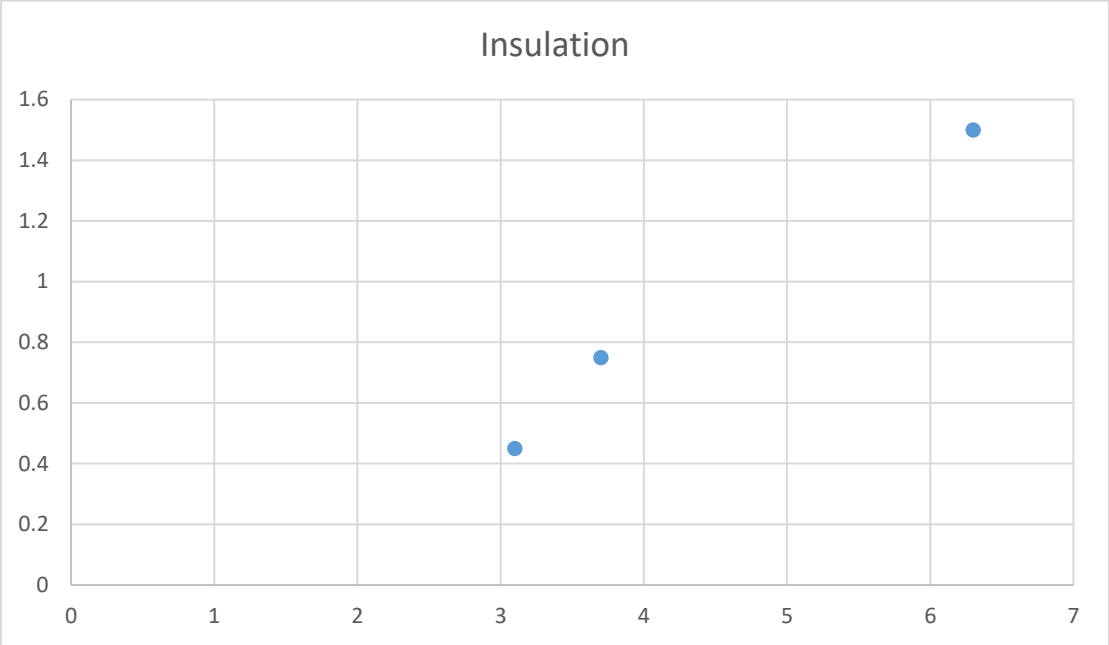
Insulation material	Fiberglass batt	cellulose	Polyurethane foam
R-Value/inch	3.1	3.7	6.3
Price(usd/Sq.ft)	0.45	0.75	1.5



As shown in the chart, price of insulation is roughly in directly proportion to its R-value. The higher R-Value is, the higher price is.

Window assembly	Operable windows	Fixed windows	Greenhouse windows
U-Value	0.87	0.72	1.40

There are three components are used to calculate U-Factor:

- Center-of-glass (COG)
  Typical value 0.29 BTU/ ft2-hr-°F (low-e IG)
- Edge of Glass (EOG)
  Typical value 0.34 BTU/ ft2-hr-°F (aluminum spacer)
- Frame
  Typical value 0.90 BTU/ ft2-hr-°F (thermal break)

Assembly U-Factor is the “area weighted” average thermal transmittance of all components

Assembly U-Factor=$\frac{(U_{frame}*Area_{frame})+(U_{EOG}*Area_{EOG})+(U_{COG}*Area_{COG})}{Total\ Area}$