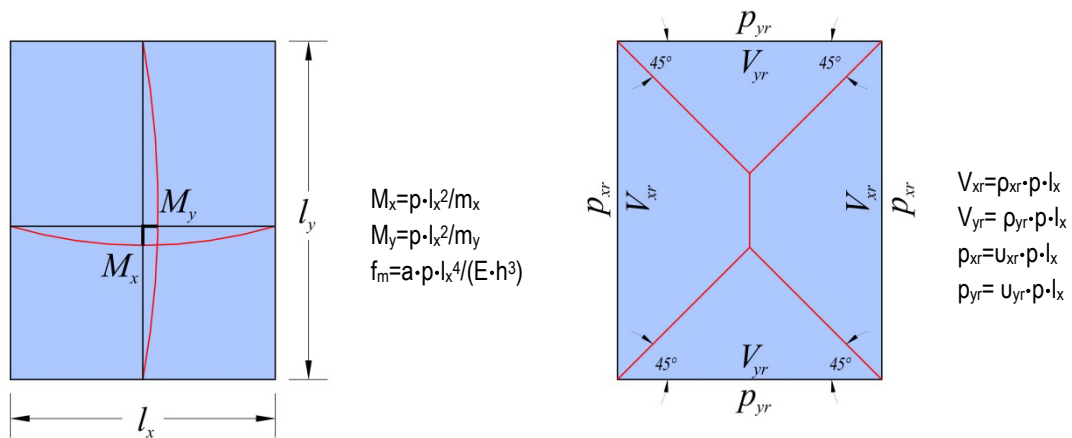


## **Tables 46 - 59**

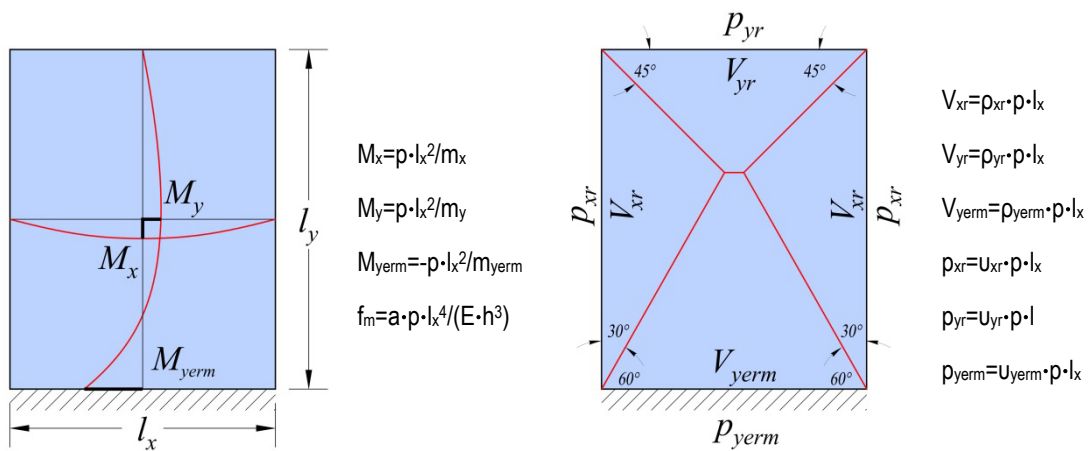
**Table 46** Two-way slab with four simply-supported edges



$p_{ij}$  = equivalent uniform load

$\epsilon = l_y/l_x$	$m_x$	$m_y$	100 a	$\rho_{xr}$	$\rho_{yr}$	$u_{xr}$	$u_{yr}$
1.00	27.2	27.2	4.87	0.34	0.34	0.25	0.25
1.05	24.5	27.5	5.36	0.35	0.35	0.26	0.25
1.10	22.4	27.9	5.84	0.36	0.35	0.27	0.25
1.15	20.7	28.4	6.31	0.37	0.35	0.28	0.25
1.20	19.1	29.1	6.78	0.38	0.36	0.29	0.25
1.25	17.8	29.9	7.28	0.39	0.36	0.3	0.25
1.30	16.8	30.9	7.67	0.4	0.36	0.31	0.25
1.35	15.8	31.8	8.09	0.41	0.36	0.31	0.25
1.40	15	32.8	8.5	0.42	0.37	0.32	0.25
1.45	14.3	33.8	8.9	0.42	0.37	0.33	0.25
1.50	13.7	34.7	9.27	0.43	0.37	0.33	0.25
1.60	12.7	36.1	9.97	0.44	0.37	0.34	0.25
1.70	11.9	37.3	10.6	0.45	0.37	0.35	0.25
1.80	11.3	38.5	11.18	0.46	0.37	0.36	0.25
1.90	10.8	39.4	11.69	0.46	0.37	0.37	0.25
2.00	10.4	40.3	12.15	0.47	0.37	0.38	0.25

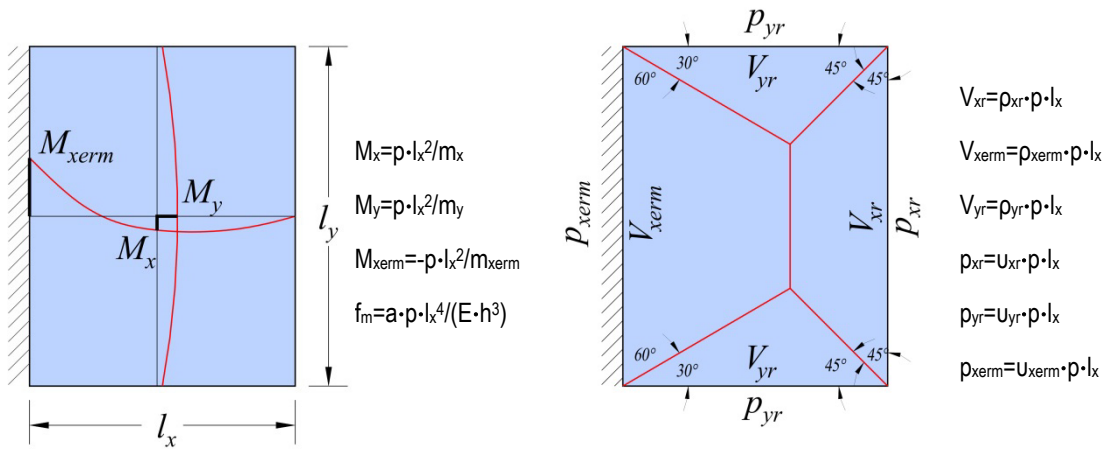
**Table 47-1** Two-way slab with one fixed edge and the rest simply supported



$p_{ij}$  = equivalent uniform load

$\epsilon = l_y / l_x$	$m_x$	$m_y$	$m_{yerm}$	100 a	$\rho_{xr}$	$\rho_{yr}$	$\rho_{yerm}$	$U_{xr}$	$U_{yr}$	$U_{yerm}$
1.00	41.20	29.40	11.90	3.34	0.29	0.32	0.58	0.18	0.23	0.40
1.05	36.50	29.00	11.30	3.78	0.30	0.33	0.60	0.19	0.24	0.41
1.10	31.90	28.80	10.90	4.22	0.31	0.33	0.61	0.20	0.24	0.42
1.15	28.30	28.80	10.40	4.67	0.32	0.34	0.63	0.21	0.24	0.42
1.20	25.90	28.90	10.10	5.12	0.33	0.34	0.64	0.22	0.25	0.43
1.25	23.40	29.20	9.80	5.57	0.34	0.34	0.65	0.23	0.25	0.43
1.30	21.70	29.70	9.60	6.02	0.35	0.35	0.66	0.24	0.25	0.43
1.35	20.10	30.20	9.30	6.45	0.36	0.35	0.67	0.25	0.25	0.43
1.40	18.80	30.80	9.20	6.89	0.37	0.35	0.68	0.26	0.25	0.43
1.45	17.50	31.60	9.00	7.31	0.38	0.36	0.69	0.27	0.25	0.43
1.50	16.60	32.30	8.90	7.73	0.39	0.36	0.69	0.27	0.25	0.43
1.60	15.00	33.60	8.70	8.52	0.41	0.36	0.70	0.29	0.25	0.43
1.70	13.80	34.90	8.50	9.26	0.42	0.36	0.71	0.30	0.25	0.43
1.80	12.80	36.20	8.40	9.94	0.43	0.37	0.72	0.31	0.25	0.43
1.90	12.00	37.50	8.30	10.56	0.44	0.37	0.72	0.32	0.25	0.43
2.00	11.40	38.80	8.20	11.12	0.45	0.37	0.73	0.33	0.25	0.43

