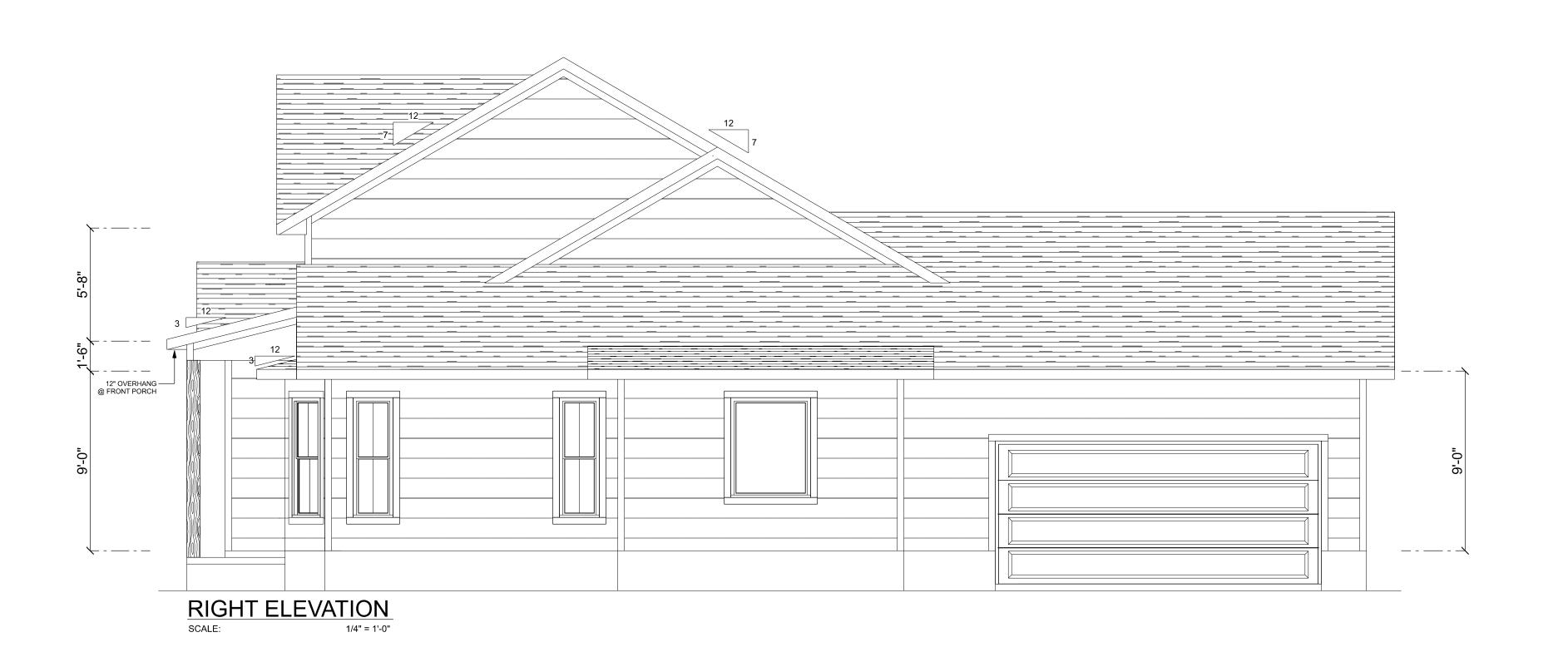


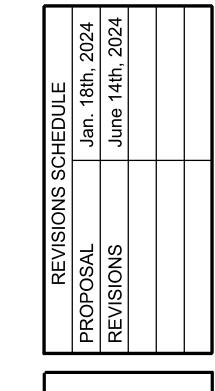




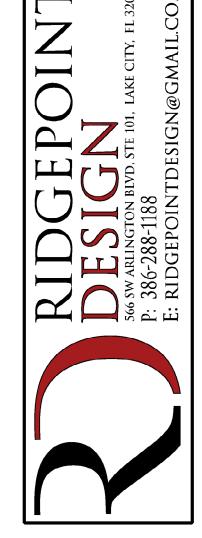
1" = 1'- 0"







COLUMBIA COUNTY, FL

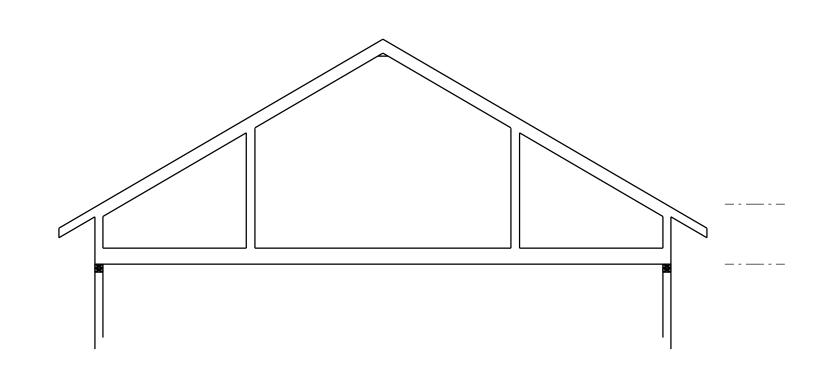


SHEET NUMBER

A.2

OF 8 SHEETS

UNFINISHED BONUS ROOM
SCALE: 1/4" = 1'-0"



PROPOSED BONUS TRUSS

Garage fire separations shall comply with the following:

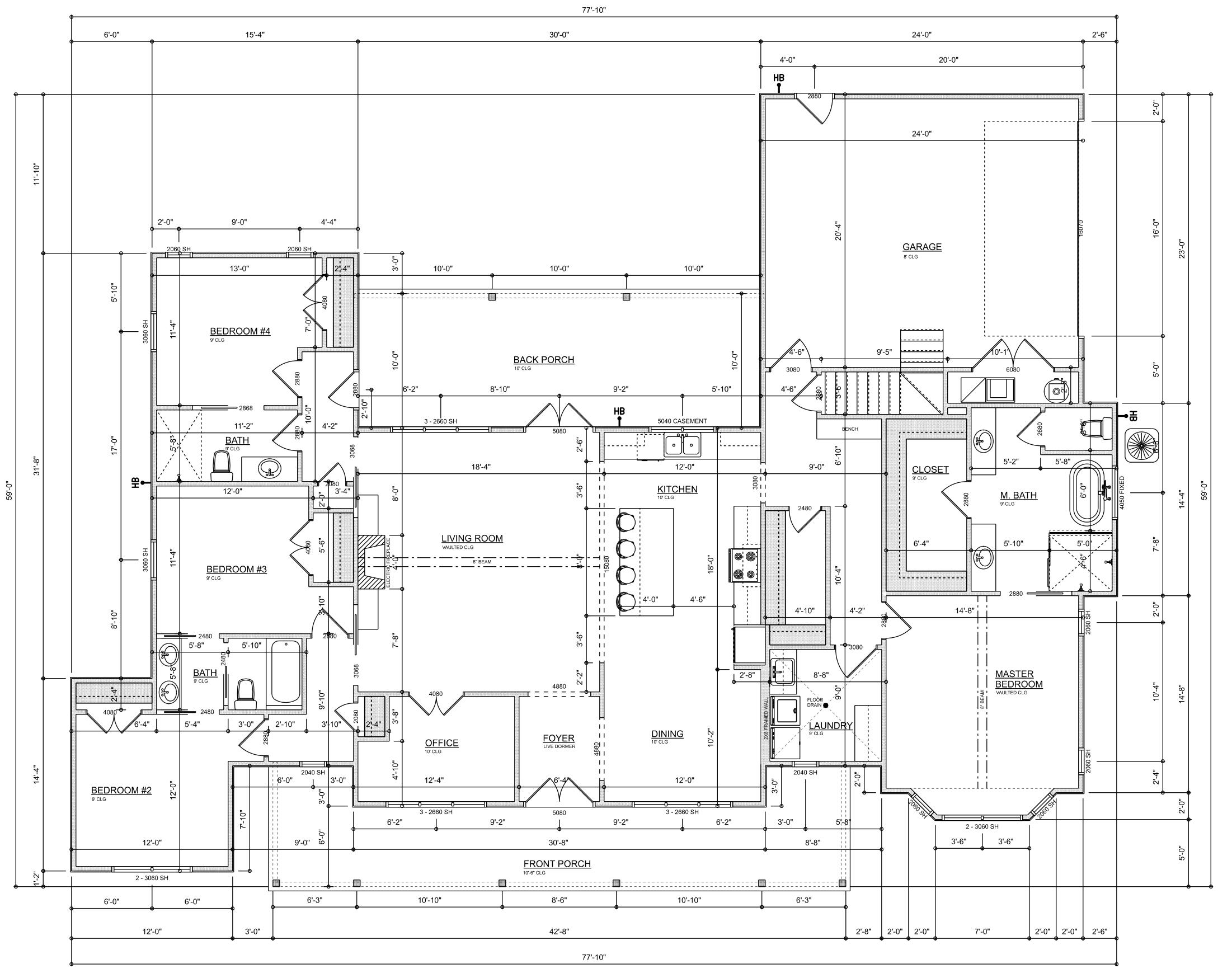
1. The private garage shall be separated from the dwelling unit and its attic area by means of a minimum 1/2-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch Type X gypsum board or equivalent. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors, or solid or honeycomb core steel doors not less than 13/8 inches (34.9 mm) thick, or doors in compliance with Section 715.3.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted.

2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be constructed of a minimum 0.019-inch (0.48 mm) sheet steel and shall have no openings into the garage.

3. A separation is not required between a Group R-3 and U carport provided the carport is entirely open on two or more sides and there are not enclosed areas above.

4. When installing an attic access and/or pull-down stair unit in the garage, devise shall have a minimum 20 min. fire rating.

DIMENSIONED FLOOR PLAN



AREA	S	U	М	М	Α	R	Y
LIVING				2	,328	3	S.I
ENTRY PORCH					274	-	S.I
REAR PORCH					298	3	S.I

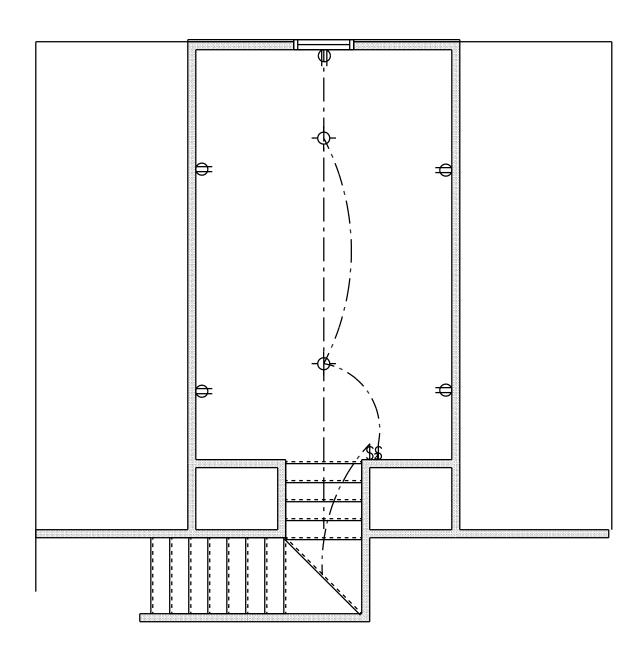
GARAGE TOTAL AREA 3,425 S.F.

SHEET NUMBER OF 8 SHEETS

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STOM HOUSE

§ **m** §



ELECTRICA	AL LEGE	ND
ELECTRICAL	COUNT	SYMBOL
CEILING FAN	7	
CAN LIGHT 6inch	53	0
CHANDELIER	2	9 <u>0</u> 0 000
LED CEILING LIGHT 1x4	2	
PENDANT LIGHT	2	
EXTERIOR SCONCE	3	Q
MOTION SECURITY LIGHT	5	₽
AC DISCONNECT	2	
CABLE TV OUTLET	6	τν
CARBON DETECTOR	3	Q
EXHAUST FAN	3	₩
OUTLET	49	Ф
OUTLET 220v	3	•
OUTLET GFI	20	⊕a=ı
OUTLET WP	9	∰wp.
SMOKE DETECTOR	8	•
STANDARD LIGHT	4	-
SWITCH	33	\$
SWITCH 3 WAY	27	\$3
VANITY BAR LIGHT - SMALL	5	000

ELECTRICAL PLAN NOTES:

INSTALLATION SHALL BE PER LATEST NAT'L ELECTRIC CODE.

WIRE ALL APPLIANCES, HYAC UNITS AND OTHER EQUIPMENT
PER MANUF. SPECIFICATIONS

CONSULT WITH THE OWNER FOR THE NUMBER OF SEPERATE TELEPHONE LINES TO BE INSTALLED

ALL SMOKE DETECTORS SHALL BE 120V W/ BATTERY BACKUP OF THE PHOTOELECTRIC TYPE, AND SHALL BE INTERLOCKED TOGETHER, INSTALL INSIDE AND NEAR ALL BEDROOMS

TELEPHONE, TELEVISION AND OTHER LOW YOLTAGE DEVICES OR OUTLETS SHALL BE AS PER THE OWNER'S DIRECTIONS, & IN ACCORDANCE W/ APPLICABLE SECTIONS OF NEC-LATEST EDITION.

