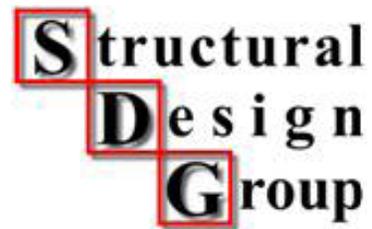


## Multifamily Application of LP® SolidStart® Engineered Wood Products

Structural Design Group



### Engineering Firm Finds Ease of Use, Reduced Shrinkage at a Cost-Competitive Price

#### SUMMARY

When it comes to successful structural engineering, constructability and budget considerations are key especially in multifamily projects, as Structural Design Group knows well. The Santa Rosa-based firm defines itself by its desire to produce clear construction drawings with a realistic approach to design as well as a commitment to staying on budget, according to principal Rich Burris. That's why Burris specifies wood framing in Type V construction.

When Burris saw the opportunity to provide more competitive pricing while maintaining strength and workability for the Epic Apartments in San Jose, Calif., Burris switched to LP® SolidStart® Engineered Wood Products.

#### OBJECTIVES

For Epic Apartments, Burris wanted to specify framing materials that would help prevent squeaking, minimize shrinkage, and provide an economical design for its customer. He turned to LP SolidStart I-Joists, LSL, LVL and Rim Board.

#### IMPLEMENTATION

"We had originally designed this project using a competitor's I-joist system, but the combination of LP products provided significant savings—enough for us to switch," Burris said. "They're very cost competitive, especially when you take advantage of value engineering LP LSL beam products into the floor system."

*"The SolidStart products are made to work together with the same vertical dimensions. While traditional lumber beams will shrink because of their moisture content, we don't have to worry about that with LP products."*

*Rich Burris  
Principal, Structural Design Group*

#### IN BRIEF

##### LOCATION

San Jose, Calif.

##### PROJECT SUMMARY

For more than 22 years, Structural Design Group has differentiated itself with clear drawings and a commitment to budget. When it began specifying products for Epic Apartments, the firm wanted to provide its customer with drawings that would provide competitive pricing for wood-framed Type V construction.

##### WEBSITE

[www.s-d-g.net](http://www.s-d-g.net)

##### PROJECT OBJECTIVES

Specify wood framing products that would:

- Prevent squeaking
- Avoid shrinkage
- Provide an economical design

##### SOLUTION

Structural Design Group turned to LP® SolidStart® Engineered Wood Products. According to principal Rich Burris, the products are cost competitive and work well together, helping avoid shrinkage and prevent squeaking. And with LP® SolidStart® Wood-E® Design Software, the products are easy to specify.



Plus, with the LP SolidStart I-Joist, Burris is able to provide his customers with a design that makes it easy to accommodate plumbing by cutting holes in the web of the I-joists.

“Because we’re not using solid lumber, the product resists shrinking. We don’t end up with nail popping that causes squeaky floors,” Burris said. “And the other SolidStart products work well with the joists. They’re all made to work together with the same vertical dimensions. While traditional lumber beams will shrink because of their moisture content, LP beam products have a lower moisture content and will shrink far less than solid lumber.”

That’s because LP LSL beams have a 7 to 10 percent moisture content, similar to the naturally occurring moisture equilibrium in enclosed structures, but unlike lumber’s moisture content which can range up to 19 percent. But the benefits Burris has experienced with LP SolidStart Engineered Wood Products don’t stop there.

“LP makes it easy on the engineers to specify their products. They have a really good design catalog and software that is free to engineers,” Burris said.

LP® SolidStart® Wood-E® Design Software is a convenient structural design program that helps with the creation of accurate and efficient wall, floor, and roof framing designs using LP SolidStart I-Joists, LVL, and LSL products. This program enables the designer to analyze complex loads and multiple spans, as well as many other conditions.

#### OUTCOME

Epic Apartments will include four individual three- and-four-story wood-framed apartment buildings with 569 units over a two-story concrete podium.

“To me, engineered wood is the best way to frame these kind of buildings,” Burris said. “I-joists provide a huge advantage over solid lumber as they give contractors the ability to run the plumbing through them. Because LP products work so well together and are cost competitive, they’re a good fit for these types of multifamily projects.”



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Phone: 888-820-0325  
Email: [Customer.Support@LPCorp.com](mailto:Customer.Support@LPCorp.com)