

New Single Family Residence

AREA TOTALS

Living Space = 1,779 Sq Ft Two-Car Garage = 447 Sq Ft Front Porch = 92 Sq Ft Covered Porch = 226 Sq Ft

TOTAL BUILD = 2,544 Sq Ft

4 Bed / 2 Bath / 2 Car Garage

GENERAL NOTES:

THE BUILDER SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK. WORK NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED TO THE SAME QUALITY AS SIMILAR WORK THAT IS DETAILED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH INTERNATIONAL BUILDING CODES AND LOCAL CODES.

WRITTEN DIMENSIONS AND SPECIFIC NOTES SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND GENERAL NOTES. THE ENGINEER/DESIGNER SHALL BE CONSULTED FOR CLARIFICATION IF SITE CONDITIONS ARE ENCOUNTERED THAT ARE DIFFERENT THAN SHOWN, IF DISCREPANCIES ARE FOUND IN THE PLANS OR NOTES, OR IF A QUESTION ARISES OVER THE INTENT OF THE PLANS OR NOTES. CONTRACTOR SHALL VERIFY AND IS RESPONSIBLE FOR ALL DIMENSIONS (INCLUDING ROUGH OPENINGS).

PLEASE SEE ADDITIONAL NOTES CALLED OUT ON OTHER SHEETS.

BUILDING PERFORMANCE:

HEAT LOSS CALCULATIONS SHALL COMPLY WITH THE REQUIREMENTS OF REGIONAL AND LOCAL CODES. SEE CALCULATIONS. PORCHES, DECKS, FOUNDATION, FIREPLACE ENCLOSURES, AND GARAGE AREAS NOT INCLUDED IN LIVING AREA. ALL EXHAUST FANS TO BE VENTED DIRECTLY TO THE EXTERIOR. ALL PENETRATIONS OF THE BUILDING ENVELOPE SHALL BE SEALED WITH CAULK OR FOAM.



LOT GRADING & DRAINAGE:

TYPE "B" LOT GRADING

DRAINAGE BOTH TO STREET & TO REAR LOT LINE Only side swales are needed to drain both to the street and to the rear lot line. They should extend back of the line

of the rear building wall; then splash blocks from rear roof

downspouts should be placed to direct roof water to the side swales for drainage directly to the abutting street. Thus the amount of water carried on the rear slope to easements

or other properties is kept as small as possible. This reduces erosion and disposal problems.

A Curb-top on lot line extension at highest lot corner A-B Parkway slope B-C Side swale

C-D Protective side slope at extension of rear wall

*Call 811 for utility locations before digging.

Site Plan Scale 1'' = 20' PLAN

ROOF PLAN

ELEVATIONS

MEPS

OFFICE:

3644 RYAN AVE

FT.WORTH, TX

76110

DATE:

9/16/2023

SHEET:

7

8

9

THIS PLAN SET SHALL COMPLY WITH 2018 IRC, IMC, IPC, 2018 NEC, & 2018 IECC. CODES PER THE CITY OF RUNAWAY BAY, TEXAS.



FOUNDATION NOTES:

1. CONCRETE STRENGTH MINIMUM 3000 PSI. 2. BOTTOM OF ALL BEAMS SHALL EXTEND 6" INTO UNDISTURBED SOIL OR BEAR ON ENGINEERED FILL. 3. LAP ALL BAR STEEL 40 DIAMETERS

4. FOR SLAB LENGTHS MORE THAN 60', PROVIDE 3 - #5 IN BOTTOM AND 2 -#5 IN TOP OF ALL LONGITUDINAL BEAMS. 5. DEAD END BEAMS ARE NOT ACCEPTABLE.

6. ALL BEAMS AND SLABS STEEL SHALL EXTEND TO WITHIN 1-1/2" OF EXTERIOR FORMS. 7. BEAM STEEL SHALL BE SUPPORTED AND TIED EVERY 4'-0".

8. (IF REQUIRED) SIMPSON STHD10 STRAPS MUST BE PREORDERED AND ON SITE PRIOR TO POURING CONCRETE.

9. HOSE BIB LOCATIONS TO BE VERIFIED BY OWNER.



Per Piece Of

& Corners Of

* Max. 6' Anchor



WALL PANEL NOTES:

SCREWS @ 7" o/c @ ALL SUPPORTS.

