

BASIC WOOD FRAMING



BUILDING DEPARTMENT

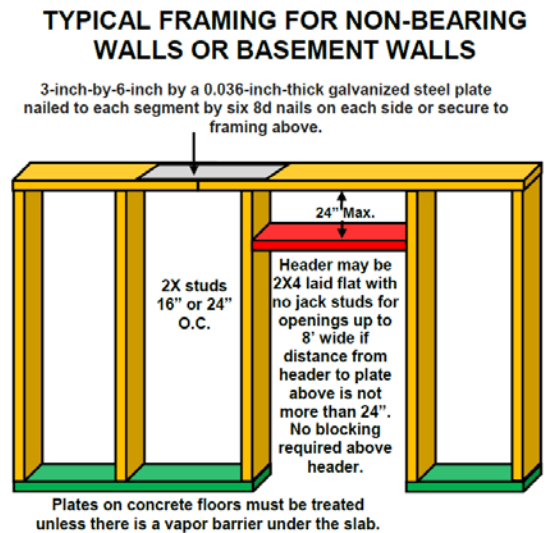
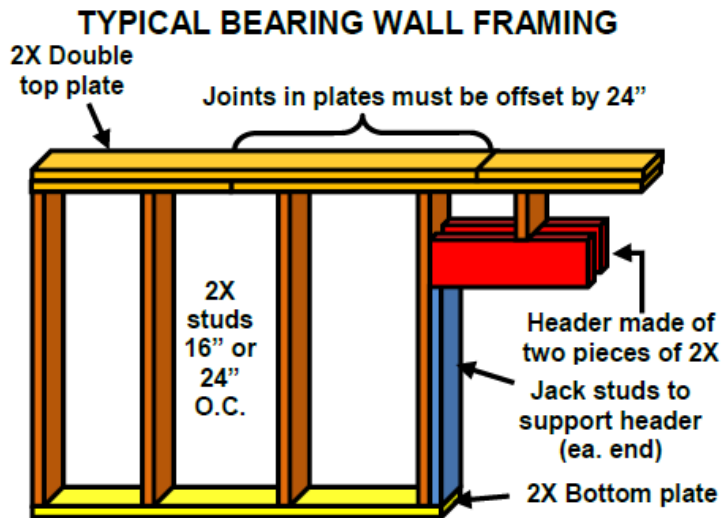
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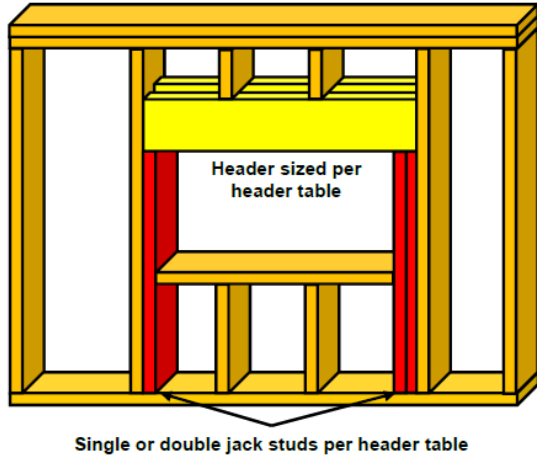
This handout is intended only as a guide and is based in part on the 2020 Minnesota Residential Code, Big Lake City ordinances, and good building practice. While every attempt has been made to insure the correctness of this handout, no guarantees are made to its accuracy or completeness. Responsibility for compliance with applicable codes and ordinances falls on the owner or contractor. For specific questions regarding code requirements, refer to the applicable codes or contact your local Building Department.



