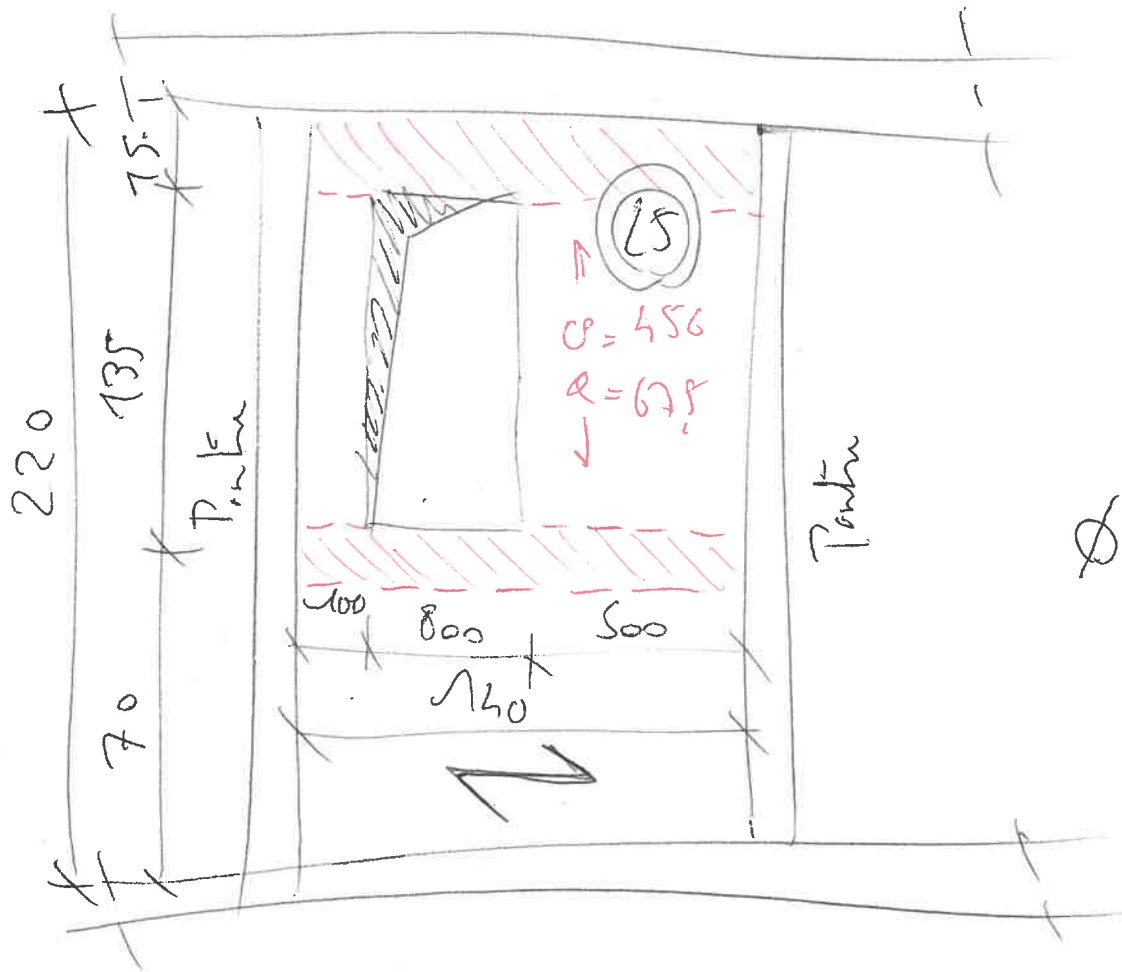




1932

$$R_{90} \approx 20 \text{ MPa}$$

$$f_c \approx 240 \text{ MPa}$$

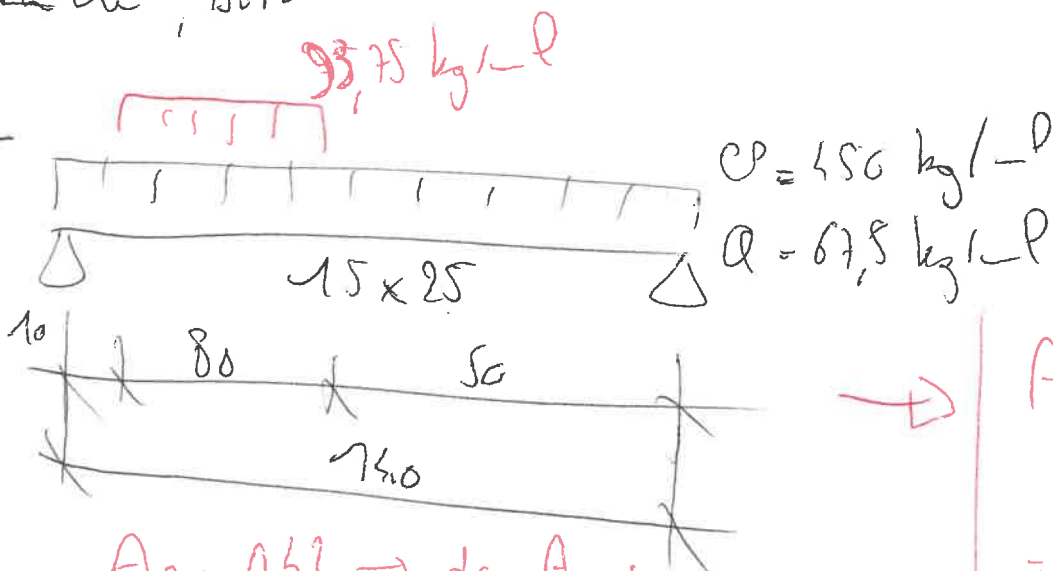
$$\phi 8 \text{ e } \approx 15 \text{ cm}$$

$$\hookrightarrow A = 3,02 \text{ cm}^2 / \text{ml}$$

$$\begin{aligned} CP &= 50 \text{ kg/m}^2 \\ Q &= 100 \text{ kg/m}^2 \end{aligned}$$