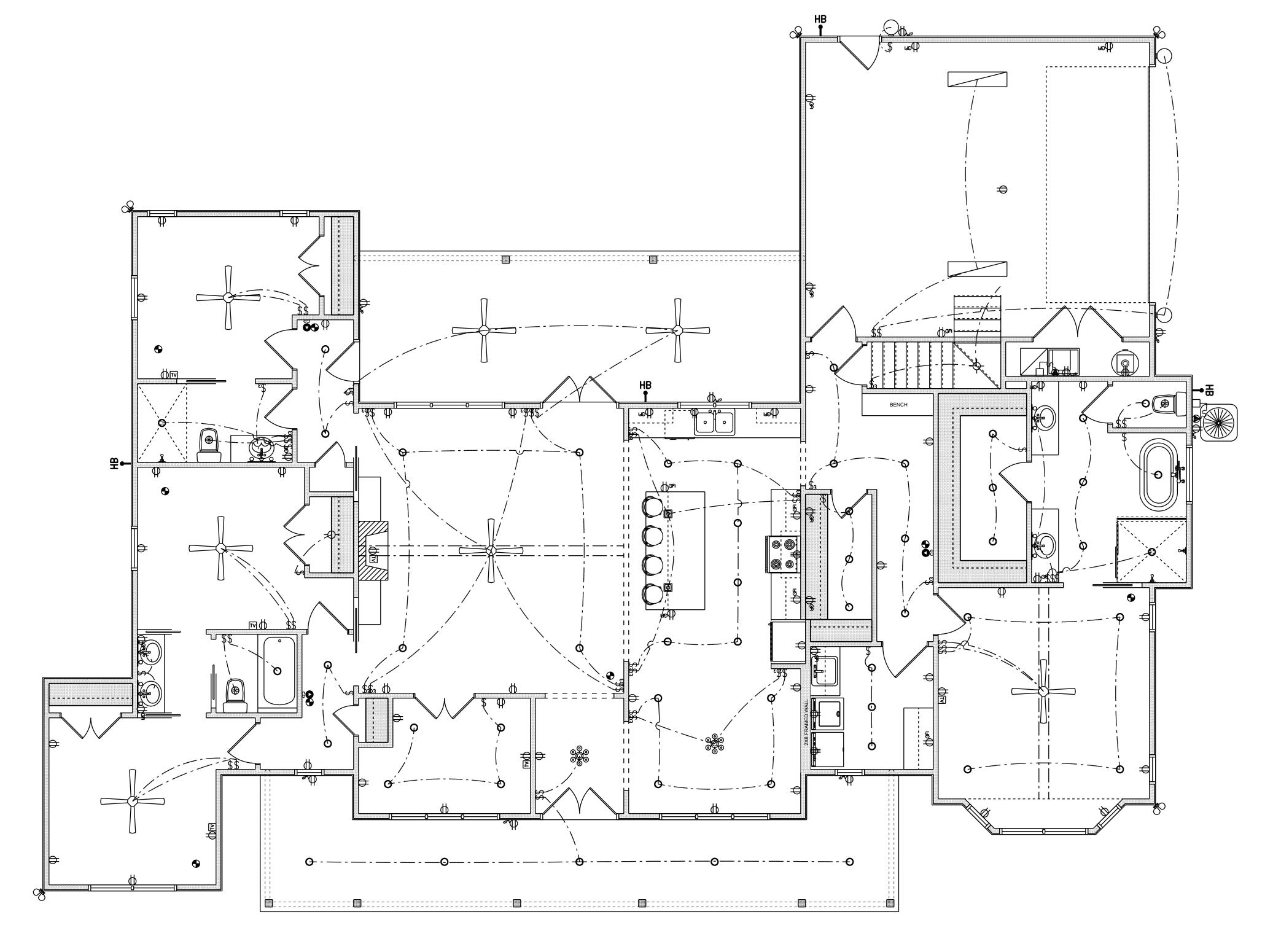
ELECTRICAL CONT'R SHALL PREPARE "AS-BUILT" SHOP
DWGS INDICATING ALL ELECTRICAL WORK, INCLUDING ANY
CHANGES TO THE ELEC. PLAN, ADD'NS TO THE ELEC. PLAN,
RISER DIAGRAM, AS-BUILT PANEL SCHEDULE W/ ALL CKTS
IDENTIFIED W/ CKT Nr. DESCRIPTION & BRKR, SERVICE ENT.
& ALL UNDERGROUND WIRE

LOCATIONS/ROUTING / DEPTH, RISER DIA, SHALL INCLUDE WIRE SIZES/TYPE & EQUIPMENT TYPE W/ RATINGS & LOADS,

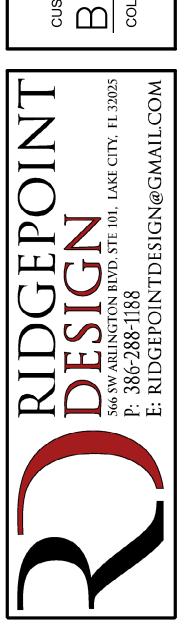
CONTRACTOR SHALL PROVIDE I COPY OF AS-BUILT DWGS
TO OWNER & I COPY TO THE PERMIT ISSUING AUTHORITY
ALL RECEPTICALS, NOT OTHERWISE NOTED, SHALL BE ARC
FAULT INTERRUPTER TYPE, EXCEPT DEDICATED OUTLETS

ALL RECEPTICALS IN WET AREAS SHALL BE GROUND FAULT INTERRUPTER TYPE (GFI)

ALL EXTERIOR RECEPTICALS SHALL BE WEATHERPROOF GROUD FAULT INTERRUPTER TYPE (WP/GFI)







SHEET NUMBER

OF 8 SHEETS

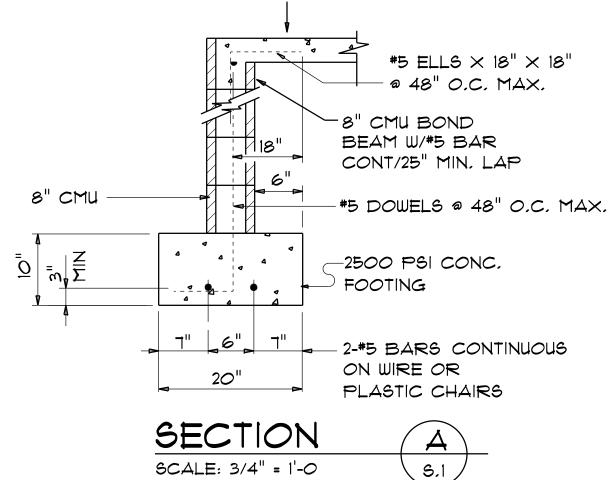
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CONCRETE / MASONRY / METALS GENERAL NOTES:

- 1. DESIGN SOIL BEARING PRESSURE: 1500 PSF.
- 2. EXPANSIVE SOILS: WHERE DIRECTED BY THE SOILS ENGINEER, SOIL AUGMENTATION PER THE SOILS ENGINEER'S SPECIFICATIONS SHALL BE IMPLEMENTED PRIOR TO PLACING ANY FOUNDATIONS TESTS AS SPECIFIED SHALL BE PREFORMED TO DETERMINE THE SUITABILITY OF THE SUB-GRADE TO SUPPORT THE DESIGN LOADS.
- 3. CLEAN SAND FILL OVER STRIPPED AND COMPACTED EXISTING GD. SHALL BE PLACED IN 12" LIFTS. BOTH SUB-SOIL AND FILL COMPACTION SHALL BE NOT LESS THAN 98% AS MEASURED BY A MODIFIED PROCTOR TEST AT THE RATE OF ONE TEST FOR EACH 1500 SF OF BUILDING PAD AREA, OR FRACTION THEREOF, FOR EACH 12" LIFT.
- 4. REINFORCING STEEL SHALL BE GRADE 40 AND MEET THE REQUIRE-MENTS OF ASTM A615, ALL BENDS SHALL BE MADE COLD.
- 5. WELDED WIRE MESH SLAB REINFORCING SHALL MEET THE REQUIRE-MENTS OF ASTM A185 - MIN. YEILD STRESS = 85 KSI.
- 6. CONCRETE SHALL BE STANDARD MIX F'C = 3000 PSI FOR ALL FTGS, SLABS, COLUMNS AND BEAMS OR SHALL BE STANDARD PUMP MIX F'C = 3000 PSI. STRENGTH SHALL BE ATTAINED WITHIN 28 DAYS OF PLACEMENT, MIXING, PLACING AND FINISHING SHALL BE AS PER ACI STANDARDS.
- T. CONCRETE BLOCK SHALL BE AS PER MANUFACTURER'S PRODUCT GUIDE FOR ASTM C-90 REQUIREMENTS WITH MEDIUM SURFACE FINISH -F'm = 1500 PSI.
- 8. MORTAR SHALL BE TYPE "M" OR "N" FOR ALL MASONRY UNITS.
- 9. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 STANDARDS FOR STRENGTH, BOLTS SHALL BE ASTM A307 / GRADE 1 OR A325, AS PER PLAN REQUIREMENTS.
- 10. WELDS SHALL BE AS PER "AMERICAN WELDING SOCIETY" STANDARDS FOR STRUCTURAL STEEL APPLICATIONS.
- 11. 2X4 P/T WOOD SILL, CONT., ALL AROUND, W/ 5/8"~
 A.B. W/ 3" SQ. X 1/4" PLATE WASHERS WITHIN 12-16" FROM
 EACH CORNER, EA. WAY, & WITHIN 8-12" FROM ALL WALL
 OPENINGS / ENDS 1/2"~ A.B. W/ 2" SQ. WASHERS ALONG
 EACH RUN @ 48" O.C., MAX. ALL ANCHOR BOLTS SHALL
 HAYE A MINIMUM OF 8" EMBEDMENT INTO THE CONCRETE.

4" THK, 3000 PSI CONCRETE SLAB W/ FIBERMESH CONCRETE ADDITIVE, OVER TREATED, CLEAN COMPACTED FILL

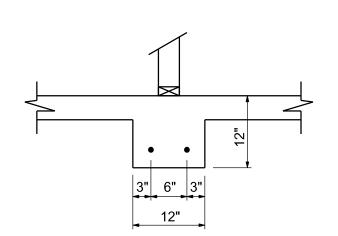


THE DESIGN WIND SPEED FOR THIS
PROJECT IS 130 MPH PER FBC 1609
AND LOCAL JURISDICTION REQUIREMENTS

NOTE:
ADDED FILL SHALL BE APPLIED IN 8" LIFTS EA, LIFT SHALL BE CONPACTED TO 98% DRY
COMPACTION PER THE "MODIFIED PROCTOR"
METHOD,

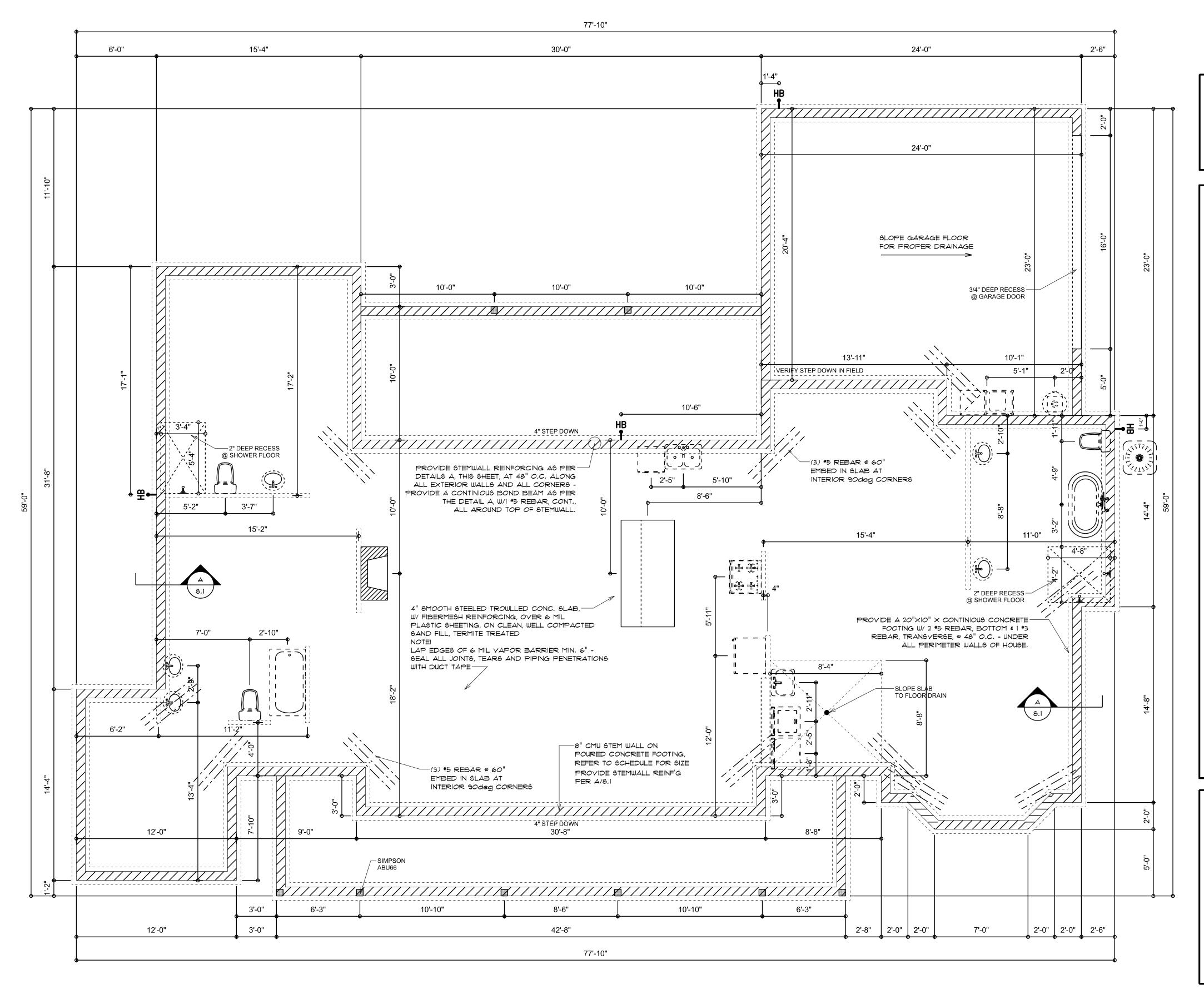
PLUMBING CONTRACTOR SHALL PREPARE "AS-BUILT" SHOP DRAWINGS INDICATING ALL PLUMBING WORK, INCLUDING ALL PLUMBING LINE LOCATIONS AND RISER DIAGRAM - CONT'R SHALL PROVIDE I COPY OF AS-BUILT DWGS TO OWNER AND I COPY TO THE PERMIT ISSUING AUTHORITY.