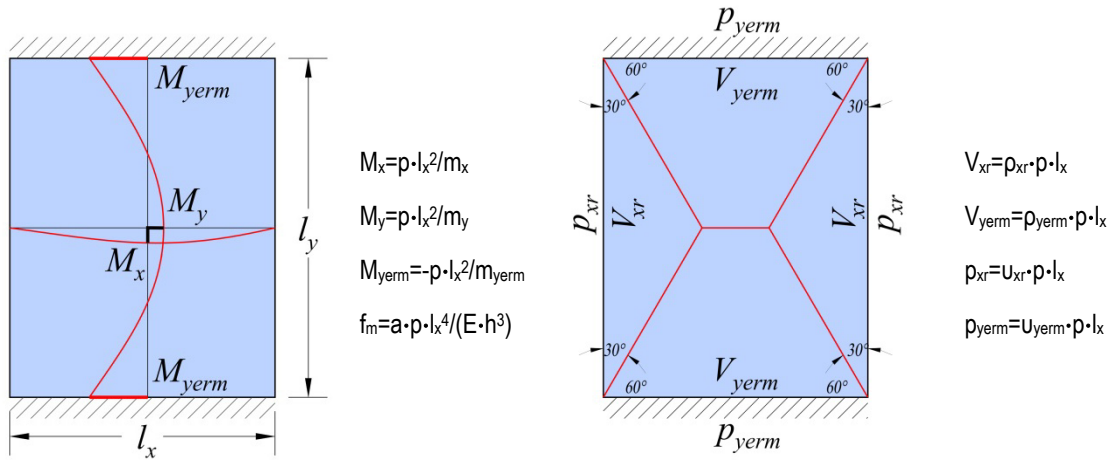
**Table 47-2** Two-way slab with one fixed edge and the rest simply supported



$p_{ij}$  = equivalent uniform load

$\epsilon = l_y / l_x$	$m_x$	$m_{xerm}$	$m_y$	100 a	$\rho_{xr}$	$\rho_{xerm}$	$\rho_{yr}$	$U_{xr}$	$U_{yr}$	$U_{xerm}$
1.00	31.40	11.90	41.20	3.34	0.32	0.58	0.29	0.23	0.40	0.18
1.05	29.20	11.30	43.20	3.57	0.32	0.59	0.29	0.24	0.41	0.18
1.10	27.30	10.90	45.10	3.80	0.33	0.60	0.29	0.24	0.42	0.18
1.15	25.80	10.50	47.10	4.01	0.33	0.61	0.29	0.25	0.43	0.18
1.20	24.50	10.20	48.80	4.20	0.34	0.61	0.29	0.25	0.44	0.18
1.25	23.40	9.90	50.30	4.38	0.35	0.62	0.29	0.26	0.45	0.18
1.30	22.40	9.70	51.80	4.55	0.35	0.62	0.29	0.26	0.46	0.18
1.35	21.60	9.40	53.20	4.72	0.35	0.63	0.29	0.27	0.46	0.18
1.40	21.00	9.30	54.30	4.85	0.36	0.63	0.29	0.27	0.47	0.18
1.45	20.30	9.10	55.00	4.98	0.36	0.63	0.29	0.27	0.47	0.18
1.50	19.80	9.00	55.60	5.10	0.36	0.63	0.29	0.28	0.48	0.18
1.60	19.00	8.80	56.80	5.31	0.37	0.64	0.29	0.28	0.49	0.18
1.70	18.30	8.60	57.80	5.49	0.37	0.64	0.29	0.29	0.50	0.18
1.80	17.80	8.40	58.60	5.62	0.37	0.64	0.28	0.29	0.50	0.18
1.90	17.40	8.30	59.00	5.75	0.38	0.64	0.28	0.30	0.51	0.18
2.00	17.10	8.30	59.20	5.85	0.38	0.64	0.28	0.30	0.52	0.18

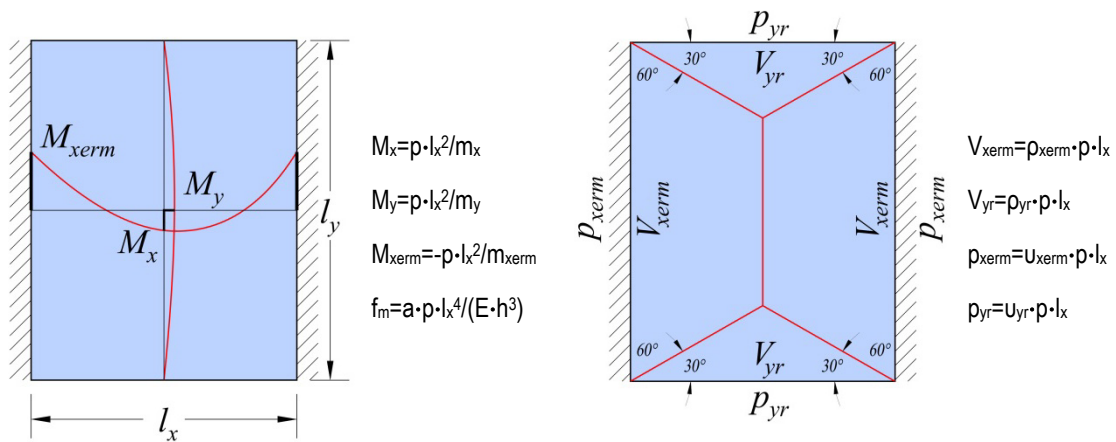
**Table 48-1** Two-way slab with two opposite fixed edges and the rest simply supported



$p_{ij}$  = equivalent uniform load

$\epsilon = l_y / l_x$	$m_x$	$m_y$	$m_{yerm}$	100 a	$\rho_{xr}$	$\rho_{yerm}$	$U_{xr}$	$U_{yerm}$
1.00	63.30	35.10	14.30	2.30	0.25	0.52	0.14	0.36
1.05	52.20	33.70	13.40	2.66	0.26	0.54	0.15	0.37
1.10	46.10	32.90	12.70	3.03	0.27	0.56	0.16	0.37
1.15	39.80	32.20	12.00	3.43	0.28	0.58	0.17	0.38
1.20	35.50	31.70	11.50	3.83	0.30	0.59	0.17	0.39
1.25	31.50	31.30	11.10	4.25	0.31	0.61	0.18	0.40
1.30	28.50	31.20	10.70	4.67	0.32	0.62	0.19	0.41
1.35	25.80	31.20	10.30	5.10	0.33	0.64	0.20	0.41
1.40	23.70	31.40	10.00	5.53	0.34	0.65	0.20	0.42
1.45	22.00	31.70	9.75	5.96	0.35	0.66	0.21	0.42
1.50	20.40	32.10	9.50	6.39	0.36	0.67	0.22	0.42
1.60	17.90	33.30	9.20	7.22	0.38	0.69	0.23	0.43
1.70	16.00	34.90	8.90	8.02	0.40	0.70	0.25	0.43
1.80	14.60	37.10	8.70	8.78	0.41	0.71	0.26	0.43
1.90	13.40	39.70	8.50	9.49	0.42	0.71	0.27	0.43
2.00	12.50	42.40	8.40	10.13	0.43	0.72	0.28	0.43

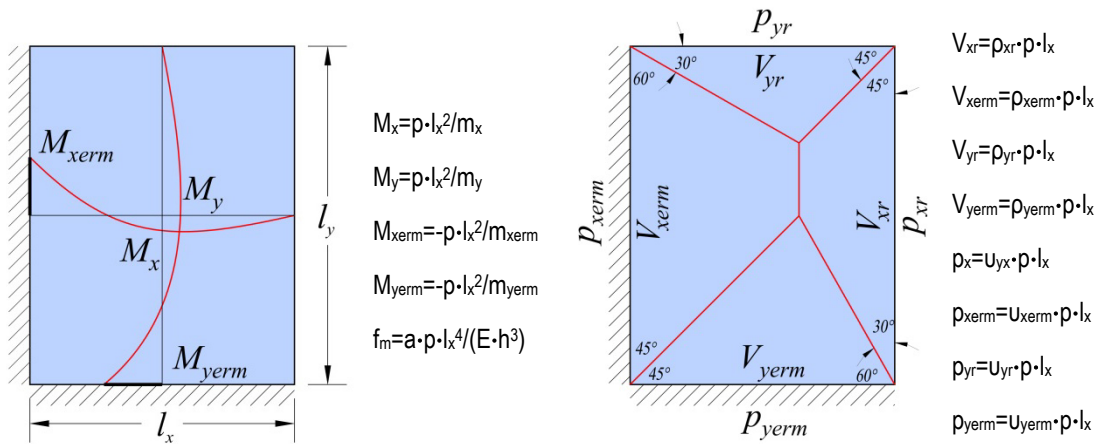
**Table 48-2** Two-way slab with two opposite fixed edges and the rest simply supported



$p_{ij}$  = equivalent uniform load

$\epsilon = l_y / l_x$	$m_x$	$m_{xerm}$	$m_y$	100 a	$\rho_{xerm}$	$\rho_{yr}$	$U_{xerm}$	$U_{yr}$
1.00	35.10	14.39	61.70	2.30	0.52	0.25	0.36	0.14
1.05	33.00	13.89	64.50	2.41	0.52	0.25	0.36	0.14
1.10	31.70	13.59	67.20	2.51	0.52	0.25	0.37	0.14
1.15	30.40	13.29	69.60	2.60	0.53	0.25	0.38	0.14
1.20	29.40	13.00	71.50	2.67	0.53	0.25	0.38	0.14
1.25	28.50	12.70	72.80	2.75	0.53	0.24	0.39	0.14
1.30	27.80	12.60	73.50	2.80	0.53	0.24	0.39	0.14
1.35	27.10	12.40	74.10	2.85	0.53	0.24	0.39	0.14
1.40	26.60	12.30	74.60	2.89	0.53	0.24	0.40	0.14
1.45	26.10	12.20	75.30	2.93	0.53	0.24	0.40	0.14
1.50	25.80	12.20	75.80	2.97	0.52	0.24	0.40	0.14
1.60	25.20	12.00	77.00	3.02	0.52	0.24	0.41	0.14
1.70	24.70	12.00	77.00	3.07	0.52	0.24	0.42	0.14
1.80	24.40	12.00	77.00	3.09	0.52	0.24	0.42	0.14
1.90	24.30	12.00	77.00	3.11	0.51	0.24	0.42	0.14
2.00	24.10	12.00	77.00	3.13	0.51	0.24	0.43	0.14