Reinf. @ Beam **Exterior Corners**

c IN FIELD.

IN PLAN.)



1/2" DIAMETER ANCHOR BOLTS TYP. SEE FOUNDATION ANCHORAGE NOTES FOR ADDITIONAL INFO

STRUCTURAL PANEL DETAIL (CS-WSP)





Bracing Plan Scale: 1/4'' = 1'

See Sheet 3 For Notes & Details.



09/21/2023

Ceiling Joist Span Schedule

Maximum Ceiling Joist Spans (Excerpt IRC Table 802.4)								
Species	Crada	laiat Ciza	Limited At	tic Storage	Without Attic Storage			
Species	Graue	JUIST SIZE	16" O.C.	24" O.C.	16" O.C.	24" O.C.		
		2x6	13'-6"	11'-0"	17'-8"	15'-6"		
	#2	2x8	17'-5"	14'-2"	23'-4"	20'-1"		
		2x10	20'-9"	16'-11"	26'-0"	23'-11"		
SYP	#3	2x6	10'-5"	8'-6"	14'-9"	12'-0"		
		2x8	13'-3"	10'-10"	18'-9"	15'-4"		
		2x10	15'-8"	12'-10"	22'-2"	18'-1"		
	#2	2x6	12'-10"	10'-6"	16'-11"	14'-9"		
SPF		2x8	16'-3"	13'-3"	22'-4"	18'-9"		
		2x10	29'-10"	16'-3"	26'-0"	22'-11"		
DF-L		2x6	12'-10"	10'-6"	17'-8"	14'-10"		
	#2	2x8	16'-3"	13'-3"	23'-0"	18'-9"		
		2x10	19'-10"	16'-3"	26'-0"	22'-11"		

Rafter Span Schedule

			Maxi	mum Rafter	Spans (Exce	erpt IRC Tabl	e 802.5.1(1)			
Spacing Crade		Doftor Size		10 psf			20 psf			
Species	Grade	Raiter Size		16" o.c.	24" o	.C.	<u>16" o.c.</u>	24	" 0.C.	
		2x6		15'-1"	12'-3'		13'-0"	10)'-8"	
	#2	2x8		19'-5"	15'-1	0"	16'-10"	13	6'-9"	
SVD		2x10		23'-2"	18'-1	1"	20'-1"	16	5'-5"	
511		2x6		11'-8"	9'-6"		10'-1"	8'-	.3"	
	#3	2x8		14'-10"	12'-1		12'-10"	10)'-6"	
		2x10		17'-6"	14'-4	"	15'-2"	12	12'-5"	
		2x6		14'-4" 11'-9"		"	12'-5"	10'	10'-2"	
SPF	#2	2x8		18'-2"	14'-1	0"	15'-9"	12'	-10"	
		2x10		22'-3" 18'-2"		2"	19'-3"		15'-8"	
				14'-4"	11'-9	"	12'-5"	10'	-2"	
DF-L	#2	2x8		18'-2"	14'-1	0"	15'-9"	12'	-10"	
		2x10		22'-3"	18'-2	2"	19'-3"	15'	-8"	
1. Where ceiling joists are not located at the bottom of the attic space, refer to footnote a in the span tables for adjustment factor 2. For hurricane winds of 100 mph or more or non hurricane winds of 110 mph or more refer to adjustment factors below										
	Raft	er Span Adi	ustment	Factor for W	ind Loads (E	xcerpt from	footnotes of	WFCM Table	es 3.26A-H	
Pitch		100 MPF		110	MPH	120	MPH	130	MPH	
		B	C	В	С	В	С	В	C	
4:12	1	.07	0.86	0.96	0.77	0.87	0.70	0.79	0.63	
6.12	4	00	0.00	0.00	0.70	0.04	0.05	0.75	0.00	

