



REScheck Software Version 4.6.0 Compliance Certificate

Project Title: M25KCD2B_TNCHR-169

Energy Code: **2006 IECC**
 Location: **Knoxville, Tennessee**
 Construction Type: **Single Family**
 Project Type: **New construction**
 Conditioned Floor Area: **940 ft²**
 Glazing Area Percentage: **11%**
 Heating Degree Days: **3611**
 Climate Zone: **4**

Construction Site:

Owner/Agent:

Designer/Contractor:

Cory Chumley
Clayton Homes

Compliance: Passes on UA trade-off

Compliance: **28.1% Better Than Code** Maximum UA: **224** Your UA: **161** Maximum SHGC: **0.40** Your SHGC: **0.28**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor	UA
Ceiling 1: Flat Ceiling or Scissor Truss	940	45.0	0.0		25
Wall 1: Wood Frame, 16" o.c.	1170	21.0	3.0		57
Window 1: Vinyl Frame:Double Pane with Low-E SHGC: 0.28	130			0.310	40
Door 1: Solid	44			0.190	8
Floor 1: All-Wood Joist/Truss:Over Unconditioned Space	940	30.0	0.0		31

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2006 IECC requirements in REScheck Version 4.6.0 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

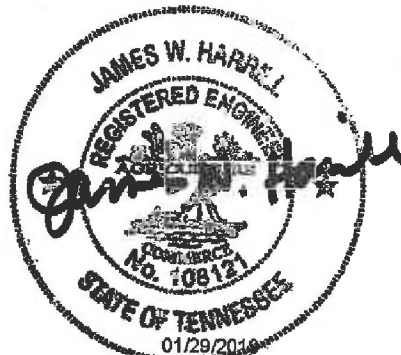
Name - Title

Signature

Date

Project Notes:

26'-8" x 36'-4"
Off Frame
Floor insulation to be site installed per attached Rescheck



Clayton Homes Rutledge (Plant 925)
395 HWY 11W SOUTH Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097
TN# CHR-169

- Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment have been provided.
- Insulation R-values and glazing U-factors are clearly marked on the building plans or specifications.

Duct Insulation:

- Ducts in unconditioned spaces or outside the building are insulated to at least R-8.
- Ducts in floor trusses above unconditioned spaces or above the outdoors are insulated to at least R-6.

Duct Construction:

- Air handlers, filter boxes, and duct connections to flanges of air distribution system equipment or sheet metal fittings are sealed and mechanically fastened.
- All joints, seams, and connections are made substantially airtight with tapes, gasketing, mastics (adhesives) or other approved closure systems. Tapes and mastics are rated UL 181A or UL 181B.
- Building framing cavities are not used as supply ducts.
- Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.
- Additional requirements for tape sealing and metal duct crimping are included by an inspection for compliance with the International Mechanical Code.

Temperature Controls:

- Thermostats exist for each separate HVAC system. A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each zone or floor is provided.

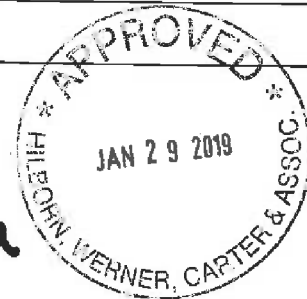
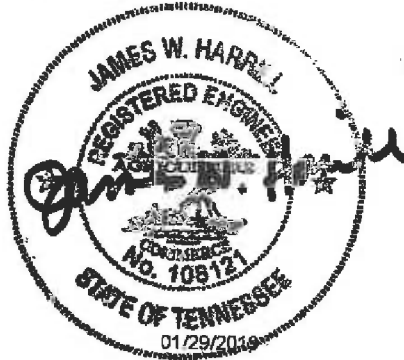
Circulating Service Hot Water Systems:

- Circulating service hot water pipes are insulated to R-2.
- Circulating service hot water systems include an automatic or accessible manual switch to turn off the circulating pump when the system is not in use.

Certificate:

- A permanent certificate is provided on or in the electrical distribution panel listing the predominant insulation R-values; window U-factors; type and efficiency of space-conditioning and water heating equipment.

NOTES TO FIELD: (Building Department Use Only)



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2006 IECC Energy Efficiency Certificate

Insulation Rating	R-Value
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Ceiling / Roof	45.00
Wall	24.00
Floor / Foundation	30.00
Ductwork (unconditioned spaces):	_____

Glass & Door Rating	U-Factor	SHGC
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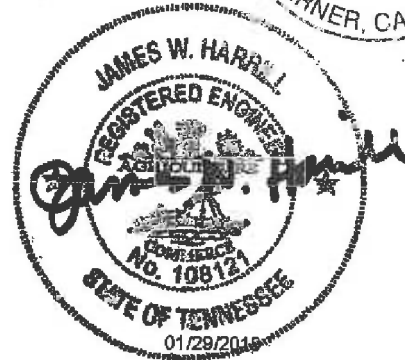
Window	0.31	0.28
Door	0.19	NA

Heating & Cooling Equipment	Efficiency
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Heating System: _____	_____
Cooling System: _____	_____
Water Heater: _____	_____

Name: _____ Date: _____

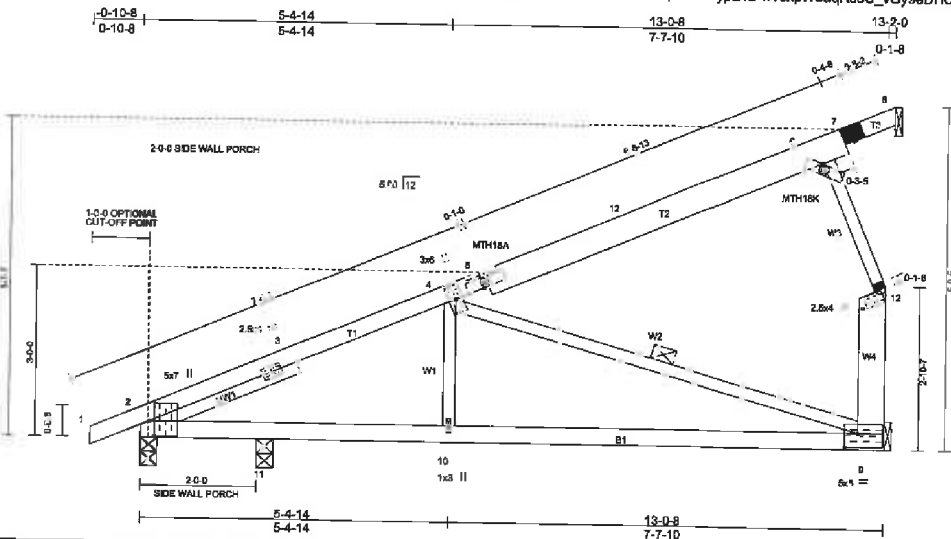
Comments:



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Job	Truss	Truss Type	Qty	Ply	CMH MANUFACTURING, INC. - NORRIS II	128188241
WPL-989-0215-005_(14W)	M982-09B	HINGED TRUSS	1	1	ETN-M982-P1 : 5/12 HUDMOD - 09	
WoodPerfect, Gu'n, AL 33583					Job Reference (optional)	

7.840 s Nov 10 2015 Mitek Industries, Inc. Wad Mar 09 10:07:02 2016 Page 1
 ID:IZwbWa3VwAGv7WXQpex1uAypEvB-hVxpW5sqRsoU_vGy9eDHCGrVG8T8YQdlrQc58zchFN



Job	Truss	Truss Type	Qty	Ply	CMH MANUFACTURING, INC. - NORRIS II	
WPL-069-0215-005_(14W)	M862-09B	HINGED TRUSS	1	1	ETN-M862-P1 : 6/12 HUD/MCD - 09	128186241
WoodPerfect, Guin, AL 33663			7.640 s Nov 10 2016 MITEK Industries, Inc. Wed Mar 09 10:07:02 2016 Page 2			


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NOTES-

- 13) All additional member connections shall be provided by others for forces as indicated.
- 14) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 15) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 16) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 383 lb uplift at joint 2, 504 lb uplift at joint 9 and 200 lb uplift at joint 11.
- 17) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.



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<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 10/03/2016 BEFORE USE. Design valid for use only with Mitek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability, and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI Quality Criteria, DSB-89 and ECSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Date:
December 14, 2018

TYPE : MODULAR

MODEL PLAN INDEX

Model #	M25KCD2B_TN	State Label
Manufacturer	CMH Manufacturing, Inc.	TN
Unit Size	26'-8" x 36'-4"	
Description	Residential	
Drawn by	Cory C.	

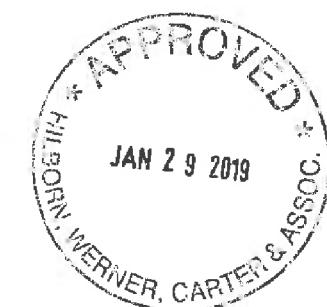
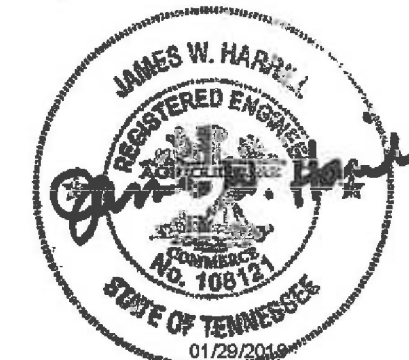
Approx. Height	15'-0"
# of Stories	1
Sq. Ft.	940

Category	Document Description	Page or Sheet #
Index	Index and Information Sheet	C-1
Tech Sheet	REScheck w/ Checklist	See Attached
Model Plan	Cover Sheet	C-2
Model Plan	Floor Plan	A-1
Model Plan	Front & Rear Elevations	A-2
Model Plan	Left & Right Elevations	A-3
Model Plan	Electrical Plan	E-1
Model Plan	HVAC / Ridgebeam Layout	M-1
Model Plan	DWV Lines	P-1
Model Plan	Supply Lines	P-2
Model Plan	Off Frame Foundation	F-2
Model Plan	Off Frame Cross Section	X-2
Model Plan	Cross Section Details	D-1
Tech Sheet	Off Frame Foundation Notes & Details	See Attached

TRUSS INFORMATION		
TRUSS	Truss Job #	Manual Page #
OPT. TRUSS/TRUSSES	M962-09B	See Attached
DORMER TRUSSES		
OPT.(S)		

ELECTRICAL PANEL SIZE					
Box: Width	26.67"				
Length	36.35"				
Electrical Appliances Standards			Gas Appliances Standards		
Floor Area	940 sq ft	2.8 KVA	Floor Area	840 sq ft	2.8 KVA
Small Appliance Circuits	3	4.8 KVA	Small Appliance Circuits	3	4.8 KVA
Range @	11.1 kw	11.1 KVA	Range @	11.1 kw	11.1 KVA
Water Heater @	3.8 kw	4.8 KVA	Washer @	1500 va	1.5 KVA
Washer @	1500 va	1.5 KVA	Dryer @	5 kw	5.0 KVA
Dryer @	5 kw	5.0 KVA	Dishwasher @	1.4 kw	1.4 KVA
Dishwasher @	1.4 kw	1.4 KVA	Garbage Disposal @	1.4 kw	1.4 KVA
Garbage Disposal @	1.4 kw	1.4 KVA	Spa @ N/A	kw	N/A
Spa @ N/A	kw	N/A	Blower @	0.8 kw	0.8 KVA
Total Load		32.5 KVA	Total Load		28.5 KVA
First 10 KVA @ 100%		10.0 KVA	First 10 KVA @ 100%		10.0 KVA
Remainder @ 40%		9.0 KVA	Remainder @ 40%		7.4 KVA
HVAC @ 100%		15.0 KVA			
Total		34.0 KVA	Total		17.4 KVA
Total Amps		141.7 AMPS	Total Amps		72.5 AMPS
Install a		200 AMP Panel	Install a		100 AMP Panel

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TN# CHR-169



JAMES HARRILL PE
P.O. BOX 9790
Maryville, TN 37802

P.E. SEAL

THIRD PARTY SEAL

TN# CHR-169
STATE LABEL(S): TN

PROJECT # M25KCD2B_TN
SCALE: 3/16" = 1'-0"
JOB # 1869-0014

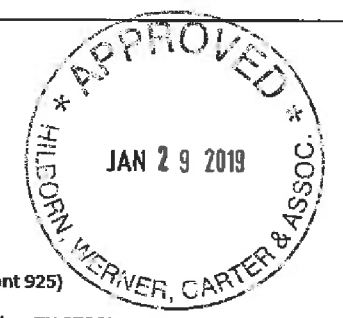
HILBORN, WERNER, CARTER,
AND ASSOCIATES, INC.
1627 SOUTH MYRTLE AVE.
CLEARWATER, FL 33756

Clayton - Plant 925
395 Hwy 11W South Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097

INDEX AND
INFORMATION SHEET

SHEET:
C-1

ELECTRICAL NOTES: NEC, 2008 EDITION w/TN AMENDMENTS	MECHANICAL NOTES: 2006 IRC	GENERAL NOTES: 2006 IRC	PLUMBING NOTES: 2006 IRC
<ol style="list-style-type: none"> ALL CIRCUITS AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE APPROPRIATE ARTICLES OF THE NEC. WHEN LIGHT FIXTURES ARE INSTALLED IN CLOSETS THEY SHALL BE SURFACE MOUNTED OR RECESSED. INCANDESCENT FIXTURES SHALL HAVE COMPLETELY ENCLOSED LAMPS. SURFACE MOUNTED INCANDESCENT FIXTURES SHALL HAVE A MINIMUM CLEARANCE OF 12 INCHES AND ALL OTHER FIXTURES SHALL HAVE A MINIMUM CLEARANCE OF 6 INCHES FROM "STORAGE AREA" AS DEFINED BY NEC 410.2. WHEN WATER HEATERS ARE INSTALLED THEY SHALL BE PROVIDED WITH READILY ACCESSIBLE DISCONNECTS ADJACENT TO THE WATER HEATERS SERVED. THE BRANCH CIRCUIT SWITCH OR CIRCUIT BREAKER SHALL BE PERMITTED TO SERVE AS THE DISCONNECTING MEANS ONLY WHERE THE SWITCH OR CIRCUIT BREAKER IS WITHIN SIGHT FROM THE WATER HEATER OR IS CAPABLE OF BEING LOCKED IN THE OPEN POSITION. HVAC, WHIRLPOOL, GARBAGE DISPOSAL, DISHWASHER SHALL BE PROVIDED WITH READILY ACCESSIBLE DISCONNECTS ADJACENT TO THE EQUIPMENT SERVED. A UNIT SWITCH WITH A MARKED "OFF" POSITION THAT IS A PART OF THE APPLIANCE AND DISCONNECTS ALL UNGROUNDED CONDUCTORS SHALL BE PERMITTED AS THE DISCONNECTING MEANS WHERE OTHER DISCONNECTING MEANS ARE ALSO PROVIDED BY A READILY ACCESSIBLE CIRCUIT BREAKER. PRIOR TO ENERGIZING THE ELECTRICAL SYSTEM THE INTERRUPTING RATING OF THE MAIN BREAKER MUST BE DESIGNED AND VERIFIED AS BEING IN COMPLIANCE WITH SECTION 110-9 OF THE N.E.C. BY LOCAL ELECTRICAL CONSULTANT. THE MAIN ELECTRICAL PANEL AND FEEDERS ARE DESIGNED BY OTHERS, SITE INSTALLED AND SUBJECT TO LOCAL JURISDICTION APPROVAL. ALL CIRCUITS CROSSING OVER MODULE MATING LINE(S) SHALL BE SITE CONNECTED WITH APPROVED ACCESSIBLE JUNCTION BOXES OR CABLE CONNECTORS. SMOKE DETECTORS SHALL BE WIRED SO THAT THE OPERATION OF ANY ONE SMOKE DETECTOR WILL CAUSE SIMULTANEOUS ACTIVATION OF ALL OTHERS. SMOKE DETECTORS SHALL HAVE BATTERY BACKUP. SMOKE DETECTORS SHALL BE PHOTO-ELECTRIC OR SILENCING WITHIN 20 FT. OF ANY COOKING APPLIANCE. ALL RECEPTACLES INSTALLED IN WET LOCATIONS (EXTERIOR) SHALL BE WEATHER RESISTANT (WR) AND IN WEATHER PROOF (WP) ENCLOSURES, THE INTEGRITY OF WHICH IS NOT AFFECTED WHEN AN ATTACHMENT PLUG IS INSERTED OR REMOVED. 	<ol style="list-style-type: none"> DUCT DESIGN PER HVAC/RIDGEBEAM DETAIL SHEET. INTERIOR DOORS MAY BE UNDERCUT 1.5 INCHES ABOVE FINISHED FLOOR FOR AIR RETURN OR RETURN AIR VENTS INSTALLED. BATHROOM VENT FANS SHALL PROVIDE EXHAUST DIRECTLY TO THE EXTERIOR. CAPABLE OF 50 CFM FOR INTERMITTENT VENTILATION OR 20 CFM FOR CONTINUOUS VENTILATION. KITCHEN VENT FANS SHALL PROVIDE EXHAUST DIRECTLY TO THE EXTERIOR. CAPABLE OF 100 CFM FOR INTERMITTENT VENTILATION OR 25 CFM FOR CONTINUOUS VENTILATION. VENT FANS SHALL BE DUCTED TO THE EXTERIOR AND TERMINATE AT AN APPROVED VENT CAP. HVAC EQUIPMENT SHALL BE EQUIPPED WITH OUTSIDE FRESH AIR INTAKE. THIS BUILDING DESIGN COMPLIES WITH OR EXCEEDS MINIMUM REQUIREMENTS FOR TENNESSEE CLIMATE ZONE 4. FOR COMBUSTION AIR AND VENTING REQUIREMENTS ON GAS APPLIANCES, SEE MANUFACTURER'S INSTALLATION MANUAL. GAS WATER HEATERS SHALL BE THE DIRECT VENT TYPE. HVAC MAY BE SITE INSTALLED BY OTHERS. HEAT LOSS & GAIN ANALYSIS IS IN COMPLIANCE WITH THE 2006 INTERNATIONAL ENERGY CONSERVATION CODE. ALL FLEX DUCTS ARE TO BE A MINIMUM OF R-6 DUCT WHEN DUCT IS WITH-IN THE BUILDING ENVELOPE. 	<ol style="list-style-type: none"> ALL GLAZING WITHIN 24 INCH ARC OF DOORS, WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR, AND ALL GLAZING IN DOORS SHALL BE SAFETY, TEMPERED OR ACRYLIC PLASTIC SHEET. FLOOR DESIGN LIVE LOAD-40PSF. ROOF LIVE LOAD-20PSF. GROUND SNOW LOAD 20PSF. MAXIMUM WIND SPEED - 90 MPH EXP. C SEISMIC DESIGN CATEGORY C. OCCUPANCY IS RESIDENTIAL (ONE & TWO FAMILY DWELLING) OCCUPANT LOAD IS BASED ON ONE PERSON PER 200 SQUARE FEET OF FLOOR AREA. CONSTRUCTION IS TYPE VB, UNPROTECTED, AND UNSPRINKLERED. CEILING FANS SHALL BE 80 INCHES MINIMUM FROM BOTTOM OF BLADES TO FINISH FLOOR. MINIMUM CORRIDOR WIDTH IS 36 INCHES. ONE EXTERIOR DOOR TO BE 36" x 80". OTHER EXTERIOR HINGED OR SLIDING DOORS SHALL NOT BE REQUIRED TO COMPLY WITH THESE MINIMUM DIMENSIONS. BUILDING MAY BE MIRRORED END FOR END. ALL WINDOWS SHALL BE VERTICAL SLIDING, DOUBLE GLAZED, CLEAR GLASS, AND VINYL FRAMES UNLESS OTHERWISE NOTED. EXTERIOR WALLS ARE BUILT WITH 2X6 STUDS. SAFETY GLAZING MATERIAL, TENN. TITLE 68, CHAPTER 120, PART 3 (TENN. CODE ANN. 68-120-301 ET. SEQ). ALL DOOR CALL-OUTS ARE LABELED IN INCHES. 	<ol style="list-style-type: none"> ALL PLUMBING FIXTURES SHALL HAVE SEPARATE SHUT-OFF VALVES. WATER HEATER SHALL HAVE A 1 1/2" DEEP SAFETY PAN WITH 1 INCH DRAIN TO EXTERIOR, T&P RELIEF VALVE WITH DRAIN TO EXTERIOR, AND A SHUT-OFF VALVE WITHIN 3 FEET ON THE COLD WATER SUPPLY LINE. WATER PIPES INSTALLED IN A WALL EXPOSED TO THE EXTERIOR SHALL BE LOCATED ON THE HEATED SIDE OF THE WALL INSULATION. WATER PIPING INSTALLED IN AN UNCONDITIONED ATTIC SHALL BE INSULATED WITH AN INSULATION OF R-6.5 MINIMUM. WATER SUPPLY LINES SHALL BE CPVC OR QUESTPEX. WHEN QUESTPEX SUPPLY LINES ARE INSTALLED THE MAXIMUM WATER HEATER TEMPERATURE SETTING IS 180°F. THE QUESTPEX PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS LIMITATIONS AND INSTRUCTIONS. BUILDING DRAIN AND CLEANOUTS ARE DESIGNED AND SITE INSTALLED BY OTHERS, SUBJECT TO LOCAL JURISDICTION APPROVAL. TUB ACCESS PROVIDED UNDER HOME UNLESS OTHERWISE NOTED. SHOWER STALLS SHALL BE COVERED WITH NON-ABSORBENT MATERIAL TO A HEIGHT OF 72 INCHES ABOVE FINISHED FLOOR. THERMAL EXPANSION DEVICE REQUIRED BY WATER HEATER INSTALLED AND IF NOT SHOWN ON PLUMBING PLAN IS DESIGNED AND SITE INSTALLED BY OTHERS SUBJECT TO LOCAL APPROVAL. SHOWERS SHALL BE CONTROLLED BY AN APPROVED MIXING VALVE WITH A MAXIMUM WATER OUTLET TEMPERATURE OF 120°F (48.8°C). DWV SHALL BE EITHER ABS OR PVC - DWV. THIS UNIT MUST BE CONNECTED TO A PUBLIC WATER SUPPLY AND SEWER SYSTEM IF THESE ARE AVAILABLE. PIPING IN UNCONDITIONED SPACES MUST BE PROTECTED WITH INSULATION HAVING A MINIMUM R FACTOR OF 3. ALL GAS LINES TO BE STRAIGHT DROPS. ALL OTHER LINES TO BE COMPLETED ON SITE. SUBJECT TO LOCAL APPROVAL. WATER HEATER MAY BE SITE INSTALLED BY OTHERS.



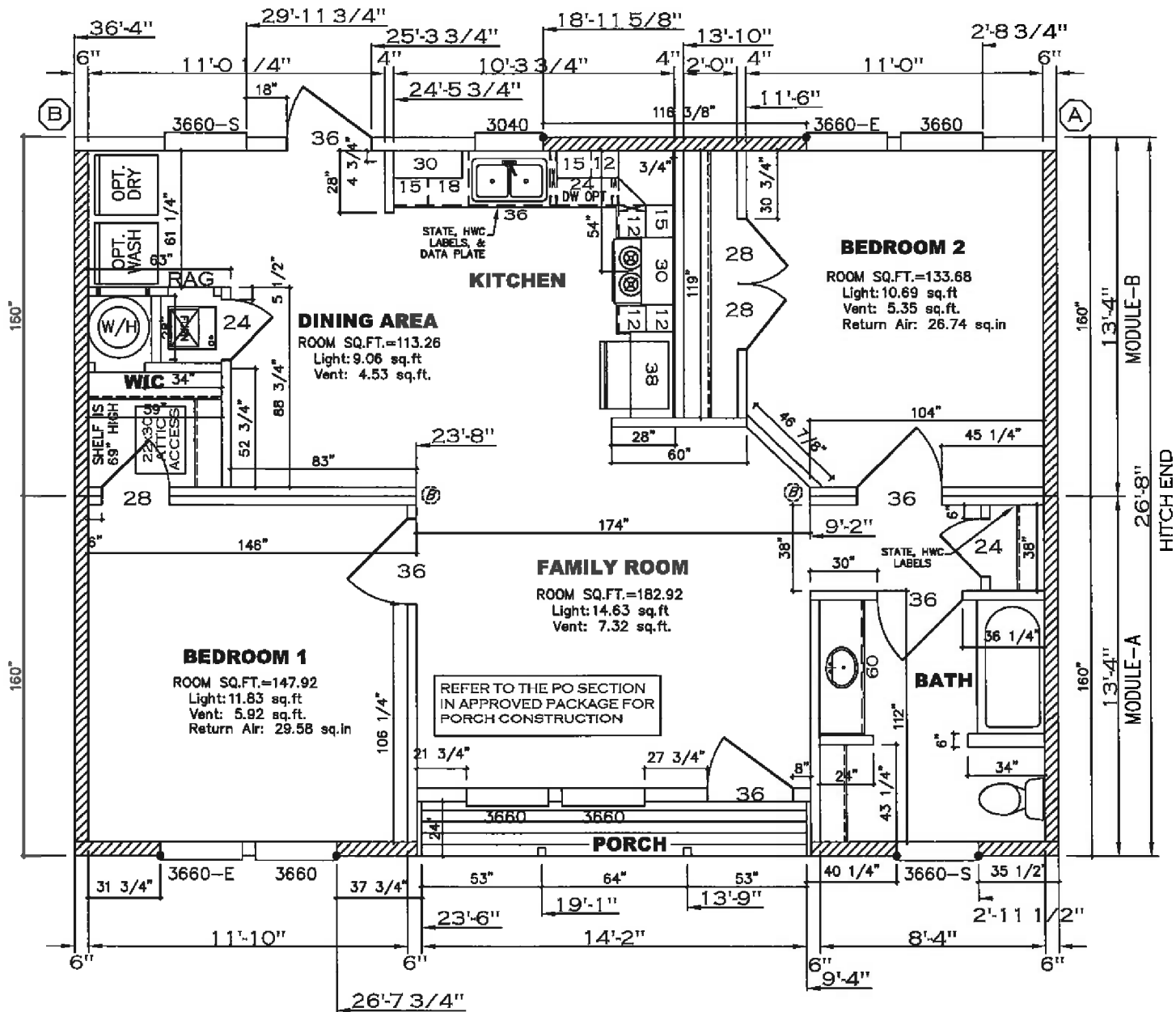
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JAMES HARRILL, PE
 P.O. BOX 8790
 Maryville, TN 37802

CLAYTON HOMES

CODES: SEE NOTES	REVISIONS	BY	DATE
STATE LABEL(S): TN	Revised notes under Mechanical & Electrical note #8	AW	9/8/09
SCALE: N.T.S.	Added CO Note under Electrical section.	SMW	9/17/09
	Plumbing notes code changed to 2006	JDC	9/18/09
	Revised note #3 & 12	JDC	11/5/09

TENNESSEE COVER SHEET SHEET C-2



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 Clayton - Plant 925
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 FLOOR PLAN
 SHEET: A-1

IF HOME IS PLACED ON SITE WHERE ANY WINDOW SILL IS LESS THAN 24" ABOVE FINISHED FLOOR AND 72" OR GREATER ABOVE THE EXTERIOR GRADE, A WINDOW GUARD MUST BE INSTALLED THAT COMPLIES WITH ASTM F2006 OR ASTM F2090.

SHEAR WALL DESIGN METHOD ENGINEERED
 SIDE WALL SHEAR WALL CONSTRUCTED TO 195 PLF

90-MPH
 SHEARWALL INFO
 PLF CONST. PER SW SECTION IN STATE APPROVED PKG.
 (A) = 195 PLF
 (B) = 195 PLF

COLUMN STRAPPING SCHEDULE

(A) (2) 2x4 SPF #2 THIS HALF	(B) (2) 2x4 SPF #2 EACH HALF
(C) (3) 2x4 SPF #2 THIS HALF	(D) (3) 2x4 SPF #2 EACH HALF
(E) (4) 2x4 SPF #2 THIS HALF	(F) (4) 2x4 SPF #2 EACH HALF
(G) (5) 2x4 SPF #2 THIS HALF	(H) (5) 2x4 SPF #2 EACH HALF

- * INDICATE BEARING STIFFENERS NOTES:
1. ALL COLUMN STUDS SHALL BE GLUED/NAILED TOGETHER PVA GLUE WITH 80% COVERAGE SHALL BE USED.
 2. INSTALL 2 STEEL STRAPS AT EACH END OF EACH STUD IN COLUMN.
 3. COLUMN MAY NOT BE NOTCHED OR DRILLED.
 4. MARRIAGEWALL HEIGHT = 9'-0" MAX.

WINDOW SYMBOLS WITH THE LETTERS 'E' OR 'S' BESIDE THEM DESIGNATE THAT WINDOW AS BEING EITHER AN 'EGRESS' OR 'SAFETY GLAZED' WINDOW
 ex. 3660-E for EGRESS
 3660-S for SAFETY GLAZED

SEE SW-195 IN APPROVED MANUAL FOR SHEARWALL PLF CONSTRUCTION
 REFERENCE SW CHARTS SW-31.10_I.A.C.17_[78].1-2
 ● = FREE END HOLD DOWNS PER SW PACKAGES IN APPROVED MANUAL
 237E CLADDING AND SHEAR DIAPHRAGM DESIGN

ZONES	INSULATION PACKAGE R VALUES			FURNACE KW SECTION #
	FLOOR	WALL	CEILING	
4	30	21+3	45	15 MI-1.0

EXTERIOR DOOR		INTERIOR DOOR		EXTERIOR WINDOW						
SIZE	U-VALUE	SHGC	CALL NUMBER	SIZE	CALL NUMBER	SIZE	U-VALUE	SHGC	LIGHT	VENT
36	.19	.40	36	36"	3040	.31	.28	.28	12.20	6.14
			28	28"					6.28	3.14
			24	24"						

JAMES HARRILL PE
 P.O. BOX 9790
 Maryville, TN 37802



IRD PARTY SEAL



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P.O. BOX 8780
MAYFIELD, TN 37802



SITE WORK:
1. LEFT AND RIGHT SIDE VINYL SIDING INSTALLATION.
2. SHINGLES TO COMPLETE PEAK.

ELEVATION NOTES: TYPICAL
SEE D-1 PAGE FOR METHOD OF ROOF VENTILATION.
ACCESSIBLE RAMP(S), STAIRS(S), AND HANDRAILS ARE SITE INSTALLED, DESIGNED BY OTHERS, AND SUBJECT TO LOCAL JURISDICTION.
FOUNDATION ENCLOSURE (WHEN PROVIDED) MUST HAVE 1 SQUARE FOOT NET VENT AREA PER 1/100TH OF THE FLOOR AREA, AND A 18" X 24" MAXIMUM CRAWL SPACE ACCESS, SITE INSTALLED BY OTHERS SUBJECT TO LOCAL JURISDICTION.

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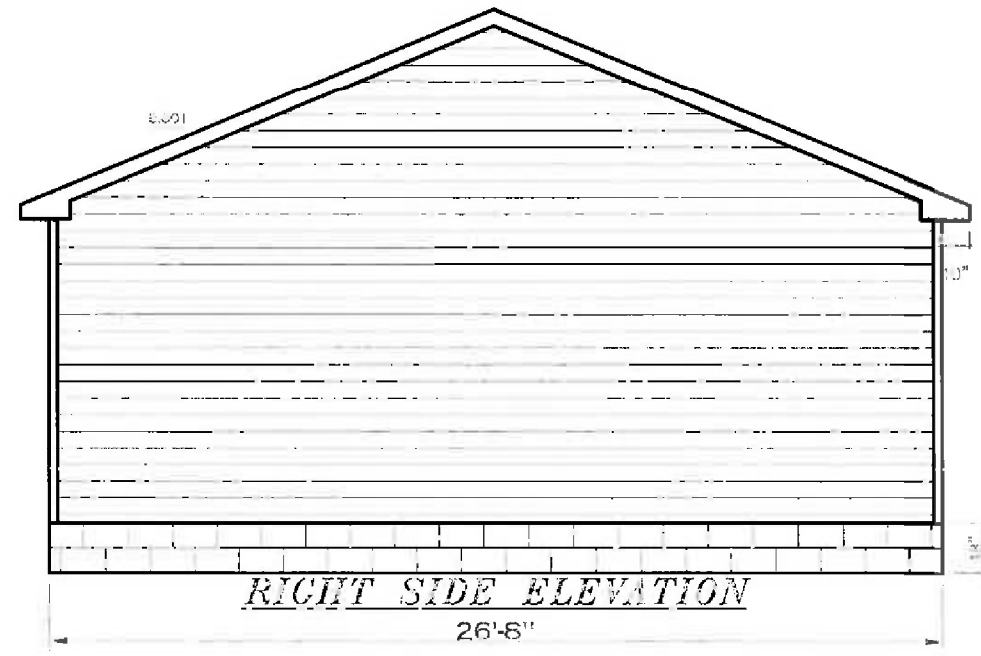
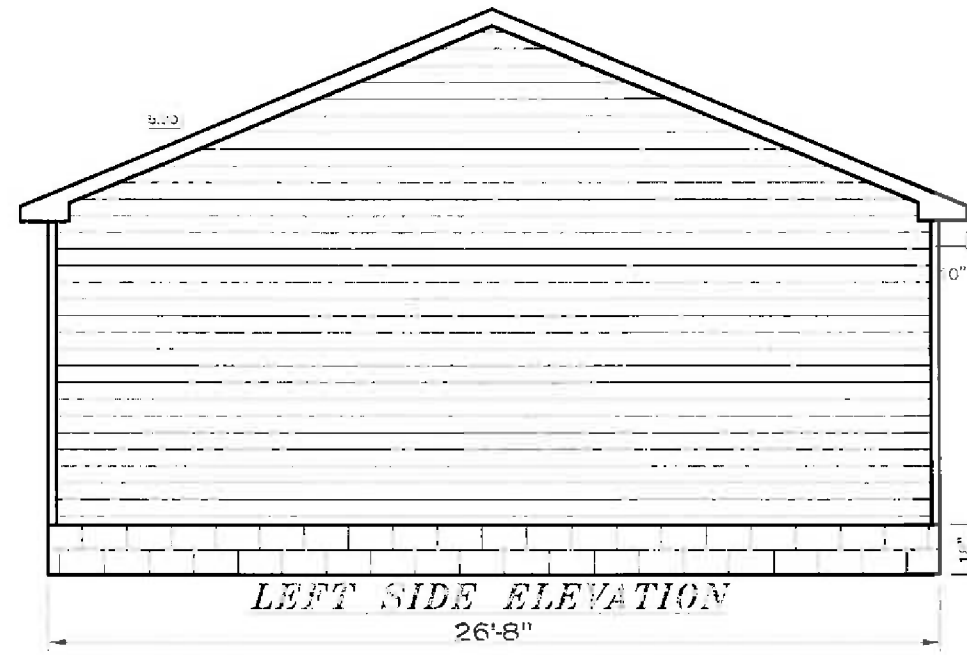
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FRONT AND REAR ELEVATIONS

Sheet A-2

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 PH: 865.828.5771 FAX: 865.828.8097
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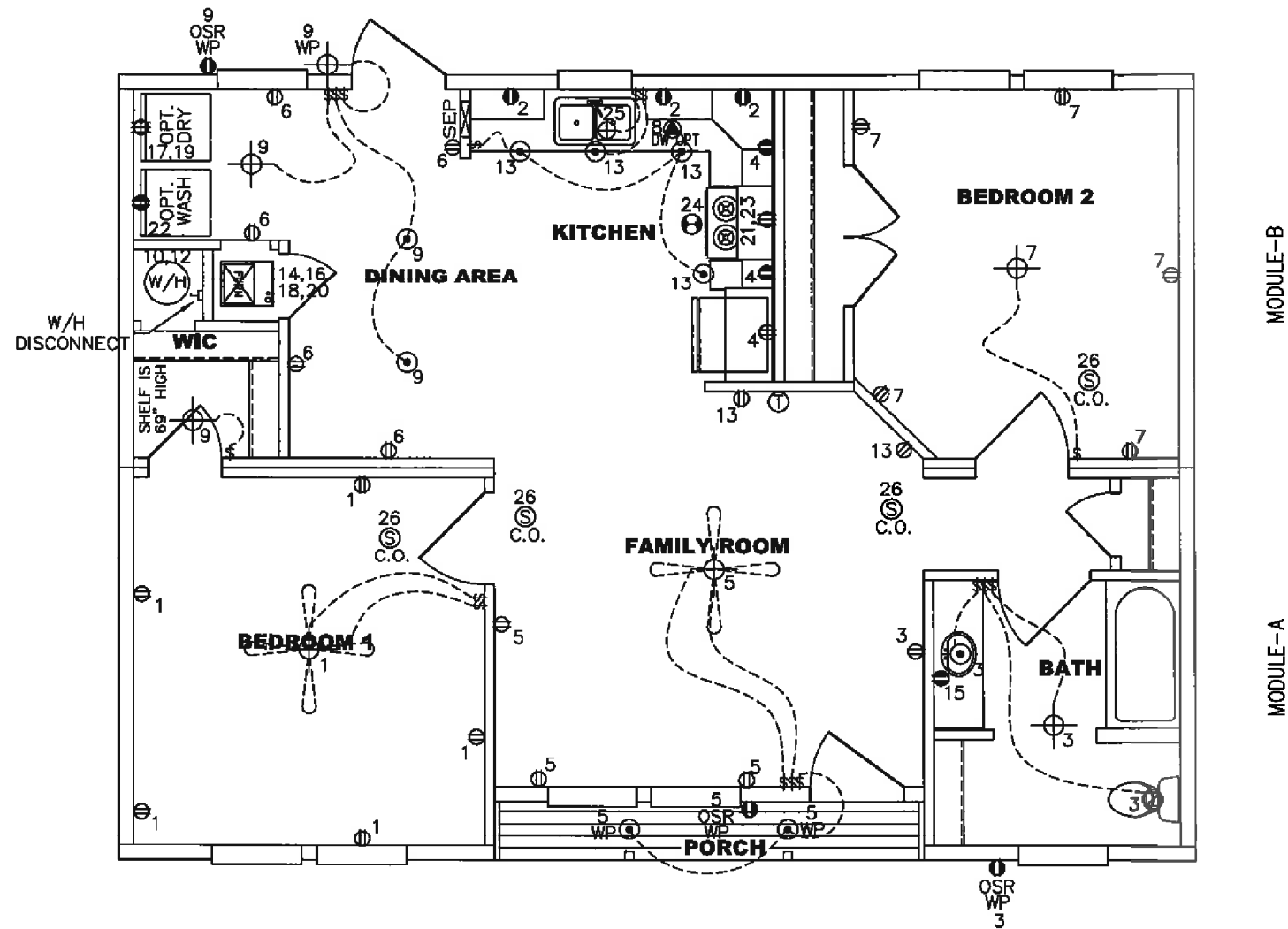


JAMES HARRELL PE
 P.O. BOX 3790
 Mayfield, TN 37088

P.E. SEAL

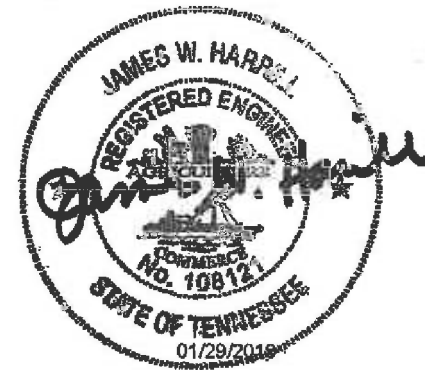
THIRD PARTY SEAL

PROJECT #M25KGD2B_TN	TN# CHR-169
SCALE: 3/16" = 1'-0"	STATE LABEL(S): TN
HILBORN, WERNER, CARTER, AND ASSOCIATES, INC. 1827 SOUTH MYRTLE AVE. CLEARWATER, FL 33709	
Clayton - Plant 925 395 Hwy 11W South, Rutledge, TN 37861 PH: 865.828.5771 FAX: 865.828.8097	
LEFT AND RIGHT ELEVATIONS	
SHEET A-3	



ELECTRICAL SCHEDULE					ELECTRICAL SCHEDULE					SYMBOLS					
NOMENCLATURE	CIRCUIT #	VOLTS	WIRE	BREAKER	NOMENCLATURE	CIRCUIT #	VOLTS	WIRE	BREAKER	NOMENCLATURE	CIRCUIT #	VOLTS	WIRE	BREAKER	SYMBOLS
DRYER	17,19	240	10-3	30-DP	SMOKE DETECTOR	28	120	14-3	15-SP AFCI	RECESSED CAN LIGHT	⊗	240	14-3	15-SP AFCI	⊗
WATER HEATER	10,12	240	12-2	20-DP	RANGE HOOD / OPT. MICROWAVE	24	120	12-2	20-SP	DISHWASHER	⊕	120	12-2	20-SP	⊕
RANGE	21,23	220	8-3	40-DP	OPT. FREEZER	N/A	120	14-2	15-SP	THERMOSTAT	⊖	120	14-2	15-SP	⊖
FURNACE	14,16, 18,20	240	#10 NM-B 4-4-6 SE	30-DP 60-DP						FLUORESCENT FIXTURE WITH 2- 40W TUBES	⊞	240	14-2	15-SP	⊞
OPT. D/WASH	8	120	14-2	15-SP						EXIT SIGNS	⊞	120	14-2	15-SP	⊞
OPT. G/DISP	25	120	14-2	15-SP						JUNCTION BOX (NON POWERED UNLESS CIRCUIT NO. IS SHOWN)	⊞	120	14-2	15-SP	⊞
OPT. SPA OR WP OR JAC	N/A	120	12-2	20-SP/GFI						TELEPHONE JACK	⊞	120	12-2	20-SP/GFI	⊞

