NAHB Wood-Flooring Guidelines Assailed

Oak-flooring association advocates stricter installation standards

The leading industry association for hardwood flooring objected in March to what it says are "ludicrous" quality criteria for wood flooring contained in guidelines published by the NAHB. The tolerances for cupping of floorboards, gaps between boards, and other flaws are "far too permissive," says National Oak Flooring Manufacturers Association executive vice president Timm Locke.

NAHB is now on the third edition of its *Residential Construction Performance Guidelines* (BuilderBooks.com, \$34.95). Designed to be incorporated by reference into construction or purchase-and-sale contracts,



the guidelines draw praise from some users. According to attorney Peter G. Merrill, CEO of Construction Dispute Resolution Services, who serves on the NAHB work group that wrote and periodically revises the document, "One builder who constructs about 800 homes annually in the Santa Fe, N.M., area told me he has eliminated 70 percent of the claims he used to have by using these guidelines."

But others question whether the standards used for the guidelines

Property Rights in Oregon 2

Recycling Ordinances 3

Termites 6

Resources 6

Applications for contractor's licenses have more than doubled in Louisiana since Hurricane Katrina, reports the New Orleansbased *Times-Picayune*. In early 2005, the state licensing board saw an average of fewer than 200 applications a month; since August 31, that rate has increased to more than 500 a month. Almost 10 percent were for mold-remediation licenses, and some 39 percent were from out-of-state contractors.

Weare, N.H., voters rebuffed an effort in March to use eminent domain to seize the farmhouse of U.S. Supreme Court Justice David Souter. In protest of the court's Kelo decision - which upheld the taking of private property for projects that serve a public "purpose" Logan Darrow Clements of Los Angeles-based Freestar Media petitioned to develop the Souter property to increase the town's tax base. His plans included an inn called the "Lost Liberty Hotel," a restaurant named the "Just Desserts Café," and a museum dedicated to documenting losses of freedom in the U.S. The people of Weare instead requested that the town ask the state to tighten eminent domain laws. New Hampshire is not alone; more than 30 states are considering limits on the use of eminent domain.

Measure 37 is once again the law of the land in Oregon. First passed by 61 percent of the state's voters in 2004, the property rights initiative allows landowners to request compensation if a land-use restriction causes a decline in property value. In lieu of payment, the government or agency may waive the restriction so the property can be used according to the laws in place when it was purchased. Measure 37 was found in October 2005 to be unconstitutional by a state circuit court, but the state supreme court subsequently overturned that decision in February. Planning commissioners in Oregon are now processing more than 2,500 claims, but because no money has been allocated for the measure, municipalities are likely to opt for waivers over payment.

By writing company checks to themselves, employees at two small construction companies stole hundreds of thousands of dollars from their employers. Brent Garrod, a Florida contractor, was clued in to his secretary's activities when he had an accountant go over his books. In February, she was convicted of embezzling \$582,000. When Bob Smith, a contractor in Pennsylvania, computerized the company's records, he discovered that his accountant had embezzled \$956,000.

Developers in Southern California are hitting cow dirt as they buy land from dairy farmers for \$400,000 to \$500,000 an acre, reports the *Los Angeles Times*. Ontario, Calif., developers must have soil samples analyzed for methane before building on former pastures. The results of the testing can mean having to replace large quantities of soil, adding to the already high cost of the property.

are valid, especially in regard to wood flooring. "We take issue with just about all the guidelines for wood flooring that the NAHB publishes," says Locke. "What they say is acceptable is ludicrous. Most of the tolerances NAHB allows are actually symptoms of improper installation or improperly manufactured product, or both."

In particular, Locke points to the following areas of disagreement:

- *Cracks between floorboards.* NAHB's guideline reads, "Gaps between floorboards shall not exceed ½ inch width at the time of installation." In NOFMA's view, an occasional gap between strips up to ¾64 inch wide is the acceptable limit, although gaps of up to ¾32 inch wide may be necessary in some cases to allow for expected flooring expansion.
- *Cupping.* "NAHB says cups up to ½16 inch are acceptable," says Locke. "NOFMA says phooey. We say if a majority of the boards are cupped more than .02 inch, it's unacceptable. A floor should be flat, or very close to it."
- Lippage (height difference at edge joints). "NAHB says lippage also known as overwood greater than ¹/16 inch is unacceptable," says Locke. "NOFMA says variation in height between edges or ends of prefinished flooring products exceeding ¹/32 inch is considered excessive. The corrective measure is to replace the product with flooring that was properly milled to tighter tolerances." Adds NOFMA technical-services director Mickey Moore, "Whoever heard of a floor that had one board that is ¹/16 inch higher than another board? You'll trip over it. Consumers complain of overwood that is 12 or 16 thousands of an inch."

