

December 14, 2022

Deer Valley Homebuilders 205 Carriage St. Guin, AL 35563

RE: MFT10186-SVM-6808

NTA JOB NUMBER: DVH120822-56

Dear Mr. Jerome Triplett,

The referenced manufactured building has been reviewed and approved. ICC-NTA LLC certifies this plan is in compliance with 2020 Florida Codes -7^{th} Edition w/2021 and 2022 supplement as referenced in the approved drawings. This approval covers the factory build structure only. Any alterations to the factory-built structure, on site, voids the approval. This plan is subject to the following limitations:

- 1. This plan is NOT approved for High Velocity Hurricane Zone (i.e. Broward and Dade Counties).
- 2. Signed and sealed plans are on file with ICC NTA, LLC
- 3. The Chapter 633 Plan Review and Inspection shall be conducted by the local fire safety inspector.
- 4. Items installed on site are subject to review and approval by the local authority having jurisdiction. Please reference the list of site installed items on the approved plans.
- 5. This review included products for compliance with 553.8425 or FAC Chapter 61G20-3.

If you have any additional questions or comments regarding this matter, please contact me at your convenience at (574) 773-7975.

Respectfully,

Michael Faller

Michael Faller SMP-056 Account Manager

ICC NTA LLC

RANCH STRUCTURAL SYSTEM

MODEL: SVM-6808 SUN VALLEY HOMEBUILDERS NOMINAL SIZE 32'-0"x 68'-0" ACTUAL SIZE 30'-0" x 64'-0"

1920 Sq. Ft.

FLORIDA STATE **CODES**

2017 National Electrical Code

7TH EDITION (2020)Florida Energy Effciency Code for Building Construction With 2022 Supplement FAC-61-41 MANUFACTURED BUILDINGS 7TH EDITION (2020) Florida Residential Code With 2022 Supplement

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: **EXPOSURE FACTOR: SEISMIC ZONE**

DESIGN CRITERIA

OCCUPANCY GROUP **CONSTRUCTION TYPE RISK CATEGORY**

1 & 2 FAMILY DWELLING WOOD FRAME UNPROTECTION

LOAD REQUIREMENTS

FLOOR LIVE LOAD FLOOR DEAD LOAD

(VULT-160MPH)(VASD-124MPH) WIND SPEED

40 PSF

10 PSF

ROOF LIVE LOAD ROOF DEAD LOAD

160 MPH Vult, 124 MPH Va

DATE 12/14/2022 CERT. NO SMP-056 PLAN NUMBER MFT10186-SVM-6808 APPROVED BY MIchael Faller

20 PSF TC, 20 PSF BC

15 PSF TC, 15 PSF BC

(signature)

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. Engineer seal applies ONLY to FACTORY MANUFACTURED portion 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 works. 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

COVER SHEET

SUPPLEMENTAL COVER SHEET

TYPICAL NOTE-(FLOOR / ELECTRICAL / WINDOW) TYPICAL FLOOR PLAN/ ELECTRICAL

A.04 RESERVED

A.05

EXTERIOR ELEVATION TYPICIAL PLUMBING LAYOUT A.06

A.06.1 DWV LINES

A.06.2 SUPPLY LINES

TYPICAL CROSS SECTION (OFF-FRAME) (RESERVED) A.09

TYPICAL CROSS SECTION (ON-FRAME)

(RESERVED) A.13 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)

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).

BUILDING DRAINS, CLEANOUTS, AND HOOK-UP TO PLUMBING SYSTEM.
 ELECTRICAL SERVICE HOOK-UP (INCLUDING FEEDERS) TO

THE BUILDING.
6. THE MAIN ELECTRICAL PANEL AND SUB-FEEDERS.

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

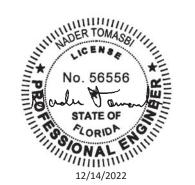
15. BUILDING SHALL BE OVER 5' AWAY FROM ALL PROPERTY LINES.
16. ALL PLUMBING BELOW FLOOR SYSTEM

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.



Wind Importance Factor: ___ Internal Pressure Coefficient: Wind Exposure: Seismic Design Category:_ Electrical Service Panel Size: 200 AMPS Permissible Gas Type: Natural /LP

Thermal Climate Zone: Degree Days: 1306 Minimum Furnace Output: 32875

Floor*<u>19</u> Wall* <u>30</u> Thermal Transmittance Values: ___ 22 WINDOW RATING DP 50 (ASD)

* "R" or "U" as required by State



FLORIDA BUILDING MAT.

.01 SIMPSON LTS & LSTA & CS14

A. SIMPSON LTS- FL-10456.18-R5 B. SIMPSON CS14- FL-10456.3-R5 C. SIMPSON LSTA- FL-13872.5-R4

C. SIMPSON HDU- FL-10441.4-R6

OWENS CORNING SHINGLES

A. FL- 10674-R16 MFM SHINGLE STARTER A. FL- 11842.1-R8

CROFT WINDOWS

A. FL- 16082.1-R4 **DUNBARTON DOORS**

A. FL- 15362 R3 (9-LITE)

B. FL- 15362.1 R3 (6 PANEL) C. FL- 15362.3 R3 (ATRIUM)

CEMPLANK LAP SIDING

A. FL- 13192 -R6 **CEMPLANK SIDING**

A. FL- 13223 R5

CEMPLANK PANELS A. FL- 13265.1-R5

D. THIS STRUCTURE HAS BEEN DESIGNED FOR ERECTION OR INSTALLATION ON A SITE BUILT PERMA

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

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

RANCH STRUCTURAL SYSTEM Deer Valley Homebuilders



DATA SHEET AND THE STATE (DBPR) INSIGNIA SHALL BE PERMANENTLY MOUNTED TO O

ABOUT THE ELECTRICAL PANEL

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

C.JACKSON NTS 12/13/22 **COVER SHEET** SVM-6808 A.01 MFT10186-SVM-6808

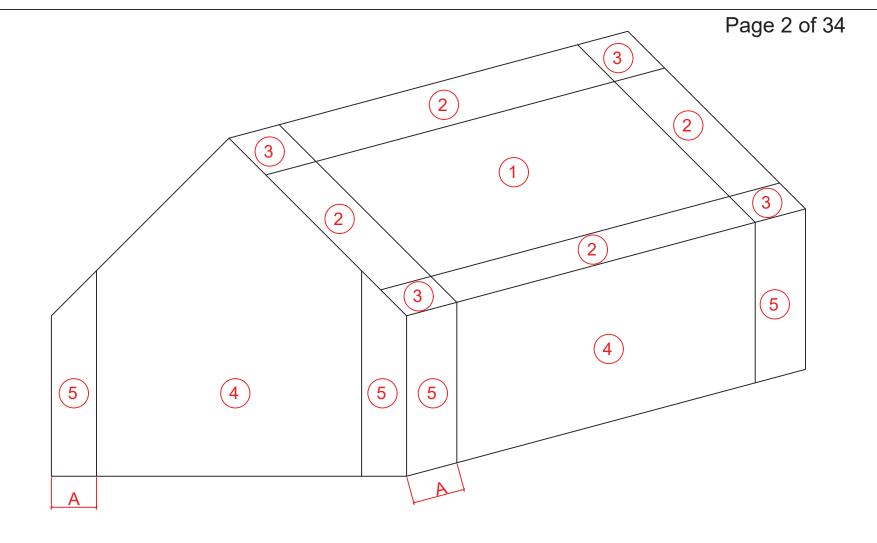
SITE INSTALLED ITEMS:

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 ÁND 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)

EXPOSU	JRE FAC	R: C	
		VA	SD 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

ese prints comply with the initial Manufactured Building and adopted Codes and there to the following criteria: PPROVED BY Fire Railing of Ed. Walls:

Const. Type: VB
Occupanory: Allowable No.
of Floors:
160 MPH Vult. 124 MPH Vasc
Fire Rating of
Ed. Walts:
0 Hr
Plan No:
MFT10186-SVM-680S
Allow-Floor Load40 PSF



REVISIONS	CUSTOMER	APPROVAL STAMP:	DANIOLI OTRUGTURAL OVOTEM	C.JACKSON	SCALE: NTS
	_		RANCH STRUCTURAL SYSTEM Deer Valley Homebuilders	12/6/22	REV:
			,	COVER SHEET	·
	1		DEER VALLEY HOMEBUILDERS, INC. 205-468-8400 P.O. Box 310 / 205 Carriage St. Guin, Alabama 35563	SVM-6808	DWG. NO:
			Guin, Alabama 35563	MFT10186-SVM-6808	

- 1. LIGHT AND VENTILATION PROVIDED WILL BE IN ACCORDANCE WITH 4. OVERALL DIMENSIONS OF HOME WILL VARY ACCORDING TO 8% OF THE ROOM AREA FOR LIGHT AND 4% OF THE ROOM AREA
- ROOMS: DINING ROOMS, FAMILY ROOMS, DENS, BEDROOMS,
- 2. FOR DOOR AND WINDOW SIZES SEE SPEC. (SEE PAGE A.2.)
- 3. ALL INDIVIDUAL FLOOR PLANS WILL BE WITHIN THE DIMENSIONAL LIMITS SHOWN ON THIS DRAWING.
- THICKNESS OF SHEATHING MATERIAL INSTALLED TO THE EXTERIOR SURFACE OF EXTERIOR WALLS AND TO EXTERIOR SURFACE OF THE MARRIAGE WALLS OF EACH HOME SECTION.
- 5. 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 IRC REF.(R312.2.)
- 6. MINIMUM ROOM SIZE IS 70 SQ.FT. WITH A 7'-0" MIN. DIMENSION AND 1 ROOM AREA OF AT LEAST 120 SQ.FT.
- 7. 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.
- OPTIONAL FIREPLACES MAY BE ADDED, PROVIDING THEY MEET ALL REQUUIREMENTS OF IRC/MECHANICAL CODE AND INSTALLED PER
- CLOTHS DRYER EXHAUST ON SITE BY OTHERS.
 ALL EXHAUST AIR FROMRANGE HOODS AND BATHROOM VENTS SHALL BE VENTED TO THE EXTERIOR.
- 11. 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(402.1.3 OF THE 2020 FL ENERGY CODE)
- 12. ALL SOURCES OF POSSIBLE AIR INFILTRATION ARE REQUIRED TO BE CAULKED, GASKETED, WEATHERSTRIPPED, WRAPPED, OR OTHERWISE SEALED TO LIMIT AIR MOVEMENT.
 - 13. 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 (SECTION R315.3 AND 325.3, 2013 KRC

19. RECESSED LUMINARY LIGHTING, FAN MOTERS AND OTHER HEAT PRODUCING DEICES SHALL HAVE THE COMBUSTIBLE INSULATION SPACED A MINIMUM OF 3 INCHES FROM THE HEAT SOURCE. (SECTION R302.13, 2013 KRC)

(SECTION RSU2:15, 2013 RRC)
20. MAXIMUM FLAME SPREAD TO 200 AND MAXIMUM SMOKE DEVELOPMENT OF 450
FOR ALL WALL AND CEILING FINISHES.
MAXIMUM FLAME SPREAD OF 25 AND MAXIMUM SMOKE DEVELOPMENT
OF 450 FOR INISH, A TION OF 450 FOR INSULATION.
UNLESS SPECIFIED ALL FASTENING PER TABLE R602.3(1). ALL DRILLING AND NOTCHING PER R502.8 AND R602.6