NOTE:
H.Y.A.C. CONTRACTOR SHALL PREPARE "AS-BUILT" SHOP
DRAWINGS INDICATING ALL H.Y.A.C. WORK, INCLUDING ALL
DUCTWORK LOC., SIZES, LINES, EQUIPMENT SCH. & BALANCING
REPORT - CONT'R SHALL PROVIDE I COPY OF AS-BUILT DWGS
TO OWNER & I COPY TO THE PERMIT ISSUING AUTHORITY.





NOTE!:
VERIFY INTERIOR BEARING WALLS WITH
TRUSS MANUFACTURE DRAWINGS! USE DETAIL
"B" THIS PAGE AT ALL INTERIOR BEARING LOC.

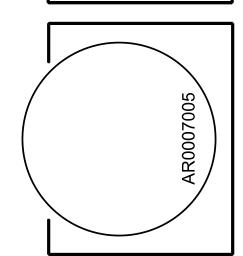


FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

SHEET NUMBER

S.1

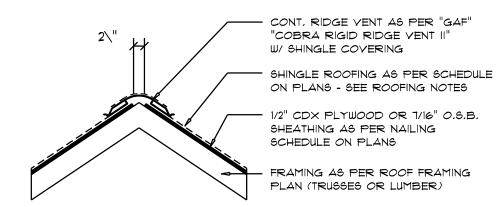
OF 4 SHEETS



WOOD STRUCTURAL NOTES

- 1. TEMPORARY BRACING OF THE STRUCTURE DURING ERECTION, REQUIRED FOR SAFE AND STABLE CONSTRUCTION, SHALL BE THE SOLE RESPON-SIBILITY OF THE CONTRACTOR SO ENGAGED, TEMPORARY & PERMANENT BRACING OF ROOF TRUSSES SHALL BE AS PER THE STANDARD GUIDE-LINES OF THE "TRUSS PLATE INSTITUTE".
- 2. ALL TRUSSES SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER & SHALL BE SIGNED AND SEALED BY SAME, TRUSS DESIGN SHALL INCLUDE PLACEMENT PLANS, TRUSS DETAILS, TRUSS TO TRUSS CONNECTIONS & THE STANDARD SPECIFICATIONS & RECOMMENDATIONS OF INSTALLATION OF THE "TRUSS PLATE INSTITUTE".
- 3. WOOD STUDS IN EXTERIOR WALLS & INTERIOR BEARING WALLS SHALL BE NOT LESS THAN Nr.2 HEM-FIR OR BETTER.
- 4. CONNECTORS FOR WOOD FRAMING SHALL BE GALVANIZED METAL OR BLACK METAL AS MANUFACTURED OR AS CALLED FOR IN THE PLANS AND BE OF A DESIGN SUITABLE FOR THE LOADS AND USE INTENDED. REFER TO THE JOINT REINFORCEMENT SCHEDULE FOR PRINCIPLE CON-

AREA OF ATTIC	REQ ['] D L,F, OF VENT	NET FREE AREA OF INTAKE
1600 SF 1900 SF 2200 SF 2500 SF 2800 SF 3600 SF	20 LF 24 LF 28 LF 32 LF 36 LF 40 LF 44 LF	410 \$Q.IN. 490 \$Q.IN. 570 \$Q.IN. 650 \$Q.IN. 130 \$Q.IN. 820 \$Q.IN.

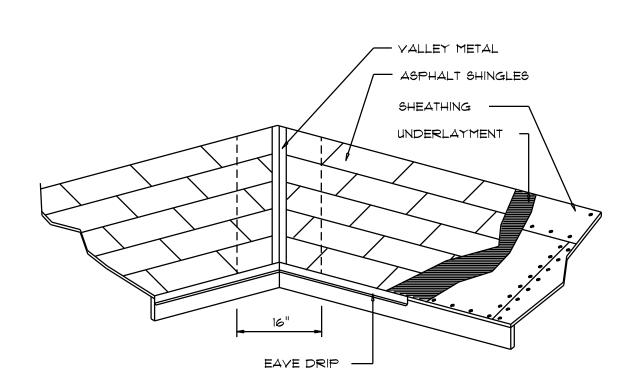


MIAMI/DADE PRODUCT APPROVAL REPORT: #98-0713.05

Ridge Vent DETAIL SCALE: 3/4" = 1'-0"

VALLEY FLASHING





ROOFING METALS FOR FLASHING/ROOFING MINIMUM THICKNESS REQUIREMENTS										
MATERIAL	MINIMUM THICKNESS (in)	GAGE	WEIGHT							
COPPER			16							
ALUMINUM	0.024									
STAINLESS STEEL		28								
GALVANIZED STEEL	er10.0	26 (ZINC COATED G90)								
ZINC ALLOY LEAD PAINTED TERNE	0.027		40 20							



STANDARD HEADER SCHEDULE

0'-0" UP TO 6'-0" OPENINGS

DOUBLE 2x8 No. *2 SOUTHERN PINE WITH 1/2" OSB SOLID CONTINUOUS SPACER GLUED AND NAILED WITH IOd x 0.128" x 3" NAILS IN 2 ROWS @ 12" O.C. STAGGERED EACH SIDE WITH I - SIMPSON MSTAIS TOP AND 1 - SIMPSON SPH4R BOTTOM EACH SIDE OF OPENING WITH 1 - HEADER STUD AND 1 FULL HEIGHT STUDS EACH SIDE OF OPENING

6'-0" UP TO 9'-0" OPENINGS

DOUBLE 2x12 No. *2 SOUTHERN PINE WITH 1/2" OSB SOLID CONTINUOUS SPACER GLUED AND NAILED WITH IOd x 0.128" x 3" NAILS IN 2 ROWS @ 12" O.C. STAGGERED EACH SIDE WITH I - SIMPSON MSTA24 TOP AND 2 - SIMPSON SPH4R BOTTOM EACH SIDE OF OPENING WITH 1 - HEADER STUD AND 2 FULL HEIGHT STUDS EACH SIDE OF OPENING

9'-0" UP TO 16'-0" OPENINGS

DOUBLE 2x12 No. *2 SOUTHERN PINE WITH 1/2" OSB SOLID CONTINUOUS SPACER GLUED AND NAILED WITH IOd x 0.128" x 3" NAILS IN 2 ROWS @ 12" O.C. STAGGERED EACH SIDE WITH 3 - SIMPSON MSTAIS EACH SIDE OF OPENING WITH 2 - HEADER STUDS AND 3 FULL HEIGHT STUDS EACH SIDE OF OPENING

16'-0" GARAGE DOOR OPENINGS

2 PLY 1%" \times 11 7/8" 2.0E MICROLAMM LYL HEADER GLUED AND NAILED WITH 10d \times 0.128" \times 3" NAILS IN 2 ROWS @ 12" O.C. STAGGERED EACH SIDE WITH 3 - SIMPSON MSTAIS EACH SIDE OF OPENING WITH 2 - HEADER STUDS AND 3 FULL HEIGHT STUDS EACH SIDE OF OPENING

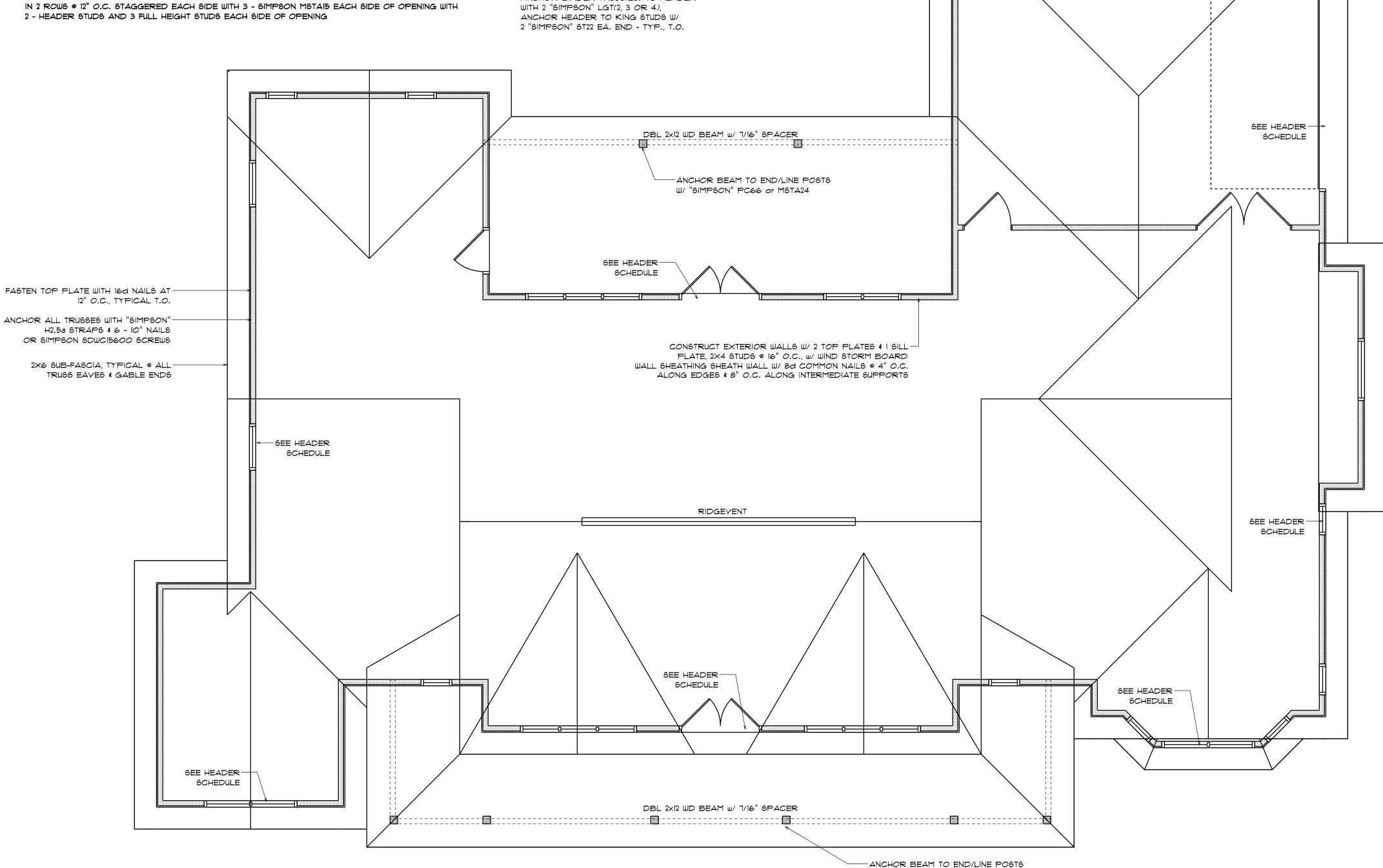
SHEATH ROOF W/ PLYWOOD or OSB PLACED W/ LONG DIMENSION PERPENDICULAR TO THE ROOF TRUSSES, SECURE TO FRAMING W/ 8d NAILS - AS PER DETAIL ON SHEET 5.4

THE DESIGN WIND SPEED FOR THIS PROJECT IS 130 MPH PER FBC 1609 AND LOCAL JURISDICTION REQUIREMENTS

NOTE!