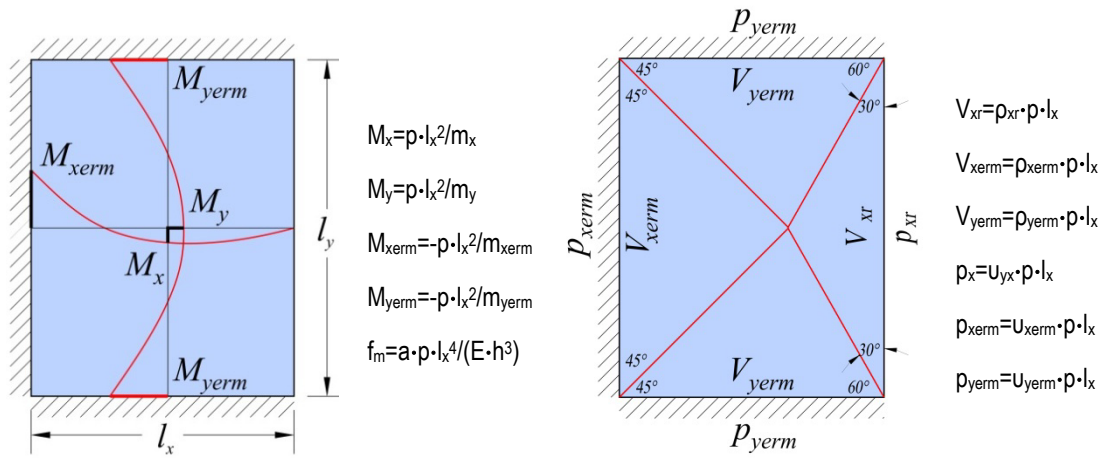
**Table 49** Two-way slab with two adjacent fixed edges and the rest simply supported



$p_{ij}$  = equivalent uniform load

$\epsilon = l_y / l_x$	$m_x$	$m_{xerm}$	$m_y$	$m_{yerm}$	100 a	$\rho_{xr}$	$\rho_{xerm}$	$\rho_{yr}$	$\rho_{yerm}$	$U_{xr}$	$U_{xerm}$	$U_{yr}$	$U_{yerm}$
1.00	40.20	14.30	40.20	14.30	2.52	0.28	0.51	0.28	0.51	0.18	0.32	0.18	0.32
1.05	38.00	13.30	41.00	13.80	2.81	0.29	0.53	0.28	0.52	0.19	0.33	0.18	0.32
1.10	35.10	12.70	42.00	13.60	3.02	0.30	0.55	0.28	0.53	0.20	0.35	0.18	0.32
1.15	32.20	12.00	42.90	13.30	3.29	0.31	0.56	0.28	0.53	0.21	0.36	0.18	0.32
1.20	30.00	11.50	44.00	13.10	3.48	0.32	0.57	0.29	0.53	0.21	0.37	0.18	0.32
1.25	28.00	11.10	45.60	12.90	3.69	0.32	0.58	0.29	0.54	0.22	0.38	0.18	0.32
1.30	26.50	10.70	47.60	12.80	3.89	0.33	0.59	0.29	0.54	0.22	0.39	0.18	0.32
1.35	25.20	10.30	49.60	12.70	4.08	0.33	0.60	0.29	0.54	0.23	0.40	0.18	0.32
1.40	24.10	10.00	51.00	12.60	4.26	0.34	0.61	0.29	0.54	0.23	0.41	0.18	0.32
1.45	23.10	9.80	52.10	12.50	4.43	0.34	0.61	0.29	0.55	0.24	0.42	0.18	0.32
1.50	22.20	9.60	53.00	12.40	4.59	0.35	0.61	0.29	0.55	0.24	0.42	0.18	0.32
1.60	21.00	9.20	54.80	12.30	4.84	0.35	0.61	0.29	0.55	0.25	0.44	0.18	0.32
1.70	19.90	8.90	56.30	12.20	5.08	0.36	0.62	0.29	0.55	0.26	0.45	0.18	0.32
1.80	19.10	8.70	57.70	12.20	5.29	0.36	0.63	0.29	0.55	0.26	0.46	0.18	0.32
1.90	18.40	8.50	59.00	12.20	5.47	0.37	0.63	0.29	0.55	0.27	0.47	0.18	0.32
2.00	17.90	8.40	60.20	12.20	5.62	0.37	0.63	0.29	0.55	0.27	0.48	0.18	0.32

**Table 50-1** Two-way slab with three fixed edges and the rest simply supported

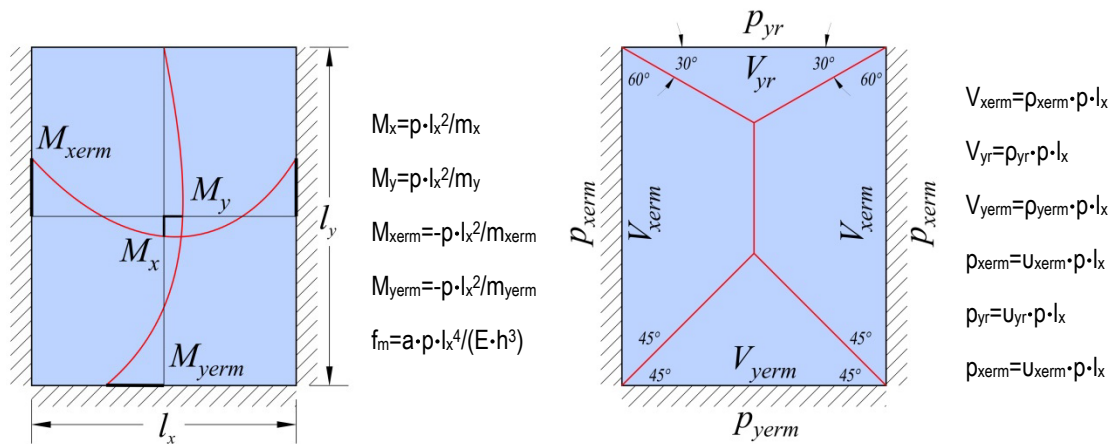


$p_{ij}$  = equivalent uniform load

$\epsilon = l_y / l_x$	$m_x$	$m_{xerm}$	$m_y$	$m_{yerm}$	100 a	$\rho_{xr}$	$\rho_{xerm}$	$\rho_{yerm}$	$U_{xr}$	$U_{xerm}$	$U_{yerm}$
1.00	59.50	18.30	44.10	16.20	1.88	0.25	0.45	0.47	0.14	0.25	0.30
1.05	51.60	16.60	43.60	15.40	2.12	0.26	0.48	0.49	0.15	0.26	0.31
1.10	46.10	15.40	43.70	14.80	2.36	0.27	0.50	0.50	0.16	0.28	0.31
1.15	41.40	14.40	44.20	14.30	2.60	0.28	0.51	0.51	0.16	0.29	0.32
1.20	37.50	13.50	44.80	13.90	2.84	0.29	0.53	0.52	0.17	0.30	0.32
1.25	34.20	12.70	45.80	13.50	3.08	0.30	0.54	0.52	0.18	0.31	0.32
1.30	31.80	12.20	46.90	13.30	3.29	0.31	0.55	0.53	0.19	0.33	0.32
1.35	29.60	11.60	48.60	13.10	3.51	0.32	0.56	0.53	0.19	0.34	0.32
1.40	28.00	11.20	50.30	13.00	3.71	0.32	0.57	0.54	0.20	0.35	0.32
1.45	26.40	10.90	52.30	12.80	3.91	0.33	0.58	0.54	0.21	0.36	0.32
1.50	25.20	10.60	55.00	12.70	4.09	0.33	0.58	0.54	0.21	0.37	0.32
1.60	23.30	10.10	61.60	12.60	4.42	0.34	0.59	0.54	0.22	0.38	0.32
1.70	21.70	9.70	70.40	12.50	4.71	0.35	0.60	0.54	0.23	0.40	0.32
1.80	20.50	9.40	79.60	12.40	4.95	0.36	0.61	0.55	0.24	0.41	0.32
1.90	19.50	9.00	89.80	12.30	5.18	0.36	0.61	0.55	0.24	0.42	0.32
2.00	18.70	8.80	101.00	12.30	5.39	0.37	0.62	0.55	0.25	0.43	0.32