NOFMA argues that builders can readily achieve NOFMA's tighter quality standards by taking reasonable care in the installation. The group's installation manual recommends that installers use moisture meters to check the moisture content of both the hardwood flooring and the subfloor it will be applied to before nailing the boards down. Flooring should measure between 6 percent and 8 percent moisture content at the time of installation, cautions NOFMA, while the subfloor moisture content should be within 4 percentage points of that. Cupping of ¹/₁₆ inch, says Moore, indicates that some unacceptably high moisture source below the floor has caused its bottom face to gain moisture and swell.

But Merrill says that incorporating NAHB's quality guidelines into a contract renders questions concerning such details — how the flooring is installed, how the work is supervised — irrelevant: The contract relieves the builder of any obligation to follow specific procedures or industry recommendations.

A contract referencing NAHB's guidelines also insulates the builder from any claims based on legal concepts like an implied warranty of merchantability or fitness for a particular purpose, says Merrill. "The contract states that if a dispute develops, the parties agree that they will first look to the current edition of the guidelines," he says. "If the dispute

is covered, the buyers agree to accept the guidelines as acceptable, and the builder agrees to bring the work up to the guideline in the way the guideline calls for."

As a "guideline" rather than a "standard," Merrill says, the NAHB document's creation is not governed by the strict legal requirements for a fair and open process that apply to American National Standards Institute (ANSI) or building-code development committees. Nevertheless, he notes, industry and trade groups outside NAHB are invited to provide input during the NAHB guidelines' two-year revision cycle.

"This is as neutral a thing as can be," he says. "Some

people are going to say 'This is borderline' — but, well, you are never going to keep all people happy."

Moore counters that NAHB consulted NOFMA 10 or 12 years ago for an earlier version of the document that was limited to remodeling work. "I gave some input, particularly about gaps and cups, and they saw fit not to include that," he says.

And he reiterates that, however the guidelines were compiled, he considers them inadequate: "If you built a whole house to these standards, it would never, ever sell." — *Ted Cushman*

Recycling Ordinances Target Construction

ith landfill space at a premium, construction and demolition debris — a significant source of waste — is starting to attract attention. How much trash are we talking about? The Construction Materials Recycling Association estimates that 325 million tons of C&D debris — including road and bridge products — were generated in 2005, of which 155 million tons of concrete and asphalt and 28 million tons of mixed C&D materials were recycled.

To increase the amount recycled and extend the useful life of existing landfills, many cities and states have passed or are considering laws that require contractors to use recycling facilities for some percentage of C&D debris.

A new Chicago ordinance, for instance, effective for permits issued after March 1, requires general and demolition contractors to recycle or reuse 25 percent of C&D debris. On January 1, 2007, that percentage will go up to 50 percent. Subject to the ordinance are new residential buildings with four or more units, new nonresidential buildings larger than 4,000 square feet, and building rehabilitation that requires a certificate of occupancy. Building demos costing less than \$10,000 are exempt, as are projects that require only a plumbing, electrical, or mechanical permit.

In California, a state law requiring cities to recycle 50

Residential activity is slowing for architects, but nonresidential work is growing, according to two surveys released by the American Institute of Architects. The fourth-quarter Home Design Survey shows that kitchen and bath renovations are going upscale, with higher-end products and more square footage, while demand for new luxury and first-time homes is softening. The Architecture Billing Index for January indicates that the nonresidential market is set to pick up any slack in the construction industry, as billings in that sector increased for the 12th consecutive month.

The tools, chandeliers, and posts that Thor Jeffrey Steven Laufer stole from Milwaukee-area construction sites during his December 2004 crime spree were just a cover to make the burglaries look "typical." So what was he really after? Doorknobs — dozens of them — to add to his personal collection. His obsession has landed him in prison; he was sentenced in February to three years in jail and could face up to 12 additional years for the thefts.

percent of all trash has been on the books since 2000, but it wasn't until last year that the state's Integrated Waste Management Board started enforcing it, according to the *San Diego Union-Tribune*. To meet the 50 percent requirement and to avoid fines of up to \$10,000 a day for noncompliance, California cities are passing ordinances that require builders to recycle half of their C&D debris. Several cities have already passed ordinances that apply to jobs valued at \$50,000 and higher, and the *Contra Costa Times* reports that others are expected to follow suit within the next few months.

