

ALLIED WINDOW, INC.

ENERGY PAYBACK FORM INSTRUCTION

Welcome to Allied Window's **Energy Savings, Payback and Return on Investment (ROI) Analysis**. This form will provide valuable information for the decision-making process to compare the use of Allied storm windows (Performance Panels) with:

- a) Installation of replacement windows
- b) Doing nothing....
Reminder: Someone is paying for the storm windows, - whether they have them or not....

It should be noted that the use of this Energy Payback form does not address other free benefits of Allied storm windows such as sound reduction, comfort near windows, uniform heating and cooling, window protection and reduced condensation.

The information below should help in the use of Allied's "on-line" form, but if there are questions, please call us at **800-445-5411**.

NOTE: You must have a quotation from Allied Window for storm windows, before you can complete the Energy Payback Analysis Form

STEP 1 – INFORMATION WHICH IS NEEDED

The "U-value" of a window system is a measure of the tendency to waste energy, - whether in the heating or cooling mode. Accordingly, the goal is the lowest number possible.

NOTE: The U-value is the reciprocal of the R-value, - which measures the tendency to save energy, - so a high R-value number is desired.

Step 1 will identify all of the factors which effect the U-value of the existing window system. **The information which is entered is critical to the accuracy of the Energy Payback Analysis.** There are pull-down menus, from which selections must be made.

Existing Window Stats:

- Glass type
Select the type of glass in the existing windows. Usually it is "single" but use "double" if the glass is insulated.
- Thickness
Guidelines if not sure:
Single – Residential windows
Double – Commercial wood and steel windows.
3/16" - Large commercial wood windows.

1/4” - Very large commercial wood windows and storefronts.

- Frame Type Identify the material used for the frames of the existing windows.
- Airspace between glass If the existing windows have double (insulated) glass, then make the best estimate of the space between the pieces of glass.
- Crack condition Select the crack condition that best describes the space between operating sash and what they fit against. Typically, for non-weatherstripped windows:
 - Old wood windows – “poor” to “very loose”
 - Newer wood windows – “good” to “poor”
 - Steel casement & projected – “poor” to “very loose”
 - Steel double-hung – “fair” to “poor”
 - Aluminum casement & projected – “average” to “poor”
 - Aluminum awning-type – “loose” or “very loose”
 - Fixed sash – “sealed” to “good”
- Weatherstripped
 - Wood windows may have been reworked to install some weatherstripping.
 - Aluminum windows may have a wool-pile built into the frame.
 - Steel windows rarely are weatherstripped.
- Existing Storm Window
 - Select “none” or “poor”
- New storm window glazing will be
 - Select type of glass to be considered
- Country
 - Allied’s form only works in the USA
- State
 - Select state where building is located
- City
 - Select city closest to where building is located
- Heating Type
 - Select
NOTE: Cooling is assumed to be by

the use of electricity.

- Total Stories - What is the highest story for the windows which would receive storm windows?
- Total ft of crack length - Determine the total lineal feet of crack length for windows combined. The crack is the space between any operating sash and what it fits into.

Example: A wood double-hung window that is 3' wide and 6' high would have a total crack length of 21'

$$\begin{array}{r} (2) \times 6' = 12' \\ (3) \times 3' = \underline{9'} \\ \text{Total} \quad 21' \end{array}$$

Example: A steel casement window that is 3' wide and 4' high (with two vents) would have a total crack length of 22'

$$\begin{array}{r} (2) \times 3' = 6' \\ (4) \times 4' = \underline{16'} \\ \text{Total} \quad 22' \end{array}$$

- Total sq. ft. (area) - Determine the total area of all windows combined

Example: A wood double-hung window that is 3' wide and 6' high would have an area of 18 sq. ft.
 $3' \times 6' = 18 \text{ sq. ft.}$

- Quote Price - The delivered price quote from Allied Window for the storm windows being considered in this analysis. At your option, installation cost can be included in the total cost to be compared to the total savings.

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