

Defective Thinking

Quality, as defined by builders and homeowners, is too often in the eye of the beholder.

By:

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Credit: Jim Henderson/Getty Images

The 94 residents of Home Town, a three-year-old community in Richmond Hills, Texas, were mostly satisfied with their townhouses until about a year ago, when signs of deterioration—fences falling down, paint peeling off exterior trim, leaking roofs—began to surface.

The community's HOA has since spent \$180,000 for repairs, paid for out of a reserve fund built up from the \$159 per month maintenance fee the builder, [Pasquinelli & Portrait Homes](#), charged each homeowner before turning over the community to the HOA two years ago. What really frustrated Bill Tidwell, the association's president, was his inability to connect directly with the builder about these problems, much less get redress, after Illinois-based Pasquinelli suspended its building and selling in Texas. (In response, the builder's spokesman Jonathan Dedman gave this reporter his phone number to pass along to the HOA.)

Tidwell's experience has left him with a bad feeling about the housing industry. When it comes to quality control, he characterizes home building as a "wasteland." That sentiment is shared by legions of other homeowners who express their anger about shoddy workmanship through blogs and other media. It's easy to get the impression that, despite builder efforts during the last decade to upgrade their construction quality, bankruptcies, abandoned subdivisions, and mistakes made during the fast-paced boom have set the industry back.

Debates about quality construction, though, are like arguments over health care; different groups, looking at the same facts, draw wildly different conclusions. On one side are homeowners, and even some construction inspectors, who are absolutely convinced that quality took a major hit during the last housing boom. They point to the preponderance of evidence on the Internet, the platform of choice for homeowners voicing any and all complaints about construction defects, whether minor or major, legitimate or irrational. Photographic evidence is regularly attached.

Builders, on the other side of the debate, often make reports of defects sound like figments of homeowners' imaginations. Most insist that their homes are well-built, and that the pace of construction has little to do with the quality of the finished product. They also contend that many publicly aired complaints involve easily fixable problems that, in some cases, are actually the homeowner's responsibility.

To be sure, the wear and tear on a house are going to cause cosmetic and even structural degradation, which would be minimized if owners maintained their houses better. Though builders provide buyers with manuals on how to care for their new homes, the advice is often ignored. Builders also lay blame for homeowners' heightened agitation about construction defects at the feet of plaintiffs' attorneys, trawling for cases and insurance money.



Roof and siding protection

Credit: Jim Henderson/Getty Images

The one thing builders can't dispute is that today's buyers have zero tolerance for defects. If anything else they buy is defective—an iPod, a refrigerator, a carpet—they can return it. So owners harbor the same attitude about their houses; anything that goes wrong is the builder's fault.

Builders looking to head off public confrontations must inject "a culture of quality" into their construction practices, one that stays with the company through booms and busts. That begins with home designs that minimize the probability of defects, holding trades and superintendents accountable, inspecting their work rigorously, and—most important—responding quickly to homeowner complaints. "Owners will accept 'no' for an answer, but they won't accept being ignored," observes Shawn Morris, a partner with the San Diego firm [Morris, Sullivan & Lemkul](#), which represents builders in construction defect litigation.

A ZERO-DEFECT SOCIETY

Ask builders about their construction quality, and they invariably point toward rising referral rates and customer satisfaction scores (see "The Ratings Game," www.builderonline.com/construction/the-ratings-game.aspx). Homeowner surveys indisputably have pushed builders toward better construction practices and complaint resolution. But surveys have one major shortcoming—most homeowners aren't engineers. Their quality assessments tend to focus on "comfort" issues, such as heating and cooling controls, or minor flaws, such as cracked tiles or nicked moldings.

Appearances can really matter to buyers. In the mid-1990s, [Fieldstone Communities](#) surveyed 11,000 homeowners, and the top quality component was jobsite cleanliness, recalls Rick Peters, Fieldstone's former director of construction, who now evaluates distressed properties for banks.

"Customer expectations have changed dramatically," says H. Alan Mooney, president of Portland, Maine-based home-inspection provider [Criterium Engineers](#), "and in my estimation, unreasonably." He notes that "shelter" has become "lifestyle," which for many owners is about "what my friends think when they see my house. That's an impossible standard for builders to live up to." Case in point: A Criterium inspector recently went through a 1,400-square-foot condo in Denver. The owner had a list of 74 items he was upset about, "90 percent of which were purely cosmetic," says Mooney.

Some of the heightened defect concerns may be rooted in consumers' deep-seated worries that they bought lemons during the housing market's go-go years. After all, observes Brad Oberg, a partner with Pittsburgh-based inspection consultant [Build IQ](#), "The boom was about finding ways to build a 120-day house in 100 days."

Every builder can recite the key components to a quality home-building program. Yet homes keep getting built and sold with haphazardly installed windows and flashing, or without barrier systems, practically inviting water penetration and retention. It's one thing to know how to do something; it's quite another to execute it flawlessly. Haste and sloppiness can lead to problems, especially if oversight is lax or nonexistent.