KITCHEN		100
MBA		50
BATH 2		50
BATH 3		50

CROFT WIND	OW	/S(SEF	RIES 20)) LIGH	IT & VEN	T CHART	
WINDOW SCHEDULE SAV WINDOW SERIES # 2000 F			≣)	SG (SAFT E (EGF	Y GLAZE) RESS)		
DESCRIPTION	LI	GHT	VENT	R.O.	SF-(MAX)	U-FACTOR	SHGC
30 X 40	5	5.64	2.69	8.33	66 SF	.38	.21
36 X 40	6	6.80	3.24	10	81 SF	.35	.20
48 X 40	7	7.96	3.94	13.3	98 SF	.38	.21
24 X 72	8	3.09	3.95	12	98.5 SF	.35	.20
36 X 72	1	13.49	7.14	18	164 SF	.35	.20
48 X 72	1	16.18	7.9	24	197 SF	.35	.20
36X72(BRONZE ALUM.)	1	1.28	N/A	3	N/A	.42	.21
36X40(BRONZE ALUM.)	1	1.00	N/A	2.5	N/A	.42	.21
30X40(BRONZE ALUM.)	2	2.250	N/A	5	N/A	.38	.21
30 X 30 (Glass Block)			N/A	6.35	N/A	N/A	N/A
40 X 40 (Glass Block)			N/A	11.25	N/A	N/A	N/A
34 X 42 (Glass Block)			N/A	10.31	N/A	N/A	N/A
12 X 36 (TRANSOM)	1	1.28	N/A	3	N/A	.31	.27
12 X 30 (TRANSOM)	1	1.00	N/A	2.5	N/A	.31	.27
12 X 60 (TRANSOM)	2	2.25	N/A	5	N/A	.34	.27
CROFT WIND	5.	.43	2.72	8.33	70SF	.38	.21
		`					
	5.	`					
3040	5. 6.	.43	2.72	8.33	70SF	.38	.21
3040 3640	5. 6.	.43	2.72	8.33 10	70SF 87SF	.38	.21
3040 3640 3660	5. 6.	.43 .78 0.98	2.72 3.39 5.48	8.33 10 15	70SF 87SF 143SF	.38 .36	.21 .27 .27
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS	5. 6. 10 1.	.43 .78 0.98 .31	2.72 3.39 5.48 N/A	8.33 10 15 3	70SF 87SF 143SF NA	.38 .36 .36 .31	.21 .27 .27
3040 3640 3660 3612(TRANSOM)	5. 6. 10 1.	.43 .78 0.98 .31	2.72 3.39 5.48 N/A	8.33 10 15 3	70SF 87SF 143SF NA	.38 .36 .36 .31 DP-RAT	.21 .27 .27 .27
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS	5. 6. 10 1.	.43 .78 0.98 .31	2.72 3.39 5.48 N/A	8.33 10 15 3	70SF 87SF 143SF NA	.38 .36 .36 .31 DP-RAT	.21 .27 .27 .27 ING 47.2
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR WIGLASS R	5. 6. 10 1. LIC	.43 .78 0.98 .31 GHT &	2.72 3.39 5.48 N/A VENT	8.33 10 15 3 CHAR	70SF 87SF 143SF NA Y GLAZE)	.38 .36 .36 .31 DP-RAT EXP-B	.21 .27 .27 .27 NG 47.2
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR WIGLASS R	5. 6. 10 1. LIC	.43 .78	2.72 3.39 5.48 N/A VENT ETY GLAZE	8.33 10 15 3 CHAR ⁷ SG (SAFT	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RAT EXP-B	.21 .27 .27 .27 NG 47.2
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR W/GLASS R DESCRIPTION * 3680 (STORM W/OPEN SLIDE	5. 6. 10 1. LIC	.43	2.72 3.39 5.48 N/A VENT ETY GLAZE VENT 5.7	8.33 10 15 3 CHAR ⁷ SG (SAFT R.O. 21.10	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RAT EXP-B EXP-C U-FACTOR	.21 .27 .27 .27 NG 47.2 61.0
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR W/GLASS R DESCRIPTION * 3680 (STORM W/OPEN SLIDE 3680 (6 PANEL)	5. 6. 10 1. LIC	.78	2.72 3.39 5.48 N/A VENT ETY GLAZE VENT 5.7 N/A	8.33 10 15 3 CHAR ⁻ SG (SAFT R.O. 21.10	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RAT EXP-B EXP-C U-FACTOR	.21 .27 .27 .27 NG 47.2 61.0
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR W/GLASS R DESCRIPTION * 3680 (STORM W/OPEN SLIDE 3680 (6 PANEL) 3680 (9 LITE & ROUNDTOP)	5. 6. 10 1. LIC	43 .78 .78 .78 .78 .79 .79 .79 .79 .79 .79 .79 .79 .79 .79	2.72 3.39 5.48 N/A VENT ETY GLAZE VENT 5.7 N/A N/A	8.33 10 15 3 CHAR ^T SG (SAFT R.O. 21.10 21.10	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RATI EXP-B EXP-C U-FACTOR	.21 .27 .27 .27 ING 47.2 61.0 SHGC
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR W/GLASS R DESCRIPTION * 3680 (STORM W/OPEN SLIDE 3680 (6 PANEL) 3680 (9 LITE & ROUNDTOP) 3680 (15 LITE)	5. 6. 10 1. LIC	.43	2.72 3.39 5.48 N/A VENT ETY GLAZE VENT 5.7 N/A N/A	8.33 10 15 3 CHAR ^T SG (SAFT R.O. 21.10 21.10 21.10 21.10	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RATI EXP-B EXP-C U-FACTOR	.21 .27 .27 .27 NG 47.2 61.0 SHGC
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR WIGLASS R DESCRIPTION * 3680 (STORM WIOPEN SLIDE 3680 (6 PANEL) 3680 (9 LITE & ROUNDTOP) 3680 (15 LITE) 3680 (3/4 OVAL)	5. 6. 10 1. LIC	.43	2.72 3.39 5.48 N/A VENT ETY GLAZE VENT 5.7 N/A N/A N/A	8.33 10 15 3 CHAR ⁻ SG (SAFT R.O. 21.10 21.10 21.10 21.10 21.10	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RATI EXP-B EXP-C U-FACTOR .16	.21 .27 .27 .27 .27 ING 47.2 61.0 SHGC
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR W/GLASS R DESCRIPTION * 3680 (STORM W/OPEN SLIDE 3680 (6 PANEL) 3680 (9 LITE & ROUNDTOP) 3680 (15 LITE) 3680 (3/4 OVAL) 3680 (FULL OVAL)	5. 6. 10 1. LI(CEQUIL	A43	2.72 3.39 5.48 N/A VENT ETY GLAZE VENT 5.7 N/A N/A N/A N/A	8.33 10 15 3 CHAR ⁻ SG (SAFT R.O. 21.10 21.10 21.10 21.10 21.10 21.10	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RATI EXP-B EXP-C U-FACTOR .16	.21 .27 .27 .27 .27 MG 47.2 61.0 SHGC .00
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR WIGLASS R DESCRIPTION * 3680 (STORM WOPEN SLIDE 3680 (9 LITE & ROUNDTOP) 3680 (15 LITE) 3680 (3/4 OVAL) 3680 (FULL OVAL) 3680 (STORM)	5. 6. 10 1. LI(CEQUIL	.43	2.72 3.39 5.48 N/A VENT TY GLAZE VENT 5.7 N/A N/A N/A N/A N/A N/A	8.33 10 15 3 CHAR ^T SG (SAFT R.O. 21.10 21.10 21.10 21.10 21.10 21.10 21.10 21.10	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RATI EXP-B EXP-C U-FACTOR .16	.21 .27 .27 .27 .27 MG 47.2 61.0 SHGC .00
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR WIGLASS R DESCRIPTION * 3680 (STORM WOPEN SLIDE 3680 (6 PANEL) 3680 (9 LITE & ROUNDTOP) 3680 (15 LITE) 3680 (3/4 OVAL) 3680 (FULL OVAL) 3680 (STORM) 13 X 80 (FULL or 1/2 SIDELITE)	5. 6. 10 1. LI(CEQUIL	.43	2.72 3.39 5.48 N/A VENT TY GLAZE VENT 5.7 N/A N/A N/A N/A N/A N/A N/A N/A N/A	8.33 10 15 3 CHAR ¹ SG (SAFT R.O. 21.10 21.10 21.10 21.10 21.10 21.10 21.10 7.50	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RATI EXP-B EXP-C U-FACTOR .16	.21 .27 .27 .27 .27 .1NG .47.2 61.0 SHGC .00
3040 3640 3660 3612(TRANSOM) DUNBARTON DOORS ALL EXTERIOR DOOR WIGLASS R DESCRIPTION * 3680 (STORM WIOPEN SLIDE 3680 (6 PANEL) 3680 (9 LITE & ROUNDTOP) 3680 (15 LITE) 3680 (34 OVAL) 3680 (FULL OVAL) 3680 (STORM) 13 X 80 (FULL or 1/2 SIDELITE) TOP PANEL	5.5.6.10 1.1.1 LI(CEQUII	A43	2.72 3.39 5.48 N/A VENT TY GLAZE VENT 5.7 N/A	8.33 10 15 3 CHAR ¹ SG (SAFT R.O. 21.10 21.10 21.10 21.10 21.10 21.10 5.92	70SF 87SF 143SF NA Y GLAZE) SF-(MAX)	.38 .36 .36 .31 DP-RATI EXP-B EXP-C U-FACTOR .16	.21 .27 .27 .27 .27 .1NG .47.2 61.0 SHGC .00

ELECTRIC CIRCUIT SCHEDULE LOAD CALCULATION s _ _ SWITCH LEG LIGHT (FLUORESCENT) SMALL APPLIANCE 20 (1) 120 SERVICE PANEL RECEPTACLE 20 AMF WEATHER PROOF RECEING NM CONNECTOR ENERAL PURPOS RECEPTACLE 220 V EXTRA 120 12 F) FAN GEXHAUST FAN EXTR/ ← EXHAUST FAN & LIGHT ← EXHAUST FAN EXTRA 16 GENERAL PURPOS17 FREEZER 20 (1) 120 20 (1) 120 EXTRA 120 12 120 12 SA)SMOKE ALARM (SA) SMOKE ALARM NONOXIDE EXTRA NOTE: 1) RECEPT REQ'D IN HALLWAYS OVER 10' MIN. IN LENGTH. WATER HEATER 2) ALL ELECTRICAL WIRING TO BE IN COMPLIANCE WITH N.E.C. PER STATE REQUIREMENT. 3) TWO EXTERIOR G.F.I./MP RECEPTS REQUIRED. ONE LOCATED ON THE FRONT OF THE MODULAR GROUNDING DETAIL 200 MAIN SERVICE ENTRANCE 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 MANUFACTURERS SPECIFICATIONS IN DWELLING UNIT BEDROOMS SHALL BE PROTECTED BY AFCI LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT. 1) SERVICE PANEL 200 AMP 5) KITCHEN COUNTERTOP SWITCHES AND RECEPTS ARE TO BE DIRECTLY ABOVE 2) SET CONNECTOR FOR CONDUIT 6) ALL BOX SIZING IN COMPLIANCE WITH N.E.C. PER STATE REQUIREMENT 3) NEUTRAL CONDUCTOR-WHITE SERVICE EQUIPMENT 7) SMOKE DETECTORS SHALL BE INSTALLED OUTSIDE OF EACH SEPERATE SLEEPING AREA AND NO. 2/0 THW-COP. 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,

FEEDER ASSEMBLY DETAILS

200 AMP UNDERGROUND

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

SERVICE CONNECTION TO

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.) - EQUIPMENT 200 AMP (3) 2/0 COPPER

POWER SOURCE SHALL BE PROVIDED BY OTHERS.

NAINC



REVISIONS

ANY LIGHT LOCALED IN A WELLOCATION MUST BE OF THE ENCLOSED & GASKELED TYPE LISTED FOR WET LOCATIONS.
 CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUT SIDE OF SEPARATE SLEPPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM IN DWELLING UNITS WITHIN WHICH FUEL-FIRED 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

AND SHALL RECEIVE POWER FROM A BATTERY WHEN PRIMARY POWER INTERRUPTED.
8) ALL ELECTRICAL CONDUCTORS AND EQUIPMENT SHALL BE LISTED OR LABELED BY A

9) IN MODELS WITHOUT LIPSTAIR LITH ITY AREA, APPLIANCES SUCH AS WATER HEATERS

11) BUILDER/DEALER TO SUPPLY AND INSTALL ALL MATERIALS NOT PROVIDED BY

WHIRLPOOL TUBS ON A SEPERATE BREAKER AND GFI PROTECTED
13) ALL RECEPTS ABOVE COUNTERTOPS TO BE PROTECTED BY G.F.I.

WASHERS, AND DRYERS ARE LOCATED IN BASEMENT AND FIELD WIRED BY OTHERS

MANUFACTURERS FOR COMPLETE ELECTRICAL HOOK-UP.

12) ALL RECEPTS IN BATHROOMS AND EXTERIOR OF HOME SHALL 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.

16) NON-METALIC SHEATHED CARLE 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 DOOF 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

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.

NATIONALLY RECOGNIZED TESTING LABORATORY AND IN COMBINATION WITH LISTING AND LABELING, CONDUCTORS AND EQUIPMENT SHALL BE SUITABLE FOR LOCATION AND USE.