Poids Tomelle? hypothèse 150 kg répartie de part & d'autre, soit

EC2



$$A_p = 0,42 \rightarrow \text{dc } A_{min}$$

$$A_k = 1,2 \text{ cm}^2 / \text{m}$$

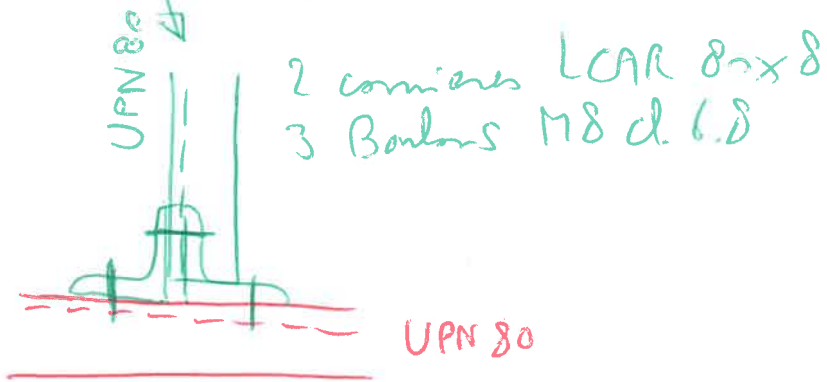
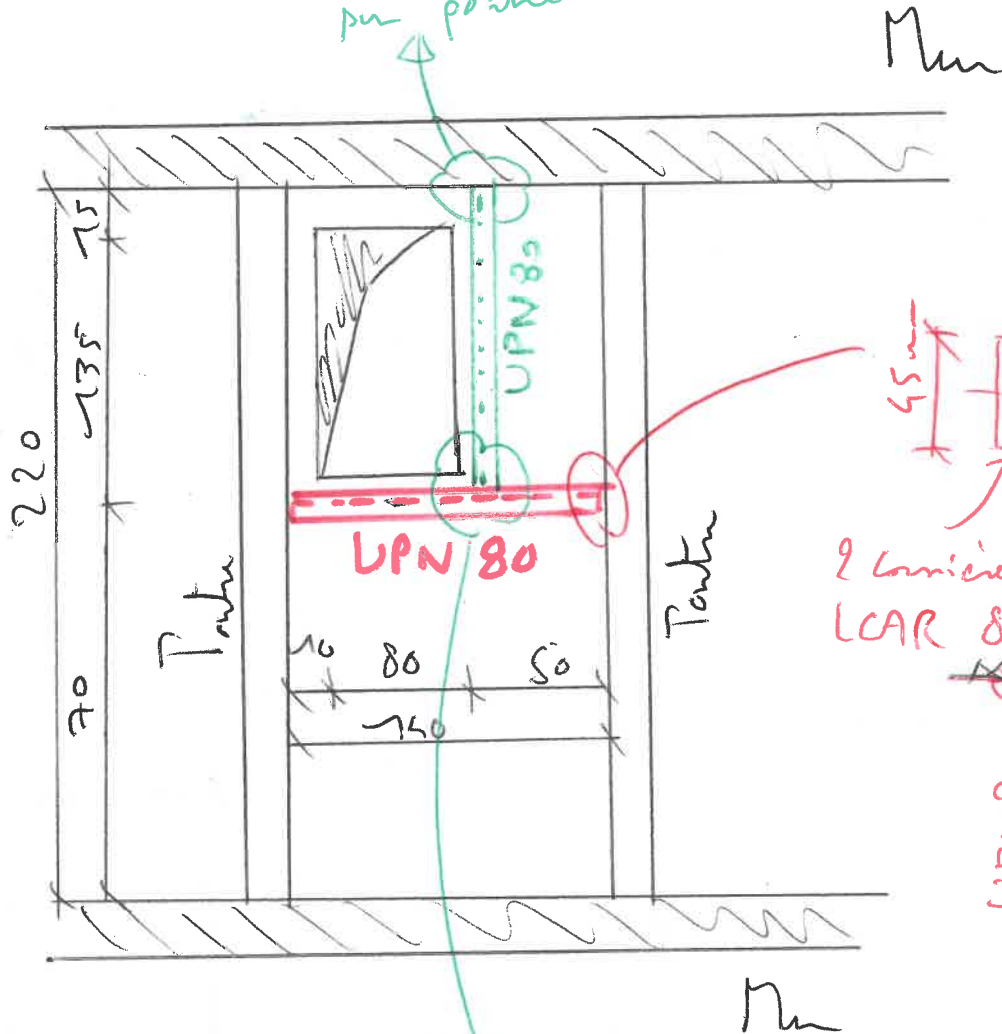
$$CP = 450 \text{ kg/m}$$

$$Q = 67,5 \text{ kg/m}$$

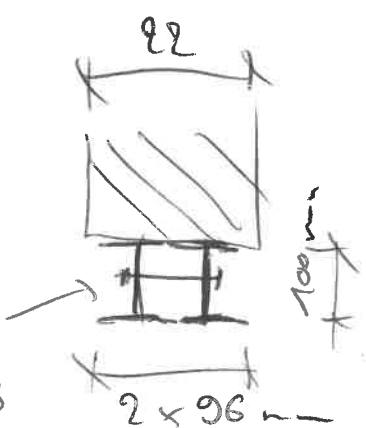
