

RANCH STRUCTURAL SYSTEM

MODEL: SVM-12709
SUN VALLEY HOMEBUILDERS
3 BEDROOM - 2 BATH
NOMINAL SIZE 32'-0"x 72'-0"
ACTUAL SIZE 30'-0" x 68'-0"
TOTAL AREA: 2040 Sq. Ft.

STATE FLORIDA
CODES

2020 National Electrical Code
8TH EDITION (2023)Florida Energy Efficiency Code for
Building Construction (With 2024 Supplement 1)
FAC-61-41 MANUFACTURED BUILDINGS
8TH EDITION (2023) Florida Residential Code (With 2024 Supplement 1)
THESE PLANS COMPLY WITH RULE 61G20-3.006 FOR PRODUCT APPROVAL

DWELLING IS NOT SPRINKLED

CEILING HEIGHT: 8'-6" 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 30 PSF TC, 0 PSF BC
ROOF DEAD LOAD 15 PSF TC, 15 PSF BC

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

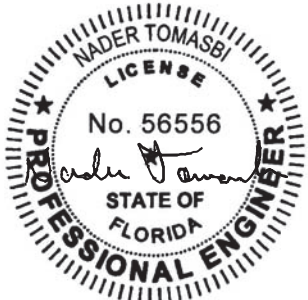


Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

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

STRUCTURAL SPECIFICATIONS INDEX

- A.01 COVER SHEET
- A.01.1 SUPPLEMENTAL COVER SHEET
- A.02 TYPICAL NOTE-(FLOOR / ELECTRICAL / WINDOW)
- A.03 TYPICAL FLOOR PLAN/ ELECTRICAL
- A.04 RESERVED
- A.05 EXTERIOR ELEVATION
- A.06 TYPICAL PLUMBING LAYOUT
- A.06.1 DWV LINES
- A.06.2 SUPPLY LINES
- A.09 TYPICAL CROSS SECTION (OFF-FRAME) (RESERVED)
- A.09.1 TYPICAL CROSS SECTION (ON-FRAME)
- A.13 (RESERVED)
- A.13.1 (RESERVED)
- A.13.2 HVAC DETAILS(Free Return Air)
- A.14.0 FOUNDATION OFF FRAME (RESERVED)
- A.14.1 ALT. FOUNDATION ON FRAME (RESERVED)



7/21/2026

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-13975.3-R8
 - G. SIMPSON HDU FL-10441.4-R10
 - H. SIMPSON MSTC66- FL-13872.10-R5
- .03 OWENS CORNING SHINGLES
 - A. FL- 10674-R20
- .04 MFM SHINGLE STARTER
 - A. FL- 11842.1-R10
- .05 CROFT WINDOWS
 - A. FL- 16082.1-R9
- .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 -R9
- .09 CEMPLANK SIDING
 - A. FL- 13223 R8
- .09 CEMPLANK PANELS
 - A. FL- 13265.1-R7
- .10 VINYL SIDING
 - A. FL- 15935-R7

DATE 7/23/2026 CERT. NO SMP-056
PLAN NUMBER MFT-10186-SVM-12709
APPROVED BY Michael Faller

(signature)

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

Wind Importance Factor: 1.0
Internal Pressure Coefficient: 0.18

ADDITIONAL SPECIAL CONDITIONS AND/OR LIMITATIONS AND/OR ITEMS SUBJECT TO LOCAL	
A. ELECTRICAL	D. STRUCTURAL
1. INTERCONNECTION BETWEEN MODULES.	1. THE DESIGN AND CONSTRUCTION OF THE FOUNDATION SYSTEM.
2. SERVICE ENTRANCE AND GROUNDING ELECTRODE CONDUCTORS.	2. COMPLETION OF EXTERIOR SIDING AT END WALLS.
3. FIRE WARNING EQUIPMENT IS TO BE TESTED FOR PROPER OPERATION	3. INSTALLATION OF GABLE OR RIDGE VENTS.
SEE EQUIPMENT INSTRUCTIONS.	4. CONNECTION OF FLOOR SYSTEM.
4. MECHANICAL WHOLE HOUSE VENTILATION TO BE FIELD INSTALLED PER	5. CONNECTION OF ROOF SYSTEM @ RIDGE.
TABLES M1507.3.3(1) AND M1507.3.3(2) OF THE 2015 IRC	6. CONNECTION OF GROUND ANCHORS.
B. PLUMBING	7. PORCH RAILS ON SITE BY OTHERS PER THE (IRC R312).
1. ALL PIPING CROSSOVER CONNECTIONS BELOW FLOOR.	8. TRUSS OVER THE INTERIOR SHEAR WALL ARE TO BE SHEATHED
2. WITNESS LEAKAGE TEST OF GAS, DWG AND WATER SUPPLY SYSTEMS.	WITH HINGED ROOFS SHEATHED HAS TO BE FINISHED
3. CONNECTION TO GAS, SEWER AND WATER UTILITIES.	ON SITE BY OTHERS.
4. WITH HINGE ROOF PLUMBING MUST BE FINISHED ON SITE BY OTHERS.	9. SIDING FOR ENDS IS SHIPPED LOOSE FOR ON-SITE
5. OFF FRAME HOUSE ALL GAS APPLIANCE WILL HAVE TO BE PLUMBED ON SITE BY OTHERS.	INSTALLATION BY OTHERS.
C. HEATING	10. HANDRAILS, STOOPS, STAIRS, GUTTERS, DOWNSPOUTS,
1. CROSS-OVER CONNECTION BETWEEN UNITS.	STORM SHUTTERS OR REMOVABLE TYPE COVERINGS,
2. RETURN AIR CONNECTIONS HAVE TO BE HOOKED UP IF REQUIRED .	AND SPLASH BLOCKS ARE FURNISHED AND INSTALLED BY
3. A DUCT TIGHTNESS TEST IS REQUIRED TO BE PERFORMED ON SITE AND SHALL	OTHERS IN ACCORDANCE WITH STATE AND LOCAL CODES.
BE VERIFIED BY EITHER OF THE FOLLOWING	
POST-CONSTRUCTION TEST: LEAKAGE TO OUTDOORS SHALL BE LESS THEN OR EQUAL	
TO 8CFM(226.5min) PER 100 ft2 (9.29m2) OF CONDITIONED FLOOR AREA WHEN TESTED AT	
A PRESSURE DIFFRENTIAL OF TOTAL LEAKAGE LESS THAN OR EQUAL TO 12 cfm (12 Min)	
PER 100/FT2 (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.	

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.

Nader
Tomasbi, P.E.
Digitally signed by Nader
Tomasbi, P.E.
Date: 2026.07.21
09:55:50 -04'00'

REVISIONS		CUSTOMER: Nader Tomasbi, P.E. 58665 Glenriver Drive Goshen IN 46526	APPROVAL STAMP:	DEER VALLEY HOMEBUILDERS, INC. SIGNATURE SERIES RANCH STRUCTURAL SYSTEM  MOD		APPROVED BY: J. TRIPLETT		SCALE: NTS	
				 MOD		PRINT DATE: 07/07/26		REV:	
						TITLE: COVER SHEET			
						MODEL: SVM-12709		DWG. NO:	
						MODEL: MFT10186-SVM-12709		A.01	

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
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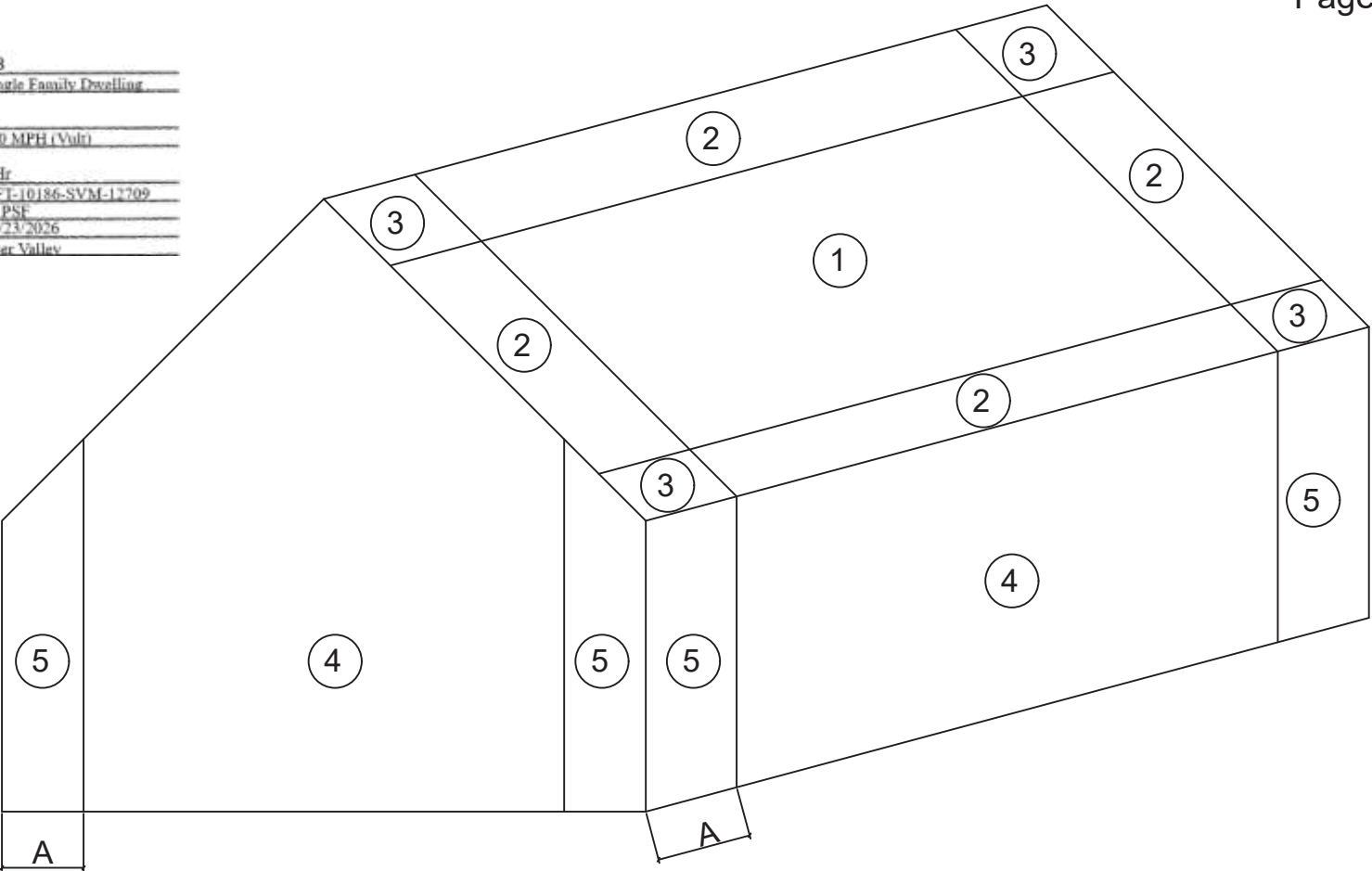
SITE INSTALLED ITEMS:

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.

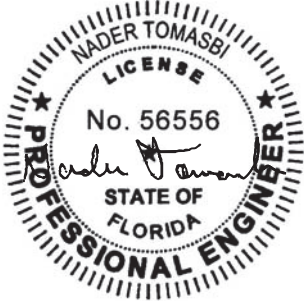
- 1. THE COMPLETE FOUNDATION SUPPORT AND TIE DOWN SYSTEM.
- 2. RAMPS, STAIRS AND GENERAL ACCESS TO THE BUILDING.
- 3. PORTABLE FIRE EXTINGUISHER(S).
- 4. BUILDING DRAINS, CLEANOUTS, AND HOOK-UP TO PLUMBING SYSTEM.
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- 8. STRUCTURAL AND AESTHETIC INTERCONNECTIONS 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 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).



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



7/21/2026

	REVISIONS	CUSTOMER:	APPROVAL STAMP:	DEER VALLEY HOMEBUILDERS, INC. SIGNATURE SERIES RANCH STRUCTURAL SYSTEM		APPROVED BY: J.TRIPLETT	SCALE: NTS
				 MOD	DEER VALLEY HOMEBUILDERS, INC. 205-468-8400 P.O. Box 310 / 205 Carriage St. Guin, Alabama 35563	PRINT DATE: 07/07/26	REV:
						TITLE: COVER SHEET	
						MODEL: SVM-12709	DWG. NO:
						MODEL: MFT10186-SVM-12709	A.01.1

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, BATH 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.

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 SIDE OF HOUSE.
12. WINDOWS MAY BE REARRANGED OR A WINDOW MAY BE ADDED PER MECHANICAL CODE.
13. CLOTHES DRYER EXHAUST ON SITE BY OTHERS.
14. ALL EXHAUST AIR FROM RANGE HOODS AND BATHROOM VENTS SHALL BE VENTED TO THE EXTERIOR.
15. ATTIC ACCESS OPENING SHALL BEAR A MINIMUM DIMENSION OF 20" WITH A VERTICAL HEIGHT OF 30". (R807.1). THE ACCESS HOLE MUST BE INSULATED TO THE SAME R-VALUE AS REQUIRED FOR THE ROOF/FLOOR CONSTRUCTION PER THE CURRENT IECC.
16. ALL SOURCES OF POSSIBLE AIR INFILTRATION ARE REQUIRED TO BE PROPERLY CAULKED, GASKETED, WEATHERSTRIPPED, WRAPPED , OR OTHERWISE SEALED TO LIMIT AIR MOVEMENT.
17. CONSTRUCTION DOCUMENTS TO BE KEPT ON JOB SITE

LEGEND		LOAD CALCULATION		Worst Case 30'-0" x 86'-0"	
S	SWITCH LEG		2580 SF x 3 Watts / 1000		7.74 kW
(M _J)	MEDIA JACK	3	APPL CIRCUITS		4.5 kW
		1	RANGE CIRCUIT		12.0 kW
	LIGHT (FLUORESCENT)	1	LAUNDRY CIRCUIT		1.5 kW
		1	WATER HEATER CIRCUIT		4.5 kW
	SERVICE PANEL	1	DRYER CIRCUIT		5.0 kW
S	SWITCH	1	WASHER CIRCUIT		1.5 kW
(J _B)	JUNCTION BOX	1	GAS FURNACE MOTOR		1.0 kW
		1	DISHWASHER		1.4 kW
	RECEPTACLE	1	RANGE HOOD VENT FAN		.25 kW
	RECEPTACLE 20 AMP	4	BATHROOM VENT FAN		.40 kW
	WEATHER PROOF RECEPTACLE	1	HYDRO-MASSAGE TUB		2.0 kW
(A)	NM CONNECTOR		TOTAL LOAD:		41.79 kW
	RECEPTACLE 220 V	1	HEATING EQUIPMENT: 24 kw (@ 65%)		15.6 kW
		1	COOLING EQUIPMENT: 10.5 kw (@ 100%)		10.5 kW
	LIGHT (INCANDESCENT)		10 kVA x 100%		10.0
			(41.79 - 10.0) = 31.79 X 40%		12.72
(T)	PROGRAMMABLE THERMOSTAT		HVAC EQUIPMENT (MAX. Heating or Cooling)		15.6
	EXHAUST FAN		DESIGN TOTAL:		38.32 kVA
			(38.32 / 240-Volts) x 1000		
	EXHAUST FAN & LIGHT		TOTAL AMPS:		159.66 Amps
			Install 200 Amp (MIN) 120/240-Volt, Single Phase, Ele. Service Panel		
(SA)	SMOKE ALARM				
	CO = CARBON MONOXIDE PE = PHOTO ELECTRIC				
	FURNACE				
	WATER HEATER				

MODULAR GROUNDING

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.)