1.09

<u>1.00</u> 0.91

1.23

1.12 1.02

0.90 0.81

8:12 10:12

12:12

Sill Plate Anchorage Schedule

0.87

0.80 0.73

1. For other pitches, refer to the WFCM. Adjustment factor may not be greater than 1.00

0.98

0.91 0.83

0.79

0.73 0.66

0.90

0.83 0.76

0.72

<u>0.66</u> 0.61

ATTACHMENT		LOAD & SPACING (FOR WALLS)				
ANCHOR TYPE		EXTERIOR	INTERIOR			
1/2"ø ANCHOR BOLTS	0'-7"	4'-0" O.C.	N/A			
MASA	0'-4"	4'-0" O.C.	N/A			
0.145"ø POWDER ACTUATED	0' 1 -¼"	N/A 12'-0" O.C				
FASTENERS (Hilti X-CP72 or approved equal)	 This schedule applies to Additional connections may be requir Sheathing Schedule for ad 2. Alternative means of att the connections have equ provisions. Reference Simpson Street 	to the basic anchorage of the bottom sill plate to the foundation. irred for lateral or uplift face on the building. See the plans or the idditional requirements. ttaching the sill plate to the foundation are permitted, providing juivalent shear and uplift capacity and are not prohibited by the local code trong-Tie.				

LOOSE LINTELS FOR MASONRY SUPPORT

Masonry Weight/ Width	Opening		Arch				
(NTE)	Width	12" 24" 36"		36"	48"	Action	
22 pof	≤ 6'	3 x 3 x ¼	3 x 3 x ¼	3 x 3 x ¼	3 x 3 x ¼	3 x 3 x ¼	
(3" Max	≥ 6' - < 8'-3"	3 x 3 x ¼	3½ x 3½ x ¼	4 x 3 x ¼	4 x 3½ x ¼	3½ x 3½ x ¼	
Width) ⁶	>8'-3" - ≤ 12'	4 x 3 x ¼	5 x 3½ x ¼	5 x 3½ x 5/ 16	6 x 4 x 5/ 16	6 x 4 x 5/ 16	
	>12' - ≤ 16'-3"	5 x 3½ x 5/ 16	6 x 4 x ⅔	7 x 4 x ½	7 x 4 x ½	8 x 4 x ½	
40 m o f	≤ 6'	3½ x 3½ x ¼	3½ x 3½ x ¼	3½ x 3½ x ¼	3½ x 3½ x ¼	3½ x 3½ x ¼	
40 psi (4" Max	>6' - ≤ 8'-3"	3½ x 3½ x ¼	3½ x 3½ x ¼	4 x 3½ x ¼	5 x 3½ x ¼	4 x 3½ x ¼	
Width) ⁶	>8'-3" - ≤ 12'	4 x 3½ x ¼	5 x 3½ x ¼	6 x 4 x 5/ 16	6 x 4 x ¾	6 x 4 x 5/ 16	
vvia (1)	>12' - ≤ 16'-3"	5 x 3½ x ¾	7 x 4 x ½	7 x 4 x ½	8 x 4 x ½	8 x 4 x ½	
CO mot	≤ 6'	3½ x 3½ x ¼	3½ x 3½ x ¼	3½ x 3½ x ¼	4 x 3½ x ¼	3½ x 3½ x ¼	
60 psf (4" Max Width) ⁶	>6' - ≤ 8'-3"	3½ x 3½ x ¼	4 x 3½ x ¼	5 x 3½ x ¼	5 x 3½ x ¼	5 x 3½ x ¼	
	>8'-3" - ≤ 12'	5 x 3½ x ¼	6 x 4 x 5/ 16	6 x 4 x ³ / ₈	7 x 4 x ½	7 x 4 x ½	
	>12' - ≤ 16'-3"	6 x 4 x 5/ 16	7 x 4 x ½	8 x 4 x ½			

Steel Lintel:

1. All lintels shall be A36 steel, oriented in the strong direction (longer leg vertical).

2. All lintels shall extend at least 4 inches beyond each end of opening.

3. The arching action assumes that the weight of the masonry load is transferred around the opening at a 45

degree angle. This assumption is valid when there is sufficient masonry on both sides of the opening to carry the load from above and when no openings interrupt the arch action.

4. Deflection is limited to L/600 or .30", whichever is less.

5. Lintels are designed for supporting non-structural masonry veneer only. Other gravity loads shall be carried

by other structural members. Lintels shall not be attached to header/beams U.N.O.