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

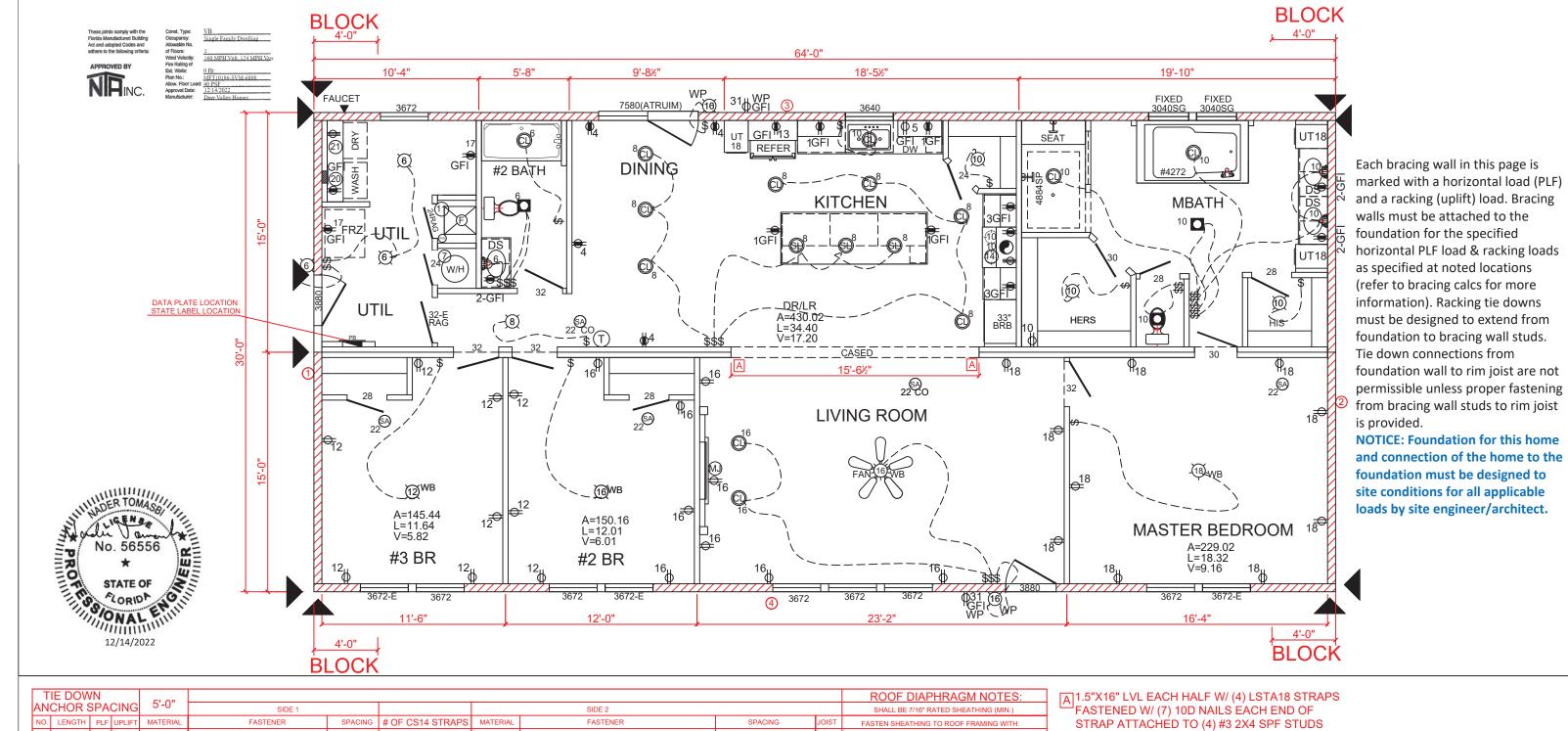
SERVICE CONDUCTORS. THIS INFORMATION MUST OCCUR ON THE DATA PLATE OF HOMES WHERE

RANCH STRUCTURAL SYSTEM Deer Valley Homebuilders



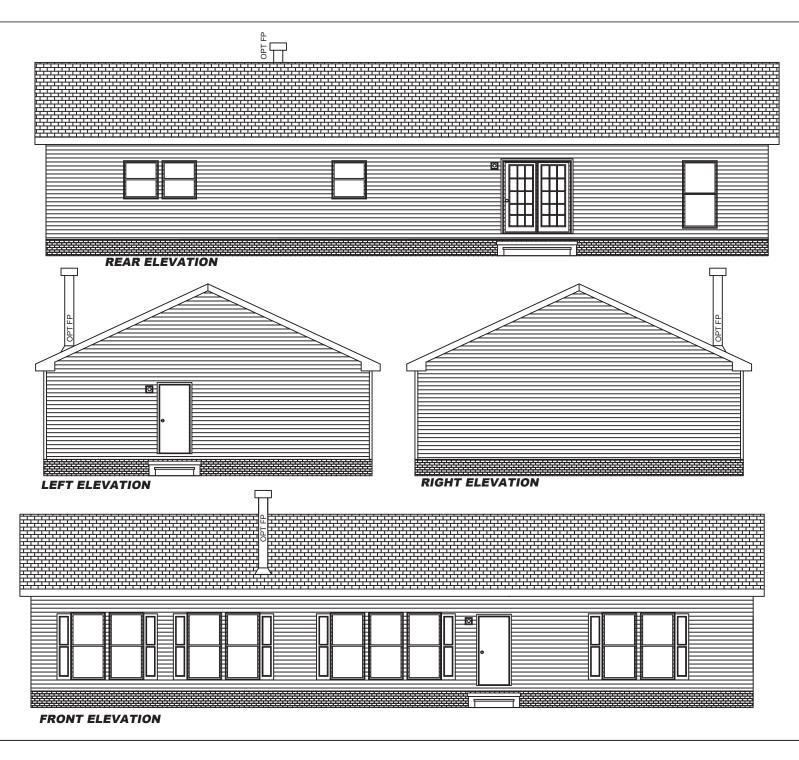
DEER VALLEY HOMEBUILDERS. INC. P.O. Box 310 / 205 Carriage St. Guin, Alabama 35563

12/14/2022	
APPROVED BY: C.JACKSON	SCALE: NTS
12/13/2022	REV:
TYPICAL NOTES	
SVM-6808	DWG. NO:
MFT10186-SVM-6808	A.02



				L L O !!						TOOL BITTI THE TOTAL		
Α	NCHOR	SPA	CING	5'-0"	SIDE 1				SIDE 2			SHALL BE 7/16" RATED SHEATHING (MIN.)
N	D. LENGT	H PLF	UPLIFT	MATERIAL	FASTENER	SPACING	# OF CS14 STRAPS	MATERIAL	FASTENER	SPACING	JOIST	FASTEN SHEATHING TO ROOF FRAMING WITH:
	25.17	376	3.4K	7/16" OSB	.131" X 2 1/2" NAILS	4" OC	2 PER 📥	1/2" GYP	#6X1 5/8" SCREWS (GLUED & SCREWED)	6" OC EDGE 12" OC FEILD	2	MAIN UNIT
	30	315	2.8K	7/16" OSB	.131" X 2 1/2" NAILS	4" OC	2 PER 📥	1/2" GYP	#6X1 5/8" SCREWS (GLUED & SCREWED)	6" OC EDGE 12" OC FEILD	2	.131X2.5" NAILS FASTENED 4" O.C. EDGE SPACING
	29.93	254	2.3K	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	BLOCKED 4FT FROM EACH ENDWALL
	31.33	243	2.2K	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	
1												

	REVISIONS	_
RANCH STRUCTURAL SYSTEM	C.JACKSON	SCALE: NTS
Deer Valley Homebuilders	11/17/22	REV:
	TYPICAL FLOOR PLAN	1
DEER VALLEY HOMEBUILDERS, INC. 205-468-8400	SVM-6808	WG. NO:
P.O. Box 310 / 205 Carriage St. Guin, Alabama 35563	MFT10186-SVM-6808	A.03
	·	



- 1. ALL ITEMS ARE COMPLETED IN THE MANUFACTURING FACILITY UNLESS NOTED OTHERWISE.
- * 2. SIDING FOR ENDS IS SHIPPED LOOSE FOR ON SITE
- 2. SIDING FOR ENDS IS SHIFFED 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.
- 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".

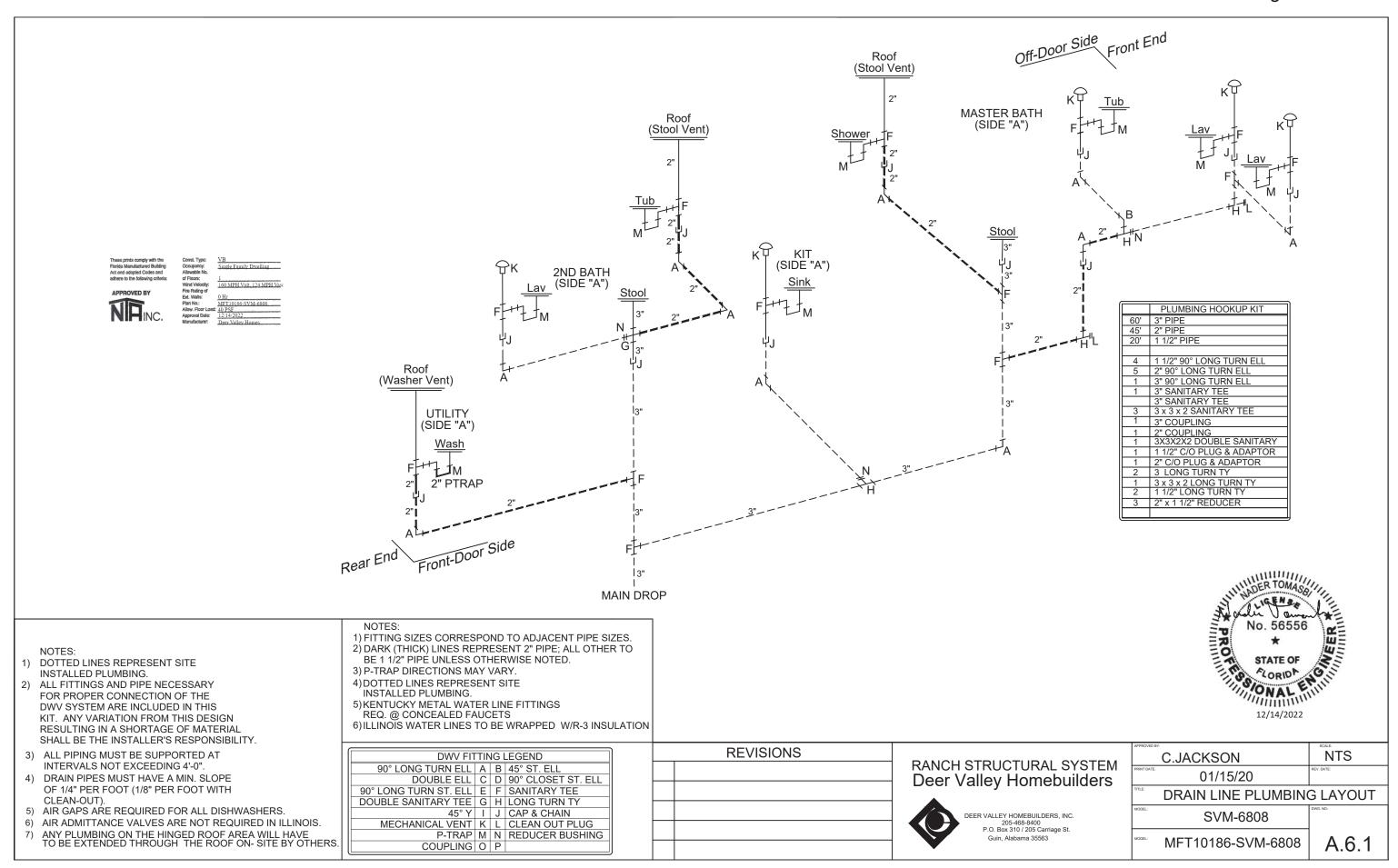
RANCH STRUCTURAL SYSTEM Deer Valley Homebuilders

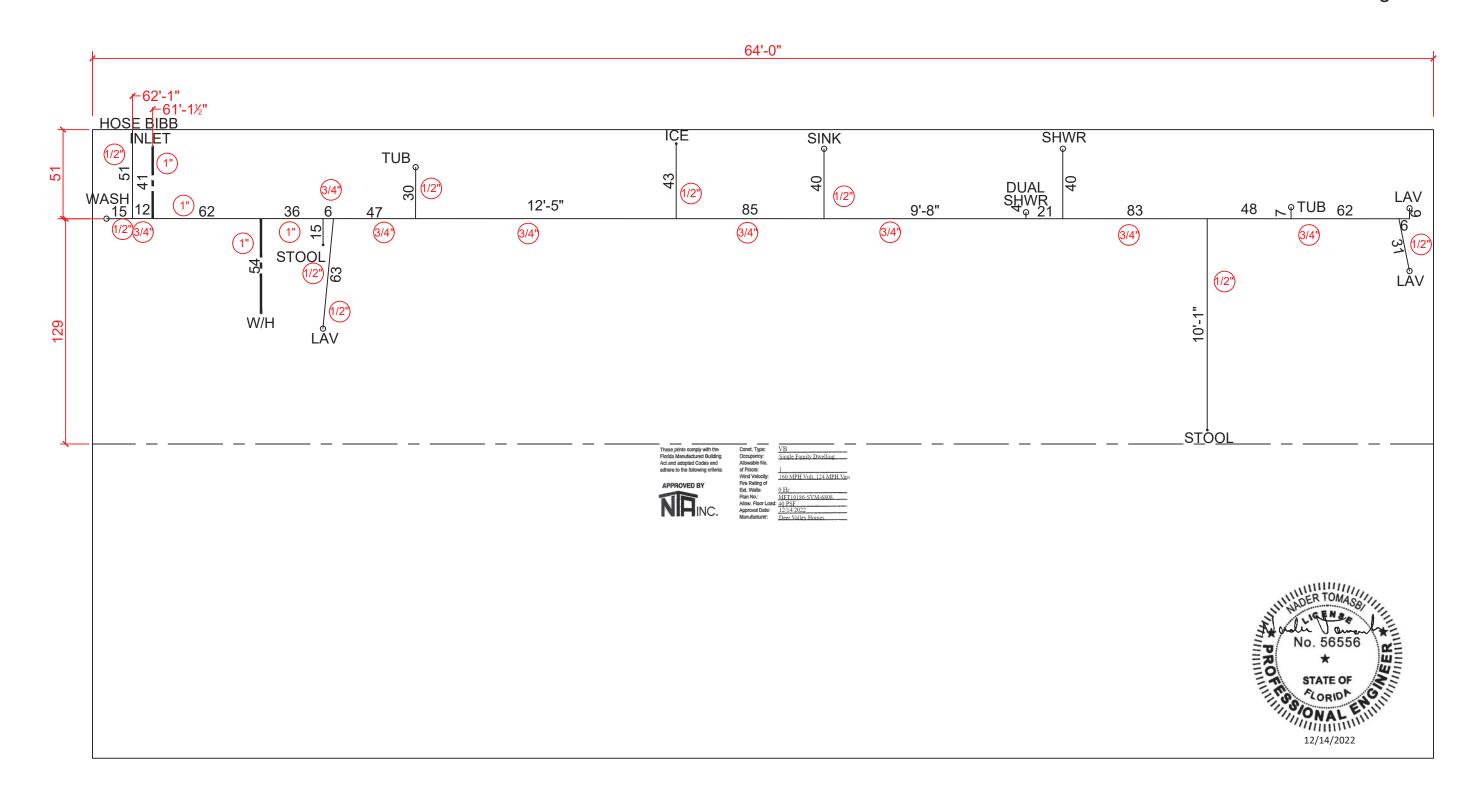


EER VALLEY HOMEBUILDERS, INC. 205-468-8400 P.O. Box 310 / 205 Carriage St. Guin, Alabama 35563

