



NATION'S BUILDING NEWS

The Official Online Weekly Newspaper of NAHB

Sponsored by McGraw-Hill Construction and Fannie Mae

Search NBN... 

Front Page [more](#)

- **Research Weighs Consumer Preferences in Soft Market**
- Builders in Kansas City Bust Housing Myths in the News Media
- Case Says Housing Prices 'Flat' in Most Local Markets

Layouts for Living [more](#)

- Floor Plans: BALA Home — Actually, Cottage — of the Year

Coast to Coast [more](#)

- **Affluent Are Also Losing Homes**

Politics & Government Affairs [more](#)

- **Congress, White House Step Up Efforts to Rescue Economy**
- NAHB Steps Up Call for GSE Reform After Syron Remarks
- Fund Helps Builders Fight Battles in Arizona and Florida

Economics & Finance [more](#)

- **Builder Confidence Unchanged in March**
- Strong Growth Projected for Cement Demand Through 2030
- NAHB Members Urged to Complete Economic Data Census Form
- Useful Links to Monitor Economic and Housing Trends
-

Tips and Techniques [more](#)

- **Builders' Tip: How to Cope-Cut Quarter-Round Trim**

Building Quality [more](#)

- **Five Common Construction Mistakes Undermine Sales**
- KB Home First to Earn National Housing Quality Certification
- National Housing Quality Award Entries Due April 30

Business Management [more](#)

- **Making Money Starts With a Good Business Plan**

Related Articles

- KB Home First to Earn National Housing Quality Certification
- National Housing Quality Award Entries Due April 30

Five Common Construction Mistakes Undermine Sales

Emphasizing practical, cost-effective building solutions that will help home builders sell more homes, the [Partnership for Advancing Technology in Housing \(PATH\)](#) has identified five common construction mistakes worth noting.

"The trim is on, the site cleaned up. The tools are packed away. Few feelings are more rewarding than stepping back and looking at a job well-done. But is that job really done well? Your crew may have fumbled some building basics along the way without even knowing it," PATH writes in the current issue of [Quality Matters](#), the e-newsletter of the [NAHB Research Center's National Housing Quality Program](#).

PATH cites these common mistakes:

Ductwork

The conventional method: Run ductwork through an unconditioned attic.

Job well-done: Either run ducts in conditioned space or insulate them really well in unconditioned space.

According to the NAHB Research Center, placing ductwork in conditioned space can reduce heating and cooling loads by 20% to 35%. It also reduces overall ductwork length because supply register locations are more flexible. Wrap ductwork in conditioned spaces with R-4 insulation to prevent condensation.

Joe Gregory, purchasing manager for [Bob Ward Companies](#), recently built the near zero energy [Maximum Efficiency Home](#) series in Baltimore. He ran a duct-blast test to show his crew how leaky the ducts were. Now he says his subcontractors understand the level of work required to install ducts with 4% to 5% leakage rates, instead of the more typical 10%.

Floor Plan Design

The conventional method: Design the floor plan with no concern for site orientation.

Job well-done: Orient the home to take advantage of natural day lighting — and some free solar heating in the winter.

Helping Those Who House Am



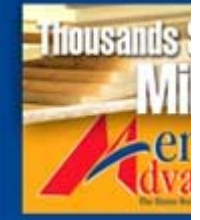
McGraw-Hill Construction Sweets

3D Models for Building Products

Search or Browse for Building Products

Get 3D Models for the Sweets Net

Find product catalog leading manufacturers Sweets Network!



GM NAHB \$500 F

Save Up to 30% on Shipping

Introducing the He Collection

- Generation Y Is Ready to Buy, Technology Will Help Sell Them

50+ Housing [more](#)

- Attend 50+ Symposium in New Orleans on May 19-21
- Help Rebuild New Orleans at 50+ Housing Symposium

Multifamily Housing [more](#)

- Builder Confidence in Condo Market Erodes Further

Small Builders & Remodelers [more](#)

- Remodelers Have a Passion for Community Service
- NAHB Remodeling Channel Provides Valuable Remodeling Info

Building Systems [more](#)

- Systems-Built Approach Reduces Wasted Materials
- 'Lean' Factory Home Building Boosts Market Share

Home Technology [more](#)

- Five Things Builders Should Know About Home Technology

Education [more](#)

- Boost Business Skills During National Designation Month
- Education Calendar

Legal Issues [more](#)

- S.C. Builders Buoyed by Liability Insurance Ruling

Labor [more](#)

- Team Builders Interns Expand Horizons at Builders' Show

Building Products [more](#)

- Energy Star Honors Whirlpool for Energy-Saving Appliances

NAHB on TV [more](#)

- NAHB-Produced Programs on DIY, Fine Living and HGTV

Endowment [more](#)

- Willis Homes Honored for Rebuilding Homeless Shelter
- Applications for Centex 'Build Your Future' Scholarships Due April 7
- HBAs: Challenge/Build/Grow Proposals Due by March 28

Association News [more](#)

- Renew, Join NAHB PRx by April 15 for Latest Industry PR Alerts

The benefits of natural lighting have been well-documented: people work better, students learn better and people are healthier in general. And designing a day-lit home needn't add expense to the project.

