

Find shutter depth for full shading starting at 10:00 am of the 6th june, knowing that the height of the window is 1.6m and the number of shutters = 4, and the shutters start at height 0.8m of the window.

If you know that the width of the window equal 2m find the solar gain of this window in the mentioned date above.

$$60.6 \quad 21/5$$

$$X \quad 6/6$$

$$62.2 \quad 21/6$$

$$21/6 - 6/6 = 62.2 - X$$

$$21/6 - 21/5 = 62.2 - 60.6$$

$$X = 61.4 \quad \text{2points}$$

$$Z = (h-T)/n = (1.6-0.8)/4 = 0.2 \quad \text{2points}$$

$$D = Z / \tan(\text{Alt}) = 0.2 / \tan(61.4) = 0.109\text{m} = 10.9\text{cm} \quad \text{1point}$$

$$A_g = 2 * 1.6 * 0.85 = 2.72\text{m}^2 \quad \text{1point}$$

$$\text{SHGC} = (1 - 3/8) * 0.85 = 0.53125 \quad \text{1point}$$

$$21/5 \quad 469$$

$$6/6 \quad X$$

$$21/6 \quad 370$$

$$21/6 - 6/6 = 370 - X$$

$$21/6 - 21/5 = 370 - 469$$

$$X = 419.5 \quad \text{2points}$$

$$\text{SG} = \text{Insolation} * a_g * \text{SHGC} = 419.5/317 * 2.72 * 0.53125 = 1.91 \text{ kWhr/day} \quad \text{1point}$$

الي كان عندو غلط بالاجابة الاخيرة بناءا على غلطة سابقة نقص نص علامة