C.JACKSON	NTS
01/15/20	REV:
EXTERIOR ELEVATIONS	
SVM-6808	DWG. NO:
MFT10186-SVM-6808	A.05

REVISIONS





1) FITTING SIZES TO CORRESPOND TO ADJACENT PIPE SIZES.	CUSTOMER			APPROVED BY: SCALE:	NITO
2) COPPER, CPVC, OR OTHER APPROVED OR LISTED MATERIAL MAY BE USED.		REVISIONS	RANCH STRUCTURAL SYSTEM	C.JACKSON FOR TN.	NTS
3) ALL SIZING OF PIPE + OR -, MUST MEET OR EXCEED ANY APPLICABLE CODES. 4) PEX LINES MUST BE SUPPORTED 32" OC MAXIMUM.		TAE VIOLOTTO	Deer Valley Homebuilders	01/15/20	NLT:
5) COLD AS SHOWN, HOT THE SAME EXCEPT DROP STOOL, ICE & INLET. 6) BASED ON PRESSURE RANGE 50 TO 60 PSI	_		Boor valley Hornesallacio	WATER LINE PLUMBIN	G LAYOUT
7) KENTUCKY METAL WATER LINE FITTINGS REQ. @ CONCEALED FAUCETS	<u>-</u>		DEER VALLEY HOMEBUILDERS, INC.	MODEL:	DWG. NO:
8) ILLINOIS WATER LINES TO BE WRAPPED W/R-3 INSULATION			205-468-8400 P.O. Box 310 / 205 Carriage St.	SVM-6808	
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.			Guin, Alabama 35563	MFT10186-SVM-6808	A.6.2

	2020 FRC
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.

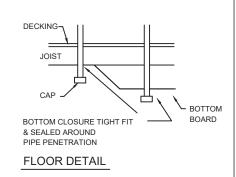
ALL WATER LINES 1/2" UNLESS OTHERWISE SHOWN.

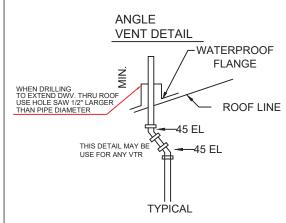
PIPING SUPPORT			
HOT & COLD FLEXIBLE	MAX. SPACING HORZ.&VERT.		
3/4" & 1"	2'-8"		
* WATER DISTRIB	ITION PIPE		

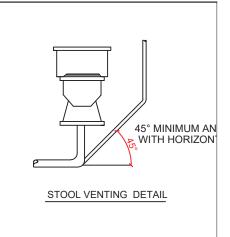
* WATER DISTRIBUTION PIPE PEX WATER LINES AND FITTINGS (OPT. COPPER WATER LINES TYPE M)

WILLIAM TOWN

ADER TOMASO,







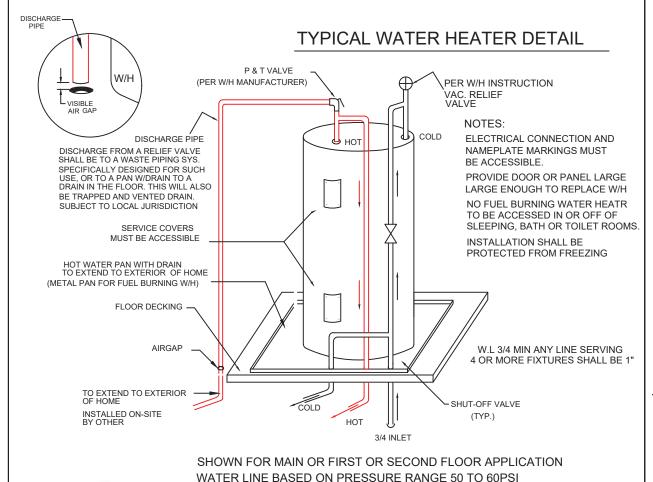
OPT. GAS TANKLESS WATER HEATER

N

- 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.

< SPECIFY IF NOTE APPLIES TO MANUFACTURER

- 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 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 (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.</p>
- < 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.

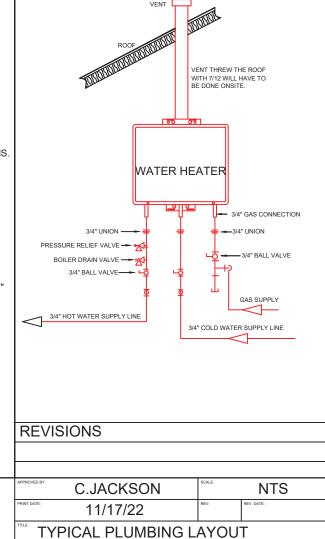


RANCH STRUCTURAL SYSTEM

Deer Valley Homebuilders

P.O. Box 310 / 205 Carriage St. Guin Alabama 35563

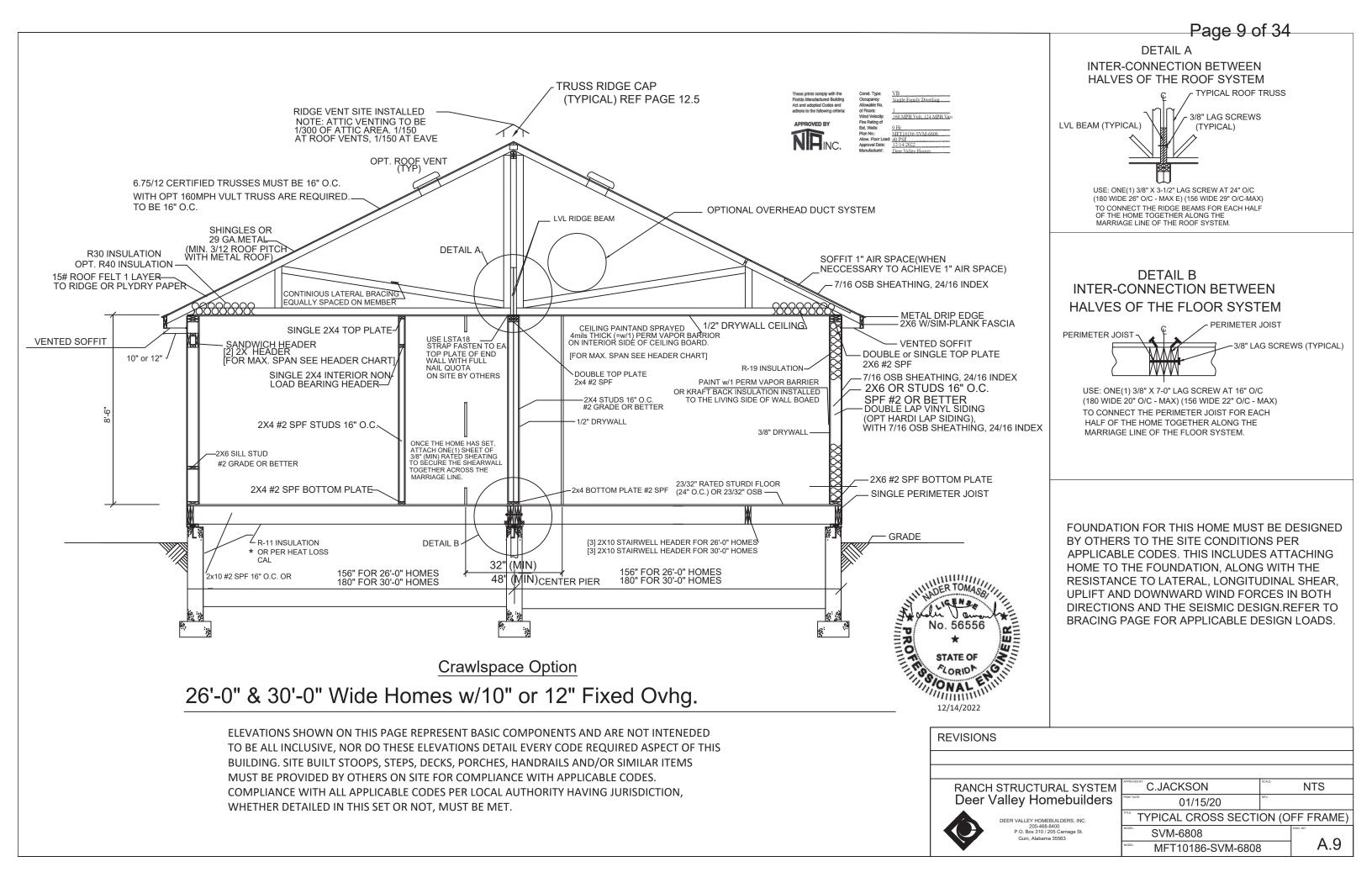
DEER VALLEY HOMEBUILDERS, INC 205-468-8400



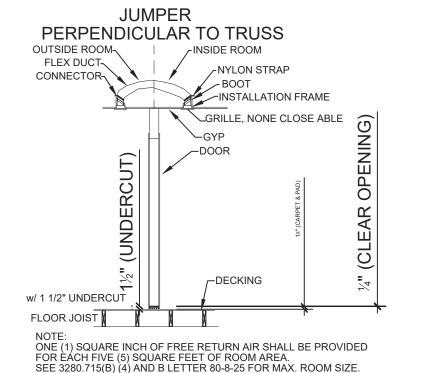
SVM-6808

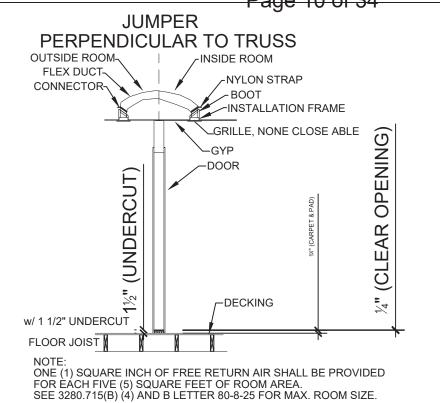
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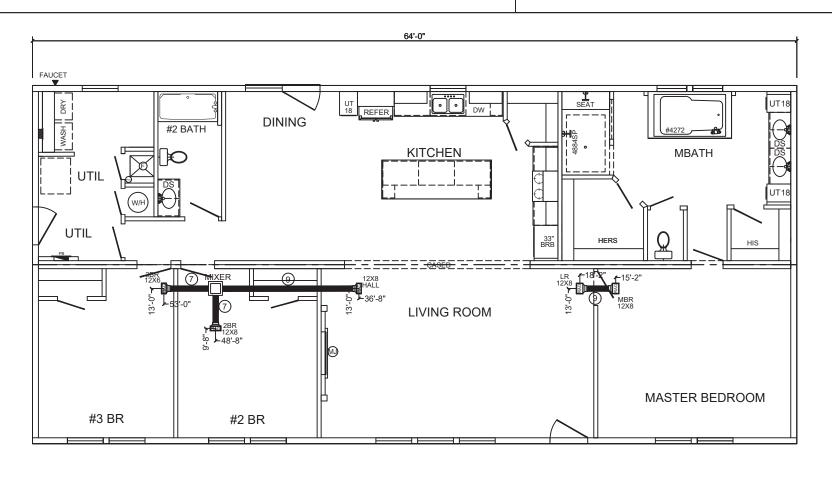
A.6











GRILLE

DOOR / WALL / CEILING

MAX. SQ. IN. RETURN

63.36

40.32

47 52

63.36

164.16

322.56

I. MAX. SF ROOM SIZE

316.8 SF

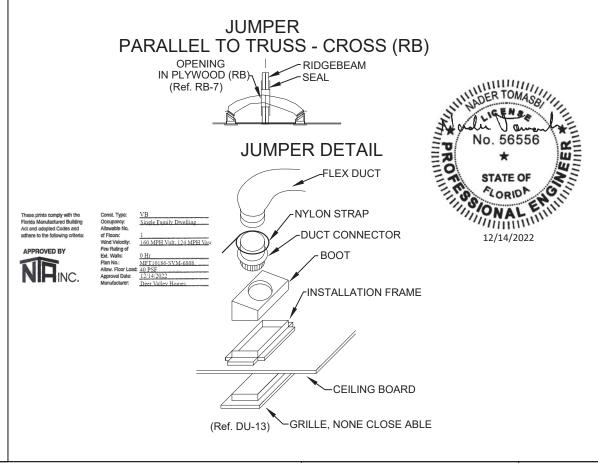
201.6 SF

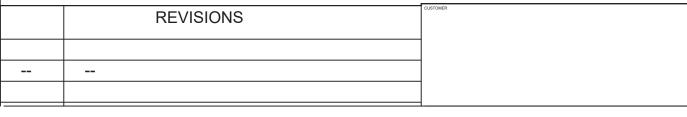
237.6 SF

316.8 SF

820.8 SF

1612.8 SF





FREE RETURN AIR

38.46

50.24

63.58

113.04

REGISTER SIZE

5 = 8x46 = 10x6

7 = 12x6

8 = 12x 8

78.5

6" = 110 CFM

7" = 170 CFM

8" = 240 CFM

9" = 320 CFM

2 1/2" UNDER CUT

1 1/4" (CLEAR OPENING)

MAX. SQ. IN.

