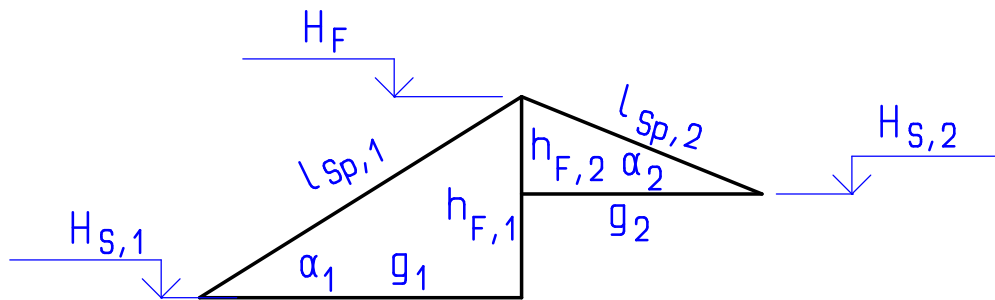


Geg.: Einhüftiges Satteldach, Dachbreite 12,40m;

$g_2 = 5,30\text{m}$; $H_F = +10,70$; $\alpha_1 = 32^\circ$; $H_{S,2} = +8,55$.

Ges.: Skizze, Grundmaß, α_2 , $H_{S,1}$ und Sparrenlängen.



$$h_{F,2} = H_F - H_{S,2} = 10,70 - 8,55 = \underline{\underline{2,15\text{m}}}$$

$$\alpha_2 = \tan^{-1} \frac{GK}{AK} = \tan^{-1} \frac{2,15}{5,30} = \underline{\underline{22,08^\circ}}$$

$$l_{sp,2} = \frac{AK}{\cos \alpha} = \frac{5,30}{\cos 22,08^\circ} = \underline{\underline{5,719\text{m}}}$$

$$g_1 = b - g_2 = 12,40 - 5,30 = \underline{\underline{7,10\text{m}}}$$

$$h_{F,1} = AK \times \tan \alpha_1 = 7,10 \times \tan 32^\circ = \underline{\underline{4,437\text{m}}}$$

$$H_{S,1} = H_F - h_{F,1} = 10,70 - 4,437 = \underline{\underline{+6,263}}$$

$$l_{sp,1} = \frac{AK}{\cos \alpha} = \frac{7,10}{\cos 32^\circ} = \underline{\underline{8,372\text{m}}}$$