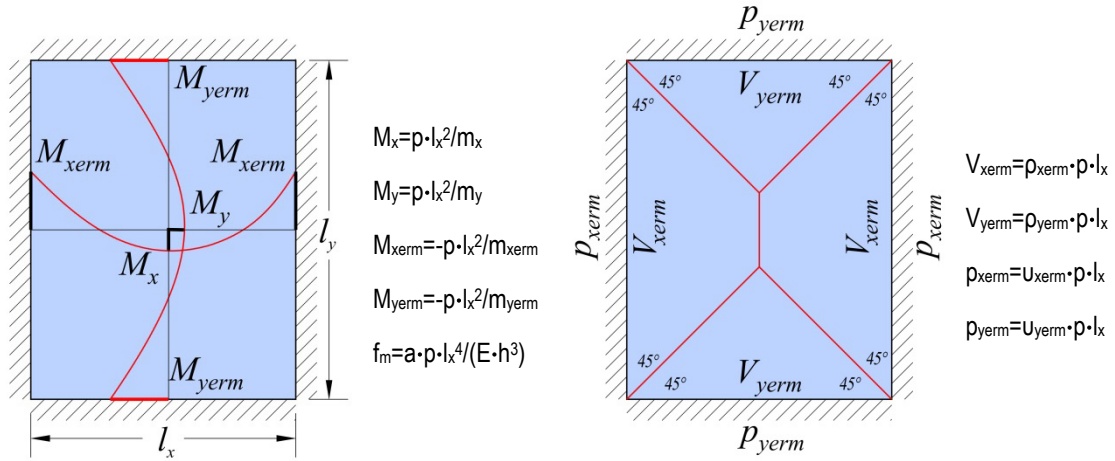
**Table 50-2** Two-way slab with three fixed edges and the rest simply supported



$p_{ij}$  = equivalent uniform load

$\epsilon = l_y / l_x$	$m_x$	$m_{xerm}$	$m_y$	$m_{yerm}$	100 a	$\rho_{xerm}$	$\rho_{yr}$	$\rho_{yerm}$	$U_{xerm}$	$U_{yr}$	$U_{yerm}$
1.00	44.10	16.20	55.90	18.30	1.88	0.47	0.25	0.45	0.30	0.14	0.25
1.05	40.50	15.30	57.50	17.90	2.02	0.49	0.25	0.47	0.31	0.14	0.25
1.10	37.90	14.80	60.30	17.70	2.14	0.50	0.25	0.48	0.32	0.14	0.25
1.15	35.50	14.20	64.20	17.60	2.26	0.51	0.25	0.48	0.33	0.14	0.25
1.20	33.80	13.90	66.20	17.50	2.36	0.51	0.25	0.48	0.34	0.14	0.25
1.25	32.30	13.50	67.70	17.50	2.45	0.52	0.25	0.48	0.34	0.14	0.25
1.30	31.00	13.20	69.00	17.50	2.53	0.52	0.24	0.47	0.35	0.14	0.25
1.35	29.90	12.90	70.50	17.50	2.61	0.52	0.24	0.47	0.35	0.14	0.25
1.40	29.00	12.70	72.00	17.50	2.68	0.52	0.24	0.47	0.36	0.14	0.25
1.45	28.20	12.60	73.40	17.50	2.74	0.52	0.24	0.46	0.36	0.14	0.25
1.50	27.60	12.50	75.20	17.50	2.80	0.52	0.24	0.46	0.37	0.14	0.25
1.60	26.50	12.30	78.70	17.50	2.89	0.52	0.24	0.46	0.38	0.14	0.25
1.70	25.70	12.20	82.50	17.50	2.98	0.52	0.24	0.46	0.38	0.14	0.25
1.80	25.10	12.10	86.80	17.50	3.03	0.52	0.24	0.45	0.39	0.14	0.25
1.90	24.70	12.00	91.70	17.50	3.07	0.51	0.24	0.45	0.40	0.14	0.25
2.00	24.50	12.00	97.00	17.50	3.09	0.51	0.24	0.45	0.40	0.14	0.25

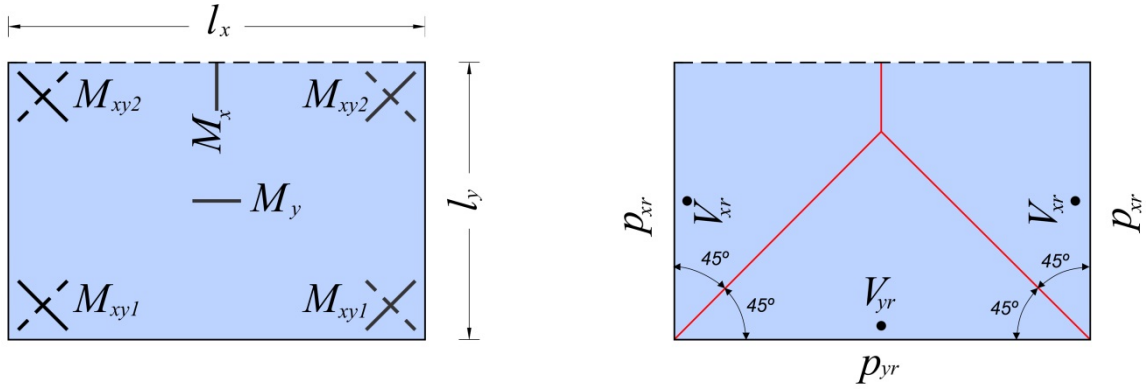
**Table 51** Two-way slab with four fixed edges



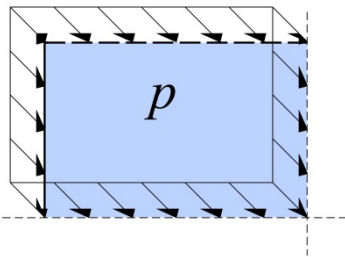
$p_{ij}$  = equivalent uniform load

$\epsilon = l_y / l_x$	$m_x$	$m_{xerm}$	$m_y$	$m_{yerm}$	100 a	$\rho_{xerm}$	$\rho_{yerm}$	$U_{xerm}$	$U_{yerm}$
1.00	56.80	19.40	56.80	19.40	1.52	0.45	0.45	0.25	0.25
1.05	50.60	18.20	58.20	18.80	1.67	0.46	0.45	0.26	0.25
1.10	46.10	17.10	60.30	18.40	1.81	0.48	0.46	0.27	0.25
1.15	42.40	16.30	62.60	18.10	1.95	0.49	0.47	0.28	0.25
1.20	39.40	15.50	65.80	17.90	2.07	0.50	0.47	0.29	0.25
1.25	37.00	14.90	69.40	17.70	2.19	0.51	0.47	0.30	0.25
1.30	34.80	14.50	73.60	17.60	2.30	0.51	0.48	0.31	0.25
1.35	33.30	14.00	78.40	17.50	2.40	0.52	0.48	0.31	0.25
1.40	31.90	13.70	83.40	17.50	2.48	0.52	0.48	0.32	0.25
1.45	30.60	13.40	89.40	17.50	2.57	0.52	0.48	0.33	0.25
1.50	29.60	13.20	93.50	17.50	2.64	0.52	0.47	0.33	0.25
1.60	28.10	12.80	98.10	17.50	2.77	0.52	0.47	0.34	0.25
1.70	26.90	12.50	101.30	17.50	2.87	0.52	0.47	0.35	0.25
1.80	26.00	12.30	103.30	17.50	2.94	0.52	0.47	0.36	0.25
1.90	25.40	12.10	104.60	17.50	3.00	0.52	0.47	0.37	0.25
2.00	25.00	12.00	105.00	17.50	3.04	0.52	0.47	0.38	0.25

**Table 52** Three-edge-supported slab, simply supported along all three edges



1. Uniform load



$$M_x = p \cdot l_y^2 / m_x$$

$$V_{xr} = \rho_{xr} \cdot p \cdot l_y$$

$$M_y = p \cdot l_x^2 / m_y$$

$$V_{yr} = \rho_{yr} \cdot p \cdot l_x$$

$$M_{xy1} = \pm p \cdot l_y^2 / m_{xy1}$$

$$\rho_{xr} = u_{xr} \cdot p \cdot l_y$$

$$M_{xy2} = \pm p \cdot l_x^2 / m_{xy2}$$

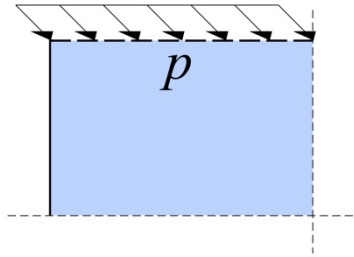
$$\rho_{yr} = u_{yr} \cdot p \cdot l_x$$

$$f_m = a \cdot p \cdot l_y^4 / (E \cdot h^3)$$

$$\rho_{ij} = \text{equivalent uniform load}$$

$\epsilon = l_y : l_x$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	4.04	4.12	4.41	4.89	5.53	6.34	7.32	8.46	9.77	11.25	12.90	14.73	16.73	18.90
$m_y$	8.43	8.92	10.51	12.95	16.44	20.94	26.58	33.47	41.67	50.42	59.99	70.42	81.67	93.75
$m_{xy1}$	2.23	2.74	3.84	5.10	6.58	8.31	10.32	12.65	15.30	18.27	21.56	25.17	19.10	33.34
$m_{xy2}$	2.90	3.83	6.32	10.07	15.79	24.47	37.57	57.22	80.46	129.7	193.3	286.3	421.8	618.4
<b>100a</b>	550	367	187	106	64.3	40.9	27.0	18.4	12.9	9.2	6.8	5.0	3.8	2.9
$\rho_{xr}$	0.53	0.53	0.52	0.51	0.50	0.48	0.45	0.43	0.40	0.38	0.36	0.34	0.32	0.31
$\rho_{yr}$	1.00	0.98	0.93	0.87	0.80	0.72	0.66	0.60	0.55	0.50	0.46	0.43	0.40	0.37
$u_{xr}$	0.50	0.50	0.50	0.50	0.49	0.46	0.43	0.40	0.38	0.35	0.33	0.31	0.29	0.28
$u_{yr}$	0.75	0.70	0.60	0.50	0.42	0.36	0.31	0.28	0.25	0.23	0.21	0.19	0.18	0.17

