

STATICKÝ VÝPOČET

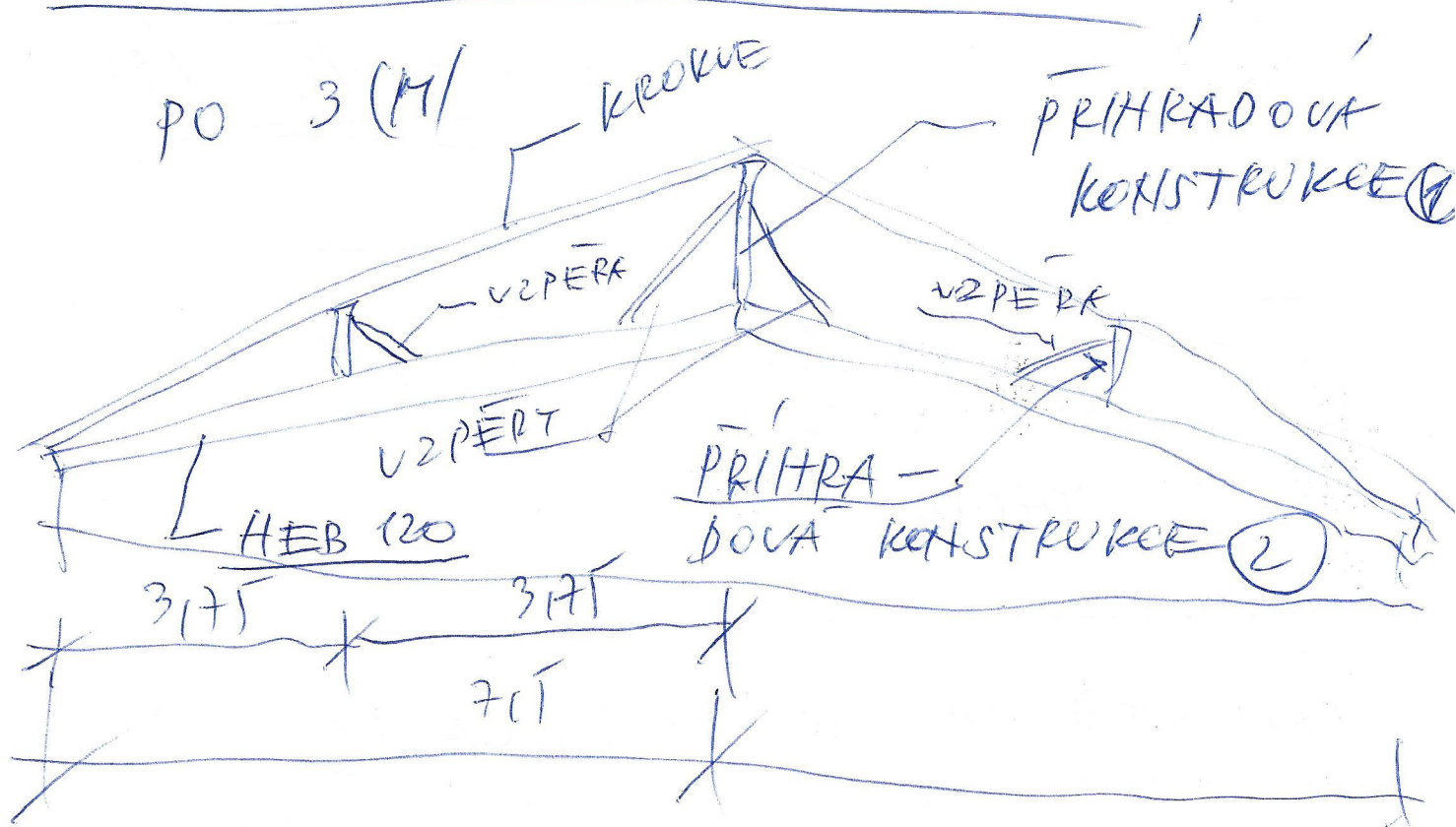
STATICKÝ NÁVRH

AKCE: UCHOVSKÁ ŠKOLA PLZEŇ

- SKVRNATÝ

NOVÁ STŘEŠNÍ KONSTRUKCE

PŘÍCHYTŘEL - SCHEMA



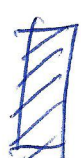
VZPĚRA

60x60x4 (44M)