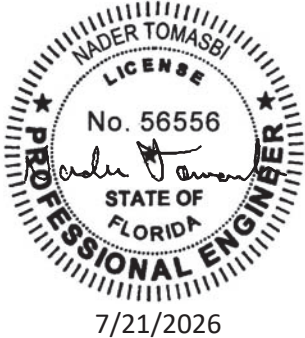
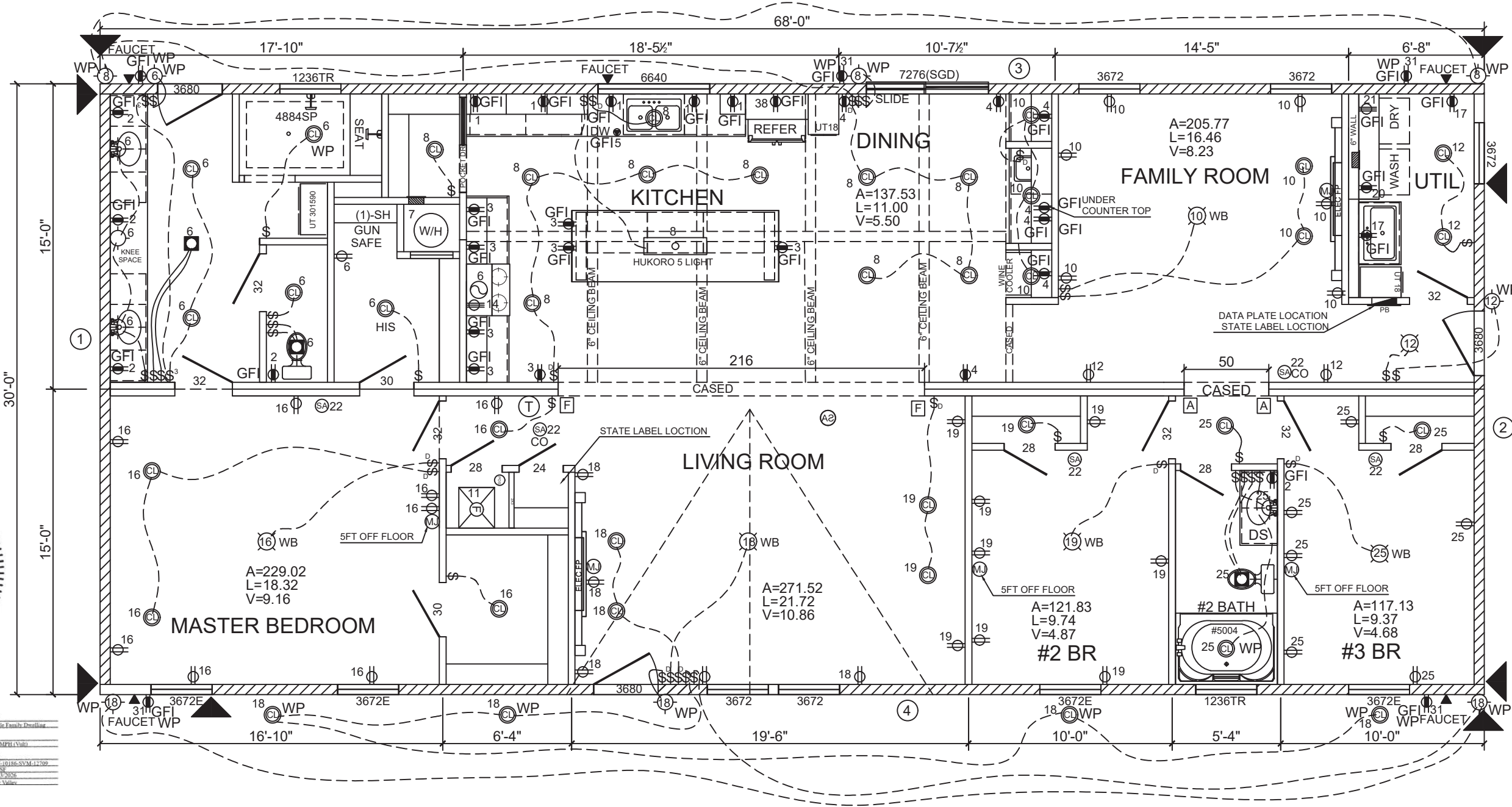
A.02

WINDOW LIGHT & VENT CHART						
DESCRIPTION	LIGHT	VENT	R.O.	SF-(MAX)	U-FACTOR	SHGC
30 X 40	5.64	2.69	8.33	66 SF	.30	.22
36 X 40	6.80	3.24	10	81 SF	.30	.22
48 X 40	7.96	3.94	13.3	98 SF	.30	.22
24 X 72	8.09	3.95	12	98.5 SF	.30	.22
36 X 72	13.49	7.14	18	164 SF	.30	.22
48 X 72	16.18	7.9	24	197 SF	.30	.22
66 X 40	15.76	6.61	18.3	164 SF	.30	.22
12 X 36 (TRANSOM)	1.28	N/A	3	N/A	.30	.22
12 X 30 (TRANSOM)	1.00	N/A	2.5	N/A	.30	.22
12 X 60 (TRANSOM)	2.25	N/A	5	N/A	.30	.22

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		.27	.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

APPROVED BY
NTA INC.

Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET-10186-SVM-12709
Allow. Floor Load:	40 PSE
Approval Date:	07/23/2026
Manufacturer:	Deger Valley



These prints comply with the Florida Manufactured Building Act and adopted Codes and address to the following criteria:	
Consent, Title:	VB Single Family Dwelling
Occupancy:	1
Allowable No. of Units:	160 MPH (Vuln)
Wind Velocity:	0 Hz
Free Rating of Ex. Water:	MFE 10186-SVM-12709
Plan No.:	20 Pk
Attn: Floor Load:	07/21/2026
Approval Date:	Deer Valley
Manufacturer:	

[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

[F] 1.5"X24" LVL EACH HALF W/ (5) LSTA18 STRAPS FASTENED W/ (7) 10D NAILS EACH END OF STRAP ATTACHED TO (5) #3 2X4 SPF STUDS

FIELD INSTALLED ITEMS:

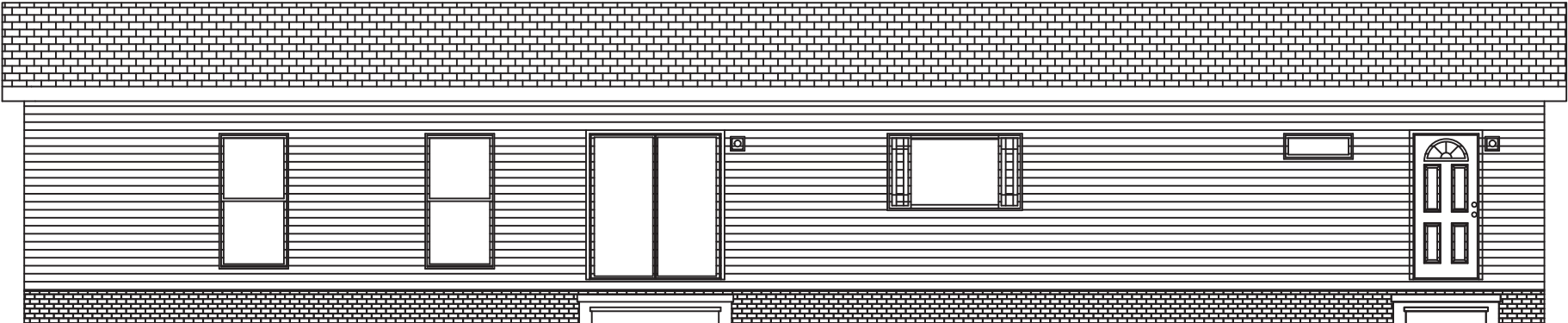
- Type 1 or Type 2 surge-protection device, which is either an integral part of service equipment or located immediately adjacent to service equipment
- Emergency disconnect installed outdoors at a readily accessible location rated. for the available fault current.

**ASTM C567 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					ROOF DIAPHRAGM NOTES:				
SIDE 1					SIDE 2					SHALL BE 7/16" RATED SHEATHING (MIN.)				
NO.	LENGTH	PLF	UPLIFT	MATERIAL	FASTENER	SPACING	CS14 STRAPS	MATERIAL	FASTENER	SPACING	JOIST	FASTEN SHEATHING TO ROOF FRAMING WITH:		
1	30.00	129	1.2K	7/16" OSB	.131" X 2 1/2" NAILS	6" OC	1 PER ▲	1/2" GYP	#6X1 5/8" SCREWS (GLUED & SCREWED)	6" OC EDGE 12" OC FEILD	2	MAIN UNIT		
2	21.25	263	2.4K	7/16" OSB	.131" X 2 1/2" NAILS	6" OC	1 PER ▲	1/2" GYP	#6X1 5/8" SCREWS (GLUED & SCREWED)	6" OC EDGE 12" OC FEILD	2	.131X2.5" NAILS FASTENED 6" O.C. EDGE, 12" O.C. FIELD		
3	44.25	96	0.6K	7/16" OSB	7/16" X 1 3/4" 15 GA STAPLES	4" OC	1 PER ▲	1/2" GYP	** GLUED FOR 100 PLF MIN SHEAR	N/A	2	UNBLOCKED		
4	38.42	155	1.0K	7/16" OSB	7/16" X 1 3/4" 15 GA STAPLES	4" OC	1 PER ▲	1/2" GYP	** GLUED FOR 100 PLF MIN SHEAR	N/A	2			

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:	07/07/26	REV: --
TITLE:	TYPICAL FLOOR PLAN	
MODEL:	SVM-12709	DWG. NO.
MODEL:	MFT10186-SVM-12709	A.03

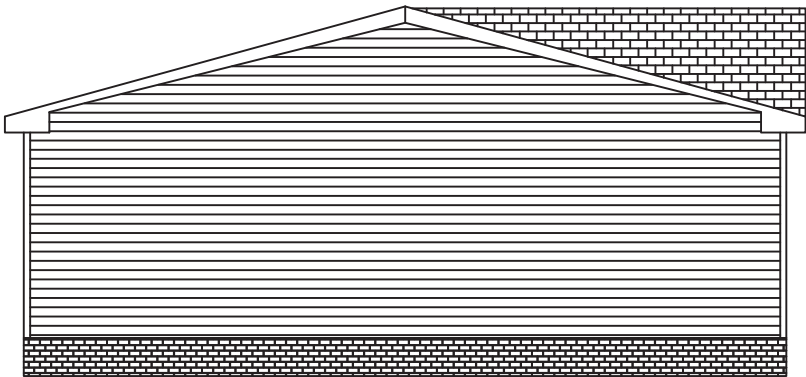


REAR ELEVATION

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



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Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley



LEFT ELEVATION



RIGHT ELEVATION

ELEVATIONS SHOWN ON THIS PAGE REPRESENT BASIC COMPONENTS AND ARE NOT INTENED 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.



FRONT ELEVATION



7/21/2026

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".

REVISIONS		
APPROVED BY:	J.TRIPLETT	SCALE: NTS
PRINT DATE:	07/07/26	REV: --
TITLE:	EXTERIOR ELEVATIONS	
MODEL:	SVM-12709	DWG. NO: A.05
MODEL:	MFT10186-SVM-12709	

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

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"

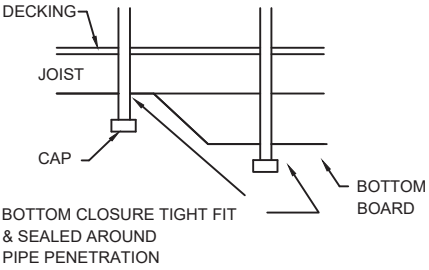
NOTES:

- (A) = INLET WITH CAP & CHAIN.
(B) = 3/4 RELIEF DRAIN THRU FLOOR.

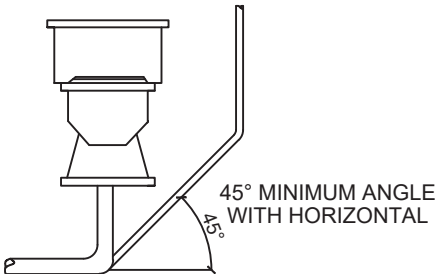
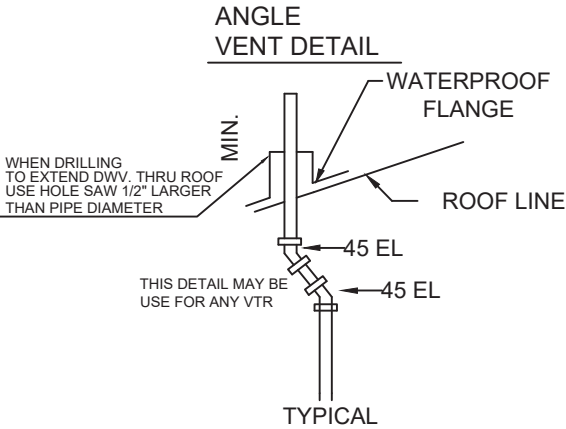
ALL WATER LINES 1/2" UNLESS OTHERWISE SHOWN.

