

# EXIT STRATEGY



For safety's sake, be sure to add an egress window to a basement bedroom.

## QUICK DRAINING, EASY ESCAPE

Any well-constructed egress window will be lined with about 4 inches of gravel to direct water into the soil below so it doesn't pool at the bottom. A built-in step allows for a speedy escape in this 40-inch deep timber-framed window well.

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**T**hinking about turning the unused space in your basement into an extra bedroom? If you're building new or about to renovate, don't forget to include an egress window in your plans. These are designed to provide a safe way out in an emergency and, in most states and provinces, they're required by code.

"If you finish a basement and don't

have an egress window, you can't claim it as a legal bedroom," says Jim Dischner, owner of a Denver-based window company. "You're basically throwing your money away on the renovation if you planned on increasing the house's value. And you're risking someone's life if you go ahead and use it like that anyway." According to the National Fire Protection Association, as many as 130 people



die and 940 are injured in basement residential fires every year.

The extra cost is often the reason why homeowners pass on installing these windows. "They think they can save money," says Dischner. "But if you and your neighbor are selling your houses, and yours has a properly installed egress window, you'll get the better return on your investment."

An egress window can also provide extra ventilation and brighten a dank, dark basement. Its most important function, however, is to provide a safe way out. If there's a fire, it can be difficult to escape from a basement without an egress window.

Essentially the window must be big enough for a firefighter, with his or her gear, or an adult and a small child, to escape through. The International Residential Code (IRC) requires the installed window (often a casement opening) be at least 20 inches wide and 24 inches high, and the bottom of the opening can be no more than 44 inches from the floor. Windows must offer 5.7 square feet of free and clear space when they're open and should be able to be operated from the inside without a key. The window well must also have a permanent ladder or steps for climbing out if it exceeds 44 inches in depth. Furthermore, the opened window can't block these steps. Municipalities can have extra requirements beyond these, including getting an engineer's report or installing a cover over the well.

Before work starts, have a contractor inspect your home's exterior for signs of water damage and leaks, and make sure the gutters are routing water away from the house. If the house has any flooding or drainage issues, it's a good idea to get an engineer or contractor in to resolve them first, as the window creates a new low place for water to pool. And the more obstacles outside, the more complicated installing the windows will be. "I always look outside first," says Dischner. "Even after the utilities have marked their lines, surprises do still come up that could stop us, like buried gas or electric lines that weren't noted."

Surprisingly, "newer homes can be more of a challenge because of their



**TIMBER FRAMED** This traditional frame (covered by a see-through plastic shield) is a homeowner favorite, but it's important the installer use pressure-treated wood to avoid rotting.

poured concrete foundations versus the more accessible concrete-block foundations found in older homes," says Don Weld, owner of a Minneapolis-based window company. Cutting out a few concrete blocks for an egress

window will be less time-consuming and easier than than making a hole in a poured concrete foundation, which often requires an industrial-sized concrete saw. Both situations can pose structural problems, though, so your

**Egress well covers and grates can keep out rain, snow and debris, while still letting in sunshine to the space below. You should be able to open them from within without any special tools.**





**MASONRY** Window wells made of concrete block, natural stone or precast concrete are the strongest and most durable option—best for cold-weather areas where soil heaving is common.



**STEEL** This galvanized material comes in one preformed piece, up to 60 inches high, which cuts down on installation costs. Many manufacturers offer built-in rungs for climbing out.

pro should take special care and may need to install a supporting header.

Also important to the job is a properly installed window well. Drainage here, a key factor in avoiding leaks, depends on the soil. Sandy soil tends to drain better, while harder clay poses more of an issue, says Weld. Window wells, which were long made only of cost-effective galvanized steel, are now being fashioned from wood, vinyl or concrete blocks.

Now, windows come in a number of

dimensions, with 36 x 42 inches, 36 x 48 inches and 48 x 48 inches, being some of the most common. But you're not limited to these—windows can be custom-made to other dimensions. In larger windows, the concrete blocks of a window well can also be used as a set of stairs.

Note, though, that if excavation is required to install new windows, the installer must contact the city and you may need your neighbor's permission if the site is close to their property.

The cost of adding an egress window can be daunting. Installation begins at \$3,400 to \$3,900, including costs for permits, which start at about \$100. But after your window is in, you can enjoy your new bedroom, or perhaps legally use your basement as an apartment and bring in some extra income. "Installing egress windows will cap off your basement renovation," says Weld, "and keep you and your family safe."

—Kathleen Fieffe