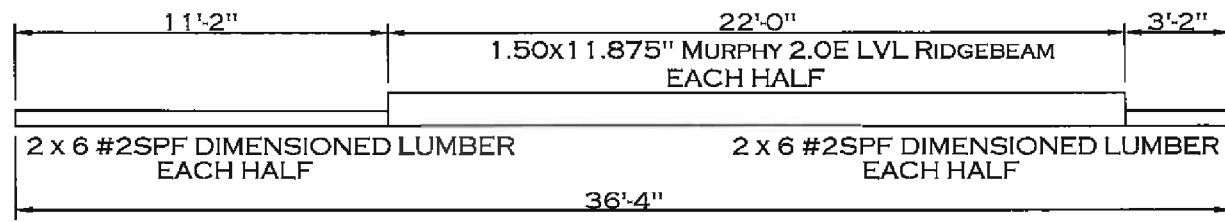
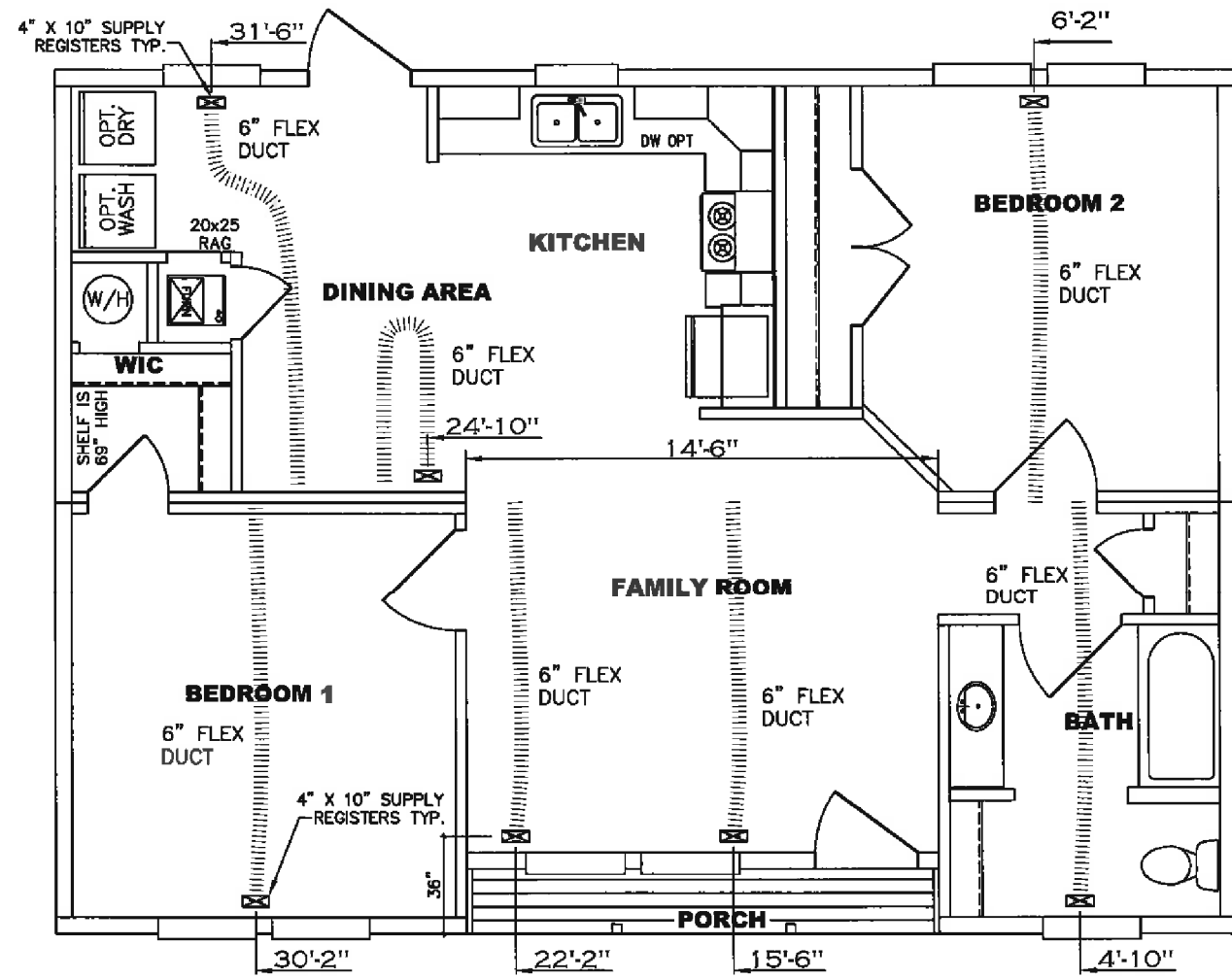
JAMES HARRILL PE
P.O. BOX 8750
Maryville, TN 37802



Clayton Homes Rutledge (Plant 925)
395 HWY 11W SOUTH Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097
TN# CHR-169

PROJECT #: M25KCD2B _TN
SCALE: 3/16"=1'-0"
JOB #: 18669-0014
HILBORN, WERNER, CARTER, AND ASSOCIATES, INC.
1627 SOUTH MYRTLE AVE.
CLEARWATER, FL 33756
Clayton - Plant 925
395 Hwy 11W South, Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097
ELECTRICAL PLAN
SHEET: E-1

*** MAIN DUCT TO BE SITE INSTALLED ***



MODULE-B

MODULE-A

Clayton Homes Rutledge (Plant 925)
 395 HWY 11W SOUTH Rutledge, TN 37861
 PH: 865.828.5771 FAX: 865.828.8097
 TN# CHR-169

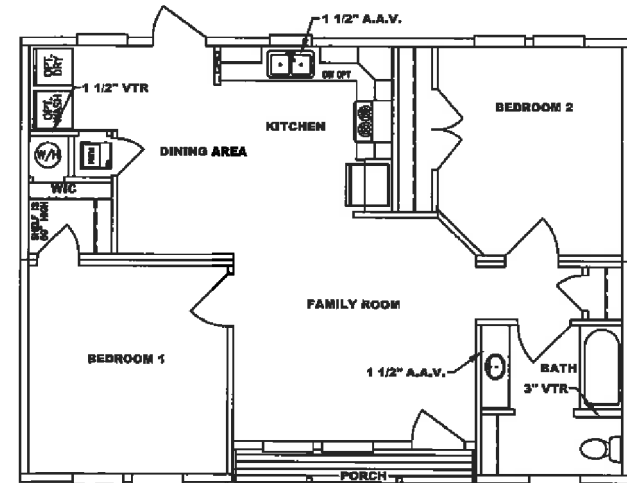
JAMES HARRILL PE
 P.O. BOX 8790
 Maryville, TN 37802



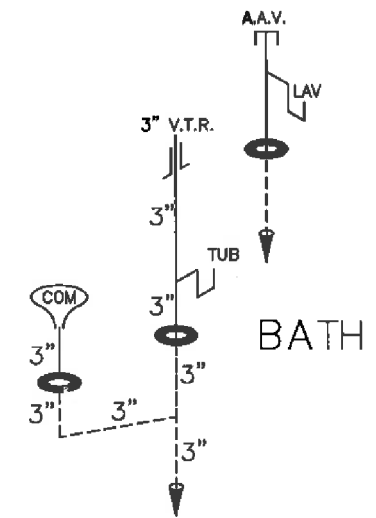
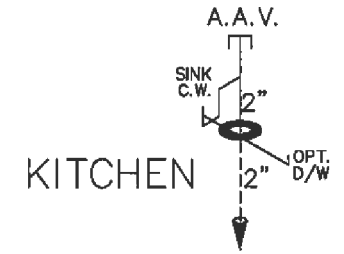
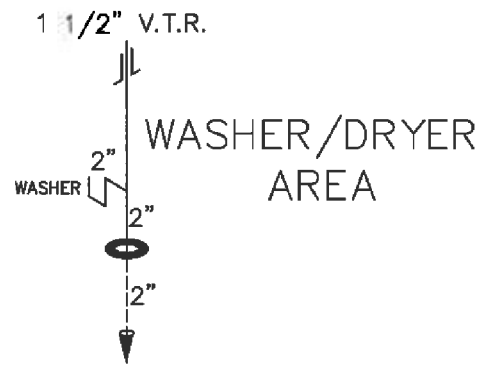
PROJECT #:	M25KCD2B_TN
SCALE:	3/16" = 1'-0"
JOB #:	1869-0014
TN#:	CHR-169
STATE LABEL(S):	TN
HILBORN, WERNER, CARTER, AND ASSOCIATES, INC. 1827 SOUTH MYRTLE AVE. CLEARWATER, FL 33756	
Clayton Plant 925 395 Hwy 11W South, Rutledge, TN 37861 PH: 865.828.5771 FAX: 865.828.8097	
HVAC AND RIDGEBEAM LAYOUT	
SHEET:	M-1

P.E. SEAL

THIRD PARTY SEAL



MODULE-B
MODULE-A



ALL DASHED LINES ON D.W.V.
ARE FIELD INSTALLED.

