS

- 1) MIN. CRAWL SPACE ACCESS IS 18"(W) \times 24"(H) W/DBL. BAND ABOVE. PLACE AT BEST LOCATION WITH REFERENCE TO GRADE.
- 2) ACCESS MAKE BE INCREASED IF MECHANICAL EQUIPMENT IS LOCATED UNDER FLOORS SEE NC MECHANICAL CODE FOR REQUIREMENTS.
- 3) ATTIC ACCESS SHALL BE $22^{\circ}\times30^{\circ}$ MINIMUM.

GLAZING

- 1) ALL HABITABLE ROOMS SHALL HAVE A GLAZING AREA OF NOT LESS THAN 8% OF THE FLOOR AREA.
- 2) WINDOWS SHALL HAVE A MINIMUM DESIGN REQUIREMENT OF 25#DPI AND U=.40
 3) VERIFY WINDOW EGRESS WITH WINDOW MANUFACTURER.

EMERGENCY ESCAPE

- 1) OPENINGS PROVIDED AS MEANS OF ESCAPE CANNOT HAVE A SILL HEIGHT OF MORE THAN $44^{\prime\prime}$ ABOVE THE FLOOR.
- 2) ESCAPE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 4 SQ. FT. THE MINIMUM CLEAR OPENING HEIGHT IS 22" AND THE WIDTH IS $2\theta''$.
- 3) ESCAPE OPENING SHALL HAVE A TOTAL GLASS AREA OF NOT LESS THAN 5 SQ. FT. FOR A GROUND WINDOW AND 5.7 SQ. FT. FOR AN UPPER STORY WINDOW.
 4) REQUIRED EXIT DOORS SHALL BE NO LESS THAN 3"-0" X 6'-8".

COMPONENT \$ CLADDING DESIGNED FOR THE FOLLOWING LOADS

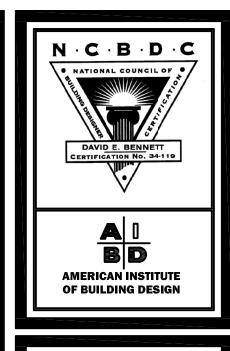
MEAN ROOF HEIGHT							
	UP TO 30'	30'-1" TO 35'	35'-1" TO 40'	40'-1" TO 45'			
ZONE 1	16.5, -18.0	17.3, -18.9	18.0, -19.6	18.5, -2 <i>0</i> .2			
ZONE 2	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5			
ZONE 3	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5			
ZONE 4	18.0, -19.5	18.9, -2 <i>0</i> .5	19.6, -21.3	20.2, -21.8			
ZONE 5	18.0, -24.1	18.9, -25.3	19.6, -26.3	20.2, -27.0			

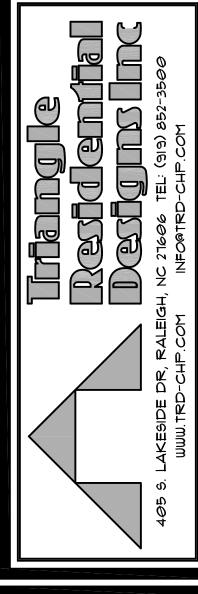
SEE NC BUILDING CODE FOR LOCATION OF ZONES

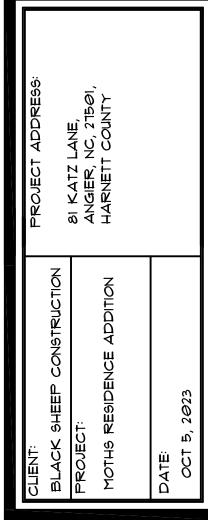
PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARDS AND AWAY FROM THE BUILDING SURFACES

NOTES:

- * THESE PLANS, NOTES AND DETAILS ARE DESIGNED TO MEET THE REQUIREMENTS OF THE 2018 NO RESIDENTIAL BUILDING CODE.
- * ALL NOTES ARE APPLICABLE UNLESS NOTED OTHERWISE (UNO)
- * THIS DETAIL SHEET IS TO BE USED ONLY IN CONJUNCTION WITH PLANS CREATED BY TRIANGLE RESIDENTIAL DESIGNS
- * SEALED ENGINEER'S DRAWINGS TAKE PRECEDENCE OVER TRD'S STANDARD DETAILS NOTES







9HEET OF 2