KROKVE . . .  $L_v = \underline{\underline{3,75 \text{ (m)}}}$   
 PO . . . CCA  $\underline{\underline{1 \text{ (m)}}}$

$$M_{\max} = \frac{1}{8} \cdot 2,9 \cdot 3,75^2 = \underline{\underline{4,22 \text{ (m)}}}$$

KLAVRIT : KROKEV

 180 (mm)  
 100 (mm)

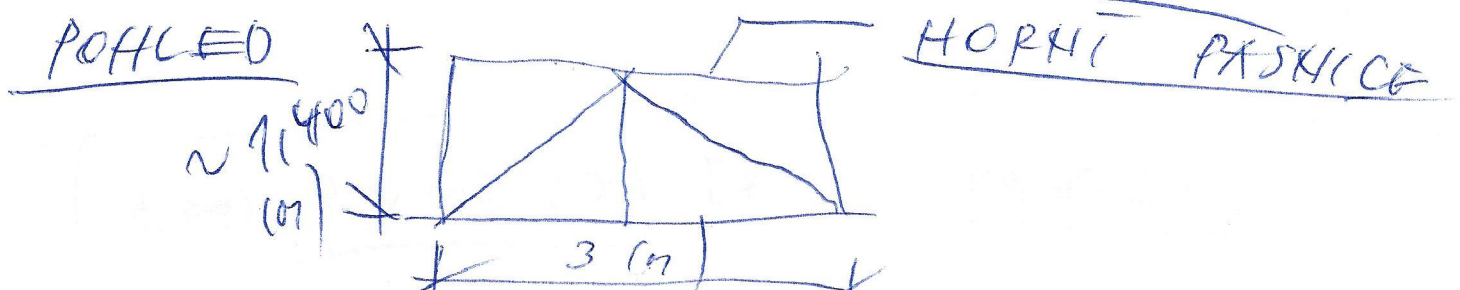
$$W = \frac{1}{6} \cdot 0,1 \cdot 0,18^2 =$$

$$= \underline{\underline{514 \cdot 10^{-9} \text{ (m}^3\text{)}}}$$

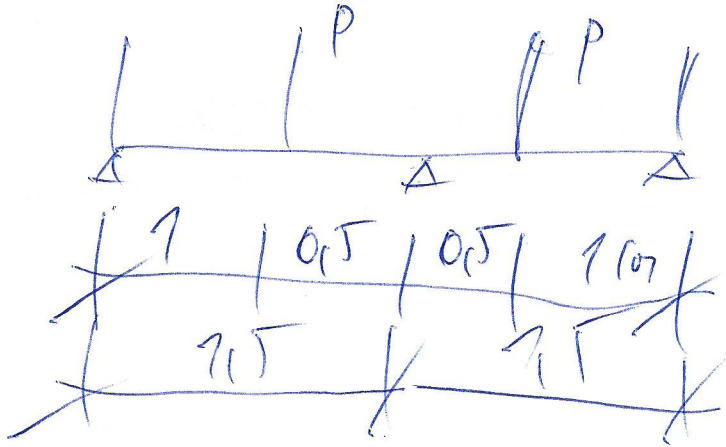
$$\sigma = \frac{M}{W} = \frac{4,22}{0,54} = \underline{\underline{7,8 \text{ (MPa)}}} = 7$$

=> VYHOVL

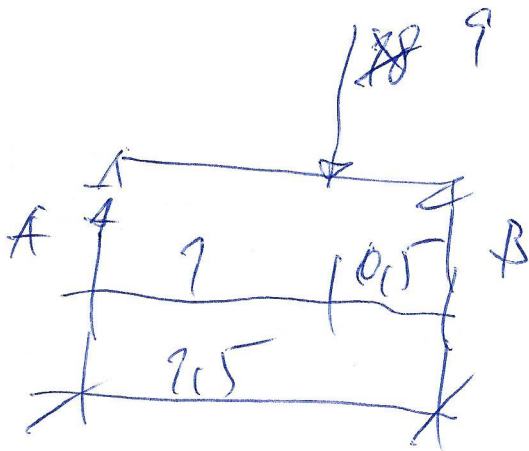
PRIHRADOVÁ KONSTRUKCE (1)



