

# In the News

## Chinese Drywall Implicated in Sick-Building Syndrome

**D**rywall imported from China may be corroding copper pipes and electrical wiring in dozens of Florida homes and giving their inhabitants chronic respiratory problems, say state officials. The problem first surfaced last summer, when public health workers in Sarasota County began looking into complaints of foul odors and failing air conditioners in a handful of houses built between 2004 and 2006. The initial inquiry quickly focused on the homes' drywall, which appeared to be emitting sulfur-based gases that interacted with the copper in air-conditioner evaporator coils.

Most drywall used in the U.S. is domestically produced. But during the construction boom that followed Hurricanes Wilma and Katrina, when drywall prices spiked and supplies were scarce, suppliers began turning to sources in China and Mexico to meet demand. In 2006 and 2007, demand for gypsum board in the U.S. peaked at 65.7 billion square feet, with as much as 300 million square feet imported from China, says the Gypsum Association, a trade group representing North American gypsum board manufacturers. About 20 percent of that imported drywall was produced by Knauf Plasterboard Tianjin Co. (KPT), a Chinese subsidiary of the German company Knauf International. Most of KPT's drywall was shipped to Miami, with additional amounts sent to New Orleans and Tampa.

**The focus narrows.** Now KPT finds itself at the center of the Florida case — the target of a number of state and private investigators and a major defendant in a recent class-action lawsuit brought by owners of affected homes. The company claims it's been singled out only because its drywall — unlike that of other Chinese manufacturers — is easily identifiable. (KPT is one of the few Chinese companies to brand its products). And though the company acknowledges that it began receiving complaints in 2006 about a sulfur smell in drywall shipped to South Florida, it says it responded quickly by switching mines and installing a gas monitoring system.

A toxicologist hired by the company, Philip Goad, found low levels of carbon disulfide and carbonyl sulfide in air samples taken from several of the affected homes. But Goad says the chemical concentrations were well below federal and state health guidelines and "hundreds of times" lower than levels shown to cause harm in experimental studies. He suggested in his report that iron disulfide — a naturally occurring mineral discovered in a laboratory analysis of drywall from KPT and at least one other Chinese manufacturer — may be the source of the sulfur-containing compounds.

■ A West Virginia builder is being sued by more than 100 current and former homeowners for installing nonfunctional radon-removal systems. Suits filed against Richmond American Homes of West Virginia claim that the company put in fake systems or intentionally installed systems incorrectly. In some cases, toilet drains were mislabeled as radon vents; in others, the PVC vent system was installed after the basement slab was poured, making the system inoperable. The homes were built in a high-radon area where radon-removal systems are required by code.

■ Construction workers performing dangerous jobs like inspecting high-rises or underwater bridge piers may soon be replaced by robots. Students at Virginia Tech have designed a trio of serpentine 3-foot-long robots that can wrap themselves around a pole or beam in a helical shape, then roll up or down by twisting their bodies. Faculty advisor Dennis Hong calls the prize-winning robots "really wicked cool" and predicts that they will serve as a practical inspection tool for construction sites.

■ The Consumer Product Safety Commission has issued notice that two electrical how-to books produced by Taunton Press have been voluntarily recalled because of faulty wiring instructions. *Wiring a House* (third edition) and *Wiring Complete: Expert Advice From Start to Finish*, both published last year, contain several errors in their technical diagrams that could lead to incorrect installations or repairs of electrical wiring, says the CPSC. Owners of the book are advised to return them to wherever they were purchased for a refund.

## In the News

**Charges of dirty manufacturing.** Plaintiffs in the class-action suit — filed in January in U.S. District Court in Fort Myers — offer a different explanation. They allege that KPT used fly ash, a waste material from scrubbers on coal-fired power plants, in its drywall manufacturing process. According to the suit, fly ash can combine with moisture to form sulfuric acid potent enough to corrode copper tubing and electrical wiring. As of press date, KPT hadn't responded to those allegations, but says that it is continuing its own investigation.

**Assessing the damage.** At least 80 of the affected homes in Florida were constructed by Lennar Homes, which has also filed suit — against not only KPT but also Taishan Gypsum, China's largest gypsum-board manufacturer, and several Florida drywall suppliers and installers. The Miami-based builder also continues to conduct air sampling in homes and developments suspected of containing the defective drywall; in some cases the company has assumed the cost of relocating homeowners while it replaces the drywall and affected plumbing, wiring, and air-conditioning units.

Even as Lennar and other builders attempt to repair the damage and struggle with questions of liability, state and federal health officials — as well as environmental consultants hired by Lennar, KPT, and other interested parties — are trying to determine just how much of a health risk the gases pose. Many homeowners have complained of sore throats, headaches, and nosebleeds. The Florida Department of Health — whose investigation is ongoing — has not commented on the findings of either Lennar or KPT, both of whom contend that the drywall poses no health risk at all.

**Tip of the iceberg?** Just how widespread the problem is remains unclear. So far, documented cases are confined to South Florida and a few builders, but some investigators have warned that hundreds of homes built by a dozen or more builders may contain the defective drywall. If allegations in the class action lawsuit are correct, as many as 2,000 South Florida homes could be affected, and the problem could be spreading beyond the state's boundaries. The EPA is looking into reports of similar problems in Virginia Beach, Va. And America's Watchdog, a consumer advocacy group, reports that defective Chinese drywall has been found in 12 other states, including Texas, Louisiana, and Arizona. — *Andrew Wormer*

■ The buzzword in building circles may be green, but a recent report by the Council for Environmental Cooperation found that only 0.3 percent of new residential construction and 2 percent of nonresidential construction actually meet current U.S. Green Building Council standards. This is far short of the 25 percent goal that the organization set for its LEED certification program for 2007.

■ “Storm-chasers” looking to make a quick buck off desperate homeowners after a weather disaster should heed the example of Clay West of Lumberton, Texas. Earlier this year West was fined \$30,000 and ordered to stop working after the state's Residential Construction Commission received complaints that he failed to properly register as a builder and wouldn't respond to complaints about substandard work. West isn't alone: Since Hurricane Ike hit the Gulf Coast last September, the commission has filed 248 similar notices of violation against storm-chasers.

■ San Francisco construction workers are disguising their familiar bright-blue portable toilets in an attempt to foil arsonists who have set at least 20 of the outhouses on fire since last November. The attacks have caused an estimated \$50,000 in property damage, say city fire officials.

■ Topping Lake Superior State University's 34th annual list of words to be banished from the Queen's English is “green.” Along with “carbon footprint,” green and all of its variables — going green, building green, greening, and so forth — beat out such contenders as “maverick,” “bailout,” and “Wall Street/Main Street” for most egregious misuse, overuse, and general overall uselessness.