Underfloor

General

- ☐ All formboards must be removed .....[408.4]
- ☐ Repair rock pockets or voids .....[local]
- ☐ Cripple wall <14in. sheathed or solidly blocked .....[602.9]
- ☐ Cripple wall >14in. braced as if first story + 15%, 18ft. max. spacing[602.10.2]
- ☐ Anchor bolts and hold-downs tightened (inspect before frieze blocking)[manu.]
- ☐ Frieze blocking req'd on sloped foundations ≥ 1:10 .....[local]

Ventilation

- ☐ 1 sq.ft./150sq. ft. of under-floor area .....[408.1]
- ☐ Vent openings within 3ft. of each corner .....[408.1]
- ☐ Vents ≤3ft. of property line OK .....[302.2X2]

Access Openings

- ☐ Min. 18in. x 24in. if no mechanical equipment .....[408.3]
- ☐ Min. 22in. x 30in. if mechanical equipment present .....[1305.1.4]

Slab

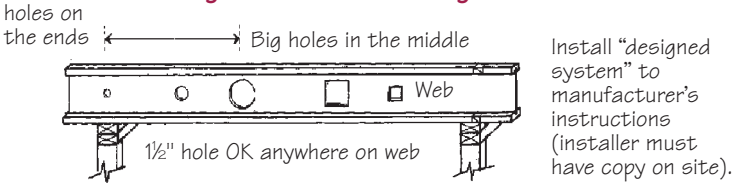
General

- ☐ Slab floor on grade min. 3½in. thick .....[506.1]
- ☐ Vapor barrier under habitable space .....[506.2.3]

Structural Slabs

- ☐ Elevated or wood-supported slab must be engineered .....[local]

Fig. b6 • TJI® Boring



Install "designed system" to manufacturer's instructions (installer must have copy on site).

Floor Framing

General

- ☐ Notching and boring joists and beams .....**bt-3, Fig. b11** [502.8.1]
- ☐ Floor/ceiling draftstopped if >1,000 sq. ft. (open web trusses) .....[502.12]
- ☐ Double joists under bearing walls .....[502.4]

Subfloor

- ☐ Untreated wood soil clearance: joists min. 18in., beams min. 12in. ...[323.1)
- ☐ Cripple wall <14in. sheathed or solidly blocked .....[602.9]

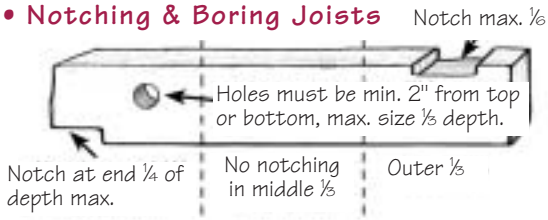
Joist Bearing

- ☐ On concrete–min. 3in. .....[502.6]
- ☐ On wood plates–min. 1½in. .....[502.6]
- ☐ Joist lap min. 3in. and three 10d nails .....[502.6.1]

Joist Blocking

- ☐ Joists blocked @ ends (SDC D1&D2 @ all supports) .....[502.7]
- ☐ Joists >2x12 blocked or bridged @ 8ft. o.c. .....[502.7.1]

Fig. b11 • Notching & Boring Joists



bt-3 • Floor-Joist Spans, Notching & Boring

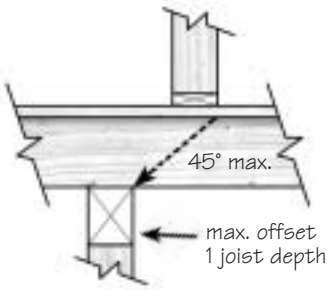
Floor-joist spans–40lb. live load				Notching		Boring
DF #2	12" o.c	16" o.c.	24" o.c	End	Outer ⅓	2" to edge
2x6	10'9"	9'9"	8'1"	1⅜"	⅞"	1½"
2x8	14'2"	12'7"	10'3"	1⅞"	1¼"	2⅜"
2x10	17'9"	15'5"	12'7"	2⅜"	1½"	3⅛"
2x12	20'7"	17'10"	14'7"	2⅞"	1⅞"	3¾"