- 3 -



$$P = 219 \cdot \frac{3.75}{9} = \underline{\underline{9 \text{ (kH)}}}$$



$$A \cdot 1.5 - 9 \cdot 0.5 = 0$$

$$A = \frac{9}{3} \text{ (kH)}$$

$$M_{na} = \underline{\underline{3 \text{ (kHf)}}}$$

HORNÍ PÁSKICE :

$$\square 80 \times 80 \times 4 \text{ (mm)}$$

$$\sigma = \frac{6 \cdot 10^3}{44} = \underline{\underline{136 \text{ (MPa)}}} \Rightarrow$$

=) UTHOVÍ

SPODNÍ PÁSKICE

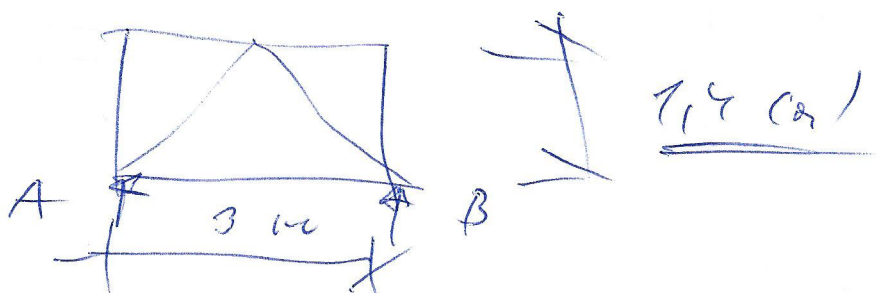
$$\square 400 \times 400 \times 4$$

$$\square 80 \times 80 \times 4$$

(mm)



## DIAGONALY A SVISLICE



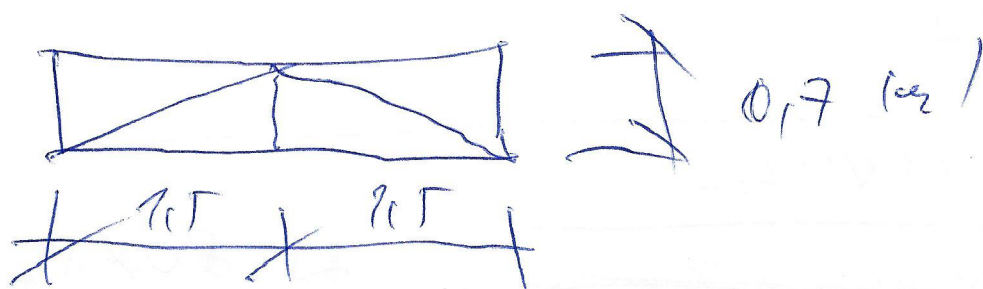
$$A = 3 \cdot \cancel{7,5} \cdot 3,75 \cdot 2,4 = \underline{\underline{27 \text{ (kH)}}}$$

KALKULACE:  $\square 80 \times 80 \times 4 \text{ cm}$

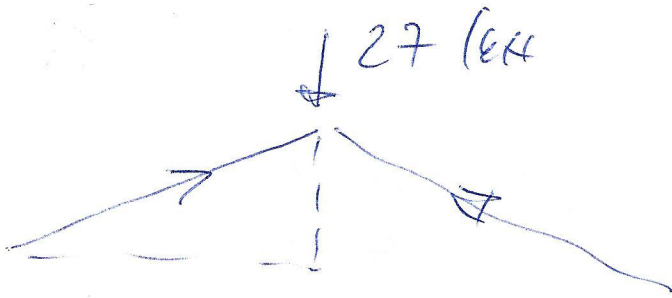
ZÁVĚR: USE 2 ŽÁKLIV :

$\square 80 \times 80 \times 4 \text{ (mm)}$

PRÍKLADOVÁ KONSTRUKCE (2)