SITE WORK:
1. UNDER FLOOR DWV

***ALL DWV LINES
1 1/2\"**

Clayton Homes Rutledge (Plant 925)
395 HWY 11W SOUTH Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097
TN# CHR-169

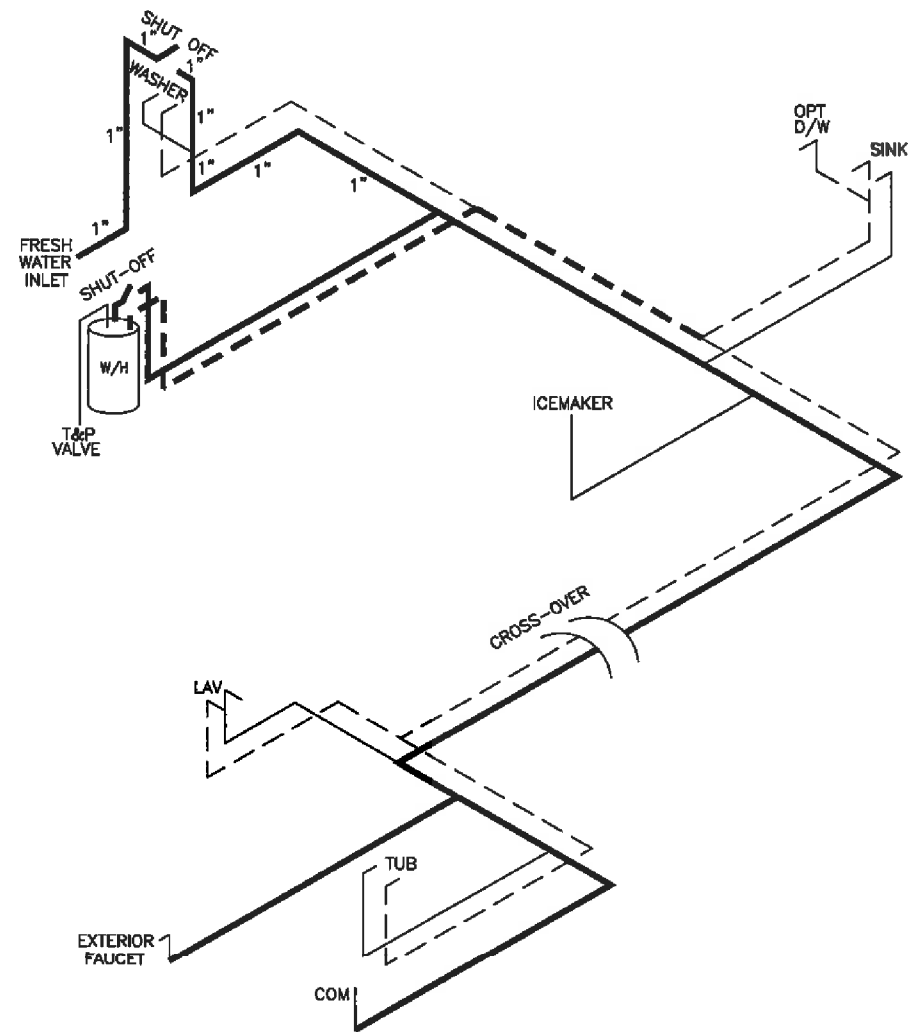
JAMES HARRELL PE
P.O. BOX 9790
Maryville, TN 37802



|P.E. SEAL

|THIRD PARTY SEAL

PROJECT #:	M25KCD2B_TN
SCALE:	3/16"=1'-0"
JOB #:	1869-0014
TN#:	CHR-169
STATE LABEL(S):	TN
HILBORN, WERNER, CARTER, AND ASSOCIATES, INC. 1627 SOUTH MYRTLE AVE. CLEARWATER, FL 33756	
Clayton 395 Hwy 11W South, Rutledge, TN 37861 PH: 865.828.5771 FAX: 865.828.8097	
DWV LINES	
SHEET:	P-1



NOTE:
DASHED LINES INDICATE HOT WATER
SOLID LINES INDICATE COLD WATER

———— = 3/4"
———— = 1/2"
** 1" PIPE SIZE NOTED

MDL= 56'

SUPPLY LINE SIZING IS BASED ON AN ASSUMED AVAILABLE PRESSURE OF 40 TO 48 PSI AT MAIN INLET AND SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.

TN# CHR-169
STATE LABEL(S): TN

PROJECT #M25KCD2B_TN
SCALE: 3/16"=1'-0"
JOB #: 1869-0014

HILBORN, WERNER, CARTER, AND ASSOCIATES, INC.
1627 SOUTH MYRTLE AVE.
CLEARWATER, FL 33756

Clayton
395 Hwy 11W South, Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097

Clayton Homes Rutledge (Plant 925)
395 HWY 11W SOUTH Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097
TN# CHR-169



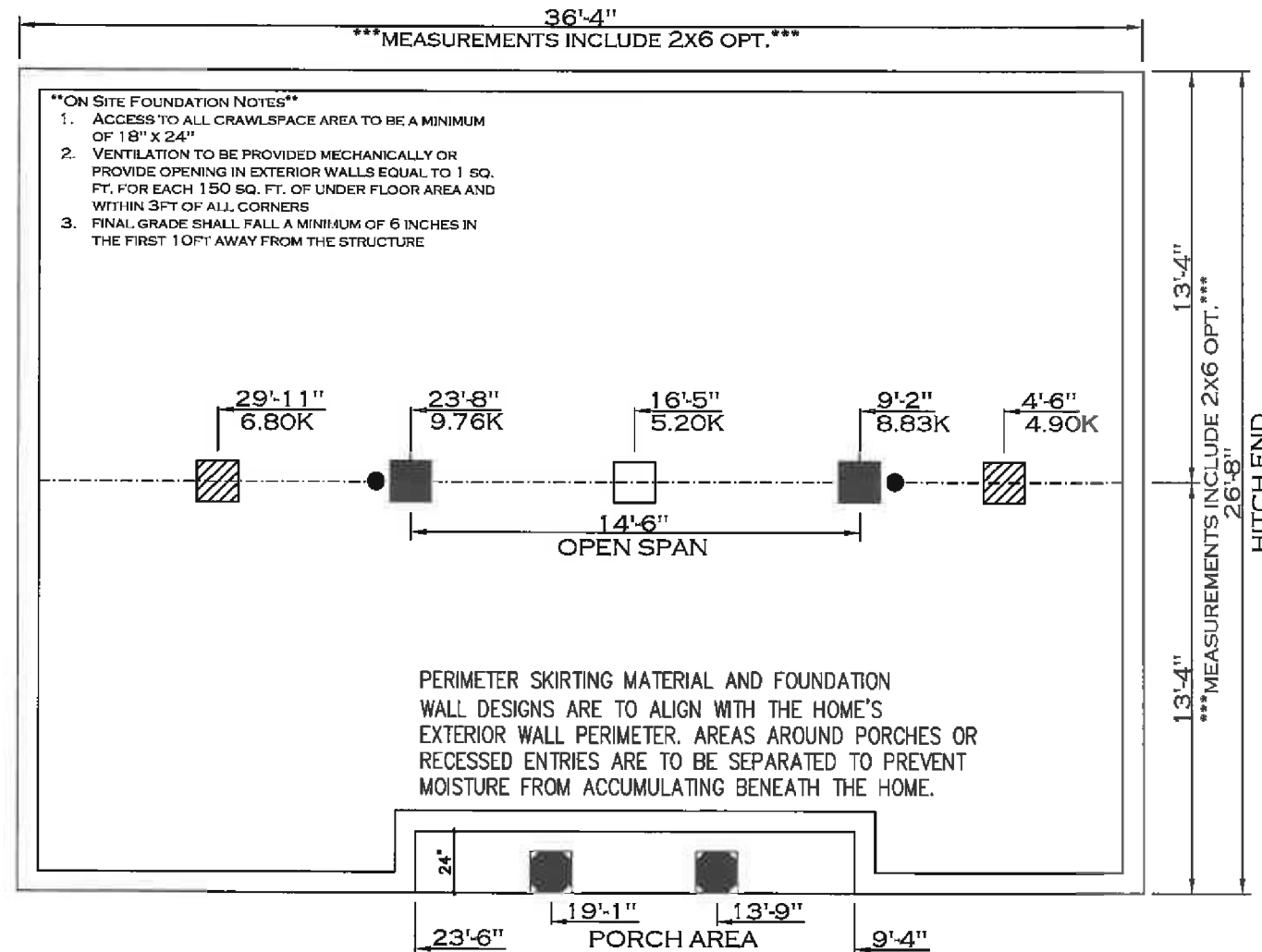
JAMES HARRILL PE
P.O. BOX 8790
Mayville, TN 37802

P.E. SEAL

THIRD PARTY SEAL

SUPPLY LINES

SHEET:
P-2



- **ON SITE FOUNDATION NOTES****
1. ACCESS TO ALL CRAWLSPACE AREA TO BE A MINIMUM OF 18" X 24"
 2. VENTILATION TO BE PROVIDED MECHANICALLY OR PROVIDE OPENING IN EXTERIOR WALLS EQUAL TO 1 SQ. FT. FOR EACH 150 SQ. FT. OF UNDER FLOOR AREA AND WITHIN 3FT OF ALL CORNERS
 3. FINAL GRADE SHALL FALL A MINIMUM OF 6 INCHES IN THE FIRST 10FT AWAY FROM THE STRUCTURE

PERIMETER SKIRTING MATERIAL AND FOUNDATION WALL DESIGNS ARE TO ALIGN WITH THE HOME'S EXTERIOR WALL PERIMETER. AREAS AROUND PORCHES OR RECESSED ENTRIES ARE TO BE SEPARATED TO PREVENT MOISTURE FROM ACCUMULATING BENEATH THE HOME.

PIER LEGEND	
□	= SUPPORT UNDER MATING OPENING
■	= SUPPORT AT MATING COLUMN
▨	= SUPPORT UNDER MATING WALL
■	= PIER PORCH/RECESSED ENTRY
□	= PIER MAIN BEAM
▨	= PIER PERIMETER
●	= TIE-DOWN SUPPORT (QTY PER TBL M, SEE DETAIL D-6 IN FOUND. PKG.)

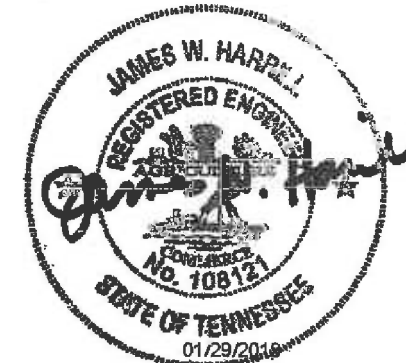
SEE FOUNDATION PACKAGE FOR ADDITIONAL DETAILS AND INFORMATION

FOUNDATION WIDTH IS NOMINAL AND DOES NOT TAKE INTO ACCOUNT THE OSB, SIDING, OR CABLES IN THE MATELINE AREA. WIDTH MAY NEED TO BE ADJUSTED ACCORDINGLY.

FOUNDATION DESIGN SPECIFICATIONS

- SEISMIC DESIGN CATEGORY = C
- GROUND SNOW LOAD = 20 PSF MAX
- MATING LINE GIRDER BEAM = (4) 2x10 #2 SP
- GIRDER BEAM SPLICE PLATE = 6" x 8" MIN.

