RANCH STRUCTURAL SYSTEM

MODEL: SVM-11815

SUN VALLEY HOMEBUILDERS

3 BEDROOM - 2 BATH
NOMINAL SIZE 32'-0"x 68'-0"
ACTUAL SIZE 30'-0" x 64'-0"
TOTAL AREA: 1920 Sq. Ft.

STATE FLORIDA

CODES

2020 National Electrical Code

8TH EDITION (2023)Florida Energy Effciency Code for Building Construction (W/2024 SUPPLEMENT 1)

FAC-61-41 MANUFACTURED BUILDINGS
8TH EDITION (2023) Florida Residential Code (W/2024 SUPPLEMENT 1)

THESE PLANS COMPLY WITH RULE 61G20-3.006 FOR PRODUCT APPROVAL

DWELLING IS NOT SPRINKLED

CEILING HEIGHT:	8'-0" Max
MEAN ROOF HEIGHT:	20 FT
CLIMATE ZONE:	2
EXPOSURE FACTOR:	C
SEISMIC ZONE	C

DESIGN CRITERIA

OCCUPANCY GROUP	SINGLE FAMILY DWELLING
CONSTRUCTION TYPE	WOOD FRAME UNPROTECTION
RISK CATEGORY	2

LOAD REQUIREMENTS

FLOOR LIVE LOAD	40 PSF
FLOOR DEAD LOAD	10 PSF
WIND SPEED	(VULT-160MPH)(VASD-124MPH)

16" O.C. TRUSSES THROUGHOUT HOME

ROOF LIVE LOAD	20 PSF TC, 0 PSF BC
ROOF DEAD LOAD	10 PSF TC, 10 PSF BC

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult. 124 MPH Vasd. Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

SPECIAL CONDITIONS & REQUIREMENTS:

1. Any site added structures must be independent of the factory building unless the entire building is re-evaluated by the site engineer/architect.

2.Typical foundation layout shown in this package is to aid the site engineer/architect for locations of required supports. Actual foundation must be designed to site conditions for all applicable loads. This includes but is not limited to construction of the foundation, seismic design and attaching the home to the foundation, along with the resistance to lateral, longitudinal shear, uplift and downward forces in both directions. Refer to bracing page for applicable bracing / seismic loads for attaching the home to foundations.

3. The Engineer seal applies ONLY to FACTORY MANUFACTURED portions of the building. Seal does not apply to site installed elements or portions built on site such as, but not limited to; foundation, bracing tie down to foundation, exterior steps, or other site work. Site work must be designed BY OTHERS for site conditions, under local jurisdiction.

This building shall not be installed in locations with higher loads than designed loads specified in this package

STRUCTURAL SPECIFICATIONS INDEX

SITE INSTALLED ITEMS:

NOTE THAT THIS LIST DOES NOT NECESSARILY LIMIT THE ITEMS OF WORK AND MATERIALS THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SITE RELATED ITEMS ARE SUBJECT TO LOCAL JURISDICTION APPROVAL.

1. THE COMPLETE FOUNDATION SUPPORT AND TIE DOWN SYSTEM.
2. RAMPS, STAIRS AND GENERAL ACCESS TO THE BUILDING.
3. PORTABLE FIRE EXTINGUISHER(S).
4. BUILDING DRAINS, CLEANOUTS, AND HOOK-UP TO PLUMBING SYSTEM.
5. ELECTRICAL SERVICE HOOK-UP (INCLUDING FEEDERS) TO THE BUILDING.
6. THE MAIN ELECTRICAL PANEL AND SUB-FEEDERS.
7. CONNECTION OF ELECTRICAL CIRCUITS CROSSING OVER MODULE MATING LINE(S) - (MULTI-UNITS ONLY).
8. STRUCTURAL AND AESTHETIC INTERCONNECTIONS BETWEEN MODULES (MULTI-UNITS ONLY).
9. EXTERIOR GLAZING PROTECTION.
10. GUTTERS & DOWN SPOUTS WHEN REQUIRED.
11. HVAC EQUIPMENT AND CONNECTIONS.
12. WASHER AND DRYER.
13. FIREPLACE FLUE.
14. MATELINE DOORS.
15. BUILDING SHALL BE OVER 5' AWAY FROM ALL PROPERTY LINES.
16. ALL PLUMBING BELOW FLOOR SYSTEM
17. SINGLE RIDGE CAP AND SET-UP OF FOLD DOWN TRUSS IF APPLICABLE
18. DRYER VENT TO BE RAN TO EXTERIOR
19. RETURN AIR SIZE MUST BE CHECKED FOR PROPER SIZE WITH HEAT PUMP INSTALLATION
    PROTECTION OF OPENINGS: REF. R301.2.1.2 (IRC)
    PROVIDED ON-SITE BY OTHERS
19. HOME MUST BE IN COMPLIANCE WITH THE FLORIDA BUILDING CODE.

FLORIDA BUILDING MAT.

.01 SIMPSON LTS & LSTA & CS14
- A. SIMPSON LTS- FL-10456.18-R8
- B. SIMPSON CS14- FL-10456.3-R8
- C. SIMPSON LSTA- FL-13872.5-R5
- D. SIMPSON H2.5A- FL-10456.7-R8
- E. SIMPSON HTS16- FL-10456.12 - R8
- F. SIMPSON SDWC15600- FL-13975.2-R7
- G. SIMPSON HDU FL-10441.4-R9
- H. SIMPSON MSTC66- FL-13872.10-R5

.03 OWENS CORNING SHINGLES
- A. FL- 10674-R19

.04 MFM SHINGLE STARTER
- A. FL- 11842.1-R9

.05 CROFT WINDOWS
- A. FL- 16082.1-R8

.06 DUNBARTON DOORS
- A. FL- 15362 R4 (9-LITE)
- B. FL- 15362.1 R4 (6 PANEL)
- C. FL- 15362.3 R4 (ATRIUM)

.07 CEMPLANK LAP SIDING
- A. FL- 13192 -R8

.09 CEMPLANK SIDING
- A. FL- 13223 - R8

.09 CEMPLANK PANELS
- A. FL- 13265.1-R7

.10 VINYL SIDING
- A. FL- 15935-R7

Nader Tomasbi, P.E.

Digitally signed by Nader Tomasbi, P.E.
Date: 2024.07.11 22:54:16 -04'00'

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

Wind Importance Factor: 1.0
Internal Pressure Coefficient: 0.18

ADDITIONAL SPECIAL CONDITIONS AND/OR LIMITATIONS AND/OR ITEMS SUBJECT TO LOCAL

A. ELECTRICAL
1. INTERCONNECTION BETWEEN MODULES.
2. SERVICE ENTRANCE AND GROUNDING ELECTRODE CONDUCTORS.
3. FIRE WARRING EQUIPMENT IS TO BE TESTED FOR PROPER OPERATION SEE EQUIPMENT INSTRUCTIONS.

B. PLUMBING
1. ALL PIPING CROSSOVER CONNECTIONS BELOW FLOOR.
2. WITNESS LEAKAGE TEST OF GAS, DWG AND WATER SUPPLY SYSTEMS.
3. CONNECTION TO GAS, SEWER AND WATER UTILITIES.
4. WITH HINGE ROOF PLUMBING MUST BE FINISHED ON SITE BY OTHERS.
5. OFF FRAME HOUSE ALL GAS APPLIANCE WILL HAVE TO BE PLUMBED ON SITE BY OTHERS.

C. HEATING
1. CROSS-OVER CONNECTION BETWEEN UNITS..
2. RETURN AIR CONNECTION HAVE TO BE HOOKED UP IF REQUIRED .
3. A DUCT TIGHTNESS TEST IS REQUIRED TO BE PERFFORMED ON SITE AND SHALL BE VERIFIED BY EITHER OF THE FOLLOWING : POST-CONSTRUCTION TEST: LEAKAGE TO OUTDOORS SHALL BE LESS THEN OR EQUAL TO 8CFM(226.5lmin) PER 100 ft2 (9.29m2 OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFRENTIAL OF TOTAL LEAKAGE LESS THEN OR EQUAL TO 12 cfm (12 Min) PER 100FT2 (9.29 M2 OF CONDITIONED FLOOR ARE WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25Pa) ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTER BOOTS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.

DATA SHEET AND THE STATE (DBPR) INSIGNIA SHALL BE PERMANENTLY MOUNTED TO OR ABOUT THE ELECTRICAL PANEL

D. STRUCTURAL
1. THE DESIGN AND CONSTRUCTION OF THE FOUNDATION SYSTEM.
2. COMPLETION OF EXTERIOR SIDING AT END WALLS.
3. INSTALLATION OF GABLE OR RIDGE VENTS.
4. CONNECTION OF FLOOR SYSTEM.
5. CONNECTION OF ROOF SYSTEM @ RIDGE.
6. CONNECTION OF GROUND ANCHORS.
7. PORCH RAILS ON SITE BY OTHERS PER THE (IRC R312).
8. TRUSS OVER THE INTERIOR SHEAR WALL ARE TO BE SHEATHED WITH HINGED ROOFS SHEATHED HAS TO BE FINSHED ON SITE BY OTHERS.
9. SIDING FOR ENDS IS SHIPPED LOOSE FOR ON SITE INSTALLATION BY OTHERS.
10. HANDRAILS, STOOPS, STAIRS, GUTTERS, DOWNSPOUTS, STORM SHUTTERS OR REMOVABLE TYPE COVERINGS, AND SPLASH BLOCKS ARE FURNISHED AND INSTALLED BY OTHERS IN ACCORDANCE WITH STATE AND LOCAL CODES.

FL : NOTES

A. RAISED SET OF PLANS ARE ON FILE IN THE 3rd PARTY AGENCY'S OFFICE AS DIRECTED BY THE DBPR

B. THIS BUILDING HAS NOT BEEN DESIGNED OR APPROVED FOR PLACEMENT IN HVHZ (i.e., DADE OR BROWARD)

C. THIS BUILDING IS SUBJECT TO REVIEW AND APPROVAL OF THE FIRE INSPECTOR ON SITE WITH COMPLIANCE WITH CH. 633 FIRE SAFETY CODE

D. THIS STRUCTURE HAS BEEN DESIGNED FOR ERECTION OR INSTALLATION ON A SITE BUILT PERMANENT FOUNDATION AND IS NOT DESIGNED TO BE MOVED ONCE SO ERECTED OR INSTALLED

E. SITE ADDRESS PER FRC R 319.1 ON SITE BY OTHERS

REVISIONS	

CUSTOMER:

Nader Tomasbi, P.E.
58665 Glenriver Drive
Goshen IN 46526

APPROVAL STAMP:

DATE 7/12/2024 CERT. NO SMP-056
PLAN NUMBER MFT10186-SVM-11815
APPROVED BY Michael Faller
(signature)

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM

MOD

DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

APPROVED BY: J.TRIPLETT	SCALE: NTS
PRINT DATE: 07/03/24	REV:
TITLE: COVER SHEET	
MODEL: SVM-11815	DWG. NO: A.01
MODEL: MFT10186-SVM-11815	

SITE INSTALLED ITEMS:

NOTE THAT THIS LIST DOES NOT NECESSARILY LIMIT THE ITEMS OF WORK AND MATERIALS THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SITE RELATED ITEMS ARE SUBJECT TO LOCAL JURISDICTION APPROVAL.

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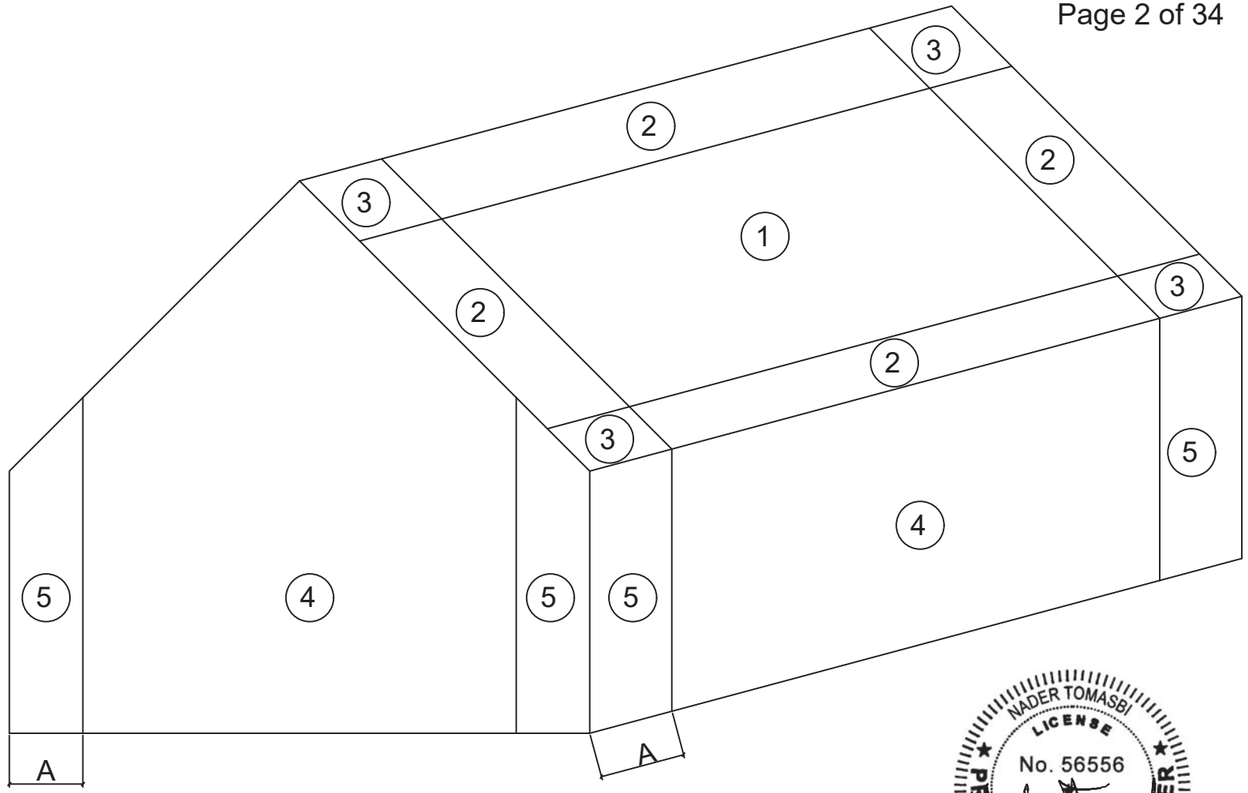
10. GUTTERS & DOWN SPOUTS WHEN REQUIRED.
11. HVAC EQUIPMENT AND CONNECTIONS.
12. WASHER AND DRYER.
13. FIREPLACE FLUE.
14. MATELINE DOORS.
15. BUILDING SHALL BE OVER 3' AWAY FROM ALL PROPERTY LINES.
16. ALL PLUMBING BELOW FLOOR SYSTEM
17. SINGLE RIDGE CAP AND SET-UP OF FOLD DOWN TRUSS IF APPLICABLE
18. DRYER VENT TO BE RAN TO EXTERIOR
19. RETURN AIR SIZE MUST BE CHECKED FOR PROPER SIZE WITH HEAT PUMP INSTALLATION

NOTES:

1. THESE PLANS COMPLY WITH RULE 61G20-3.006 FOR PRODUCT APPROVAL
2. THE RAISED SEAL SET OR ELECTRONIC SEALED SET) OF PLANS ARE ON FILE IN THE 3 RD PARTY AGENCY'S OFFICE AS DIRECTED BY THE DBPR
3. THIS BUILDING IS SUBJECT TO REVIEW AND APPROVAL OF THE FIRE INSPECTOR ON SITE WITH COMPLIANCE WITH CH.633 FIRE SAFETY CODE.
4. THIS STRUCTURE HAS BEEN DESIGNED FOR ERECTION OR INSTALLATION ON SITE BUILT PERMANENT FOUNDATION AND IS NOT DESIGNED TO BE MOVED ONCE SO ERECTED OR INSTALLED.
5. BUILDING ADDRESS AS REQUIRED BY FRC R319.1 TO BE INSTALLED ON SITE BY OTHERS
6. BUILDING HAS NOT BEEN DESIGNED OR APPROVED FOR PLACEMENT IN HIGH VELOCITY HURRICANE ZONES (HVHZ).



NADER TOMASBI
LICENSE
No. 56556
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/11/2024

COMPONANTS & CLADDING DESIGN LOAD SCHEDULE (7<D>30.26DEGREES)		
EXPOSURE FACTOR:		C
		VULT PRESSURES
ZONE	(+)	(-)
1	32.58	-59.70
2	32.58	-65.70
3	32.58	-80.46
4	35.58	-38.58
5	35.58	-47.64
2		-89.82
3		-104.58

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APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult 123 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

	REVISIONS

CUSTOMER:

APPROVAL STAMP:

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM

MOD

DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
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APPROVED BY: J.TRIPLETT
SCALE: NTS
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TITLE: COVER SHEET
MODEL: SVM-11815
DWG. NO: A.01.1
MODEL: MFT10186-SVM-11815

NOTES:

1. LIGHT AND VENTILATION PROVIDED WILL BE IN ACCORDANCE WITH 8% OF THE ROOM AREA FOR LIGHT AND 4% OF THE ROOM AREA FOR VENTILATION.
   ROOMS: DINING ROOMS, FAMILY ROOMS, DENS, BEDROOMS,
2. FOR DOOR AND WINDOW SIZES SEE SPEC. (SEE PAGE A.02.)
3. INDIVIDUAL COMPONENTS IN WHOLE OR IN PART SUCH AS LIVING LINEN AND CLOTHES CLOSETS, UTILITY AREAS, STAIRWELLS, BATHS, KITCHENS, ETC. MAY BE INTEGRATED WITH ANY FLOOR PLAN. THEY MAY BE ROTATED 90 DEGREES AND/OR REVERSED IN ANY DIRECTION, IN PART OR IN THEIR ENTIRETY.
4. ALL FLOOR PLANS MAY BE ROTATED 180 DEGREES AND/OR REVERSED IN ANY DIRECTION, IN PART OR IN THEIR ENTIRETY.
5. ALL INDIVIDUAL FLOOR PLANS WILL BE WITHIN THE DIMENSIONAL LIMITS SHOWN ON THIS DRAWING.
6. OVERALL DIMENSIONS OF HOME WILL VARY ACCORDING TO THICKNESS OF SHEATHING MATERIAL INSTALLED TO THE EXTERIOR SURFACE OF EXTERIOR WALLS AND TO EXTERIOR SURFACE OF THE MARRIAGE WALLS OF EACH HOME SECTION.
7. EGRESS WINDOWS SHALL HAVE A MIN. CLEAR WIDTH OF 20" AND A MIN. CLEAR HEIGHT OF 24" WITH A TOTAL CLEAR OPENING OF 5.7 SQ.FT. WINDOW GUARDS ARE PROVIDED AND INSTALLED BY OTHERS WHEN NEEDED PER THE CURRENT IRC
8. MINIMUM ROOM SIZE IS 70 SQ.FT. WITH A 7'-0" MIN. DIMENSION AND 1 ROOM AREA OF AT LEAST 120 SQ.FT.
9. LABELS SHALL BE LOCATED AS FOLLOWS: STATE INSIGNIA, DATA PLATE, AND THIRD PARTY LABELS SHALL BE LOCATED ON THE WALL BELOW THE KITCHEN SINK. ADDITIONAL THIRD PARTY LABELS TO BE LOCATED IN SECONDARY BEDROOM CLOSET.
10. OPTIONAL FIREPLACES MAY BE ADDED, PROVIDING THEY MEET ALL REQUIREMENTS OF IRC/MECHANICAL CODE AND INSTALLED PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
11. EXTERIOR DOORS MAY BE RELOCATED IN SAME ROOM TO DIFFERENT AREA
12. WINDOWS MAY BE REARRANGED OR A WINDOW MAY BE ADDED PER IECC
13. CLOTHS DRYER EXHAUST ON SITE BY OTHERS.
14. ALL EXHAUST AIR FROMRANGE HOODS AND BATHROOM VENTS SHALL BE VENTED TO THE EXTERIOR.
15. ATTIC ACCESS OPENING SHALL BEAR A MINIMUM DIMENSION OF 22" X 30" WITH A VERTICAL HEIGHT OF 30". (R807.1). THE ACCESS HOLE MUST BE INSULATED TO THE SAME R-VALUE AS REQUIRED FOR THE ROOF/CEILING CONSTRUCTION PER THE CURRENT IECC.
16. ALL SOURCES OF POSSIBLE AIR INFILTRATION ARE REQUIRED TO BE CAULKED, GASKETED, WEATHERSTRIPPED, WRAPPED , OR OTHERWISE SEALED TO LIMIT AIR MOVEMENT.
17. COSTRUCTION DOUMENTS TO BE KEPT ON JOB SITE
18. SMOKE-DEVELOPED INDEX. WALL AND CEILING FINISHES SHALL HAVE A SMOKE-DEVELOPED INDEX OF NOT GREATER THAN 450
    CARBON MONOXIDE DETECTORS CO SHALL BE UL 2034 COMPLIANT

KITCHEN				100
MBA				50
BATH 2				50
BATH 3				50

LIPPERT
HERITAGE VINLY G7

DESCRIPTION	LIGHT	VENT	R.O.	SF-(MAX)	U-FACTOR	SHGC
30 X 40	5.64	2.69	8.33	66 SF	.29	.21
30 X 40 (FIXED)	5.64	N/A	8.33	66 SF	.29	.21
36 X 40	6.80	3.24	10	81 SF	.29	.21
48 X 40	7.96	3.94	13.3	98 SF	.29	.21
24 X 72	8.09	3.95	12	98.5 SF	.29	.21
36 X 72	13.49	7.14	18	164 SF	.29	.21
48 X 72	16.18	7.9	24	197 SF	.29	.21
12 X 36 (TRANSOM)	1.28	N/A	3	N/A	.29	.21
12 X 30 (TRANSOM)	1.00	N/A	2.5	N/A	.29	.21
12 X 60 (TRANSOM)	2.25	N/A	5	N/A	.29	.21

DOOR LIGHT & VENT CHART
ALL EXTERIOR DOOR W/GLASS REQUIRED SAFETY GLAZE SG (SAFTY GLAZE)

	DP-RATING	
	EXP-B	47.2
	EXP-C	50.0

DESCRIPTION	LIGHT	VENT	R.O.	SF-(MAX)	U-FACTOR	SHGC.
* 3680 (STORM w/OPEN SLIDER)	11.9	5.7	21.10	142 SF		
3680 (6 PANEL)	N/A	N/A	21.10		.16	.00
3680 (9 LITE & ROUNDTOP)	5.50	N/A	21.10		.27	.17
3680 (15 LITE)	9.78	N/A	21.10		.31	.24
3680 (3/4 OVAL)	3.78	N/A	21.10		.24	.16
3680 (FULL OVAL)	7.78	N/A	21.10		.30	.27
3680 (STORM)	17.18	N/A	21.10		N/A	N/A
13 X 80 (FULL or 1/2 SIDELITE)	4.00/2.00	N/A	7.50	N/A	N/A	N/A
75 x 80 (ATRUIM DOOR) w/SCREEN	19.60	20.0	43.11	245 SF	.35	.30
72 X 80 (SGD) W/SCREEN	32.61	15.49	39.08	387 SF	.31	.27
106 X 80 (3 PANEL SGD) W/SCREEN	59.93	24.54	58.88	N/A	.27	.21
120 X 80 (4 PANEL SGD) W/SCREEN	39.75	15.84	66.66	N/A	.27	.21

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Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult, 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

ELECTRIC CIRCUIT SCHEDULE

** GFI CIRCUIT PROTECTION **** PER MANUFACTURERS RECOMENDATION/APPLIANCE DEMAND PLUS 125% CONTINUOUS AND/OR MOTOR LOAD FACTOR
KITCHEN, DISWAHSER, FREEZER & WASHER, CIRCUITS MUST BE GFI & ARC FAULT PROTECTED
ALL OTHER NEC CODES CIRCUITS 15A & 20A MUST BE ARC FAULT PROTECTED
ALL CIRCUITS 125V, 15A & 20A MUST BE TAMPER -RESISTANT.

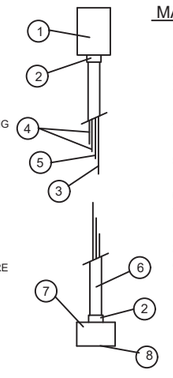
CIR. NO.	PURPOSE	AMPS (POLES)	VOLTS	WIRE SIZE	CIR. NO.	PURPOSE	AMPS (POLES)	VOLTS	WIRE SIZE
1	SMALL APPLIANCES	20 (1)	120	12	20	LAUNDRY (WASHER)	20 (1)	120	12
2	BATHS	20 (1)	120	12	21	DRYER	30 (2)	240	10
3	SMALL APPLIANCES	20 (1)	120	12	22	SMOKE DETECTORS	15 (1)	120	14
4	SMALL APPLIANCES	20 (1)	120	12	23	WATER HEATER	25 (2)	240	10
5	OPT. DISHWASHER	20 (1)	120	12	24	EXTRA FURNACE	****	****	****
6	GENERAL PURPOSE	20 (1)	120	12	25	GENERAL PURPOSE	20 (1)	120	12
7	WATER HEATER	25 (2)	240	10	26	GENERAL PURPOSE	20 (1)	120	12
8	GENERAL PURPOSE	20 (1)	120	12	27	GENERAL PURPOSE	20 (1)	120	12
9	MICROWAVE	20 (1)	120	12	28	GENERAL PURPOSE	20 (1)	120	12
10	GENERAL PURPOSE	20 (1)	120	12	29	GENERAL PURPOSE	20 (1)	120	12
11	FURNACE	****	****	****	30	GENERAL PURPOSE	20 (1)	120	12
12	GENERAL PURPOSE	20 (1)	120	12	31	EXTERIOR RECEPT.	20 (1)	120	12
13	OPT. UTILITY	20 (1)	120	12	32	EXTRA	20 (1)	120	12
14	RANGE/COOKTOP	40 (2)	240	8	33	EXTRA	20 (1)	120	12
15	WALL OVEN	40 (2)	240	8	34	EXTRA	20 (1)	120	12
16	GENERAL PURPOSE	20 (1)	120	12	35	EXTRA	20 (1)	120	12
17	UTILITY	20 (1)	120	12	36	EXTRA	20 (1)	120	12
18	GENERAL PURPOSE	20 (1)	120	12	37	EXTRA	20 (1)	120	12
19	GENERAL PURPOSE	20 (1)	120	12	38	SMALL APPLIANCES	20 (1)	120	12

NOTE:
1) RECEPT REQ'D IN HALLWAYS OVER 10' MIN. IN LENGTH.
2) ALL ELECTRICAL WIRING TO BE IN COMPLIANCE WITH N.E.C. PER STATE REQUIREMENT.
3) TWO EXTERIOR G.F.I./WP RECEPTS REQUIRED. ONE LOCATED ON THE FRONT OF THE HOME, AND ONE LOCATED ON THE REAR OF THE HOME.
4) ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE 15-20 amp OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS SHALL BE PROTECTED BY AFCI LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.
5) KITCHEN COUNTERTOP SWITCHES AND RECEPTS ARE TO BE DIRECTLY ABOVE OR WITHIN 12" OF COUNTERTOP.
6) ALL BOX SIZING IN COMPLIANCE WITH N.E.C. PER STATE REQUIREMENT.
7) SMOKE DETECTORS SHALL BE INSTALLED OUTSIDE OF EACH SEPERATE SLEEPING AREA AND MUST BE INSTALLED IN EACH BEDROOM. AT LEAST ONE (1) SMOKE DETECTOR MUST BE INSTALLED ON EACH LEVEL, INCLUDING BASEMENTS. ALL SMOKE DETECTORS WITHIN A DWELLING UNIT SHALL BE AC/DC AND INTERCONNECTED TO PROVIDE SIMULTANEOUS ACTIVATION, AND SHALL RECEIVE POWER FROM A BATTERY WHEN PRIMARY POWER INTERRUPTED.
8) ALL ELECTRICAL CONDUCTORS AND EQUIPMENT SHALL BE LISTED OR LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY AND IN COMBINATION WITH LISTING AND LABELING, CONDUCTORS AND EQUIPMENT SHALL BE SUITABLE FOR LOCATION AND USE.
9) IN MODELS WITHOUT UPSTAIR UTILITY AREA, APPLIANCES SUCH AS WATER HEATERS, WASHERS, AND DRYERS ARE LOCATED IN BASEMENT AND FIELD WIRED BY OTHERS.
10) WHEN PANEL BOX IS NOT LOCATED ON OR DIRECTLY ADJACENT TO EXTERIOR WALL OF HOME, A SERVICE DISCONNECT MUST BE INSTALLED ON SITE AT THE NEAREST POINT OF ENTRANCE OF SERVICE CONDUCTORS. THIS INFORMATION MUST OCCUR ON THE DATA PLATE OF HOMES WHERE SUCH CONDITIONS EXIST.
11) BUILDER/DEALER TO SUPPLY AND INSTALL ALL MATERIALS NOT PROVIDED BY MANUFACTURERS FOR COMPLETE ELECTRICAL HOOK-UP.
12) ALL RECEPTS IN BATHROOMS AND EXTERIOR OF HOME SHALL BE PROTECTED BY G.F.I. WHIRLPOOL TUBS ON A SEPERATE BREAKER AND GFI PROTECTED.
13) ALL RECEPTS ABOVE COUNTERTOPS TO BE PROTECTED BY G.F.I.
14) ELECTRICAL SERVICE TO BE GROUNDED IN FIELD BY OTHERS AFTER CIRCUITS HAVE BEEN COMPLETED ACCORDING TO LOCAL REQUIREMENTS.
15) NON-METALIC SHEATHED CABLE SHALL BE SECURED IN PLACE AT INTERVALS NOT EXCEEDING 4 1/2" AND WITHIN 12" FROM EVERY CABINET, BOX OR FITTING.
16) NON-METALIC SHEATHED CABLE PASSING THRU FRAMING MEMBER WITHIN 1 1/4" OF THE EDGE OF SUCH FRAMING MEMBER ARE PROTECTED WITH A 1/16" THICK STEEL BUSHING. CABLE PASSING THRU NOTCHES ARE PROTECTED WITH 1/16" THICK STUD STEEL PLATES.
17) SURFACE MOUNTED INCANDESCENT FIXTURES INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING PROVIDED THER IS A MINIMUM CLEARANCE OF 12" BETWEEN THE FIXTURE AND THE NEAREST POINT OF A STORAGE AREA. NEC-410-8(d)(1)
18) ANY LIGHT LOCATED IN A WET LOCATION MUST BE OF THE ENCLOSED & GASKETED TYPE LISTED FOR WET LOCATIONS.
19) CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUT SIDE OF SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM IN DWELLING UNITS WITHIN WHICH FUEL-FIRED
20) APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES.(R315.1) RECESSED LUMINARY LIGHTS, FAN MOTERS AND OTHER HEAT PRODUCING DEVICES SHALL HAVE COMBUSTIBLE INSULATION SPACED A MINIMUM OF 3" FROM HEAT SOURCE

LEGEND

- S SWITCH LEG
- CL LISTED AND APPROVED FOR OVER TUB
- LIGHT (FLUORESCENT)
- SERVICE PANEL
- S SWITCH JB JUNCTION BOX
- RECEPTACLE
- RECEPTACLE 20 AMP
- WEATHER PROOF RECEP
- A NM CONNECTOR
- RECEPTACLE 220 V
- LIGHT (INCANDESCENT)
- T PROGRAMMABLE THERMOSTAT
- F FAN EXHAUST FAN
- EXHAUST FAN & LIGHT EXHAUST FAN
- SA SMOKE ALARM CO SA SMOKE ALARM CARBON MONOXIDE
- WH WATER HEATER
- F FURNACE

LOAD CALCULATION	Worst Case 30'-0" x 86'-0"	
	2580 SF x 3 Watts / 1000	7.74 KW
3	APPL. CIRCUITS	4.5 KW
1	RANGE CIRCUIT	12.0 KW
1	LAUNDRY CIRCUIT	1.5 KW
1	WATER HEATER CIRCUIT	4.5 KW
1	DRYER CIRCUIT	5.0 KW
1	WASHER CIRCUIT	1.5 KW
1	GAS FURNACE MOTOR	1.0 KW
1	DISHWASHER	1.4 KW
1	RANGE HOOD VENT FAN	.25 KW
4	BATHROOM VENT FAN	.40 KW
1	HYDRO-MASSAGE TUB	2.0 KW
	TOTAL LOAD:	41.79 KW
1	HEATING EQUIPMENT: 24 kw (@ 65%)	15.6 KW
1	COOLING EQUIPMENT: 10.5 kw (@ 100%)	10.5 KW
	10 kVA X 100%	10.0
	(41.79- 10.0) = 31.79 X 40%	12.72
	HVAC EQUIPMENT (MAX. Heating or Cooling)	15.6
	DESIGN TOTAL:	38.32 kVA
	(38.32 / 240-Volts) x 1000	
	TOTAL AMPS:	159.66 Amps
Install 200 Amp (MIN), 120/240-Volt, Single Phase, Ele. Service Panel		



FEEDER ASSEMBLY DETAILS
200 AMP UNDERGROUND

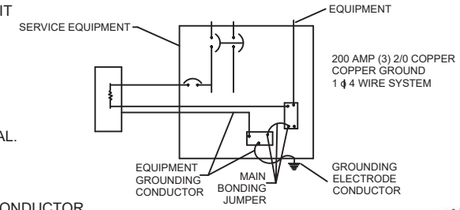
MANUFACTURERS SPECIFICATIONS

1) SERVICE PANEL 200 AMP
2) SET CONNECTOR FOR CONDUIT
3) NEUTRAL CONDUCTOR-WHITE NO. 2/0 THW-COP.
4) MAIN CONDUCTOR-RED AND BLACK 2/0 MCM-THW-CU.
5) GROUND CONDUCTOR-GREEN NO. 4 THW-COP.
6) 2" CONDUIT-EMT PVC OR EQUAL.
7) 12 x 12 x 4 WEATHER PROOF BOX-SCREW COVER.
8) SOLDERLESS CONNECTORS
9) #4 GROUNDING ELECTRODE CONDUCTOR

NOTE:
SERVICE CONNECTION TO POWER SOURCE SHALL BE PROVIDED BY OTHERS.

MODULAR GROUNDING DETAIL
200 MAIN SERVICE ENTRANCE

GROUNDING FOR GROUNDED SYSTEMS. SHOWING CONNECTION OF EQUIPMENT GROUNDING BUS TO THE ENCLOSURES AND THE GROUNDED CONDUCTOR.
ALL EXPOSED METAL PARTS TO BE GROUNDED TO MAIN BONDING JUMPER (METAL FRAME, GAS LINE, HEAT DUCT, ETC.)



