

the conduction is the amount of heat energy goes through any forms of materials such as liquid, gas, or solid like wall and this amount is related to material, area, the thinness of it at the same time it is completely related to the difference of the temperature at both sides of it. wall as an example has all of those items and thicker wall is good for hot weather and at the same time smaller the area of the wall-less energy conduction happen.

subject.
Date.

$$L = 0.4 \text{ m} \quad A = 20 \text{ m}^2 \quad \Delta T = 25 \quad K = 0.78 \text{ W/mK}$$

$$1 - \quad KA \frac{\Delta T}{L} = 0.78 \times 20 \times \frac{25}{0.4} = 975 \text{ W}$$

$$2 - \quad R_{\text{wall}} = \frac{L}{kA} = \frac{0.4}{0.78 \times 20} = 0.0256 \text{ } ^\circ\text{C/W}$$

$$Q = \frac{\Delta T}{R_{\text{wall}}} = \frac{25}{0.0256} = 976.5625 \approx 977$$