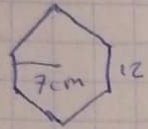


Yerolma Guadalupe

Determina la masa de un bloque de concreto, que descansa sobre una base hexagonal de 12 cm de lado y tiene un apotema de 7 cm, y sabemos que se ejerce una presión de 80 kpa. Resolver.



$$A = \frac{72 \times 7}{2}$$

$$A = \frac{504}{2}$$

$$A = 252 \text{ cm}^2$$

$$80 \text{ kpa} = 0.815773 \text{ kg/cm}^2$$

$$0.815773 \text{ kg/cm}^2 \times 252 \text{ cm}^2$$

$$= 205.5748 \text{ kg}$$

$$= 205.5748$$

Option 2

$$A = P \cdot d$$
$$A = 12.7 / 2$$
$$A = 42 \text{ cm}$$
$$A = 0.0042 \text{ m}^2$$

$$= \frac{P \cdot d}{2}$$
$$= \frac{84.7}{2}$$
$$= 2244 \text{ cm}$$
$$= 0.029 \text{ m}^2$$

~~0.0042 m<sup>2</sup>~~

$$0.0332 \text{ m}^2$$

80 kPa  
80000 kPa

$$F = P \times A$$
$$F = (80000)(0.0332)$$
$$F = 2656 \text{ N}$$

$$m = \frac{F}{g}$$

$$m = \frac{2656 \text{ N}}{9.81 \text{ m/s}^2}$$
$$m = 270.74$$