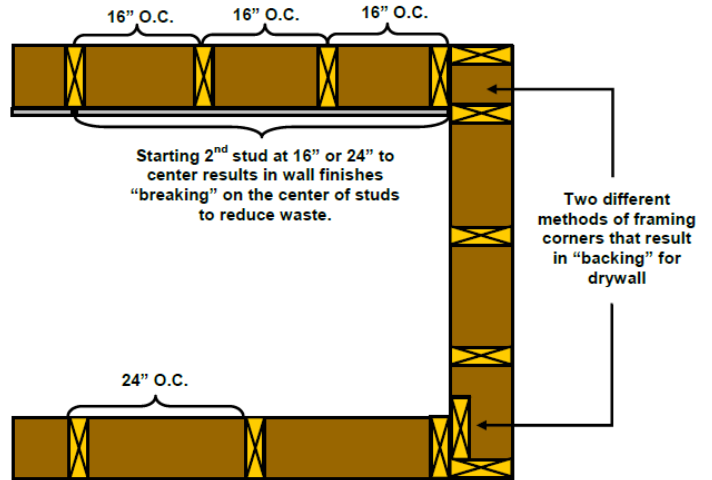
SIZE, HEIGHT AND SPACING OF WOOD STUDS
TABLE R602.3(5)

STUD SIZE	BEARING WALLS					NONBEARING WALLS	
	MAXIMUM HEIGHT	MAXIMUM SPACING WHEN SUPPORTING ROOF AND CEILING ONLY	MAXIMUM SPACING WHEN SUPPORTING ONE FLOOR, ROOF, AND CEILING	MAXIMUM SPACING WHEN SUPPORTING TWO FLOORS, ROOF AND CEILING	MAXIMUM SPACING WHEN SUPPORTING ONE FLOOR ONLY	MAXIMUM HEIGHT	MAXIMUM SPACING
2X4	10	24	16	-	24	14	24
2X6	10	24	24	16	24	20	24