6. Table based on typical sizes and weights. Builder to verify. Contact this office for alternate materials.

7. Masonry shall not extend more than 1/2" past the edge of the horizontal leg.

8. Reference: Brick Industry Association and IRC R703.7.3

Nailing Schedule

[]			+	- Allowa	able stud le	enath exceed	s 20 feet.		
Fastening Location	IRC Table 602.3(1)	IBC Table 2304.9.1							
Joist to Sill or Girder	3 -8d (Toenail)	3-3" x 0.131" nails (Toenail)	Where exterior walls are sheathed with wood struct			structural par	ole mix		
Bridging to Joist	2 -8d (Toenail each end)	2-3" x 0.131" nails (Toenail each end)	vvii otu	here extends wans are sheatned with wood structural panels, mix					
Sole Plate to Joist or Blocking	3 -16d @ 16" o.c. (Facenail)	3" x 0.131" nails @ 8" o.c. (facenail)	stud lengths shall be per the following.						
Top Plate to Stud	2 -16d (Endnail)	3-3" x 0.131" nails (Endnail)	-						
Stud to Sole Plate	3- 8d or 2- 16d (Toenail)	4-3" x 0.131" nails (Toenail) or 2-3" x 0.131" (Endnail)	Maximum Exterior Stud Length (for walls with wood structural sheathing)						
Double Studs	10d @ 24" o.c. (Facenail)	3" x 0.131" nails @ 8" o.c. (facenail)			(Exc	erpt from WF	CM Table 3.	.20A)	
Double Top Plates	10d @ 24" o.c. (Facenail)	3" x 0.131" nails @ 12" o.c. (facenail)			-			-	
Top Plate Laps & Intersections	2 -10d (Facenail)	3-3" x 0.131" nails (Facenail)				Maximum S	Stud Length		
Continuous Header, 2 Pieces	16d @ 16" o.c. along each edge					16" (0.C.	1 1	
Ceiling Joist to Plate	3 -8d (Toenail)	5-3" x 0.131" nails (Toenail)			90 MPH	100 MPH	110 MPH	120 MPH	130 MPH
Continuous Header to Stud	4 -8d (Toenail)		2x4	Stud	12'-10"	11'-4"	11'-2"	10'-2"	9'-4"
Ceiling Joist, Laps over Partitions	3 -10d (Facenail)	4-3" x 0.131" nails (Facenail)		#2	13'-6"	12'-7"	11'-9"	11'-1"	10'-5"
Ceiling Joists to Parallel Rafters	3 -10d (Facenail)	4-3" x 0.131" nails (Facenail)	2x6	Stud	19'-8"	17'-6"	15'-10"	14'-5"	13'-3"
Built-Up Corner Studs	10d @ 24" o.c.	3" x 0.131" nails @ 16" o.c.		#2	+	+	18'-10"	17'-9"	16'-9"
Built-Up girders & beams	10d @ 32" o.c. Top, Bot & Staggered - 2 nails @ ends & each splice	3" x 0.131" nails @ 24" o.c. (Facenail) at Top & Bottom Staggered 3-3" x 0.131" nails (Face nail) at Ends & at each splice	This table assumes SPF or equivalent. For other material, size spacing combinations, refer to the WFCM.				size, or		
Built-Up Wood Columns	16d @ 8" o.c. (2x4's); 2 rows 16d @ 8" o.c. for 2x6 or greater								
Roof or Floor Truss to Plate	3 -8d (Toenail)	3-3" x 0.131" nails (Toenail)							
Ledger Strip	3 -16d (Facenail)	4-3" x 0.131" nails				ش ور	TE OF TANK		
Blocking@Joists/Rafters to TopPlate	3 -8d (Toenail)	3-3" x 0.131" nails (Toenail)	S. A. Star						
Rim Joist to Top Plate	8d @ 6' o.c. (Toenail)	3-3" x 0.131" nails @ 6" o.c. (Toenail)				***	× *		
Rafter to Plate	2 -16d (Toenail)	3-3" x 0.131" nails (Toenail)				X	AVIER CHAPA		
Collar Tie to Rafter	3 -10d (Facenail)	4-3" x 0.131" nails (Facenail)					42335 A		
Jack Rafter to Hip	4 - 16d (Toenail) / 3 -16d (Facenail)	4-3" x 0.131" nails (Toenail) 3-3" x 0.131" nails (Facenail)				0.6	DIDNAL EN		
Roof Rafter to 2x Ridge Bm	4 - 16d (Toenail) / 3 -16d (Facenail)	3-3" x 0.131" nails (Toenail) 3-3" x 0.131" nails (Facenail)	Vavuer Chapa Xavier Chapa Engineering/Surveying						
Rafter Ties to Rafters	3 -8d (Facenail)					F	irm Number F-9156		
Joist to Band Joist	3 -16d (Facenail)	3-3" x 0.131" nails (Toenail)							