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)



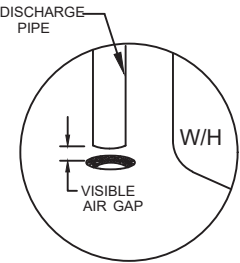
FLOOR DETAIL



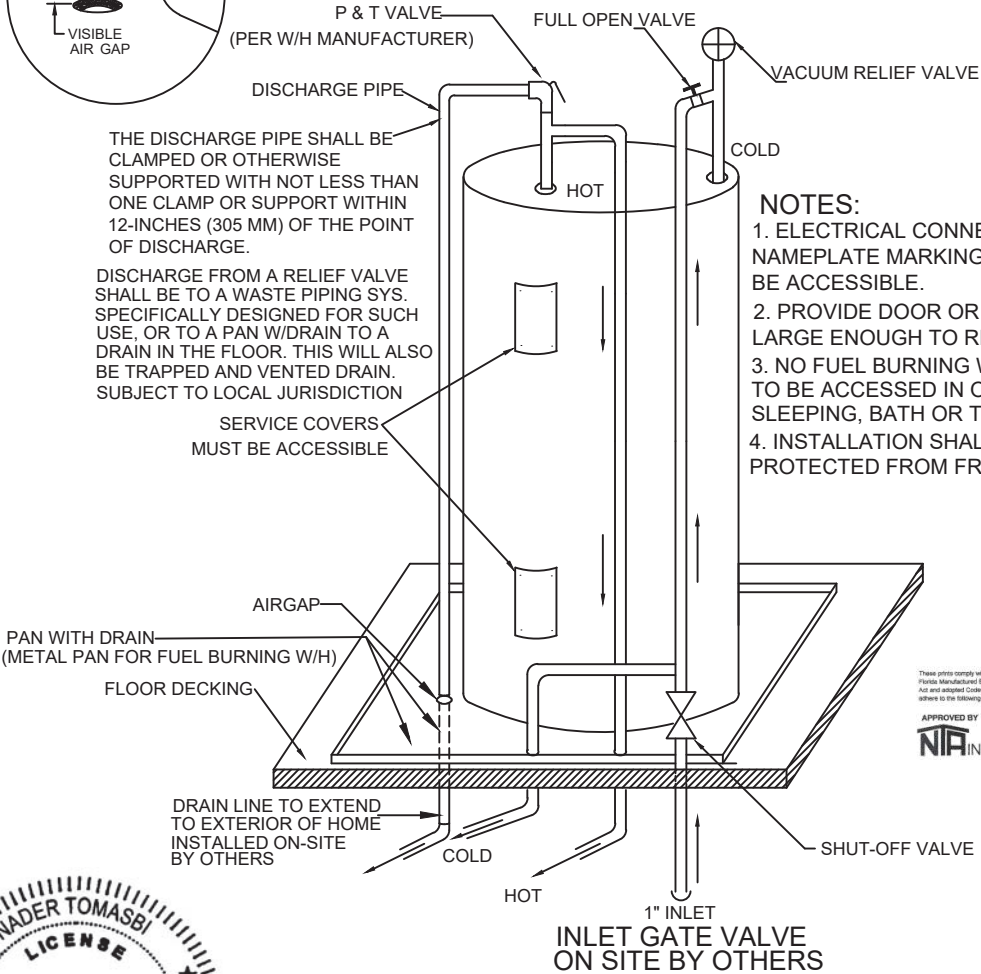
STOOL VENTING DETAIL

< SPECIFY IF NOTE APPLIES TO MANUFACTURER

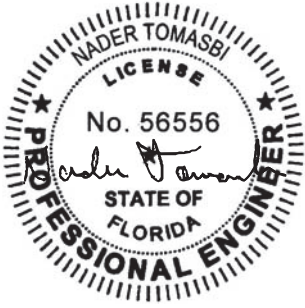
- NOTE:
- 1) MAXIMUM FLOW RATE TO BE 2.2 GPM FOR FAUCETS @60 PSI AND 2.5 GPM FOR SHOWERS @ 80 PSI.
 - 2) DRAINWASTE AND VENT LINES PVC SHALL MEET ASTM D2665-89a REQUIREMENTS.
 - 3) WATER DISTRIBUTION SYSTEM PIPING MAY BE POLYBUTYLENE, CPVC, COPPER, GALV. STEEL OR PEX
 - 4) DRAIN LINE SLOPE TO BE 1/4" 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) (KENTUCKY ONLY) 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 FREEZING 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 (TUB/SHOWER 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) 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.



TYPICAL WATER HEATER DETAIL



- NOTES:
1. ELECTRICAL CONNECTION AND NAMEPLATE MARKINGS MUST BE ACCESSIBLE.
 2. PROVIDE DOOR OR PANEL LARGE LARGE ENOUGH TO REPLACE W/H
 3. NO FUEL BURNING WATER HEATER TO BE ACCESSED IN OR OFF OF SLEEPING, BATH OR TOILET ROOMS.
 4. INSTALLATION SHALL BE PROTECTED FROM FREEZING



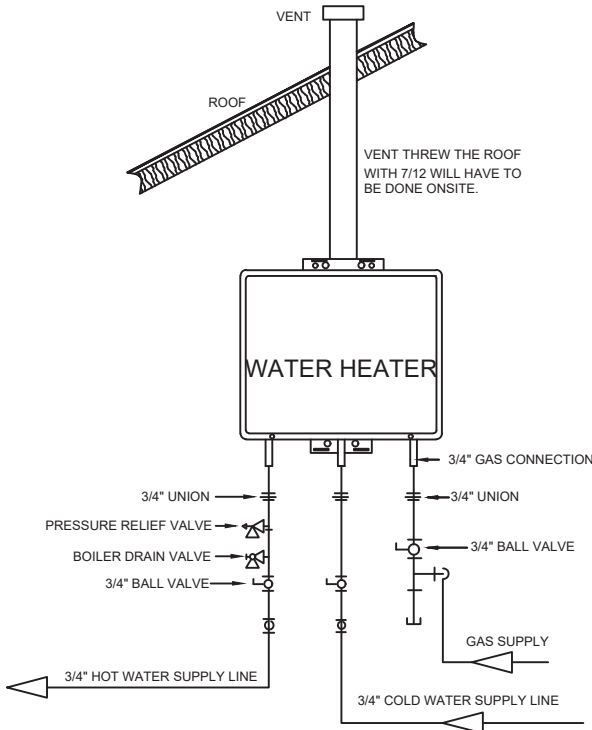
7/21/2026

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM



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OPT. GAS TANKLESS WATER HEATER



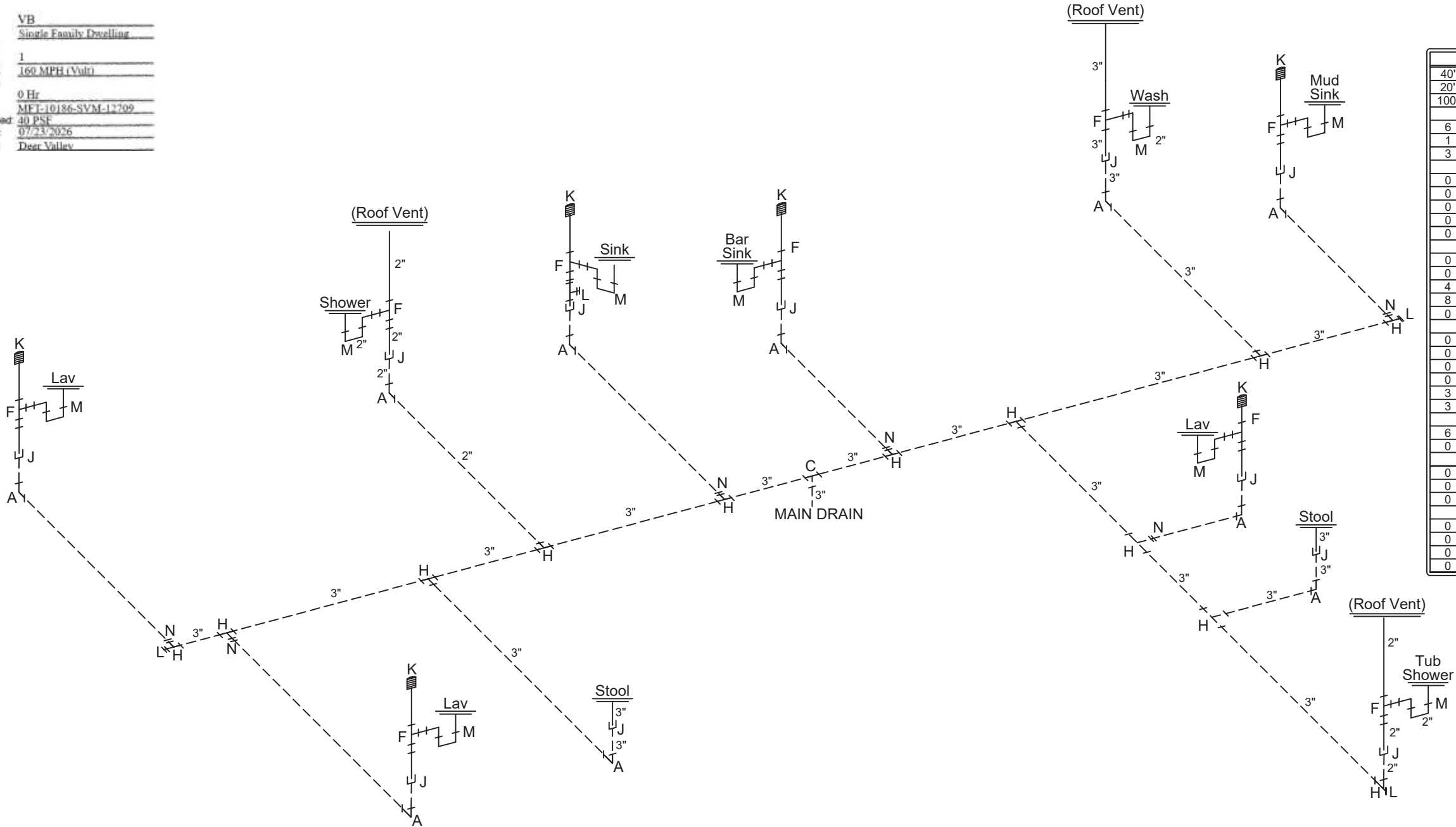
REVISIONS

APPROVED BY:	SCALE:	NTS
PRINT DATE:	REV:	REV. DATE:
TITLE:	TYPICAL PLUMBING LAYOUT	
MODEL:	MFT10186-SVM-12709	
MODEL:	A.6	

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley



PLUMBING HOOKUP KIT	
40'	1 1/2" PIPE
20'	2" PIPE
100'	3" PIPE
6	1 1/2" 90° LONG TURN ELL
1	2" 90° LONG TURN ELL
3	3" 90° LONG TURN ELL
0	1 1/2" SANITARY TEE
0	2" SANITARY TEE
0	3" SANITARY TEE
0	2 x 2 x 1 1/2 SANITARY TEE
0	3 x 3 x 2 SANITARY TEE
0	1 1/2" LONG TURN TY
0	2" LONG TURN TY
4	3" LONG TURN TY
8	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
0	2" C/O PLUG
0	2" C/O ADAPTOR
3	3" C/O PLUG
3	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
0	2" ROOF VENT
0	3" ROOF VENT
0	ROOF TAR

- 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			

REVISIONS

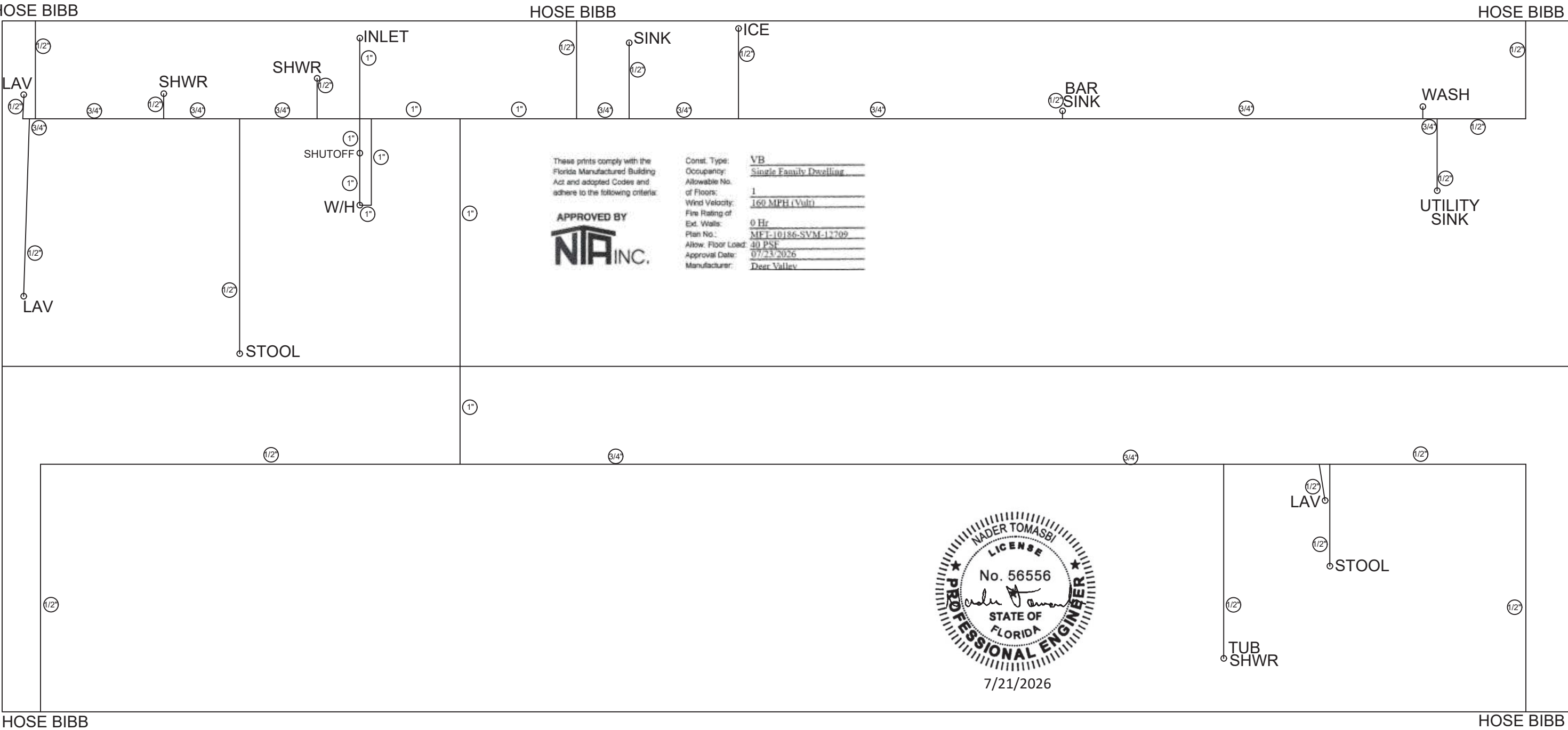
DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM



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:	07/07/26	REV. DATE:	
TITLE:	DRAIN LINE PLUMBING LAYOUT		
MODEL:	SVM-12709	DWG. NO.:	A.6.1
MODEL:	MFT10186-SVM-12709		



- 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 CONDITIONS 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

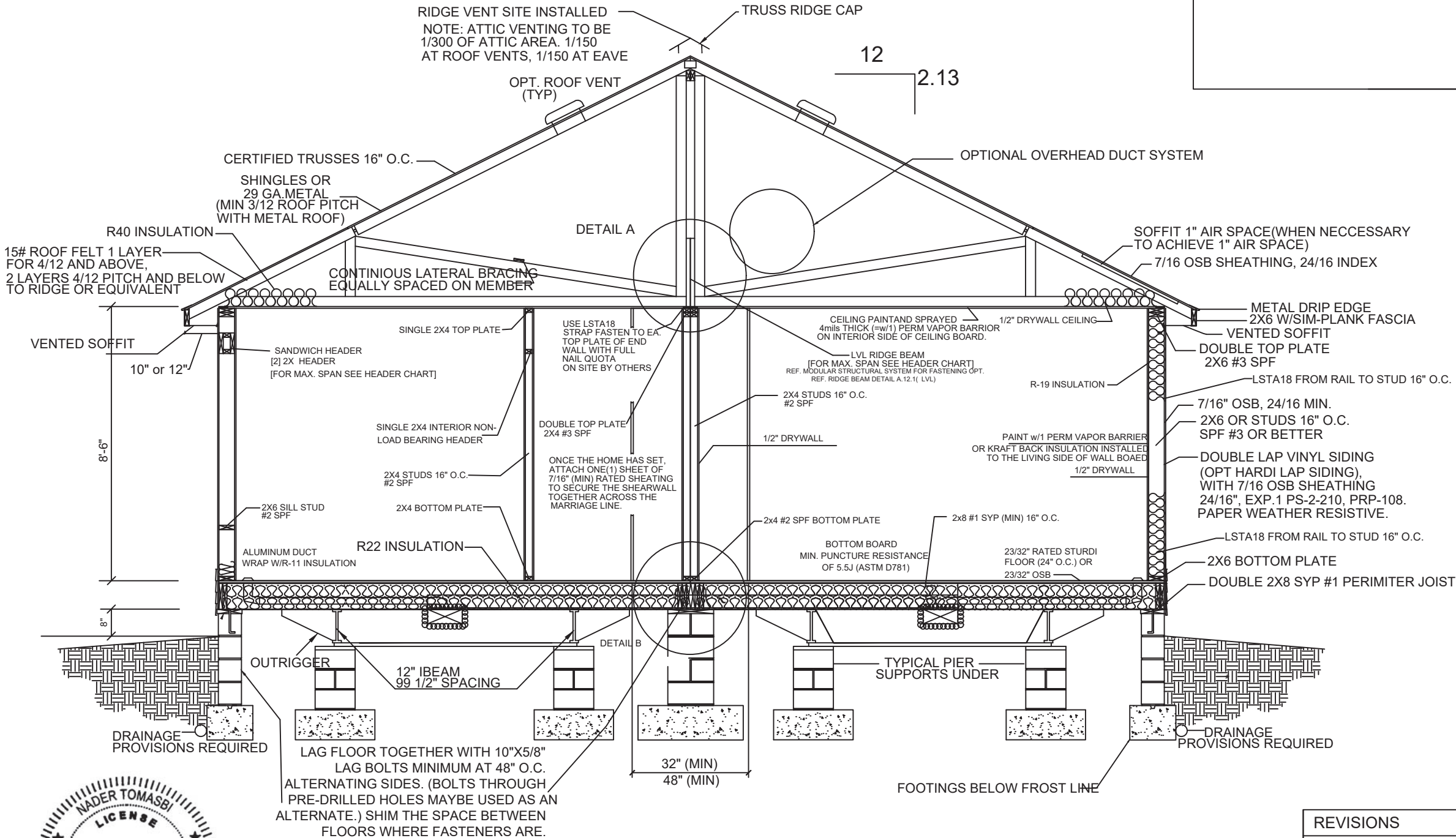
DEER VALLEY HOMEBUILDERS, INC.
205-468-8400
P.O. Box 310 / 205 Carriage St.
Guin, Alabama 35563

APPROVED BY:	J. TRIPLETT	SCALE:	NTS
PRINT DATE:	07/07/26	FOR TN ONLY:	
TITLE:	WATER LINE PLUMBING LAYOUT		
MODEL:	SVM-12709	DWG. NO.:	A.6.2
MODEL:	MFT10186-SVM-12709		

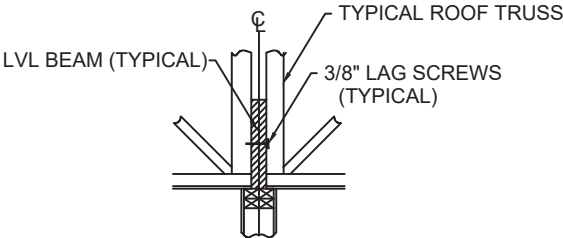
These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

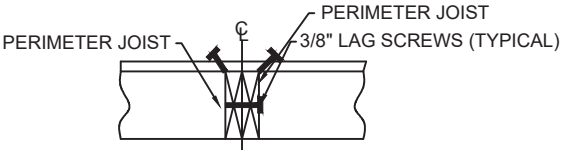


DETAIL A
INTER-CONNECTION BETWEEN HALVES OF THE ROOF SYSTEM



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.

REVISIONS

DEER VALLEY HOMEBUILDERS, INC.
SIGNATURE SERIES
RANCH STRUCTURAL SYSTEM



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Guin, Alabama 35563

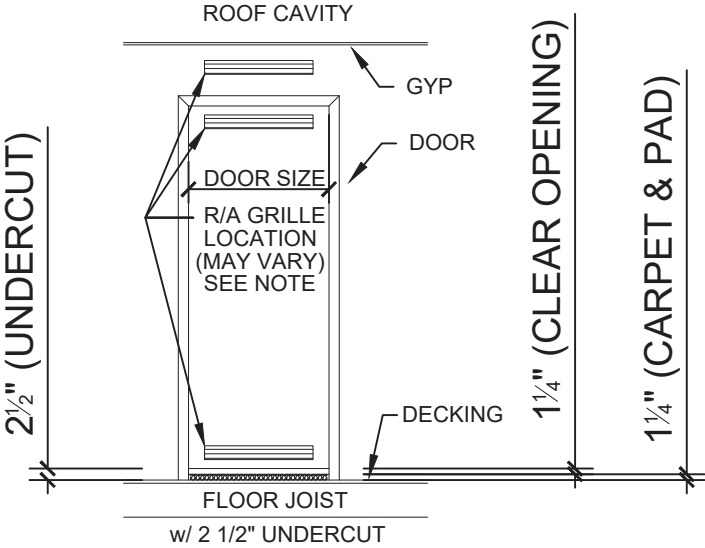
APPROVED BY:	J. TRIPLETT	SCALE:	NTS
PRINT DATE:	07/07/26	REV:	
TITLE:	TYPICAL CROSS SECTION (ON FRAME)		
MODEL:	SVM-12709	DWG NO.:	A.9.1
MODEL:	MFT10186-SVM-12709		



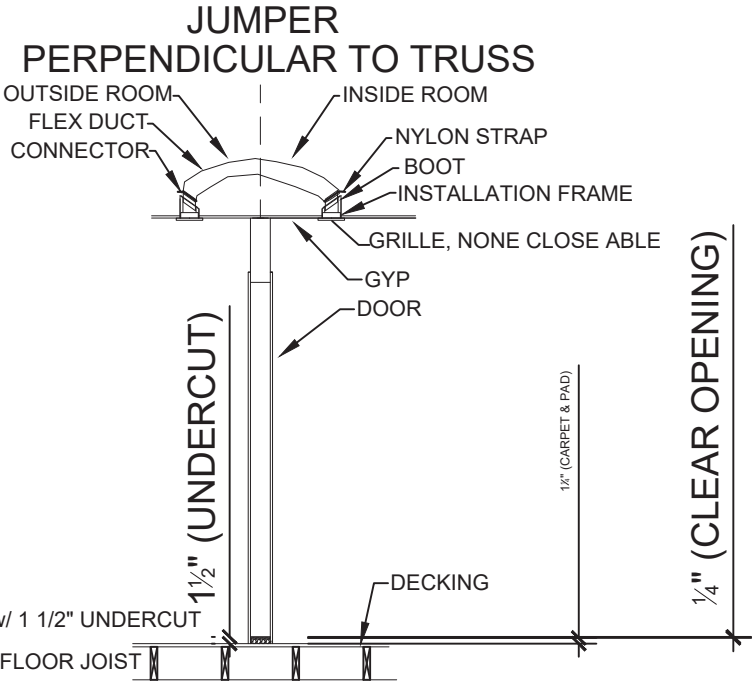
7/21/2026

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.

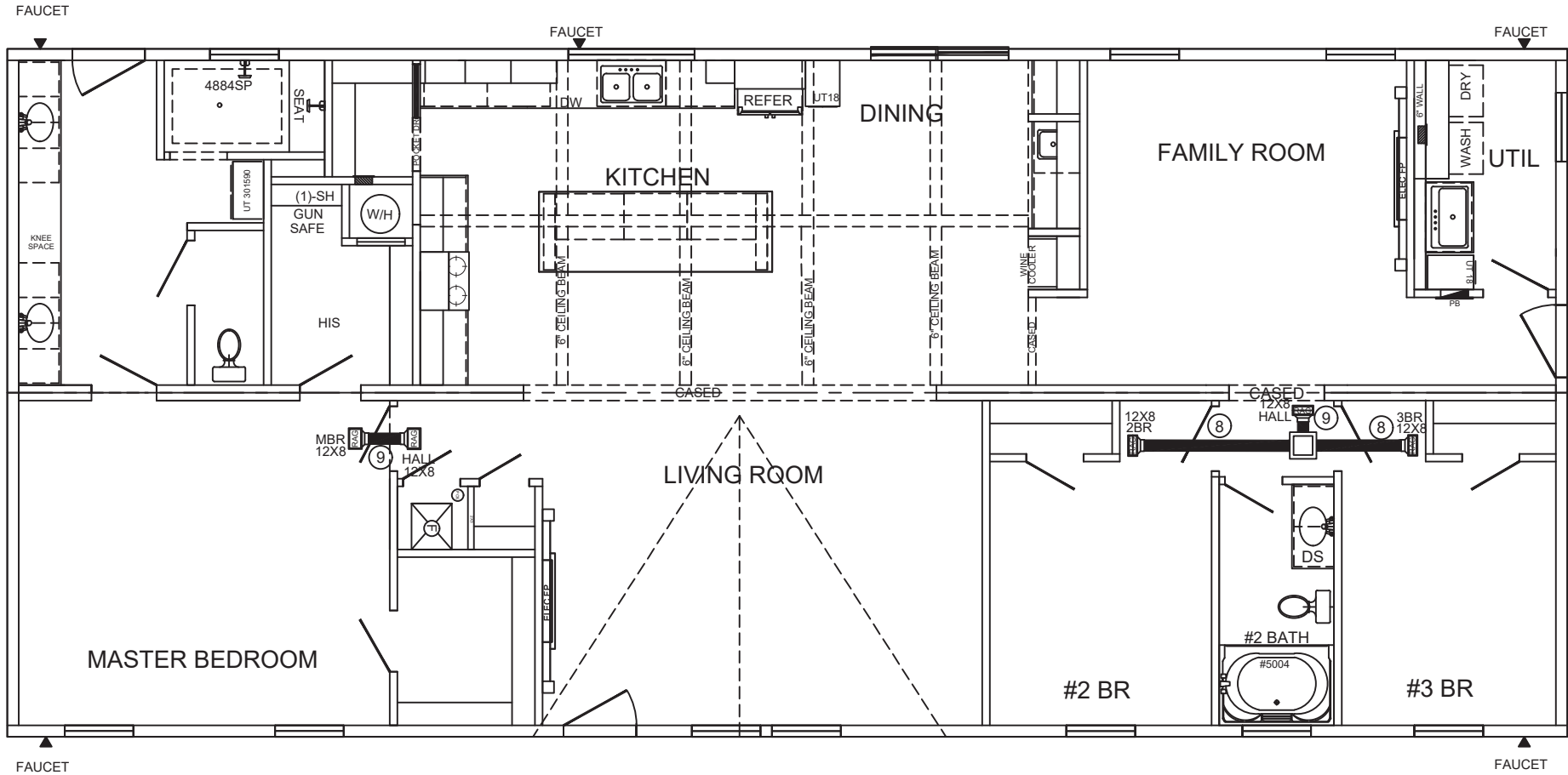
FREE RETURN AIR								
DOOR SIZE	2 1/2" UNDER CUT		DUCT SIZE	FLEX DUCT		GRILLE SIZE	GRILLE	
	1 1/4" (CLEAR OPENING)			MAX. SQ. IN. RETURN	MAX. SF ROOM SIZE		DOOR / WALL / CEILING	
	MAX. SQ. IN. RETURN	MAX. SF ROOM SIZE	MAX. SQ. IN. RETURN					MAX. SF ROOM SIZE
	24" (23 1/4)	29.06	145 SF	5"	19.6		98.1 SF	24 X 4
28" (27 1/4)	34.06	170 SF	6"	28.26	141.3 SF	10 X 6	40.32	201.6 SF
30" (29 1/4)	36.56	183 SF	7"	38.46	192.3 SF	12 X 6	47.52	237.6 SF
32" (31 1/4)	39.06	195 SF	8"	50.24	251.2 SF	12 X 8	63.36	316.8 SF
36" (35 1/4)	44.06	220 SF	9"	63.58	317.9 SF	14 X 20	164.16	820.8 SF
48" (47 1/4)	59.06	295 SF	10"	78.5	392.5 SF	20 X 25	322.56	1612.8 SF
			12"	113.04	565.2 SF			
			14"	153.86	769.3 SF			
			CFM					
			5" = 70 CFM 10" = 420 CFM					
			6" = 110 CFM 12" = 700 CFM					
			7" = 170 CFM 14" = 1000 CFM					
			8" = 240 CFM 16" = 1400 CFM					
			9" = 320 CFM					
			REGISTER SIZE					
			5 = 8x4					
			6 = 10x6					
			7 = 12x6					
			8 = 12x 8					



