

need to build tighter and tighter as the code gurus crank us towards E100.

My favourite low-leak construction option is structural insulated panels (SIPs). They go up faster than studs, and even with ordinary levels of workmanship it's easy to get ACH numbers down near 1.0. In fact, SIPs-built homes are so naturally tight that they're exempt from the kind of blower door testing normally required for other structural systems in homes aiming for Energy Star approval. Confused by differing home rating systems? See "Energide for New Houses vs. Energy Star vs. R2000" at the bottom of this page.



Windows and Doors

Energy Star qualification is one of the easiest ways to determine if a window, exterior door or skylight makes sense for E80 homes. Energy Star requirements vary for different climatic regions of Canada, with insulation values ranging from a minimum of R-2.9 to R-4.0. And ultimately, this is mostly about glass.

"The major determining factor that influences energy efficiency in a window is the glass chosen by the customer," explains Sante Cigana, vice president of JELD-WEN, a Canadian manufacturer of windows and doors. "When you compare the efficiency of a plain dual pane window to a tripane window with two coats of low-e glass and argon gas, the difference is dramatic. You can go from an R-Value of 2.0 to about 8.5."

Anything as complicated as home building is bound to generate differences of opinion, and there are plenty of concerns about whether the new E80 code requirements will actually deliver the kind of results they're supposed to. While the technical arguments go back and forth, one thing is for sure: as time goes on, you'll be required to build greener than you do now. And while these requirements will apply to all builders where you live, the more informed you are about giving your clients the kind of efficient homes they want, the more likely you are to keep on getting the best kinds of jobs. **CC**

Energide for New Houses vs. Energy Star vs. R2000

Although all three leading home rating systems aim to influence the design and construction of new houses, they're not the same. The Energide for New Homes program was created by Natural Resources Canada after the closure of the Energide for Houses campaign in 2005. Energide for New Houses rates homes on a scale, with the Energide 80 level as the basis for up-and-coming code changes you'll need to build to now or soon.

R2000 is a minimum standard that has been evolving since it came on the scene in 1982, created through a partnership between Natural Resources Canada and the Canadian Home Builder's Association. Each R2000 home must pass testing and verification procedures and can only be built by specially licensed builders. Construction materials must also meet minimum requirements for environmental responsibility.

The Energy Star for Homes Program originally came from the U.S., and has been evolving since 1995. Although code requirements you'll be building to don't necessarily mean following Energy Star parameters, it's not unusual for windows, doors and mechanical equipment to carry an Energy Star rating on their own. This is a handy indicator of home building materials and components that dovetail with E80-based code requirements. —SM

PRODUCT FILE

times more gripping power than traditional locking pliers, with no slipping or stripping. According to IRWIN, the slotted geometry of the VISE-GRIP CR pliers exponentially increases torquing power, and thus clamping power. These pliers also feature a one-handed, triggerless release and moulded handles for maximum comfort. www.irwin.com.

Owens Corning fiberglass

Owens Corning recently launched EcoTouch PINK FIBERGLAS insulation. According to the company, EcoTouch insulation combines the thermal and acoustical performance characteristics of the original PINK FIBERGLAS insulation



with newly developed PureFiber technology. The result is a formaldehyde-free insulation made with natural ingredients and over 70 per cent recycled content that is soft, easy to install and creates less dust than other fiberglass insulation products. EcoTouch insulation is third-party GREENGUARD Indoor Air Quality certified.

www.owenscorning.ca

Wooster paint bucket

The Wooster Brush Company has introduced a paint bucket designed to accommodate wider roller frames. The Wide Boy bucket easily accommodates 12-, 14- and 18-inch roller frames commonly used for larger paint applications. The Wide Boy bucket has a five-gallon working capacity, and the sturdy, no-tip design eliminates costly and messy spills. The angled bottom