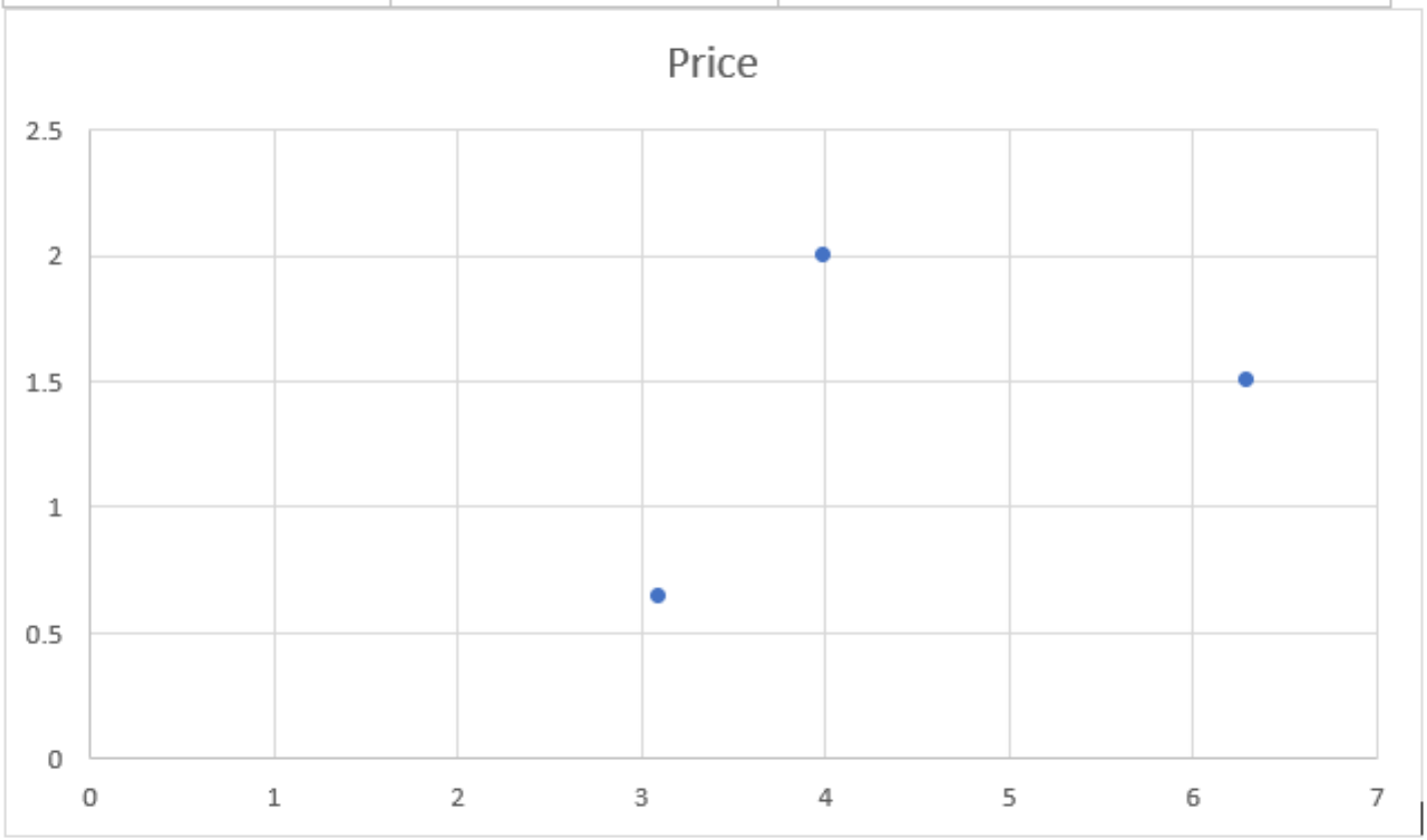
TYPICAL INSULATION MATERIAL

Insulation material	R-Value/inch	Price/ square foot
Fiberglass	R-3.1	$: $0.64
Polystyrene	R-4	$$: $1.47-$2
Polyurethane Foam	R-6.3	$$: $1-$1.5(closed-cell foam)



From the chart and scatter diagram, we can see as the R-value goes up, the price is not necessarily goes up with it. R-value of the Polyurethane foam is the highest, however, the price is in the middle compare to the Fiberglass and Polystyrene.

