

Multifamily Developers Turn to Wood-Frame Construction to Cut Costs

In the past, developers have tended to stick to wood for garden-style product, generally a two- to four-story walk-up, and relied on concrete and steel materials for buildings taller than four stories. But now, more builders are considering wood.



Big Switch: York Residential decided to go with wood-frame construction instead of concrete to make the five-story North Tract Lofts in Arlington, Va., financially feasible.

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By Rachel Z. Azoff

The five-story North Tract Lofts apartment complex in Arlington, Va., was originally designed as a concrete project, but the developer asked its contractor, Clark Builders Group, to reengineer the building to Type III wood construction. The switch in building materials is expected to shave as much as 40 percent off of the total construction cost.

North Tract Lofts' developer, Arlington, Va.-based York Residential, isn't the only firm giving wood a second thought. An increasing number of developers are turning to wood in order to make projects financially feasible in today's turbulent economy.

Wood is starting to make a lot more sense. In some cases as it's tough to get a concrete project moving as a rental," says Keith Anderson, executive vice president of Arlington, Va.-based Clark Builders Group, which builds both for third parties and its own account. "There are definitely times when burning some density in favor of lower-cost wood construction allows the project to move forward where maybe it wouldn't have before."

In the past, developers have tended to stick to wood for garden-style product, generally a two- to four-story walk-up, and relied on concrete and steel materials for buildings taller than four stories. But now, more builders are considering wood for five-story buildings using Type III construction, Anderson says. "It is complex, going from four- to five-story wood construction, but it's just a matter of working through issues with local officials. I expect to see more of this, especially in areas where there is such a premium on density and land prices haven't quite corrected from what they were worth as condo projects to what they are now worth as apartment projects. There's always going to be that tension on trying to maximize the amount of density while, at the same time, controlling costs."

However, five-story wood construction, while cheaper than steel and concrete, still costs a premium over four-story wood construction. For that reason, some developers don't find it cost-effective to extend their wood-frame product from four to five stories. Four-story wood construction (without parking or site work) averages \$115,000 per unit, while five-story wood product costs around \$135,000 to \$140,000 per unit, says Michael Schlegel, president of Greenbelt, Md.-based general contractor and in-house builder Bozzuto Construction Co. "Therefore, we aren't seeing it done a lot, only in places where they are really trying to maximize density on expensive land."

Price Point	
The costs of structured steel and concrete products have declined in recent months due to a lack of demand, yet lumber remains the cheapest consumer product.	
	Concrete

For those in need of high-density design, taller wood-frame product might soon be possible. In Miki City, Japan, in mid-July, LP Building Products and the Network for Earthquake Engineering and Simulation are scheduled to perform the world's largest shake test ever attempted to demonstrate

Month (2009)	Structured Steel	Lumber	Products
January	+10.7%	-2.9%	+1.4%
February	+6.7%	-0.9%	% -0.1%
March	+4.6%	-3.2%	-0.9%
April	+0.7%	+0.7%	-0.3%
May	-2.0%	-1.0%	-0.1%
<i>Source: Producer Price Index</i>			

the importance of earthquake-resistant construction. The subject? A seven-story, 23-unit condo tower weighing nearly a million pounds that uses LP SolidStart I-Joists and LP SolidStart Laminated Veneer Lumber as the main structural components of the tower floors. The outcome of the tests could very well lead to taller wood-frame building, says David Clyne, the lead contractor on the earthquake shake test.

"The predicted results of our test in July will lead to the building codes in most areas in California to change from five stories to six stories," Clyne says. "The B.C. government in Canada already changed their building codes from five stories to six stories as well. Both the U.S. federal government and the Canadian government will be present for the tests and will use the results of this test to establish new regulations in building with wood."

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