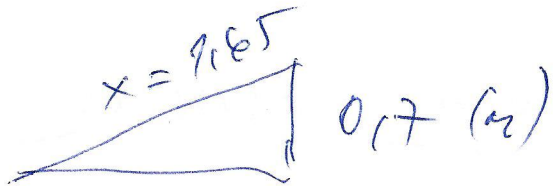


-5-



$$13,5 - \left( \frac{9,85}{0,7} \right) =$$

$$= \underline{3,7 \text{ kN}}$$



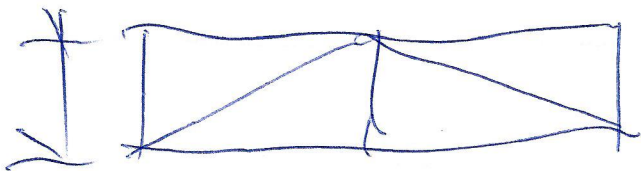
$$x = \sqrt{2,125 + 0,49} =$$

$$=$$

$$N_u' = 8,3 \cdot 29 \cdot 0,7 = 122 \text{ kN} \Rightarrow$$

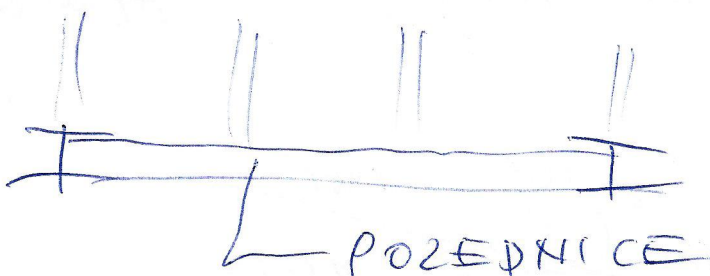
$\Rightarrow$  UTHOVIT

0,7

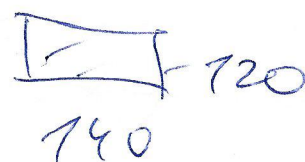


VSE 2  
JACKLU

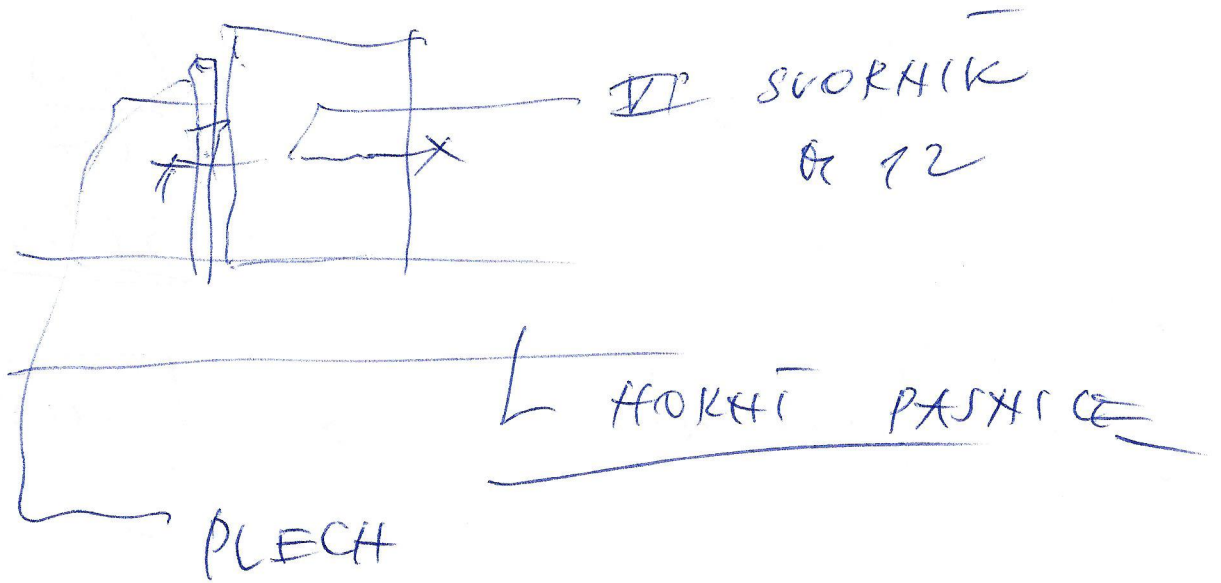
□ 80x80x7  
(mm)



(HKO  
VENČO)



- 6 -



80 x 120 x 8 (mm)  
(HAKHIT)

4 cm