ALL PENETRATIONS OF THE TOP PLATE OF ALL LOAD BEARING WALLS SHALL BE SEALED WITH FIRE RETARDANT CAULKING, INCLUDING WIRING, PLUMBING OR OTHER SUCH PENETRATIONS. WALLS OVER 8'-0" TALL SHALL HAVE CONTINUOUS BLOCKING TO LIMIT CAVITY HEIGHT TO 8'-0". PENETRATIONS THROUGH SUCH BLOCKING SHALL BE TREATED IN THE SAME MANNER AS TOP PLATES, NOTED ABOVE

ANCHOR GIRDER TRUSS(ES) TO HEADER WITH 2 "SIMPSON" LGT(2, 3 OR 4), ANCHOR HEADER TO KING STUDS W/



ROOF FRAMING PLAN

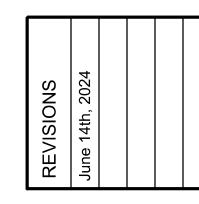
GENERAL TRUSS NOTES:

- 1. TRUSSES SHALL BE DESIGNED BY A LICENSED ENGINEER, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE "NATIONAL FOREST PRODUCTS ASSOCIATION" MANUAL FOR "STRESS RATED LUMBER AND IT'S CONNECTIONS", LATEST Ed., ALONG W/ THE "TRUSS PLATE INSTITUTE" SUGGESTED GUIDELINES FOR TEMPORARY AND PERMANENT BRACING, AND HANDLING OF TRUSSES. TRUSS SHOP DRAWINGS SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, DETS, & TRUSS TO TRUSS CONNECTIONS.
- 2. TRUSS SHOP DRAWINGS SHALL BE SIGNED & SEALED BY THE DESIGNING ENGINEER.
- 3. FOLLOWING DEVELOPMENT OF TRUSS SHOP DRAWINGS, ADJUSTMENTS TO THE ANCHOR REQUIRMENTS MAY BE REQUIRED DEPENDING ON THE ENGINEERED GRAVITY AND WIND UPLIFT REQUIREMENTS OF TRUSSES OR GIRDERS, THE CONTRACTOR SHALL MAKE AVAILABLE A COMPLETE SET OF TRUSS SHOP DRAWINGS TO THE ARCHITECT FOR THE PURPOSE OF REVIEW OF LOADS IMPOSED ON THE BALANCE OF THE STRUCTURE, ANY SUCH REQUIRED CHANGE SHALL BE INCORPORATED INTO THE CONSTRUCTION OF THIS

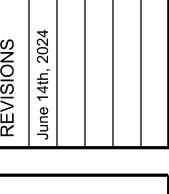
ROOF PLAN NOTES

W/ "SIMPSON" PC66 or MSTA24

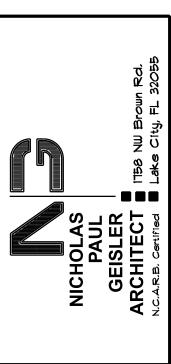
- R-1 SEE ELEVATIONS FOR ROOF PITCH
- ALL OVERHANG 18" (12" on gables) UNLESS OTHERWISE NOTED
- PROVIDE ATTIC VENTILATION IN AC-CORDANCE WITH SCHEDULE ON SD.3
- SEE EXTERIOR ELEVATIONS AND FLOOR PLANS TO VERIFY PLATE AND HEEL HEIGHTS
- MOVE ALL VENTS AND OTHER ROOF PENETRATIONS TO REAR



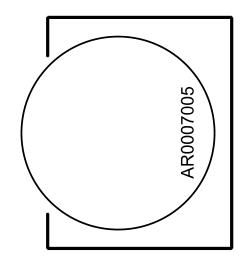
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SHEET NUMBER OF 4 SHEETS



ASPHALT SHINGLES SHALL BE FASTENED TO SOLIDLY SHEATHED DECKS.

SLOPE:

ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF 2:12 OR GREATER. FOR ROOF SLOPES FROM 2:12 TO 4:12, DBL. UNDERLAYMENT IS REQUIRED.

UNDERLAYMENT:

UNLESS OTHERWISE NOTED, UNDERLAYMENT SHALL CONFORM W/ ASTM D 226, TYPE 1, OR ASTM D 4869, TYPE 1.

SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET: SELF ADHERING POLYMER MODIFIED BITUMEN SHALL COMPLY W/ ASTM D 1970.

ASPHALT SHINGLES:
ASPHALT SHINGLES SHALL HAVE SELF SEAL STRIPS OR BE INTERLOCKING,
AND COMPLY WITH ASTM D 225 OR ASTM D 3462.

FASTENERS:

FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12 GAUGE SHANK WITH A MINIMUM 3/8 INCH DIAMETER HEAD, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIAL AND A MINIMUM 3/4" INTO THE ROOF SHEATHING. WHERE THE SHEATHING IS LESS THAN 3/4" THICK, THE NAILS SHALL PENETRATE THROUGH THE SHEATHING.

ATTACHMENT:

ASPHALT SHINGLES SHALL BE SECURED TO THE ROOF WITH NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. WHERE ROOFS LOCATED IN BASIC WIND SPEED OF 110 MPH OR GREATER, SPECIAL METHODS OF FASTENING ARE REQUIRED. UNLESS OTHERWISE NOTED, ATTACHMENT OF ASPHALT SHINGLES SHALL CONFORM WITH ASTM D 3161 OR M-DC PA 107-95.

UNDERLAYMENT APPLICATION:

FOR ROOF SLOPES FORM 2:12 TO 4:12, UNDERLAYMENT SHALL BE A MINIMUM OF TWO LAYERS APPLIED AS FOLLOWS:

- 1. STARTING AT THE EAVE, A 19 INCH STRIP OF UNDERLAYMENT SHALL BE APPLIED PARALLEL WITH THE EAVE AND FASTENED SUFFICIENTLY TO STAY IN PLACE.
- 2. STARTING AT THE EAVE, 36 INCH WIDE STRIPS OF UNDERLAYMENT FELT SHALL BE APPLIED OVERLAPPING SUCCESSIVE SHEETS 19 INCHES AND FASTENED SUFFICIENTLY TO STAY IN PLACE.

FOR ROOF SLOPED 4:12 AND GREATER, UNDERLAYMENT SHALL BE A MINIMUM OF ONE LAYER OF UNDERLAYMENT FELT APPLIED AS FOLLOWS:
STARTING AT THE EAVE, UNDERLAYMENT SHALL BE APPLIED SHINGLE
FASHION PARALLEL TO THE EAVE, LAPPED 2 INCHES, AND FASTENED
SUFFICIENTLY TO STAY IN PLACE.

BASE AND CAP FLASHINGS:

BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE W/ MFGR'S INSTALLATION INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS O.O. INCH OR MINERAL SURFACE ROLL ROOFING WEIGHING A MINIMUM OF TI LBS PER 100 SQUARE FEET, CAP FLASHING SHALL BE CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS OF O.O. INCH.

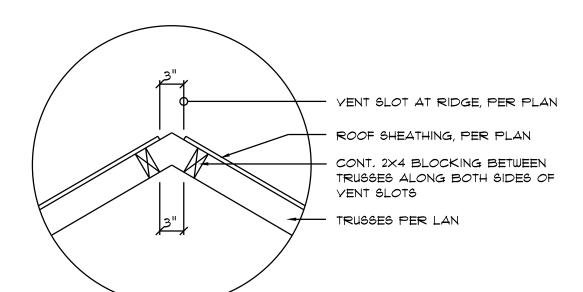
VALLEY

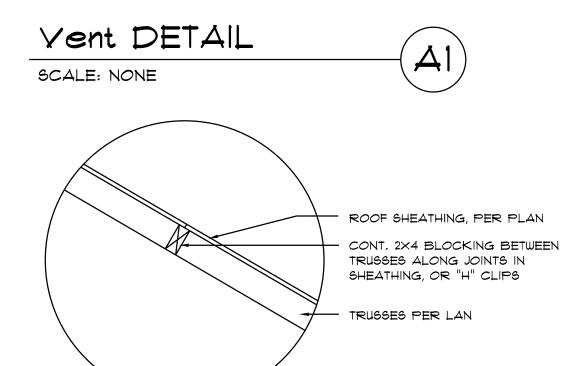
VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE W/ MANUFACTURER'S INSTALLATION INSTRUCTIONS BEFORE APPLYING ASPHALT SHINGLES. VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED.

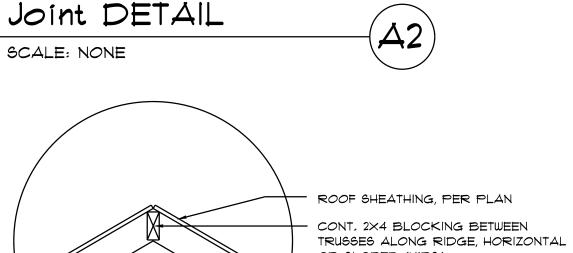
- 1. FOR OPEN VALLEYS LINED WITH METAL, THE VALLEY LINING SHALL BE AT LEAST 16" WIDE AND OF ANY OF THE CORROSION RESISTANT METALS IN FBC TABLE 1507.3.9.2.

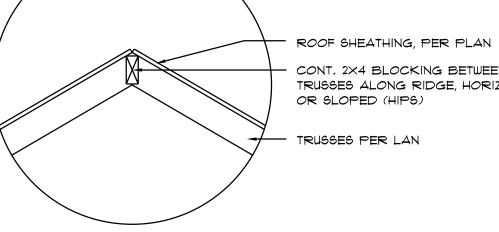
 2. FOR OPEN VALLEYS, VALLEY LINING OF TWO PLIES OF MINERAL SURFACE
- ROLL ROOFING SHALL BE PERMITTED. THE BOTTOM LAYER SHALL BE 18 INCHES AND THE TOP LAYER A MINIMUM OF 36 INCHES WIDE.

 3. FOR CLOSED VALLEYS VALLEY LINING SHALL BE ONE OF THE FOLLOWING:
- 1. BOTH TYPES 1 AND 2 ABOVE, COMBINED.
 2. ONE PLY OF SMOOTH ROLL ROOFING AT LEAST 36 INCHES WIDE AND COMPLYING WITH ASTM D 224.
- 3. SPECIALTY UNDERLAYMENT AT LEAST 36 INCHES WIDE AND COMPLYING WITH ASTM D 1970.





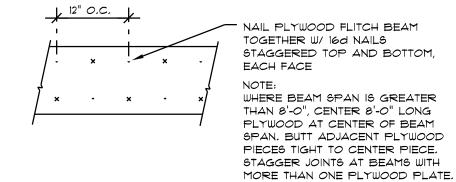




RIDGE DETAIL SCALE: NONE



FOR (2) OR (3) GANG LAM. 1 3/4" BEAMS, NAIL MEMBERS TOGETHER W/ 16d NAILS STAGGERED TOP AND BOTTOM, EACH FACE



MULTIPLE GANG LAM, DETAIL NOT TO SCALE

PLYWOOD FLITCH BEAM DETAIL

NOT TO SCALE

B/U Beam DETAILS

SCALE: NONE



FRAMING ANCHOR SCHEDULE

APPLICATION

MANUF'R/MODEL

TRUSS TO WALL:

GIRDER TRUSS TO POST/HEADER:

HEADER TO KING STUD(S):

PLATE TO STUD:

STUD TO SILL:

PORCH BEAM TO POST:

MANUF'R/MODEL

SIMPSON H2.5a or SDWC15600

SIMPSON LGT, W/ 28 - 16d NAILS

SIMPSON ST22

NO CONNECTION REQ. WHEN USING WINDSTORM BOARD

NO CONNECTION REQ. WHEN USING WINDSTORM BOARD

SIMPSON PC44 or (2) 5/8" LAG BOLTS EA. POST

SIMPSON ABU44

SIMPSON A34

NOTE:

PORCH POST TO FND .:

MISC, JOINTS

ALL ANCHORS SHALL BE SECURED W/ NAILS AS PRESCRIBED BY THE MANUFACTURER FOR MAXIMUM JOINT STRENGTH, UNLESS NOTED OTHERWISE.

