

**В технической системе силы измеряются**  
 **$1\text{кГ}=1\text{кгс}=1\text{ДаН}\sim 10\text{Н}$**

**У американцев**

**Силы  $1\text{kip}=1000\text{lb}$**

**Напряжения**

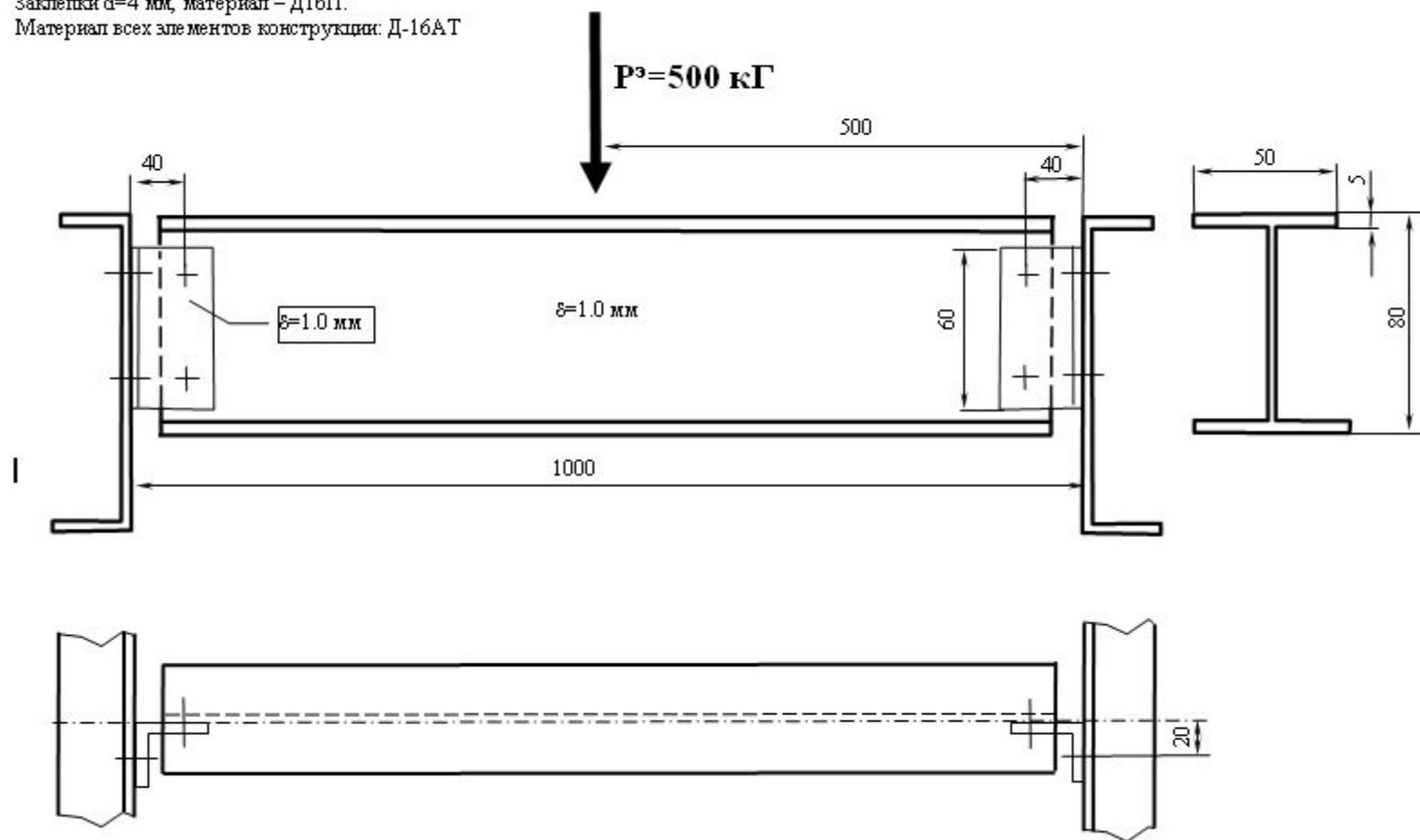
**$1\text{ksi}=1\text{kip}/1\text{in}^2 = 1000\text{lb}/1\text{in}^2 = 1000\text{psi}$**