WALL STUD SCHEDULES

Load Bearing Walls (Except IRC Table R602.3.1)								
Maximum Allowable Length & Spacing of Load Bearing Wall Studs								
Stud Height (feet)	Roof + Ceiling	Roof, Ceiling & One Floor	Roof, Ceiling & Two Floors					
<10 12 14 16 18 20 22 24	2x4 0 16" o.c. 2x4 0 16" o.c. 2x6 0 8" o.c. 2x6 0 8" o.c. 2x6 0 8" o.c. 2x6 0 8" o.c.	2x4 @ 16" o.c. 2x6 @ 8" o.c. 2x6 @ 8" o.c. 2x6 @ 8" o.c.	2x6 @ 16" o.c. 2x6 @ 16" o.c. 2x6 @ 16" o.c. 2x6 @ 12" o.c. 2x6 @ 12" o.c. 2x6 @ 8" o.c. See Engineer See Engineer					

1. Assumes SPF stud grade or better

2. Balloon frames or tall walls (greater than 12' max) shall be #2 grade or better.

3. For exterior walls exposed to wind, stud lengths shall be limited by the following,

Maximum Exterior Stud Length (Excerpt from WFCM Table 3.20A)									
Maximum Stud Length									
16" O.C.									
		90 MPH	110 MPH	120 MPH	130 MPF				
2x4	Stud	12'-0"	10'-8"	9'-8"	8'-10"	8'-1"			
	#2	13'-6"	12'-7"	11'-9"	11'-1"	10'-5"			
2x6	Stud	18'-0"	16'-1"	14'-6"	13'-3"	12'-2"			
	#2	+	+	18'-0"	17'-1"	15'-8"			

This table assumes SPF or equivalent. For other material, size, or spacing combinations, refer to the WFCM.



09/21/2023









IMPORTANT

1. ALL MECHANICAL, ELECTRICAL, AND PLUMBING WORK MUST BE DONE AND SIZED ACCORDING TO THE CURRENT NATIONAL AND LOCAL CITY CODE REQUIREMENTS.

THESE SCHEMATIC DIAGRAMS ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE A GENERAL LAYOUT.

2. G.C. HAS THE OPTION TO REROUTE MECHANICAL DUCTS AND WATER SUPPLY LINES IN ORDER TO SAVE ON COST. (OR AS REQUIRED PER ON SITE CONSTRUCTION)

-G.C./HOMEOWNER TO VERIFY ALL DUCT SIZES WITH HVAC CONTRACTOR .

-ALL WATER SUPPLY LINES SHALL BE PROPERLY INSULATED AND MAY RUN UNDER SLAB OR INSIDE ATTIC. (PLUMBING MAY BE REROUTED AS REQUIRED BY ON-SITE CONSTRUCTION.)

3. ELECTRICAL LAYOUT IS PROVIDED AS A GENERAL GUIDELINE FOR BASIC FEATURES ONLY. OWNER/G.C BEARS RESPONSIBILITY TO VERIFY ALL ELECTRICAL COMPONENT LOCATIONS

PLUMBING WATER/SEWER AND VENTS

MAIN WATER LINE ENTERING BUILDING IS A 1" LINE THEN BRANCHES OUT TO A 3/4" COLD/HOT WATER LINE. LINE BRANCHES OUT FURTHER TO 1/2" LINE AT FIXTURES.

CLEAN OUT AND VENT LOCATIONS TO BE PLACED PER NATIONAL AND LOCAL CITY CODE BY A LICENSED PROFESSIONAL.



Mechanical & Plumbing Plan Scale: 1/8'' = 1'







Electrical Plan Scale: 1/8'' = 1'

