

Pedram Abedini Arabani

WEEK 1

Conductivity = Conductivity is willingness of material to transfer heat.

$$\dot{Q} = KA \times (\Delta T / L) = 0.78 \text{ W/m} \times 20 \text{ m}^2 \times (25 / 0.4 \text{ m}) = 975 \text{ W}$$

$$R = (L / KA) = (0.4 \text{ m} / (0.78 \text{ W/m} \times 20 \text{ m}^2)) = 0.02564 \text{ c/w}$$

$$\dot{Q} = (\Delta T / R) = (25 / 0.0256) = 975 \text{ W}$$