JAMES HARRILL PE
P.O. BOX 9790
Maryville, TN 37802



Clayton Homes Rutledge (Plant 925)
395 HWY 11W SOUTH Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097
TN# CHR-169

PROJECT #:	M25KCD2B_TN
SCALE:	3/16"=1'-0"
JOB #:	1869-0014
TN#:	CHR-169
STATE LABEL(S):	TN

HILBORN, WERNER, CARTER, AND ASSOCIATES, INC.
1627 SOUTH MYRTLE AVE.
CLEARWATER, FL 33756

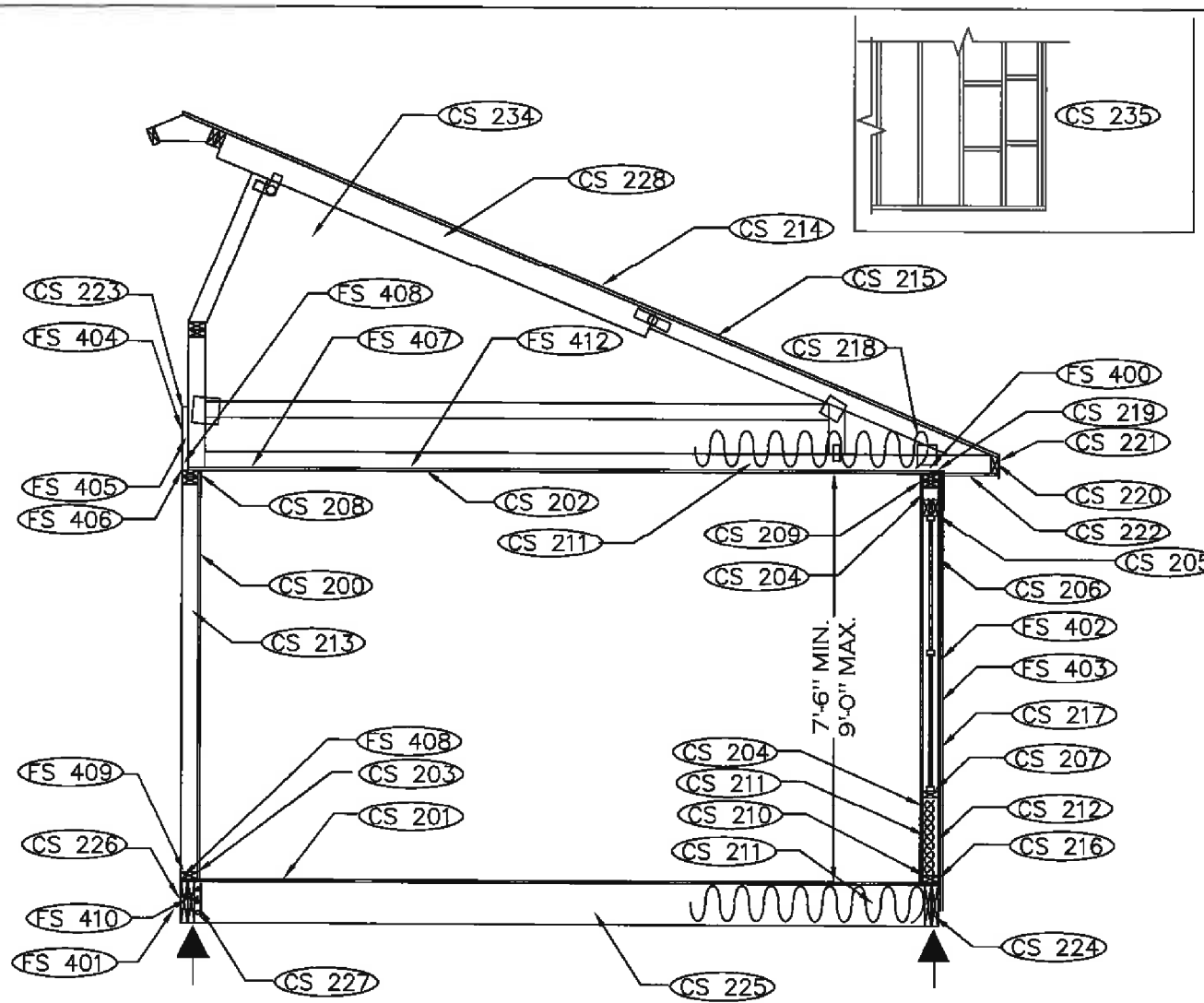
Clayton
Clayton - Plant 925
395 Hwy 11W South, Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097

OFF FRAME
FOUNDATION

SHEET:
F-2

RD PARTY SEAL

Jan 24, 2019 - 3:25pm R:_CAD\KCD\Typical Off-Frame Cross Section KCD2B.dwg



- CS 200 3/8" VINYL COVERED GYPSUM BOARD THROUGHOUT INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
OPT. 1/2" GYPSUM BOARD TAPED, SANDED AND FINISHED MAY BE SUBSTITUTED IN ANY LOCATION FOR THE 3/8" VINYL COVERED GYPSUM.
- CS 201 19/32" MINIMUM T&G OSB, EXP. 1, 24/16 OR 5/8" T&G PLYWOOD, STURD-I-FLOOR EXP. 1. ALL ENDS ARE BUTT JOINTS. INSTALLED PERPENDICULAR TO JOIST.
- CS 202 1/2" MINIMUM GYPSUM BOARD INSTALLED PER MANUFACTURER'S SPECIFICATIONS. (ACOUSTICALLY TREATED) (WHEN SUPPORTS ARE 24" O.C. AND WET SPRAY-ON FINISH IS USED GYPSUM BOARD SHALL BE 5/8 INCH THICK OR GOLD BOND 1/2 INCH HIGH STRENGTH CEILING BOARD OR EQUAL SHALL BE USED). SPRAY APPLIED VAPOR BARRIER (ONE PERM MAX.).
- CS 203 BOTTOM SOLE PLATE 2X3 #3 SPF MIN.
- CS 204 CRIPPLE STUD 2X6 #2 SPF MIN. 16" O.C.
- CS 205 2x HEADER PER EW-20.0 IN APPROVED PACKAGE.
- CS 206 TYPICAL WINDOW OR DOOR SEE FLOOR PLAN FOR SPECIFICATIONS.
- CS 207 WINDOW SILL PLATE MIN. 2x6 SPF #2
- CS 208 DOUBLE TOP PLATE MIN. 2X3 #3 SPF
- CS 209 DOUBLE TOP PLATE MIN. 2X6 #3 SPF
- CS 210 BOTTOM SOLE PLATE 2X6 #3 SPF MIN.
- CS 211 INSULATION W/ VAPOR BARRIER-SEE ATTACHED RESCHECKS OR FLOOR PLAN FOR R - VALUE.
- CS 212 EXTERIOR WALL STUDS 2X6 SPF #2 AT 16" O.C. OR SP #2 @ 12" O.C. WITHIN 36" CORNER ZONES & 16" O.C. ELSEWHERE.
- CS 213 MARRIAGE WALL STUDS MIN 2X3 SPF #3 AT 16" O.C.
- CS 214 7/16" OSB SHEATHING RATED EXP 1, 24/16
- CS 215 ASPHALT OR FIBERGLASS SHINGLES OVER TWO LAYERS OF 15# FELT FOR PITCHES UP TO 4:12 AND ONE LAYER FOR 4:12 OR STEEPER INSTALLED PER MANUFACTURER'S SPECIFICATIONS. UNDERLAYMENT SHALL CONFORM WITH ASTM D 226, TYPE I, OR ASTM D 4869, TYPE I. CLOSED VALLEY FLASHING SHALL COMPLY WITH ASTM D 6380 TYPE II OR TYPE III. ASTM D 1970 MAY BE USED IN LIEU OF LINING MATERIAL.
- CS 216 7/16" OSB SHEATHING RATED EXP. 1, 24/16 WITH WEATHER RESISTIVE BARRIER BELOW ALL EXT. FINISH MATERIAL. CORROSION-RESISTANT FLASHING REQUIRED AT ALL LOCATIONS AS SHOWN ON APPROVED MANUAL DETAILS
- CS 217 LAP BOARD, WOOD OR VINYL SIDING, HARDI SIDING, OR EXPOSED SHEATHING FOR ON SITE EXTERIOR FINISH INSTALLATION.
- CS 218 MAINTAIN 1" MIN. SPACE BETWEEN INSULATION AND ROOF SHEATHING.
- CS 219 COMPRESSION STRIP SHIM (2" CONTINUOUS)
- CS 220 2X MIN. SPF #3 RIM
- CS 221 ALUMINUM OR HARDI FASCIA MATERIAL
- CS 222 CONTINUES VENTILATED SOFFIT
- CS 223 RIDGE BEAM PER RC-60.0 IN APPROVED PACKAGE
- CS 224 FLOOR RIM JOIST PER EL-100.0 IN APPROVED PACKAGE
- CS 225 FLOOR JOIST PER EL-100.0 IN APPROVED PACKAGE
- CS 226 MATE LINE FLOOR RIM JOIST PER EL-100.0 IN APPROVED PACKAGE
- CS 227 JOIST HANGER PER EL-120.0 IN APPROVED PACKAGE
- CS 228 ENGINEERED TRUSSES PER C-1 SHEET
- CS 229 ENDWALL OVERHANG DETAIL PER RC-10.0 DETAIL(S)
- CS 230 RESERVED FOR FUTURE USES
- CS 231 RESERVED FOR FUTURE USES.
- CS 232 RESERVED FOR FUTURE USES
- CS 233 RESERVED FOR FUTURE USES
- CS 234 GABLE ENDWALL FRAMING PER RC-21.0 DETAIL(S).
- CS 235 2x FULL DEPTH BLOCKING PER FL-100.0 AT ALL ENDWALL LOCATIONS WHEN AN UNBALANCED BACKFILL OCCURS.