Framing deficiencies

Credit: Jim Henderson/Getty Images

John Robinson, who owns [Wood & Clay Fine Homes](#), a custom builder in Gilford, N.H., says he visits his jobsites two or three times a week, "just to make sure the flashing is done right." That's doubly important now that he's applying spray-foam insulation. He doesn't want water getting trapped behind walls and siding.

Some builders devote whole teams to oversight. Over the past decade, [Walsh Construction](#), a general contractor in Portland, Ore., specializing in low-income multifamily housing, has created a quality assurance team staffed by five architects. They work with people whom Marty Houston, Walsh's quality director, refers to as "skin doctors," superintendents who oversee all aspects of a building's envelope. In its effort to build houses as a system, Walsh instructs subs to install housewrap around exteriors before they cut holes for windows and doors, for one thing, to ensure that components are sealed properly.

But quality, as defined by systematic construction practices, is still alien to many builders. "Unfortunately, we're in an industry that tests components as components," says Jim Petersen, director of research and development for [PulteGroup](#), the industry's largest builder. Four years ago, Pulte addressed water intrusion blowups by re-evaluating everything from drainage plans to how contractors applied sealant. "We don't want to let the homeowner be the first person to system-test our house."



WASTING AWAY: Unfinished communities are petri dishes for construction malfunctions. At this project in California, water gathered in

the gutter line as a result of incomplete drainage facilities. Raw materials sat for around 22 months; and wind, sunlight, and blowing sand contributed to surface damage and deterioration of the exterior lathing and roof paper as well as the windows, doors, and glass in the window openings.

Credit: R.E. Peters Co.

LAX LABOR

Builders have learned the hard way that turning a blind eye and leaving construction quality solely in the hands of contractors and their subs is unwise. They need to take a more active role, starting with quality management. [Bozzuto & Associates](#), based in Greenbelt, Md., assigns a warranty person to each home start. The person serves as a de facto inspector during construction. One of eight senior-level executives inspects every completed house before it's delivered. When builders sustain this level of control, "I don't think there's a limit to the number of homes you can build," says Bozzuto's president Tom Baum.

Given that so many builders blame defects on the technical ineptitude of their subs, the importance of supervision and inspection can't be overstated. Peters says he's seen it all—plumbing pipes incorrectly laid out under slabs, drywall installed over framing with no insulation, room and window sizes that don't match blueprints, homes on cul de sacs that encroach on setback lines. He's even encountered houses staged out of sequence so "they were ready for carpeting but the subdrains and sewer systems hadn't been installed."

Tim Carter, a former contractor who writes an ["Ask The Builder" column](#) syndicated in 60 newspapers in 45 states, says "the common thread is the builder didn't know what he was doing." Carter, whose website gets 45,000 unique daily visitors, believes that the bottom line on defects is that too many products and components are installed incorrectly because subs haven't been taught otherwise.

A builder's potential liability is magnified at certain key points during construction, such as when windows and flashing are installed. That's where [John Wieland Homes and Neighborhoods](#), based in Smyrna, Ga., concentrates its training. "We'll repeat it every quarter if we have to," says Kelly Rulis, vice president of customer relations. Wieland's quality assurance team does regular construction inspections and subjects every completed house to a 650-point checklist. Putting money where its mouth is, the builder ties employee bonuses to quality goals. It also tracks every warranty invoice it pays to see if problems with trade partners need to be rectified. Wieland's confidence about its quality control is manifested in its 5-year/20-year buyer warranty.

PRODUCT BREAKDOWNS

An 11-point quality assurance regimen has helped Houston-based [David Weekley Homes](#) achieve its highest customer satisfaction ratings and its lowest warranty costs per home in history. The company is also enjoying its lowest level of customer "breaks"—the number of calls a homeowner needs to make before a problem is resolved. Mike Humphrey, Weekley's vice president of operations, says the process begins with hiring the right people and training them assiduously; developing quality teams comprised of warranty, sales, and project managers, who connect with contractors and customers during construction; using third-party inspectors to check their work; and keeping in touch with homeowners for at least a year after closing. Weekley also runs a "Partners of Choice" vendor evaluation program that has helped the company avoid the product-liability maelstroms that suck other builders into costly lawsuits.

The Chinese drywall fiasco accentuates what happens when builders and suppliers let costs eclipse quality control. "During the boom, the larger builders were hiring purchasing managers out of college who were only interested in the lowest price," observes Glenn Burgess, founder and CEO of Weekley's third-party inspection provider [Burgess Construction Consultants](#) in Richardson, Texas.

And drywall isn't the only product category giving builders migraines lately. This year alone, class-action suits have been filed against [Trex](#) and [Pella's](#) Viking division. Last December, Pulte's Del Webb division paid \$27.2 million to settle a class action complaint in Las Vegas over the installation of defective plumbing in 4,200 homes.

