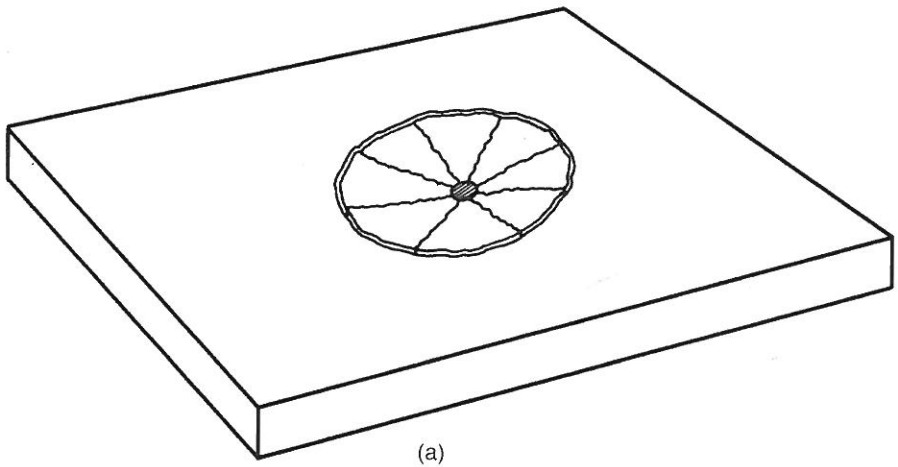
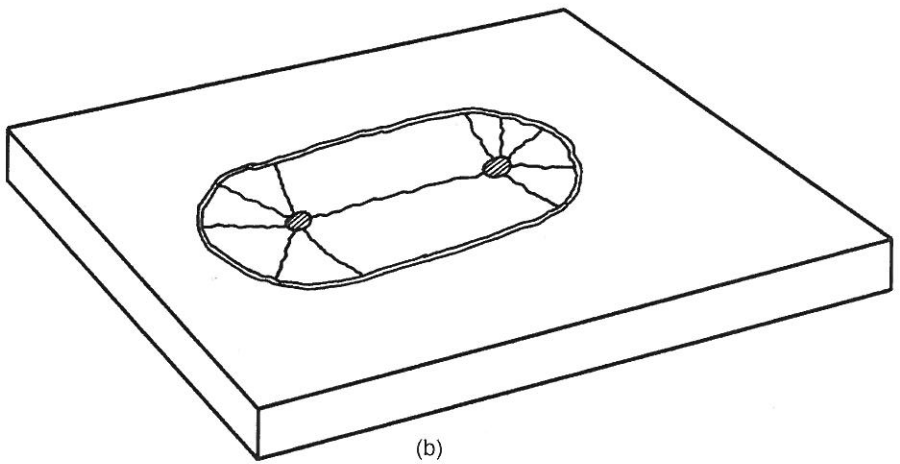
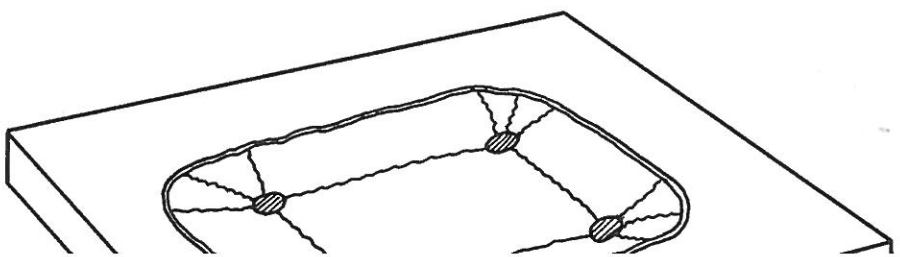


(a)



(b)



(*b*) Single patch load applied along a free edg

$$P_u = (\pi[M_p + M_n] + 4M_n)/\left[1 - \frac{2a}{3l}\right]$$

(*c*) Single patch load applied at a corner of a

$$P_u = 2\left[1 + \frac{4a}{l}\right]M_n]$$

(*d*) Two similar patch loads of radius a, space corners of the slab:

$$P_u = \left[\frac{4\pi}{\left(1 - \frac{a}{3l}\right)} + \frac{1{\cdot}8x}{\left(l - \frac{a}{2}\right)}\right][M_p + M_n]$$

(*e*) Four similar patch loads applied at corners c all four loads away from edges or corners

$$P_u = \left[\frac{4\pi}{\left(1 - \frac{a}{3l}\right)} + \frac{1{\cdot}8(x+y)}{\left(l - \frac{a}{2}\right)}\right][M_p + M_n]$$

Where P_u is the ultimate load, M_p is the ultim resistance of the slab, and M_n is the ultimate negativ the slab. The above two values can be obtained fro

$$M_{p,n} = f\left(\frac{h^2}{6}\right)$$

where

f	=	characteristic flexural strength of con
h	=	slab thickness
a	=	radius of patch load
x	=	spacing of two point of patch loads (
y	=	spacing of four point loads forming c at right angles to x
l	=	radius of relative stiffness: