



- ROOF PLAN NOTES:**
1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AT SITE.
  2. CONTRACTOR IS TO FOLLOW SPECIFICATIONS PROVIDED BY METAL BUILDING SUPPLIER.
  3. ALL TIMBER RAFTERS TO BE SIZED AS PER SPAN CHART.
  4. CONTRACTOR TO WATERPROOF ALL ROOF INTERSECTIONS AS PER CODE.
  5. CONTRACTOR TO VERIFY ALL ROOF PITCHES WITH EXTERIOR ELEVATIONS PRIOR TO CONSTRUCTION. MAIN ROOF PITCH IS PROVIDED BY METAL BUILDING SUPPLIER DOCUMENTS.
  6. CONTRACTOR TO PROVIDE ADEQUATE ROOF VENTILATION AS REQUIRED BY CURRENT CODES.
  7. OVERHANGS FOR METAL BUILDING SHOWN AS 18". CONTRACTOR TO FOLLOW METAL BUILDING SPECIFICATIONS.

**RAFTER LENGTH CHART**

ROOF PITCH	FACTOR
3/12	1.05
4/12	1.07
5/12	1.10
6/12	1.14
7/12	1.17
8/12	1.20
9/12	1.25
10/12	1.30
11/12	1.35
12/12	1.40
14/12	1.54
16/12	1.70

MULTIPLY HORIZONTAL SPAN OF MEMBER BY FACTOR. CHOOSE APPROPRIATE FACTOR BY ROOF PITCH.

**CEILING JOIST SPANS**

CEILING JOIST SPANS FOR SOUTHERN PINE SPECIES (UNHABITABLE ATTICS WITHOUT LIMITED STORAGE, LIVE LOAD = 20 PSF, L/A = 240) DEAD LOAD = 10 PSF)

\*\*\* IF HABITABLE ATTIC SPACE IS DESIRED, REFER TO THE INTERNATIONAL RESIDENTIAL CODE SPAN TABLES. \*\*\*

SIZE	SPACING (INCHES)	VISUALLY GRADED #2 SOUTHERN PINE (MAXIMUM CEILING JOIST SPANS) (FT. - IN.)
2"x4"	12.0	9-3
	16.0	8-0
	19.2	7-4
	24.0	6-7
2"x6"	12.0	13-11
	16.0	12-0
	19.2	11-0
	24.0	9-10
2"x8"	12.0	17-7
	16.0	15-3
	19.2	13-11
	24.0	12-6
2"x10"	12.0	20-11
	16.0	18-1
	19.2	16-6
	24.0	14-9

NOTE: THE ABOVE TABLE IS BASED ON THE IRC 2018 TABLE 802.5.1 (2)

**RAFTER JOIST SPANS**

RAFTER SPANS FOR SOUTHERN PINE SPECIES  
LIVE LOAD = 30 PSF, L/A = 180 DEAD LOAD = 10 PSF

SIZE	SPACING (INCHES)	SPANS (MAXIMUM RAFTER SPANS BETWEEN BRACINGS) (FT. - IN.)
2"x6"	12.0	12-11
	16.0	11-2
	19.2	10-2
	24.0	9-2
2"x8"	12.0	16-4
	16.0	14-2
	19.2	12-11
	24.0	11-7
2"x10"	12.0	19-5
	16.0	16-10
	19.2	15-4
	24.0	13-9
2"x12"	12.0	22-10
	16.0	19-10
	19.2	18-1
	24.0	16-2

NOTE: THE ABOVE TABLE IS BASED ON THE IRC 2018 TABLE 802.5.1 (2)

DATE	REV.	REVISION DESCRIPTION
03/04/25	A	ISSUED FOR REVIEW

START:	XX/XX/XX
FINISH:	XX/XX/XX
SCALE:	1/4" = 1'-0"
DRAWN BY:	DTA
CHECKED BY:	WHD

DISCLAIMER: THE MOST DESIGNS WATTS HOME DESIGNS, LLC. FIRM STAFF HAS NO LIABILITY FOR STRUCTURAL OR ARCHITECTURAL DESIGN INTEGRITY. EVERY EFFORT HAS BEEN MADE TO ENSURE ALL DIMENSIONS AND HAVE BEEN MET. IF AN ERROR OR OMISSION DOES OCCUR, IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER TO VERIFY ALL DIMENSIONS AND NOT THE RESPONSIBILITY OF WATTS HOME DESIGNS, LLC. ALL SALES ARE FINAL.

PLAN NUMBER:  
**25-02**

DRAWING NUMBER:  
**A-06**

SHEET NUMBER:  
**7 OF 10**

**ROOF PLAN**  
SCALE: 1/4" = 1'-0"