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Code Counts 2015

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INDUSTRY PERSPECTIVE ON CODE MATTERS

Easy-to-Use Online Tools for Code Officials

Five or six times a day, Residential Plans Examiner Karolee Towe takes phone calls from contractors and homeowners who want to know if a proposed ceiling joist, floor joist or rafter for a house, deck or addition is right for the job. And five or six times a day, she opens the [American Wood Council's \(AWC\) online Maximum Span Calculator for Wood Joists and Rafters](#), which helps her give those callers their answers within minutes.



"It saves me 10 minutes per phone call," says Towe, who works in Williamsburg, Va., for James City County. "I can check to see if the size, species, grade, and span meet the code while they wait. I can take care of things in the moment instead of having to call them back with the information later. I'm so busy, and this makes it easier to just get it done."

Making the building official's job easier was the goal of the AWC engineers who created the free, easy-to-use online tools to help building officials quickly calculate spans or verify that wood designs for decks and other structures comply with the requirements of the building codes.

Like the popular interactive span calculator, online versions of AWC's at-a-glance [Prescriptive Residential Wood Deck Construction Guide](#) and the Council's comprehensive 2012 [Code Conforming Wood Design](#) guide are easy to access via a desktop or laptop computer, a smartphone, or a tablet. So code officials can get the information they need whether they're in the office, on the road or at a job site.

Code Official Connections



[Go to Code Official Connections page.](#)



That information is compact but thorough. “The publications compile the applicable code provisions into a one-stop format,” AWC’s Vice President of Codes and Regulations Kenneth Bland, P.E., says of the downloadable deck and wood design PDFs. The Code Conforming Wood Design document, he notes, was created in partnership with the International Code Council and “is a building code encyclopedia on all things wood. If you were to take the building code and excerpt code provisions related to wood, that’s what this document pulls together.”

Especially popular in that document are tables that detail how large or tall a wood structure is permitted to be if it includes a sprinkler system or an open perimeter that allows for fire department access. “Instead of having to apply a series of equations from the code, you’ll know from the table what Type of Construction is required based on the Occupancy Group,” says Bland. “The user will quickly understand from a series of examples how allowable building height and area can be increased well beyond the base areas shown in the International Building Code.”



Likewise, the deck guide covers everything from foundation to hand rails, and includes the popular Figure 5, a fill-in-the-blank deck framing plan that a building official can review with a homeowner or builder right at the counter in the code office. “It is a useful tool as part of the plan submittal and permitting process,” Bland says. “It clearly shows the code specified elements of a properly designed and detailed deck for both for the building official and the homeowner.”



The Span Calculator instantly calculates maximum horizontal spans once a building official uses the tool’s pull-down menus to select from three dozen wood species and indicate the joist or rafter’s size, spacing, grade and other specs. The calculator even accounts for wet service conditions common for decks.

Towe finds the Span Calculator and the deck document so easy to follow that she recommends them to homeowners, who can download them and refer to them as they work on their do-it-yourself decks and sunroom conversations.

In fact, while the tools were designed for use by code officials, they are available to anyone who visits AWC’s website, including contractors and DIYers.

And just for code officials, AWC has created a free Code Official Connections program for government officials. Connections participants receive updates on building codes and standards, free building department access to WoodWorks® software, the biweekly newsletter *WoodPost*—written just for code specialists, announcements of free AWC webinars and other educational programs offering **ICC Preferred Provider** CEUs, updates about the availability of new publications, as well as a free electronic copy of and discounts on AWC’s popular printed technical publications.

For Frederick County, Maryland, Plans Examiner Ken Compell, online access to well-designed information that quickly assists him in determining code compliance is a must-have on the job.

“I’d like to think we’ve prevented horror stories from happening” by using the Span Calculator and other online tools, he says, noting that he believes the tools make his plan inspections more accurate and thorough. “I catch more things now than when we

were all manual.” And because the Span Calculator gives him the option of selecting among many wood species and other variables, he is able to quickly suggest alternative options to builders and homeowners who present plans that don’t meet code.

Compell also participates in AWC’s many [webinars](#), which teach code officials how to use the Council’s tools and products, and keep them updated on new standards and codes that apply to the use of wood in construction.

“There’s a lot of materials and products that we don’t see [in Frederick County] that I’ve been exposed to and have more knowledge on because of the webinars,” Compell says. “Every now and then, those things filter through this area, and I’m prepared. That’s been helpful.”



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