Each night, the bedtime ritual for my boys includes the telling of another installment in the continuing adventures of “Jack and the No-Bean Stalk.” The hero of the story, using his endless supply of magical jelly beans and other assorted objects from his trans-dimensional pockets, constantly battles and defeats a series of nonsensical monsters ranging from a slimy giant slug (I recommend salt) to the more traditional vampire (a high-intensity discharge flashlight is always useful). Sometimes, though, I worry about my kids being too invested in this fantasy. But when I question Joshua, he looks at me and earnestly explains: “Dad, it’s only pretend.”

I guess I should be less worried about my kids’ abilities to tell fantasy from reality and worry more about some of the so-called professionals in the design and construction industry.

Fantasy number one is from the storytellers at the Concrete Alliance. Their latest fairy tale tells the story of the Windsor Tower in Madrid and how it was consumed by a fire that raged for 36 hours. In their story, they report how the building had a concrete frame below the 21st floor and it remained intact, while the building’s steel frame from floors 22 to 30 collapsed. There are just a few problems with this story, however. First, in reality the concrete frame extended to the 30th floor; the steel in the building was simply an unprotected perimeter framing system primarily supporting the cladding. Second, both the unprotected steel perimeter framing and the concrete beams and columns experienced a similar collapse. And third, there is essentially no applicability of this fire to structures in the U.S. since it clearly did not meet our design standards—and reportedly didn’t meet Spanish standards either. (For more on this fire, keep your eyes open for a soon-to-be-published white paper from Ramon Gilsanz of Gilsanz Murray Steficek.)

Fantasy number two is courtesy of the California Engineered Structural Component Association. After a steel-framed apartment project in northern California was lauded as a “green” development in the San Francisco Chronicle, the wood industry stepped up their attacks on steel’s sustainable credentials. However, the facts are clear: Steel is the world’s most recycled material. Today, all of the wide flange produced in the U.S. derives from about 95% scrap material—material that otherwise would enter the waste stream. Steel is not just recyclable, but recycled and reusable. Steel has less impact on a construction site and is less environmentally disruptive than other building materials. And as the article on page xx points out, steel has reduced its greenhouse gas emissions by 37.7% from 1990 to 2002, exceeding the requirements of the Kyoto Protocol six-fold and a decade early. (If it had been adopted by the U.S., the Protocol would have required U.S. industries to show a 5.2% reduction of emissions by 2021.)

Our final fantasy for today is again courtesy of the fine folks at the Concrete Alliance who report that the design of the new 7 World Trade Center building is evidence that concrete is safer than steel. There’s only one problem with their reasoning: the innovative building they cite as evidence is in reality a steel-framed structure with a concrete core, not a concrete-framed building.

On a more positive note, I’m happy to report that not everyone in the concrete industry lives entirely in a fantasy world. For example, the Portland Cement Association recently was quoted during a discussion of the relative benefits of concrete versus steel as saying: “...the performance of any building during an earthquake is largely a function of design rather than the material used in construction.”

I’m glad that my five-year-old son has a good grasp of reality; I just wish everyone in the design and construction industry could as readily tell fact from fiction.