**Недостающие данные принимаете сами.**

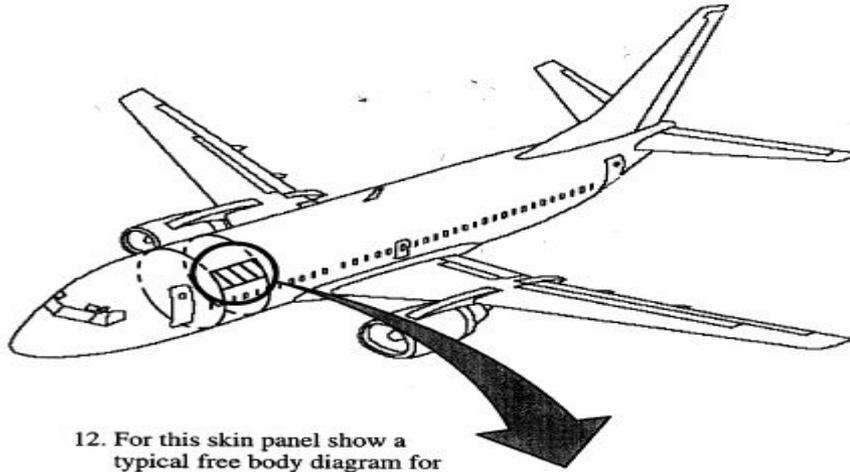
Определить коэффициенты запаса прочности для диафрагмы

Заклепки  $d=4$  мм, материал – Д16П.

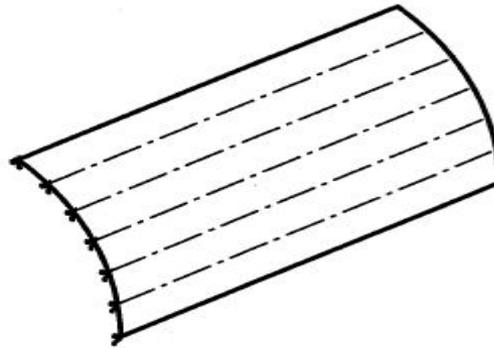
Материал всех элементов конструкции: Д-16АТ



