



EGRESS WINDOW INFORMATION

What is an egress window?

An egress window is a window that is required in specific locations in a dwelling and is intended to provide an emergency means of exiting a dwelling. Egress windows are only required in dwellings. Windows must meet specific size requirements to qualify as an egress window.

Where is an egress window required?

Egress windows are required in every room used for sleeping purposes (bedrooms) on any floor and in basements. If you are constructing a new home, the code requires that you put an egress window in each bedroom. It also requires an egress window in the basement. If you install a basement bedroom or bedrooms, an egress window is required in each bedroom but you need not provide another egress window if there are other rooms in the basement. The bedroom window(s) suffices for the other rooms.

If you have an existing home and you add a sleeping room(s) to the home including in a basement, the code requires that you install an egress window in the sleeping room(s).

What are the size requirements for an egress window?

An egress window must satisfy four Michigan Residential Code (IRC) criteria:

- Minimum width of opening: 20 in.
- Minimum height of opening: 24 in.
- Minimum net clear opening: 5.7 sq. ft. (5.0 sq. ft. for ground floor)
- Maximum sill height above floor: 44 in.

The window must have a minimum net clear opening of 5.7 sq. ft. Net clear opening refers to the actual free and clear space that exists when the window is open. It is not the rough opening size or the glass panel size, but the actual opening a person can crawl through.

The window opening must be operational from the inside without keys or tools. Bars, grilles and grates may be installed over windows but must be operational without tools or keys and still allow the minimum clear opening.

Do the math

At first glance, you might assume that a 20-in. by 24-in. window would be acceptable for egress. However, those dimensions would yield a net clear opening of only 3.3 sq. ft. To achieve the required net clear opening of 5.7 sq. ft., a 20-in. wide window would have to be 42 in. high. Likewise, a 24-in. high window would have to be 34-in. wide.

Nearly all window manufacturers specify which of their windows meet national egress requirements right in their catalogs and list the net free opening of their windows. This should take the guesswork out of selecting a window for

your addition or remodeling project. Also, the sales person who sells you the window should be able to help you select a code compliant window provided that they know you need an egress window.

Must I use a special type of window?

A wide variety of window designs can be used for egress windows. You should select a window design that meets your architectural, aesthetic, space, and financial limitations.

Casement windows with hinged sashes that swing free and clear of the opening can be relatively small and still meet egress requirements. This makes them ideal for basement egress and for other areas where space is limited. Some manufacturers can install a special operator arm that allows the window to open wider than the standard operating arm to meet egress requirements. Others have an operator arm that can be pushed to open the window wider in an emergency. These meet egress requirements as long as you leave the "PUSH HERE" label in place.

Glider or slider windows have sashes that fill nearly half the possible window opening. They require a window nearly twice the size of a casement window.

Even when it's fully open, more than half of a **double-hung window's** overall area is blocked by glass. This means that to meet egress window height requirements, a window must be nearly 4 ft. 9 in. in overall height. This height requirement makes it undesirable for most basement egress situations.

Awning windows are problematic. Since the opening sash prevents escape from most window wells, they're unsuitable for basement egress. And with most awning windows, the center opening hardware and height don't meet egress requirements. Some manufacturers offer models with special detachable operators that meet egress requirements.

Why don't my windows meet egress requirements?

Some older homes were built before there were any egress window requirements. Many more homes were built when the egress window net free opening size was 5 sq. ft. Yet even newer homes often lack proper egress windows. Attics and basements were often legally remodeled into family rooms or offices which didn't require egress windows, then later converted into bedrooms which do require them.

When bedrooms are added to basements without the knowledge of inspectors and without the requisite egress window, they create a dangerous underground firetrap. During remodeling, homeowners often unwittingly replace large egress windows with smaller, non-egress windows. And while the code will require egress windows be installed when bedrooms are added, they won't necessarily dictate that windows in existing bedrooms be enlarged to egress size. Required or not, egress windows are crucial lifesaving equipment. If a room has even the remote possibility of later becoming a bedroom, include an egress size window.

Basement Egress Windows

Basement egress windows present an added challenge. Besides the height, width and overall square-footage requirements that the window must meet, there are certain requirements for the window well surrounding the window.

Window wells must:

- Allow the rescue window opening to be fully opened.
- Provide 9 sq. ft. of "floor area," with a minimum dimension of 36 in. in width and length.

- Contain a permanently affixed ladder or steps for climbing out if the window well depth exceeds 44 inches in depth. The ladder must be at least 12 in. wide and project no less than 3 in. from the window well. It can't be obstructed by the open window or encroach on the required window well dimensions by more than 6 in.

Window wells may be made of rust resistant metal, treated wood, wood naturally resistant to decay, concrete, masonry, or plastic. Some window well designs have steps built or molded into them. If an egress window is located under a deck or porch, the code requires at least 36 inches between the top of the window well and the bottom of the deck or porch joists.

Replacement Windows

If you're replacing a smaller window with a larger one that meets egress requirements, bear in mind that enlarging the height of the opening takes less structural work than enlarging the width. Increasing width might mean installing a larger, stronger horizontal structural header over the window opening. Increasing height is often only a matter of lowering the height of the sill below the window.

Please contact the Grand Haven Township Building Department at 616-842-5988 for more information.