FRAMING OPENINGS IN BEARING WALLS

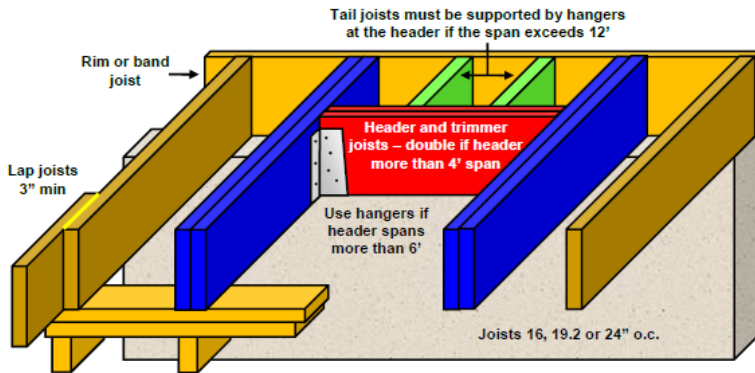


LAYING OUT WALLS – 16” AND 24” ON CENTER

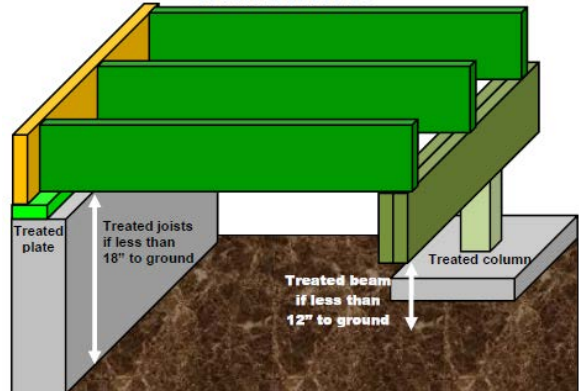


BEAMS AND GIRDER SIZES REFER TO MSBC TABLE R602.7 (1) - 50 LBS SNOW LOAD

TYPICAL FLOOR FRAMING

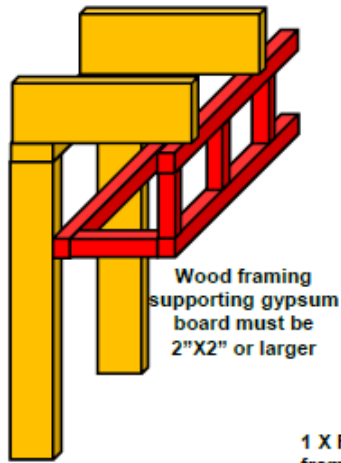


CRAWL SPACES

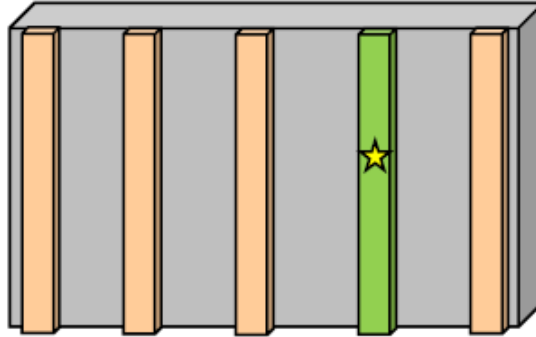


FLOOR JOIST SPANS #2 SPF				
TABLE R502.3.1(2)				
Joist spacing	2X6	2X8	2X10	2X12
16” O.C.	9-4	12-3	15-5	17-10
19.2” O.C.	8-9	11-6	14-1	16-3
24” O.C.	8-1	10-3	12-7	14-7

FURRING VS. FRAMING

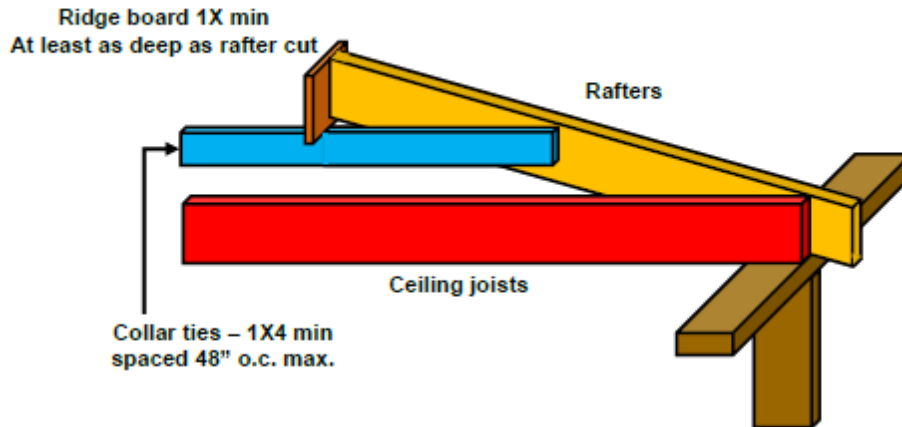


Wood framing supporting gypsum board must be 2"X2" or larger



1 X Furring strips may only be used over solid backing or framing spaced not more than 24" o.c. ★ Furring strips placed against a concrete or masonry wall must be treated unless a vapor retarder is placed between the wall and furring strips

ROOF FRAMING



RAFTER SPANS FOR #2 HEM FIR AND SPF 50 LBS SNOW LOAD

		2 x 4	2 x 6	2 x 8	2 x 10
12" o.c.	Hem Fir	7-5	11-1	14-0	17-2
	SPF	7-8	11-3	14-3	17-5
16" o.c.	Hem Fir	6-7	9-7	12-2	14-10
	SPF	6-8	9-9	12-4	15-1
24" o.c.	Hem Fir	5-4	7-10	9-11	12-1
	SPF	5-5	7-11	10-1	12-4

**CEILING JOIST SPANS FOR #2 HEM FIR AND SPF
NO STORAGE IN ATTIC**

		2 x 4	2 x 6	2 x 8	2 x 10
12" o.c.	Hem Fir	11-7	18-2	24-0	26+
	SPF	11-10	18-8	24-7	26+
16" o.c.	Hem Fir	10-6	16-6	21-9	26+
	SPF	10-9	16-11	22-4	26+
24" o.c.	Hem Fir	9-2	14-5	18-6	22-7
	SPF		14-9	18-9	22-11

ENGINEERED LUMBER

This handout does not cover engineered lumber such as floor or roof trusses, I joists, glue-laminated members, structural composite lumber, and similar products. Refer to the manufacturer's installation instructions for further information.

OTHER FRAMING HANDOUTS

Other handouts are available on cutting, boring and notching framing, fireblocking, gypsum wall board, fasteners, and a host of other code requirements pertaining to