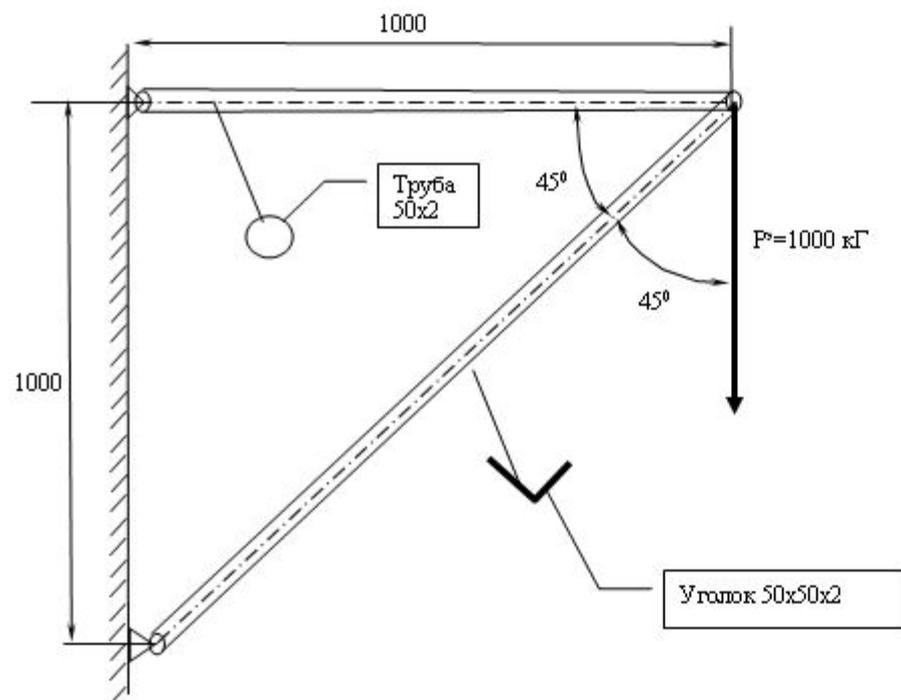
## FREE BODY DIAGRAMS



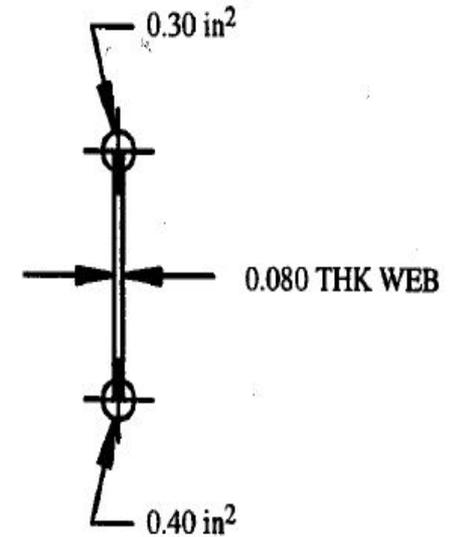
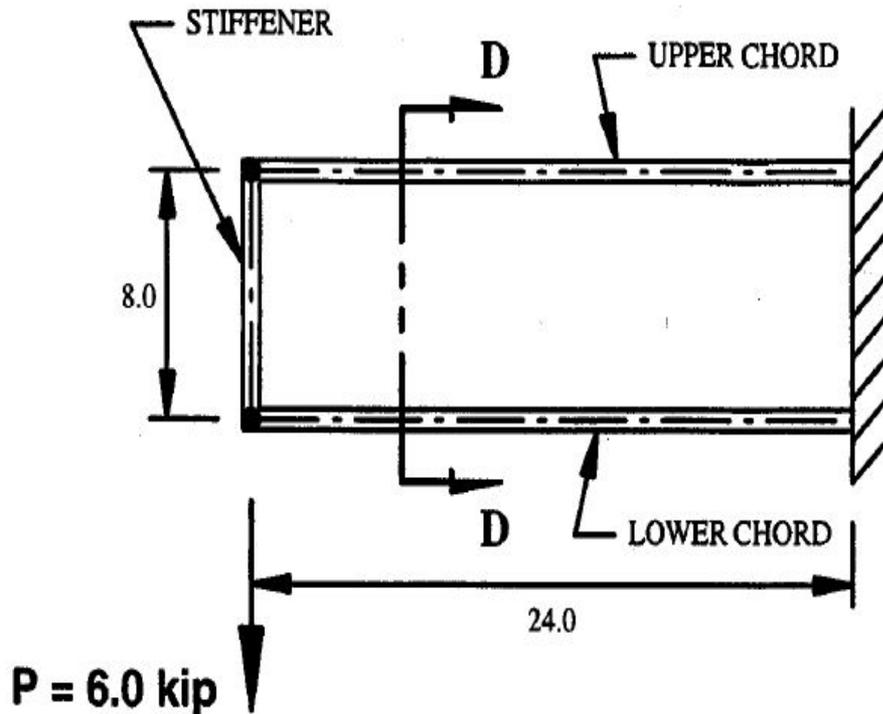
12. For this skin panel show a typical free body diagram for internal pressure and down inertia load. Give formulas used for computing panel loads and stresses. (10 Points)



Определить коэффициенты запасов прочности стержней.  
Материал – Д16АГ.



9. Calculate beam reactions -- Show magnitudes and vector directions on sketch. Calculate web shear flow. Show detailed free bodies of stiffeners, web and lower chord. Calculate web shear stress and maximum lower chord stress. (8 Points)



**VIEW D-D**

Note:

$f_t$  is positive for tension.  
All dimensions in inches