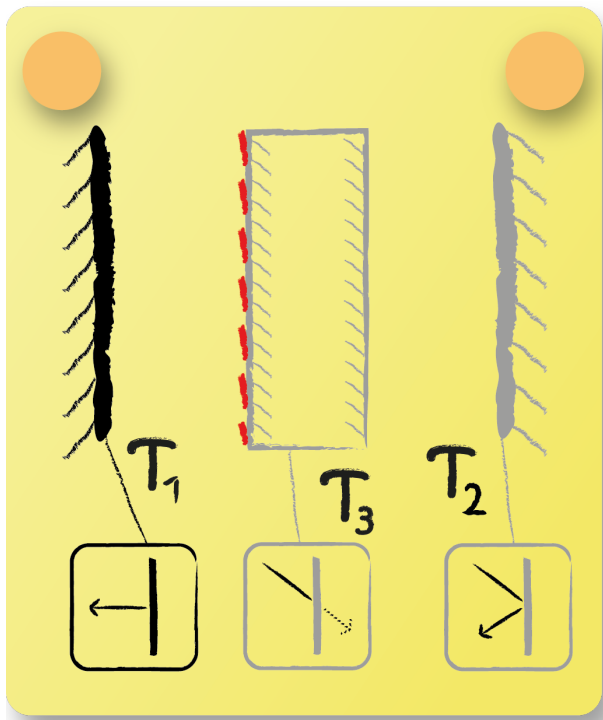


Surface Brightness: Task 9



The image shows three walls of which wall 1 is a black body. Walls 2 and 3 are grey bodies, while $\tau_2 = 0$ and $\rho_3 = 0$.

1



$$\dot{Q}_{3,l} = \tau_3 \cdot \dot{Q}_2 + \sigma \cdot \epsilon_3 \cdot A_3 \cdot T_3^4$$

2



Wall 3 is not reflecting, but transmitting. Therefore the surface brightness on its left is composed of transmission of \dot{Q}_2 and its grey body emission.