Based on IRC T502.3.1(2) & 502.8.1 and 10lb. dead load

Steel Framing

- ☐ Studs in line with joists, rafters, and trusses max. ¾in. offset .....[603.1.2]
- ☐ No splicing of studs or structural members .....[603.3.6]
- ☐ SDC D1&D2 and high wind areas (≥110mph) req. add'l bracing OR engineering .....[603.8.1] [301.2]
- ☐ Harsh environments (e.g. coastal areas) req. min. G-90 protective coating[manu.]
- ☐ Sheathing fastened #8 min. screws every 6in. at edges 12in. field [T603.3.2(1)]

Fig. b7 Bearing-Wall Support



*60% hole OK on bearing wall if through only 2-doubled successive studs. All holes must be min. 5⁄8" from edge.

Fig. b8 Notching & Boring Studs

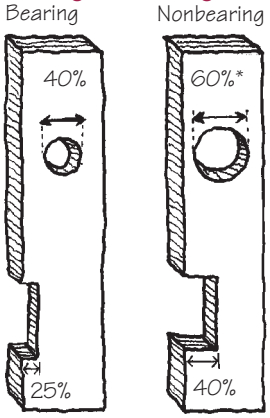
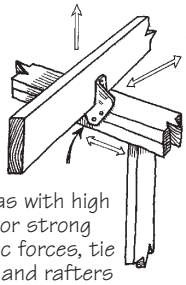
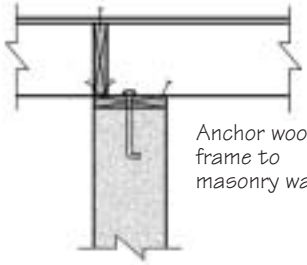


Fig. b9 • Hurricane & Seismic Retrofit



In areas with high winds or strong seismic forces, tie floors and rafters to sills.

Fig. b10 • Anchoring to Masonry Walls



Wall Framing

Top Plates

- ☐ Bearing wall intersections and corners must overlap .....[602.3.2]
- ☐ End joints must offset 24in. min. .....[602.3.2]
- ☐ #16 gauge steel straps over notches ≥ 50% of plate width .....[602.6.1]
- ☐ Single top plate OK if tied with 3in. x 6in. steel plate with 6-8d nails AND joists/trusses/rafters land within 1in. over stud .....[602.3.2X)
- ☐ Top plates face nailed 10d max. 24in. o.c. .....**bt-11** [T602.3(1)]

Bearing Wall Support

- ☐ Double joists under parallel bearing walls .....[502.4]
- ☐ Wall perpendicular to joist max. offset from girder 1 joist size **Fig. b7** [local]

Corner Framing

- ☐ Exterior corners–3 studs min. .....[F602.3(2)]
- ☐ Hold-downs in place and tightened .....[manu.]

Stud Notching and Boring

- ☐ Bearing or exterior wall max. notch 25% boring 40%. .....**Fig. b8** [602.6]
- ☐ Boring to 60% OK if stud doubled and not >2 successive studs bored [602.6X]
- ☐ Nonbearing notches OK to 40%, boring OK to 60% .....**Fig. b8** [602.6]
- ☐ Holes no closer than 5⁄8in. to face of stud .....[602.6]

bt-4 • Stud Sizing, Spacing, Notching & Boring

Stud Size	2x4	3x4	2x6
Bearing walls (to 10ft. high)			
Supporting roof & ceiling	24in. o.c.[a]	24in. o.c.[a]	24in. o.c.
Roof & ceiling + 1 floor	16in. o.c.	24in. o.c.	24in. o.c.
Roof & ceiling + 2 floors	n/a	16in. o.c.	16in. o.c.
Notching *Fig. b8*	7⁄8in.	7⁄8in.	1 3⁄8in.
Boring *Fig. b8*	1 3⁄8in.	1 3⁄8in.	2 3⁄16in.
Boring 2 doubled consec.	2in.	2in.	3 1⁄4in.
Nonbearing walls			
Notching	1 3⁄8in.	1 3⁄8in.	2 3⁄16in.
Boring	2in.	2in.	3 1⁄4in.

a. Reduce to 16in. if utility grade studs are used.
Based on IRC T602.3(5) and 602.6