NADER TOMASBI
LICENSE
No. 56556
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/11/2024

REVISIONS

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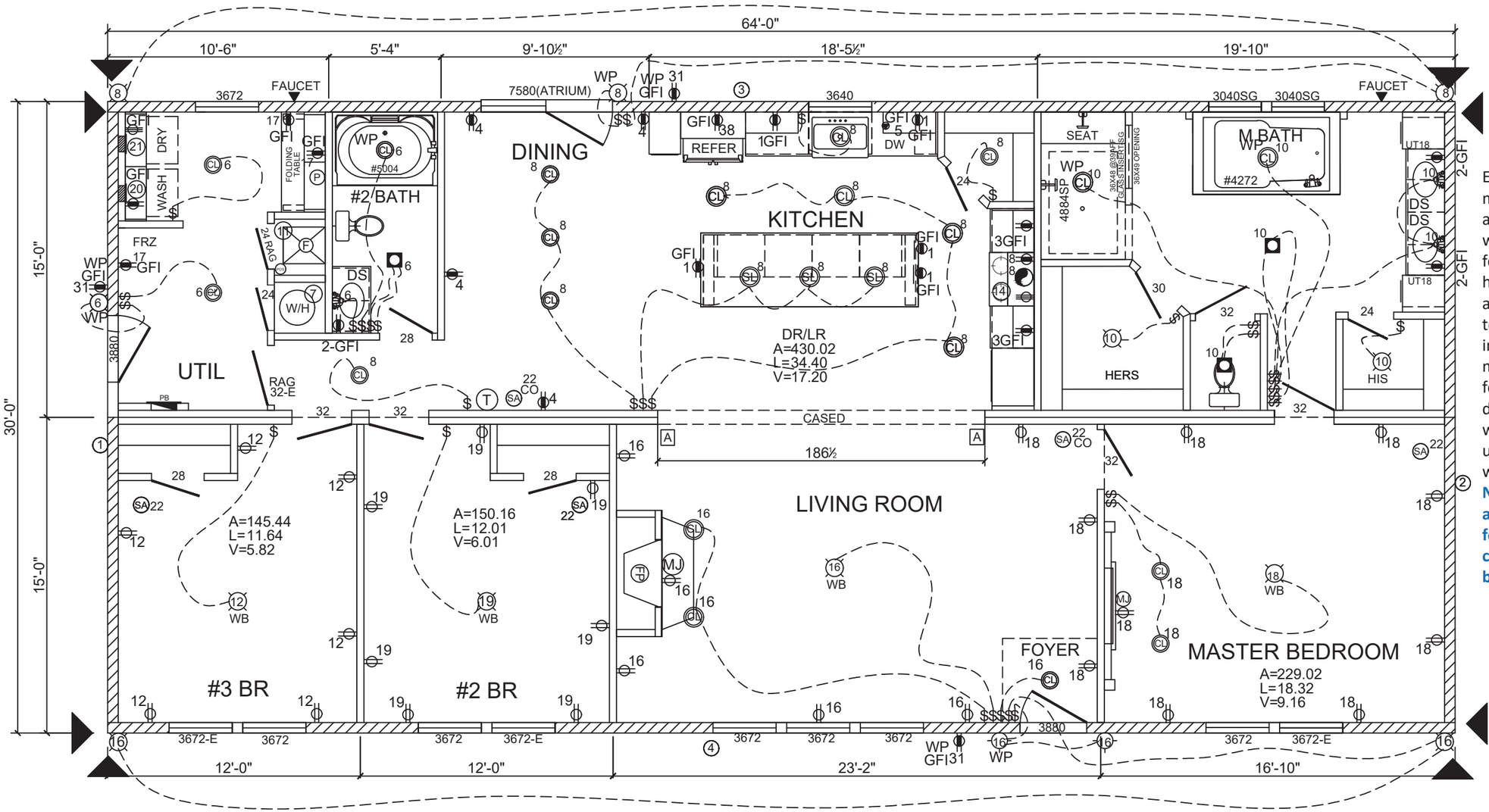
DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM

Deer Valley HOMEBUILDERS

DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

MOD

APPROVED BY: J.TRIPLETT	SCALE: NTS
PRINT DATE: 07/03/24	REV: --
TITLE: TYPICAL NOTES	
MODEL: SVM-11815	DWG. NO: A.02
MODEL: MFT10186-SVM-11815	



Each bracing wall in this page is marked with a horizontal load (PLF) and a racking (uplift) load. Bracing walls must be attached to the foundation for the specified horizontal PLF load & racking loads as specified at noted locations (refer to bracing calcs for more information). Racking tie downs must be designed to extend from foundation to bracing wall studs. Tie down connections from foundation wall to rim joist are not permissible unless proper fastening from bracing wall studs to rim joist is provided.

NOTICE: Foundation for this home and connection of the home to the foundation must be designed to site conditions for all applicable loads by site engineer/architect.

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

A 1.5"X16" LVL EACH HALF W/ (4) LSTA18 STRAPS FASTENED W/ (7) 10D NAILS EACH END OF STRAP ATTACHED TO (4) #3 2X4 SPF STUDS

FIELD INSTALLED ITEMS:

1. Type 1 or Type 2 surge-protection device, which is either an intregal part of service equipment or located immediately adjacent to service equipment
2. Emergency disconnect installed outdoors at a readily accessible location rated. for the available fault current.

**ASTM C557 APPROVED ADHESIVE MEETING 100 PLF MIN. SHEAR RESISTANCE WHEN INSTALLED IN ACCORDANCE WITH THE ADHESIVE MFG USAGE INSTR.

2" O.C. SHEATHING FASTENING TO BE STAGGERED WITH DOUBLE FRAMING AT ADJOINING PANEL EDGES

NO.	LENGTH	PLF	UPLIFT	MATERIAL	SIDE 1 FASTENER	SPACING	CS14 STRAPS	SIDE 2 MATERIAL	SIDE 2 FASTENER	SPACING	JOIST
1	25.17	197	1.6K	7/16" OSB	.131" X 2 1/2" NAILS	4" OC	1 PER ▲	1/2" GYP	#6X1 5/8" SCREWS (GLUED & SCREWED)	6" OC EDGE 12" OC FEILD	2
2	30.00	117	0.9K	7/16" OSB	.131" X 2 1/2" NAILS	4" OC	1 PER ▲	1/2" GYP	#6X1 5/8" SCREWS (GLUED & SCREWED)	6" OC EDGE 12" OC FEILD	2
3	46.26	130	0.7K	7/16" OSB	.131" X 2 1/2" NAILS	6" OC	1 PER ▲	1/2" GYP	** GLUED FOR 100 PLF MIN SHEAR	N/A	2
4	31.33	245	1.4K	7/16" OSB	.131" X 2 1/2" NAILS	4" OC	1 PER ▲	1/2" GYP	**GLUED FOR 100 PLF MIN SHEAR	N/A	2

ROOF DIAPHRAGM NOTES:

SHALL BE 7/16" RATED SHEATHING (MIN.)

FASTEN SHEATHING TO ROOF FRAMING WITH:

MAIN UNIT

.131X2.5" NAILS FASTENED 6" O.C.

UNBLOCKED

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult. 124 MPH Vasd. Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

APPROVED BY NTA INC.

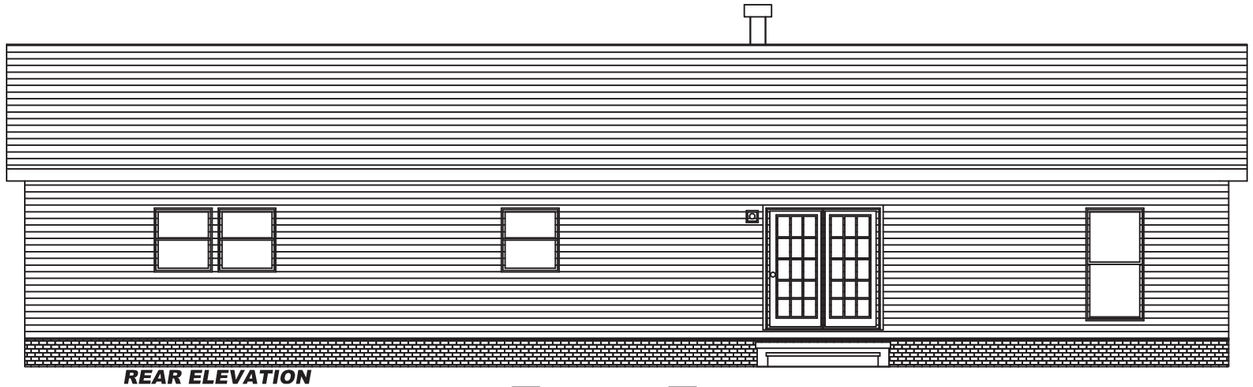
REVISIONS

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM

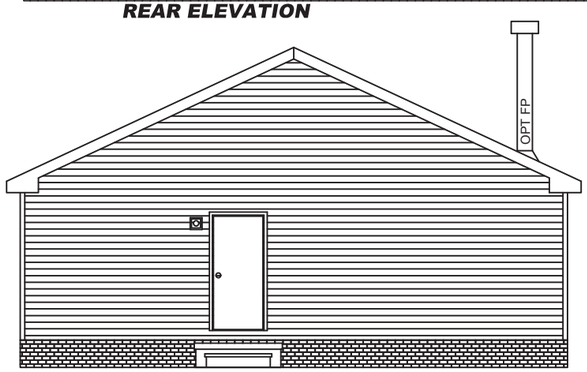
DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

MOD

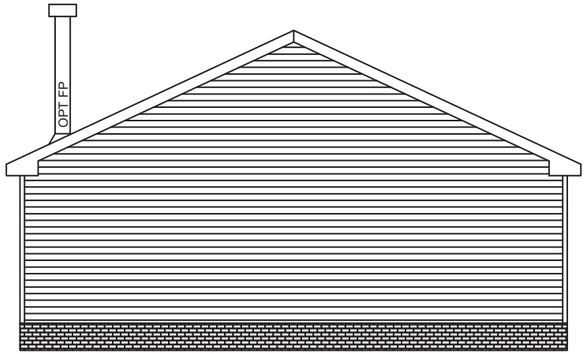
APPROVED BY: J.TRIPLETT
SCALE: NTS
PRINT DATE: 07/03/24
REV: --
TITLE: TYPICAL FLOOR PLAN
MODEL: SVM-11815
MODEL: MFT10186-SVM-11815
DWG. NO. A.03



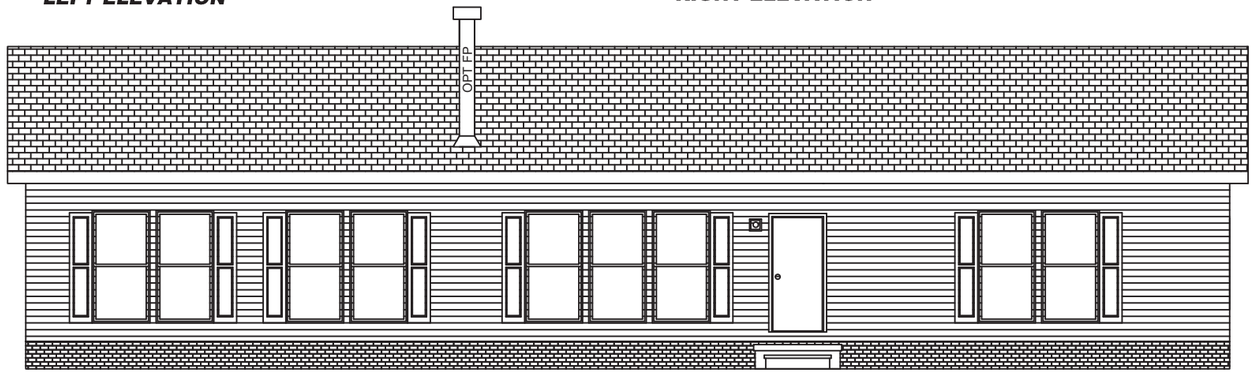
REAR ELEVATION



LEFT ELEVATION



RIGHT ELEVATION



FRONT ELEVATION

ELEVATIONS SHOWN ON THIS PAGE REPRESENT BASIC COMPONENTS AND ARE NOT INTENEDED TO BE ALL INCLUSIVE, NOR DO THESE ELEVATIONS DETAIL EVERY CODE REQUIRED ASPECT OF THIS BUILDING. SITE BUILT STOOPS, STEPS, DECKS, PORCHES, HANDRAILS AND/OR SIMILAR ITEMS MUST BE PROVIDED BY OTHERS ON SITE FOR COMPLIANCE WITH APPLICABLE CODES. COMPLIANCE WITH ALL APPLICABLE CODES PER LOCAL AUTHORITY HAVING JURISDICTION, WHETHER DETAILED IN THIS SET OR NOT, MUST BE MET.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult. 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

NADER TOMASBI
LICENSE
No. 56556
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/11/2024

NOTES

1. ALL ITEMS ARE COMPLETED IN THE MANUFACTURING FACILITY UNLESS NOTED OTHERWISE.
* 2. SIDING FOR ENDS IS SHIPPED LOOSE FOR ON SITE INSTALLATION BY OTHERS.
* 3. HANDRAILS, STOOPS, STAIRS, GUTTERS, DOWNSPOUTS, STORM SHUTTERS OR REMOVABLE TYPE COVERINGS, AND SPLASH BLOCKS ARE FURNISHED AND INSTALLED BY OTHERS IN ACCORDANCE WITH STATE AND LOCAL CODES.
4. ALL ELEVATIONS ARE SHOWN WITH 2.16 TO 7/12 ROOF PITCH.
5. WINDOWS ARE SIZED PER WINDOW SCHEDULE AND VARY FROM FLOORPLAN TO FLOORPLAN.
* 6. ALL FOUNDATION WORK IS COMPLETED ON SITE BY OTHERS.
7. ALL DRAIN, AND WASTE VENTS SHALL TERMINATE A MINIMUM OF 12" ABOVE THE ROOF LINE.
8. PATIO DOORS ARE AVAILABLE PER FLOOR PLAN.
9. SIDING SHOWN IS 4", OTHER SIZES ARE AVAILABLE.
10. SHUTTERS ARE STANDARD ON THE FRONT AND RIGHT SIDE OF THE HOME, AND MAY BE OPTIONED FOR THE REAR AND LEFT SIDE.
11. TERMINATION HEIGHT OF METAL CHIMNEYS SHALL BE A MIN. 3'-0" ABOVE THE HIGHEST POINT WHERE THEY PASS THRU THE ROOF AND A MINIMUM OF 2'-0" HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10'-0". THE CHIMNEY IS TO BE SITE INSTALLED.
12. ATTIC ROOF SPACE VENTILATION SHALL BE 1/300 OF ROOF AREA WITH UPPER HALF PROVIDING MIN.50%-MAX 80% OF THE VENTILATION.
1/300 OF ATTIC AREA.
1/150 AT ROOF VENTS.
1/150 AT EAVE.
13. ROOF COVERING (SHINGLES) SHALL MEET THE REQUIREMENTS OF ASTM D 3161.
14. Crawlspace Access min. 18" x 24" location may vary.
15. Minimum crawlspace ventilation required must be 1/150 of crawlspace and within 3' of each corner and must meet all local code requirements. Access min. 18" x 24".

* ITEMS INSTALLED ON SITE BY OTHERS
For future garage siding to be removed and the garage shall be completely separated from the adjacent interior spaces and attic by means of 5/8" gypsum board or equiv. applied to the garage by owner.
* A 1 3/8" steel door W/A 20 min. fire rating shall be used between garage and residence. The sills for these doors shall be raised not more than 4" above the garage door.

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM
MOD

DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

REVISIONS

APPROVED BY:	J.TRIPLETT	SCALE:	NTS
PRINT DATE:	07/03/24	REV:	--
TITLE:	EXTERIOR ELEVATIONS		
MODEL:	SVM-11815	DWG. NO:	A.05
MODEL:	MFT10186-SVM-11815		

2023 FBC	
DRAIN SIZE	TRAP ARM LENGTH PER 1/4" SLOPE
1-1/4"	5'-0"
1-1/2"	6'-0"
2"	'8-0"
3"	'12-0"
4"	'16-0"

NOTES:

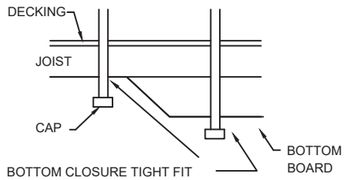
(A) = INLET WITH CAP & CHAIN.

(B) = 3/4 RELIEF DRAIN THRU FLOOR.

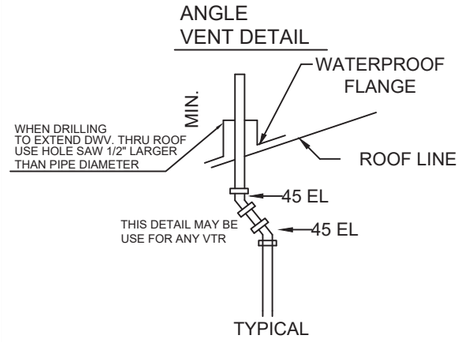
ALL WATER LINES 1/2" UNLESS OTHERWISE SHOWN.