REFER TO THE INCLUDED STRUCTURAL DETAILS FOR ADDITIONAL ANCHORS/ JOINT REINFORCEMENT AND FASTENERS,

ALL UNLISTED JOINTS IN THE LOAD PATH SHALL BE REINFORCED WITH SIMPSON A34 FRAMING ANCHORS, TYPICAL T.O.
NOTE:

"SEMCO" PRODUCT APPROVAL:
MIAMI/DADE COUNTY REPORT #95-0818.15

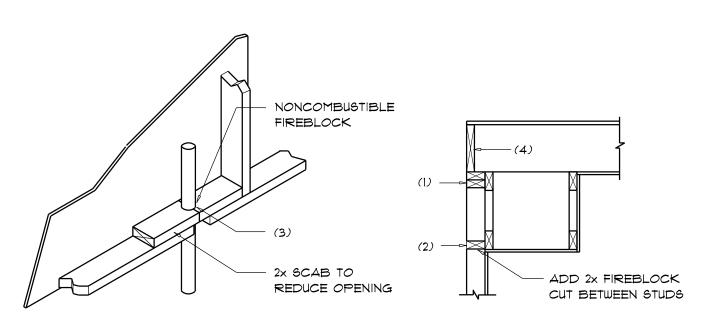
NOTE:

"SIMPSON" PRODUCT APPROVALS:
MIAMI/DADE COUNTY REPORT #97-0107.05, #96-1126.11, #99-0623.04

5BCC1 NER-443, NER-393

	BUILDING COMPONENTS & CLADDING LOADS MEAN BUILDING HEIGHT = 30.0', EXPOSURE "B" ROOF ANGLE T TO 2T											
	ZONE	AREA	Yult 110 MPH	Yult 120 MPH	Yult 130 MPH	Yult 140 MPH						
27.	1 1 1	O 00 50	12.0 / -19.9 11.4 / -19.4 10.0 / -18.6	14.9 / -23.7 13.6 / -23.0 11.9 / -22.2	17.5 / -27.8 16.0 / -27.0 13.9 / -26.0	20.3 / -32.3 18.5 / -31.4 16.1 / -30.2						
t t	2 2 2	O 20 50	12.5 / -34.7 11.4 / -31.9 10.0 / -28.2	14.9 / -41.3 13.6 / -38.0 11.9 / -33.6	17.5 / -48.4 16.0 / -44.6 13.9 / -39.4	20.3 / -56.2 18.5 / -51.7 16.1 / -45.7						
ROOR #000	30 30 30	10 20 50	12.5 / -51.3 11.4 /-47.9 10.0 / -43.5	14.9 / -61.0 13.6 / -57.1 11.9 / -51.8	17.5 / -71.6 16.0 / -67.0 13.9 / -60.8	20.3 / -83.1 18.5 / -77.7 16.1 / -70.5						
MALL	4 4 4	10 20 50	21.8 / -23.6 20.8 / -22.6 19.5 / -21.3	25.9 / -34.7 24.7 / -26.9 23.2 / -25.4	30.4 / -33.0 29.0 / -31.6 27.2 / -29.8	35.3 / -38.2 33.7 / -36.7 31.6 / -34.6						
 ∀m	000	10 20 50	21.8 / -29.1 20.8 / -27.2 19.5 / -24.6	25.9 / -34.7 24.7 / -32.4 23.2 / -29.3	30.4 /-40.7 29.0 / -38.0 27.2 / -34.3	35.3 / -47.2 33.7 / -44.0 31.6 / -39.8						

HEIGHT & EXPOSURE ADJUSTMENT COEFFICIENTS FOR BUILDING COMPONENTS & CLADDING									
BLDG	EXPOSURE	EXPOSURE	EXPOSURE						
HEIGHT	"B"	"C"	"D"						
15	,82	1.21	1.47						
20	,89	1.29	1.55						
25	,94	1.35	1.61						
30	1.00	1.40	1.66						



FIREBLOCKING NOTES:

PENETRATIONS

SCALE: NONE

FIREBLOCKING SHALL BE INSTALLED IN WOOD FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

- 1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES AT CEILING AND FLOOR LEVELS.
- 2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS, ETC.
- 3. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH "PYROPANEL MULTIFLEX SEALANT"
- 4. AT ALL INTERCONNECTIONS BETWEEN CONCEALED YERTICAL STUD WALL OR PARTITION SPACES AND CONCEALED SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS, FIREBLOCKING SHALL BE PROVIDED FOR THE FULL DEPTH OF THE JOISTS AT THE ENDS AND OVER THE SUPPORTS.

Fire Stopping DETAILS

<u>- · ·</u>



SOFFIT/DROPPED CLG.

FLORIDA BUILDING CODE

Compliance Summary

TYPE OF CONSTRUCTION

Roof: Gable Construction, Wood Trusses © 24" O.C.

Walls: 2x4 Wood Studs © 16" O.C.

Floor: 4" Thk. Concrete Slab W/ Fibermesh Concrete Additive
Foundation: Continuous Footer/Stem Wall

ROOF DECKING

CAP,

600#

1785#

1370#

1700#

2200#

315#/240#

Material: 1/2" CDX Plywood or 1/16" O.S.B.

Sheet Size: 48"x96" Sheets Perpendicular to Roof Framing
Fasteners: .113 RING SHANKED Nails per schedule on sheet 5.4

SHEARWALLS

Material: 7/16" O.S.B. WINDSTORM BOARD
Sheet Size: 48"x96" Sheets Placed Vertical
Fasteners: .113 COMMON Nails @ 4" O.C. Edges \$ 8" O.C. Interior
Dragetrut: Double Top Plate (S.Y.P.) W/16d Nails @ 12" O.C.
Wall Studs: 2x4 Studs @ 16" O.C.

HURRICANE UPLIFT CONNECTORS

Truss Anchors: SIMPSON H2.5a @ Ea. Truss End (Typ. U.O.N.)

Wall Tension: Wall Sheathing Nailing is Adequate - 8d @ 4" O.C. Top & Bot.

Anchor Bolts: 1/2" A30T Bolts @ 48" O.C. - 1st Bolt 6" from corner

Corner Hold-down Device: (1) HD5a @ each corner

Porch Column Base Connector: Simpson ABU66 @ each column

Porch Column to Beam Connector: Simpson MSTA20 (2 ea. side) or

FOOTINGS AND FOUNDATIONS

Footing: 20"x10" Cont. W/2 - #5 Bars Cont. on wire/plastic chairs @ 48" o.c. Stemwall: 8" C.M.U. W/1-#5 Yertical Dowel @ 48" O.C. Int. Footings: 12"x 12" x Cont. W/2 - #5 Bars Cont. on wire/plastic chairs @ 48" o.c.

Simpson EPC66 or 2 - 5/8" thru bolts

STRUCTURAL DESIGN CRITERIA:

1. THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE 2023 FLORIDA, 8th EDITION BUILDING CODE - SECTION 1603 AND OTHER REFERENCED CODES AND SPECIFICATIONS. ALL CODES AND SPECIFICATIONS SHALL BE LATEST EDITION AT TIME OF PERMIT.

2. WIND LOAD CRITERIA: RISK CATAGORY: 2, EXPOSURE: "B"

BASED ON ANSI/ASCE 7-22. 2023 FBC 1609-A WIND VELOCITY: $V_{\rm ULT}$ = 130 MPH $V_{\rm ASD}$ = 101 MPH

3. ROOF DESIGN LOADS:
SUPERIMPOSED DEAD LOADS: 20 PSF

5. WIND NET UPLIFT: ARE AS INDICATED ON PLANS

TERMITE PROTECTION NOTES:

AWAY FROM BUILDING SIDE WALLS, FBC 1503,4,4

SOIL CHEMICAL BARRIER METHOD:

1. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND NEED FOR REINSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL. FBC 104.2.6

2. CONDENSATE AND ROOF DOWNSPOUTS SHALL DISCHARGE AT LEAST 1'-0"

3. IRRIGATION/SPRINKLER SYSTEMS INCLUDING ALL RISERS AND SPRAY HEADS SHALL NOT BE INSTALLED WITHIN 1'-O" FROM BUILDING SIDE WALLS, FBC 1503,4,4

4. TO PROVIDE FOR INSPECTION FOR TERMITE INFESTATION, BETWEEN WALL COVERINGS AND FINAL EARTH GRADE SHALL NOT BE LESS THAN 6".

EXCEPTION: PAINT AND DECORATIVE CEMENTIOUS FINISH LESS THAN 5/8"

THICK ADHERED DIRECTLY TO THE FOUNDATION WALL. FBC 1403.1.6

5. INITIAL TREATMENT SHALL BE DONE AFTER ALL EXCAVATION AND BACKFILL IS COMPLETE. FBC 1816.1.1

6. SOIL DISTURBED AFTER THE INITIAL TREATMENT SHALL BE RETREATED

INCLUDING SPACES BOXED OR FORMED. FBC 1816.1.2

T. BOXED AREAS IN CONCRETE FLOOR FOR SUBSEQUENT INSTALLATION OF TRAPS, ETC., SHALL BE MADE WITH PERMANENT METAL OR PLASTIC FORMS. PERMANENT FORMS MUST BE OF A SIZE AND DEPTH THAT WILL ELIMINATE THE DISTURBANCE OF SOIL AFTER THE INITIAL TREATMENT.

8. MINIMUM 6 MIL VAPOR RETARDER MUST BE INSTALLED TO PROTECT AGAINST RAINFALL DILUTION, IF RAINFALL OCCURS BEFORE VAPOR RET-ARDER PLACEMENT, RETREATMENT IS REQUIRED. FBC 1816.1.4

9. CONCRETE OVERPOUR AND MORTAR ALONG THE FOUNDATION PERIMETER MUST BE REMOVED BEFORE EXTERIOR SOIL TREATMENT. FBC 1816.1.5
10. SOIL TREATMENT MUST BE APPLIED UNDER ALL EXTERIOR CONCRETE

II. AN EXTERIOR VERTICAL CHEMICAL BARRIER MUST BE INSTALLED AFTER CONSTRUCTION IS COMPLETE INCLUDING LANDSCAPING AND IRRIGATION. ANY SOIL DISTURBED AFTER THE VERTICAL BARRIER IS APPLIED, SHALL BE RETREATED. FBC 1816.1.6

12. ALL BUILDINGS ARE REQUIRED TO HAVE PER-CONSTRUCTION TREATMENT. FBC 1816.1.7

OR GRADE WITHIN 1'-O" OF THE STRUCTURE SIDEWALLS. FBC 1816.1.6

13. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT BY * LICENSED PEST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED, THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES, THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS OF THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES", FBC 1816,1.7

14. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILL MUST BE REMOVED FROM BELOW AND WITHIN 1'-O" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL. FBC 2303.1.3

15. NO WOOD, YEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED WITHIN 15'-O" OF ANY BUILDING OR PROPOSED BUILDING. FBC 2303.1.4

REVISIONS June 14th, 2024

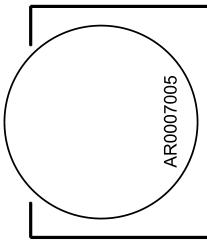
E RESIDENCE

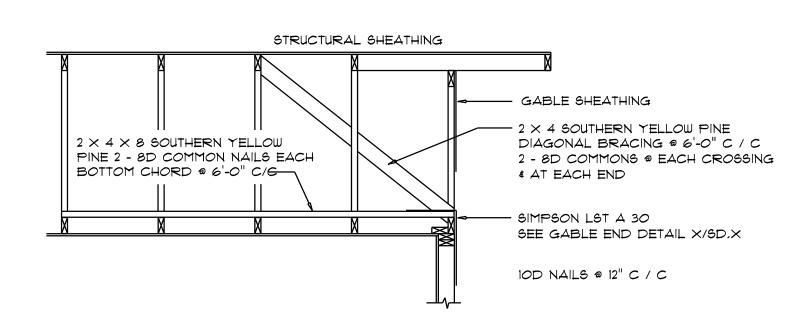
IICHOLAS
PAUL
GEISLER
RCHITECT TES NW Brown Rd.

SHEET NUMBER

S.3

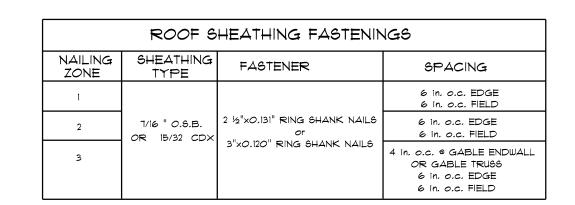
OF 4 SHEETS

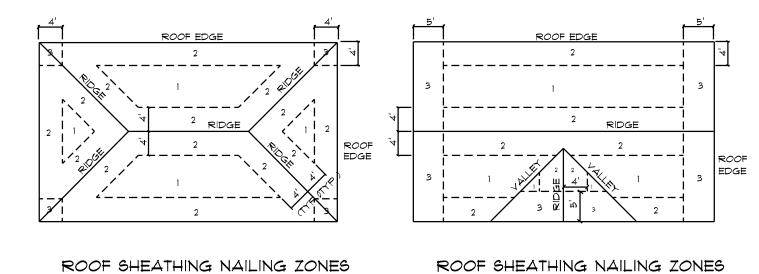




END WALL BRACING FOR CEILING DIAPHRAGM

(ALTERNATIVE TO BALLOON FRAMING) NOTE: ALL WOOD TO BE NUMBER 2 GRADE SOUTHERN YELLOW PINE



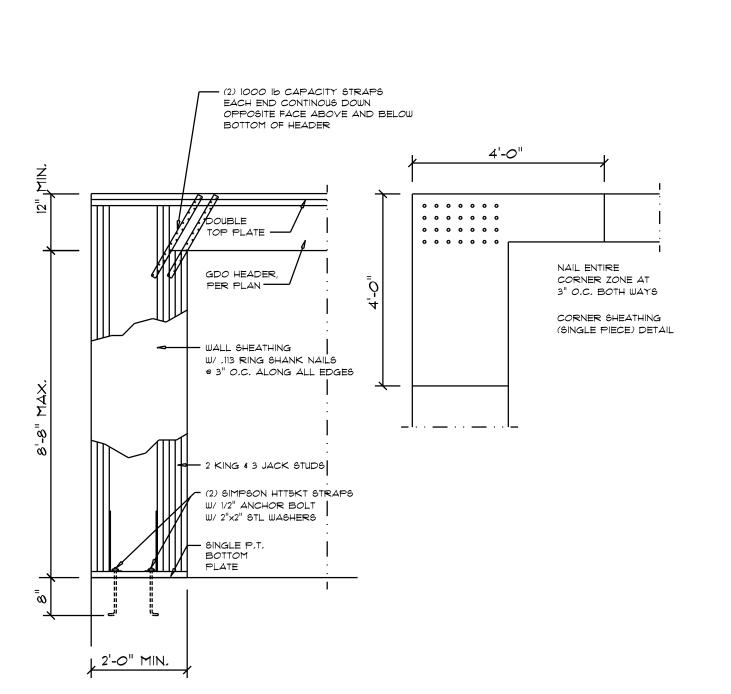




(HIP ROOF)

