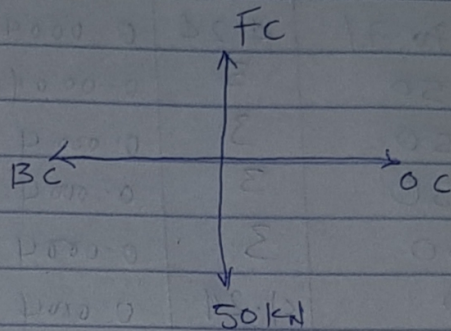


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At Joint C \Rightarrow



From previous calculated example,
 $B_C = 50 \text{ kN}$

$$\therefore -B_C + O_C = 0 \quad (\text{Resolving to horizontal})$$

$$-50 + O_C = 0$$

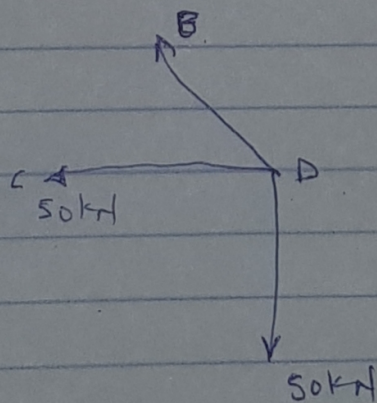
$$O_C = 50 \text{ kN} \quad (\text{Tensional})$$

Resolving to Vertical

$$\Rightarrow -50 \text{ kN} + F_C = 0$$

$$F_C = 50 \text{ kN} \quad (\text{Tensional})$$

At Joint D



$$\text{Resolving to horizontal} = -50 \text{ kN} - OB \cos 45 = 0$$

$$-50 \text{ kN} = OB \cos 45$$

$$50 \text{ kN} = -OB \cos 45$$

$$DE = \frac{50}{\cos 45} = -70.7$$

DE = 70.7 Compressional

MEMBER	P (kN)	t (m)	a (m ²)	P = P/a (kN/m ²)	U	PUL
AF	-70.71	4.24	0.0004	-176775	-0.471	35302675
AB	50	3	0.0004	125000	0.333	424875
BC	50	3	0.0004	125000	0.666	249750
BF	50	3	0.0004	125000	0.333	124875
FE	50	3	0.0004	125000	-0.333	-124825
BE	0	4.24	0.0004	0	-0.471	0
EC	50	3	0.0004	125000	1.000	375000
ED	-70.71	4.24	0.0004	-176775	-0.942	706053.492
CD	50	3	0.0004	125000	0.666	249750

$$\Sigma = 2058455.24$$

$$\frac{\Sigma PUL}{\Sigma} = \frac{2058455.24}{200000} = 10.29 \text{ mm}$$