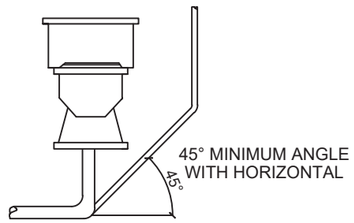
PIPING SUPPORT	
HOT & COLD FLEXIBLE	MAX. SPACING HORZ.&VERT.
3/4" & 1"	2'-8"

* WATER DISTRIBUTION PIPE
PEX WATER LINES AND FITTINGS
(OPT. COPPER WATER LINES TYPE M)



FLOOR DETAIL





STOOL VENTING DETAIL

< SPECIFY IF NOTE APPLIES TO MANUFACTURER

NOTE:

1) MAXIMUM FLOW RATE TO BE 2.2 GPM FOR FAUCETS @60 PSI AND 2.5 GPM FOR SHOWERS @ 80 PSI.
2) DRAINWASTE AND VENT LINES PVC SHALL MEET ASTM D2665-89a REQUIREMENTS.
3) WATER DISTRIBUTION SYSTEM PIPING MAY BE POLYBUTYLENE, CPVC, COPPER, GALV. STEEL OR PEX
4) DRAIN LINE SLOPE TO BE 1/4" MIN./FT.
5) VACUUM BREAKS TO BE INSTALLED ON HOSE BIBBS, AND FROST FREE SILLOCKS.
6) AN ADEQUATELY RATED PRESSURE AND TEMPERATURE RELIEF VALVE IS TO BE PROVIDED FOR WATER HEATER
7) FOR EACH DWELLING, MIN (1) 3" MAIN VENT UNDIMINISHED IN SIZE THRU ROOF
8) ALL VENT STACKS LESS THAN 3" I.D. WHICH PASS THROUGH ROOF SHALL INCREASE TO 3' I.D. AT A POINT 12" MIN. BELOW ROOF LINE AND EXTEND TO A POINT 12" MIN. ABOVE ROOF LINE. 3" I.D. CONTINUOUS STACKS SHALL TERMINATE 12" MIN. ABOVE ROOF LINE IN FROST PRONE AREAS.
9) TUBS MAY NOT BE WET VENTED DOWNSTREAM OF WATER CLOSET.
10) HEIGHT OF WATERPROOFING IN TUB AND SHOWER SPACE 6-0 MIN. ABOVE FLOOR
11) PLASTIC PIPE SHALL BE SUPPORTED EVERY 4-0 HORIZONTALLY AND VERTICALLY
12) BATH TUBS AND SHOWERS ARE LISTED BY AN APPROVED AGENCY
13) MODELS WITH BASEMENTS MAY LOCATE WASHER IN BASEMENT TO BE CONNECTED ON SITE BY OTHERS.
14) HORIZONTAL TO VERTICAL CONNECTION TO BE WITH SANITARY TEES
15) HORIZONTAL TO HORIZONTAL AND VERTICAL TO HORIZONTAL CONNECTIONS TO BE MADE WITH LONG TURN OR TEE WYE FITTINGS.
16) PRESSURE TEMPERATURE RELIEF VALVE SHALL PIPE TO A VISIBLE AIR GAP AT FLOOR IN THE SAME SPACE AS WATER HEATER . WHEN WATER HEATER IS ON FIRST OR SECOND FLOOR A PAN SHALL BE PROVIDED & ITS DRAIN SHALL PIPE BELOW FIRST FLOOR. DRAIN SHALL PIPE & DISCHARGE INDIRECTLY TO A HAZARD FREE POINT.
17) MAX. DISTANCE OF FIXTURE TRAP TO VENT 1 1/2 IS 3-6, 2" IS 5-0, 3" IS 6-0
18) AIR ADMITTANCE VALVES ARE PERMITTED WHEN INSTALLED ACCORDING TO THEIR LISTING. LA, KY, IL, DOESN'T ALLOW AIR ADMITTANCE
19) ALL HORIZONTAL VENT BRANCH PIPING SHALL BE LOCATED A MINIMUM OF SIX (6) INCHES ABOVE THE FLOOD LEVEL OF THE HIGHEST FIXTURE SERVED IN THAT BRANCH.
20) FIXTURES HAVING CONCEALED CONNECTIONS SHALL BE ARRANGED TO MAKE THE CONNECTIONS ACCESSIBLE FOR INSPECTION AND REPAIR.
21) ALL PLUMBING SHALL BE TESTED IN PLANT AND NO PLUMBING SHALL BE COVERED OR CONCEALED BEFORE BEING TESTED.
22) WATER CLOSET SHALL BE 1.6 GALLONS PER FLUSH (MAXIMUM)
23) PLASTIC PIPING SHALL BE PROTECTED WITH A STEEL PLATE (18 GA. MIN.) WHEN PIPE PASSES THROUGH WOOD MEMBERS LESS THAN 1-1/4 INCH FROM THE EDGE OF MEMBERS.
24) ANTI-SCALD DEVICES REQUIRED ON ALL TUB/SHOWER DIVERTERS. (DELTA #R1300-IP-TP, ASME A112.18.1M, ASSE 1016).
25) PIPING SHALL BE FIRE STOPPED WHERE REQUIRED WITH MATERIALS EQUIVALENT TO CONSTRUCTION WHICH IT PENETRATES AND BE SUITABLE TO PIPE MATERIAL.
26) CONCEALED PIPING IN UNHEATED AREAS INCLUDING OUTSIDE WALLS SHALL BE PROTECTED AGAINST FREEZIN IN PLANT.
27) IN-PLANT FIXTURE DRAINS AND ALL OPEN PIPE SHALL BE PROTECTED (CAPPED) AND LABELED FOR TRANSPORT
28) JOIST NOTCHES SHALL NOT EXCEED 1/6 OF JOIST DEPTH AND SHALL NOT OCCUR IN MIDDLE 1/3 OF SPAN HOLES SHALL NOT EXCEED 1/3 DEPTH OF JOIST AND MUST OCCUR 2" FROM EITHER EDGE

< 29) SHUT OFF VALVES ON ALL FIXTURES (OPTIONAL)

< 30) ALL PLUMBING IS TYPICALLY INSTALLED FOR EACH MODULE AT THE TIME OF MANUFACTURE. CERTAIN CICJ/RCUMSTANCES MAY NECESSITATE SOME FIXTURE DRAINS TO BE STUBBED THROUGH FLOOR IN WHICH CASE HOOK-UP AND MATERIALS ARE PROVIDED ON SITE BY OTHERS. FLOOR SYSTEMS WHICH DO NOT ALLOW FOR PLANT INSTALLED PLUMBING, ARE MANUFACTURED WITH ALL PLUMBING RISERS STUBBED THROUGH FLOOR IN WHICH CASE ALL MATERIALS FOR COMPLETION AND INSTALLATION ARE PROVIDED ON SITE BY OTHERS. NOTE: STUB-THROUGH PLUMBING IS AVAILABLE ON ALL FLOOR SYSTEMS.

< 31) WATER HEATER IN BASEMENT TO BE FIELD INSTALLED BY OTHERS

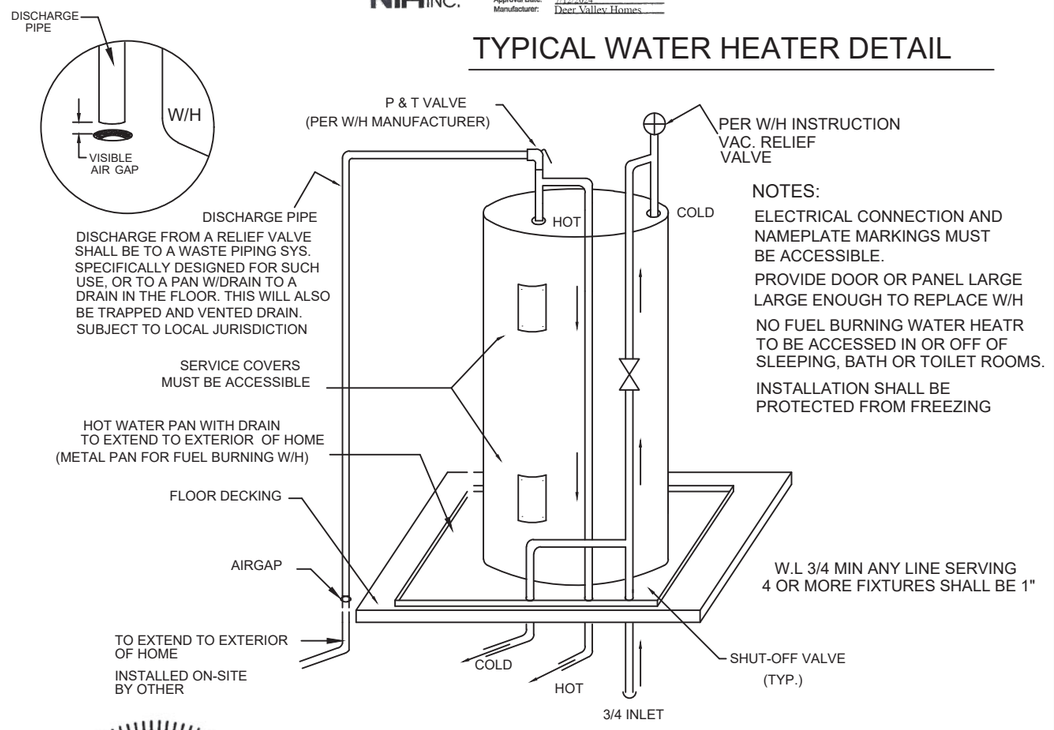
< 32) A WATER HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK CLOSING VALVES ARE UTILIZED. THE ARRESTOR SHALL BE LOCATED WITHIN AN EFFECTIVE RANGE OF THE QUICK CLOSING VALVE. ACCESS SHALL BE PROVIDED TO THE WATER HAMMER ARRESTORS.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult. 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

APPROVED BY NTA INC.

TYPICAL WATER HEATER DETAIL



NOTES:

ELECTRICAL CONNECTION AND NAMEPLATE MARKINGS MUST BE ACCESSIBLE.

PROVIDE DOOR OR PANEL LARGE LARGE ENOUGH TO REPLACE W/H

NO FUEL BURNING WATER HEATR TO BE ACCESSED IN OR OFF OF SLEEPING, BATH OR TOILET ROOMS.

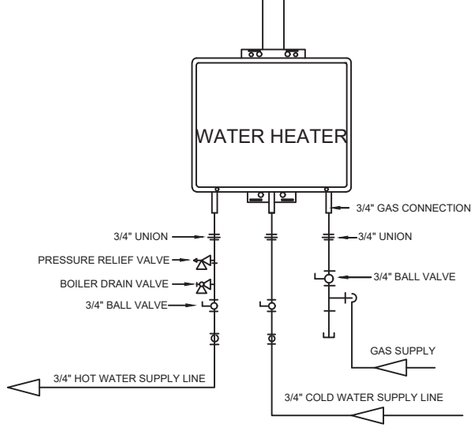
INSTALLATION SHALL BE PROTECTED FROM FREEZING

SHOWN FOR MAIN OR FIRST OR SECOND FLOOR APPLICATION
WATER LINE BASED ON PRESSURE RANGE 50 TO 60PSI

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

OPT. GAS TANKLESS WATER HEATER



REVISIONS

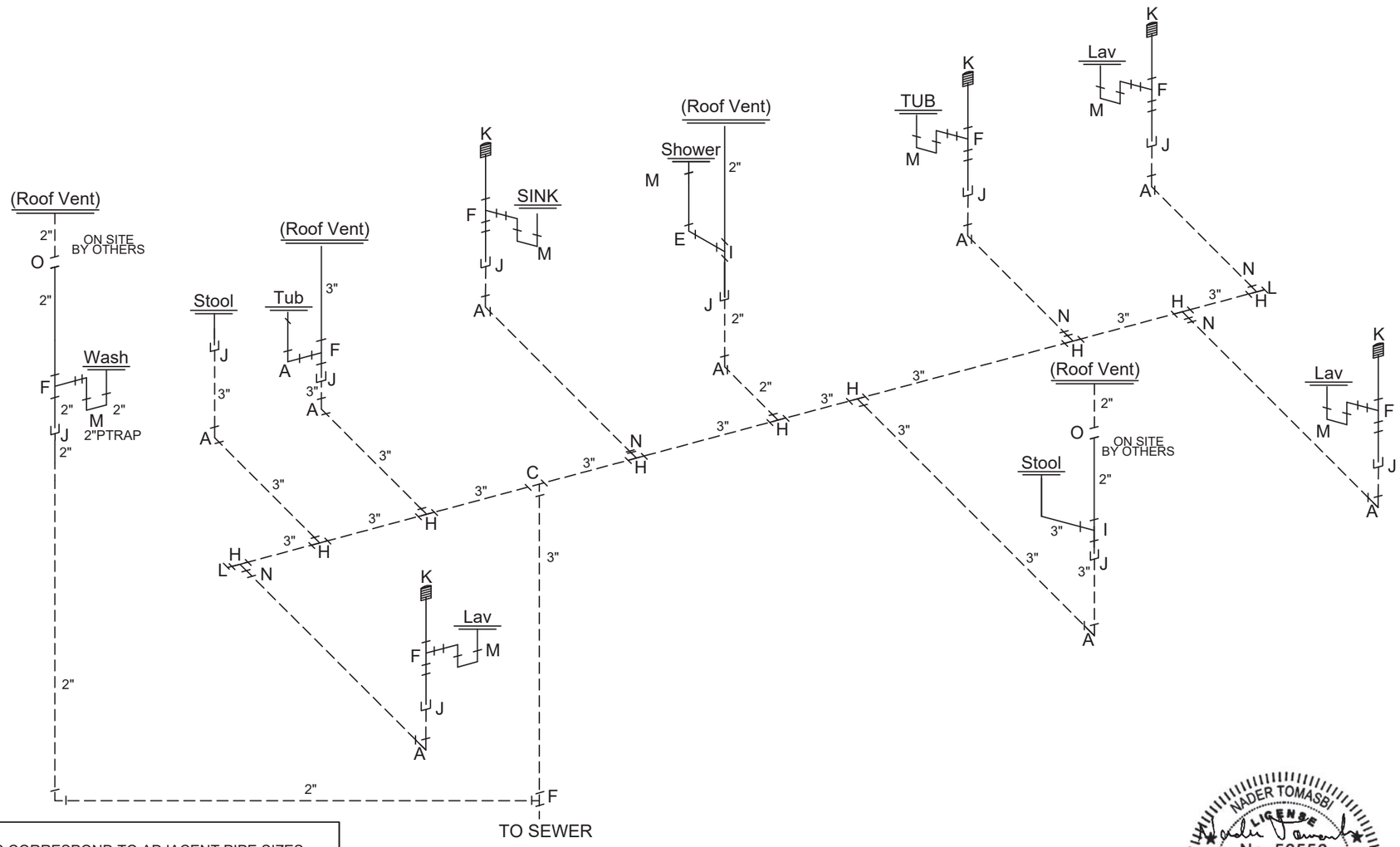
DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM

MOD

DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

APPROVED BY:	SCALE: NTS	
PRINT DATE:	REV:	REV. DATE:
TITLE: TYPICAL PLUMBING LAYOUT		
MODEL:	DWG. NO: A.6	
MODEL: MFT10186-SVM-11815		

	PLUMBING HOOKUP KIT
40'	1 1/2" PIPE
40'	2" PIPE
80'	3" PIPE
4	1 1/2" 90° LONG TURN ELL
4	2" 90° LONG TURN ELL
3	3" 90° LONG TURN ELL
1	3"X3"X3" DOUBLE ELL
1	1 1/2" SANITARY TEE
0	3" SANITARY TEE
1	3 x 3 x 2 SANITARY TEE
1	3 x 3 x 3 x 3 DBL SANITARY TEE
0	1 1/2" LONG TURN TY
0	2" LONG TURN TY
2	3" LONG TURN TY
7	3 x 3 x 2 LONG TURN TY
0	2 x 2 x 1 1/2 LONG TURN TY
0	1 1/2" C/O PLUG
0	1 1/2" C/O ADAPTOR
1	2" C/O PLUG
1	2" C/O ADAPTOR
2	3" C/O PLUG
2	3" C/O ADAPTOR
6	2 x 1 1/2 REDUCER
0	3 x 1 1/2 REDUCER
0	1 1/2" COUPLING
0	2" COUPLING
0	3" COUPLING
0	1 1/2" ROOF VENT
2	2" ROOF VENT
0	3" ROOF VENT
0	ROOF TAR



These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult. 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr.
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

NOTES:
1) DOTTED LINES REPRESENT SITE INSTALLED PLUMBING.
2) ALL FITTINGS AND PIPE NECESSARY FOR PROPER CONNECTION OF THE DWV SYSTEM ARE INCLUDED IN THIS KIT. ANY VARIATION FROM THIS DESIGN RESULTING IN A SHORTAGE OF MATERIAL SHALL BE THE INSTALLER'S RESPONSIBILITY.
3) ALL PIPING MUST BE SUPPORTED AT INTERVALS NOT EXCEEDING 4'-0".
4) DRAIN PIPES MUST HAVE A MIN. SLOPE OF 1/4" PER FOOT (1/8" PER FOOT WITH CLEAN-OUT).
5) AIR GAPS ARE REQUIRED FOR ALL DISHWASHERS.
6) AIR ADMITTANCE VALVES ARE NOT REQUIRED IN ILLINOIS.
7) ANY PLUMBING ON THE HINGED ROOF AREA WILL HAVE TO BE EXTENDED THROUGH THE ROOF ON- SITE BY OTHERS.

NOTES:
1) FITTING SIZES CORRESPOND TO ADJACENT PIPE SIZES.
2) DARK (THICK) LINES REPRESENT 2" PIPE; ALL OTHER TO BE 1 1/2" PIPE UNLESS OTHERWISE NOTED.
3) P-TRAP DIRECTIONS MAY VARY.
4) DOTTED LINES REPRESENT SITE INSTALLED PLUMBING.
5) KENTUCKY METAL WATER LINE FITTINGS REQ. @ CONCEALED FAUCETS
6) ILLINOIS WATER LINES TO BE WRAPPED W/R-3 INSULATION

DWV FITTING LEGEND			
90° LONG TURN ELL	A	B	45° ST. ELL
DOUBLE ELL	C	D	90° CLOSET ST. ELL
90° LONG TURN ST. ELL	E	F	SANITARY TEE
DOUBLE SANITARY TEE	G	H	LONG TURN TY
45° Y	I	J	CAP & CHAIN
MECHANICAL VENT	K	L	CLEAN OUT PLUG
P-TRAP	M	N	REDUCER BUSHING
COUPLING	O	P	

NADER TOMASBI
LICENSE
No. 56556
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/11/2024