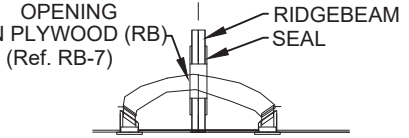
NOTE:
WHEN MAXIMUM ROOM SIZE HAS EXCEEDED THE FREE RETURN AIR PROVIDED BY THE DOOR'S UNDERCUT AREA, ONE OF THE FOLLOWING SHALL BE INSTALLED TO PROVIDE ADDITIONAL FREE RETURN AIR.
1. LOUVERED GRILLE MAY BE INSTALLED IN THE DOOR .
OR IN THE HEADER ABOVE THE DOOR.
2. FLEX DUCT JUMPER / GRILLE MAY BE INSTALLED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



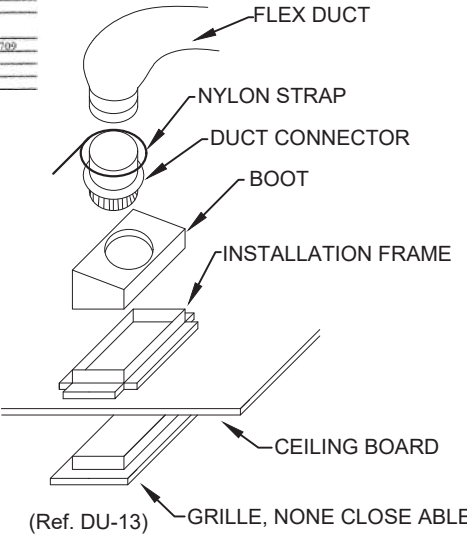
NOTE:
ONE (1) SQUARE INCH OF FREE RETURN AIR SHALL BE PROVIDED FOR EACH FIVE (5) SQUARE FEET OF ROOM AREA.
SEE 3280.715(B) (4) AND B LETTER 80-8-25 FOR MAX. ROOM SIZE.



JUMPER
PARALLEL TO TRUSS - CROSS (RB)



JUMPER DETAIL



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

APPROVED BY
NIA INC.

Const. Type: Single Family Dwelling
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH (Vult)
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT-10186-SVM-12709
Allow. Floor Load: 40 PSF
Approval Date: 07/21/2026
Manufacturer: Deer Valley



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: 07/07/26	REV: --
TITLE: HVAC FREE RETURN AIR	
MODEL: SVM-12709	DWG. NO: A.13.2
MODEL: MFT10186-SVM-12709	



Manual S Compliance Report

Entire House

AMS of Indiana, Inc.

Page 11 of 34
Job: SVM-12709(DVHBSS-6808...
Date: 6/16/26
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-12709(DVHBSS-6808+4)FLEX TRUNK

Cooling Equipment

Design Conditions

Outdoor design DB:	94.4°F	Sensible gain:	22800	Btuh	Entering coil DB:	76.3°F
Outdoor design WB:	76.8°F	Latent gain:	6121	Btuh	Entering coil WB:	63.7°F
Indoor design DB:	75.0°F	Total gain:	28921	Btuh		
Indoor RH:	50%	Estimated airflow:	961	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split AC		
Manufacturer:	Generic	Model:	SEER2 14.3
Actual airflow:	961	cfm	
Sensible capacity:	22662	Btuh	99% of load
Latent capacity:	9712	Btuh	159% of load
Total capacity:	32375	Btuh	112% of load SHR: 70%

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

Heating Equipment

Design Conditions

Outdoor design DB:	32.9°F	Heat loss:	23075	Btuh	Entering coil DB:	67.5°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Elec furnace		
Manufacturer:	Nordyne	Model:	E7E-015
Actual airflow:	961	cfm	
Output capacity:	47000	Btuh	204% of load
			Temp. rise: 0 °F

Meets all requirements of ACCA Manual S.



7/21/2026



Right-Suite® Universal 2025 25.0.02 RSU56435

...ic Trunk(SVM-12709(DVHBSS-6808+4)FLEXTRUNK.rup Calc = MJ8 Front Door faces: W

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Page 1



Load Short Form
Entire House
AMS of Indiana, Inc.

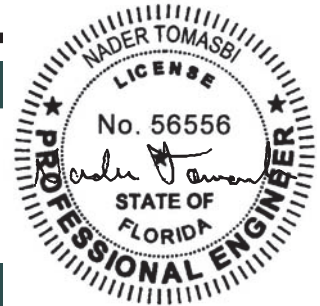
Page 12 of 34

Job: SVM-12709(DVHBSS-6808+4)
Date: 6/16/26
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-12709(DVHBSS-6808+4)FLEX TRUNK



Design Information

	Htg	Clg	Infiltration	7/21/2026
Outside db (°F)	33	94	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	37	19	Fireplaces	1 (Average)
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	11	46		

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

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NIA INC.

Cons. Type: VFD
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 140 MPH (Value)
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MEP-0116-SVM-11-269
Allow Floor Load: 20 PSF
Approval Date: 07-14-2026
Manufacturer: Deer Valley

HEATING EQUIPMENT

Make	Nordyne
Trade	
Model	E7E-015
AHRI ref	
Efficiency	92.1 AFUE
Heating input	15.0 kW
Heating output	47000 Btuh
Temperature rise	45 °F
Actual air flow	961 cfm
Air flow factor	0.047 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 EER, 14.3 SEER2
Sensible cooling	22662 Btuh
Latent cooling	9712 Btuh
Total cooling	32375 Btuh
Actual air flow	961 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)
BA1	180	2602	1475	122	66
PTY	22	0	0	0	0
C1	60	0	0	0	0
KT\DR	428	3837	4376	180	196
FR	214	1903	2419	89	109
U	96	1916	1148	90	52
B3	150	2048	2005	96	90
BA2	58	702	1104	33	50
B2	150	1237	1716	58	77
A	21	0	0	0	0
LR	292	2942	3477	138	156
B1	251	3267	3710	154	166
CL1	50	0	0	0	0
H	25	0	0	0	0

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



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Page 1

...ic Trunk\SVM-12709(DVHBSS-6808+4)FLEXTRUNK.rup Calc = MJ8 Front Door faces: W

CLO	19	0	0	Page 13 of 34	0
Entire House	2016	20454	21429	961	961
Other equip loads		2621	1370		
Equip. @ 0.99 RSM			22663		
Latent cooling			6121		
TOTALS	2016	23075	28784	961	961

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

APPROVED BY



Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH (Vult)
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT-10186-SVM-12709
Allow. Floor Load: 40 PSF
Approval Date: 07/23/2026
Manufacturer: Dear Valley

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



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Page 2

...ic TrunkSVM-12709(DVHBSS-6808+4)FLEXTRUNK.rup Calc = MJ8 Front Door faces: W

Project Information

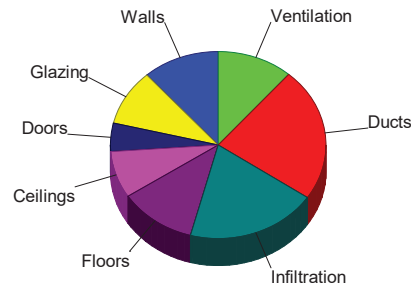
For: Deer Valley Homebuilders
SVM-12709(DVHBSS-6808+4)FLEX TRUNK

Design Conditions

Location: Jacksonville Craig, FL, US Elevation: 41 ft Latitude: 30°N		Indoor: Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb)		Heating 70 37 30 10.7	Cooling 75 19 50 46.4
Outdoor: Dry bulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph)	Heating 33 - - 15.0	Cooling 94 16 (M) 77 7.5	Infiltration: Method Construction quality Fireplaces	Simplified Average 1 (Average)	

Heating

Component	Btuh/ft²	Btuh	% of load
Walls	2.0	2657	11.5
Glazing	11.1	2239	9.7
Doors	10.8	1130	4.9
Ceilings	0.9	1869	8.1
Floors	1.3	2684	11.6
Infiltration	2.7	4538	19.7
Ducts		5336	23.1
Piping		0	0
Humidification		0	0
Ventilation		2621	11.4
Adjustments		0	
Total		23075	100.0



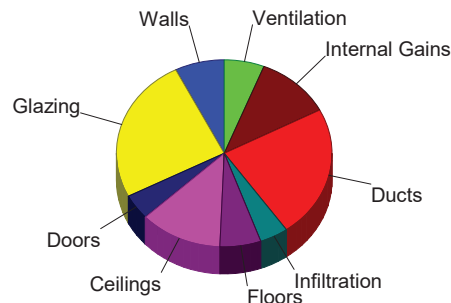
These prices comply with the Florida Manufactured Building Act and required Codes and adhere to the following criteria:

Correl. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 120 MPH (150%)
Flooring: 0 ft
Floor No.: 1
Allow. Floor Load: 30 PSF
Approve Date: 07/13/2026
Manufacturer: Deer Valley

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NIA INC.

Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.3	1694	7.4
Glazing	28.5	5730	25.1
Doors	9.5	997	4.4
Ceilings	1.4	2834	12.4
Floors	0.7	1404	6.2
Infiltration	0.6	973	4.3
Ducts		5216	22.9
Ventilation		1370	6.0
Internal gains		2580	11.3
Blower		0	0
Adjustments		0	
Total		22800	100.0



Latent Cooling Load = 6121 Btuh
Overall U-value = 0.053 Btuh/ft²-°F, Window / Floor Area = 10.0 %

Data entries checked.



7/21/2026

Project Information

For: Deer Valley Homebuilders
 SVM-12709(DVHBSS-6808+4)FLEX TRUNK

Design Conditions

Location:		Indoor:		Heating	Cooling
Jacksonville Craig, FL, US		Indoor temperature (°F)		70	75
Elevation:	41 ft	Design TD (°F)		37	19
Latitude:	30°N	Relative humidity (%)		30	50
Outdoor:		Moisture difference (gr/lb)		10.7	46.4
Dry bulb (°F)	33	Infiltration:			
Daily range (°F)	-	Method		Simplified	
Wet bulb (°F)	-	Construction quality		Average	
Wind speed (mph)	15.0	Fireplaces		1 (Average)	
Heating		Cooling			
	94	(M)			
	16				
	77				
	7.5				

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 - 7-16: Fm wall, vnl ext, 7/16" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood fr	n	253	0.053	19.0	1.97	497	1.25	317
	e	456	0.053	19.0	1.97	896	1.25	571
	s	214	0.053	19.0	1.97	421	1.25	268
	w	429	0.053	19.0	1.97	843	1.25	538
	all	1351	0.053	19.0	1.97	2657	1.25	1694

Partitions

(none)

Windows

CROFT: CROFT; 6.67 ft head ht

e	57	0.300	0	11.1	636	26.9	1539
s	18	0.300	0	11.1	200	12.1	217
w	126	0.300	0	11.1	1402	26.9	3392
all	201	0.300	0	11.1	2239	25.6	5148

Doors

11P0: Door, mtl pur core type

e	63	0.290	10.5	10.8	678	9.50	598
s	21	0.290	10.5	10.8	226	9.50	199
w	21	0.290	10.5	10.8	226	9.50	199
all	105	0.290	10.5	10.8	1130	9.50	997

Ceilings

Attic ceiling, asphalt shingles roof mat, r-40 ceil ins, 1/2" gypsum board int fnsh

2016	0.025	40.0	0.93	1869	1.41	2834
------	-------	------	------	------	------	------

Floors

Flr floor, frm flr, 8" thkns, carpet flr fnsh, r-22 cav ins, tight bsmt ovr

2016	0.045	22.0	1.33	2684	0.70	1404
------	-------	------	------	------	------	------

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



Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH (Vnlr)
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT-10186-SVM-12709
 Allow. Floor Load: 40 PSF
 Approval Date: 07/23/2026
 Manufacturer: Deer Valley



7/21/2026

Project Information

For: Deer Valley Homebuilders
 SVM-12709(DVHBSS-6808+4)FLEX TRUNK

Notes:



7/21/2026

Design Information

Weather: Jacksonville Craig, FL, US

Winter Design Conditions

Outside db 33 °F
 Inside db 70 °F
 Design TD 37 °F

Ventilation Method MJ8

Heating Summary

Structure 15118 Btuh
 Ducts (R-8.0) 5336 Btuh
 Central vent (64 cfm) 2621 Btuh
 Outside air Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 23075 Btuh

Infiltration

Method Simplified
 Construction quality Average
 Fireplaces 1 (Average)

	Heating	Cooling
Area (ft ²)	2016	2016
Volume (ft ³)	17132	17132
Air changes/hour	0.39	0.16
Equiv. AVF (cfm)	111	46

Heating Equipment Summary

Make Nordyne
 Trade
 Model E7E-015
 AHRI ref

Efficiency 92.1 AFUE
 Heating input 15.0 kW
 Heating output 47000 Btuh
 Temperature rise 45 °F
 Actual air flow 961 cfm
 Air flow factor 0.047 cfm/Btuh
 Static pressure 0.30 in H2O
 Space thermostat

Summer Design Conditions

Outside db 94 °F
 Inside db 75 °F
 Design TD 19 °F
 Daily range M
 Relative humidity 50 %
 Moisture difference 46 gr/lb

Sensible Cooling Equipment Load Sizing

Structure 16213 Btuh
 Ducts (R-8.0) 5216 Btuh
 Central vent (64 cfm) 1370 Btuh
 Outside air Blower 0 Btuh
 Use manufacturer's data n
 Rate/swing multiplier 0.99
 Equipment sensible load 22663 Btuh

Latent Cooling Equipment Load Sizing

Structure 2640 Btuh
 Ducts 1454 Btuh
 Central vent (64 cfm) 2028 Btuh
 Outside air Equipment latent load 6121 Btuh

Equipment Total Load (Sen+Lat) 28784 Btuh
 Req. total capacity at 0.70 SHR 2.7 ton

Cooling Equipment Summary

Make Generic
 Trade
 Cond SEER2 14.3
 Coil
 AHRI ref 12.2EER, 14.3 SEER2
 Efficiency
 Sensible cooling 22662 Btuh
 Latent cooling 9712 Btuh
 Total cooling 32375 Btuh
 Actual air flow 961 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.



