

# Framing Cheat Sheet

## LUMBER: NOMINAL VS ACTUAL

Nominal	Actual (in)
1x4	3/4 x 3-1/2
2x4	1-1/2 x 3-1/2
2x6	1-1/2 x 5-1/2
2x8	1-1/2 x 7-1/4
2x10	1-1/2 x 9-1/4
2x12	1-1/2 x 11-1/4
4x4	3-1/2 x 3-1/2

## WALL FRAMING BASICS

- Studs at 16" on center (24" allowed for some non-bearing walls).
- One bottom plate, double top plate; stagger top-plate joints.
- Openings get a header (doubled 2x on edge) sized to the span.
- Design and order using actual sizes, not nominal.

## DECK JOIST SPAN (SP, 16" OC)

Joist	Max span
2x6	9' 0"
2x8	11' 10"
2x10	14' 0"
2x12	16' 6"

#2 Southern Pine, 40 psf live + 10 dead, no cantilever. Other species span less. Verify local code.

## FASTENERS (TYPICAL)

- 16d nails for stud-to-plate and general framing.
- Joist hangers: use the nails/screws the manufacturer specifies.
- 3" coated screws or 16d for deck framing connections.

## RULES OF THUMB

- Install joists and rafters crown-up.
- Headers, spans, and shear walls follow local code.