

Framing takeoff worked example worksheet

Version: Original 32 in rough opening

Scope: synthetic nonbearing practice detail. All member sizes and cuts are givens, not construction recommendations.

Geometry: W1 = 20 ft outside faces. W2 = 12 ft clear from the W1 face. C1-C3 are W1-owned.

W1 field centers: 16, 32, 48, 64, 128, 144, 160, 176, 192, 208, 224, 239.25

W2 field centers: 16, 32, 48, 64, 80, 96, 112, 128, 143.25. No W2 start stud at 0 in.

Opening: RO 80-112 in (32 in); K-L 77.75, J-L 79.25, J-R 112.75, K-R 114.25.

Members: 26 full-height 2x4 x 92-5/8; 2 jacks x 81; 3 cripples x 4-3/8; 2 x 2x8 header plies x 35 in.

Plates: one sole + two top layers. Each layer has W1 12 + 8 ft and W2 12 ft. Net = 96 LF.

Precut stock: 28 net pieces x 1.10 = 30.8, round up = 31.

Plates: 96 LF x 1.10 = 105.60 LF. Nine 12 ft boards = 108 LF; scheduled cuts fit that stock.

Header reference: two plies x 35 in = 70 in raw. 70 in x 1.10 / 12 = 6.42 LF (displayed). 1 x 2x8x8 stock boards.

Offcuts: two 81 in jacks leave 11-5/8 in gross each. After a 1/8 in jack-cut kerf, each has 11-1/2 in usable before cripple cuts. No header packers are included in this lumber-only schedule.

Framing takeoff worked example worksheet

Version: Revised 48 in rough opening

Scope: synthetic nonbearing practice detail. All member sizes and cuts are givens, not construction recommendations.

Geometry: W1 = 20 ft outside faces. W2 = 12 ft clear from the W1 face. C1-C3 are W1-owned.

W1 field centers: 16, 32, 48, 128, 144, 160, 176, 192, 208, 224, 239.25

W2 field centers: 16, 32, 48, 64, 80, 96, 112, 128, 143.25. No W2 start stud at 0 in.

Opening: RO 64-112 in (48 in); K-L 61.75, J-L 63.25, J-R 112.75, K-R 114.25.

Members: 25 full-height 2x4 x 92-5/8; 2 jacks x 81; 4 cripples x 4-3/8; 2 x 2x8 header plies x 51 in.

Plates: one sole + two top layers. Each layer has W1 12 + 8 ft and W2 12 ft. Net = 96 LF.

Precut stock: 27 net pieces x 1.10 = 29.7, round up = 30.

Plates: 96 LF x 1.10 = 105.60 LF. Nine 12 ft boards = 108 LF; scheduled cuts fit that stock.

Header reference: two plies x 51 in = 102 in raw. $102 \text{ in} \times 1.10 / 12 = 9.35 \text{ LF}$ (displayed). 2 x 2x8x8 stock boards.

Offcuts: two 81 in jacks leave 11-5/8 in gross each. After a 1/8 in jack-cut kerf, each has 11-1/2 in usable before cripple cuts. No header packers are included in this lumber-only schedule.