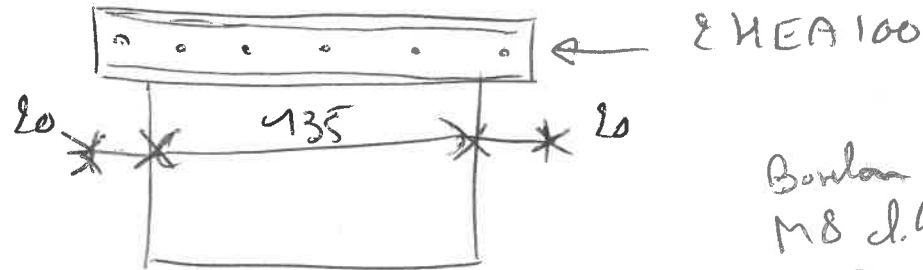
$$\begin{aligned} A_{min} &= \frac{0,26 \times 0,3 \times f_{ctk} b_w d}{f_{yk}} \\ &= 0,000087 \text{ m}^2 \\ &= 0,87 \text{ cm}^2 \text{ si } 15 \times 25 \end{aligned}$$

$$\begin{aligned} 1 \text{ HA } 8 &= 1,51 \text{ cm}^2 \\ 1 \text{ HA } 8 &= 0,5 \text{ cm}^2 \end{aligned}$$

