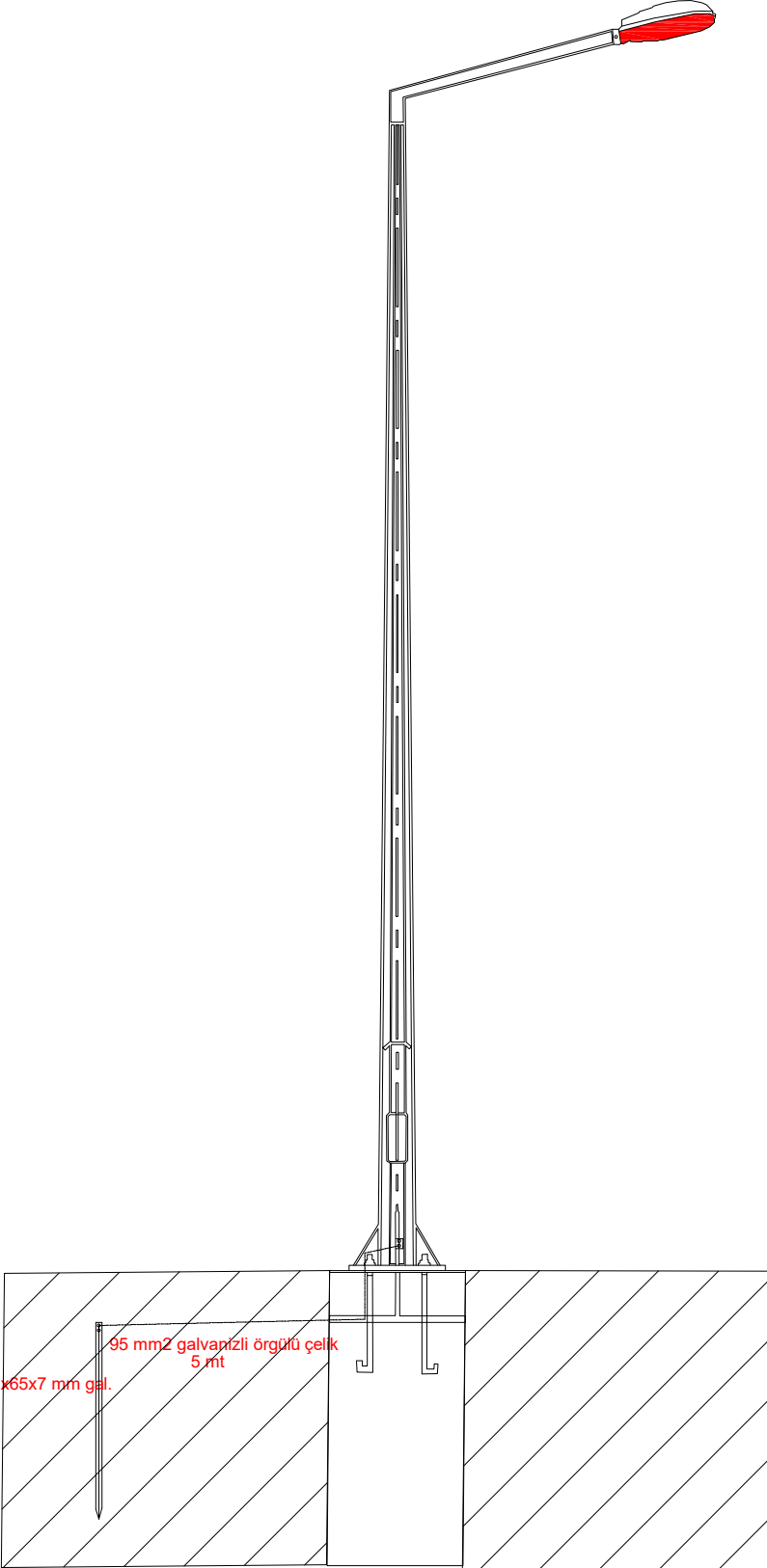


# TOPRAKLAMA HESAPLARI



## GALVANİZ AYDINLATMA DİREĞİ TOPRAKLAMA HESABI

TT SISTEMDE  $R_A \times I_A \leq 50V$

TOPRAK GEÇİS DİRENCİ HESABI

$\rho = 100 \text{ ohm.m}$

ÇUBUK

$$R_c = \frac{\rho}{2 \pi L} \ln \frac{4 L}{d}$$

$$R_c = \frac{100}{2 \cdot 3,14 \cdot 2} \ln \frac{4 \cdot 2}{0,02} = 47,69 \text{ ohm}$$

$L = 2m$   $d = 0,02m$   $n = 1$  (ÇUBUK ADEDİ)

$R_c = 47,68 \text{ ohm}$

GÖMÜLÜ İLETKEN (95mm2 CU)

$$R_{cu} = \frac{\rho}{2 \pi L} \ln \frac{2L}{d} \left( 1 + \frac{\ln \frac{L}{2H}}{\ln \frac{2L}{d}} \right)$$

$L = 5m$   $d = 0,0126m$   $H = 1m$

$R_{cu} = 25,09 \text{ ohm}$

$$\frac{1}{R_A} = \frac{1}{R_c} + \frac{1}{R_s} = 0,06 \text{ ohm}$$

$R_A = 16,44 \text{ ohm}$

NEDENİ İLE GECİS DİRENCİ UYGUNDUR.

UYGULAMA SONUNDA ÖLÇÜM YAPTIRILACAKTIR.