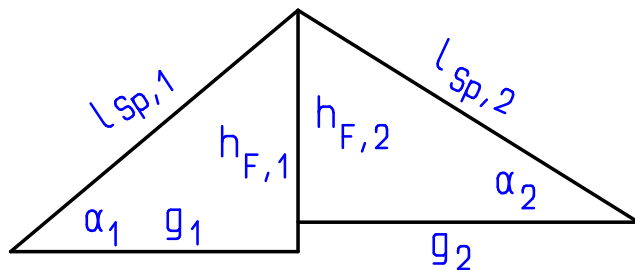
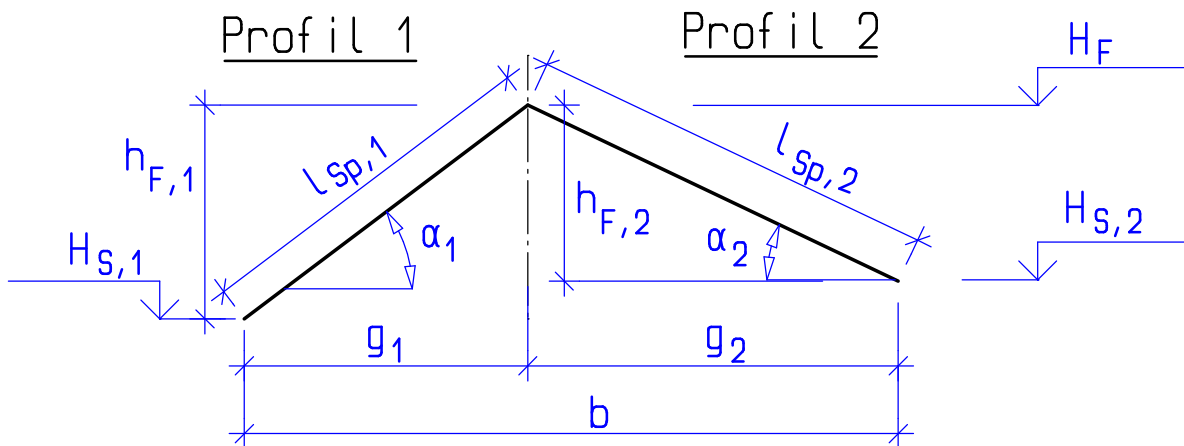


Geg.: Einhäufiges Satteldach, Dachbreite 8,30m;

$g_1 = 3,80\text{m}$; $\alpha_1 = 40^\circ$; $h_{F,2} = 2,50\text{m}$.

Ges.: Skizze, Firsthöhe, Sparrenlängen und α_2 .



$$g_2 = b - g_1 = 8,30 - 3,80 = \underline{\underline{4,50\text{m}}}$$

$$h_{F,1} = AK \times \tan \alpha = 3,80 \times \tan 40^\circ = \underline{\underline{3,189\text{m}}}$$

$$l_{sp,1} = \frac{AK}{\cos \alpha} = \frac{3,80}{\cos 40^\circ} = \underline{\underline{4,961\text{m}}}$$

$$\alpha_2 = \tan^{-1} \frac{GK}{AK} = \tan^{-1} \frac{2,50}{4,50} = \underline{\underline{29,055^\circ}}$$

$$l_{sp,2} = \frac{AK}{\cos \alpha} = \frac{4,50}{\cos 29,055^\circ} = \underline{\underline{5,148\text{m}}}$$