My niece Emily Rose is getting married soon, and my youngest son doesn’t understand why he needs to wear a jacket and tie to the ceremony (a concept to which I’m not entirely unsympathetic). My wife patiently explained the concept of societal expectations (as well as the argument “because we said so”) but that didn’t really satisfy him. My explanation was slightly more palatable: The host gets to set the expectations for their guests’ behavior (including what they should wear). And while he has momentarily capitulated, I know this subject will be revisited over and over again.

This type of meta discussion also happens on construction projects. At the most basic level, too often we hear the myth that “least weight is least cost.” When anyone at AISC hears that, we patiently explain that material costs are only one component of the price of a steel frame and you also need to consider fabrication and erection costs. Often, you can increase the weight of the frame slightly while substantially reducing fabrication and erection costs, which ends up creating a net savings for the project.

The amazing and nonproprietary SpeedCore system, which uses a modular sandwich of cross-tied steel-plate walls infilled with concrete as a core, takes the discussion one step further and provides a great lesson for every project.

The system itself is fairly labor-intensive to fabricate and erect. And the cost of material and labor is roughly equivalent to a concrete core. So why is anyone excited about it?

The answer is that you can’t look at the steel package—or even the entire structural system—in isolation. It’s not the cost of a beam, or the cost of the frame, or the foundation costs, or the finishes, or any other part of the building that matters most. Rather, it’s the entire project cost that needs to be considered.

In the case of the $570 million Rainier Square project in Seattle—the first to use this innovative system—the justification was simple: It promised to shave around 40% off the time required to construct a standard steel frame with a concrete core (a system that already reduced the time that would have been required to construct a concrete-framed building).

Reducing the construction time by four to eight months means reducing the general condition costs and interest payments on the construction loans, and accelerating completion means the owner can begin collecting rent sooner.

So while the use of SpeedCore might not directly reduce construction costs, it will save the owner around $20 million. And for that, it’s certainly worth putting on a jacket and tie.