

# RESIDENTIAL WINDOWS



## DOCUMENT SUBMITTAL LIST

- Completed *Application for Construction or Use*. Application must include authorized signature by property owner if not owner occupied.
  
- Two copies of construction plans and manufacturer's installation information, including energy U-factor rating, window sizes of existing and proposed windows, dimensions above floor, and window well dimensions for basement escape windows.

**Failure to provide any of the above documents may result in processing delays.**

## GENERAL INFORMATION AND FEES

1. A permit is required for the installation or replacement of residential windows.
2. The application review period averages two weeks. The applicant will be contacted when the permit is ready for issuance and payment.
3. If work commences prior to permit issuance, the permit fee shall be doubled.
4. Approved construction documents shall be available on site at all times.
5. Alterations to the approved plans must be resubmitted to the Building Department in writing for review and approval prior to construction.
6. A list of required inspections is provided on the reverse side of the permit. Inspections must be scheduled at least one day prior to the desired inspection date by calling the Warrenville Community Development Department (630-393-9050).
7. A permit may become invalid if work does not begin within 180 days of issuance, or if construction has been halted and not resumed for a period of 60 consecutive days.
8. Homeowners Association (HOA) approval may be required before commencing work. The issuance of a permit does not exempt HOA rules and regulations.
9. Fees: Plan review fee           \$30.00

Building permit fee   \$ 6.00 per \$1000 valuation, minimum \$30.00

Bond: A \$100.00 building bond is required at the time of building permit issuance, and will be refunded upon completion and approval of the project in accordance with all applicable City Ordinances in the manner in which it was initially submitted.

## DEFINITIONS

|                 |   |
|-----------------|---|
| Habitable space | A space for living, sleeping, eating, or cooking.   |
| Opening         | An openable window or door.   |
| Sleeping Room   | A room designated for sleeping, and meeting the requirements of a bedroom, including a privacy door, secondary escape opening, and smoke alarm. |
| U-Factor        | The rate of heat transfer that indicates how efficiently the window insulates. The lower the U-factor, the better the window insulation value.  |

## CODE REFERENCES

- 2015 *International Residential Code (IRC)*
- 2015 *International Energy Conservation Code*, with State of Illinois amendments.

## **ENERGY CONSERVATION**

The *Illinois Energy Conservation Act* requires all windows to have a fenestration U-factor rating of .32 or better (smaller number value is better e.g. .26, .19, etc.). Manufactured windows often share the same components in the northern regions as are used in warmer climates; therefore, a U-factor rating is typically not etched in the glass or frame. Instead, manufacturers ship windows with an energy sticker (Figure 1) indicating the energy performance. It is important the sticker remain affixed to the window until approved by a City inspector.

## **SAFETY GLAZING**

The following conditions require windows with safety glass:

- Windows with a glass pane greater than nine square feet and located 18 inches or less from the floor.
- Windows adjacent to the bottom of a stairway where the glass is less than 36 inches above the landing and within 60 inches horizontally of the bottom tread.
- Non-decorative windows located within a 24-inch arc of either vertical edge of a door.
- Windows located within 60 inches of a spa, pool, or bathing area and less than 60 inches above any adjacent standing or walking surfaces.

## **EMERGENCY ESCAPE WINDOW (Figure 2)**

Emergency escape windows are required as a secondary escape path for bedrooms and basement-level living spaces. The reasons for emergency escape openings are twofold: (i) to allow for an alternate exit in case of emergency, and (ii) to provide access for a firefighter to gain entrance. The 2006 *IRC* requirements for escape windows are as follows:

- The bottom of the escape window opening cannot exceed 44 inches above the finished floor.
- The minimum opening area of the escape window is 5.7 square feet.
- The minimum escape window opening height is 24 inches.
- The minimum escape window opening width is 20 inches.

Emergency escape openings shall be operational from the inside of the room without the use of keys, tools, or special knowledge.

New or revised window wells may be subject to zoning setback requirements.