Suivant nature
du mur, dite fixation
par pointes ou achemet BA



linterne par mur briques ép 99













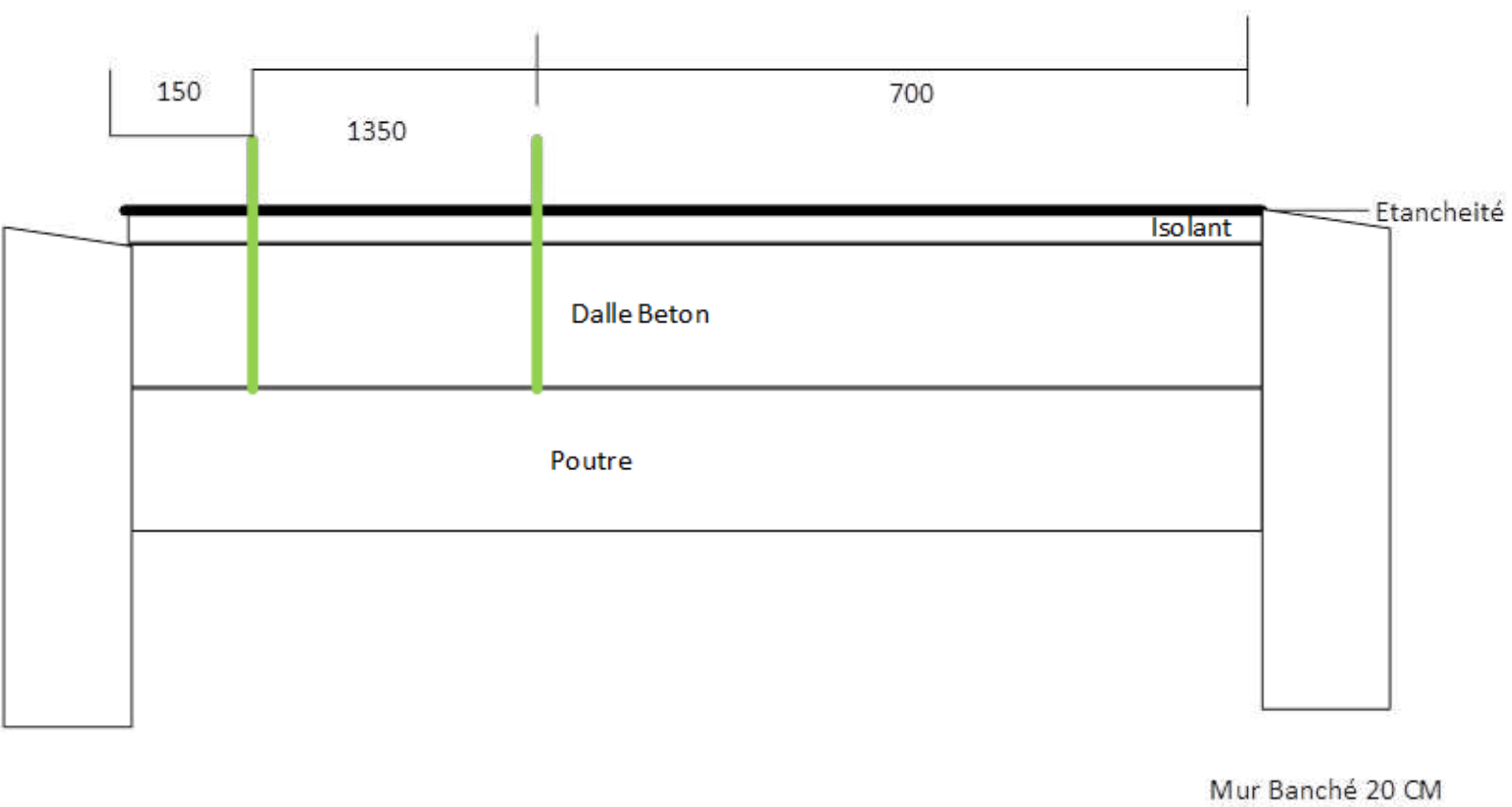
Führer aufwachen

IPN??

Zoehne



Vue de face





Future
Placement.

IPV??

Future

Future