The Massachusetts Department of Environmental Protection has opted for an

Company or Individual Rec	eiving Material(s):				
Facility N					
Contact or Individual N					
	dress:				
City, State					
Phone/Fax/Mobile/					
Circle Facility/Individual Ty *Facility Attendant Sign:		Salvager Landlil	Operator	End User	Other
* Signature required to Valida					
Signature required to varioa	ie receijit.				
Joh-Site Information:					
Pernut #: T					
Job-Site Address:					
Construction/Demolition Co	mpany or Individu	al Providing Material	(s) to Rece	ver:	
Company Name:					
Contact or Individual Name:					
Address:					
City, State, Zip:					
City, State, Zip: PhoneFay/Mobile/Page: Identification of Materials I	eft with Receiver (i Quantity by Weight, in		Circle how	s landfilled): receiving facility	
City, State, Zip: Phone/Fax/Mobile/Page:	Quantity by Weight, in pounds or	Cost (or payment, if applicable to the facility or individual	Circle how or indiv materials	receiving facility vidual will use received for each	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials (Mat [Recycle]	receiving facility vidual will use received for each erial Type Rease	Receive
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or	Cost (or payment, if applicable to the facility or individual	Circle how or indiv materials (Mat [Recycle] 5alvage	receiving facility idual will use received for each erial Type Reise Landfill	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials i Mai [Recycle] Salvage Recycle	receiving facility idual will use received for each erial Type Rease Landfill Reose	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials (Mat [Recycle] 5alvage	receiving facility idual will use received for each erial Type Reise Landfill	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials (Mat [Recycle] Solvage Recycle Salvage	receiving facility idual will use received for each erial Type Reuse Landfill Reuse Landfill	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials i Mai [Recycle] Salvage Recycle Salvage Recycle Salvage Recycle Salvage	receiving facility idual will use received for each erial Type Rease Landfill Rease Landfill Rease Landfill Rease Landfill Rease	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials i Mai [Recycle] Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage	receiving facility idual will use received for cache erial Type Rease Landfill Reuse Landfill Reuse Landfill Reuse Landfill Landfill Reuse Landfill	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials in Mail [Recycle] 56/vage Recycle 56/vage Recycle 56/vage Recycle 56/vage Recycle 56/vage	receiving facility infual will use received for each crial Type Reuse Landfill Reuse	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials i Mat [Recycle] Solvage Recycle Solvage Recycle Solvage Recycle Solvage Recycle Solvage Recycle Solvage Recycle Solvage	receiving facility idual will use received for cach erial Type Rense Landfill Reuse Landfill	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials i Mat [Recycle] Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle	receiving facility ididual will use received for each erial Type Reuse Landfill Reuse	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indivendent of the control of the con	receiving facility in the control of	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials i Mat [Recycle] Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle Salvage Recycle	receiving facility ididual will use received for each erial Type Reuse Landfill Reuse	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or indiv materials i Mai [Recycle] Salvage Recycle Recycle Salvage Recycle Recycle Salvage Recycle	receiving facility ridutal will use received for each received for	Receive or Picke
City, State, Zip: Phone/Fux/Mobile/Page; identification of Materials 1 Material Type	Quantity by Weight, in pounds or tons**	Cost (or payment, if applicable to the facility or individual receiving material)	Circle how or Indiv materials is Mall [Recycle] Salvage Recycle Recycle Recycl	receiving facility ididal will use received for each erial Type Reuse Landfill Reuse	Receive or Picke
City, State, Zip: Phone Fax/Mobile/Page: Identification of Materials I	Quantity by Weight, in pounds or tons:* 12 tons	Cost for payment, if applicable to the facility or individual receiving material NO (ma charge)	Circle how or indiv materials is Materials in Materials in Recycle Salvage Recycle Recycle Salvage Recycle Salvage Recycle Rec	receiving facility ridual will use received for cache relai Type Rene Landfill Reuse Landfill	Receive or Picke Up
City, State, Zip. Phone/Fav/Mobile/Page; Identification of Materials 1 Material Type Sample: Concrete	Quantity by Weight, in pounds or tons** 12 tons 12 tons 1-between volume and words & Recycling Special Control of the Contr	Cost for payment, if applicable to the facility or individual receiving materials 30 km charges 30 k	Circle how or indiv materials in Mat Recycle; Salvage Recycle Recycle Salvage Recycle	receiving facility diduct will use received for each erial Type Rese Landfill Beure Landfill Reuse Landfill coats Solid Waste	Receive or Picke Up