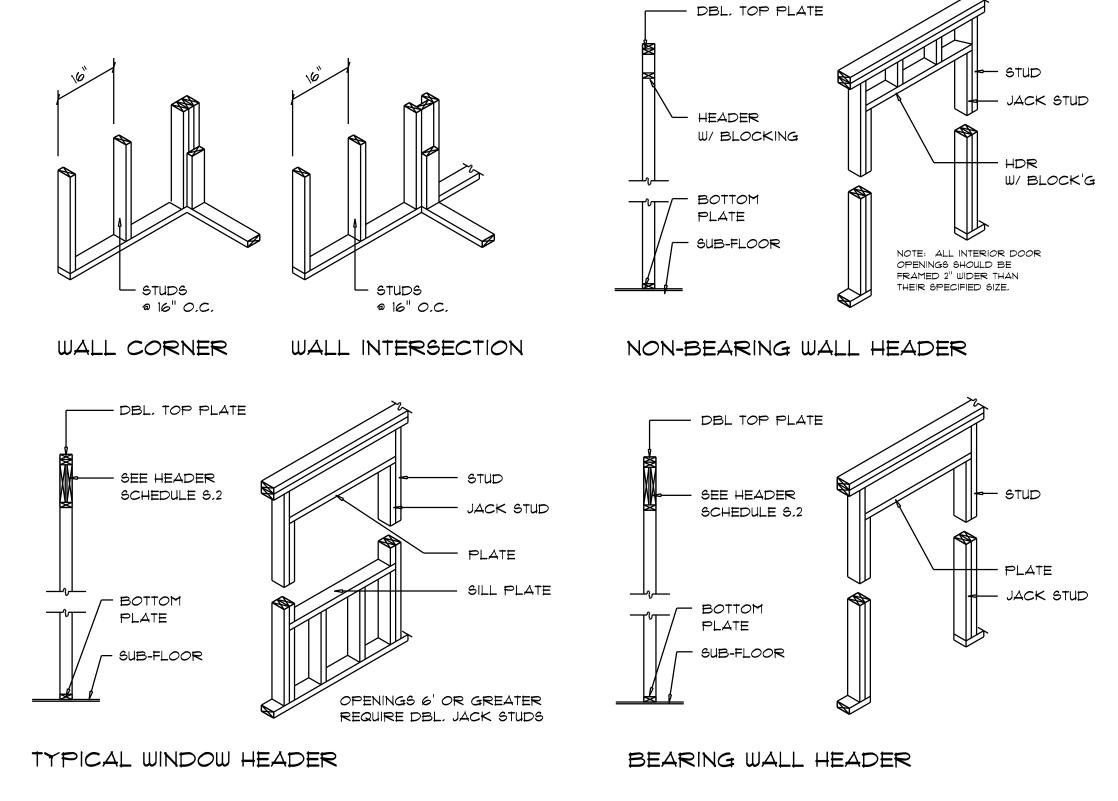
SCALE: NONE

(GABLE ROOF)

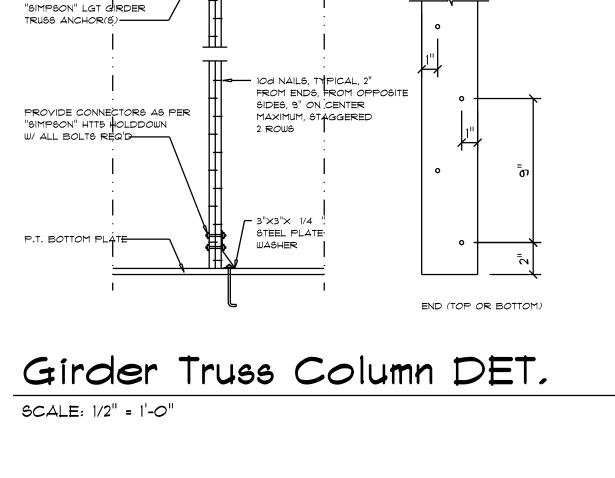


Garage End Wall DETAILS

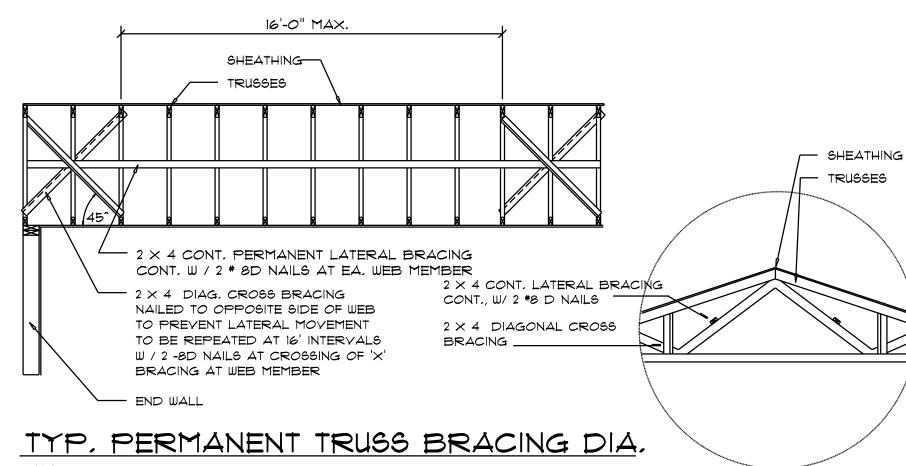
SCALE: 1/2" = 1'-0"



Wall Framing/Header DETAILS



DOUBLE 2X TOP PLATE



A SOLID MEMBER OF EQUAL OR GREATER SIZE THAN MULTIPLE MEMBERS MAY



SCALE: AS NOTED

NOTE: ALL WOOD TO BE NUMBER 2 GRADE SOUTHERN YELLOW PINE

ROOF TRUSSES SEE PLAN ATTACHES PLATE — PER "SIMPSON" SP2 @ 32"O.C. (NOT REQUIRED WHEN USING WINDSTORM BOARD) ROOF TRUSS ANCHORAGE-TOP PLATE ---- DBL HEADER PER SCHEDULE 5.2 END OF SHEARWALL - ONE KING STUD PER SEGMENT BUILDING 3'-6" OF OP'NG WIDTH, BLOCKING @ JOINTS - TWO JACK STUDS FOR IN SHEATHING OPENINGS 6'-0" & GREATER EGDE OR FLAT-(SINGLE JACK FOR \$MALLER OP'G.) 2 STUDS NAIL PANEL TO OUTSIDE (2) 16d TOENAILS EACH END, EACH PIECE, TYPICAL P.T. BOT. PLATE

PER "SIMPSON" SPI @ 48" O.C.

(NOT REQUIRED WHEN USING WINDSTORM BOARDS)

SHEARWALL NOTES: 1. ALL SHEARWALLS SHALL BE TYPE 2 SHEARWALLS

D

2. THE WALL SHALL BE ENTIRELY SHEATHED WITH T/16" WINDSTORM BD INCLUDING AREAS ABOVE AND BELOW OPENINGS

3. ALL SHEATHING SHALL BE ATTACHED TO FRAMING ALONG ALL FOUR EDGES WITH JOINTS FOR ADJACENT PANELS OCCURING OVER COMMON FRAMING MEMBERS OR ALONG BLOCKING.

4. NAIL SPACING SHALL BE 4" O.C. EDGES AND 8" O.C. IN THE FIELD.

5. TYPE 2 SHEARWALLS ARE DESIGNED FOR THE OPENING IT CONTAINS, MAXIMUM HEIGHT OF OPENING SHALL BE 5/6 TIMES THE WALL HEIGHT. THE MINIMUM DISTANCE BETWEEN OPENINGS SHALL BE THE WALL HEIGHT/3.5 FOR 8'-0" WALLS (2'-3"),

OPENING WIDTH	SILL PLATES	IGA TOE NAILS EACH END
UP TO 6'-0"	(1) 2x4 OR (1) 2x6	1
> 6' TO 9'-0"	(3) 2x4 OR (1) 2x6	2
> 9' TO 12'-0"	(5) 2x4 OR (2) 2x6	3

Shear Wall DETAILS

- FOUNDATION

SCALE: NONE

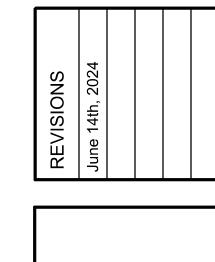
PER "SIMPSON"



- 1/2"~ BOLTS W/ 2"×2"

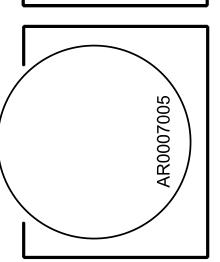
WASHER, TYP.

X 1/8" STEEL PLATE





SHEET NUMBER **S.4** OF 4 SHEETS



ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD ESTIMATED ENERGY PERFORMANCE INDEX* = 76

The lower the EnergyPerformance Index, the more efficient the home.

,,FL,

New construction or exist	sting No	ew (From Plans)	10. Wall Types(2626.7 sqft.)	Insulation	
2. Single family or multiple	family	Detached	a. Frame - Wood, Exterior	R=19.0	2350.00 ft ²
3. Number of units, if multi	ple family	1	b. Frame - Wood, Adjacentc. N/A	R=13.0	276.67 ft ²
4. Number of Bedrooms		4	d. N/A		
5. Is this a worst case?		No	11. Ceiling Types(2328.0 sqft.)	Insulation	
6. Conditioned floor area a Conditioned floor area b	• , ,	2328 0	a. Single assembly, no ai (Unvented b. N/Ac. N/A	u) K=30.0	2326.00 11
a. U-Factor: SHGC: b. U-Factor:	Description Dbl, U=0.26 SHGC=0.20 N/A	Area 304.00 ft^2 ft^2	12. Roof(Comp. Shingles, Unvent) D13. Ducts, location & insulation levela. Sup: Main, Ret: Main, AH: Garagb.		2695 ft ² R ft ² 6 454
SHGC:	N/A	ft ²	c. 14. Cooling Systems a. Central Unit	kBtu/hr 42.0 SI	Efficiency EER2:14.30
Area Weighted Average C Area Weighted Average S		1.500 ft 0.200			
U-Factor:(AVG)	Description N/A N/A	Area N/A ft ²	15. Heating Systems a. Electric Heat Pump	kBtu/hr 42.0 ł	Efficiency HSPF2:7.50
9. Floor Typesa. Slab-On-Grade Edge Inb. N/Ac. N/A	Insula nsulation R= 0.0 R= R=	2	Hot Water Systems a. Electric b. Conservation features	Сар	: 50 gallons EF: 0.920
			b. Conservation leatures		None
			17. Credits		Pstat

I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: _____ Date: _____ Date: _____ Address of New Home: City/FL Zip: ,FL,

*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida Energy Rating. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.



Residential System Sizing Calculation

Summary Project Title:

Project Title: Bootle Residence

, FL

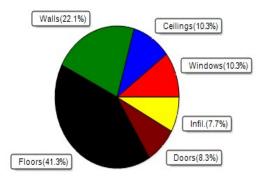
6/21/2024

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(100 ft.) Temp Range(M)											
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)											
Winter design temperature(TMY3	99%) 30	Summer design temperature(TMY	3 99%) 94	F							
Winter setpoint	70	F	Summer setpoint	75	F						
Winter temperature difference 40 F			Summer temperature difference	19	F						
Total heating load calculation	30760	Btuh	Total cooling load calculation	20966	Btuh						
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh						
Total (Electric Heat Pump)	136.5	42000	Sensible (SHR = 0.85)	198.7	35700						
Heat Pump + Auxiliary(0.0kW)	136.5	42000	Latent	209.8	6300						
			Total (Electric Heat Pump)	200.3	42000						

WINTER CALCULATIONS

Winter Heating Load (for 2328 sqft)

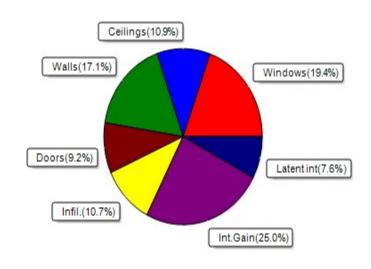
Load component			Load	
Window total	304	sqft	3162	Btuh
Wall total	2163	sqft	6801	Btuh
Door total	160	sqft	2560	Btuh
Ceiling total	2328	sqft	3166	Btuh
Floor total	2328	sqft	12697	Btuh
Infiltration	54	cfm	2374	Btuh
Duct loss			0	Btuh
Subtotal			30760	Btuh
Ventilation	Ex:0 cfm; Sup:0	cfm	0	Btuh
TOTAL HEAT LO	30760	Btuh		



SUMMER CALCULATIONS

Summer Cooling Load (for 2328 sqft)

Load component			Load	
Window total	304	sqft	4077	Btuh
Wall total	2163	sqft	3585	Btuh
Door total	160	sqft	1920	Btuh
Ceiling total	2328	sqft	2296	Btuh
Floor total			0	Btuh
Infiltration	41	cfm	846	Btuh
Internal gain			5240	Btuh
Duct gain			0	Btuh
Sens.Ventilation	Ex:0 cfm; Sup:0	o cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gai	in		17963	Btuh
Latent gain(ducts)			0	Btuh
Latent gain(infiltrat	ion)		1403	Btuh
Latent gain(ventilate	tion)		0	Btuh
Latent gain(interna	l/occupants/othe	r)	1600	Btuh
Total latent gain			3003	Btuh
TOTAL HEAT GAI	N		20966	Btuh





EnergyGauge® System Sizing
PREPARED BY:
DATE:
6-21-24

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Project Title: Bootle Residence

, FL

6/21/2024

Reference City: Gainesville, FL (Defaults) Humidity difference: 51gr.

