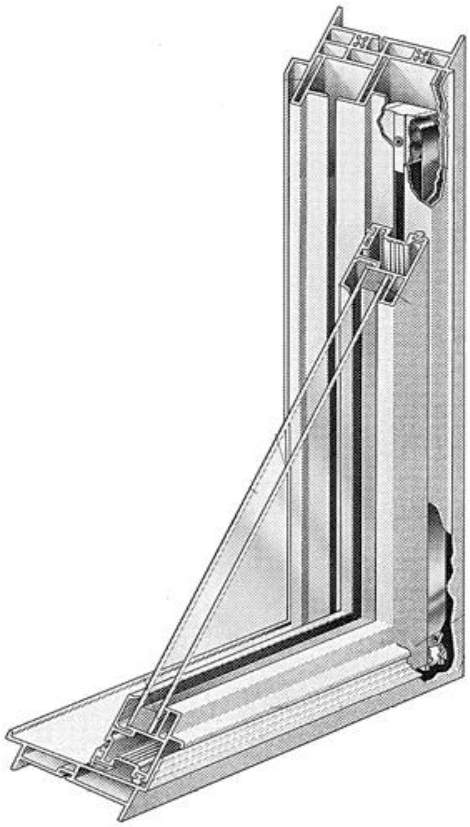
Windows as seen through HOT2000 modeling software for R-2000 and EnerGuide Rating Services.

To accurately model a house and its energy efficiency, windows must be correctly described and entered into the HOT2000 software. The performance of a window will affect the heat loss and solar gain of the house. Orientation and shading effects of roof over hangs will also play an important roll in determining the loss or gain of window performance.



The chart on the next page shows the current choices of components that are selectable when entering a window into the HOT2000 program. Each component letter can have only one of the numbered choices. Each selection is made in the order presented, a. to f. because some selections will affect which items are available in the next component. For example: a patio door (e.4) cannot have a frame of vinyl (f.4) but instead must use reinforced vinyl (f.5) or fiberglass (f.6).

HOT2000 Internal Codes for Windows

a. b. c. d. e. f.

a. Glazing Types

1	Single	5	Double Acrylic
2	Double or Double with 1 Coating	6	Double + 1 Heat Mirror 66
3	Triple or Triple with 1 Coating	7	Double + 1 Heat Mirror 88
4	Triple with 2 Coatings	8	Double + 2 Heat Mirror 88

b. Coating / Tint

0	Clear	6	Tint + Low-E .04
1	Low-E .04 (soft)	7	Tint + Low-E .10
2	Low-E .10 (soft)	8	Tint + Low-E .20
3	Low-E .20 (hard 1)	9	Tint + Low-E .35
4	Low-E .35 (hard 2)	A	Reflective
5	Tint	B	Reflective + Tint

c. Fill Type & Spacing

0	13mm Air	3	13mm Argon		
1	9mm Air	4	9mm Argon	6	9mm Kypton
2	6mm Air	5	6mm Argon		

d. Spacer Type

0	Metal	2	Insulating
1	Fused Glass	3	Metal + Insulating

e. Window Type

0	Picture	4	Patio Door
1	Hinged	5	Sky Light
2	Slider with Sash		
3	Semi-sash Slider		

f. Frame Material

0	Aluminum	4	Vinyl
1	Aluminum Thermal Break	5	Reinforced Vinyl
2	Wood	6	Fiberglass
3	Aluminum Clad Wood		

HOT2000 Window Codes

The **Glazing Types** field is used to define the number of glass layers used in the window. The following list of options is available in the drop-down menu:

- ***Single glazing (SG)***
- ***Double/Double with one coat***
- ***Triple/Triple with one coat***
- ***TG with 2 coatings***
- ***Double acrylic***
- ***DG + 1 Heat Mirror 66***
- ***DG + 1 Heat Mirror 88***
- ***DG + 2 Heat Mirror 88***

The **Coatings/Tints** field is used to describe any of the coatings or tints used in the window. The following list of options is available in the drop-down menu:

- ***Clear***
- ***Low-E.04 (Soft)***
- ***Low-E.10 (Soft)***
- ***Low-E.20 (Hard1)***
- ***Low-E.35 (Hard2)***
- ***Tint***
- ***Tint and LowE.04***
- ***Tint and LowE.10***
- ***Tint and LowE.20***
- ***Tint + LowE.35***
- ***Reflective***
- ***Reflective + tint***

Low-E refers to the low-emissivity coating. There are four degrees of this coating. Consult the manufacturer's specification for the degree applicable. This value results in a change of the shading coefficient of the glazing.

The **Fill Type** field is used to describe the spacing between the glass layers and the fill gas used between the glass layers. The following list of options is available in the drop-down menu:

- ***13 mm Air***
- ***9 mm Air***
- ***6 mm Air***
- ***13 mm Argon***
- ***9 mm Argon***
- ***6 mm Argon***
- ***9 mm Krypton***

The **Spacer Type** field is used to describe the spacer system used between the glass layers. The following list of options is available in the drop-down menu:

- ***Metal***
- ***Fused glass***
- ***Insulating***
- ***Metal + Insul***

The **Window Type** field is used to describe the type of window system being used. The following list of options is available in the drop-down menu:

- ***Picture*** , which is a fixed unit

- ***Hinged*** , which is an operable unit that opens on a hinge. This includes such windows as awning, projected (turn and tilt) and casement

- ***Slider with Sash*** , which is an operable window that opens by sliding one of the panes. In this type of window one or both of the window panes has a complete sash. This type includes horizontal sliders and double-hung (both panes move up and down) and single-hung (only the lower pane moves up and down)

- ***Semi-Sash Slider*** , which is a horizontal slider with four panes of glass that slide in a track: one inner set and one outer set (i.e. there is no sealed glass unit). This type of window is also known as a four-lite slider. There is a partial sash on the vertical edges of the glass, which forms the interlock between the two inner panes of glass as well as an interlock between the two outer panes of glass. The partial sash may also be used to lock the window closed.

- ***Patio Door***

- ***Skylight***

The **Frame Material** field is used to describe the frame material being used in the window. The following list of options is available in the drop-down menu:

- ***Aluminum***
- ***Alum. Thermal Break***
- ***Wood***
- ***Alum. Clad Wood***
- ***Vinyl***
- ***Reinforced Vinyl***
- ***Fibreglass***