## **EXISTING CONDITIONS**

The windows in your home may have been installed under an older code that required smaller openings. If the replacement window is in a room requiring an escape opening smaller than current code requirements, replacement is permitted with a same-size window unit, provided the existing opening area of the window is not reduced.

If basements are converted into habitable space, a secondary means of escape, meeting the current adopted code requirements, is required. The window must provide clear access to an open area outside the dwelling.

If the scope of work includes replacing an existing window with a larger window, the documents must include a detailed structural drawing that indicates stud and header dimensions and supported loads of the roof and floors above. The Chief Code Official reserves the right to require drawings from a design professional as part of the review process.

**EMERGENCY WINDOWS LOCATED BELOW GRADE (BASEMENTS)**

**Window Wells (Figure 3)**

Window wells for emergency escape are required where any portion of the escape window is below ground level.

No part of the window well may interfere with the window’s ability to open to full capacity. The escape window shall be operational from the inside of the room without the use of keys, tools, or special knowledge.

The minimum horizontal area of the window well shall be nine square feet, with a minimum horizontal projection and width of 36 inches. The area of the window well shall allow the emergency escape and rescue opening to be fully opened. A clear path of not less than 36 inches in height and width must be provided where a deck is located over the escape window.

**Escape Ladders and Steps**

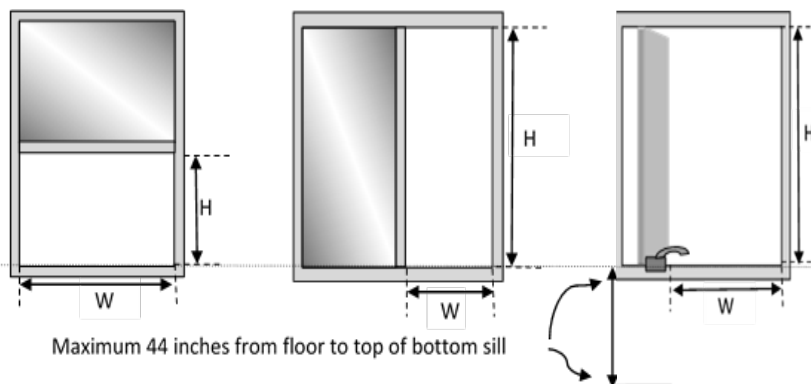
Window wells with a vertical depth greater than 44 inches shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or rungs shall have an inside width of at least 12 inches shall project at least three inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well.

**Escape Well Covers and Well Grates**

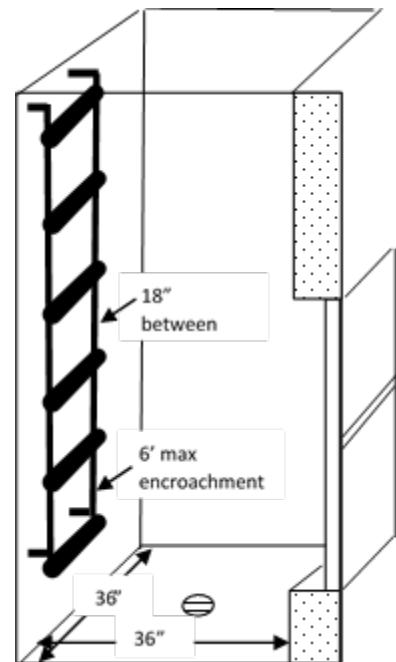
Escape well covers and well grates shall be easily opened or removed from the inside of the escape well without the use of keys, tools, or special knowledge.

| ENERGY PERFORMANCE RATINGS     |                              |
|--------------------------------|------------------------------|
| U-Factor                       | Solar Heat Gain Coefficiency |
| <b>0.32</b>                    | <b>.30</b>                   |
| ADDITIONAL PERFORMANCE RATINGS |                              |
| Visible Transmittance          | Air Leakage                  |
| <b>0.51</b>                    | <b>&lt;0.3</b>               |

**Figure 1**



**Figure 2**



**Figure 3**

**Approved construction documents shall be available on site at all times.**

**Where conflicts between this guide and the code arise, the provisions of the code shall prevail.**