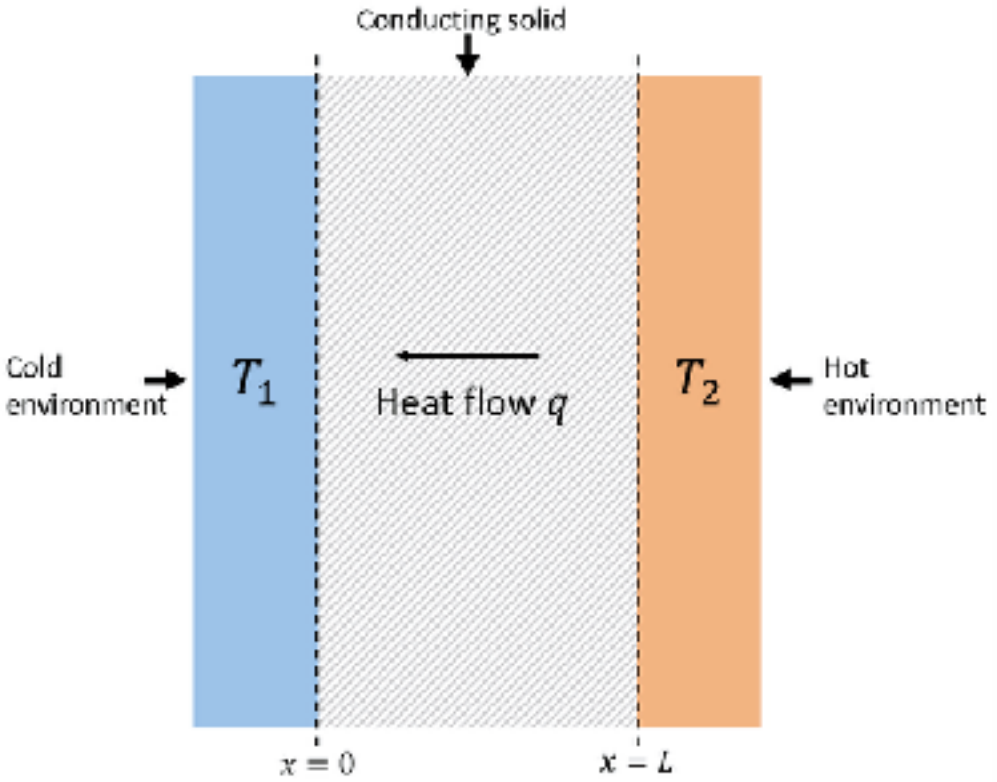
열전도율

열전도율?

The **thermal conductivity** of a material is a measure of its ability to conduct heat.



The defining equation for thermal conductivity is , where is the heat flux, is the thermal conductivity, and is the temperature gradient.

- 두께가 1미터인 재료의 열전달 특성
- 단위는 W/mK 혹은 kcal/mh℃
  - 여기서 K=℃
  - W/mK = W/m℃
  - **열전도율÷두께 = 열관류율**

열관류율

Thermal transmittance is the rate of transfer of heat through matter. The thermal transmittance of a material (such as insulation or concrete) or an assembly (such as a wall or window) is expressed as a U-value.

- 특정 두께를 가진 재료의 열전도 특성
- U = W/㎡K

Although the concept of U-value (or U-factor) is universal, U-values can be expressed in different units. In most countries, U-value is expressed in SI units, as watts per square metre times Kelvin:

$W/(m^2)(K)$

- 특정 두께를 가진 재료의 열전도 특성
- U = W/㎡K

열저항®

열관류율 역수

물 질	열전도율	비 고
은	0.99	열전도율 최고
구 리	0.92	열배관
알루미늄	0.49	
놋 쇠	0.26	
철	0.17	
콘크리트	0.002	
유 리	0.002	
얼 음	0.005	
석 면	0.0002	단열재
목 재	0.0002	
물	0.0014	
알 코 올	0.0005	
공 기	0.000057	