

KLATKA SCHODOWA

$$\tan \alpha = \frac{14.74}{27} = 0.546 \rightarrow \alpha = 28.63^\circ$$

$$\cos \alpha = 0.877$$

BIEGI - BG

OBŁĄZENIA	kW/m ²	CHAR	WSP	OBŁĄZ
WYPRAWA $(0.02 + \frac{14.7}{27} \times 0.01) \times 22$		0.56	1.3	0.72
BIEG $0.13 \times 24 \times 0.877$		3.55	1.1	3.91
STOPNIE $0.147 \times 0.5 \times 22$		1.60	1.1	1.77
TRWA $0.30 : 0.877$		0.34	1.3	0.44
OBŁ. UŻYTKOWE	4.0	4.00	1.3	5.20
RAZEM		10.05		12.04

$$l_0 = 0.4 + 2.16 + 0.20 = 2.76 \text{ m}$$

$$M = 0.125 \times 2.76^2 \times 12.04 = 11.46 \text{ kNm}$$

$$R = 0.5 \times 2.76 \times 12.04 = 16.61 \text{ kN}$$

SPÓCZWIŁ - PK

$$0.02 \times 22 \times 1.3 + 0.13 \times 24 \times 1.1 + 0.30 \times 1.3 + 5.20 = 9.60 \text{ kW/m}^2$$

$$M = 0.125 \times 1.20^2 \times 9.60 = 1.72 \text{ kNm} \rightarrow \phi 8 \text{ w } 12$$

$$R = 0.5 \times 1.20 \times 9.60 = 5.80 \text{ kN/m}$$

BK 1

$$q_1 = 0.80 \text{ kW/m} + 1.0 = 1.80 \text{ kW/m}$$

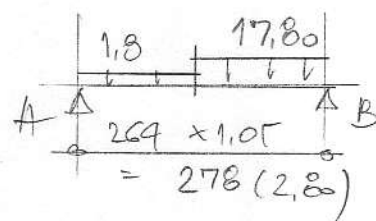
$$q_2 = 16.60 + 1.0 = 17.60 \approx 17.80 \text{ kW/m}$$

$$R_A = 2.50 + 5.6 = 8.10 \text{ kN}$$

$$R_B = 2.50 + 16.8 = 19.3 \text{ kN}$$

$$x_B = 1.08 \text{ m}$$

$$M = 19.3 \times 1.08 - 0.5 \times 1.08^2 \times 17.80 = 20.8 - 10.4 = 10.4 \text{ kNm}$$

BK 2

$$q = 17.80 \text{ kW/m}$$

$$M = 0.125 \times 2.80^2 \times 17.80 = 17.44 \text{ kNm}$$

$$R = 0.5 \times 2.80 \times 17.80 = 25 \text{ kN}$$