Temperature Difference: 19.0F(TMY3 99%) Summer Setpoint: 75 °F (Required Manual J default)

Component Loads for Whole House

	Type*			Overhang Window		ow Are	w Area(sqft)		ITM	Load			
Window	Panes SHGC I		IS (Ornt	Len	Hgt			Unshaded	Shaded	Unshaded		
1	2 NFRC 0.20, 0.2		No	N	1.5ft	2.3ft	12.0	0.0	12.0	9	9	110	Btuh
2	2 NFRC 0.20, 0.2	6 No	No	Ν	1.5ft	2.3ft	8.0	0.0	8.0	9	9	73	Btuh
3	2 NFRC 0.20, 0.2	6 No	No	Ε	1.5ft	2.3ft	20.0	0.0	20.0	9	24	484	Btuh
4	2 NFRC 0.20, 0.2	6 No	No	Е	1.5ft	2.3ft	30.0	0.0	30.0	9	24	727	Btuh
5	2 NFRC 0.20, 0.2	6 No	No	S	1.5ft	2.3ft	36.0	36.0	0.0	9	11	329	Btuh
6	2 NFRC 0.20, 0.2	6 No	No	S	1.5ft	2.3ft	8.0	8.0	0.0	9	11	73	Btuh
7	2 NFRC 0.20, 0.2	6 No	No	S	1.5ft	2.3ft	90.0	90.0	0.0	9	11	823	Btuh
8	2 NFRC 0.20, 0.2	6 No	No	S	1.5ft	2.3ft	8.0	8.0	0.0	9	11	73	Btuh
9	2 NFRC 0.20, 0.2	6 No	No	S	1.5ft	2.3ft	36.0	36.0	0.0	9	11	329	Btuh
10	2 NFRC 0.20, 0.2	6 No	No	W	1.5ft	2.3ft	36.0	0.0	36.0	9	24	872	Btuh
11	2 NFRC 0.20, 0.2	6 No	No	Ν	1.5ft	1.3ft	20.0	0.0	20.0	9	9	183	Btuh
	Window Total						304 (s	saft)				4077	Btuh
Walls	Туре			IJ	-Value	R-\/		<u> </u>	(sqft)		HTM	Load	
	.,,,,,			Ŭ	· a.ac	Cav/S		, 00	(0411)				
1	Frame - Wood - E	c t		(0.08	19.0		13	6.7		1.7	226	Btuh
2	Frame - Wood - E				0.08	19.0			0.0		1.7	215	Btuh
3	Frame - Wood - E				0.08	19.0			0.7		1.7	299	Btuh
4	Frame - Wood - A				0.09	13.0			252.7		1.7	426	Btuh
5	Frame - Wood - E	•			0.08 19.0/0.0			241.7		1.7	400	Btuh	
6	Frame - Wood - E	ĸt		(0.08	.08 19.0/0.0		11	112.3 1.7		1.7	186	Btuh
7	Frame - Wood - E	ĸt			80.0		19.0/0.0 20.0			1.7	33	Btuh	
8	Frame - Wood - E	ĸt		(0.08 19.0/0.0		75	75.3		1.7	125	Btuh	
9	Frame - Wood - E	ĸt		(.08 19.0/0.0		70	0.0		1.7	116	Btuh	
10	Frame - Wood - E	ĸt		(80.0	19.0/0.0		18	0.0	1.7		298	Btuh
11	Frame - Wood - E	ĸt		(80.0	19.0	/0.0	30	0.0		1.7	50	Btuh
12	Frame - Wood - E	ĸt		(80.0	19.0	/0.0	80	0.3		1.7	133	Btuh
13	Frame - Wood - E	c t		(0.08	19.0	/0.0	78	3.3		1.7	130	Btuh
14	Frame - Wood - E	c t		(80.0	19.0	/0.0	87	7.3		1.7	144	Btuh
15	Frame - Wood - E	ĸt		(80.0	19.0	/0.0	14	6.7		1.7	243	Btuh
16	Frame - Wood - E	ĸt		(80.0	19.0	/0.0	60	0.0		1.7	99	Btuh
17	Frame - Wood - E	ĸt		(0.08	19.0	/0.0	280.7		1.7	464		
	Wall Total							216	33 (sqft)			3585	Btuh
Doors	Туре							Area	(sqft)		HTM	Load	
1	Insulated - Exterio	r						96	6.0		12.0	1152	Btuh
2	Wood - Garage							24	4.0		12.0	288	Btuh
3	Insulated - Exterio	r						40	0.0		12.0		Btuh
	Door Total							16	60 (sqft)			1920	Btuh
Ceilings	Type/Color/Su	face		U	-Value		R-Value	Area	(sqft)		HTM	Load	
1	SnglAsmb no airs		hinale		0.034		30.0/0.0		28.0		0.99		Btuh
	Ceiling Total	, Danto	g.c	•	0.001	`	30.070.0		28 (sqft)		0.00	2296	
Floors	Type					R-\	/alue		ze		HTM	Load	2011
	Slab On Grade					112 V	0.0			motor)	0.0		Dtub
1							0.0		328 (ft-peri	neter)	U.U		Btuh
	Floor Total							2328	.0 (sqft)			0	Btuh
								Е	nvelope	Subtota	l:	11877	Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued) Project Title: Climate:FL_GAINESVILLE_REGIONAL_A Bootle Residence

, FL

6/21/2024

Infiltration	Type Natural	Average ACH 0.12		(cuft) V 0952	Vall Ratio 1	CFM= 40.6	Load 846	Btuh
Internal		Occupants	Btu	ıh/occu	pant	Appliance	Load	
gain		8	Χ	230	+	3400	5240	Btuh
		17963	Btuh					
Duct load	Extremely sealed, Supply(R6.0-Condi), Return(R6.0-	Condi)		0.000)	0 Btul		
				Sensi	ble Load /	All Zones	17963	Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_

Bootle Residence

Climate:FL_GAINESVILLE_REGIONAL_A

, FL

6/21/2024

WHOLE HOUSE TOTALS			
	Sensible Envelope Load All Zones Sensible Duct Load	17963	
	Total Sensible Zone Loads	17963	Btuh
	Sensible ventilation (Ex:0 cfm; Sup:0 cfm)	0	Btuh
	Blower	0	Btuh
Whole House	Total sensible gain	17963	Btuh
Totals for Cooling	Latent infiltration gain (for 51 gr. humidity difference)	1403	Btuh
	Latent ventilation gain	0	Btuh
	Latent duct gain	0	Btuh
	Latent occupant gain (8.0 people @ 200 Btuh per person)	1600	Btuh
	Latent other gain	0	Btuh
	Latent total gain	3003	Btuh

EQUIPMENT							
1. Central Unit	#	42000 Btuh					

*Key: Window types (Panes - Number and type of panes of glass)

(SHGC - Shading coefficient of glass as SHGC numerical value)

TOTAL GAIN

(U - Window U-Factor)

(InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
- For Blinds: Assume medium color, half closed

For Draperies: Assume medium weave, half closed For Roller shades: Assume translucent, half closed

(IS - Insect screen: none(N), Full(F) or Half(1/2))

(Ornt - compass orientation)



20966 Btuh

Version 8

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Project Title: Bootle Residence Building Type: User

6/21/2024

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 °F (TMY3 99%) Winter Setpoint: 70 °F (Required Manual J default)

Component Loads for Whole House

, FL

Window	Panes/Type	Frame U	Orientation /	Area(sqft) X	HTM=	Load
1	2, NFRC 0.20	Vinyl 0.26	N	12.0	10.4	125 Btuh
2	2, NFRC 0.20	Vinyl 0.26	N	8.0	10.4	83 Btuh
3	2, NFRC 0.20	Vinyl 0.26	E	20.0	10.4	208 Btuh
4	2, NFRC 0.20	Vinyl 0.26	E	30.0	10.4	312 Btuh
5	2, NFRC 0.20	Vinyl 0.26	S	36.0	10.4	374 Btuh
6	2, NFRC 0.20	Vinyl 0.26	S	8.0	10.4	83 Btuh
7	2, NFRC 0.20	Vinyl 0.26	S	90.0	10.4	936 Btuh
8	2, NFRC 0.20	Vinyl 0.26	S	8.0	10.4	83 Btuh
9	2, NFRC 0.20	Vinyl 0.26	S	36.0	10.4	374 Btuh
10	2, NFRC 0.20	Vinyl 0.26	W	36.0	10.4	374 Btuh
11	2, NFRC 0.20	Vinyl 0.26	N	20.0	10.4	208 Btuh
	Window Total			304.0(sqft)		3162 Btuh
Walls	Туре	Ornt. Ueff.	R-Value	Area X	HTM=	Load
			(Cav/Sh)			
1	Frame - Wood	- Ext (0.077)	19.0/0.0	137	3.09	422 Btuh
2	Frame - Wood	- Ext (0.077)	19.0/0.0	130	3.09	402 Btuh
3	Frame - Wood	- Ext (0.077)	19.0/0.0	181	3.09	558 Btuh
4	Frame - Wood	- Adj (0.089)	13.0/0.0	253	3.55	897 Btuh
5	Frame - Wood	- Ext (0.077)	19.0/0.0	242	3.09	747 Btuh
6	Frame - Wood	- Ext (0.077)	19.0/0.0	112	3.09	347 Btuh
7	Frame - Wood	- Ext (0.077)	19.0/0.0	20	3.09	62 Btuh
8	Frame - Wood	- Ext (0.077)	19.0/0.0	75	3.09	233 Btuh
9	Frame - Wood	- Ext (0.077)	19.0/0.0	70	3.09	216 Btuh
10	Frame - Wood	- Ext (0.077)	19.0/0.0	180	3.09	556 Btuh
11	Frame - Wood	- Ext (0.077)	19.0/0.0	30	3.09	93 Btuh
12	Frame - Wood	- Ext (0.077)	19.0/0.0	80	3.09	248 Btuh
13	Frame - Wood	- Ext (0.077)	19.0/0.0	78	3.09	242 Btuh
14	Frame - Wood	- Ext (0.077)	19.0/0.0	87	3.09	270 Btuh
15	Frame - Wood	- Ext (0.077)	19.0/0.0	147	3.09	453 Btuh
16	Frame - Wood	- Ext (0.077)	19.0/0.0	60	3.09	185 Btuh
17	Frame - Wood	- Ext (0.077)	19.0/0.0	281	3.09	868 Btuh
	Wall Total			2163(sqft)		6801 Btuh
Doors	Туре	Storm Ueff.		Area X	HTM=	Load
1	Insulated - Exte	, , ,		96	16.0	1536 Btuh
2	Wood - Garage,			24	16.0	384 Btuh
3	Insulated - Exte	rior, n (0.400)		40	16.0	640 Btuh
<u> </u>	Door Total		5.77	160(sqft)		2560Btuh
Ceilings	Type/Color/Surf		R-Value	Area X	HTM=	Load
1	Single as/D/Shir	ng (0.034)	30.0/0.0	2328	1.4	3166 Btuh
	Ceiling Total			2328(sqft)		3166Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued) Project Title:

Project Title: Bootle Residence Building Type: User

6/21/2024

Floors	Туре	Ueff.	R	:-Value	Siz	e X	HTM=	Load
1	Slab On Grade	(1.180))	0.0	26	9.0 ft(perim	.) 47.2	12697 Btuh
	Floor Total				23	328 sqft		12697 Btuh
					Envelo	ope Subtota	l:	28385 Btuh
Infiltration	Туре	Wholehouse A	ACH	Volume	(cuft)	Wall Ratio	CFM=	
	Natural	C).16	2095	2	1.00	54.1	2374 Btuh
Duct load	Extremely sealed,	R6.0, Supply(C	Con),	Return(Con)	(DLM of	f 0.000)	0 Btuh
All Zones				Sensible	Subto	otal All Zon	es	30760 Btuh

