

BULLETIN

With the Surge in Wood Prices, CFS Saves 24%

“Costs to Build” Supplement

SFIA has conducted studies of construction costs in two different locations using an identical building (Figure 1) – one designed with wood and the other with cold-formed steel (CFS) framing. Factoring in substantial savings from lower insurance costs, R.A. Smith, Inc. found, as reported in [“Costs to Build with Cold-Formed Steel Versus a Wood-Framed Building”](#) (June 2020), that CFS framing costs only 0.92% more than light wood framing.

However, the price of framing lumber is notoriously volatile. Furthermore, wood prices lately have skyrocketed, creating a dramatically different picture than when our original cost study was released. The Random Lengths Framing Composite Price reached \$627 per 1,000 board feet for the week ending July 31, 2020, an 80% rise from



Figure 1.
Chicago Construction Costs

The comparative cost study of framing featured this 5-story, 49,900 SF, mixed-use apartment building.

mid-April, according to the National Association of Home Builders.

If these same structures were built at the time of the original studies, but reflecting today’s differences in material prices, the CFS framing would cost 24% less than the wood option. The completed building would cost 5% less.

Here are the updated “Costs to Build” study tables, reflecting current wood prices:

AUGUST 2020 PRICING


Light Wood Frame
\$6,706,300


CFS Frame
\$6,396,300

Difference: 5.0%

Table 1.
Chicago Construction Costs
Does not include the impact of construction-phase insurance premiums.

	Chicago Total Building Cost Summary
Building cost w/ wood framing	\$6,706,300
Building cost w/ CFS framing	\$6,396,300
Savings w/ CFS	\$310,000
CFS Cost Advantage	5.0%
Savings w/ CFS in \$/SF	\$6.22

Source: R.A. Smith

Table 2.
New Jersey Cost Comparison
Includes the impact of construction-phase insurance premiums.

	New Jersey Total Building Cost Summary	Total Building Cost with Lower BR and GL Premiums for CFS
Building cost w/ wood framing	\$6,861,477	\$6,861,477
Building cost w/ CFS framing	\$6,544,304	\$6,436,449
Savings w/ CFS	\$317,173	\$425,028
CFS Cost Advantage	4.7%	6.0%
Savings w/ CFS in \$/SF	\$6.47	\$8.67

Source: R.A. Smith