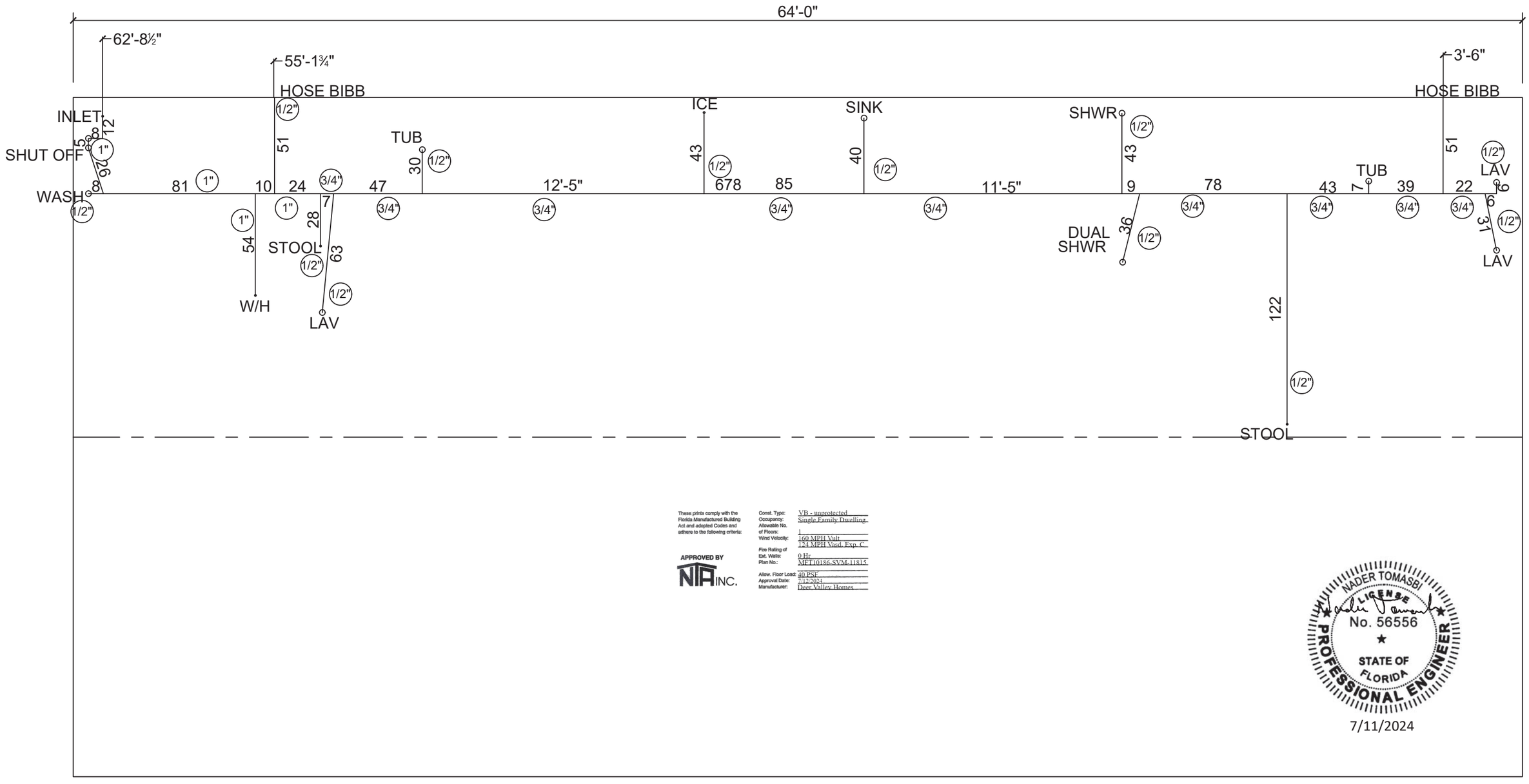
REVISIONS

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM

DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

MOD

APPROVED BY: J.TRIPLETT	SCALE: NTS
PRINT DATE: 07/03/24	REV. DATE:
TITLE: DRAIN LINE PLUMBING LAYOUT	
MODEL: SVM-11815	DWG. NO: A.6.1
MODEL: MFT10186-SVM-11815	



These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Ult. 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr.
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

NADER TOMASBI
LICENSE
No. 56556
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/11/2024

1) FITTING SIZES TO CORRESPOND TO ADJACENT PIPE SIZES.
2) COPPER, CPVC, OR OTHER APPROVED OR LISTED MATERIAL MAY BE USED.
3) ALL SIZING OF PIPE + OR -, MUST MEET OR EXCEED ANY APPLICABLE CODES.
4) PEX LINES MUST BE SUPPORTED 32" OC MAXIMUM.
5) COLD AS SHOWN, HOT THE SAME EXCEPT DROP STOOL, ICE & INLET.
6) BASED ON PRESSURE RANGE 50 TO 60 PSI
7) KENTUCKY METAL WATER LINE FITTINGS REQ. @ CONCEALED FAUCETS
8) ILLINOIS WATER LINES TO BE WRAPPED W/R-3 INSULATION 2015 ENERGY CODE REQUIRES ALL PIPES 3/4" OR LARGER AND ALL PIPES LOCATED OUTSIDE CONDTITIONS TO BE WRAPPED WITH R-3 INSULATION
9) SHOWER (SINGLE HEAD) 3/4" W/PEX.

CUSTOMER

REVISIONS

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM
MOD

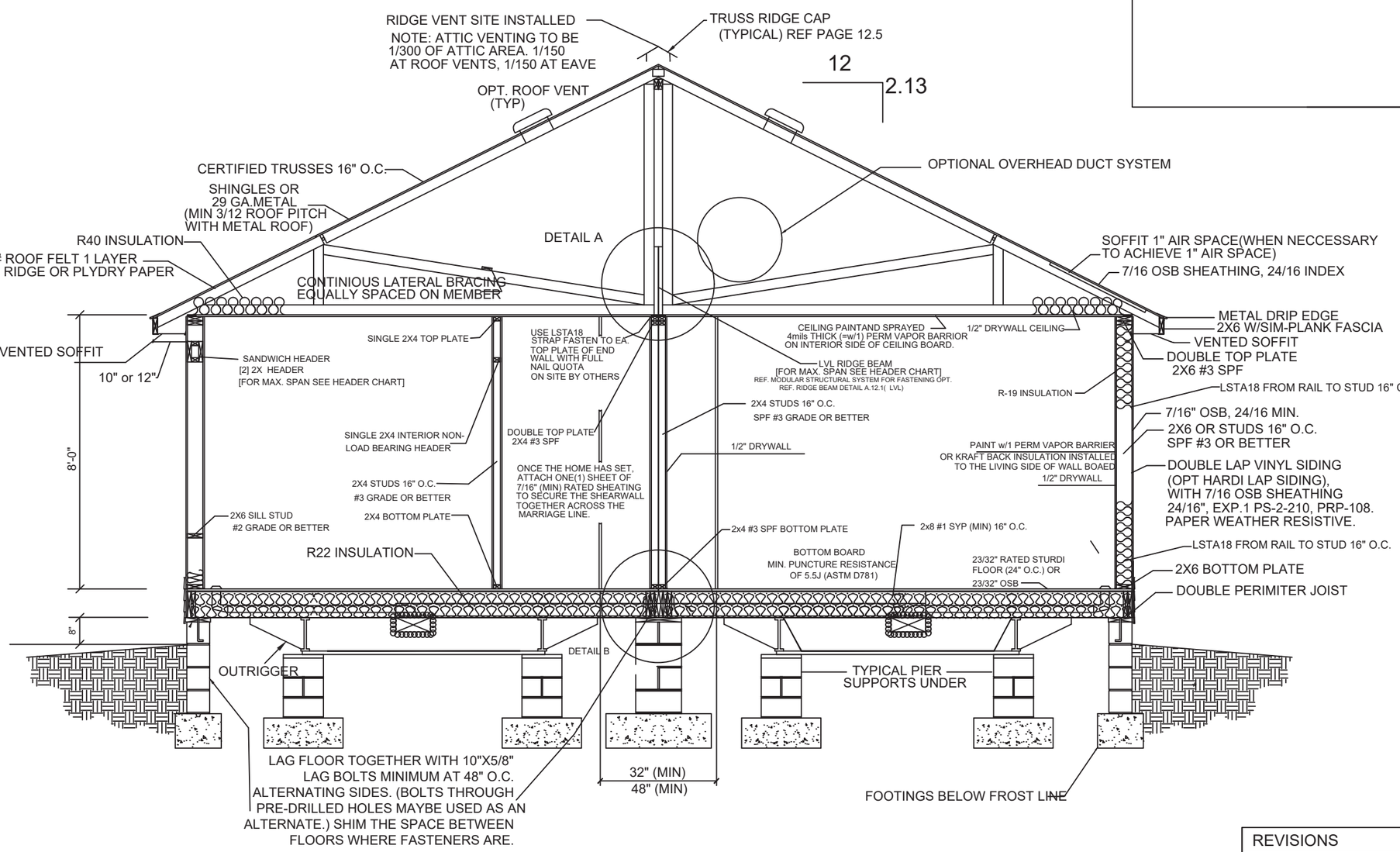
DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

APPROVED BY: J.TRIPLETT
SCALE: NTS
PRINT DATE: 07/03/24
FOR TN.ONLY:
TITLE: WATER LINE PLUMBING LAYOUT
MODEL: SVM-11815
DWG. NO: A.6.2
MODEL: MFT10186-SVM-11815

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

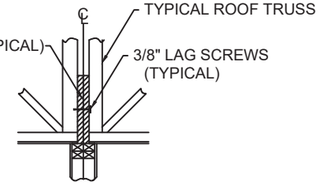
APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult. 124 MPH Vasd. Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815.
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes



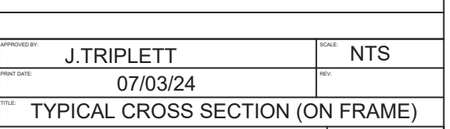
FOUNDATION FOR THIS HOME MUST BE DESIGNED BY OTHERS TO THE SITE CONDITIONS PER APPLICABLE CODES. THIS INCLUDES ATTACHING HOME TO THE FOUNDATION, ALONG WITH THE RESISTANCE TO LATERAL, LONGITUDINAL SHEAR, UPLIFT AND DOWNWARD WIND FORCES IN BOTH DIRECTIONS AND THE SEISMIC DESIGN.REFER TO BRACING PAGE FOR APPLICABLE DESIGN LOADS.

DETAIL A
INTER-CONNECTION BETWEEN HALVES OF THE ROOF SYSTEM

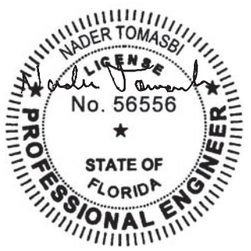


USE: ONE(1) 3/8" X 3-1/2" LAG SCREW AT 24" O/C (180 WIDE 26" O/C - MAX E) (156 WIDE 29" O/C-MAX) TO CONNECT THE RIDGE BEAMS FOR EACH HALF OF THE HOME TOGETHER ALONG THE MARRIAGE LINE OF THE ROOF SYSTEM.

DETAIL B
INTER-CONNECTION BETWEEN HALVES OF THE FLOOR SYSTEM



USE: ONE(1) 3/8" X 7-0" LAG SCREW AT 16" O/C (180 WIDE 20" O/C - MAX) (156 WIDE 22" O/C - MAX) TO CONNECT THE PERIMETER JOIST FOR EACH HALF OF THE HOME TOGETHER ALONG THE MARRIAGE LINE OF THE FLOOR SYSTEM.



7/11/2024

REVISIONS

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM

MOD

DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

APPROVED BY: J.TRIPLETT	SCALE: NTS
PRINT DATE: 07/03/24	REV:
TITLE: TYPICAL CROSS SECTION (ON FRAME)	
MODEL: SVM-11815	DWG. NO: A.9.1
MODEL: MFT10186-SVM-11815	

FREE RETURN AIR

DOOR SIZE	2 1/2" UNDER CUT	
	1 1/4" (CLEAR OPENING)	
	MAX. SQ. IN. RETURN	MAX. SF ROOM SIZE
24" (23 1/4)	29.06	145 SF
28" (27 1/4)	34.06	170 SF
30" (29 1/4)	36.56	183 SF
32" (31 1/4)	39.06	195 SF
36" (35 1/4)	44.06	220 SF
48" (47 1/4)	59.06	295 SF

DUCT SIZE	FLEX DUCT	
	MAX. SQ. IN. RETURN	MAX. SF ROOM SIZE
5"	19.6	98.1 SF
6"	28.26	141.3 SF
7"	38.46	192.3 SF
8"	50.24	251.2 SF
9"	63.58	317.9 SF
10"	78.5	392.5 SF
12"	113.04	565.2 SF
14"	153.86	769.3 SF

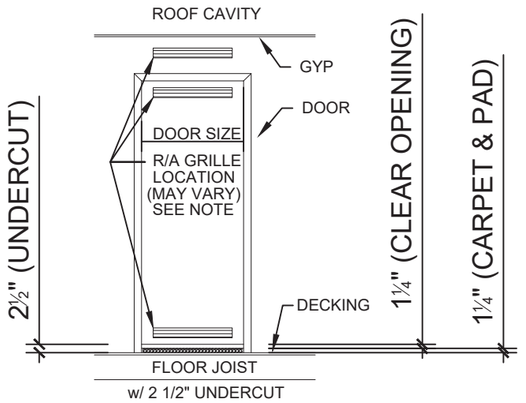
GRILLE SIZE	GRILLE	
	DOOR / WALL / CEILING	
	MAX. SQ. IN. RETURN	MAX. SF ROOM SIZE
24 X 4	63.36	316.8 SF
10 X 6	40.32	201.6 SF
12 X 6	47.52	237.6 SF
12 X 8	63.36	316.8 SF
14 X 20	164.16	820.8 SF
20 X 25	322.56	1612.8 SF

CFM

5" = 70 CFM
6" = 110 CFM
7" = 170 CFM
8" = 240 CFM
9" = 320 CFM
10" = 420 CFM
12" = 700 CFM
14" = 1000 CFM
16" = 1400 CFM

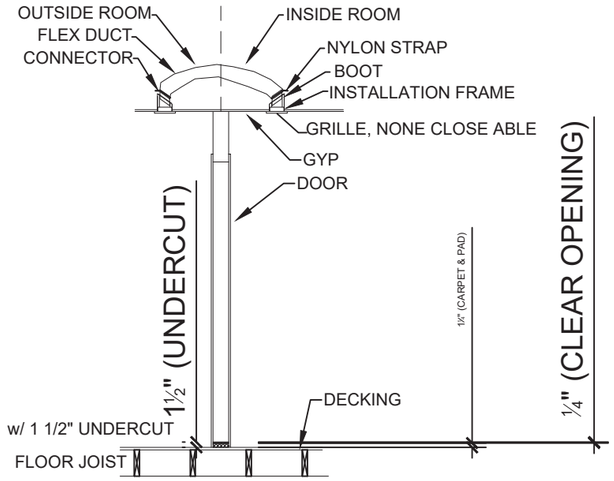
REGISTER SIZE

5 = 8x4
6 = 10x6
7 = 12x6
8 = 12x 8

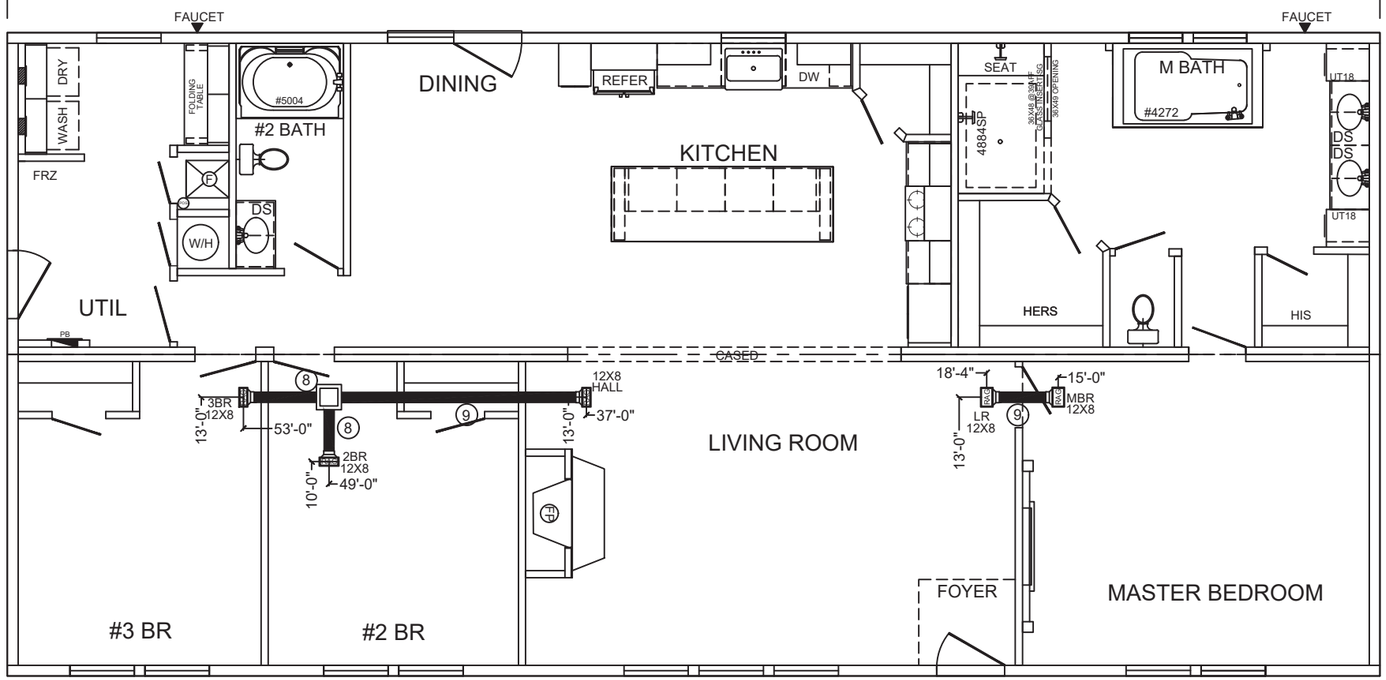


NOTE:
WHEN MAXIMUM ROOM SIZE HAS EXCEDDED THE FREE RETURN AIR PROVIDED BY THE DOOR'S UNDERCUT AREA, ONE OF THE FOLLOWING SHALL BE INSTALLED TO PROVIDE ADDITIONAL FREE RETURN AIR.
1. LOUVERED GRILLE MAY BE INSTALLED IN THE DOOR . OR IN THE HEADER ABOVE THE DOOR.
2. FLEX DUCT JUMPER / GRILLE MAY BE INSTALLED IN THE CEILING EA. SIDE OF ROOM (INTERIOR / EXTERIOR) GRILLE SHALL NOT BE CLOSE ABLE.

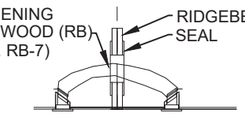
JUMPER
PERPENDICULAR TO TRUSS



NOTE:
ONE (1) SQUARE INCH OF FREE RETURN AIR SHALL BE PROVIDED FOR EACH FIVE (5) SQUARE FEET OF ROOM AREA.
SEE 3280.715(B) (4) AND B LETTER 80-8-25 FOR MAX. ROOM SIZE.



JUMPER
PARALLEL TO TRUSS - CROSS (RB)



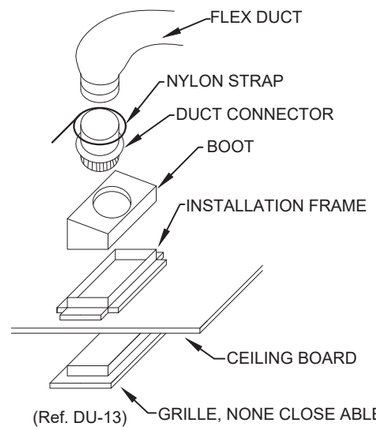
These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

APPROVED BY NTA INC.