Petersen, though, sees a silver lining in that calamity, because his company “proactively” alerted homeowners about the product defect and replaced the plumbing before it failed in most homes.

QUALITY IMPERATIVE

Despite high-profile failures, Steve Davis, [Meritage Homes'](#) COO, believes new homes still have a “quality advantage” over resales and foreclosures. Mooney, the forensic engineer, says that builders in recent years definitely have raised their standards for construction and customer relations. Burgess even sees renewed “passion” among builders about their profession.

But will this ardor for quality live into the next housing upturn? Stan Luhr, president of the quality assurance firm [Quality Built](#) in San Diego, thinks so. He anticipates that durability and comfort will be “big issues” for future home buyers. Perhaps most significantly, Luhr expects demand for improved energy efficiency, along with third-party testing, to drive builders toward better construction practices.

Meanwhile, builders are stepping up their education of owners about their maintenance responsibilities. Bozzuto annually dispatches inspection teams to completed condo projects to identify maintenance issues for HOAs. Bozzuto’s actions aren’t entirely altruistic. “It doesn’t take much to create a lawsuit,” says Baum.



Exterior cladding

Credit: Jim Henderson/Getty Images

Recent right-to-repair laws haven’t stopped construction defect litigation. In California, law firms have targeted [Granville Homes'](#) communities in Fresno every year for the past decade. “The way we build homes hasn’t changed, but the way we communicate with buyers has,” says Granville’s president Darius Assemi. The company now regularly informs recent buyers about “what they will get in their mailboxes” from lawyers, mortgage companies, landscapers, and remodelers, “many of which don’t have good intentions.”

In August, Granville Homes was ensnared in a class action at one community over alleged structural defects. Eighteen owners out of 600 in this nine-year-old neighborhood joined the action. But 15 subsequently dropped out, says Assemi, after Granville contacted them and fixed what were mostly “cosmetic” problems, such as grout cracks or leaning fence posts. Still, the proliferation of this type of litigation has caused insurers to boost Granville’s premiums to \$10,000 per house.

Regardless of the threat of legal action, it’s in the economic interest of builders to construct better, more durable homes, and be more responsive to homeowner complaints. “I vote for what’s happening now [in quality control] carrying over” to the next cycle, says Oberg of Build IQ. “Builders can’t afford to be doing a lot of rework.”

SHORT CUTS

Small construction oversights can lead to big problems. *Builder asked two leading third-party inspectors—Quality Built and Build IQ/Ibacos Marketing—to identify the most common construction deficiencies from the hundreds of thousands of homes in their respective databases. In no particular order, these are the ones they cited.*

1. **Exterior cladding:** Exposure problems can stem from torn and missing water-resistive barriers, missing flashing at windows and other penetrations, reverse laps that allow water to run behind siding and flashing, and incomplete waterproofing at horizontal shelves and column caps.
2. **Plumbing:** Common mistakes include plastic water piping that's improperly installed, or placed too close to hot flues and lighting. Piping sometimes is inadequately supported, and sewer lines inadequately sloped. Underground sewer pipes have been found to be improperly shaded or protected.
3. **Interiors:** Problems include handrails and guardrails that aren't installed to code, tiled shower pans that aren't waterproof at complex corners, and insufficient slope for waterproof membranes.
4. **Foundations:** Quality Built has reported missing reinforcement steel and interior footings, improperly installed structural bolts, and misplaced post-tension cables.
5. **Inadequate grade separation:** Build IQ points out that this defect allows water to wick through stone, brick, and stucco exteriors and damage the structural framing they are attached to.
6. **HVAC:** Efficiency is undermined by excessive bends in flex ducts, which themselves are not always mechanically fastened to registers. Efficiency also suffers when ducting is restrained or overcompressed, or when exterior refrigerant insulation is left unprotected. Some installers still overlook the importance of adequate return air, which can contribute to a host of comfort and performance issues.
7. **Thermal:** Insulation is missing in some houses, or doesn't completely fill the cavity. The inspectors found insulation that wasn't in contact with interior air barriers and vapor retarders that were missing or incomplete.
8. **Life safety:** Quality Built has spotted missing fire blocking, the improper use of insulation as a fireblock, missing fire pads at electrical outlets, and missing fire caulking at rated assemblies. Inside the house, exhaust contaminants from range hoods and microwaves sometimes are not ducted to exhaust to the outside.
9. **Roof and siding protection:** Builders say leaks caused by defective shingles and tiles are rare. But both inspectors found installation snafus, such as loose tiles, incomplete underlayment, and no kick-out flashing at the bottom of roof rakes, which allows water to run directly behind the siding.
10. **Framing:** Deficiencies include incomplete shear panels as well as the absence of support posts, structural hardware, shear transfer nailing, and blocking at waterproofing and flashings.

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