

# 1 Basic of thermodynamics

Page 30, Problem 1.9: replace the text 'evaporated' with 'vaporised'

Page 30, Problem 1.11: replace the text 'evaporates' with 'vaporises', 'specific heat of evaporation' with 'specific heat of vaporisation'

Page 30, Problem 1.13: replace the text '1010 J/kg' with '1010 J/(kg K)'

## 2 Heat transfer

Page 41, line 13: replace the formula with

$$\frac{\partial \theta}{\partial t} = a \left( \frac{\partial^2 \theta}{\partial x^2} + \frac{\partial^2 \theta}{\partial y^2} + \frac{\partial^2 \theta}{\partial z^2} \right),$$

[reported by Mohsen Soleimani Mohseni]

Page 43, line 20: replace the text 'is much higher' with 'is much lower'.

[reported by Mohsen Soleimani Mohseni]

Page 54, line 9: replace the text 'dq/dλ (W/m)' with 'dq/dλ (W/m<sup>3</sup>)'. [reported by Zvonko Jagličić]

Page 54, line 20: replace the text '4 μm > λ > 7.5 μm' with '0.4 μm < λ < 0.75 μm'. [reported by Mohsen Soleimani Mohseni]

Page 66, lines 19 and 20: replace the lines with

$$A_1 = 2\pi r_1 h_1 + 2\pi r_1^2 = 0.085 \text{ m}^2,$$

$$A_2 = 2\pi r_2 h_2 + 2\pi r_2^2 = 0.116 \text{ m}^2.$$

# 3 Heat transfer in building components

Page 108, lines 13–17: replace the paragraph with ‘The procedure for determining heat losses through ventilation is described in ISO 13789 [45]. Due to ventilation, the internal air of volume  $V_a$  at temperature  $\theta_i$  is replaced by external air at temperature  $\theta_e$ . The external air must be heated isobarically to temperature  $\theta_i$ ; in the process, its volume increases and in the end it must be equal to the volume of the air it replaces  $V_a$ . Hence, the required heat is (1.20)’

Page 114, Problem 3.5: replace the text ‘Vertical airspace’ with ‘Vertical unventilated airspace’

Page 114, Problem 3.7: replace the text ‘an airspace’ with ‘an unventilated airspace’

Page 115, Problem 3.7: replace the text ‘within the airspace is  $0^\circ\text{C}$ ’ with ‘within the airspace is  $-2^\circ\text{C}$ ’

# 4 Moisture in building components

Page 140, Table 4.1: replace the text 'Direction of Water Vapour Flow' with 'Direction of Heat Flow'.

Page 143, line 35: replace the text ' $1.93 \times 10^{-4}$  g/s = 16.4 g/d' with ' $4.82 \times 10^{-4}$  g/s = 41.6 g/d'. [reported by Blaž Omeragić]

Page 145, line 5: replace the text 'equivalent layer thickness' with 'equivalent air layer thickness'

Page 155, lines 17, 20, 21, 28: replace ' $p_c$ ' with ' $p_{ev}$ '

Page 155, Figure 4.25: replace ' $p_c$ ' with ' $p_{ev}$ '

Page 156, lines 8, 11, 12, 15: replace ' $p_c$ ' with ' $p_{ev}$ '

Page 156, Figure 4.26: replace ' $p_c$ ' with ' $p_{ev}$ '

Page 165, Problem 4.3: replace the text '1.8 kg' with '1.7 kg'

Page 166, Problem 4.10: replace the text 'equivalent layer thickness' with 'equivalent air layer thickness'

# 7 Building acoustics

Page 239, Problem 7.1: replace the text 'of height 1.5 m are located' with 'are located 1.5 m above the floor'

# 8 Illumination

Page 263, unnamed figure:  $dA'$  to  $d\Omega$

Page 264, line 19: replace 'much larger' with 'much smaller'.

Page 264, lines 21 and 22: replace the texts ' $K = 93 \text{ lm/W}$ ' and ' $K = 20 \text{ lm/W}$ ' with ' $\eta_v = 93 \text{ lm/W}$ ' and ' $\eta_v = 20 \text{ lm/W}$ '. [reported by Andrej Orgulan]

Page 265, line 9: replace the texts ' $K = 70 \text{ lm/W}$ ' and ' $K = 90 \text{ lm/W}$ ' with ' $\eta_v = 80 \text{ lm/W}$ - $110 \text{ lm/W}$ ' and ' $\eta_v = 120 \text{ lm/W}$ - $200 \text{ lm/W}$ '. [reported by Andrej Orgulan]

Page 266, lines 1-4: replace first two sentences with 'The highest possible value is 100, which corresponds to a light source that radiates identically to a black body radiator for the correlated colour temperatures below 5000 K or identically to daylight illuminants above this temperature. As the colour appearance drifts away from the ideal, the value gets smaller, dropping to negative values for some light sources. [reported by Andrej Orgulan]

Page 272, Problem 8.3: replace the text 'of height 9.5 m' with 'of height 22.5 m'.

# Tables

Page 276, **Table A.1:** add

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$\eta_v$	lm/W	luminous efficacy of a source
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