

1 Basic of thermodynamics

Page 18, Figure 2.22: replace value on p -axis 1.03 with 1.013.

Page 18, line 17: replace the text 'temperature of the triple point' with 'temperature of the critical point'. [reported by Marta Karlova]

Page 20, Problem 1.9: replace 'evaporated' with 'vaporised'

Page 20, Problem 1.11: replace 'evaporates' with 'vaporises', 'specific heat of evaporation' with 'specific heat of vaporisation'

2 Heat transfer

Page 42, Figure 2.18: replace the unit on y -axis $\frac{\text{W}\mu\text{m}}{\text{m}^2}$ with $\frac{\text{W}}{\text{m}^2\mu\text{m}}$.

Page 42, line 5: replace ‘ $dq/d\lambda$ (W/m)’ with ‘ $dq/d\lambda$ (W/m³)’: [reported by Zvonko Jagličić]

Page 42, line 14: replace the text ‘ $4\mu\text{m} > \lambda > 7.5\mu\text{m}$ ’ with ‘ $0.4\mu\text{m} < \lambda < 0.75\mu\text{m}$ ’. [reported by Mohsen Soleimani Mohseni]

Page 43, line 29: replace the text ‘is much higher’ with ‘is much lower’. [reported by Mohsen Soleimani Mohseni]

Page 45, Figure 2.22: replace the unit on y -axis $\frac{\text{W}\mu\text{m}}{\text{m}^2}$ with $\frac{\text{W}}{\text{m}^2\mu\text{m}}$.

Page 57, Problem 2.4: replace the text ‘neglecting radiation and convection with the environment’ with ‘neglecting heat exchange with Earthly objects’. [reported by Zvonko Jagličić]

Page 57, Problem 2.5: replace the results 76 °C and 33 °C with 54 °C and 29 °C. [reported by Zvonko Jagličić]

Page 53, lines 29 and 30: replace 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 78, line 7: replace with

$$e = \frac{R'_T - R''_T}{2R_T}.$$

Page 91, lines 2–5: replace the paragraph with ‘The procedure for determining heat losses through ventilation is described in ISO 13789 [35]. Due to ventilation, the internal air of volume V at temperature θ_i is replaced by external air at temperature θ_e . The external air must be heated isobarically to temperature θ_i ; in the process, its volume increases and in the end it must be equal to the volume of the air it replaces V . Hence, the required heat is (1.19)’

Page 95, Problem 3.5: replace the text ‘Vertical airspace’ with ‘Vertical unventilated airspace’

Page 95, Problem 3.6: replace the text ‘Calculate the external’ with ‘Calculate the external’.

Page 95, Problem 3.6: replace the text ‘the average external temperature’ with ‘the average of external and surface temperatures’.

Page 96, Problem 3.7: replace the text ‘an airspace’ with ‘an unventilated airspace’

Page 96, Problem 3.7: replace the text ‘within the airspace is 0 °C’ with ‘within the airspace is –2 °C’

Page 96, Problem 3.8: replace the results 4.14 m² K/W and 0.126 W/(m² K) with 3.98 m² K/W and 0.258 W/(m² K). [reported by Mirka Kandráčová]

Page 96, Problem 3.9: replace the result 1.37 W/(m² K) with 1.39 W/(m² K). [reported by Zvonko Jagličić]

4 Moisture in building components

Page 104, line 20: replace the text ‘increased water vapour pressure’ with ‘decreased water vapour pressure’.

Page 121, **Table 4.1:** replace the text ‘Direction of Water Vapour Flow’ with ‘Direction of Heat Flow’.

Page 124, line 15: replace the text ‘ $1.93 \times 10^{-4} \text{ g/s} = 16.4 \text{ g/d}$ ’ with ‘ $4.82 \times 10^{-4} \text{ g/s} = 41.6 \text{ g/d}$ ’. [reported by Blaž Omeragić]

Page 125, line 19: replace the text ‘equivalent layer thickness’ with ‘equivalent air layer thickness’

Page 135, **Figure 4.24:** replace ‘ p_c ’ with ‘ p_{ev} ’

Page 136, lines 12, 15, 16, 22, 27, 30: replace ‘ p_c ’ with ‘ p_{ev} ’

Page 136, **Figure 4.25:** replace ‘ p_c ’ with ‘ p_{ev} ’

Page 156, lines 3, 6: replace ‘ p_c ’ with ‘ p_{ev} ’

Page 145, **Problem 4.3:** replace the text ‘1.8 kg’ with ‘1.7 kg’

Page 145, **Problem 4.9:** replace the result -2.5 °C with 9.5 °C .

Page 146, **Problem 4.10:** replace the text ‘equivalent layer thickness’ with ‘equivalent air layer thickness’

6 Sound propagation

Page 165, line 2: replace the text '7.9 kg/m³' with '7900 kg/m³'.

Page 172, line 10: replace the text 'sound intensity' with 'sound pressure level'.

Page 173, line 3: replace the text 'sound intensity' with 'sound pressure level'.

Page 173, line 9: replace the text 'sound intensity' with 'sound pressure level'.

Page 173, line 27: replace the text 'sound intensity' with 'sound pressure level'.

7 Building acoustics

Page 212, 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 221, line 6: replace the text ‘illumination’ with ‘illuminance’. [reported by Zvonko Jagličić]

Page 226, line 15: replace the text ‘luminance dependence’ with ‘luminous intensity dependence’.

Page 227, line 3: replace the text ‘sound sources’ with ‘light sources’.

Page 232, line 2: add the text ‘positioned on the horizontal surface at geographic latitude 47° (Northern Hemisphere)’ behind ‘existing building’.

Page 234, lines 5–6: replace with

$$L_Z = \frac{9}{7\pi} (300 + 21000 \sin \gamma_s), \quad (8.39)$$

where γ_s is the altitude of the Sun.

Page 234, unnamed figure: dA' to $d\Omega$

Page 235, **Figure 8.16**: replace the unit on y -axis $\frac{\text{W nm}}{\text{m}^2}$ with $\frac{\text{W}}{\text{m}^2 \text{ nm}}$.

Tables

Page 243, line 2: replace the text 'ISO 12665' with 'EN 12665'.

Page 245, Table A.1: swap items q_v and q_m (wrong order).

Page 245, Table A.1: add

Z	1	zenith angle
α	1	azimuth
γ	1	altitude

Bibliography

Page 250, line 31: replace the text 'ISO 12665' with 'EN 12665'.