WHOLE HOUSE TOTALS

Total Heat Loss 30760 Btuh

EQUIPMENT

, FL

Electric Heat Pump	#	42000 Btuh
		1

Key: Window types - NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values) or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
U - (Window U-Factor)
HTM - (ManualJ Heat Transfer Multiplier)



Version 8

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

•		a i i i i i i i i i i i i i i i i i i i	ai Regulation - Residential Per	Termanee Wetnea					
Project Name:	Bootle Residence		Builder Name:						
Street:			Permit Office:						
City, State, Zip:	, FL,		Permit Number:						
Owner: Design Location:	FL, Gainesville		Jurisdiction: County: Columbia(Florida C	Nimate Zone 2)					
Design Location.	T E, Gainesville		County. Columbia(Florida C	minate Zone Z)					
1. New constructio	n or existing New (From Plans)	10. Wall Types(2626.7 sqft.)	Insulation Area					
2. Single family or	multiple family	Detached	a. Frame - Wood, Exterior b. Frame - Wood, Adjacent	R=19.0 2350.00 ft ² R=13.0 276.67 ft ²					
3. Number of units	, if multiple family	1	c. N/A	N=13.0 270.07 II					
4. Number of Bedr	ooms	4	d. N/A						
5. Is this a worst ca	ase?	No	 Ceiling Types(2328.0 sqft.) Single assembly, no ai (Unvented) 	Insulation Area					
	or area above grade (ft²)	2328	b. N/A	u) N=30.0 2320.00 N					
	or area below grade (ft²)	0	c. N/A	2					
7. Windows(304.0		Area	12. Roof(Comp. Shingles, Unvent) D						
a. U-Factor: SHGC:	Dbl, U=0.26 SHGC=0.20	304.00 ft ²	13. Ducts, location & insulation level						
b. U-Factor:	N/A	ft ²	a. Sup: Main, Ret: Main, AH: Garag b.	0 454					
SHGC:			C.						
c. U-Factor:	N/A	ft ²	14. Cooling Systems	kBtu/hr Efficiency					
SHGC:		4.500.6	a. Central Unit	42.0 SEER2:14.30					
Area Weighted Av	verage Overhang Depth:	1.500 ft 0.200							
_	•		15. Heating Systems	kBtu/hr Efficiency					
Skylights U-Factor:(AVG)	Description N/A	Area N/A ft ²	a. Electric Heat Pump	42.0 HSPF2:7.50					
SHGC(AVG):	N/A	IN/A IL	·						
9. Floor Types	Insulation	Area	40 11 (11/4)						
a. Slab-On-Grade		2328.00 ft ²	Hot Water Systems a. Electric	Cap: 50 gallons					
b. N/A	R=	ft ²	a. Liectric	EF: 0.920					
c. N/A	R=	ft ²	b. Conservation features	21.0.020					
				None					
			17. Credits	Pstat					
Glass/Floor Area: 0	131 Total I	Proposed Modifie	ed Loads: 48.05						
		Total Baselin	ne Loads: 63.39	PASS					
-			equal to 95 percent of the annual total loads of the standard	d reference design in order to comply.					
	the plans and specifications	•	Review of the plans and	ALLE CO					
this calculation are Code.	in compliance with the Florida	r =nergy	specifications covered by this calculation indicates compliance	OF THE STATE					
Oode.	\bigcap		with the Florida Energy Code.						
PREPARED BY: _			Before construction is completed	0					
	6-21-24		this building will be inspected for compliance with Section 553 908						
DATE:	U-Z 1-Z T		compliance with Section 553.908 Florida Statutes.						
I hereby certify that	this building, as designed, is	in compliance	i iorida Statutes.	11 1					
with the Florida Ene			GOD WE TRUS						
OWNER/AGENT:			BUILDING OFFICIAL:						
DATE:			DATE:						

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.
- Compliance with a proposed duct leakage Qn requires a PERFORMANCE Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.030 Qn for whole house.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires a PERFORMANCE envelope leakage test report with envelope leakage no greater than 4.72 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

			F	PROJE	СТ						
Title: Building Type Owner: Builder Home Builder Name Permit Office: Jurisdiction: Family Type: New/Existing: Year Constru- Comment:	Detached New (From Plan	ns)	Bedrooms: Conditione Total Storie Worst Cas Rotate Anç Cross Ven Whole Hou Terrain: Shielding:	ed Area: es: e: gle: tilation:	4 2328 1 No 0 Rural Moderate/	Lot # Block PlatE Stree Cour City,	k/SubDivisi Book: et:	 ion: Columb	Address		
				CLIMA	TE						
Design Location		Tmy Site		Design 97.5%	Temp 2.5%	Int Desig Winter		Heating Degree Day	Desi ys Moistu		ily temp inge
FL, Gaines	ville	FL_GAINESVILLE_	REGIONA	32	92	70	75	1305.5	51	Med	ium
				BLOC	KS						
√ Number	Name	Area	Volu	me							
1	Block1	2328	2095	52 cu ft							
				SPAC	ES						
Number	Name	Area	Volume I	Kitchen	Occupants	s Bedr	ooms	Finished	Co	oled I	Heated
1	Main	2328	20952	Yes	8	4	ļ	Yes	,	Yes	Yes
				FLOOI	RS	(Total Ex	xposed A	Area = 2	2328 sc	ı.ft.)
√# Floor	Туре	Space	Expos Perim(Value l m. Joist	J-Factor	Slab Insu Vert/Horiz	ıl. Tile	Wood	Carpet
1 Slab-Oı	n-Grade Edge Ins	Main	269	2328 s	qft 0		0.563	2 (ft)/0	(ft) 0.20	0.60	0.20
				ROO	F						
√# Type		Materials	Ro Are		able Roo rea Colo		Solar Absor.	SA Er Tested	mitt Emitt Teste		
1 Gable o	or shed	Composition shingle	s 269	5 ft² 680	ft ² Dark	. N	0.92	No 0	0.9 No	30	30.26
				ATTI	C						
√# Type		Ventilation		Vent Rati	o (1 in)	Area	RBS	IR	RCC		
1 No attic	;	Unvented		0		2328 ft²	N		N		
				CEILIN	IG	(Total Ex	xposed A	Area = 2	2328 sc	ı.ft.)
√# Ceilin	ng Type	Ş	Space	R-Value	e Ins. Ty	pe Are	a U-F	actor Fran	ming Frac.	Trus	s Type
1 Single a	assembly, no airspac	o(Unyontod)	Main	30.0	Blow	n 2328	Offi2 O	032	0.11	١٨	/ood

INPUT SUMMARY CHECKLIST REPORT

						WA	LLS	5		(Total Exposed Area = 2627 sq.ft.)							
√# Ornt	Adjacent To	Wall Type		Space		Ca\ R-\	/ity /alue	Width Ft			ight In	Area sq.ft.	U- Factor	Sheath R-Value		Solar . Absor.	Below Grade
1 N 2 E 3 N 4 N 5 E 6 S 7 W 8 S 9 E 10 S 11 W 12 S 13 E 14 S	Exterior Exterior Exterior Garage Exterior	Frame - Wood Frame - Wood		M M M M M M M M M	ain	19 19 11 19 19 19 19 19 19	9.0 9.0 9.0 3.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	13.0 29.0 27.0 29.0 14.0 2.0 8.0 7.0 31.0 3.0	8 0 8 8 2 10 0 4 0 0 10 10 4	10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	156.7 130.0 296.7 276.7 291.7 148.3 20.0 83.3 70.0 310.0 30.0 88.3 78.3 123.3	0.071 0.071 0.094 0.071 0.071 0.071 0.071 0.071 0.071 0.071		0.23 0.23 0.23 0.23 0.23 0.23 0.23 0.23	0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	0 % 0 % 0 % 0 % 0 % 0 % 0 % 0 % 0 % 0 %
15 W 16 N	Exterior Exterior	Frame - Wood Frame - Wood		M	ain ain ain	19	9.0 9.0 9.0	14.0 6.0	8	10.0 10.0 10.0	0	146.7 60.0			0.23 0.23	0.75 0.75 0.75	0 % 0 % 0 %
17 W	Exterior	Frame - Wood			ain		9.0	31.0	8	10.0		316.7			0.23	0.75	0 %
DOORS (Total Exposed Area = 160 sq.ft.)																	
√# Ornt	Adjacent 1	Го Door Type		Space			Stori	ms		U-V	'alue		/idth ⁻ t In		ight In	Are	a
1 N 2 N 3 S	Exterior Garage Exterior	Insulated Wood Insulated		Main None Main None Main None			ne		0.40 3.00			0	8.00 0 8.00 0 8.00 0		24.0	96.0ft ² 24.0ft ² 40.0ft ²	
					V	/INE	OOW	/S			(To	tal Ex	posec	Area	= 30)4 sq.f	t.)
√# Ornt	Wall ID Frame	Panes	NFRC U	J-Factor	SHGC	Imp :	Storm	Total Area (ft²)		ame nits	Vidth (ft)	Height (ft)	Overh Depth (ft)	-	nterior	Shade	Screen
1 N 2 N 3 E 4 E 5 S 6 S 7 S 8 S 9 S 10W 11N	3 Vinyl 5 Vinyl 5 Vinyl 6 Vinyl 8 Vinyl 10 Vinyl 12 Vinyl 14 Vinyl 17 Vinyl	Low-E Double	Y Y Y Y Y Y Y Y	0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26	0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20	2 2 2 2 2 2 2 2 2 2	N N N N N N N N N N N N N N N N N N N	12.0 8.0 20.0 30.0 36.0 8.0 90.0 8.0 36.0 36.0 20.0		1 2	3.00 1.00 4.00 2.50 3.00 2.50 2.50 2.00 3.00 3.00 2.00	4.00 4.00 5.00 6.00 4.00 6.00 4.00 6.00 6.00 5.00	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3	No No No No No No No No No	ne	None None None None None None None None
					INF	ILTI	RAT	ION									
√# Scope	e Met	hod	SL	Α (CFM50	E	LA	Eql	_A	A	СН	ACH5	0 Spac	e(s)	Infiltra	tion Test	Volume
1 Who	olehouse Propo	osed ACH(50)	0.000)27	1647	90	.36	169	.64	0.0	969	4.7	Al	I	20952	cu ft	
					(SAR	AG	E									
V #	Floor Area	R	oof Area		Exp	osed	Wall P	erimete	eter Avg. Wall Height Exposed Wall Insulation			tion					
1	495 ft²		495 ft²				64 ft					9 ft			1		

INPUT SUMMARY CHECKLIST REPORT

						N	IASS							
V #	Mass Type			Area			Thickness	ickness Furniture Frac			ion Space			
1	Default(8 lbs/	/sq.ft.)		0 ft²					0.	30		Main		
HEATING SYSTEM														
V #	System Type		Sub	otype/Spee	d	AHRI #	Efficie	ncy (CapacityGeothermal kBtu/hr Entry Power			HeatPump Ducts Block Volt Current		
1 Electric Heat Pump None/Single HSPF2: 7.50 42.0 0.00 0.00 0.00 sys#1											1			
COOLING SYSTEM														
V #	System Type		Sub	otype/Spee	d	AHRI #	# Effic	iency		acity u/hr	Air Flow cfm	SHR	Duct	Block
1	Central Unit			None/Sing	le		SEEF	R2:14.3	42.0		1260	0.85	sys#1	1
HOT WATER SYSTEM														
V #	System Type	Subtype		Location		EF(UEF	E) Cap	Us	se Set	:Pnt Fixt	ure Flow	Pipe Ins.	Pipe	e length
1	Electric	None		Garage		0.92 (0.9	92) 50.00 g	jal 70	gal 120	deg Sta	andard	None		99
	Recirculation System		Control ype		Loop length	Branch length					Equal Flow	DWHR Eff	Othe	r Credits
1	No				NA	NA	NA	No		NA	NA	NA	Non	e
						D	UCTS							
V #	ct Location	Supply R-Value Ar		ation I	urn R-Value		Leakage	Туре	Air Handl	CFM 2 er TOT	5 CFM: OUT		RLF H	HVAC # eat Cool
1	Main	6.0 454 f	t² Main		6.0 1	114 ft²	Prop. Lea	k Free	Gara	ge		0.030	0.50	1 1
					TE	MPE	RATU	RES						
Cod Hea	gramable Thern bling [] Jan ating [X] Jan hting [] Jan	nostat: Y [] Feb [X] Feb [] Feb	[] Mar [X] Mar [X] Mar	[] Apr [] Apr [X] Apr	([] M [] M	lay	ans: N [X] Jun [] Jun [] Jun	[X] Jul [] Jul [] Jul	[X] Au [] Au [] Au	g []Se	p []	Oct [X	Nov Nov Nov	[] Dec [X] Dec [] Dec
	hermostat Sche chedule Type	dule: HERS 2	2006 Refere 1	ence 2	3	4	5	6	Hours 7	8	9	10	11	12
c	Cooling (WD)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
c	Cooling (WEH)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
F	leating (WD)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68
F	leating (WEH)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68