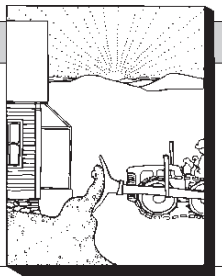

Nail-Banging 101: Final Exam

The Barrow Street Building as it stands today

1. What's a good way to frame and sheath an eight-story building with 33,000 square feet of office, retail and condo space, plus a rooftop lawn with a basketball court? (35 points)

Use 2x6 studs on 16" centers and sheath the whole thing with 1/2" plywood. 2x10 floor joists should work fine, but you might want to use 3/4" plywood for the subfloor.

Oh yes, and you should probably put on an extra carpentry crew.

Impossible, you say? The Barrow Street Building in Anchorage, Alaska, is just such a building and demonstrates what can be done with some wood and nails.

It's not *quite* as simple as that, but close. The grade-level story actually is an above-grade basement with masonry walls, and the first-floor and mezzanine levels use 2x8 studs. The floor joists are all 2x10, though spacing varies at 12, 16 or 24 inches o.c.

Designed and built by the architectural firm of Lane Knorr Plunkett with engineering assistance from SCHR-Barkshire, Inc., the building was completed in October 1982 at a cost of $67 a square foot.

The firm chose wood for the structure because steel and masonry couldn't meet the building codes in Anchorage and still be cost-competitive. The codes are necessarily tough due to the more-than-occasional incidence of earthquakes rippling through the city.

The Barrow Street Building has withstood seismic traumas of up to 6.4 on the Richter scale with nary a scratch, and its walls, with a fire rating of up to four hours, acclimate the building nicely to city life.

So if you're interested in raising your carpentry skills to new heights by entering the wooden high-rise business and need more information, contact Patricia Case at the American Plywood Association, P. O. Box 11700, Tacoma, Wash. 98411; 206/565-6600. ■

The Barrow Street Building under construction

photos courtesy American Plywood Association