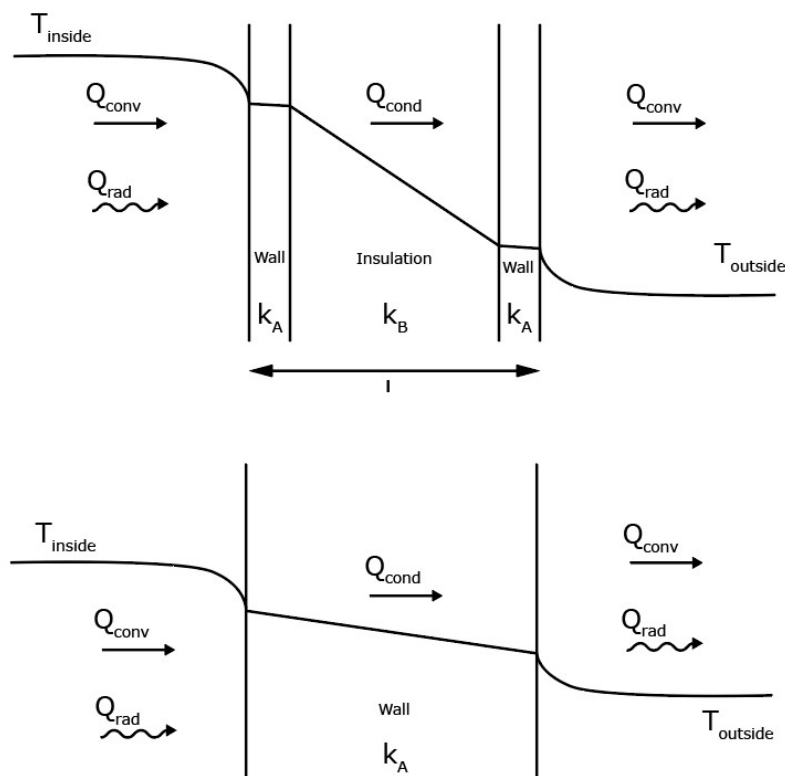


Insulation effect of COP

Insulation reduces the heat conductivity of the wall material, thus lowering the heat flux from inside to the environment or vice versa.

$$\dot{q}'' = -\lambda \frac{dT}{dx}$$

The insulation will increase the conduction resistance by enlarging the value of λ



It can be noted that an insulation forces a steeper slop of temperature profile.