Created by the Central Contra Costa (Calif.) Solid Waste Authority, this receipt documents compliance with recycling ordinances.

overall disposal ban on certain recyclable materials, rather than mandating percentages. As of July 1, concrete, asphalt, wood, metals, and old corrugated containers will no longer be accepted at landfills and will need to go through a C&D recycling plant instead. Because the ban has been in the works for a number of years, numerous recycling facilities have already established a presence in the state.

According to *Construction & Demolition Recycling* magazine, recycling fees that are lower than landfill tipping fees have induced many Massachusetts builders to change job-site disposal practices, even before the law takes effect. — *Laurie Elden*

RECYCLING CONSTRUCTION	ON AND DEMOLITION WASTES
A Guide for Archit	ects and Contractors
A	rii 2008
Spor	world by:
Associated General Co	sciety of Architects etroctors of Messechusetts sent of Environmental Protection
Hitto S	apport from:
Armstrong World Industries ERRGO C&D Recycling	Commercial Paving and Recycling Or Oypsem Association looning Systems
	1
Pres	saved By:
	Recycling Network Principal Author

You can download this 57-page guide to planning a successful job-site recycling program from www.waste miser.com/ resources.html.

Taking on Termites

The termite's downfall might be, of all things, wood. After seeing one unharmed fence post in a line of termite-ravished posts, Australian scientists from the University of Western Sydney began investigating the tree the resistant post was made from, the false sandalwood. Results of their



experiments have been encouraging, and the researchers are working with Bio-Prospect Ltd. to create a commercial product from false sandalwood extracts that will be a natural alternative to the toxic chemicals currently used to fight termites.

In other termite news, rumors are swirling about Formosan termites in this spring's garden mulch. But according to entomologists, the mulch termites are a

hoax. The insects, they say, wouldn't survive the mulch-making process, packaging, and transportation. — *Jennifer Barnett*

Builders Get Right to Repair

isconsin became the 28th state to enact notice and opportunity to repair (NOR) legislation, when Governor Jim Doyle signed Senate Bill 488 in March. Under the state's new law, homeowners must notify the builder in writing of any alleged problems before filing a lawsuit. The builder then has 30 days to inspect the property and has the legal right to repair the defects within a reasonable amount of time or to offer monetary compensation.

If the builder declines the opportunity to repair, the homeowner may sue over the defect.

S

Bilingual Safety Video Helps Keep Workers *Seguro*



ccidents can happen to anyone in the construction industry, but they happen at a disproportionately high rate to workers who don't speak English. While Hispanics make up only 12 percent of the U.S. labor force, they account for more than 15 percent of workplace fatalities.

In part, this is a language problem: Many warnings and safety-training materials are available only in English. That's why I was very interested in a new Spanish-English safety DVD produced by NAHB in cooperation with OSHA.

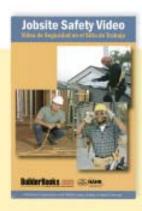
Based on past experience, however, I didn't expect to like it.

Most Spanish training tapes I've

viewed are stilted, literal translations from English that feel patronizing — but NAHB's *Video de Seguridad en el Sitio de Trabajo (Jobsite Safety Video)*, I discovered, is different. Obviously conceived, written, and narrated by native Spanish speakers, this DVD delves into job-site safety topics in an authoritative and eloquent manner.

Divided into 10 sections that work as independent units, it begins with personal-protection equipment like hard hats and gloves and then moves on to cover site hazards, scaffolding, fall protection, trenches, tools, vehicles, and fire prevention.

The English version (on the same DVD) follows the same narrative,



but it's clear that neither presentation is a translation — the producers took the trouble to create original scripts in each language. The result is possibly the best safety-training DVD currently available for the residential construction industry.

Produced in DVD format only, the *Jobsite Safety Video* can be purchased at www.BuilderBooks.com (800/223-2665); the cost is \$29.95 for NAHB members and \$49.95 for nonmembers. — *Fernando Pagés Ruiz*