- FS 400 ROOF TRUSS ATTACHMENT TO TOP PLATE PER RC-30.0 IN APPROVED PACKAGE.
- FS 401 EXTERIOR WALL STRAPPING AND FASTENING PER EW-31.0 IN APPROVED PACKAGE.
- FS 402 EXTERIOR STRUCTURAL SHEATHING PER SW-10.0 OR SW-35.0, WHICH EVER IS WORST CASE OF, APPROVED STATE PACKAGE.
- FS 403 RESERVED FOR FUTURE USES
- FS 404 SITE SET UP CONNECTION: 3/8" LAG BOLT WITH 1" MIN. PENETRATION LAG SCREW SPACED 16" O.C. STAGGERED FROM SIDE TO SIDE. ALT. 1/2" DIA. BOLT WITH 1 3/8" WASHER SPACED 24" O.C. MAX.
- FS 405 FASTEN RIDGE BEAM TO EACH TRUSS PER RC-60.0 IN APPROVED PACKAGE.
- FS 406 RIDGEBEAM FASTENED TO TOP PLATE WITH #8x4" SCREWS 16" O.C.
- FS 407 INTERIOR PARTITIONS FASTENED TO TRUSS OR LAYFLATS IN ROOF AND FLOOR PER PT-40.0 IN APPROVED PACKAGE.
- FS 408 MARRIAGE WALL STRAPPING AND FASTENING PER MW-30.0 IN APPROVED PACKAGE. (TYPICAL EACH MARRIAGE WALL)
- FS 409 EXTERIOR WALLS FASTENED TO FLOOR PER EW-31.0 IN APPROVED PACKAGE.
- FS 410 SITE SET UP CONNECTION: 3/8" LAG SCREWS STAGGERED FROM SIDE TO SIDE AT 48" O.C. MAXIMUM. LAG SCREWS MUST PENETRATE 1.75" MINIMUM INTO ADJACENT MODULE RIM JOIST OR SITE INSTALL 1/2" X 4" BOLTS INTO PRE-DRILLED HOLES AT 48" O.C. MAX.
- FS 412 ENDWALL TRUSS TO PLATE AND PLATE TO FLOOR PER SW SECTION IN APPROVED STATE MANUAL.

NOTE:
1. BUILDING IS SYMMETRICAL.
2. FLOOR INSULATION MAY BE SITE INSTALLED.

JAMES HARRILL PE
P.O. BOX 9790
Moryville, TN 37802



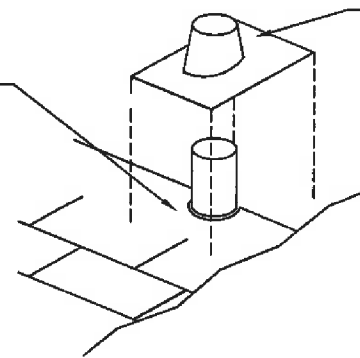
Clayton Homes Rutledge (Plant 925)
395 HWY 11W SOUTH Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097
TN# CHR-169

P.E. SEAL THIRD PARTY SEAL

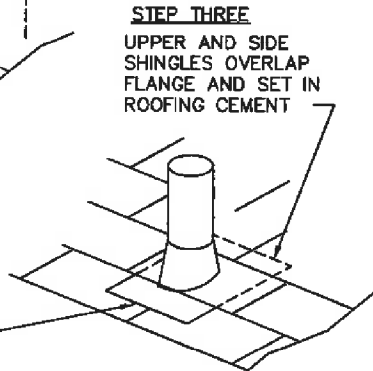
DRAWN BY: B. RUSSELL
TN# CHR-169
SCALE: N.T.S.
HILBORN, WERNER, CARTER, AND ASSOCIATES, INC.
1827 SOUTH MYRTLE AVE
CLEARWATER, FL 33756
CMH MANUFACTURING, INC.
Cheney, Plant 925
395 Hwy 11W South, Rutledge, TN 37861
PH: 865.828.5771 FAX: 865.828.8097
OFF FRAME CROSS SECTION
SHEET: X-2

ROOF PENETRATIONS

STEP ONE
SHINGLE CUT TO FIT OVER PIPE AND SET IN ROOFING CEMENT



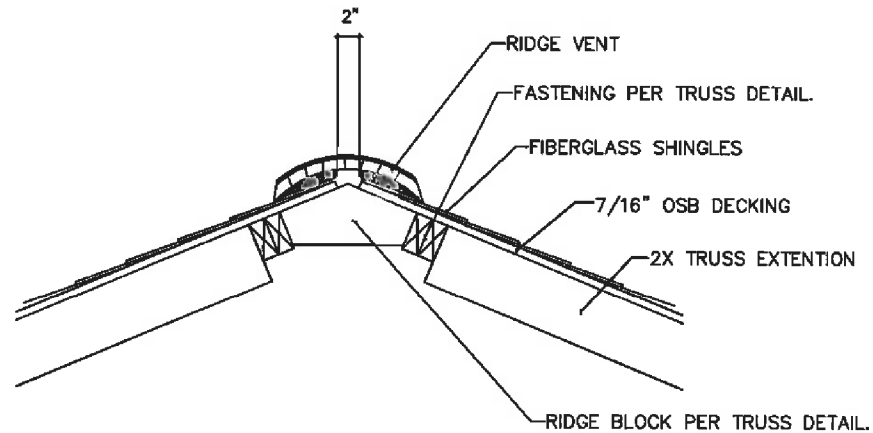
STEP TWO
FLANGE INSTALLED OVER PIPE ACCORDING TO MANUFACTURERS INSTRUCTIONS



STEP THREE
UPPER AND SIDE SHINGLES OVERLAP FLANGE AND SET IN ROOFING CEMENT

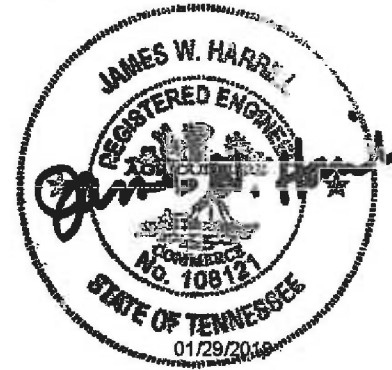
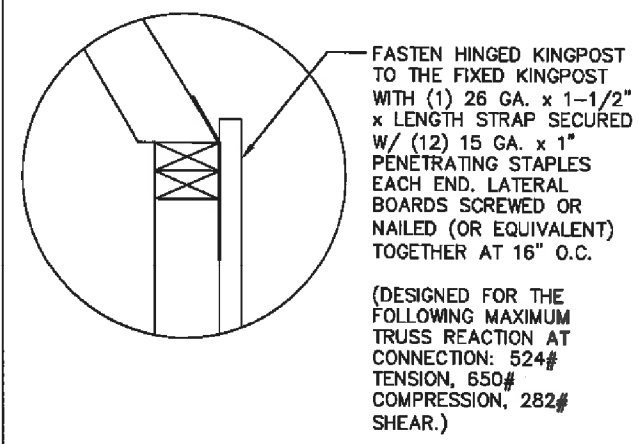
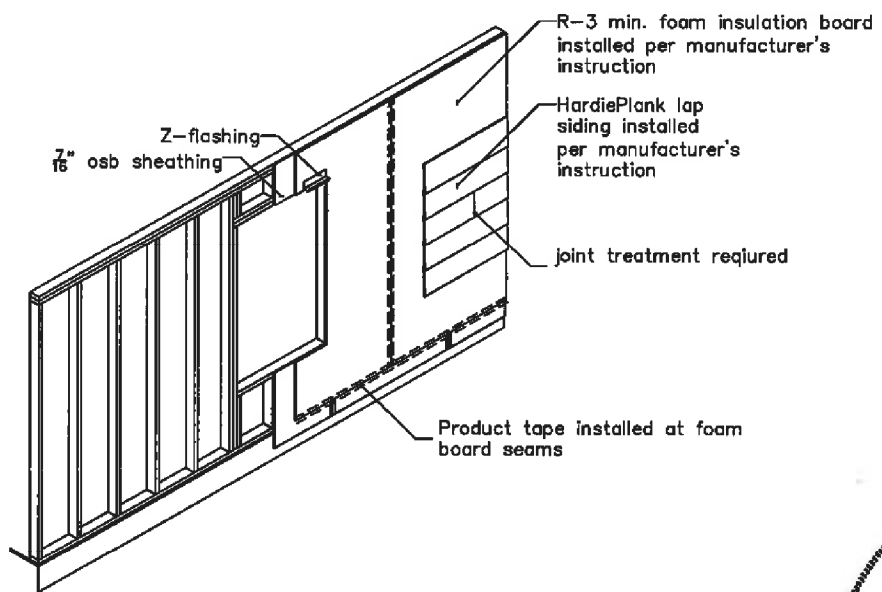
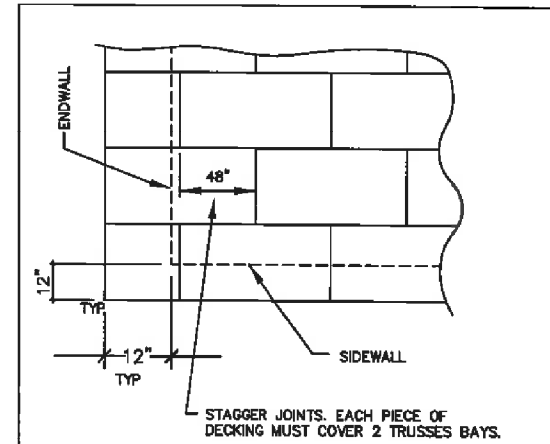
LOWER PART OF FLANGE OVERLAPS LOWER SHINGLES

- NOTES:**
1. WHEN ROOF DECKING IS PENETRATED, THE AREA PENETRATED MAY BE 1/2" +/- 1/4" LARGER THEN ITEM PROTRUDING THRU OR PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
 2. ALL SHINGLES PENETRATIONS TO BE SEALED IN ACCORDANCE WITH THE FLASHING MANUFACTURER INSTALLATION INSTRUCTIONS WHEN APPLICABLE. OTHERWISE USE DETAIL ABOVE.
 3. DO NOT USE PETROLEUM BASED SEALANTS ON BASE OF FLASHING WHEN USING A NO CAULK FLASHING.
 4. PLUMBING VENT PENETRATION SHALL EXTEND A MINIMUM OF 6" ABOVE ROOF FINISH.
 5. CHIMNEYS TO BE LOCATED BETWEEN TRUSSES TO MAINTAIN MINIMUM REQUIRED DISTANCES FROM COMBUSTIBLE MATERIAL.
 6. DETAILS APPLICABLE TO PLUMBING VENTS, FLUES AND CHIMNEYS, AND ELECTRICAL MASTS.



Ridge Cap Vent Length			
Floor Width	26.67	% High Vent	0.80
Floor Length	38.33	% Low Vent	0.20
Attic Area	940.5600	Sq. Ft.	
Required Vent	361	Sq. In.	
Ridge Cap Vent	18	Sq. In. per Ft.	
Length of Ridge Cap	20	Ft.	

LOW VENT WILL BE HANDLED BY SOFFIT VENTING



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Maryville, TN 37802

P.E. SEAL

THIRD PARTY SEAL

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1827 SOUTH MYRTLE AVE.
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Clayton - Plant 925
395 Hwy 11W South, Rutledge, TN 37861
P-H: 865.828.5771 FAX: 865.828.8097
CROSS SECTION DETAILS
SHEET: D-1