## 2. Uniformly distributed force on the free edge



$$M_x = p \cdot l_y^2 / m_x$$

$$M_y = p \cdot l_y^2 / m_y$$

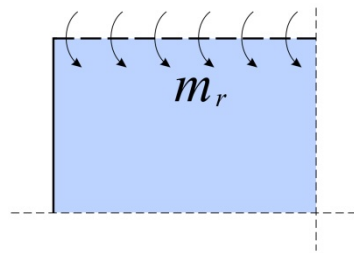
$$M_{xy1} = \pm p \cdot l_y^2 / m_{xy1}$$

$$M_{xy2} = \pm p \cdot l_y^2 / m_{xy2}$$

$$f_m = a \cdot p \cdot l_y^3 / (E \cdot h^3)$$

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
<b><math>m_x</math></b>	2.04	2.07	2.24	2.46	2.73	3.04	3.38	3.75	4.12	4.52	4.92	5.32	5.71	6.12
<b><math>m_y</math></b>	61.3	43.5	31.2	25.8	22.4	21.1	2.10	21.9	23.4	25.0	26.8	28.6	30.5	32.6
<b><math>m_{xy1}</math></b>	0.33	0.42	0.64	0.94	1.34	1.88	2.66	3.75	5.20	7.15	9.90	13.8	18.9	26.0
<b><math>m_{xy2}</math></b>	0.31	0.39	0.55	0.74	0.93	1.12	1.32	1.52	1.73	1.93	2.13	2.33	2.55	2.75
<b>100a</b>	11.0	7.1	3.8	2.2	1.4	0.9	0.6	0.4	0.3	0.2	0.2	0.1	0.1	0.1

## 3. Uniformly distributed moment on the free edge



$$M_{x,min} = -m_r / m_{xmin} \quad M_y = -m_r / m_y$$

$$M_{x,max} = m_r / m_{xmax}$$

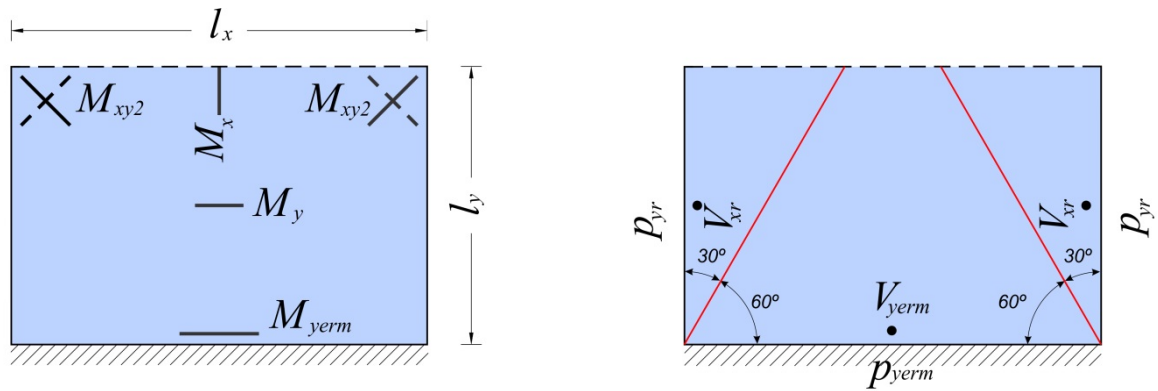
$$M_{xy1} = \pm m_r / m_{xy1} \quad M_{xy2} = \pm m_r / m_{xy2}$$

$$M_{xy2} = \pm p \cdot l_y^2 / m_{xy2}$$

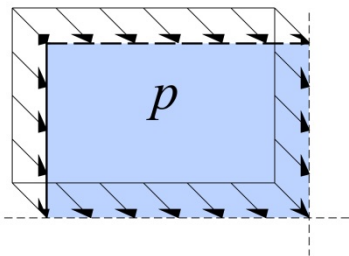
$$f_m = a \cdot m_r \cdot l_y^2 / (E \cdot h^3)$$

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
<b><math>m_{xmax}</math></b>	2.07	2.14	2.30	2.47	2.63	2.74	2.84	2.91	2.94	2.96	2.97	2.98	2.99	3.00
<b><math>m_{xmin}</math></b>	-	-	-	-	-	-	47.5	54.0	33.1	24.5	21.1	19.4	18.9	18.9
<b><math>m_y</math></b>	2.02	2.07	2.24	2.55	3.01	3.65	4.52	5.68	7.28	9.52	12.5	16.3	22.2	32.2
<b><math>m_{xy1}</math></b>	-0.44	-0.61	-1.23	-2.80	-10.6	17.9	7.95	6.40	6.15	6.35	7.05	8.60	10.2	11.5
<b><math>m_{xy2}</math></b>	0.20	0.22	0.25	0.27	0.29	0.30	0.32	0.33	0.34	0.36	0.37	0.39	0.40	0.42
<b>100a</b>	11.3	7.4	4.0	2.3	1.5	1.1	0.8	0.6	0.5	0.4	0.3	0.3	0.2	0.2

**Table 53-1** Three-edge-supported slab, fixed along the edge opposite the free edge and simply supported along the other two edges



1. Uniform load



$$M_x = p \cdot l_y^2 / m_x$$

$$V_{xr} = \rho_{xr} \cdot p \cdot l_y$$

$$M_y = p \cdot l_y^2 / m_y$$

$$V_{yerm} = \rho_{yerm} \cdot p \cdot l_y$$

$$M_{yerm} = -p \cdot l_y^2 / m_{yerm}$$

$$\rho_{xr} = u_{xr} \cdot p \cdot l_y$$

$$M_{xy2} = \pm p \cdot l_y^2 / m_{xy2}$$

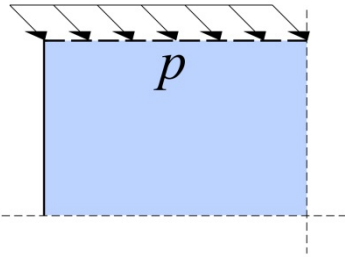
$$\rho_{yerm} = u_{yr} \cdot p \cdot l_y$$

$$f_m = a \cdot p \cdot l_y^4 / (E \cdot h^3)$$

$\rho_{ij}$  = equivalent uniform load

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	26.43	18.09	11.75	9.71	9.09	9.13	9.59	10.36	11.37	12.61	14.06	15.72	17.58	19.64
$m_y$	170.0	90.0	46.80	35.71	33.33	35.35	39.68	45.36	54.48	66.44	78.48	92.89	110.6	132.3
$m_{yerm}$	2.26	2.42	2.85	3.41	4.11	4.94	5.95	7.14	8.51	10.06	11.79	13.72	15.82	18.13
$m_{xy}$	8.00	8.32	9.11	10.38	12.21	14.66	17.87	21.09	27.24	33.83	42.07	52.32	65.00	80.73
<b>100a</b>	120	105	78	56.3	40.4	29.0	20.9	15.2	11.1	8.3	6.2	4.7	3.6	2.8
$\rho_{xr}$	0.21	0.21	0.23	0.26	0.28	0.30	0.32	0.32	0.32	0.32	0.31	0.30	0.29	0.28
$\rho_{yerm}$	1.03	1.04	1.04	1.01	0.96	0.90	0.83	0.78	0.71	0.66	0.61	0.56	0.53	0.49
$u_{xr}$	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.29	0.28	0.28	0.27	0.26	0.25	0.24
$u_{yerm}$	0.86	0.83	0.77	0.71	0.65	0.60	0.54	0.48	0.43	0.39	0.36	0.33	0.31	0.29

## 2. Uniformly distributed force on the free edge



$$M_x = p \cdot l_y / m_x$$

$$M_y = -p \cdot l_y / m_y$$

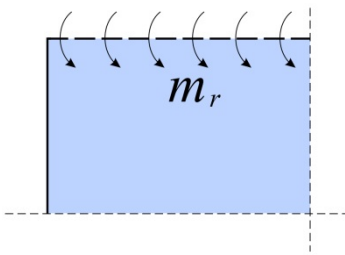
$$M_{yerm} = -p \cdot l_x / m_{yerm}$$

$$M_{xy2} = \pm p \cdot l_x / m_{xy2}$$

$$f_m = a \cdot p \cdot l_y^3 / (E \cdot h^3)$$

$\varepsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	16.9	15.4	13.2	11.1	10.3	10.4	11.0	12.1	13.6	15.6	18.1	21.1	24.6	29.1
$m_y$	2.70	3.18	4.60	6.65	9.42	12.7	16.5	20.6	23.6	25.4	27.2	29.1	31.2	33.5
$m_{yerm}$	1.18	1.30	1.66	2.19	2.94	4.03	5.56	7.63	10.5	14.4	20.2	28.2	39.6	54.3
$\pm m_{xy}$	0.65	0.66	0.71	0.82	0.95	1.12	1.30	1.48	1.68	1.89	2.10	2.32	2.53	2.75
<b>100a</b>	3.1	2.8	2.0	1.5	1.1	0.7	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1