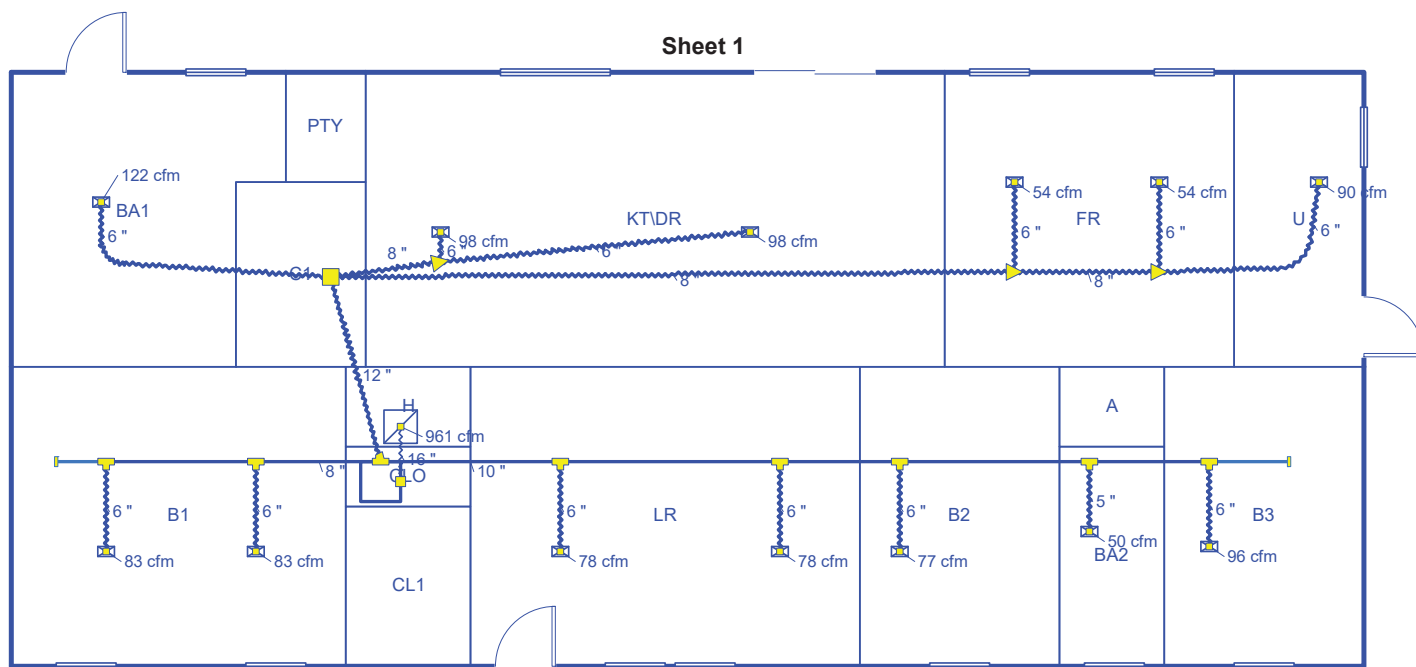
These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:

APPROVED BY

NIA INC.

Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MEE-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

Sheet 1



Job #: SVM-12709(DVHBSS-6808+4)FLE...
Performed by AMS of Indiana, Inc. for:
 Deer Valley Homebuilders
 SVM-12709(DVHBSS-6808+4)FLEX TRUNK

AMS of Indiana, Inc.

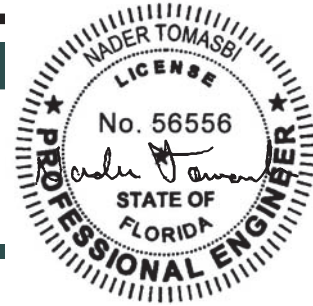
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 Elkhart, IN 46516
 Phone: 574-293-5526
 eng-ams@comcast.net

Scale: 1 : 115

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 ...709(DVHBSS-6808+4)FLEX TRUNK....

Project Information

For: Deer Valley Homebuilders
 SVM-12709(DVHBSS-6808+4)FLEX TRUNK



7/21/2026

	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	0.187 / 0.053 in H2O	0.187 / 0.053 in H2O
Lowest friction rate	0.084 in/100ft	0.084 in/100ft
Actual air flow	961 cfm	961 cfm
Total effective length (TEL)	286 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 1855	77	83	0.126	6.0	0x 0	VIFx	18.2	130.0	st2
B1-A	c 1854	77	83	0.124	6.0	0x 0	VIFx	10.8	140.0	st2
B2	c 1716	58	77	0.104	6.0	0x 0	VIFx	30.5	150.0	st1
B3	h 2048	96	90	0.107	6.0	0x 0	VIFx	45.8	130.0	st1
BA1	h 2602	122	66	0.130	6.0	0x 0	VIFx	24.1	120.0	st3
BA2	c 1104	33	50	0.105	5.0	0x 0	VIFx	39.0	140.0	st1
FR	c 1209	45	54	0.102	6.0	0x 0	VIFx	48.3	135.0	st4
FR-A	c 1209	45	54	0.089	6.0	0x 0	VIFx	55.6	155.0	st5
KTDR	c 2188	90	98	0.123	6.0	0x 0	VIFx	16.6	135.0	st6
KTDR-A	c 2188	90	98	0.113	6.0	0x 0	VIFx	30.7	135.0	st6
LR	c 1739	69	78	0.105	6.0	0x 0	VIFx	13.5	165.0	st1
LR-A	c 1739	69	78	0.101	6.0	0x 0	VIFx	24.5	160.0	st1
U	h 1916	90	52	0.084	6.0	0x 0	VIFx	62.8	160.0	st5

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st1	Peak AVF	326	372	0.101	683	10.0	0 x 0	ShtMetl	st4 st3 st3
st2	Peak AVF	154	166	0.124	477	8.0	0 x 0	ShtMetl	
st5	Peak AVF	135	106	0.084	386	8.0	0 x 0	VinIFlx	
st4	Peak AVF	179	160	0.084	514	8.0	0 x 0	VinIFlx	
st6	Peak AVF	180	196	0.113	562	8.0	0 x 0	VinIFlx	
st3	Peak AVF	482	423	0.084	614	12.0	0 x 0	VinIFlx	

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	961	961	62.8	0.084	689	16.0	0x 0		VIFx	

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

APPROVED BY

NIA INC.

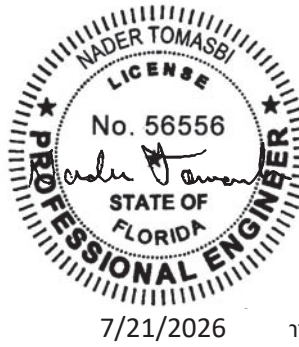
Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH (Vult)
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT-10186-SVM-12709
 Allow. Floor Load: 40 PSF
 Approval Date: 07/23/2026
 Manufacturer: Dear Valley



FLORIDA ENERGY EFFICIENCY**R BUILDING CONSTRUCTION**

Florida Department of Business and Professional Regulation

Residential Performance Method



Project Name: SVM-12709
 Street: 323 SW Carl Wilson Road
 City, State, Zip: Lake City, FL, 32024
 Owner: James & Cindy Reynolds
 Design Location: FL, Jacksonville

Name: Deer Valley Homebuilders
 Office:
 Number:
 Location: 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) 2040
 Conditioned floor area below grade (ft²) 0
 7. Windows(185.9 sqft.) Description Area
 a. U-Factor: Dbl, U=0.30 185.88 ft²
 SHGC: SHGC=0.22
 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: 0.220
 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 2040.00 ft²
 b. N/A R= ft²
 c. N/A R= ft²



10. Wall Types(1666.0 sqft.) Insulation Area
 a. Frame - Wood, Exterior R=19.0 1666.00 ft²
 b. N/A
 c. N/A
 d. N/A
 11. Ceiling Types(2040.0 sqft.) Insulation Area
 a. Single assembly, with (Vented) R=40.0 2040.00 ft²
 b. N/A
 c. N/A
 12. Roof(Comp. Shingles, Vented) Deck R=0.0 2103 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 47.0 SEER2:14.30
 15. Heating Systems kBtu/hr Efficiency
 a. Electric Heat Pump 47.0 HSPF2:7.50
 16. Hot Water Systems
 a. Electric Cap: 50 gallons
 EF: 0.920
 b. Conservation features
 17. Credits None
 CF

Glass/Floor Area: 0.091

Total Proposed Modified Loads: 51.85

Total Baseline Loads: 58.20

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: 07/15/26

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.



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).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	SVM-12709	Bedrooms:	3	Address type:	Street Address
Building Type:	User	Conditioned Area:	2040	Lot #:	---
Owner:	James & Cindy Reynolds	Total Stories:	1	Block/SubDivision:	---
Builder Home ID:	Deer Valley Homebuilders	Worst Case:	Yes	PlatBook:	---
Permit Office:		Rotate Angle:	180	Street:	323 SW Carl Wilson Road
Jurisdiction:		Cross Ventilation:	No	County:	Columbia
Family Type:	Detached	Whole House Fan:	No	City, State, Zip:	Lake City, FL, 32024
New/Existing:	New (From Plans)	Terrain:	Suburban		
Year Construct:	2026	Shielding:	Suburban		
Comment:					



CLIMATE

✓ Design Location	Tmy Site	Design Temp		Int Design Temp		Heating	Design	Daily temp
		97.5%	2.5%	Winter	Summer	Degree Days	Moisture	Range
___ FL, Jacksonville	FL_JACKSONVILLE_INTL_A	32	93	70	75	1281	49	Medium

BLOCKS

Number	Name	Area	Volume
___ 1	Block1	2040	17340 cu ft

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___ 1	Main	2040	17340	Yes	4	3	Yes	Yes	Yes

FLOORS

(Total Exposed Area = 2040 sq.ft.)

✓ #	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim.	Joist	U-Factor	Slab Insul. Vert/Horiz	Tile	Wood	Carpet
___ 1	Crawlspace	Main	196	2040 sqft	0.0	22.0	0.048	-----	0.60	0.00	0.40

ROOF

#	Type	Materials	Roof Area	Gable Area	Framing. Fract.	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt Tested	Emitt Tested	Deck Insul.	Pitch (deg)
___ 1	Gable or shed	Composition shingles	2103 ft²	256 ft²	0.0	Unfinished, Galvalume	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	2040 ft²	N	N

CEILING

(Total Exposed Area = 2040 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	2040.0ft²	0.026	0.11	Wood

INPUT SUMMARY CHECKLIST REPORT

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

Approved By: NIA INC.

Contract Title: Single Family Dwelling

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 160 MPH (V-Min)

File Rating of: 1

Plan No.: MBR-10100-SYM-1-700

Allow. Floor Load: 30 PSF

Approval Date: 07/25/2024

Manufacturer: Don Valley

WALLS

(Total Exposed Area = 1666 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	In	Height Ft	In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade
___ 1	W=>E	Exterior	Frame - Wood	Main	19.0	68.0	0	8.0	6	578.0	0.061	0	0.23	0.75	0.0 %
___ 2	S=>N	Exterior	Frame - Wood	Main	19.0	30.0	0	8.0	6	255.0	0.061		0.23	0.75	0.0 %
___ 3	E=>W	Exterior	Frame - Wood	Main	19.0	68.0	0	8.0	6	578.0	0.061		0.23	0.75	0.0 %
___ 4	N=>S	Exterior	Frame - Wood	Main	19.0	30.0	0	8.0	6	255.0	0.061		0.23	0.75	0.0 %

DOORS

(Total Exposed Area = 98 sq.ft.)

✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
___ 1	W=>E	Exterior	Insulated	Main	None	0.27	3.00	0	6.00	6	19.5ft²
___ 2	S=>N	Exterior	Insulated	Main	None	0.27	3.00	0	6.00	6	19.5ft²
___ 3	E=>W	Exterior	Insulated	Main	None	0.27	3.00	0	6.00	6	19.5ft²
___ 4	E=>W	Exterior	Insulated	Main	None	0.31	6.00	0	6.00	6	39.0ft²

WINDOWS

(Total Exposed Area = 186 sq.ft.)

✓ #	Ornt	Wall ID	Frame	Panels	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 0.30	0.22	N	N	108.0	6	3.00	6.00	1.0	1.0	IECC 2012	None
___ 2	W=>E	1	Vinyl	Low-E Double	Y 0.30	0.22	N	N	3.0	1	3.00	1.00	1.0	1.0	IECC 2012	None
___ 3	S=>N	2	Vinyl	Low-E Double	Y 0.30	0.22	N	N	18.0	1	3.00	6.00	1.0	1.0	IECC 2012	None
___ 4	E=>W	3	Vinyl	Low-E Double	Y 0.30	0.22	N	N	36.0	2	3.00	6.00	1.0	1.0	IECC 2012	None
___ 5	E=>W	3	Vinyl	Low-E Double	Y 0.30	0.22	N	N	3.0	1	3.00	1.00	1.0	1.0	IECC 2012	None
___ 6	E=>W	3	Vinyl	Low-E Double	Y 0.30	0.22	N	N	17.9	1	5.50	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)	0.00038	2023	110.99	208.37	0.1405	7.0	All	17340 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	47.0	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	47.0	1410	0.75	sys#1	1

INPUT SUMMARY CHECKLIST REPORT

HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixt. Flow	Trap	Pipe Ins.	Pipe length
___ 1	Electric	None	Main	0.92 (0.92)	50.0 gal	60 gal	120 deg	Standard	Yes	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 R-Value Area	-----Return----- Location R-Value Area	Leakage Type	AHU Location	CFM 25 TOT OUT	QN OUT	AHU SEALED	RLF	HVAC # Heat Cool
___ 1 Attic	6.0 400 ft²	Attic 6.0 100 ft²	Proposed Qn	Main	--- ---	0.040	Yes	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	1	2	3	4	5	6	Hours		7	8	9	10	11	12
	___ Cooling (WD)	AM PM	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75
	___ Cooling (WEH)	AM PM	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75
	___ Heating (WD)	AM PM	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72
___ Heating (WEH)	AM PM	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	

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

APPROVED BY

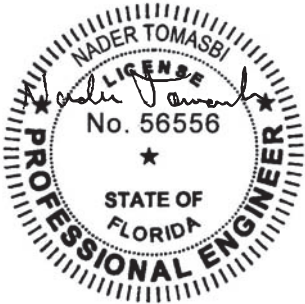
NIA INC.

Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH (Vult)
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT-10186-SVM-17709
 Allow. Floor Load: 40 PSF
 Approval Date: 07/23/2026
 Manufacturer: Deer Valley

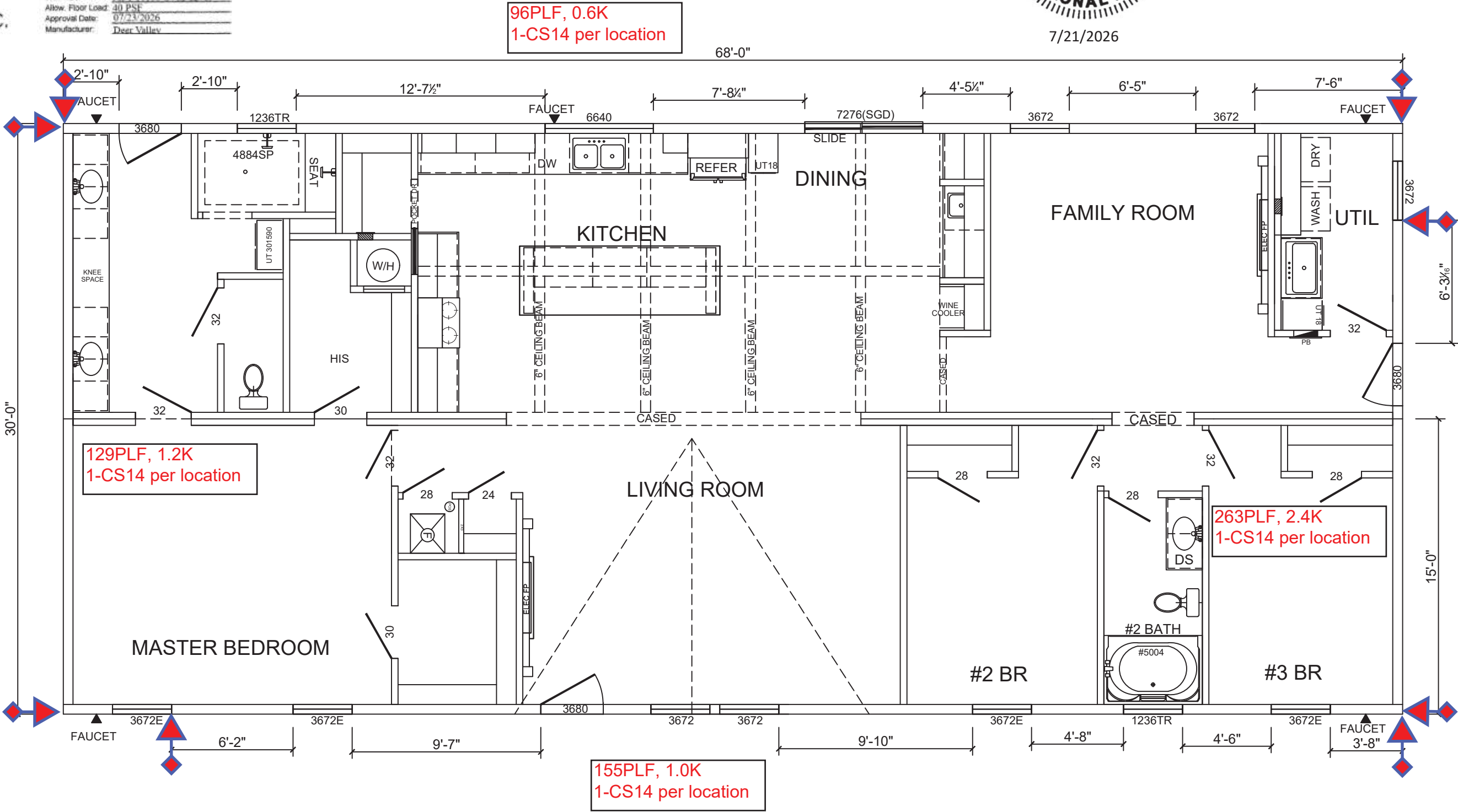
These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (V _{ult})
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley



7/21/2026



SVM-12709 - LAKE CITY, FL - 124/160 MPH - ON FRAME - 8'6" SIDEWALL - 2.13 PITCH

* =FINISHED WALL TO FINISHED WALL DIMENSION

TITLE: SVM-12709 FLOOR PLAN	PRINT DATE: 7/16/2026	APPROVED BY: J. TRIPLETT	DEER VALLEY HOMEBUILDERS, INC. SIGNATURE SERIES MOD	REV:	REV:	DWG. NO: 1.01
	SCALE: NTS	PRODUCTION BY:				

Bracing Tributary Length Determination

SVM-12709

No Interior Walls

ASCE 7-22

Endwall added area=

0 ft

Endwall Length = 30 ft
 Sidewall Length = 68 ft
 Porch Length (Left) = 0 ft
 Porch Length (Right) = 0 ft
 Wall Height = 9 ft
 Heel Height of Truss = 8 in
Seismic category = C
Ultimate Wind Speed = 160 mph
Wind Exposure = C

Left Endwall Trib From Wall: 34 ft
Left Endwall Trib From Roof: 34 ft
Right Endwall Trib From Wall: 34 ft
Right Endwall Trib From Roof: 34 ft

Roof pitch = 2.13 /12
 Mean Roof Height = 20 ft
 Transition from Perforated to Segmented:

380 PLF

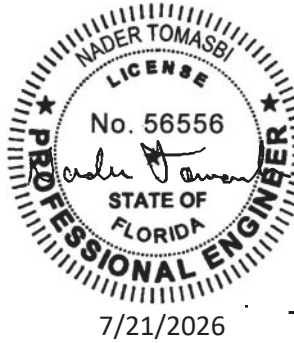
**Left Endwall - Bracing #1****Right Endwall (hitch end) - Bracing #2**

Perforated or Segmented: **P**
 PLF: 129 plf
 Height of Tallest Opening = 7 ft
 Wall length when perforated = 30 ft

Perforated or Segmented: **P**
 PLF: 263 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
Total :	30	30

Segment length - ft	Effective wind	Effective seismic
15	15	15
6.25	6.25	6.25
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 :	21.25	21.25

**Top Sidewall - Bracing #3****Bottom Sidewall - Bracing #4**

Perforated or Segmented: **P**
 PLF: 96 plf
 Height of Tallest Opening = 68 ft
 Wall length when perforated = 41 ft

Perforated or Segmented: **P**
 PLF: 155 plf
 Height of Tallest Opening = 7 ft
 Wall length when perforated = 68 ft

Segment length - ft	Effective wind	Effective seismic
2.83333	2.833333	1.783951
2.83333	2.833333	1.783951
12.583	12.583	12.583
7.67	7.67	7.67
4.42	4.42	4.341422
6.42	6.42	6.42
7.5	7.5	7.5
0	0	0
0	0	0
0	0	0
0	0	0
Total :	44.25967	42.08232

Segment length - ft	Effective wind	Effective seismic
6.17	6.17	6.17
9.583	9.583	9.583
9.833	9.833	9.833
4.67	4.67	4.67
4.5	4.5	4.5
3.67	3.67	2.993089
0	0	0
0	0	0
0	0	0
0	0	0
Total :	38.426	37.74909

Tag load: 0 Lb.

Tag load: 0 Lb.

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

SVM-12709

Wind Loads**ASCE 7-22**

MWF

Nominal wind speed = 123 mph
 Ultimate Wind Speed = 160 mph
 Exposure = C
 Mean Roof Height = 20 ft
 Wind load Areas (psf)

	A	B	C	D
	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

Building Values

Roof pitch =	2.13 /12	Sidewall Length =	68 ft
Roof angle =	10.1 °	Endwall Length =	30 ft
Wall Height =	9 ft	a =	3.00 ft
Heel Height of Truss =	8 in	2a =	6.00 ft
		Porch Length (Left) =	0 ft
		Porch Length (Right) =	0 ft
Height of Roof =	3.33 ft		

Left Endwall Shear Values

Area of End Zone of Sidewall =	27.0 ft ² /side	Total Shear =	940 lbs
Area of End Zone of Roof =	20.0 ft ² /side	Total Shear =	0 lbs
Area of Interior Zone of Sidewall =	126.0 ft ² /side	Total Shear =	2916 lbs
Area of Interior Zone of Roof =	93.2 ft ² /side	Total Shear =	0 lbs

Total Shear Force to Endwalls = 3857 lbsRight Endwall Shear Values

Area of End Zone of Sidewall =	27.0 ft ² /side	Total Shear =	940 lbs
Area of End Zone of Roof =	20.0 ft ² /side	Total Shear =	0 lbs
Area of Interior Zone of Sidewall =	126.0 ft ² /side	Total Shear =	2916 lbs
Area of Interior Zone of Roof =	93.2 ft ² /side	Total Shear =	0 lbs

Total Shear Force to Endwalls = 3857 lbsSidewall Shear Values

Area of End Zone of Wall =	27 ft ² /side	Total Shear =	940 lbs
Area of End Zone of Roof =	3 ft ² /side	Total Shear =	111 lbs
Area of Interior Zone of Wall =	41 ft ² /side	Total Shear =	937 lbs
Area of Interior Zone of Roof =	22 ft ² /side	Total Shear =	504 lbs

Total Shear Force to Sidewalls = 2493 lbs

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



Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH (Vult)
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT-10186-SVM-12709
 Allow. Floor Load: 40 PSF
 Approval Date: 07/23/2026
 Manufacturer: Dear Valley

Seismic Loads

Seismic category = C
 S_{DS} = 0.5

Wall DL = 10 psf
 Roof DL = 20 psf

Total W for seismic shear walls = 49620 lbs
 R = 6.5
 C_s = 0.09615

F_x = 4771.15 lbs

F_x = 0

shear on endwalls = 2386 lbs/wall
 shear on sidewalls = 2386 lbs/wall

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

APPROVED BY


Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

Compare Wind vs Seismic for shear walls

	Seismic	Wind	Wind with 1.4 reduction
Endwall	2386	3857	2755
Sidewall	2386	2493	1781

Controlling factors for shear wall panels

Endwall -----> Wind
 Sidewall -----> Seismic

Controlling factors for Uplift/Shear Forces

Endwall -----> Wind
 Sidewall -----> Wind

Determination of shear wall panel loads

Left Endwall - Bracing #1

Perforated or Segmented: P

Wall length when perforated = 30 ft

Wall Height = 9 ft

Height of Tallest Opening = 7 ft

Height Ratio = 0.77778

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) = 3857 lbs

Total Force (seismic) *1.4 = 3340 lbs

Load Taken to Shear Wall Segments = 129 plf

Uplift Force at End of Wall = 1157 lbs



Right Endwall (hitch end) - Bracing #2

Perforated or Segmented: **P**

Wall length when perforated = 30 ft

Wall Height = 9 ft

Height of Tallest Opening = 7 ft

Height Ratio = 0.77778

Length of Full Height Sheathing (3.5:1) = 21.25 ft

Length of Full Height Sheathing (2:1) = 21.25 ft

Percent Full Height Sheathing (3.5:1) = 71%

Percent Full Height Sheathing (2:1) = 71%

C_o (3.5:1) = 0.69 from table in IBC

C_o (2:1) = 0.69 from table in IBC

Total Force (wind) = 5589 lbs

Total Force (seismic) *1.4 = 4840 lbs

Load Taken to Shear Wall Segments = 263 plf

Uplift Force at End of Wall = 2367 lbs

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFL-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

Top Sidewall - Bracing #3

Perforated or Segmented: **P**

Wall length when perforated = 41 ft

Wall Height = 9 ft

Height of Tallest Opening = 68 ft

Height Ratio = 7.55556

Length of Full Height Sheathing (3.5:1) = 44.2597 ft

Length of Full Height Sheathing (2:1) = 42.0823 ft

Percent Full Height Sheathing (3.5:1) = 108%

Percent Full Height Sheathing (2:1) = 103%

C_o (3.5:1) = 0.83 from table in IBC

C_o (2:1) = 0.83 from table in IBC

Total Force (wind) = 3004 lbs (includes tag load when applicable)

Total Force (seismic) *1.4 = 4024 lbs (includes tag load when applicable)

Load Taken to Shear Wall Segments = 96 plf

Uplift Force at End of Wall = 615 lbs

Bottom Sidewall - Bracing #4

Perforated or Segmented: **P**

Wall length when perforated = 68 ft

Wall Height = 9 ft

Height of Tallest Opening = 7 ft

Height Ratio = 0.77778

Length of Full Height Sheathing (3.5:1) = 38.426 ft

Length of Full Height Sheathing (2:1) = 37.7491 ft

Percent Full Height Sheathing (3.5:1) = 57%

Percent Full Height Sheathing (2:1) = 56%

C_o (3.5:1) = 0.57 from table in IBC

C_o (2:1) = 0.57 from table in IBC

Total Force (wind) = 4374 lbs (includes tag load when applicable)

Total Force (seismic) *1.4 = 5859 lbs (includes tag load when applicable)

Load Taken to Shear Wall Segments = 155 plf

Uplift Force at End of Wall = 1024 lbs



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		
K_d =	0.85	α =	9.5
K_{zt} =	1	z_g =	900 ft
K_z =	0.90	q_h =	29.63 psf
I =	1		

Building Class = Enclosed Building

GC_{pi} =	0.18
	-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

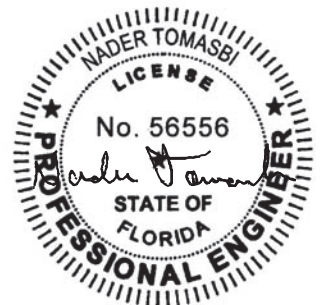
1 =	0.44	GC_{pf} =	0.78
4 =	-0.34		
C =	23.15 psf		

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	B =	0.00 psf
Horz 3E load =	-3.03		

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	D =	0.00 psf
Horz 3E load =	-2.11		



7/21/2026

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFL-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

One Story Shear Wall Design

SVM-12709

Summary of Forces

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

APPROVED BY
NIA INC.

Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (V _{ult})
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFE-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

Shear Walls

Brace wall

PLF-Load

CONSTRUCTION

Left endwall - Preforated	129	7/16 in sheathing One Side with .131 pd nail (studs at 16" o/c) at 6 in o/c edge spacing
Right endwall - Preforated	263	7/16 in sheathing One Side with .131 pd nail (studs at 16" o/c) at 6 in o/c edge spacing
Top sidewall - Perforated	96	7/16 in sheathing One Side with 15 gauge staple at 4 in o/c edge spacing
Bottom sidewall - Perforated	155	7/16 in sheathing One Side with 15 gauge staple at 4 in o/c edge spacing

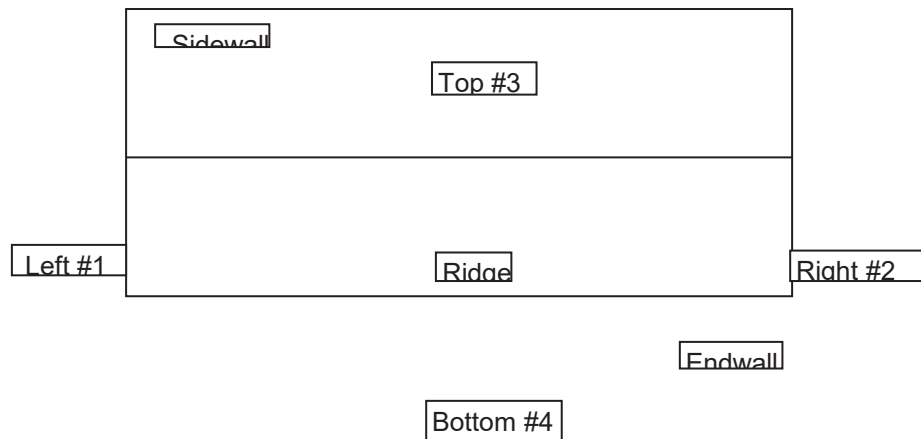
Overturning Forces

Simpson CS14 strap capacity : 2.49 Kips

Total Shear Force to Endwalls = 3.9 Kips

Total Shear Force to Sidewalls = 2.5 Kips

Racking Load Left endwall -	1.2	Kips	req.# CS14 1.0
Racking load right endwall -	2.4	Kips	req.# CS14 1.0
Racking Load top sidewall -	0.6	Kips (Includes tag load when applicable)	req.# CS14 1.0
Racking Load bottom sidewall -	1.0	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

-- --



7/21/2026

Shear Wall Design

SVM-12709

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

APPROVED BY
NIA INC.

Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFL-10186-SVM-12709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley

Left Shearwall

Shearwall Required Design = 129 plf
 Thickness of Sheathing = 7/16 "
 Fastener = .131 pd nail (studs at 16" o/c)
 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 .131 pd nail (studs at 16" o/c) at 6 in o/c edge spacing

Sheathing Capacity = 334.88 plf

Shear Wall **OK**

Right Shearwall

Shearwall Required Design = 263 plf
 Thickness of Sheathing = 7/16 "
 Fastener = .131 pd nail (studs at 16" o/c)
 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 .131 pd nail (studs at 16" o/c) at 6 in o/c edge spacing

Sheathing Capacity = 334.88 plf

Shear Wall **OK**

Top Shearwall

Shearwall Required Design = 96 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**

Bottom Shearwall

Shearwall Required Design = 155 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**



7/21/2026

Roof Diaphragm Design

SVM-12709

Roof Diaphragm Diaphragm width : 30 ft 30 ft
 Top of BC of truss sheathed?¹ No
 Diaphragm Required Design² = 129 plf 129 plf
 Thickness of Sheathing = 7/16 "
 Fastener = .131 pd nail
 Edge Spacing of Fastener^{3,4,5} = unblocked 6 in o/c
 Species of Framing⁶ = SPF
 Use 7/16 in sheathing with .131 pd nail at unblocked 6 in o/c edge spacing
 Sheathing Capacity⁷ = 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 staggered 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

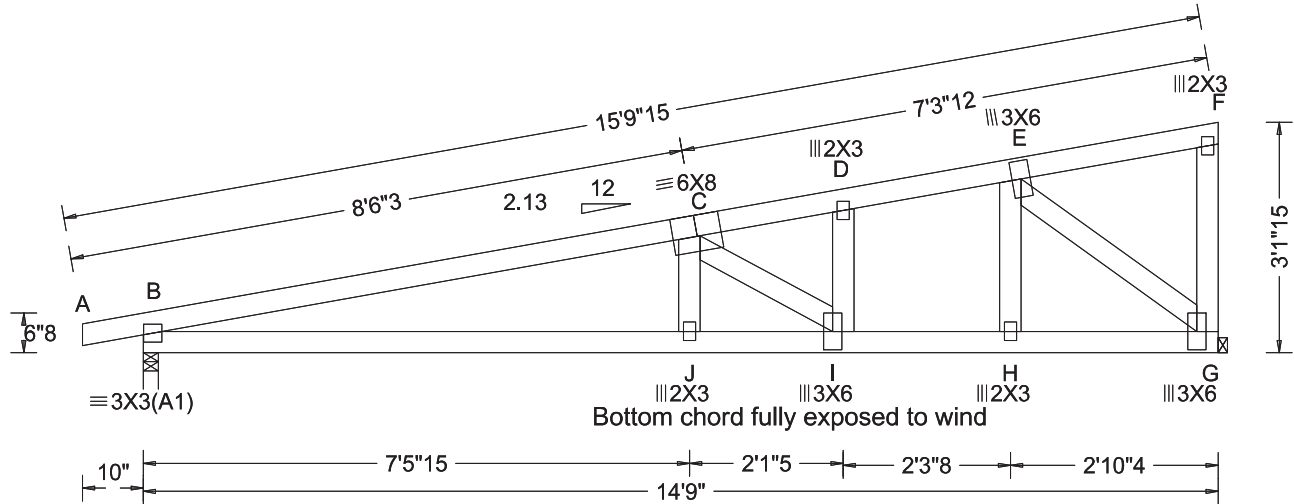
These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type:	<u>VB</u>
Occupancy:	<u>Single Family Dwelling</u>
Allowable No. of Floors:	<u>1</u>
Wind Velocity:	<u>160 MPH (Vult)</u>
Fire Rating of Ext. Walls:	<u>0 Hr</u>
Plan No.:	<u>MFT-10186-SVM-12709</u>
Allow. Floor Load:	<u>40 PSF</u>
Approval Date:	<u>07/23/2026</u>
Manufacturer:	<u>Deer Valley</u>



7/21/2026



Loading Criteria (psf)	
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 Criteria	
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

Snow Criteria (Pg,Pf in PSF)	
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	

Defl/CSI Criteria	
PP Deflection in	loc L/defl L/#
VERT(LL):	0.124 999 240
VERT(CL):	0.244 721 240
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	
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.

Maximum Top Chord Forces Per Ply (lbs)	
Chords	Tens.Comp. Chords Tens. Comp.
B - C	1169 - 1541
C - D	635 - 824

D - E	570 - 730
-------	-----------

Maximum Bot Chord Forces Per Ply (lbs)	
Chords	Tens.Comp. Chords Tens. Comp.
B - J	1477 - 1313
J - I	1459 - 1310
I - H	742 - 655
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.

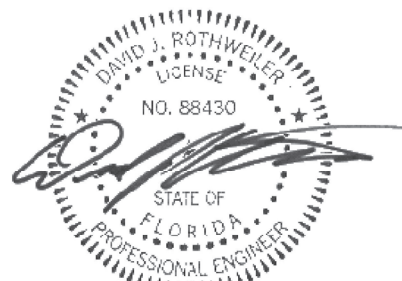
TC LL	30.0 psf
TC DL	15.0 psf
BC DL	15.0 psf
BC LL	0.0 psf

Tot LD 60.0 psf

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Vult)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MEF-10186-SVM-17709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley



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 SBCEA) 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; SBCEA: sbceacomponents.com; ICC: iccsafe.org; AWC: awc.org

Fabrication by: UFP
Haleyville LLC, #317
AL

ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

Job	Truss	Truss Type	Qty	Ply	Deer Valley
122346	C0788003	MONO SCISSOR	1	1	814

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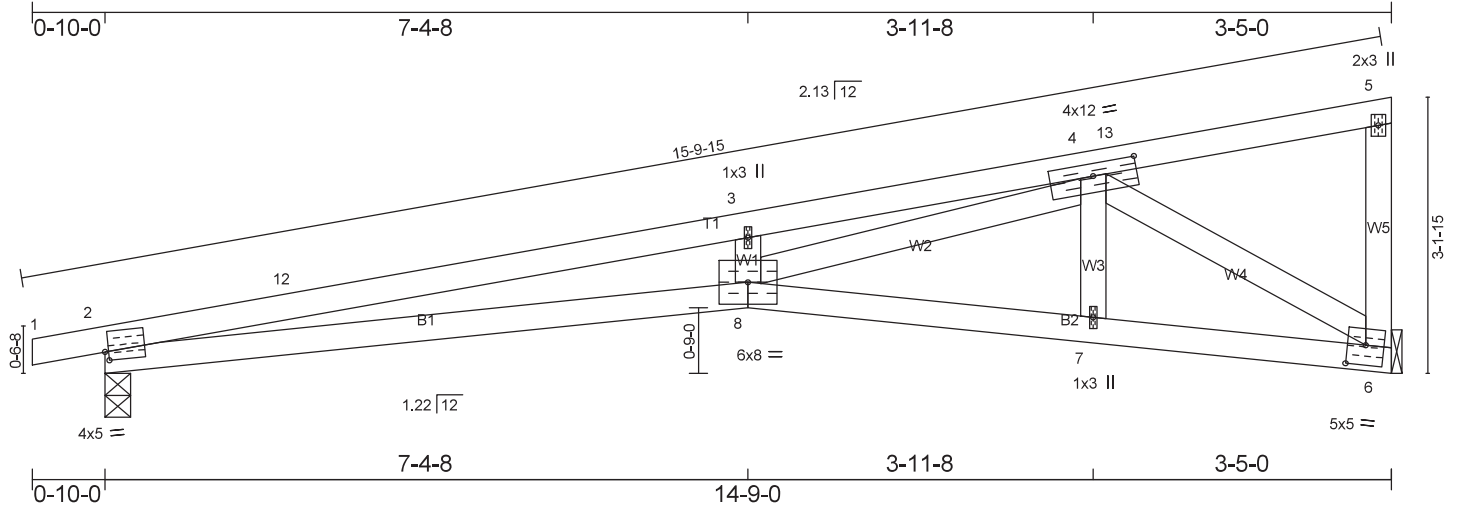


Plate Offsets (X,Y)-- [2:0-0-8,0-1-3], [4:0-6-0,0-1-12], [6:0-2-8,0-2-12]

SPACING-: 2-0-0 LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-: 1-4-0 LOADING (psf) TCLL 30.0 TCDL 15.0 BCLL 0.0 * BCDL 15.0	Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code FBC2023/TPI2014	CSL TC 0.97 BC 0.57 WB 0.49 Matrix-MP	DEFL. in (loc) l/defl L/d Vert(LL) 0.39 8 >453 240 Vert(CT) -0.40 8 >434 180 Horz(CT) 0.12 6 n/a n/a	PLATES GRIP MT20 244/190 Weight: 64 lb FT = 0%
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LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
B2: 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end vertical [P]
BOT CHORD	Rigid ceiling directly applied or 4-0-8 oc bracing.

REACTIONS. (lb/size) 2=636/0-3-8 (min. 0-1-8), 6=583/Mechanical
Max Horz 2=204(LC 6)
Max Uplift 2=-472(LC 6), 6=-435(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/9, 2-12=-2722/2276, 3-12=-2678/2285, 3-4=-2690/2346, 4-13=-34/1, 5-13=-34/10, 5-6=-71/169
BOT CHORD 2-8=-2427/2654, 7-8=-811/860, 6-7=-809/864
WEBS 3-8=-247/320, 4-7=0/180, 4-6=-1031/969, 4-8=-1720/1911

NOTES-

- 1) This truss has been checked for uniform roof live load only, except as noted.
- 2) Wind: ASCE 7-22; Vult=151mph (3-second gust) Vasd=117mph @24in o.c.; TC DL=4.0psf; BC DL=4.0psf; (Alt. 180mph @16in o.c.; TC DL=6.0psf; BC DL=6.0psf); h=30ft; Cat. II; Exp C; Encl., GCPI=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -0-10-0 to 2-2-0, Zone1 2-2-0 to 11-7-4, Zone3 11-7-4 to 14-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 472 lb uplift at joint 2 and 435 lb uplift at joint 6.
- 7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 8) Based on C0788002 - FBC 2023

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

APPROVED BY
NIA INC.

Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH (Valr)
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MF-10186-SVM-17709
Allow. Floor Load:	40 PSF
Approval Date:	07/23/2026
Manufacturer:	Deer Valley



WARNING - Verify design parameters and READ NOTES

Truss shall not be cut or modified without approval of the truss design engineer.

This component has only been designed for the loads noted on this drawing. Construction and lifting forces have not been considered. The builder is responsible for lifting methods and system design. Builder responsibilities are defined under TPI1. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult BCSI 1-06 from the Wood Truss Council of America and Truss Plate Institute Recommendation available from WTCA, 6300 Enterprise LN, Madison, WI 53719 J:\support\MitekSupply\templates\ufp.tpe

