# Window Replacement Background Information

Last update 8/26/22

#### Example of existing window



#### Example of replacement window



Examples of replacement windows that meet the Window Policy are units: 44, 60, and 84

### **Energy Efficiency and Replacement Options**

Window energy efficiency is measured by <u>U and SHGC</u>. The vintage aluminum windows at Orchard River are a U of about 1.10, terrible! And an SHGC of 1.0, again terrible!. When shopping for windows try to get the **lowest** U and SHGC with the longest warranty...simply a matter of shopping around.

## Windows that meet the Window Policy requirements

The links below are not an endorsement from the Orchard River Board, only information for owners to use in making their decision. There are hundreds of window manufacturers and manufacturers change their style names, color names, and product offerings therefore the below links may not work. These are the windows we are aware of at this time. If you find other windows, please let us know.

Aluminum non-thermally broken double pane, U = about 0.6 to 0.5 and SHGC = about 0.6 to 0.5

Milgard standard aluminum windows A150

Thermally broken double pane aluminum windows, can be Energy Star windows: U = 0.60 and SHGC 0.28

<u>Milgard thermally improved aluminum windows A250</u>

Double pane vinyl windows with U of 0.40 - 0.30 and SHGC of 0.35- 0.30

• Milgard style line silver finish V250

# **Energy Efficiency Priority Pyramid**

Years of research on improving energy efficiency of existing homes has resulted in several rules of thumb:

- In general, the more energy efficient the option the more expensive it will be. But whatever work you are doing; it will always pay back in energy savings to go with the most energy efficient option. For example, if you are buying a new dishwasher, get the most energy efficient.
- 2) Window replacement as a stand alone energy efficiency project is the second to the last project to consider as noted in the Energy Efficiency Priority Pyramid below. Considering the first rule of thumb above, if you are replacing windows for other reasons, such as the sliding door does not work anymore, or you want less noise, then go with the most energy efficient that meet the Window Policy. Otherwise, there are other more cost-effective energy savings projects to do first.



**Start at the bottom rung.** The energy-saving measures at the bottom of the pyramid are much more costeffective than those at the top. In fact, the top two measures on the energy conservation pyramid are almost never cost-effective. (Click on the picture to enlarge it.) Image Credit: Minnesota Power