## 3. Uniformly distributed moment on the free edge



$$M_{x,max} = m_r / m_{xmax}$$

$$M_{yerm} = -m_r / m_{yerm}, M_{xy2} = \pm m_r /$$

$$M_{x,min} = -m_r / m_{xmin} M_y = -m_r / m_y$$

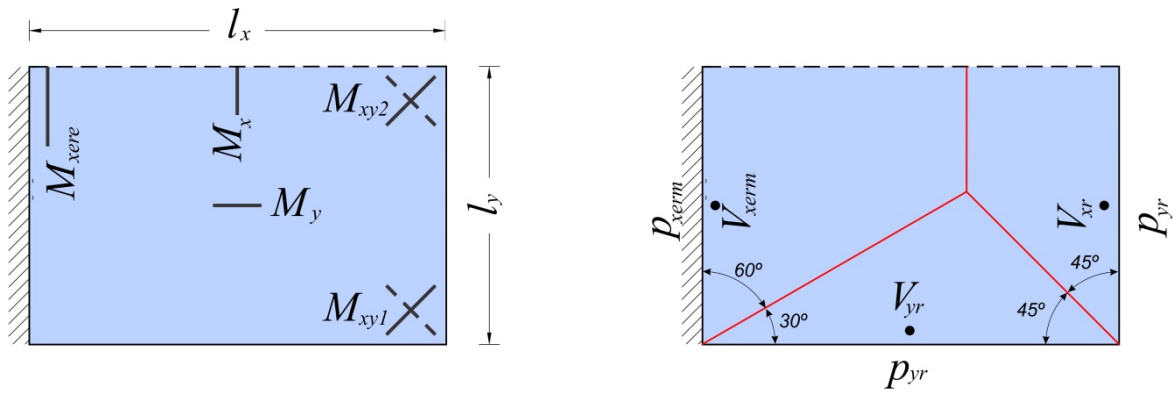
$$m_{xy2}$$

$$M_{xy2} = \pm m_r / m_{xy2}$$

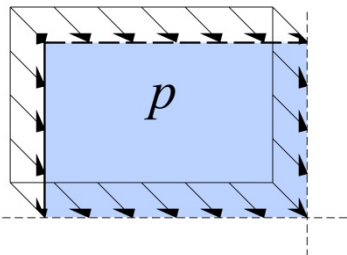
$$f_m = a \cdot m_r \cdot l_y^2 / (E \cdot h^3)$$

$\varepsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_{xmax}$	6.50	4.67	3.30	2.86	2.73	2.73	2.76	2.81	2.86	2.90	2.94	2.97	2.99	3.00
$m_{xmin}$	-	-	-	710	400	250	155	90.0	52.7	35.5	29.5	22.9	21.0	20.6
$m_y$	1.25	1.41	1.81	2.31	2.93	3.64	4.64	5.83	7.46	12.1	12.5	16.4	22.2	31.8
$m_{yerm}$	1.38	1.68	2.83	5.90	20.7	-33.9	-15.7	-12.9	-12.0	-12.5	-13.5	-15.4	-18.2	-23.5
$m_{xy}$	0.27	0.27	0.27	0.27	0.29	0.30	0.32	0.33	0.34	0.36	0.37	0.39	0.40	0.42
<b>100f</b>	4.6	4.0	2.9	2.1	1.5	1.1	0.8	0.6	0.5	0.4	0.3	0.3	0.2	0.2

**Table 53-2** Three-edge-supported slab, fixed along the edge perpendicular to the free edge and simply supported along the other two edges



1. Uniform load



$$M_x = p \cdot l_y^2 / m_x$$

$$M_y = p \cdot l_x^2 / m_y$$

$$M_{xy1} = \pm p \cdot l_x^2 / m_{xy1}$$

$$M_{xere} = -p \cdot l_y^2 / m_{xere}$$

$$f_m = a \cdot p \cdot l_y^4 / (E \cdot h^3)$$

$$V_{xr} = \rho_{xr} \cdot p \cdot l_y$$

$$V_{xere} = \rho_{xere} \cdot p \cdot l_y$$

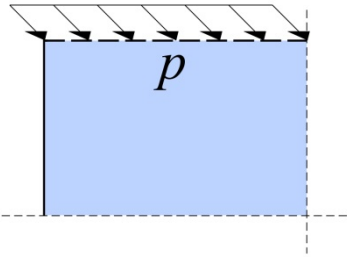
$$\rho_{xr} = U_{xr} \cdot p \cdot l_y$$

$$\rho_{xere} = U_{xere} \cdot p \cdot l_y$$

$p_{ij}$  = equivalent uniform load

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	4.18	4.13	4.88	5.91	7.23	8.75	10.49	12.60	14.95	17.85	20.94	24.31	28.10	32.18
$m_y$	9.05	10.05	12.95	17.06	22.64	29.69	38.43	48.50	59.88	72.45	86.22	101.2	117.4	134.7
$m_{xere}$	0.80	1.02	1.53	2.18	2.98	3.94	5.08	6.40	7.89	9.56	11.40	13.41	15.58	17.92
$m_{xy1}$	2.48	3.12	4.61	6.46	8.74	11.44	14.71	18.42	22.63	27.31	32.45	38.06	44.13	50.66
$m_{xy2}$	3.35	4.91	8.34	14.82	25.90	44.88	77.29	132.6	227.2	389.6	669.8	1157	2016	3549
<b>100f</b>	446	283	131	67.8	37.9	22.5	14.0	9.1	6.1	4.2	3.0	2.2	1.6	1.2
$\rho_{xr}$	0.53	0.53	0.51	0.50	0.46	0.43	0.40	0.37	0.34	0.32	0.32	0.28	0.26	0.25
$\rho_{yr}$	1.13	1.06	0.98	0.89	0.83	0.77	0.71	0.65	0.5:	0.56	0.52	0.48	0.45	0.42
$\rho_{xerm}$	0.71	0.68	0.60	0.52	0.45	0.40	0.35	0.31	0.29	0.26	0.24	0.22	0.20	0.19
$U_{xr}$	0.29	0.29	0.86	0.80	0.73	0.67	0.61	0.56	0.52	0.48	0.45	0.42	0.39	0.37
$U_{yr}$	0.50	0.50	0.50	0.46	0.42	0.39	0.35	0.32	0.30	0.28	0.26	0.24	0.23	0.21
$U_{xerm}$	0.66	0.59	0.46	0.37	0.31	0.26	0.23	0.20	0.18	0.17	0.15	0.14	0.13	0.12

## 2. Uniformly distributed force on the free edge



$$M_x = p \cdot l_y / m_x, \quad M_y = -p \cdot l_y / m_y$$

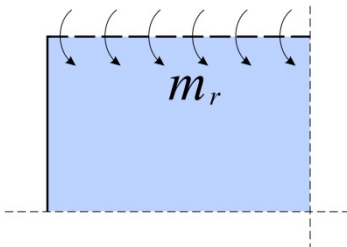
$$M_{xy1} = \pm p \cdot l_y / m_{yem}, \quad M_{xy2} = \pm p \cdot l_y / m_{xy2}$$

$$M_{xere} = -p \cdot l_y / m_{xere}$$

$$f_m = a \cdot p \cdot l_y^3 / (E \cdot h^3)$$

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	2.09	2.18	2.47	2.86	3.31	3.82	4.34	4.89	5.43	5.98	6.53	7.09	7.64	8.19
$m_y$	8.23	9.75	11.4	13.2	14.2	15.3	16.6	18.2	20.2	22.4	24.5	26.3	28.4	30.8
$m_{xere}$	0.45	0.52	0.68	0.86	1.03	1.22	1.40	1.58	1.78	1.97	2.17	2.37	2.58	2.79
$m_{xy1}$	0.37	0.48	0.80	1.28	2.03	3.21	5.08	8.10	13.0	20.8	33.8	55.1	91.0	153
$m_{xy2}$	0.35	0.44	0.65	0.88	1.10	1.33	1.55	1.76	1.98	2.20	2.42	2.65	2.88	3.11
<b>100f</b>	9.30	5.90	2.80	1.50	0.90	0.60	0.40	0.30	0.20	0.10	0.10	0.10	0.10	0.10