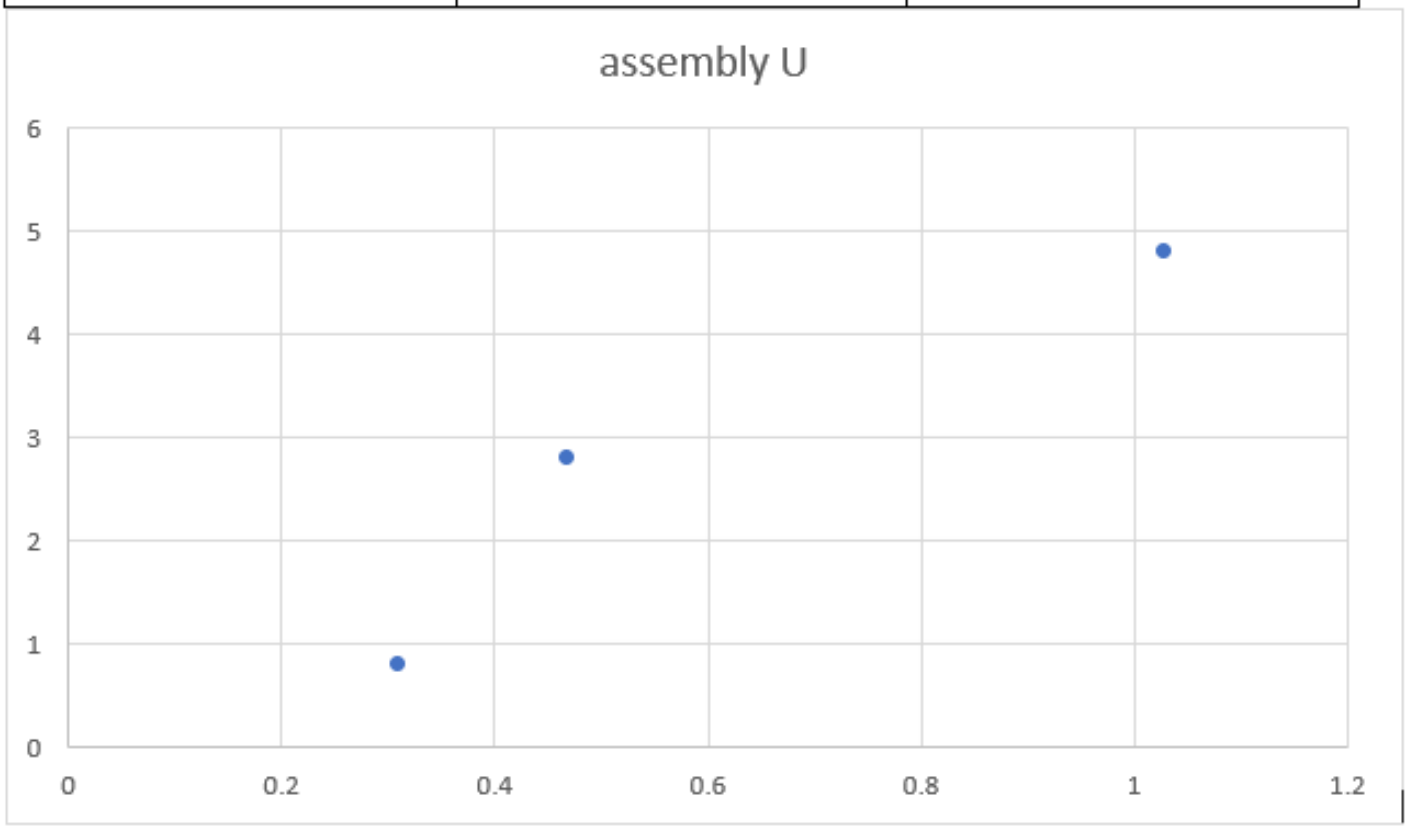
-Fiberglass is able to minimize the heat transfer, but the downside is the danger of handling it. It can cause damage to the eyes, lungs and even skin if the proper safety equipment isn't worn.

-Polystyrene is a water proof thermoplastic foam which is excellent sound and temperature insulation material. I is typically cut into blocks , ideal for wall insulation. Foam is flammable and needs to be coated in a fireproofing .

-Polyurethane Foam are an excellent form of insulation, relatively light. And it is fire resistant.

TYPICAL WINDOW ASSEMBLIES

Window assemblies type	Center glass U-value	Assembly U-value
Clear Single Glazing	1.03	4.8
Clear Double Glazing	0.47	2.8
Clear Triple Glazing	0.31	2.1



From the scatter chart, we can see as the center glass U-value goes up, the assembly U value is goes up as well. The rate of increasing is almost the same.

The assemblies U-value equals the glassing U+spacer U+frame U +junction U

As number of glass increased, spacer increased, the thickness of frame increased, the junction increased, the U value of the whole assemblies is increased correspondingly.