In all but the hottest southern climates, orient the building so the long axis runs east to west. Place a row of windows along the south wall for winter gain. Size roof overhangs to block the summer sun, but let in light and warmth from the winter sun. Cluster the main living areas along the south wall and mechanical and storage areas to the north.

Skylights are energy hogs that can make a room uncomfortably hot. Try sun tubes, or tubular skylights, to bring light into dark corners, interior rooms or even the basement without as much energy loss.

Building Wrap

The conventional method: Put building wrap up as quickly as possible, and don't worry about tape or careful installation.

Job well-done: Follow the manufacturer's instructions.

Getting this wrong risks mold and mildew, rotting window jams and drafty walls and floors.

To get it right, overlap all seams at least 6 inches in shingle fashion so they shed water. Seal with code-approved contractor sheathing tape to make a weather-tight bond. Use proper fasteners (plastic cap nails are the best), and make inverted Y cuts (also called modified I cuts) to wrap window openings.

HVAC

The conventional method: Size HVAC with a rule-of-thumb calculation.

Job well-done: Use Manual J to properly size the HVAC system.

With today's tighter building envelopes, following the rule of thumb often results in oversized systems that cost more upfront and cost more to operate over time. Oversized systems also don't dehumidify as well as properly sized systems because the run time is shorter, so occupants are actually paying more for discomfort.

Manual J calculations from the [Air Conditioning Contractors of America](#) (ACCA) take construction methods into account to accurately size a system. Following Manual J will take one or two hours per house and less when working with several similar houses. This added expense is almost always recouped immediately because a smaller system can be purchased.

Insulation

The conventional method: Install the minimum required amount of insulation as quickly as possible.

Job well-done: Follow the [U.S. Department of Energy's](#) recommended insulation levels and installation guidelines.

Using DOE's recommended insulation levels and installation guidelines at www.ornl.gov makes homes more comfortable, a little quieter and much less expensive to heat and cool.

How insulation is installed is just as important as how much is put in. Compression reduces insulation R-value. Research by the [Oak](#)

- Drive Away With a Shiny New \$500 GM Private Offer
- New: Register Online for Spokesperson Training
- UPS Offers Up to 30% Discount to NAHB Members on Shipping
- Introducing the Hertz Green Collection. Reserve and Conserve.
- Calendar of Events

NAHB Career Center

more 

- Search, Post Construction-Related Jobs and Opportunities Online

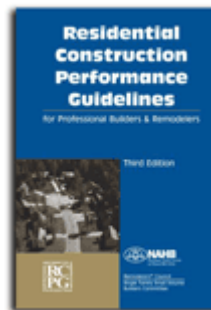
Ridge National Laboratory shows that wall insulation that settles to create even a 5% gap reduces the effective R-value of that wall up to 50%.

Batt insulation needs to fit snugly into stud cavities and around mechanical and electrical boxes. In oddly shaped spaces or areas with notable obstructions, loose fill like blown-in cellulose may be most effective. But at least cut in the insulation to fit rather than skipping spaces or compressing it over or under boxes, piping and wiring. Spray foam costs more than most other insulations, but because it air seals while it insulates, the cost of air sealing can be eliminated and the nooks and crannies can be more easily insulated.

Insulate pipes to conserve water-heating energy, and insulate recessed can lights that penetrate the building envelope.

Deliver High-Performance Homes With 'Residential Construction Performance Guidelines: Contractor's Reference, 3rd Edition'

"Residential Construction Performance Guidelines," available from BuilderBooks.com, is the industry's most widely-accepted reference on how homes should perform.



The fully revised and updated reference was created specially for builders and remodelers to help successfully manage customer expectations — and protect the bottom line — while delivering high-performance homes.

The reference includes 300 guidelines in 12 major construction categories, new remodeling-specific content, guidance on how to take critical measurements and more.

To view or purchase this publication online, [click here](#), or call 800-223-2665.

NBN Tools

-  E-mail This Page
-  Print This Article
-  Subscribe to NBN
-  E-mail Editor
-  Print ALL Articles
-  Manage Your Subscription

To unsubscribe or to manage your subscription, [CLICK HERE](#).

Nation's Building News Online is produced and distributed by the National Association of Home Builders. ©2008.

NATION'S
BUILDING