## 3. Uniformly distributed moment on the free edge



$$M_{x,max} = m_r / m_{xmax}, \quad M_{x,min} = -m_r / m_{xmin}$$

$$M_{y,min} = -m_r / m_{ymin}$$

$$M_{y,max} = m_r / m_{ymax}$$

$$M_{xy1} = \pm m_r / m_{xy1}, \quad M_{xy2} = \pm m_r / m_{xy2}$$

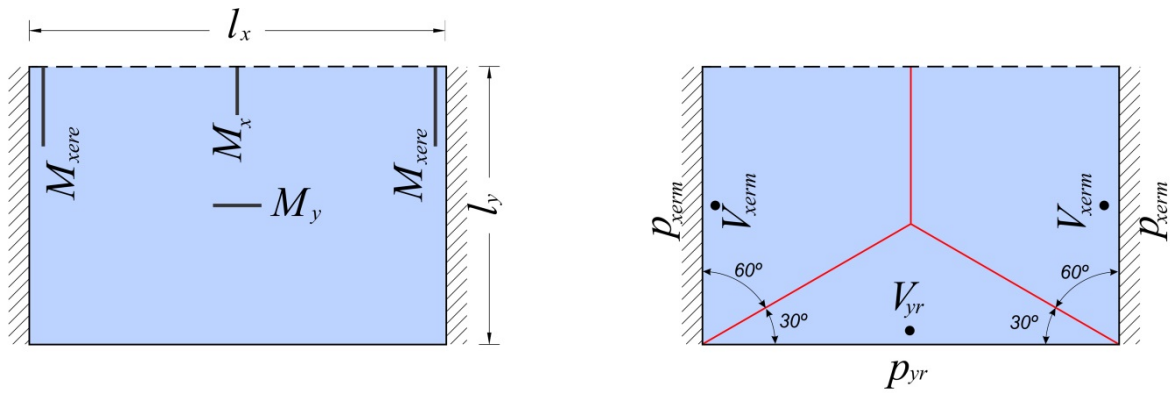
$$M_{xere,min} = -m_r / m_{xeremin}, \quad M_{xere,max} = m_r / m_{xeremax}$$

$$f_m = a \cdot m_r \cdot l_y^2 / (E \cdot h^3)$$

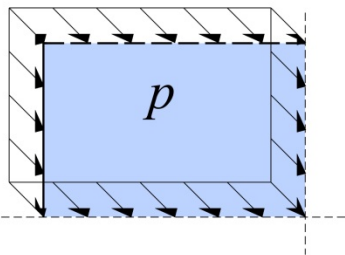
$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_{xmax}$	2.12	2.22	2.48	2.71	2.88	3.00	3.04	3.04	3.08	3.10	3.13	3.13	3.14	3.15
$m_{xmin}$	-	-	-	-	-	15.2	16.2	18.0	17.0	17.0	17.3	17.1	16.8	16.8
$m_{ymin}$	1.95	2.00	2.16	2.51	3.06	3.88	5.09	6.87	9.49	13.5	19.9	31.3	54.6	121
$m_{ymax}$	-	-	-	-	-	-	-	-	-	340	185	135	107	94.3
$m_{xeremin}$	0.39	0.42	0.48	0.51	0.52	0.54	0.55	0.56	0.57	0.58	0.60	0.61	0.63	0.65
$m_{xeremax}$	-	-	-	13.8	7.35	5.62	5.10	4.72	4.65	4.63	4.50	4.52	4.61	4.76
$m_{xy1}$	-0.50	-0.74	-1.79	-7.25	12.9	5.70	4.88	5.00	5.70	6.85	8.55	11.0	14.5	19.5
$m_{xy2}$	0.21	0.23	0.26	0.27	0.28	0.29	0.31	0.32	0.33	0.34	0.35	0.37	0.38	0.40
<b>100f</b>	9.60	6.10	3.00	1.80	1.20	0.80	0.60	0.50	0.40	0.30	0.30	0.20	0.20	0.20



**Table 54** Three-edge-supported slab, fixed along two opposite edges and simply supported along the third edge



1. Uniform load



$$M_x = p \cdot l_y^2 / m_x, M_y = p \cdot l_x^2 / m_y$$

$$M_{xere} = -p \cdot l_y^2 / m_{xere}$$

$$f_m = a \cdot p \cdot l_y^4 / (E \cdot h^3)$$

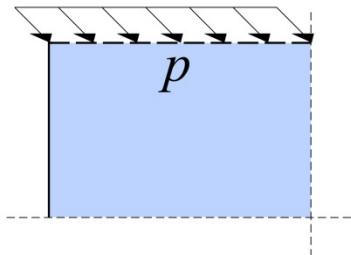
$$V_{xerm} = \rho_{xerm} \cdot p \cdot l_y, V_{yr} = \rho_{yr} \cdot p \cdot l_y$$

$$\rho_{xerm} = U_{xerm} \cdot p \cdot l_y, \rho_{yr} = U_{yr} \cdot p \cdot l_y$$

$$p_{ij} = \text{equivalent uniform load}$$

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	4.30	4.67	5.80	7.42	9.58	12.27	15.53	19.35	23.76	28.73	34.22	40.24	46.76	53.74
$m_y$	9.72	11.11	15.38	21.36	29.03	38.58	49.61	61.38	76.33	92.36	110.8	131.0	151.9	174.4
$m_{xere}$	0.90	1.20	1.89	2.83	4.04	5.53	7.30	9.35	11.67	14.25	17.07	20.13	23.43	26.96
<b>100a</b>	362	219	92.7	44.4	23.3	13.1	7.8	4.9	3.2	2.2	1.6	1.1	0.8	0.6
$\rho_{xerm}$	1.10	1.03	0.93	0.84	0.76	0.68	0.62	0.56	0.51	0.47	0.43	0.40	0.37	0.34
$\rho_{yr}$	0.69	0.65	0.55	0.46	0.39	0.34	0.30	0.27	0.24	0.22	0.20	0.19	0.17	0.16
$U_{xerm}$	0.87	0.86	0.80	0.71	0.63	0.57	0.51	0.47	0.43	0.39	0.37	0.34	0.32	0.30
$U_{yr}$	0.57	0.48	0.36	0.29	0.24	0.21	0.18	0.16	0.14	0.13	0.12	0.11	0.10	0.10

## 2. Uniformly distributed force on the free edge



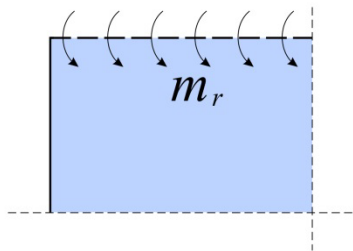
$$M_x = p \cdot l_y / m_x, \quad M_y = -p \cdot l_y / m_y$$

$$M_{xere} = -p \cdot l_y / m_{xere}$$

$$f_m = a \cdot p \cdot l_y^3 / (E \cdot h^3)$$

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	2.20	2.36	2.88	3.53	4.23	4.97	5.71	6.45	7.18	7.91	8.64	9.37	10.1	10.9
$m_y$	14.5	12.6	11.9	12.1	12.6	14.1	15.6	17.7	19.7	22.0	24.4	26.8	29.1	31.4
$m_{xere}$	0.49	0.59	0.79	1.02	1.24	1.48	1.71	1.94	2.19	2.43	2.69	2.95	3.23	3.51
100a	7.7	4.7	2.1	1.1	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.05	0.05

## 3. Uniformly distributed moment on the free edge



$$M_{x,max} = m_r / m_{xmax},$$

$$M_{y,max} = m_r / m_{ymax}$$

$$M_{x,min} = -m_r / m_{xmin},$$

$$M_{y,min} = -m_r / m_{ymin}$$

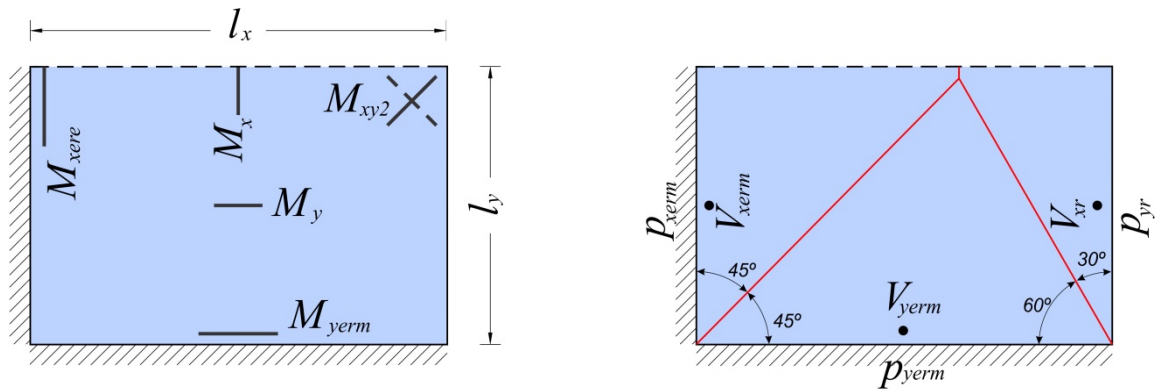
$$M_{xere min} = -m_r / m_{xeremin},$$

$$M_{xere max} = m_r / m_{xeremax}$$

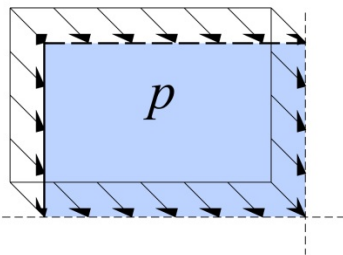
$$f_m = a \cdot m_r \cdot l_y^2 / (E \cdot h^3)$$

