TEORIA DE REISSNER - MINDLIN

$$D_f = \frac{E h^3}{12(1-\nu^2)}$$

$$\phi = 5/6$$

$$\begin{bmatrix} m_x \\ m_y \\ m_{xy} \\ v_x \\ v_y \end{bmatrix} = \begin{bmatrix} D_f & \nu D_f & 0 & 0 & 0 \\ \nu D_f & D_f & 0 & 0 & 0 \\ 0 & 0 & Gh^3/24 & 0 & 0 \\ 0 & 0 & 0 & \phi G h & 0 \\ 0 & 0 & 0 & 0 & \phi G h \end{bmatrix} \begin{bmatrix} \chi_x \\ \chi_y \\ 2\chi_{xy} \\ \gamma_x \\ \gamma_y \end{bmatrix}$$

$m_x(x,y)$ $v_x(x,y)$
$m_y(x,y)$ $v_y(x,y)$
$m_{xy}(x,y)$

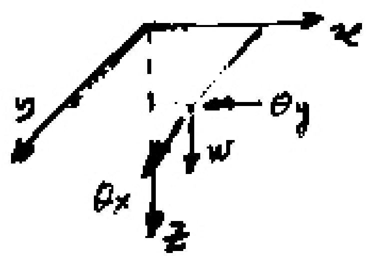
$\chi_x(x,y)$ $\gamma_x(x,y)$
$\chi_y(x,y)$ $\gamma_y(x,y)$
$\chi_{xy}(x,y)$

$$\begin{bmatrix} \partial/\partial x & 0 & \partial/\partial y & -1 & 0 \\ 0 & \partial/\partial y & \partial/\partial x & 0 & -1 \\ 0 & 0 & 0 & \partial/\partial x & \partial/\partial y \end{bmatrix} \begin{bmatrix} m_x \\ m_y \\ m_{xy} \\ v_x \\ v_y \end{bmatrix} + \begin{bmatrix} q \\ \bar{m}_x \\ \bar{m}_y \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$\begin{bmatrix} \bar{m}_x \\ \bar{m}_y \\ q \end{bmatrix}$$

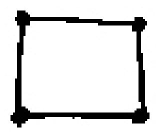
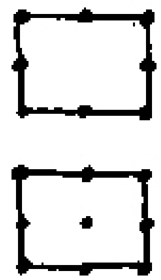
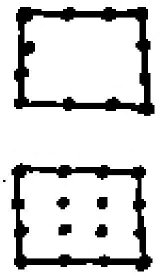
$$\begin{bmatrix} \chi_x \\ \chi_y \\ 2\chi_{xy} \\ \gamma_x \\ \gamma_y \end{bmatrix} = \begin{bmatrix} \partial/\partial x & 0 & 0 \\ 0 & \partial/\partial y & 0 \\ \partial/\partial y & \partial/\partial x & 0 \\ 1 & 0 & \partial/\partial x \\ 0 & 1 & \partial/\partial y \end{bmatrix} \begin{bmatrix} \theta_x \\ \theta_y \\ w \end{bmatrix}$$

$q(x,y)$
$\bar{m}_x(x,y)$
$\bar{m}_y(x,y)$



$w(x,y)$
$\theta_x(x,y)$
$\theta_y(x,y)$

|D|

TIPO DE INTEGRAÇÃO			
COMPLETA	2x2	3x3	4x4
REDUZIDA	1x1	2x2	3x3
SELECTIVA	1x1 CORTE 2x2 FLEXÃO	2x2 CORTE 3x3 FLEXÃO	3x3 CORTE 4x4 FLEXÃO