NADER TOMASBI
LICENSE
No. 56556
STATE OF FLORIDA
PROFESSIONAL ENGINEER
7/11/2024

JUMPER DETAIL



REVISIONS	
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CUSTOMER

LEGEND:

MIXER — MAIN MIXER BOX (16 X 20 X 72)
SPLICE COLLAR SAME SIZE AS FLEX DUCT
MIXER BOX (10 X 10 X 8 X 1) OR OTHERWISE NOTED
(#) FLEX DUCT (SIZE NOTED)
UPFLOW AIR REGISTER GRILLE (SIZE NOTED)
CEILING RETURN AIR GRILLE / JUMPER (SIZE NOTED) - REF. DU-18

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM
MOD

DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

APPROVED BY: J.TRIPLETT	SCALE: NTS
PRINT DATE: 07/03/24	REV: --
TITLE: HVAC FREE RETURN AIR	
MODEL: SVM-11815	DWG. NO: A.13.2
MODEL: MFT10186-SVM-11815	

Manual S Compliance Report
Entire House
AMS of Indiana, Inc.

Job: SVM-11815(DVHBSS-6808)
Date: 6/11/24
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Email: eng-ams@comcast.net

Project Information

For: Deer Valley Homebuilders
SVM-11815(DVHBSS-6808)

Cooling Equipment

Design Conditions

Outdoor design DB:	97.9°F	Sensible gain:	23760	Btuh	Entering coil DB:	76.0°F
Outdoor design WB:	79.1°F	Latent gain:	6152	Btuh	Entering coil WB:	63.3°F
Indoor design DB:	75.0°F	Total gain:	29912	Btuh		
Indoor RH:	50%	Estimated airflow:	1020	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split AC				
Manufacturer:	Generic		Model:	SEER2 14.3	
Actual airflow:	1020	cfm			
Sensible capacity:	24575	Btuh	103% of load		
Latent capacity:	10532	Btuh	171% of load		
Total capacity:	35107	Btuh	117% of load	SHR:	70%

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

Heating Equipment

Design Conditions

Outdoor design DB:	23.3°F	Heat loss:	26452	Btuh	Entering coil DB:	68.1°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Elec furnace				
Manufacturer:	NORDYNE		Model:	E7E()-010	
Actual airflow:	1020	cfm			
Output capacity:	35000	Btuh	132% of load		

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

Temp. rise: 0 °F

Meets all requirements of ACCA Manual S.

7/11/2024

wrightsoft®

Load Short Form
Entire House
AMS of Indiana, Inc.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

Job: SVM-11815(DVHBSS-6808)
Date: 6/11/24
By: AMS of Indiana. Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Email: eng-ams@comcast.net

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

Project Information

For: Deer Valley Homebuilders
SVM-11815(DVHBSS-6808)

Design Information

	Htg	Clg
Outside db (°F)	23	98
Inside db (°F)	70	75
Design TD (°F)	47	23
Daily range	-	M
Inside humidity (%)	30	50
Moisture difference (gr/lb)	19	56

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

HEATING EQUIPMENT

Make	NORDYNE		
Trade			
Model	E7E()-010		
AHRI ref			
Efficiency	100 AFUE		
Heating input	10.0	kW	
Heating output	35000	Btuh	
Temperature rise	31	°F	
Actual air flow	1020	cfm	
Air flow factor	0.042	cfm/Btuh	
Static pressure	0.30	in H2O	
Space thermostat			

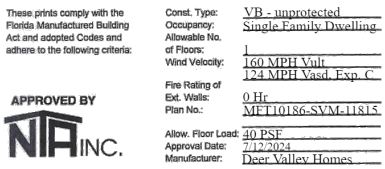
COOLING EQUIPMENT

Make	Generic		
Trade			
Cond	SEER2 14.3		
Coil			
AHRI ref			
Efficiency	12.2 EER2,14.3 SEER2		
Sensible cooling	24575	Btuh	
Latent cooling	10532	Btuh	
Total cooling	35107	Btuh	
Actual air flow	1020	cfm	
Air flow factor	0.045	cfm/Btuh	
Static pressure	0.30	in H2O	
Load sensible heat ratio	0.79		

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
U	143	2885	1892	121	85
BA2	62	637	325	27	15
KT	424	4355	4208	183	189
BA1	223	3598	2120	151	95
B1	251	3710	3737	155	168
LR	349	4044	4585	169	206
STUDY	180	2050	2763	86	124
B2	176	3048	3088	128	139
H	31	0	0	0	0
HER	73	0	0	0	0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Entire House	1913	24327	22718	1020	1020
Other equip loads		2125	1042		
Equip. @ 1.03 RSM			24449		
Latent cooling			6152		
TOTALS	1913	26452	30601	1020	1020



Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

wrightsoft®

Building Analysis
Entire House
AMS of Indiana, Inc.

Job: SVM-11815(DVHBSS-6808)
Date: 6/11/24
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Email: eng-ams@comcast.net

Project Information

For: Deer Valley Homebuilders
SVM-11815(DVHBSS-6808)

Design Conditions

Location:
Gainesville, FL, US
Elevation: 123 ft
Latitude: 30 °N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	23	98
Daily range (°F)	-	18 (M)
Wet bulb (°F)	-	79
Wind speed (mph)	15.0	7.5

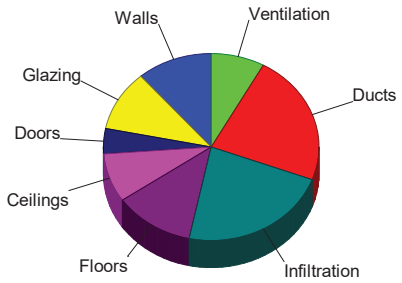
Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	70	75
Design TD (°F)	47	23
Relative humidity (%)	30	50
Moisture difference (gr/lb)	18.7	56.1

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

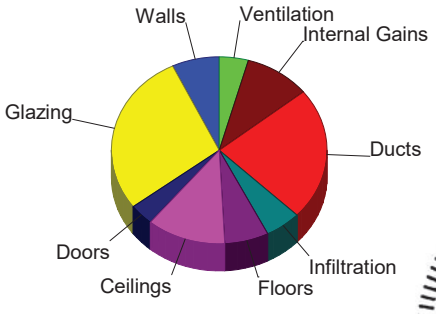
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	2.5	2995	11.3
Glazing	13.5	2773	10.5
Doors	13.5	1153	4.4
Ceilings	1.2	2233	8.4
Floors	1.7	3206	12.1
Infiltration	4.0	5979	22.6
Ducts		5988	22.6
Piping		0	0
Humidification		0	0
Ventilation		2125	8.0
Adjustments		0	
Total		**26452**	**100.0**



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.4	1690	7.1
Glazing	32.7	6693	28.2
Doors	10.3	876	3.7
Ceilings	1.5	2819	11.9
Floors	0.8	1572	6.6
Infiltration	0.9	1279	5.4
Ducts		5439	22.9
Ventilation		1042	4.4
Internal gains		2350	9.9
Blower		0	0
Adjustments		0	
Total		**23760**	**100.0**



Latent Cooling Load = 6152 Btuh
Overall U-value = 0.053 Btuh/ft²-°F, Window / Floor Area = 10.7 %

Data entries checked.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult
124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

NADER TOMASBI
LICENSE
No. 56556
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/11/2024

wrightsoft®

Component Constructions
Entire House
AMS of Indiana, Inc.

Job: SVM-11815(DVHBSS-6808)
Date: 6/11/24
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Email: eng-ams@comcast.net

Project Information

For: Deer Valley Homebuilders
SVM-11815(DVHBSS-6808)

Design Conditions

Location:
Gainesville, FL, US
Elevation: 123 ft
Latitude: 30 °N

Outdoor:	Heating	Cooling
Dry bulb (°F)	23	98
Daily range (°F)	-	18 (M)
Wet bulb (°F)	-	79
Wind speed (mph)	15.0	7.5

Indoor:	Heating	Cooling
Indoor temperature (°F)	70	75
Design TD (°F)	47	23
Relative humidity (%)	30	50
Moisture difference (gr/lb)	18.7	56.1

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

Construction descriptions	Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
R19 - wall: Frm wall, vnl ext, 7/16" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood fr	n	218	0.053	19.0	2.48	541	1.40	305
	e	425	0.053	19.0	2.48	1053	1.40	594
	s	240	0.053	19.0	2.48	594	1.40	335
	w	326	0.053	19.0	2.48	808	1.40	456
	all	1210	0.053	19.0	2.48	2995	1.40	1690
Partitions								
(none)								
Windows								
HERITAGE 3672: HERITAGE 3672; 6.67 ft head ht	e	43	0.290	0	13.5	579	26.8	1145
	w	162	0.290	0	13.5	2194	26.8	4341
	all	205	0.290	0	13.5	2773	26.8	5486
Doors								
11P0: Door, mtl pur core type	n	22	0.290	10.5	13.5	292	10.3	222
	e	42	0.290	10.5	13.5	569	10.3	432
	w	22	0.290	10.5	13.5	292	10.3	222
	all	85	0.290	10.5	13.5	1153	10.3	876
Ceilings								
Attic ceiling, asphalt shingles roof mat, r-40 ceil ins, 1/2" gypsum board int fnsh		1913	0.025	40.0	1.17	2233	1.47	2819
Floors								
Flr floor, frm flr, 8" thkns, carpet flr fnsh, r-22 cav ins, tight crwl ovr		1913	0.045	22.0	1.68	3206	0.82	1572

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult
124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

NADER TOMASBI
LICENSE
No. 56556
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/11/2024

wrightsoft

Project Summary
Entire House
AMS of Indiana, Inc.

Job: SVM-11815(DVHBSS-6808)
Date: 6/11/24
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Email: eng-ams@comcast.net

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

Project Information

For: Deer Valley Homebuilders
SVM-11815(DVHBSS-6808)

Notes:

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

Design Information

Weather: Gainesville, FL, US

Winter Design Conditions

Outside db	23	°F
Inside db	70	°F
Design TD	47	°F

Summer Design Conditions

Outside db	98	°F
Inside db	75	°F
Design TD	23	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	56	gr/lb

Heating Summary

Structure	18339	Btuh
Ducts (R-8.0)	5988	Btuh
Central vent (42 cfm) Outside air	2125	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	26452	Btuh

Sensible Cooling Equipment Load Sizing

Structure	17278	Btuh
Ducts (R-8.0)	5439	Btuh
Central vent (42 cfm) Outside air	1042	Btuh
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	1.03	
Equipment sensible load	24449	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

	Heating	Cooling
Area (ft²)	1913	1913
Volume (ft³)	15300	15300
Air changes/hour	0.46	0.20
Equiv. AVF (cfm)	117	51

Latent Cooling Equipment Load Sizing

Structure	2936	Btuh
Ducts	1638	Btuh
Central vent (42 cfm) Outside air	1578	Btuh
Equipment latent load	6152	Btuh
Equipment Total Load (Sen+Lat)	30601	Btuh
Req. total capacity at 0.70 SHR	2.9	ton

Heating Equipment Summary

Make	NORDYNE
Trade	
Model	E7E()-010
AHRI ref	

Efficiency	100	AFUE
Heating input	10.0	kW
Heating output	35000	Btuh
Temperature rise	31	°F
Actual air flow	1020	cfm
Air flow factor	0.042	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

Cooling Equipment Summary

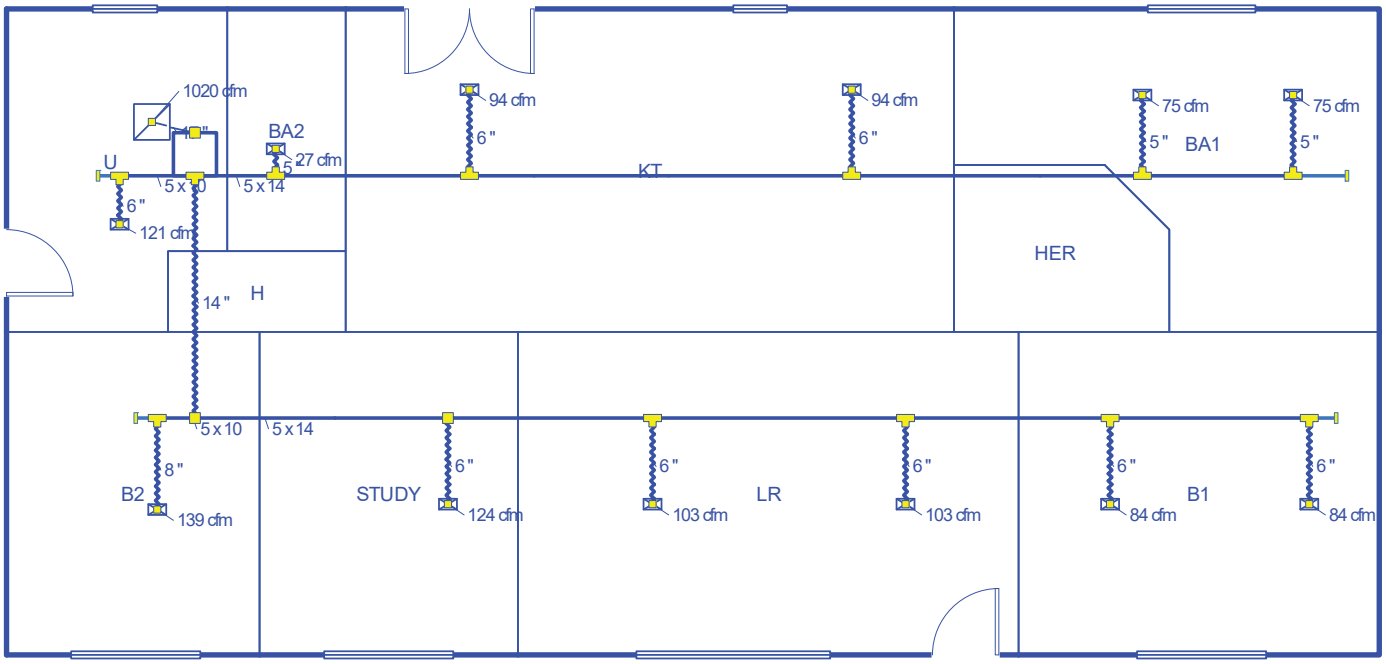
Make	Generic
Trade	
Cond	SEER2 14.3
Coil	
AHRI ref	

Efficiency	12.2 EER2,14.3 SEER2	
Sensible cooling	24575	Btuh
Latent cooling	10532	Btuh
Total cooling	35107	Btuh
Actual air flow	1020	cfm
Air flow factor	0.045	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.79	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

N

Sheet 1



These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

Job #: SVM-11815(DVHBSS-6808)
Performed by AMS of Indiana, Inc. for:
Deer Valley Homebuilders
SVM-11815(DVHBSS-6808)

AMS of Indiana, Inc.
3933 E. Jackson Blvd.
Elkhart, IN 46516
Phone: 574-293-5526
eng-ams@comcast.net

Scale: 1 : 107

Right-Suite® Universal 2023
23.0.05 RSU02009
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wrightsoft®

Duct System Summary
Entire House
AMS of Indiana, Inc.

Job: SVM-11815(DVHBSS-6808)
Date: 6/11/24
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Email: eng-ams@comcast.net

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

Project Information

For: Deer Valley Homebuilders
SVM-11815(DVHBSS-6808)

	Heating	Cooling
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0.06 in H2O	0.06 in H2O
Available static pressure	0.24 in H2O	0.24 in H2O
Supply / return available pressure	0.183 / 0.057 in H2O	0.183 / 0.057 in H2O
Lowest friction rate	0.092 in/100ft	0.092 in/100ft
Actual air flow	1020 cfm	1020 cfm
Total effective length (TEL)	260 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
B1	c	1868	78	84	0.092	***6.0***	***0*** x ***0***	VlFx	57.8	140.0	st5
B1-A	c	1868	78	84	0.093	***6.0***	***0*** x ***0***	VlFx	67.0	130.0	st5
B2-A	c	3088	128	139	0.124	8.0	0x 0	VlFx	17.3	130.0	st4
BA1	h	1799	75	48	0.099	5.0	0x 0	VlFx	54.8	130.0	st2
BA1-A	h	1799	75	48	0.097	5.0	0x 0	VlFx	47.8	140.0	st2
BA2	h	637	27	15	0.108	5.0	0x 0	VlFx	5.0	165.0	st2
KT	c	2104	91	94	0.103	***6.0***	***0*** x ***0***	VlFx	16.8	160.0	st2
KT-A	c	2104	91	94	0.099	***6.0***	***0*** x ***0***	VlFx	34.5	150.0	st2
LR-B	c	2293	85	103	0.093	6.0	0x 0	VlFx	36.5	160.0	st5
LR-C	c	2293	85	103	0.092	6.0	0x 0	VlFx	48.3	150.0	st5
STUDY	c	2763	86	124	0.095	***6.0***	***0*** x ***0***	VlFx	27.0	165.0	st5
U	h	2885	121	85	0.135	***6.0***	***0*** x ***0***	VlFx	5.8	130.0	st1

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st2	Peak AVF	360	299	0.097	741	***10.5***	***14*** x ***5***	ShtMetl	
st1	Peak AVF	121	85	0.135	348	***6.6***	***10*** x ***5***	ShtMetl	
st4	Peak AVF	128	139	0.124	399	6.3	10 x 5	ShtMetl	st3
st5	Peak AVF	411	497	0.092	1023	***14.0***	***14*** x ***5***	ShtMetl	st3
st3	Peak AVF	539	636	0.092	595	***14.0***	***0*** x ***0***	VinlFlx	

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

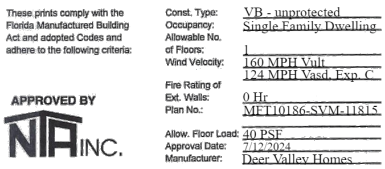
APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult. 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

Bold/italic values have been manually overridden

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x 0	1020	1020	62.1	0.092	647	17.0	0x 0		RtFg	



Static Pressure and Friction Rate
Entire House
AMS of Indiana, Inc.

Job: SVM-11815(DVHBSS-6808)
Date: 6/11/24
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Email: eng-ams@comcast.net

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

Project Information

For: Deer Valley Homebuilders
SVM-11815(DVHBSS-6808)

Available Static Pressure

	Heating (in H2O)	Cooling (in H2O)
External static pressure	0.30	0.30
Pressure losses		
Coil	0	0
Heat exchanger	0	0
Supply diffusers	0.03	0.03
Return grilles	0.03	0.03
Filter	0	0
Humidifier	0	0
Balancing damper	0	0
Other device	0	0
Available static pressure	0.24	0.24

Total Effective Length

	Supply (ft)	Return (ft)
Measured length of run-out	4	2
Measured length of trunk	44	0
Equivalent length of fittings	150	60
Total length	198	62
Total effective length		260

Friction Rate

	Heating (in/100ft)		Cooling (in/100ft)	
Supply Ducts	0.092	OK	0.092	OK
Return Ducts	0.092	OK	0.092	OK

Fitting Equivalent Length Details

Supply 4AD=60, 2A2=55, 1A=35: TotalEL=150

Return 6M=20, 5D=40: TotalEL=60

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

FORM R405-2023

FLORIDA ENERGY EFFI[illegible]FOR BUILDING CONSTRUCTION

Florida Department of Busines[illegible]gulation - Residential Performance Method

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

Project Name:	SVM-11815	[illegible]ilder Name:	Deer Valley Homebuilders
Street:	322 SW Moonlit Drive	[illegible]rmit Office:	
City, State, Zip:	Fort White, FL, 32038	[illegible]rmit Number:	
Owner:	Jean Murray	[illegible]risdiction:	
Design Location:	FL, Gainesville	unty:	Columbia(Florida Climate Zone 2)

1. New construction or existing		New (From Plans)
2. Single family or multiple family		Detached
3. Number of units, if multiple family		1
4. Number of Bedrooms		3
5. Is this a worst case?		Yes
6. Conditioned floor area above grade (ft²)		1920
Conditioned floor area below grade (ft²)		0

7. Windows(209.3 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.29	209.25 ft²
SHGC:	SHGC=0.21	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		1.000 ft
Area Weighted Average SHGC:		0.210

8. Skylights	Description	Area
U-Factor:(AVG)	N/A	N/A ft²
SHGC(AVG):	N/A	

9. Floor Types	Insulation	Area
a. Crawlspace	R= 22.0	1920.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

10. Wall Types(1504.0 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=19.0	1504.00 ft²
b. N/A		
c. N/A		
d. N/A		

11. Ceiling Types(1920.0 sqft.)	Insulation	Area
a. Single assembly, with (Vented)	R=40.0	1920.00 ft²
b. N/A		
c. N/A		

12. Roof(Comp. Shingles, Vented)	Deck R=0.0	1979 ft²

13. Ducts, location & insulation level	R	ft²
a. Sup: Attic, Ret: Attic, AH: Main	6	400
b.		
c.		

14. Cooling Systems	kBtu/hr	Efficiency
a. Central Unit	35.0	SEER2:14.30

15. Heating Systems	kBtu/hr	Efficiency
a. Electric Heat Pump	35.0	HSPF2:7.50

16. Hot Water Systems	
a. Electric	Cap: 50 gallons EF: 0.920
b. Conservation features	None
17. Credits	CF

Glass/Floor Area: 0.109

Total Proposed Modified Loads: 52.42

Total Baseline Loads: 56.81

PASS

NOTE: Proposed residence must have annual total normalized Modified Loads that are less than or equal to 95 percent of the annual total loads of the standard reference design in order to comply.

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: Jerome Triplett

DATE: 07/03/24

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____

DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

GREAT SEAL OF THE STATE OF FLORIDA IN GOD WE TRUST

BUILDING OFFICIAL: _____

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 0.040 Qn for whole house.

- Compliance requires a roof absorptance test and a roof emittance test in accordance with R405.7.2

- 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 7.00 ACH50 (R402.4.1.2).

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	SVM-11815			Address type:	Street Address
Building Type:	User	Bedrooms:	3	Lot #:	---
Owner:	Jean Murray	Conditioned Area:	1920	Block/SubDivision:	---
Builder Home ID:		Total Stories:	1	PlatBook:	---
Builder Name:	Deer Valley Homebuilders	Worst Case:	Yes	Street:	322 SW Moonlit Drive
Permit Office:		Rotate Angle:	180	County:	Columbia
Jurisdiction:		Cross Ventilation:	No	City, State, Zip:	Fort White, FL, 32038
Family Type:	Detached	Whole House Fan:	No		
New/Existing:	New (From Plans)	Terrain:	Suburban		
Year Construct:	2024	Shielding:	Suburban		
Comment:					

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

Const. Type:	VB - unprotected
Occupancy:	Single Family Detached
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approved Roofs:	All roofs
Manufacturer:	Deer Valley Homes

APPROVED BY NTA INC.

CLIMATE

✓	Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range
___	FL, Gainesville	FL_GAINESVILLE_REGIONA	32	92	70	75	1305.5	51	Medium

BLOCKS

✓	Number	Name	Area	Volume
___	1	Block1	1920	15360 cu ft

SPACES

✓	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___	1	Main	1920	15360	Yes	3	3	Yes	Yes	Yes

FLOORS (Total Exposed Area = 1920 sq.ft.)

✓	#	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim.	R-Value Joist	U-Factor	Slab Insul. Vert/Horiz	Tile	Wood	Carpet
___	1	Crawlspace	Main	200	1920 sqft	0	22	0.048	-------	0.60	0.00	0.40

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
___	1	Gable or shed	Composition shingles	1979 ft²	240 ft²	Unfinished, Galvalum	N	0.75	Yes	0.4	Yes	0	14.04

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
___	1	No attic	Vented	300	1920 ft²	N	N

CEILING (Total Exposed Area = 1920 sq.ft.)

✓	#	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___	1	Single assembly, with airspace(Vented)	Main	40.0	Blown	1920.0ft²	0.026	0.11	Wood

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

WALLS (Total Exposed Area = 1504 sq.ft.)

Note: First wall orientation below is as entered. Actual orientation is modified by the rotate angle (180 degrees) as shown in the "Project" section on page 1.

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade
___	1	W=>E	Exterior	Frame - Wood	Main	19.0	64.0	0	8.0	0	512.0	0.061	0	0.23	0.75	0 %
___	2	S=>N	Exterior	Frame - Wood	Main	19.0	30.0	0	8.0	0	240.0	0.061		0.23	0.75	0 %
___	3	E=>W	Exterior	Frame - Wood	Main	19.0	64.0	0	8.0	0	512.0	0.061		0.23	0.75	0 %
___	4	N=>S	Exterior	Frame - Wood	Main	19.0	30.0	0	8.0	0	240.0	0.061		0.23	0.75	0 %

DOORS (Total Exposed Area = 78 sq.ft.)

√	#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
___	1	W=>E	Exterior	Insulated	Main	None	0.27	3.00	0	6.00	6	19.5ft²
___	2	E=>W	Exterior	Insulated	Main	None	0.35	6.00	0	6.00	6	39.0ft²
___	3	N=>S	Exterior	Insulated	Main	None	0.27	3.00	0	6.00	6	19.5ft²

WINDOWS (Total Exposed Area = 209 sq.ft.)

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Storm	Total Area (ft²)	Same Units	Width (ft)	Height (ft)	--Overhang-- Depth (ft)	Sep. (ft)	Interior Shade	Screen
___	1	W=>E	1	Vinyl	Low-E Double	Y	0.29	0.21	N	N	162.0	9	3.00	6.00	1.0	1.0	IECC 2012	None
___	2	E=>W	3	Vinyl	Low-E Double	Y	0.29	0.21	N	N	18.0	1	3.00	6.00	1.0	1.0	IECC 2012	None
___	3	E=>W	3	Vinyl	Low-E Double	Y	0.29	0.21	N	N	29.3	3	3.00	3.25	1.0	1.0	IECC 2012	None

INFILTRATION

√	#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___	1	Wholehouse	Proposed ACH(50)	0.00036	1792	98.31	184.57	0.1372	7.0	All	15360 cu ft

MASS

√	#	Mass Type	Area	Thickness	Furniture Fraction	Space
___	1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Main

HEATING SYSTEM

√	#	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal HeatPump---- Entry	Power	Volt	Current	Ducts	Block
___	1	Electric Heat Pump	None/Single		HSPF2: 7.50	35.0		0.00	0.00	0.00	sys#1	1

COOLING SYSTEM

√	#	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___	1	Central Unit	Single/Single		SEER2:14.3	35.0	1050	0.75	sys#1	1

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NCI

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Manufacturer: Deer Valley Homes

FORM R405-2023

INPUT SUMMARY CHECKLIST REPORT

HOT WATER SYSTEM

✓	#	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___	1	Electric	None	Main	0.92 (0.92)	50.00 gal	60 gal	120 deg	Standard	None	99

	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits
___ 1	No		NA	NA	NA	No	NA	NA	NA	None

DUCTS

✓	Duct #	Supply Location	Supply R-Value	Supply Area	Return Location	Return R-Value	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN OUT	RLF	HVAC # Heat	HVAC # Cool
___	1	Attic	6.0	400 ft²	Attic	6.0	100 ft²	Proposed Qn	Main	---	---	0.040	0.50	1	1

TEMPERATURES

Programable Thermostat: N Ceiling Fans: N

Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec

✓ Thermostat Schedule: FloridaCode 2014

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
___ Cooling (WD)	AM	75	75	75	75	75	75	75	75	75	75	75	75
	PM	75	75	75	75	75	75	75	75	75	75	75	75
___ Cooling (WEH)	AM	75	75	75	75	75	75	75	75	75	75	75	75
	PM	75	75	75	75	75	75	75	75	75	75	75	75
___ Heating (WD)	AM	72	72	72	72	72	72	72	72	72	72	72	72
	PM	72	72	72	72	72	72	72	72	72	72	72	72
___ Heating (WEH)	AM	72	72	72	72	72	72	72	72	72	72	72	72
	PM	72	72	72	72	72	72	72	72	72	72	72	72

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APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult, 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

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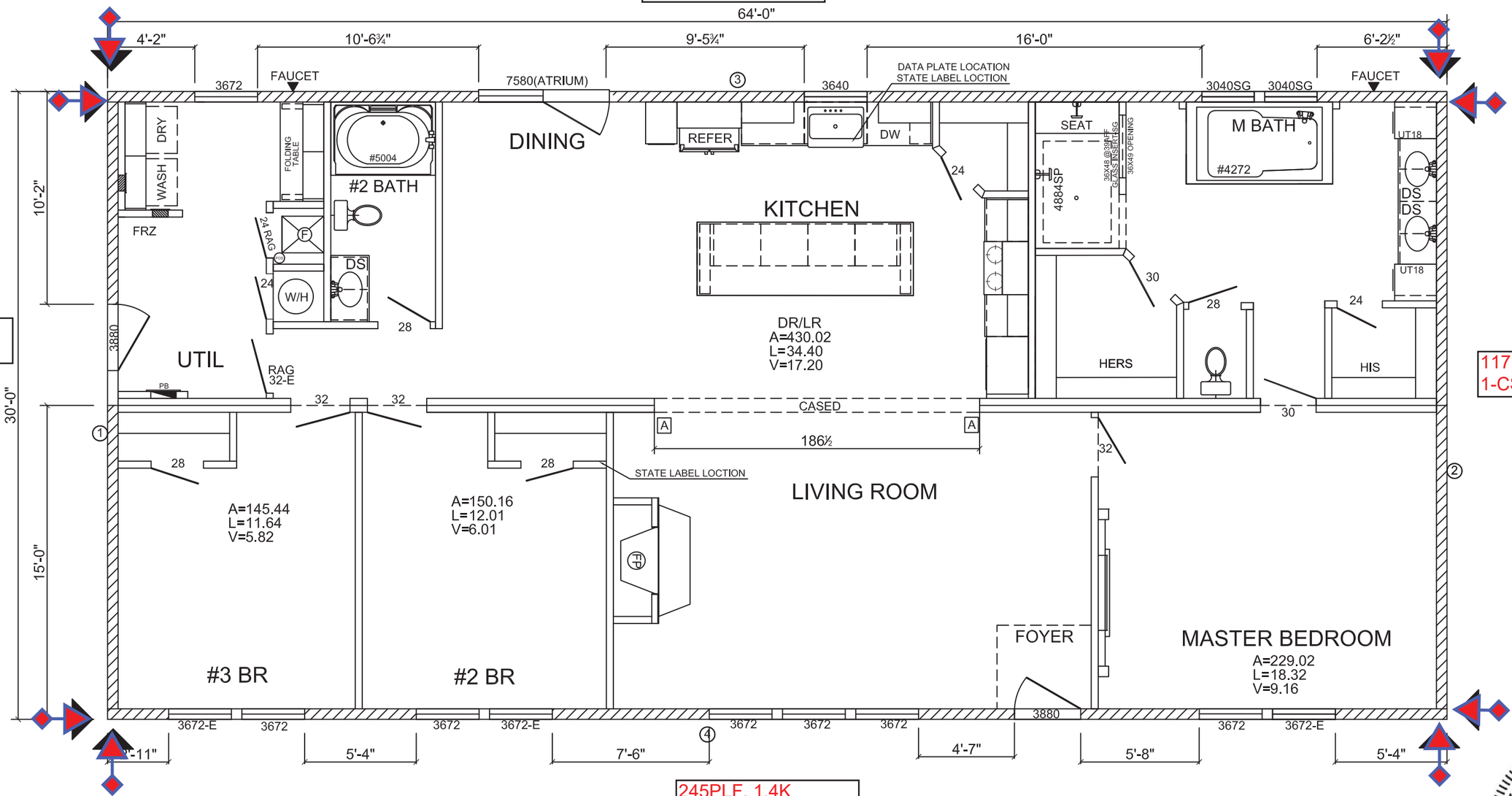
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

130PLF, 0.7K
1-CS14 per location

197PLF, 1.6K
1-CS14 per location

117PLF, 0.9K
1-CS14 per location

245PLF, 1.4K
1-CS14 per location



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PROFESSIONAL ENGINEER
7/11/2024

* =FINISHED WALL TO FINISHED WALL DIMENSION

TITLE: SVM-11815 FLOOR PLAN	FL 160 MPH	PRINT DATE: 6/29/2024	APPROVED BY: J.TRIPLETT	W:\DV Logo.dwg (2).jpg	DEER VALLEY HOMEBUILDERS, INC. SIGNATURE SERIES MOD	REV:	REV:	DWG. NO: 1.01
		SCALE: NTS	PRODUCTION BY:			REV:	REV:	

Bracing Tributary Length Determination

Deer Valley SVM-11815

No Interior Walls ASCE 7-22 (Also meets ASCE 7-16)

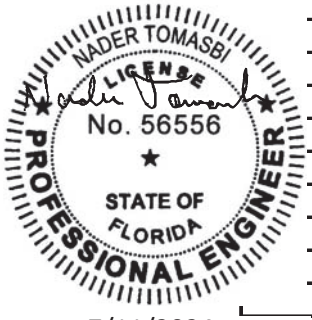
Endwall Length =	30 ft	Endwall added area=	0 ft
Sidewall Length =	70 ft		
Porch Length (Left) =	0 ft		
Porch Length (Right) =	0 ft	**Left Endwall Trib From Wall:**	**35 ft**
Wall Height =	8 ft	**Left Endwall Trib From Roof:**	**35 ft**
Heel Height of Truss =	8 in	**Right Endwall Trib From Wall:**	**35 ft**
Seismic category =	C	**Right Endwall Trib From Roof:**	**35 ft**
Ultimate Wind Speed =	**160** mph		
Wind Exposure =	**C**		
Roof pitch =	2.13 /12		
Mean Roof Height =	20 ft		

Transition from Perforated to Segmented: **380** PLF

Left Endwall - Bracing #1

Perforated or Segmented: **P**
PLF: 197 plf
Height of Tallest Opening = 7 ft
Wall length when perforated = 30 ft

Segment length - ft	Effective wind	Effective seismic
10.17	10.17	10.17
15	15	15
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
Total :	25.17	25.17



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Right Endwall (hitch end) - Bracing #2

Perforated or Segmented: **P**
PLF: 117 plf
Height of Tallest Opening = 7 ft
Wall length when perforated = 30 ft

Segment length - ft	Effective wind	Effective seismic
15	15	15
15	15	15
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
otal :	30	30

Top Sidewall - Bracing #3

Perforated or Segmented: **P**
PLF: 130 plf
Height of Tallest Opening = 7 ft
Wall length when perforated = 70 ft

Segment length - ft	Effective wind	Effective seismic
4.17	4.17	4.17
10.5	10.5	10.5
9.42	9.42	9.42
16	16	16
6.17	6.17	6.17
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
Total :	46.26	46.26

Tag load: 0 Lb.

Bottom Sidewall - Bracing #4

Perforated or Segmented: **P**
PLF: 245 plf
Height of Tallest Opening = 7 ft
Wall length when perforated = 70 ft

Segment length - ft	Effective wind	Effective seismic
2.92	2.92	2.1316
5.33	5.33	5.33
7.5	7.5	7.5
4.5832	4.5832	4.5832
5.67	5.67	5.67
5.33	5.33	5.33
0	0	0
0	0	0
0	0	0
0	0	0
Total :	31.3332	30.5448

Tag load: 0 Lb.

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Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

One Story Shear Wall Wind/Seismic Analysis - No Interior Shearwalls

Deer Valley SVM-11815

Wind Loads

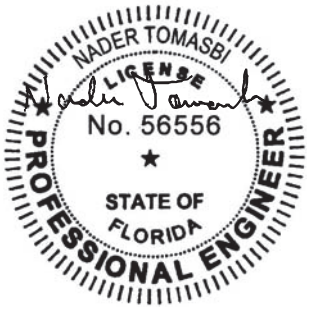
ASCE 7-22

MWF

(Also meets ASCE 7-16)

Nominal wind speed =	123	mph			
Ultimate Wind Speed =	160	mph			
Exposure =	C				
Mean Roof Height =	20	ft			
Wind load Areas	A	B	C	D	
(psf)	34.8	0.0	23.1	0.0	

A = End zone of Wall
B = End zone of Roof
C = Interior zone of Wall
D = Interior zone of Roof



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Building Values

Roof pitch =	2.13 /12	Sidewall Length =	70 ft
Roof angle =	10.1 °		
Wall Height =	8 ft	Endwall Length =	30 ft
Heel Height of Truss =	8 in	a =	3.00 ft
		2a =	6.00 ft
		Porch Length (Left) =	0 ft
Height of Roof =	3.33 ft	Porch Length (Right) =	0 ft

Left Endwall Shear Values

Area of End Zone of Sidewall =	24.0 ft^2 /side	Total Shear =	836 lbs
Area of End Zone of Roof =	20.0 ft^2 /side	Total Shear =	0 lbs
Area of Interior Zone of Sidewall =	116.0 ft^2 /side	Total Shear =	2685 lbs
Area of Interior Zone of Roof =	96.5 ft^2 /side	Total Shear =	0 lbs

Total Shear Force to Endwalls = 3521 lbs

Right Endwall Shear Values

Area of End Zone of Sidewall =	24.0 ft^2 /side	Total Shear =	836 lbs
Area of End Zone of Roof =	20.0 ft^2 /side	Total Shear =	0 lbs
Area of Interior Zone of Sidewall =	116.0 ft^2 /side	Total Shear =	2685 lbs
Area of Interior Zone of Roof =	96.5 ft^2 /side	Total Shear =	0 lbs

Total Shear Force to Endwalls = 3521 lbs

Sidewall Shear Values

Area of End Zone of Wall =	24 ft^2 /side	Total Shear =	836 lbs
Area of End Zone of Roof =	3 ft^2 /side	Total Shear =	111 lbs
Area of Interior Zone of Wall =	36 ft^2 /side	Total Shear =	833 lbs
Area of Interior Zone of Roof =	22 ft^2 /side	Total Shear =	504 lbs

Total Shear Force to Sidewalls = 2284 lbs

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Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult 124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

Seismic Loads

Seismic category =	C	
S_{DS} =	0.5	
Wall DL =	10	psf
Roof DL =	20	psf
Total W for seismic shear walls =	50000	lbs
R =	6.5	
C_s =	0.09615	
F_x =	4807.69	lbs

F_x = 0

shear on endwalls = 2404 lbs/wall
shear on sidewalls = 2404 lbs/wall

Compare Wind vs Seismic for shear walls

	Seismic	Wind	Wind with 1.4 reduction
Endwall	2404	3521	2515
Sidewall	2404	2284	1632

Controlling factors for shear wall panels
Endwall ----------> Wind
Sidewall ----------> Seismic

Controlling factors for Uplift/Shear Forces
Endwall ----------> Wind
Sidewall ----------> Seismic

Determination of shear wall panel loads

Left Endwall - Bracing #1

Perforated or **S**egmented:	**P**	
Wall length when perforated =	30	ft
Wall Height =	8	ft
Height of Tallest Opening =	7	ft
Height Ratio =	0.875	
Length of Full Height Sheathing (3.5:1) =	25.17	ft
Length of Full Height Sheathing (2:1) =	25.17	ft
Percent Full Height Sheathing (3.5:1) =	84%	
Percent Full Height Sheathing (2:1) =	84%	
C_o (3.5:1) =	0.71	from table in IBC
C_o (2:1) =	0.71	from table in IBC
Total Force (wind) =	4959	lbs
Total Force (seismic) *1.4 =	4740	lbs
Load Taken to Shear Wall Segments =	197	plf <==
Uplift Force at End of Wall =	1576	lbs

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Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

Right Endwall (hitch end) - Bracing #2

Perforated or **S**egmented:	**P**		
Wall length when perforated =	30	ft	
Wall Height =	8	ft	
Height of Tallest Opening =	7	ft	
Height Ratio =	0.875		
Length of Full Height Sheathing (3.5:1) =	30	ft	
Length of Full Height Sheathing (2:1) =	30	ft	
Percent Full Height Sheathing (3.5:1) =	100%		
Percent Full Height Sheathing (2:1) =	100%		
C_o (3.5:1) =	1	from table in IBC	
C_o (2:1) =	1	from table in IBC	
Total Force (wind) =	3521	lbs	
Total Force (seismic) *1.4 =	3365	lbs	
Load Taken to Shear Wall Segments =	117	plf	<==
Uplift Force at End of Wall =	939	lbs	

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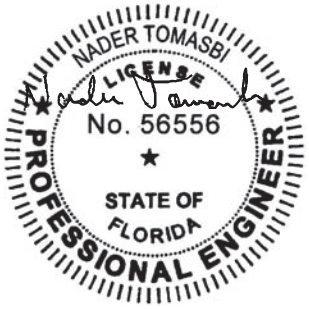
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MET10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

Top Sidewall - Bracing #3

Perforated or **S**egmented:	**P**		
Wall length when perforated =	70	ft	
Wall Height =	8	ft	
Height of Tallest Opening =	7	ft	
Height Ratio =	0.875		
Length of Full Height Sheathing (3.5:1) =	46.26	ft	
Length of Full Height Sheathing (2:1) =	46.26	ft	
Percent Full Height Sheathing (3.5:1) =	66%		
Percent Full Height Sheathing (2:1) =	66%		
C_o (3.5:1) =	0.56	from table in IBC	
C_o (2:1) =	0.56	from table in IBC	
Total Force (wind) =	4079	lbs	(includes tag load when applicable)
Total Force (seismic) *1.4 =	6010	lbs	(includes tag load when applicable)
Load Taken to Shear Wall Segments =	130	plf	<==
Uplift Force at End of Wall =	742	lbs	

Bottom Sidewall - Bracing #4

Perforated or **S**egmented:	**P**		
Wall length when perforated =	70	ft	
Wall Height =	8	ft	
Height of Tallest Opening =	7	ft	
Height Ratio =	0.875		
Length of Full Height Sheathing (3.5:1) =	31.3332	ft	
Length of Full Height Sheathing (2:1) =	30.5448	ft	
Percent Full Height Sheathing (3.5:1) =	45%		
Percent Full Height Sheathing (2:1) =	44%		
C_o (3.5:1) =	0.45	from table in IBC	
C_o (2:1) =	0.45	from table in IBC	
Total Force (wind) =	5076	lbs	(includes tag load when applicable)
Total Force (seismic) *1.4 =	7479	lbs	(includes tag load when applicable)
Load Taken to Shear Wall Segments =	245	plf	<==
Uplift Force at End of Wall =	1399	lbs	



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Wind Load Determination Worksheet

MWF Low-rise building Method 2 ASCE 7-22

Nominal Wind Speed =	123 mph		Roof Slope =	2.13 /12	
Ultimate Wind Speed =	160 mph			10.07 °	
Exposure =	C				
Mean Roof Height =	20 ft				
			α =	9.8	
K_d =	0.85		z_g =	2460 ft	
K_{zt} =	1				
K_z =	0.90		**q_h =**	**29.63 psf**	
I =	1				
			GC_{pi} =	0.18	
Building Class =	Enclosed Building			-0.18	

* Gc_{pi} cancels-out on total building calcs

Load A - End Zone of Wall

1E =	0.67	GC_{pf} =	1.18
4E =	-0.50		
A =	**34.83 psf**		

Load C - Interior Zone of Wall

1 =	0.44	GC_{pf} =	0.78
4 =	-0.34		
C =	**23.15 psf**		

Load B - End Zone of Roof

2E =	-1.07	2E load =	-31.70
3E =	-0.58	3E load =	-17.31
Horz 2E load =	-5.54		
Horz 3E load =	-3.03	**B =**	**0.00 psf**

Load D - End Zone of Roof

2 =	-0.69	2E load =	-20.44
3 =	-0.40678	3E load =	-12.05
Horz 2E load =	-3.57		
Horz 3E load =	-2.11	**D =**	**0.00 psf**

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

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Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

One Story Shear Wall Design

Deer Valley SVM-11815
Summary of Forces

Shear Walls

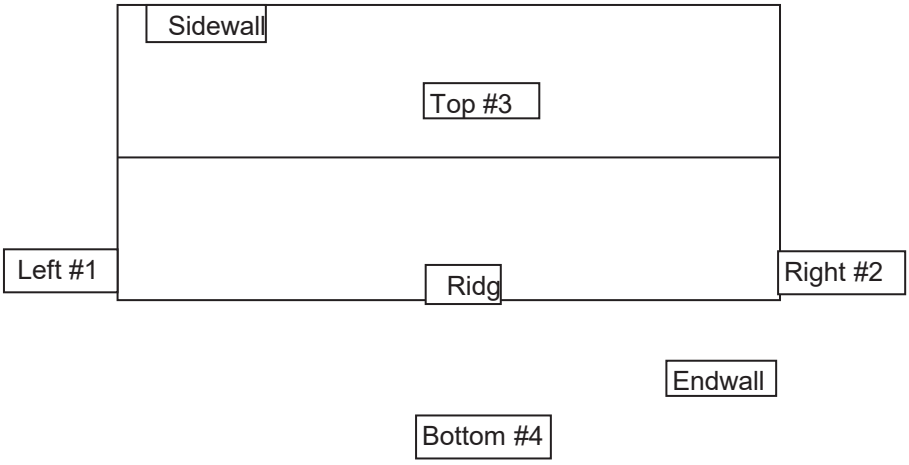
Brace wall	PLF-Load	CONSTRUCTION
Left endwall - Preforated	197	7/16 in sheathing One Side with 15 gauge staple at 4 in o/c edge spacing
Right endwall - Preforated	117	7/16 in sheathing One Side with 15 gauge staple at 4 in o/c edge spacing
Top sidewall - Perforated	130	7/16 in sheathing One Side with 15 gauge staple at 6 in o/c edge spacing
Bottom sidewall - Perforated	245	7/16 in sheathing One Side with 15 gauge staple at 4 in o/c edge spacing

Overturning Forces

Simpson CS14 strap capacity : 2.49 Kips

Total Shear Force to Endwalls = 3.5 Kips
Total Shear Force to Sidewalls = 2.3 Kips

Racking Load Left endwall -	1.6	Kips	req.# CS14 **1.0**
Racking load right endwall -	0.9	Kips	req.# CS14 **1.0**
Racking Load top sidewall -	0.7	Kips (Includes tag load when applicable)	req.# CS14 **1.0**
Racking Load bottom sidewall -	1.4	Kips (Includes tag load when applicable)	req.# CS14 **1.0**



Roof Diaphragm

7/16 in sheathing with .131 pd nail at unblocked 6 in o/c edge spacing

-- --

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Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

Shear Wall Design

Deer Valley SVM-11815

Left Shearwall

Shearwall Required Design = 197 plf
Thickness of Sheathing = 7/16 "
Fastener = 15 gauge staple
Edge Spacing of Fastener = 4 in o/c
Species of Framing = SPF
Sheathing on Both sides? One Side
Use 7/16 in sheathing One Side with 15 gauge staple at 4 in o/c edge spacing
Sheathing Capacity = 298.48 plf
Shear Wall **OK**

Right Shearwall

Shearwall Required Design = 117 plf
Thickness of Sheathing = 7/16 "
Fastener = 15 gauge staple
Edge Spacing of Fastener = 4 in o/c
Species of Framing = SPF
Sheathing on Both sides? One Side
Use 7/16 in sheathing One Side with 15 gauge staple at 4 in o/c edge spacing
Sheathing Capacity = 298.48 plf
Shear Wall **OK**

Top Shearwall

Shearwall Required Design = 130 plf
Thickness of Sheathing = 7/16 "
Fastener = 15 gauge staple
Edge Spacing of Fastener = 6 in o/c
Species of Framing = SPF
Sheathing on Both sides? One Side
Use 7/16 in sheathing One Side with 15 gauge staple at 6 in o/c edge spacing
Sheathing Capacity = 195.16 plf
Shear Wall **OK**

Bottom Shearwall

Shearwall Required Design = 245 plf
Thickness of Sheathing = 7/16 "
Fastener = 15 gauge staple
Edge Spacing of Fastener = 4 in o/c
Species of Framing = SPF
Sheathing on Both sides? One Side
Use 7/16 in sheathing One Side with 15 gauge staple at 4 in o/c edge spacing
Sheathing Capacity = 298.48 plf
Shear Wall **OK**

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Fire Rating of Ext. Walls: 0 Hr
Plan No.: MET10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

NADER TOMASBI LICENSE No. 56556 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/11/2024

Roof Diaphragm Design

Deer Valley SVM-11815

Roof Diaphragm	Diaphragm width :	30 ft	30 ft
Top of BC of truss sheathed?[1]		No	
Diaphragm Required Design[2] =		117 plf	117 plf
Thickness of Sheathing =		7/16 "	
Fastener =		.131 pd nail	
Edge Spacing of Fastener[3,4,5] =		unblocked 6 in o/c	
Species of Framing[6] =		SPF	
Use		7/16 in sheathing with .131 pd nail at unblocked 6 in o/c edge spacing	
Sheathing Capacity[7] =		296.24 plf	
Shear Wall		**OK**	

Blocking only required at 0 ft from each endwall

1. Design assumes 19/32" min sheathing of at least 1/2 of BC of trusses with .131 pd nails at 6" o/c
2. Load increased by 1.4 if seismic loads control to compensate for 1.4 increase in diaphragm panel
3. Nail spacing at other panel edges to be as follows
   - 6" o/c if edge spacing is 6" o/c
   - 6" o/c if edge spacing is 4" o/c
   - 3" o/c if edge spacing is 2" o/c
4. Framing at adjoining panel edges shall be 3" nominal or wider & nails be staggard where nails are spaced 2" o/c
5. Roof sheathing is blocked unless stated unblocked
6. Diaphragm panels are reduced by 0.82 for SPF lumber
7. Per tables in ESR-1539

7/11/2024

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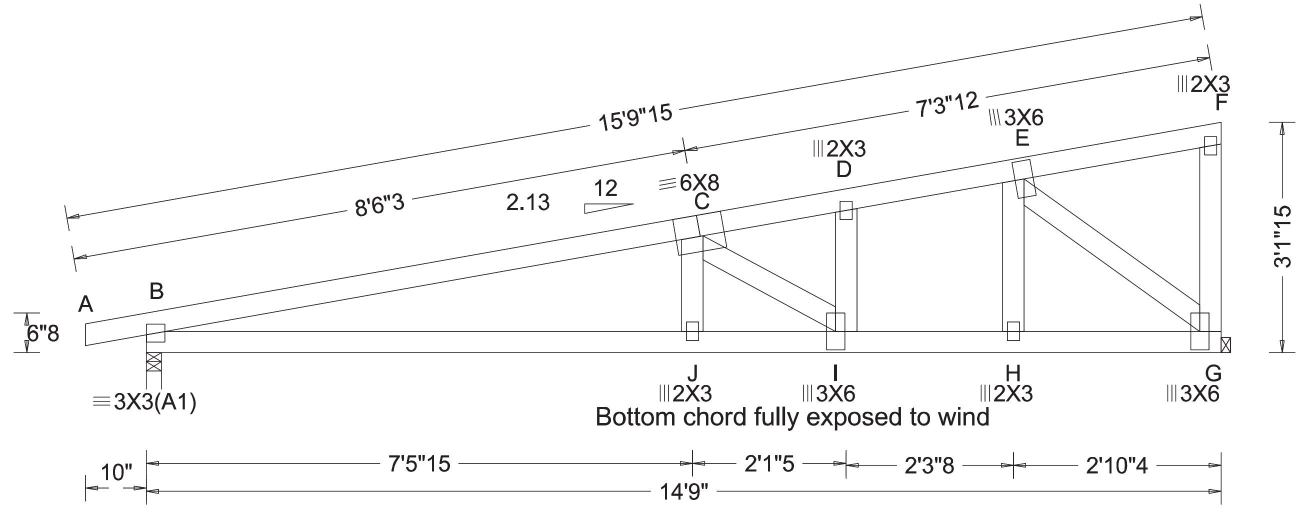
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10186-SVM-11815
Allow. Floor Load:	40 PSF
Approval Date:	7/12/2024
Manufacturer:	Deer Valley Homes

SEQN: 1481 MONO FROM:	Ply: 1 Qty: 1	**Job Number:** 115301 DEER VALLEY **Truss Label:** M0750728 Ref. 10021862	Cust: R 0130 JRef: 1XVQ91300002 T54 DrwNo: 352.23.1745.07053 DLD / PPH 12/18/2023



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-22 Speed: 140 mph@24"/171@16" Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 30.00 ft TCDL: 5.0 psf@24"/7.5@16" BCDL: 5.0 psf@24"/7.5@16" MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 8th Ed. 2023 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:0(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.124 I 999 240 VERT(CL): 0.244 I 721 240 HORZ(LL): -0.014 C - - HORZ(TL): 0.029 C - - Creep Factor: 2.0 Max TC CSI: 0.555 Max BC CSI: 0.813 Max Web CSI: 0.194 VIEW Ver: 23.02.01.1109.17

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	650	/-	/-	/487	/564	/229
G	584	/-	/-	/445	/521	/-

Wind reactions based on MWFRS
B Brg Wid = 2.5 Min Req = 1.5 (Truss)
G Brg Wid = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	1169	- 1541	D - E	570	- 730
C - D	635	- 824			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - J	1477	- 1313	I - H	742	- 655
J - I	1459	- 1310	H - G	726	- 646

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - I	844	- 940	E - G	860	- 967

Lumber

Value Set: NDS 2015

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #2;

Wind

Wind loads based on MWFRS with additional C&C member design.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

Lanai/Porch Loading : 29.6 PLF wind pressure applied to the bottom chord of the truss from 0.00 ft to 14.75 ft,

Alt. load @ 16" o.c.

TC LL 30.0 psf
TC DL 15.0 psf
BC DL 15.0 psf
BC LL 0.0 psf

Tot LD 60.0 psf

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult
124 MPH Vasd, Exp. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10186-SVM-11815
Allow. Floor Load: 40 PSF
Approval Date: 7/12/2024
Manufacturer: Deer Valley Homes

12/19/2023 FL REQ# 278, David J. Rothweiler, FL PE# 88430

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

Fabrication by: UFP Haleyville LLC, #317
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