RETURN

29.06

34.06

36 56

39.06

44.06

59.06

24" (23 1/4)

28" (27 1/4)

30" (29 1/4)

32" (31 1/4)

36" (35 1/4)

48" (47 1/4)

MAX. SF ROOM SIZE

145 SF

170 SF

183 SF

195 SF

220 SF

295 SF

FLEX DUCT

MAX. SQ. IN. MAX. SF RETURN ROOM SIZE

98.1 SF

24 X 4

10 X 6

12 X 6

12 X 8

14 X 20

20 X 25

141.3 SF 192.3 SF

251.2 SF

317.9 SF

392.5 SF

565.2 SF

12" = 700 CFM

14" = 1000 CFM

16" = 1400 CFM



RANCH STRUCTURAL SYSTEM

Deer Valley Homebuilders

Valley Homebuilders	PRINI DATE	
DEER VALLEY HOMEBUILDERS. INC.	TITLE:	HVAC
205-468-8400 P.O. Box 310 / 205 Carriage St.	MODEL:	S\
Guin, Alabama 35563	MODEL:	MFT10186

	C.JACKSON	N 12
RINT DATE:	12/6/22	REV:
TLE:	HVAC FREE RETUR	RN AIR
ODEL:	SVM-6808	DWG. NO:
ODEL:	MFT10186-SVM-6808	A.13.2



Manual S Compliance Report **Entire House**

AMS of Indiana. Inc.

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 MFT10186(SVM-6808)

Cooling Equipment

Design Conditions

Outdoor design DB:	97.7°F	Sensible gain:	29965	Btuh
Outdoor design WB:	79.8 °F	Latent gain:	8072	Btuh
Indoor design DB:	75.0 °F	Total gain:	38037	Btuh
Indoor RH:	50%	Estimated airflow:	1289	cfm

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split AC

Model: SEER 14.0 Manufacturer: Generic

1289 Actual airflow: cfm

Sensible capacity: 103% of load 30774 Btuh 163% of load Latent capacity: 13189 Btuh

Total capacity: 43963 Btuh 116% of load SHR: 70%

0 Hr

Entering coil DB:

Entering coil WB: 63.5°F

MFT10186-SVM-6808

76.1°F

Heating Equipment

Design Conditions

Outdoor design DB: 23.8 °F Heat loss: 32875 Btuh Entering coil DB: 67.9°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: 1289 cfm

53000 Output capacity: Btuh 161% of load

Temp. rise: No. 56556

Meets all requirements of ACCA Manual S.



wrightsoft®

2022-Dec-07 14:26:36

0 °F



Load Short Form Entire House

AMS of Indiana, Inc.

PRO No. 56556 STATE OF 11111111 12/14/2022

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 MFT10186(SVM-6808)

Design Information					
	Htg	Clg		Infiltration	
(°F)	24	98	Method		Simplified
Ť)	70	75	Construction quality		Average
(°F)	46	23	Fireplaces		1 (Average)
)	-	M			
idity (%)	30	50			
fference (gr/lb)	18	61			
i	(°F) °F) (°F) e idity (%) fference (gr/lb)	(°F) 24 °F) 70 (°F) 46 e - idity (%) 30	Htg Clg (°F) 24 98 °F) 70 75 (°F) 46 23 e - M idity (%) 30 50	Htg Clg (°F) 24 98 Method °F) 70 75 Construction quality (°F) 46 23 Fireplaces e - M idity (%) 30 50	Htg Clg Infiltration (°F) 24 98 Method °F) 70 75 Construction quality (°F) 46 23 Fireplaces e - M idity (%) 30 50

HEATING EQUIPMENT

COOLING EQUIPMENT

Make	nordyne			Make	Generic		
Trade				Trade			
Model	E7E()-015			Cond	SEER 14.0		
AHRI ref	. ,			Coil			
				AHRI ref			
Efficiency		100 AFUE		Efficiency	12.2 EER	, 14 SEER	
Heating inpu	ut	15.0	kW	Sensible co	oling	30774	Btuh
Heating out	put	53000	Btuh	Latent cooli	ng	13189	Btuh
Temperature	e rise	37	°F	Total cooling	g	43963	Btuh
Actual air flo	OW	1289	cfm	Actual air fl	OW	1289	cfm
Air flow fact	tor	0.043	cfm/Btuh	Air flow fac	tor	0.045	cfm/Btuh
Static press	sure	0.30	in H2O	Static press	sure	0.30	in H2O
Space thern	nostat			Load sensib	ole heat ratio	0.79	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
U	143	3551	2338	153	106
BA2	62	778	424	34	19
DR\KIT	424	5256	5681	226	257
BA1	199	4297	2619	185	118
HIS	29	0	0	0	0
T	14	0	0	0	0
B1	251	4799	4617	207	209
LR	349	4892	5799	211	262
B2	180	2514	3285	108	149
B3	176	3816	3742	164	169
Н	31	0	0	0	0
HER	54	0	0	0 1	0

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



Page 13 of 34 28505 Entire House 1913 29904 1289 1289 2971 1460 Other equip loads 30774 Equip. @ 1.03 **RSM** Latent cooling 8072 **TOTALS** 1913 32875 38846 1289 1289



pe:	VB
cy:	Single Family Dwelling
No.	
	1
ocity:	160 MPH Vult, 124 MPH Vas
ng of	
s:	0 Hr
	MFT10186-SVM-6808
or Load:	40 PSF
Date:	12/14/2022
urer:	Deer Valley Homes

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



Building Analysis Entire House AMS of Indiana, Inc.

AMS of Indiana, Inc.

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

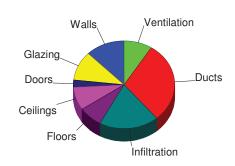
Project Information

Deer Valley Homebuilders MFT10186(SVM-6808) For:

Design Conditions							
Location: Jacksonville Intl, FL, US Elevation: 26 ft Latitude: 31 °N Outdoor:	Heating	Cooling	Indoor: Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb)	Heating 70 46 30 18.3	75 23 50 60.9		
Dry bulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph)	24 - - 15.0	98 18 (M) 80 7.5	Infiltration: Method Construction quality Fireplaces	Simplified Average 1 (Average)			

Heating

Component	Btuh/ft ²	Btuh	% of load
Walls Glazing Doors Ceilings Floors Infiltration Ducts Piping Humidification Ventilation Adjustments Total	3.1 15.7 13.4 1.5 1.3 3.9	4094 3558 860 2827 2521 6243 9801 0 2971 0	12.5 10.8 2.6 8.6 7.7 19.0 29.8 0 9.0



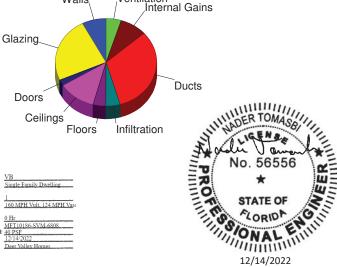
Walls

Cooling

Component	Btuh/ft ²	Btuh	% of load
Component Walls Glazing Doors Ceilings Floors Infiltration Ducts Ventilation Internal gains	Btuh/ft² 1.8 31.7 10.2 1.9 0.6 0.8	Btuh 2317 7170 656 3596 1239 1352 9596 1460 2580	% of load 7.7 23.9 2.2 12.0 4.1 4.5 32.0 4.9 8.6
Blower		0	0.0
Adjustments		0	0
Total		29965	100.0

Latent Cooling Load = 8072 Btuh Overall U-value = 0.057 Btuh/ft2- °F

Data entries checked.



Ventilation



Component Constructions Entire House

AMS of Indiana, Inc.

Page 1,5-0f.34_{M-6808}

Date: 12/7/22

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 MFT10186(SVM-6808)

Design Conditions							
Location: Jacksonville Intl, FL, US Elevation: 26 ft Latitude: 31 °N Outdoor:	Heating	Cooling	Indoor: Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb)	70 46 30 18.3	Cooling 75 23 50 60.9		
Dry bulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph)	24 - - 15.0	98 18 (M) 80 7.5	Infiltration: Method Construction quality Fireplaces	Simplified Average 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								
12E-0sw: Frm wall, vnl ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum	n	233	0.068	19.0	3.14	733	1.78	415
board int fnsh, 2"x6" wood frm, 16" o.c. stud	е	456	0.068	19.0	3.14	1434	1.78	812
	s	255	0.068	19.0	3.14	801	1.78	453
	W	358	0.068	19.0	3.14	1126	1.78	637
	all	1303	0.068	19.0	3.14	4094	1.78	2317
Partitions (none)								
Windows								
Croft 3660 Window: 2 glazing, clr low-e outr, argon gas, insulated vinyl	е	65	0.340	0	15.7	1013	27.9	1797
frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht	W	162	0.340	0	15.7	2545	27.9	4513
	all	227	0.340	0	15.7	3558	27.9	6310
Doors								
11P0: Door, mtl pur core type	n	22	0.290	10.5	13.4	289	10.2	221
	е	21	0.290	10.5	13.4	281	10.2	215
	W	22	0.290	10.5	13.4	289	10.2	221
	all	64	0.290	10.5	13.4	860	10.2	656
Ceilings								
16B-30ad: Attic ceiling, asphalt shingles roof mat, r-30 ceil ins, 1/2" gypsum board int fnsh		1913	0.032	30.0	1.48	2827	1.88	3596
Floors								
19A-30cscp: FIr floor, frm flr, 8" thkns, carpet flr fnsh, r-30 cav ins, tight crwl ovr		1913	0.034	30.0	1.32	2521	0.65	1239

Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



VB
Single Family Dwelling

1
160 MPH Vult. 124 MPH Vas
0 Hr
MFT10186-SVM-6808
at 40 PSF
12/14/2022







Project Summary Entire House AMS of Indiana, Inc.

AMS of Indiana, Inc.

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

Project Information

Deer Valley Homebuilders MFT10186(SVM-6808) For:

The cooling duct capacity is 42,966 btuh. Notes:



Design Information

Weather: Jacksonville Intl, FL, US

Winter Design Conditions

Outside db Inside db Design TD		ኖ ኖ
--------------------------------------	--	--------

Heating Summary

Structure Ducts Central vent (59 cfm)	20103 9801 2971	Btuh
Outside air Humidification Piping Equipment load	0 0 32875	Btuh Btuh Btuh

Infiltration

Simplified
Average
1 (Average)

	Heating	Cooling
Area (ft ²)	1913	1913
Volume (ft³)	16256	16256
Air changes/hour	0.45	0.20
Equiv. AVF (cfm)	123	54

Heating Equipment Summary

Make	nordyne
Trade Model AHRI ref	E7E()-015

Efficiency	100 AFUE	
Heating input	15.0 kW	
Heating output	53000 Btuh	
Temperature rise	37 °F	
Actual air flow	1289 cfm	
Air flow factor	0.043 cfm/Bt	
Static pressure	0.30 in H20)
Space thermostat		

Summer Design Conditions

Outside db Inside db	98 75	F F
Design TD	23	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	61	gr/lb

Sensible Cooling Equipment Load Sizing

Structure Ducts Central vent (59 cfm) Outside air	18909 Btuh 9596 Btuh 1460 Btuh
Blower	0 Btuh
Use manufacturer's data Rate/swing multiplier Equipment sensible load	n 1.03 30774 Btuh

Latent Cooling Equipment Load Sizing

0	
Structure Ducts Central vent (59 cfm) Outside air	3443 Btuh 2206 Btuh 2423 Btuh
Equipment latent load	8072 Btuh
Equipment Total Load (Sen+Lat) Reg. total capacity at 0.70 SHB	38846 Btuh

Cooling Equipment Summary

Generic

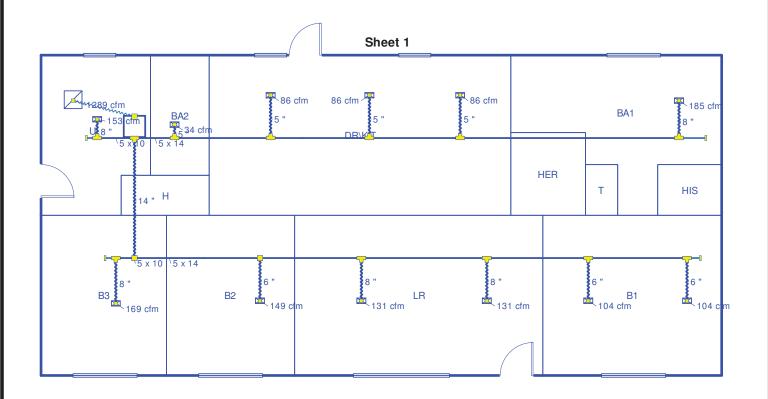
Trade		
Cond SEER 14.0 Coil)	
AHRI ref		
Efficiency	12.2 EER, 14 SEER	
Sensible cooling	30774	
Latent cooling	13189	
Total cooling	43963	
Actual air flow	1289	
Air flow factor		cfm/Btuh
Static pressure		in H2O
I oad sensible heat ratio	0.79	

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

Make







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

APPROVED BY

Const. Type: Voccupancy: S. Millowable No. of Floors: 1. Mind Velocity: 1. The Retting of Ext. Walls: 0. Mind No.: M

VB
Single Family Dwelling

1
160 MPH Vult, 124 MPH Vas
0 Hr
MFT10186-SVM-6808

Job #: MFT10186(SVM-6808)
Performed by AMS of Indiana, Inc. for:

Deer Valley Homebuilders MFT10186(SVM-6808)

AMS of Indiana, Inc.

3933 E. Jackson Blvd. Elkhart, IN 46516 Phone: 574-293-5526 eng-ams@comcast.net Scale: 1:108

Page 1 Right-Suite® Universal 2022 22.0.01 RSU02009 2022-Dec-07 14:26:42 ...T10186(SVM-6808) attic trunk.rup



Duct System Summary Entire House

AMS of Indiana, Inc.

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

Page: 18-0f.34_{M-6808)}

Date: 12/7/22

By: AMS of Indiana, Inc.



Project Information

For: Deer Valley Homebuilders MFT10186(SVM-6808)

Heating Cooling 0.30 in H2O External static pressure 0.30 in H2O 0.06 in H2O Pressure losses 0.06 in H2O 0.24 in H2O 0.24 in H2O Available static pressure Supply / return available pressure 0.120 / 0.120 in H2O 0.120 / 0.120 in H2O Lowest friction rate 0.121 in/100ft 0.121 in/100ft Actual air flow 1289 cfm 1289 cfm Total effective length (TEL) 198 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	С	2309	103	104	0.121	6.0	<i>0</i> × <i>0</i>	VIFx	57.8	140.0	st5
B1-A	С	2309	103	104	0.122	6.0	<i>0</i> × <i>0</i>	VIFx	67.0	130.0	st5
B2	С	3285	108	149	0.125	6.0	<i>0</i> × <i>0</i>	VIFx	27.0	165.0	st5
B3-A	С	3742	164	169	0.163	8.0	0x 0	VIFx	17.3	130.0	st4
BA1	h	4297	185	118	0.130	8.0	<i>0</i> × <i>0</i>	VIFx	54.5	130.0	st2
BA2	h	778	34	19	0.141	5.0	0x 0	VIFx	5.0	165.0	st2
DR\KIT	c	1894	75	86	0.136	5.0	0x 0	VIFx	16.8	160.0	st2
DR\KIT-A	c	1894	75	86	0.138	5.0	0x 0	VIFx	34.5	140.0	st2
DR\KIT-B	c	1894	75	86	0.136	5.0	0x 0	VIFx	26.0	150.0	st2
LR-B	С	2899	105	131	0.122	8.0	0x 0	VIFx	36.5	160.0	st5
LR-C	c	2899	105	131	0.121	8.0	0x 0	VIFx	48.3	150.0	st5
U	h	3551	153	106	0.177	8.0	0x 0	VIFx	5.3	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
st4	Peak AVF	164	169	0.163	487	6.4	10 x 5	ShtMetI	st3
st1	Peak AVF	153	106	0.177	441	8.0	10 x 5	ShtMetI	
st5	Peak AVF	526	619	0.121	1274	14.0	14 × 5	ShtMetI	st3
st2	Peak AVF	445	394	0.130	916	8.0	14 × 5	ShtMetI	
st3	Peak AVF	690	789	0.121	738	14.0	0 × 0	VinIFIx	

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

APPROVED BY

VB
Single Family Dwelling

1
160 MPH Vult, 124 MPH Vase

0 Hr MFT10186-SVM-6808 aud: 40 PSF 12/14/2022

Bold/italic values have been manually overridden



Page 19 of 34

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	1289	1289	0	0	0	0	0x	0		VIFx	



e:	VB
y:	Single Family Dwelling
No.	
	1
city:	160 MPH Vult, 124 MPH Va
of	
	0 Hr
	MFT10186-SVM-6808
or Load:	40 PSF
ate:	12/14/2022
rer:	Deer Valley Homes



Static Pressure and Friction Rate Entire House

AMS of Indiana, Inc.

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

AMS of Indiana, Inc.

Project Information

For: Deer Valley Homebuilders MFT10186(SVM-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 Ellective Leligili				
	Supply	Return			
	(ft)	(ft)			
Measured length of run-out	4	0			
Measured length of trunk	44	0			
Equivalent length of fittings	150	0			
Total length Total effective length	198	0 198			

Friction	nale		
Heating (in/100ft)		Cooling (in/100ft)	
` 0.121 [´]	OK	` 0.121 [′]	OK
0.121	OK	0.121	OK
	Heating (in/100ft) 0.121	(in/100ft) 0.121 OK	Heating (in/100ft) Cooling (in/100ft) 0.121 OK 0.121

Fitting Equivalent Length Details

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

TotalEL=0 Return





FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CON!

FORM R405-2020 FLORIDA ENERGY EFFICIENCY COL Florida Department of Business and Professiona Project Name: MFT10186-SVM-6808 Street: 278 SW Deputy J Davis Lane City, State, Zip: Lake City, FL, 32024	Builder Name: Deer Valley Homebuilder Permit Office: Permit Number:
Owner: Brian Lucas Design Location: FL, Gainesville	Jurisdiction: County: Columbia(Florida Climate
1. New construction or existing 2. Single family or multiple family 3. Number of units, if multiple family 4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area above grade (ft²) 7. Windows(208.3 sqft.) 9. Windows(208.3 sqft.) 1920 1920 1920 1920 1920 1920 1920 1920	10. Wall Types(1598.0 sqft.) a. Frame - Wood, Exterior b. N/A c. N/A d. N/A 11. Ceiling Types(1920.0 sqft.) b. N/A c. N/A c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=30.0 1920.00 ft² 13. Ducts, location & insulation level a. Sup: Attic, Ret: Attic, AH: Main b. c. 14. Cooling Systems a. Central Unit 15. Heating Systems a. Electric Strip Heat 21. Cap: 50 gallons EF: 0.920 b. Conservation features
St. Wells: 0 Hr 0	17. Credits CF
Glass/Floor Area: 0.109 Total Proposed Modifie Total Baselin	d Loads: 49.93 e Loads: 55.54 PASS
I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: 12/07/2022 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).

Page 22 of 34 INPUT SUMMARY CHECKLIST REPORT

				PROJ	ECT							
Title: Building Type: Owner: Builder Name: Permit Office: Jurisdiction: Family Type: New/Existing: Year Construct: Comment:	MFT10186-SVM-0 User Brian Lucas Deer Valley Home Detached New (From Plans 2023	ebuilders	Bedroom: Condition Total Stoi Worst Ca Rotate Ar Cross Ve Whole Ho Terrain: Shielding	ed Area: ries: se: ngle: ntilation: ouse Fan:	Flat Te	L B P S C	address ty ot #: Block/Sub PlatBook: Street: County: City, State	Division:	Street Addi 278 SW De Columbia Lake City, FL, 32024 These prints comply with the Florida Manufactured Buildin dat and adopted Codes and adhere to the following criter APPROVED BY	const. Type: Occupancy: Allowable No.	VB Single Famil	y Dwelling sit. 124 MPH Vas«
				CLIM	ATE				NAINC.	Plan No.: Allow. Floor Lo Approval Date Manufacturer;	MFT10186-S ad: 40 PSF 12/14/2022 Deer Valley	
Design Location		Tmy Site		Desi 97.5%	gn Temp 2.5%		esign Ter er Sumn		leating gree Days	Design Moisture	Dail Rar	ly temp nge
FL, Gainesvil	le	FL_GAINESVILLE_	_REGIONA	A 32	92	70	75	5 1	305.5	51	Mediu	ım
				BLO	CKS							
√ Number	Name	Area	Vol	ume								
1	Block1	1920	165	512 cu ft								
				SPA	CES							
√ Number	Name	Area	Volume	Kitchen	Occupa	ants B	Bedrooms	; F	inished	Coole	ed H	eated
1	Main	1920	16512	Yes	4		3	Υ	'es	Yes	3	Yes
				FLO	ORS		(Tota	al Expo	osed Are	ea = 19	20 sq.	.ft.)
√# Floor Ty	/ре	Space	Exposed	Perim F	Perimeter F	R-Value A	rea U	-Factor J	loist R-Value	e Tile V	/ood	Carpet
1 Crawlspa	ce	Main	190)	19	19	920 ft	0.056	22	0.60	0.00	0.40
				RO	OF							
√# Type		Materials		oof rea			Rad Sc Barr Abs		SA Emitt ested	Emitt Tested	Deck Insul.	Pitch (deg)
1 Gable or s	shed	Composition shingle	es 220	03 ft² 5	40 ft² Ε)ark	Y 0.	75 Y	es 0.9	Yes	30	29.36
				AT1	ГІС							
√# Type		Ventilation	1	Vent R	atio (1 in)	Area		RBS	IRCC			
1 No attic		Vented		3	300	1920 ft	2	Υ	N			
				CEIL	ING		(Tota	al Expo	osed Are	ea = 19	20 sq.	.ft.)
√# Ceiling	Туре		Space	R-Va	ılue Ins.	Туре	Area	U-Facto	or Framing	Frac.	Truss	Туре
1 Single ass	sembly, with airspac	e(Vented)	Main	30.	0 ВІ	own 19	920.0ft²	0.055	0.1	1	Wo	bod

Page 23 of 34 INPUT SUMMARY CHECKLIST REPORT

These prints comply with the Const. Type 中国地区地区和国际区域中国地区域内的 Act and adopted Codes and Allowable N	Single Family Dwelling			
Act and adopted Codes and Allowable N adhere to the following criteria: of Floors: Wind Veloci	WAII	S (To	tal Exposed Area	= 1598 sq.ft.)
Ext. Walls:	0 Hr	Width Height Ft In Ft In	Area U- Sheatl sq.ft. Factor R-Valu	
1 W Exterior Frame - Woo 2 S Exterior Frame - Woo 3 E Exterior Frame - Woo 4 N Exterior Frame - Woo	d Main 19.0 d Main 19.0	64.0 0 8.0 6 30.0 0 8.0 6 64.0 0 8.0 6 30.0 0 8.0 6	5 255.0 0.071 5 544.0 0.071	0.23 0.01 0 % 0.23 0.75 0 % 0.23 0.75 0 % 0.23 0.75 0 %
	DOOR	S (Total Exposed Are	ea = 82 sq.ft.)
# Ornt Adjacent To Door Type	Space Sto	orms U-Value		leight t In Area
1 W(Front) Insulated 2 S(Front) Insulated 3 E Insulated	Main N	lone 0.16 lone 0.27 lone 0.35	3.00 0 6.00 3.00 0 6.00 6.00 3 6.00	8 20.0ft ²
	WINDO	NS (T	otal Exposed Area	a = 208 sq.ft.)
Wall # Ornt ID Frame Panes	NFRC U-Factor SHGC Imp Storm	Total Same Width n Area Units (ft) (ft²)	n HeightOverhang (ft) Depth Sep. (ft) (ft)	Interior Shade Screen
1 W	Y 0.35 0.21 N N Y 0.35 0.21 N N Y 0.35 0.21 N N Y 0.35 0.21 N N	162.0 9 3.00 20.0 2 3.00 8.3 1 2.50 18.0 1 3.00	3.33 1.0 1.0 3.33 1.0 1.0	IECC 2012 None IECC 2012 None IECC 2012 None IECC 2012 None
	INFILTRA	TION		
√# Scope Method	SLA CFM50 ELA	EqLA ACH	ACH50 Space(s)	Infiltration Test Volume
1 Wholehouse Proposed ACH(50)	0.00038 1926 105.69	198.42 0.1412	7.0 All	16512 cu ft
	MASS	3		
√# Mass Type	Area Thickne	ess Furniture F	raction Space	
1 Default(8 lbs/sq.ft.)	0 ft² 0 ft	0.30	Main	
	HEATING S	YSTEM		
√# System Type	Subtype AHRI# Effi	ciency Capacity kBtu/hr E	Geothermal HeatPum Entry Power Volt C	
1 Electric Strip Heat	None CO	P: 1.00 53.0	0.00 0.00	0.00 sys#1 1
	COOLING S	YSTEM		
√# System Type	Subtype/Speed AHRI# E	ifficiency Capac kBtu/l		HR Duct Block
1 Central Unit	Single/Single SE	ER2:14.0 53.0	1289 0	.79 sys#1 1

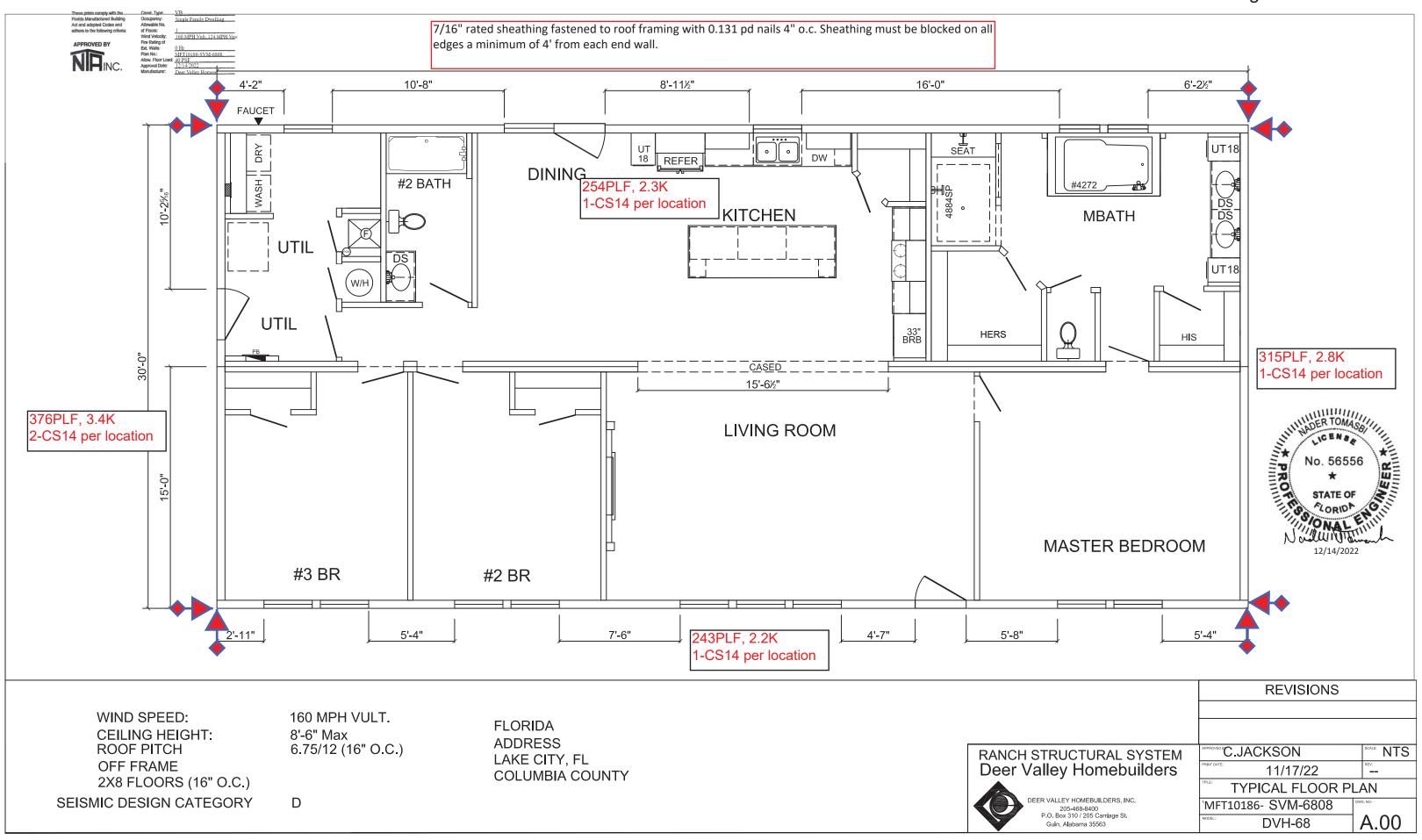
Page 24 of 34 INPUT SUMMARY CHECKLIST REPORT

					HOT	WAT	ER SY	STEM						
√# Sy	stem Type	Subtype		Location		EF(UEF) Cap	Use	SetPnt	Fixture	Flow	Pipe Ins	s. Pi	pe length
1 Ele	ectric	None		Main		0.92 (0.92	2) 50.00 ga	l 60 gal	120 deg	Stand	dard	None		99
	circulation System		c Control ype		Loop length	Branch length	Pump power	DWHR	Faciliti Connec			DWHR Eff	d Oth	ner Credits
1	No				NA	NA	NA	No	NA	N/	A	NA	No	one
						DL	JCTS							
V Duct #	Supր Location F	oly R-Value A		Retu ation F		 Area	Leakage T	· уре	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1 Attic	:	8.0 198	ft ² Attic		8.0	198 ft²	Proposed	Qn	Main			0.04	0.50	1 1
					TI	EMPE	RATUF	RES						
Program Cooling Heating Venting	nable Thermo [X] Jan [X] Jan [X] Jan	estat: N [X] Feb [X] Feb [X] Feb	[X] Mar [X] Mar [X] Mar	[X] Apr [X] Apr [X] Apr	[X] I [X] I	May [X	K] Jun K] Jun	[X] Jul [X] Jul [X] Jul	[X] Aug [X] Aug [X] Aug	[X] Sep [X] Sep [X] Sep	[X] C [X] C	oct [X] Nov X] Nov X] Nov	[X] Dec [X] Dec [X] Dec
	ostat Schedu ule Type	ıle: Florida	Code 2014 1	2	3	4	5	Hou 6	ırs 7	8	9	10	11	12
Coolir	ng (WD)	AM PM	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	7	5 75 5 75
Coolir	ng (WEH)	AM PM	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	7 7	5 75 5 75
Heatir	ng (WD)	AM PM	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	7	2 72 2 72
Heatir	ng (WEH)	AM PM	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	72 72	7	2 72 2 72

Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



onst. Type:	VB
ccupancy:	Single Family Dwelling
lowable No.	
Floors:	1
find Velocity:	160 MPH Vult, 124 MPH V
re Rating of	
d. Walls:	0 Hr
an No.:	MFT10186-SVM-6808
low. Floor Load:	40 PSF
oproval Date:	12/14/2022
anufacturer:	Deer Valley Homes



32 ft

Bracing Tributary Length Determination

Deer Valley SVM-10459

No Interior Walls	ASCE 7-16	Endwall added area=	0 ft
Endwall Length =	30 ft		

Sidewall Length = 64 ft 0 ft Porch Length (Left) = Porch Length (Right) = 0 ft

Left Endwall Trib From Wall: 32 ft Wall Height = 9 ft **Left Endwall Trib From Roof:** 32 ft Heel Height of Truss = 8 in **Right Endwall Trib From Wall:** 32 ft

Seismic category = C

Ultimate Wind Speed = 160 mph Wind Exposure = Roof pitch = 6.75 /12 Mean Roof Height = 20 ft

Transition from Perforated to Segmented:

Left Endwall - Bracing #1

Perforated or Segmented: S PLF: 376 plf

Height of Tallest Opening = 7 ft Wall length when perforated = 30 ft

ngan whom p	orioratoa	00
Segment	Effective	Effective
length - ft	wind	seismic
15	15	15
10 17	10 17	10 17

15	15	15
10.17	10.17	10.17
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

Top Sidewall - Bracing #3

Perforated or Segmented: P

PLF: 254 plf 7 ft Height of Tallest Opening = Wall length when perforated = 64 ft

Segment	Effective	Effective
length - ft	wind	seismic
4.17	4.17	3.8642
10.67	10.67	10.67
8.92	8.92	8.92
6.17	6.17	6.17
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
Total :	29.93	29.6242

Tag load: 0 Lb.

380 PLF Right Endwall (hitch end) - Bracing #2

Perforated or Segmented: PLF: 315 plf

Effective

Effective

Height of Tallest Opening = 7 ft Wall length when perforated = 30 ft

Right Endwall Trib From Roof:

Segment

	0		
	length - ft	wind	seismic
ADER TOMASO	15	15	15
DER TOMASA	1/2 15	15	15
LIGENSE	11/1	0	0
~~~ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	* ( C	0	0
No. 56556	<b>K</b> = (	0	0
*		0	0
STATE OF	35	0	0
SONAL EN		0	0
ONAL	dilling (	0	0
willilling.		0	0
12/14/2022	Total	30	30

#### Bottom Sidewall - Bracing #4

Perforated or Segmented: PLF: 243 plf

7 ft Height of Tallest Opening = Wall length when perforated = 64 ft

Segment	Effective	Effective
length - ft	wind	seismic
2.92	2.92	1.894756
5.33	5.33	5.33
7.5	7.5	7.5
4.583	4.583	4.583
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 :	31.333	30.30776

Tag load: 0 Lb.

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

Deer Valley SVM-10459

## Wind Loads

**ASCE 7-16** 

MWF

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) 35.2 21.5 27.6 17.3

A = End zone of WallB = End zone of RoofC = Interior zone of WallD = Interior zone of Roof



**Building Values** 

Roof pitch =	6.75 /12	Sidewall Length =	64 ft
Roof angle =	29.4 °		
Wall Height =	9 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 =	9.10 ft	Porch Length (Right) =	0 ft

Left Endwall Shear Values

Area of End Zone of Sidewall =	27.0 ft ² /side	Total Shear =	950 lbs
Area of End Zone of Roof =	54.6 ft ² /side	Total Shear =	1172 lbs
Area of Interior Zone of Sidewall =	117.0 ft ² /side	Total Shear =	3231 lbs
Area of Interior Zone of Roof =	236.7 ft ² /side	Total Shear =	4106 lbs

#### Total Shear Force to Endwalls = 9458 lbs

Right Endwall Shear Values

Area of End Zone of Sidewall =	27.0 ft ² /side	Total Shear =	950 lbs
Area of End Zone of Roof =	54.6 ft ² /side	Total Shear =	1172 lbs
Area of Interior Zone of Sidewall =	117.0 ft ² /side	Total Shear =	3231 lbs
Area of Interior Zone of Roof =	236.7 ft ² /side	Total Shear =	4106 lbs

#### Total Shear Force to Endwalls = 9458 lbs

Sidewall Shear Values

Area of End Zone of Wall =	27 ft ² /side	Total Shear =	950 lbs
Area of End Zone of Roof =	10 ft ² /side	Total Shear =	356 lbs
Area of Interior Zone of Wall =	41 ft ² /side	Total Shear =	1118 lbs
Area of Interior Zone of Roof =	58 ft ² /side	Total Shear =	1606 lbs

Total Shear Force to Sidewalls = 4030 lbs

These prints comply with the Florida Manufactured Buildin Act and adopted Codes and adhere to the following criter



Conet. Type: VB
Occupancy:
Allowable No. of Floors:
Vinind Velocials:
Fine Railing of Bet. Walls:
MFT10186-SVM-6808
Alproval Date:
Alproval Date:
Deer Valley Homes

С Seismic category =

 $S_{DS} =$ 0.5

Wall DL = 10 psf Roof DL = 20 psf

Total W for seismic shear walls = 46860 lbs

6.5

 $C_s = 0.09615$ 

 $F_x = 4505.77 \text{ lbs}$  $F_x =$ 0

shear on endwalls = 2253 lbs/wall 2253 lbs/wall shear on sidewalls =

Compare Wind vs Seismic for shear walls

	Seismic	Wind	Wind with 1.4 reduction
Endwall	2253	9458	6756
Sidewall	2253	4030	2879

Controlling factors for shear wall panels

Controlling factors for Uplift/Shear Forces

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

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

## Determination of shear wall panel loads

Left Endwall - Bracing #1

Perforated or Segmented: S Wall length when perforated = 30 ft

> Wall Height = 9 ft

Length of Full Height Sheathing (3.5:1) = 25.17 ft Length of Full Height Sheathing (2:1) = 25.17 ft

> $C_o$  (3.5:1) = 1 from table in IBC

 $C_0(2:1) =$ 1 from table in IBC

Total Force (wind) = 9458 lbs

Total Force (seismic) *1.4 = 3154 lbs Load Taken to Shear Wall Segments = 376 plf

> Uplift Force at End of Wall = 3382 lbs



Perforated or Segmented: S Wall length when perforated = 30 ft Wall Height = 9 ft Length of Full Height Sheathing (3.5:1) = 30 ft Length of Full Height Sheathing (2:1) = 30 ft  $C_o(3.5:1) =$ 1 from table in IBC  $C_0(2:1) =$ 1 from table in IBC Total Force (wind) = 9458 lbs Total Force (seismic) *1.4 = 3154 lbs 315 plf Load Taken to Shear Wall Segments = Uplift Force at End of Wall = 2837 lbs Top Sidewall - Bracing #3 P Perforated or Segmented: Wall length when perforated = 64 ft Wall Height = 9 ft Height of Tallest Opening = 7 ft Height Ratio = 0.77778 Length of Full Height Sheathing (3.5:1) = 29.93 ft Length of Full Height Sheathing (2:1) = 29.6242 ft Percent Full Height Sheathing (3.5:1) = 47% Percent Full Height Sheathing (2:1) = 46%  $C_o(3.5:1) =$ 0.53 from table in IBC  $C_o(2:1) =$ 0.53 from table in IBC Total Force (wind) = 7604 lbs (includes tag load when applicable) Total Force (seismic) *1.4 = 5951 lbs (includes tag load when applicable) Load Taken to Shear Wall Segments = 254 plf <== Uplift Force at End of Wall = 2287 lbs Bottom Sidewall - Bracing #4 Perforated or Segmented: P Wall length when perforated = 64 ft No. 56556 Wall Height = 9 ft Height of Tallest Opening = 7 ft Height Ratio = 0.77778 Length of Full Height Sheathing (3.5:1) = 31.333 ft Length of Full Height Sheathing (2:1) = 30.3078 ft Percent Full Height Sheathing (3.5:1) = 49% 12/14/2022 Percent Full Height Sheathing (2:1) = 47%  $C_o(3.5:1) =$ 0.53 from table in IBC  $C_o(2:1) =$ 0.53 from table in IBC Total Force (wind) = 7604 lbs (includes tag load when applicable) Total Force (seismic) *1.4 = 5951 lbs (includes tag load when applicable)

243 plf

2184 lbs

Load Taken to Shear Wall Segments =

Uplift Force at End of Wall =

6.75 /12

## **Wind Load Determination Worksheet**

123 mph

MWF Low-rise building Method 2

Nominal Wind Speed =

Horz 2E load =

Horz 3E load =

2.21

-6.29

ASCE 7-16

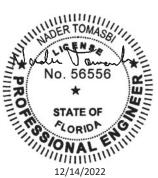
Roof Slope =

D =

17.34 psf

	123 1	•		i Glope –	0.73 /12	
Ultimate Wind Speed =	160 n	nph			29.36 °	
Exposure =	С					
Mean Roof Height =	20 f	t				
G			α =	9.5		
$K_d =$	0.85		z _g =	900 f	t	
$K_{zt} =$	1					
$K_z =$	0.90		q _h =	29.63	osf	
I =	1					
				GC _{pi} =	0.18	
Building Class =	Enclosed Bu	ilding			-0.18	
* Gc _{pi} cancels-out on total buil						These print Florida Mar Act and ad
φ.						adhere to t
Load A - End Zone of Wall						M
1E =	0.70			$GC_{pf} =$	1.19	IAII
4E =	-0.49					
A =	35.18 p	osf				
		osf				
A =  Load C - Interior Zone of Wall  1 =		osf		GC _{nf} =	0.93	
Load C - Interior Zone of Wall	0.56	osf		GC _{pf} =	0.93	
<u>Load C - Interior Zone of Wall</u> 1 =	0.56	osf		GC _{pf} =	0.93	
<u>Load C - Interior Zone of Wall</u> 1 =	0.56			GC _{pf} =	0.93	
Load C - Interior Zone of Wall  1 = 4 =  C =	0.56 -0.37			GC _{pf} =	0.93	
Load C - Interior Zone of Wall  1 = 4 = C =  Load B - End Zone of Roof	0.56 -0.37 <b>27.61</b> p			r		
Load C - Interior Zone of Wall  1 = 4 = C =  Load B - End Zone of Roof	0.56 -0.37 <b>27.61</b> p			GC _{pf} =  2E load = 3E load =	5.45	
Load C - Interior Zone of Wall  1 = 4 =  C =  Load B - End Zone of Roof  2E = 3E =	0.56 -0.37 <b>27.61</b> p 0.18 -0.54			2E load =	5.45	
Load C - Interior Zone of Wall  1 = 4 =  C =  Load B - End Zone of Roof  2E = 3E = Horz 2E load =	0.56 -0.37 <b>27.61</b> p 0.18 -0.54 2.67			2E load = 3E load =	5.45 -16.01	
Load C - Interior Zone of Wall  1 = 4 =  C =  Load B - End Zone of Roof  2E = 3E =	0.56 -0.37 <b>27.61</b> p 0.18 -0.54			2E load =	5.45 -16.01	
Load C - Interior Zone of Wall  1 = 4 =  C =  Load B - End Zone of Roof  2E = 3E =  Horz 2E load = Horz 3E load =	0.56 -0.37 <b>27.61</b> p 0.18 -0.54 2.67			2E load = 3E load =	5.45 -16.01	
Load C - Interior Zone of Wall  1 = 4 =  C =  Load B - End Zone of Roof  2E = 3E = Horz 2E load = Horz 3E load = Load D - End Zone of Roof	0.56 -0.37 <b>27.61</b> p 0.18 -0.54 2.67		;	2E load = 3E load =	5.45 -16.01 <b>21.46</b> psf	
Load C - Interior Zone of Wall  1 = 4 =  C =  Load B - End Zone of Roof  2E = 3E = Horz 2E load = Horz 3E load = Horz 3E load =	0.56 -0.37 <b>27.61</b> p 0.18 -0.54 2.67 -7.85		2	2E load = 3E load = B =	5.45 -16.01 <b>21.46 psf</b> 4.51	- A-1





## One Story Shear Wall Design

Deer Valley SVM-10459 Summary of Forces

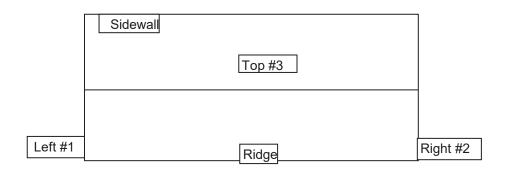
#### **Shear Walls**

Brace wall	PLF-Load	CONSTRUCTION

Left endwall - Segmented Right endwall - Segmented Top sidewall - Perforated Bottom sidewall - Perforated Side

<u>Overturning Forces</u>
Simpson CS14 strap capacity: 2.49 Kips
Total Shear Force to Endwalls = 9.5 Kips
4.0 Kips

Racking Load Left endwall -3.4 **Kips** req.# CS14 1.4 Racking load right endwall -2.8 **Kips** req.# CS14 1.1 Racking Load top sidewall -2.3 Kips (Includes tag load when applicable) req.# CS14 1.0 Racking Load bottom sidewall -2.2 Kips (Includes tag load when applicable) req.# CS14 1.0



Endwall

Roof Diaphragm

Bottom #4

7/16 in sheathing with .131 pd nail at 4 in o/c edge spacing

Blocking only required at 4 ft from each endwall





Type: VB | Single Family Dwelling | Single Fam



#### **Shear Wall Design**

Deer Valley SVM-10459

```
Left Shearwall
```

Shearwall Required Design = 376 plf Thickness of Sheathing = 7/16 "

Fastener = .131 pd nail (studs at 16" o/c)

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 .131 pd nail (studs at 16" o/c) at 4 in o/c edge spacing

Sheathing Capacity = 489.44 plf

Shear Wall OK

#### Right Shearwall

Shearwall Required Design = 315 plf Thickness of Sheathing = 7/16 "

Fastener = .131 pd nail (studs at 16" o/c)

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 .131 pd nail (studs at 16" o/c) at 4 in o/c edge spacing

Sheathing Capacity = 489.44 plf

Shear Wall OK

#### Top Shearwall

Shearwall Required Design = 254 plf Thickness of Sheathing = 7/16 "

Fastener = .131 pd nail (studs at 16" o/c)

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 .131 pd nail (studs at 16" o/c) at 4 in o/c edge spacing

Sheathing Capacity = 489.44 plf

Shear Wall OK

#### **Bottom Shearwall**

Shearwall Required Design = 243 plf Thickness of Sheathing = 7/16 "

Fastener = .131 pd nail (studs at 16" o/c)

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 .131 pd nail (studs at 16" o/c) at 4 in o/c edge spacing

Sheathing Capacity = 489.44 plf

Shear Wall OK



Const. Type: VB
Occupancy: Singl
Allowable No.
of Floors:
Windf Valocity:
Fire Rating of
Ebt. Walls:
Plan No.:
MFT.
Allow. Floor Load:
Manufacturer:
Decr.





## **Roof Diaphragm Design**

Deer Valley SVM-10459

Roof Diaphragm width: 30 ft 30 ft

Top of BC of truss sheathed?¹ No

Diaphragm Required Design² = 315 plf 315 plf

Thickness of Sheathing = 7/16 "

Fastener = .131 pd nail

Edge Spacing of Fastener^{3,4,5} =  $\frac{1}{2}$  4 in o/c

Species of Framing⁶ = SPF

Use 7/16 in sheathing with .131 pd nail at 4 in o/c edge spacing

Sheathing Capacity⁷ = 437.92 plf

Shear Wall **OK** 

Blocking only required at 4 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



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

APPROVED BY

Pageus 3930 Oter: 3 (3891300007 T23 SEQN: 15227 MONO Ply: 1 Job Number: 110388 FROM: DrwNo: 179.22.1436.34462 Qty: 1 Deer Valley Truss Label: HMD18823 Ref. #10013839 DLD / BAF 06/28/2022 Single Family Dwelling APPROVED BY **≡4X5** 11'8"12 ≥28HPW(F) T2 1 6.75 Optional Shear plate one face Optional Setback Cap detail 28HPW(1" GAP) ₩2X5 1 **≡3X3 ≡3X4** =3X3 (a) =3X8(**) 2'4"8 2'3"8 W11 Alt. load @ 16" o.c. TC LL 30.0 psf M TC DL 15.0 psf III6X8(**) 112X3 =6X8 **∥2X**3 BC DL 15.0 psf Bottom chord fully exposed to wind BCIL 0.0 psf 10" 110"12 - 3'10"8 -- 2'3"8 Tot LD 60.0 psf 14'9"

1				***	
Loading Criteria (p	sf) Wind Criteria	Snow Criteria (Po	g,Pf in PSF)	Defl/CSI Criteria	
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA	CAT: NA	PP Deflection in loc L/d	defl L/#
TCDL: 10.00	Speed: 140 mph@24"/171@16	" Pf: NA	Ce: NA	VERT(LL): 0.040 L 9	999 240
BCLL: 0.00	Enclosure: Part. Enc.	Lu: NA Cs: NA		VERT(CL): 0.080 L 9	999 240
BCDL: 10.00	Risk Category: II	Snow Duration: NA	A	HORZ(LL): -0.019 F	
Des Ld: 40.00	EXP: D Kzt: NA			HORZ(TL): 0.022 F	
NCBCLL: 0.00	Mean Height: 25.00 ft TCDL: 5.0 psf@24"/7.5@16"	Building Code:		Creep Factor: 2.0	
Soffit: 2.00	BCDL: 5.0 psf@24*/7.5@16"	FBC 7th Ed. 2020	Res.	Max TC CSI: 0.735	
Load Duration: 1.25		TPI Std: 2014		Max BC CSI: 0.258	
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes		Max Web CSI: 0.570	
' "	Loc. from endwall: Any	FT/RT:0(0)/0(0)			
	GCpi: 0.55	Plate Type(s):			
	Wind Duration: 1.60	WAVE		VIEW Ver: 22.01.01.042	28.21
1	•	•		•	

L	u	m	ıb	е	r

Top chord: 2x4 SP #1; T2 2x6 SP #2; T3 2x4 SP #2:

Bot chord: 2x4 SP #1;

Lt Slider: 2x4 SP #1; block length = 1.500'

#### **Bracing**

(a) Continuous lateral restraint equally spaced on member.

**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements

#### Wind

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

Wind loading based on both gable and hip roof types.

Lanai/Porch Loading: 32.9 PLF wind pressure applied to the bottom chord of the truss from 0.00 ft to 14.75 ft.

- No gap at hinged connection, provide a minimum of 2" wood to wood contact when hinged section
- (L) The project engineer or building designer shall provide lateral stability at top of vertical web.

Refer to DRWG HINGPL161014, HINGPL781014, SHEARPLT1014 for hinge and shear plate details.

Circled numbers indicate type of field connection required per ply. See schedule for connection loads and requirements. Tight fit is required between all members at the joint. All field connections shall be desinged by the project Engineer Webs: 2x3 SPF Stud; W3 2x4 SP #1; W11 2x4 SP #2; and conform to the home manufacturer's installation details. Warning: Failure to provide proper field connection may result in inadequate structural performance.

#### Field connection schedule:

Maximum load(lbs) |notes:

Axial | Shear | -T=tension load. 778T / 469C| --- -C=compression -C=compression load. 159T / 159C 250| -design connection for 2 İ combined axial + shear axial + shear load shown.

Note: The Registered Design Professional shall design the supports (wall and/or beams, connections, and building system To accommodate horizontal reactions ("RH & RL") where shown.

▲ Maximum Reactions (lbs)							
Gravity				Non-Gravity			
Lo	c R+	/ R-	/ Rh	/ Rw	/ U	/ RL	
В	703	/-	/-	/593	/366	/-	
J	578	/-	/83	/678	/663	/625	

Wind reactions based on MWFRS

Brg Wid = 3.5 Min Req = 1.5 (Truss) 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	682 - 1097	D-E	89	- 484
C-D	682 - 1054	E-F	144	- 452

#### Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.		Chords	Tens. Comp.	
B - N	963	- 605	L-K	554	-3
N - M	906	-76	K - J	562	- 14
M - I	544	0			

#### Maximum Web Forces Per Plv (lbs)

Webs	Tens.Comp.	Webs	Tens. C	omp.
D - O	881 - 777	Q-J	419	- 666
N - O	142 - 545	Q-R	404	- 625
0 - P	340 - 683	J-R	534	- 333
M - P	523 - 626	R-T	503	- 328
F-T	642 -416			



06/29/2022 FL REQ# 278, David J. Rothweiler, FL PE# 88430 Fabrication by: UFP Haleyville LLC, #317

**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 bracing installed 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.

155 Harlem Ave North Building, 4th Floor Glenview, IL 60025

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