Calvin Vannoy
12/17/2017
Assignment 8
ARCH 633

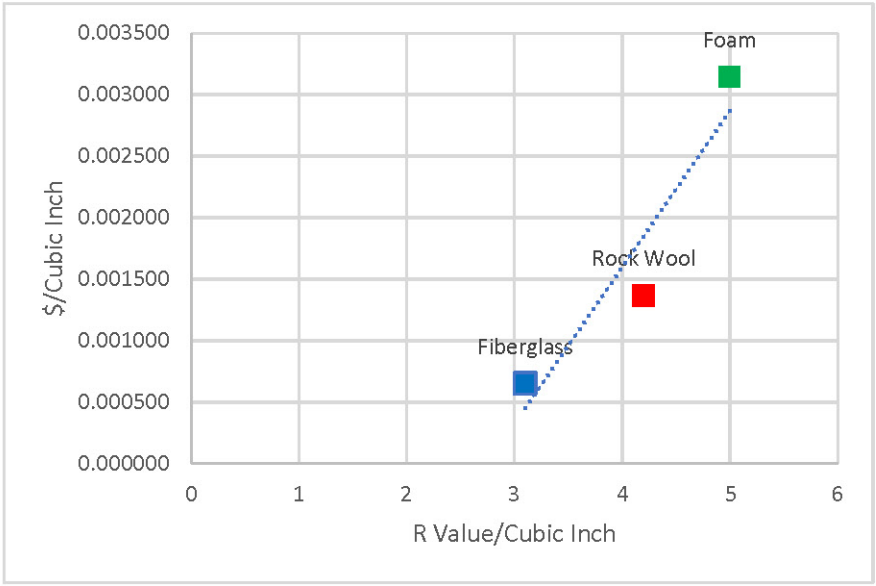
INSULATION

Fiberglass Insulation
R Value Per Inch: 3.1
Max R Value: 30

Rock Wool Insulation
R Value Per Inch: 4.2
Max R Value: 15

Polystyrene Exttruded Foam Insulation
R Value Per Inch: 5
Max R Value: 10

	R/cubic in	$/cubic in
Fiberglass Insulation	3.1	0.000654
Rock Wool	4.2	0.001369
Extruded Foam	5	0.003147



CONCLUSION:

A trend can be seen between the material cost and the material R-value per square inch, with the cost increasing with R value.

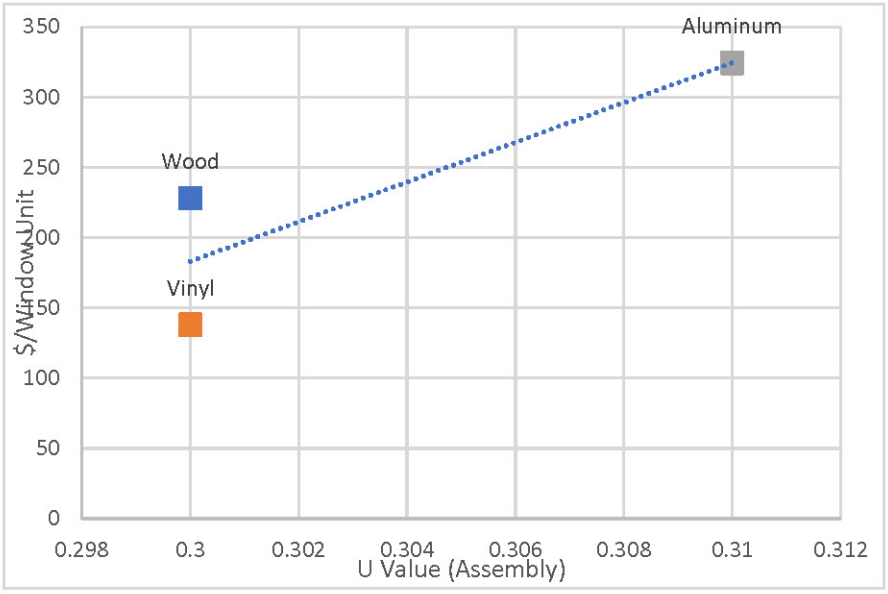
WINDOWS

Wood: Pella 450 Series Wood Double Pane Annealed Double Hung Window (Rough Opening: 36.25-in x 54.25-in; Actual: 35.5-in x 53.5-in)

Vinyl: ThermaStar by Pella Vinyl Double Pane Annealed Replacement Double Hung Window (Rough Opening: 35.75-in x 53.75-in; Actual: 35.5-in x 53.5-in)

Aluminum: JELD-WEN Tradition Aluminum-clad Double Pane Annealed New Construction Double Hung Window (Rough Opening: 34.125-in x 56.75-in; Actual: 33.375-in x 56-in)

	U Value (assembly)	$/unit
Wood Frame Double Glazed	0.3	228
Vinyl Frame	0.3	138
Aluminum Frame	0.31	324.35



CONCLUSION:

No trend is visible here, as the windows have very similar U-values and the cost difference mainly being due to material differences.