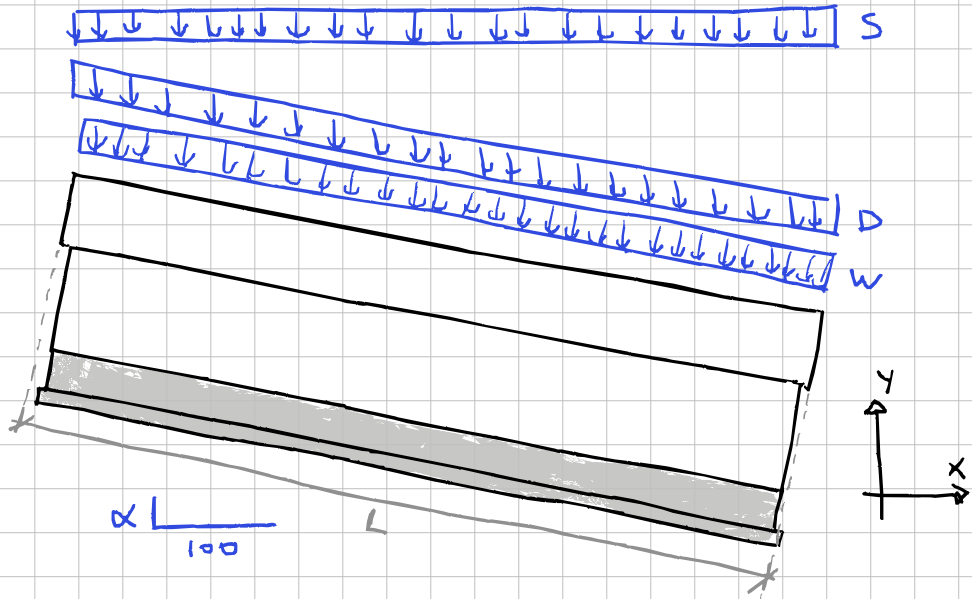


02 - SLANTED BUILDING LATERAL

APPLIED LOADS



1. PROJECTED LOADS (S)

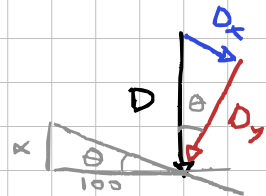
$$L_{HOR} = \sqrt{L^2 - \alpha^2} \Rightarrow S_{adj} = \frac{S \cdot L}{L_{HOR}} \approx S$$

$$\text{For } L = 100\text{m and } \alpha = 2\% \rightarrow S_{adj} = 1.0002 S \approx S$$

2. GRAVITY LOADS (D)

$$D_y = \frac{D \cdot L_{HOR}}{L} \approx D$$

$$D_x = D_y \cdot \alpha/100 \approx D \cdot \alpha/100$$



$$\text{For } D = 50 \text{ kN/m} \rightarrow D_x = 50 \text{ kN/m} \cdot 2/100 \cdot 100\text{m} = \underline{100 \text{ kN}}$$

3. PERPENDICULAR LOADS (W) $\rightarrow$ NO IMPACT.