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_{xmin}$	2.21	2.41	2.82	3.16	3.37	3.46	3.49	3.49	3.50	3.50	3.51	3.51	3.52	3.54
$m_{xmax}$	1.73	3.05	6.65	12.3	22.5	25.0	21.3	17.8	16.3	16.3	16.9	18.3	20.4	23.2
$m_{ymin}$	1.93	1.96	2.13	2.53	3.21	4.22	5.95	8.62	13.3	22.2	41.7	125	-400	-125
$m_{ymax}$	-	-	-	-	-	-	-	-	210	105	78.8	63.8	61.4	65.4
$m_{xeremin}$	0.42	0.46	0.52	0.55	0.57	0.59	0.61	0.62	0.64	0.67	0.69	0.72	0.74	0.77
$m_{xeremax}$	-	-	38.5	8.55	5.60	4.66	4.52	4.42	4.37	4.33	4.32	4.32	4.31	4.31
100a	8.0	5.0	2.5	1.5	1.0	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1

**Table 55** Three-edge-supported slab, fixed along two adjacent edges and simply supported along the third edge



1. Uniform load



$$M_x = p \cdot l_y^2 / m_x, M_y = p \cdot l_x^2 / m_y$$

$$M_{xere} = -p \cdot l_y^2 / m_{xere}, M_{yerm} = -p \cdot l_x^2 / m_{yerm}$$

$$M_{xy2} = p \cdot l_y^2 / m_{xy2}, f_m = a \cdot p \cdot l_y^4 / (E \cdot h^3)$$

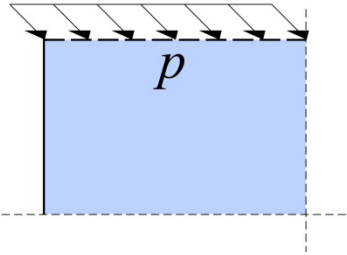
$$V_{xr} = \rho_{xr} \cdot p \cdot l_y, V_{xerm} = \rho_{xerm} \cdot p \cdot l_y, V_{yerm} = \rho_{yerm} \cdot p \cdot l_x$$

$$\rho_{xr} = U_{xr} \cdot p \cdot l_y, \rho_{xerm} = U_{xerm} \cdot p \cdot l_y, \rho_{yerm} = U_{yerm} \cdot p \cdot l_x$$

$\rho_{ij}$  = equivalent uniform load

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	14.08	12.98	10.86	9.80	9.80	10.63	12.04	13.69	15.87	18.51	21.27	24.39	27.77	31.25
$m_y$	133.3	76.92	43.47	38.40	40.00	43.47	54.05	67.56	80.00	100.0	120.5	140.8	166.7	200.0
$m_{xere}$	2.11	2.20	2.50	2.96	3.60	4.43	5.45	6.66	8.06	9.66	11.44	13.40	15.53	17.84
$m_{yerm}$	2.33	2.56	3.20	4.11	5.28	6.74	8.48	10.53	12.86	15.47	18.35	21.51	24.93	28.61
$m_{xy2}$	8.56	8.73	9.95	12.07	15.29	19.84	26.10	34.60	45.87	60.60	80.80	105.3	138.9	181.8
<b>100a</b>	114	96.6	65.7	43.1	28.1	18.4	12.2	8.3	5.8	4.1	2.9	2.2	1.6	1.2
$\rho_{xr}$	0.21	0.22	0.25	0.28	0.30	0.31	0.31	0.31	0.30	0.28	0.27	0.26	0.25	0.24
$\rho_{xerm}$	0.43	0.44	0.48	0.51	0.55	0.56	0.56	0.54	0.52	0.50	0.48	0.45	0.43	0.40
$\rho_{yerm}$	1.02	1.03	0.99	0.92	0.83	0.75	0.67	0.61	0.55	0.50	0.46	0.42	0.39	0.37
$U_{xerm}$	0.50	0.50	0.50	0.50	0.50	0.50	0.48	0.46	0.43	0.41	0.39	0.37	0.35	0.33
$U_{xr}$	0.29	0.29	0.29	0.29	0.29	0.29	0.28	0.26	0.25	0.24	0.22	0.21	0.20	0.19
$U_{yerm}$	0.80	0.76	0.68	0.61	0.53	0.45	0.39	0.35	0.32	0.29	0.26	0.24	0.23	0.21

## 2. Uniformly distributed force on the free edge



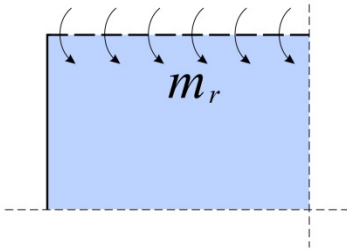
$$M_x = p \cdot l_y / m_x, \quad M_y = -p \cdot l_y / m_y$$

$$M_{xere} = -p \cdot l_y / m_{xere}, \quad M_{yerm} = -p \cdot l_y / m_{yerm}$$

$$M_{xy2} = p \cdot l_y^2 / m_{xy2}, \quad f_m = a \cdot p \cdot l_y^3 / (E \cdot h^3)$$

$\varepsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	5.55	5.04	4.24	3.88	3.91	4.17	4.54	5.00	5.49	6.01	6.55	7.10	7.64	8.19
$m_y$	2.83	3.42	5.12	7.50	10.4	13.7	17.4	21.5	26.5	32.5	39.5	48.1	59.1	72.3
$m_{xere}$	0.98	0.93	0.93	1.00	1.13	1.26	1.42	1.60	1.78	1.97	2.17	2.37	2.58	2.79
$m_{yerm}$	1.22	1.40	1.92	2.80	4.23	6.54	10.3	16.6	26.8	43.8	72.7	122	207	359
$m_{xy2}$	0.65	0.67	0.75	0.90	1.09	1.30	1.52	1.74	1.97	2.19	2.41	2.64	2.88	3.11
100a	3.0	2.6	1.8	1.2	0.8	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1

## 3. Uniformly distributed moment on the free edge



$$M_{x,max} = m_r / m_{x,max}, \quad M_{x,min} = -m_r / m_{x,min}, \quad M_y = -m_r / m_y$$

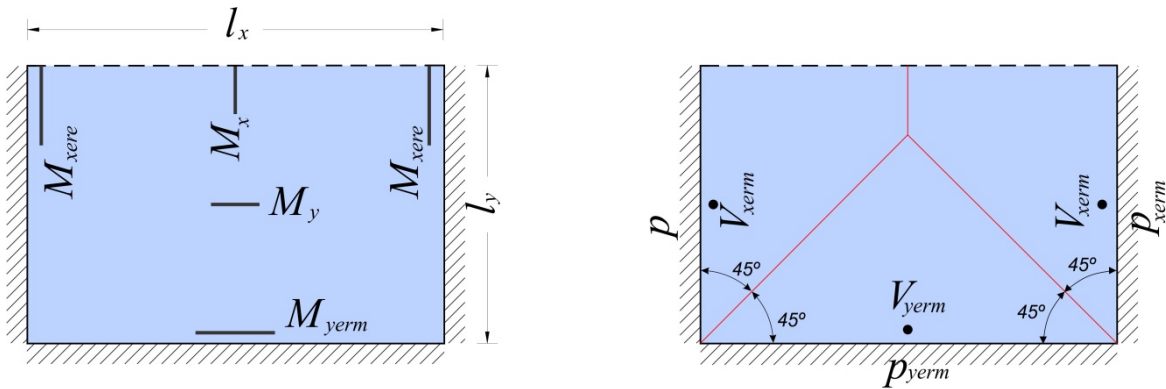
$$M_{xere,min} = -m_r / m_{xere,min}, \quad M_{xere,max} = m_r / m_{xere,max}$$

$$M_{yere,min} = m_r / m_{yere,min}$$

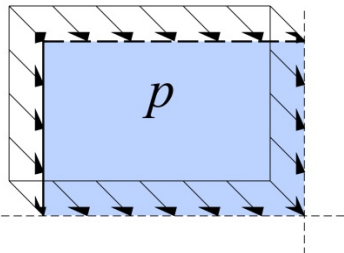
$$M_{yere,max} = m_r / m_{yere,max}, \quad M_{xy2} = p \cdot l_y^2 / m_{xy2}, \quad f_m = a \cdot m_r \cdot l_y^2 / (E \cdot h^3)$$

$\varepsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_{x,max}$	3.46	2.29	3.03	2.83	2.81	2.87	2.95	3.01	3.06	3.09	3.11	3.12	3.13	3.15
$m_{x,min}$	-	-	-	6.54	5.83	7.89	5.84	7.23	9.22	12.2	17.1	17.9	17.2	17.1
$m_y$	1.29	1.46	1.91	2.45	3.14	4.03	5.26	7.01	9.58	13.4	19.6	30.4	52.4	112
$m_{xere,min}$	0.61	0.56	0.52	0.51	0.52	0.53	0.54	0.56	0.57	0.58	0.60	0.61	0.63	0.65
$m_{xere,max}$	-	-	27.0	16.0	10.2	7.35	6.37	5.35	5.05	4.81	4.61	4.59	4.65	4.78
$m_{yere,min}$	1.45	1.86	2.78	13.5	-18.1	-9.51	-8.54	-9.15	-10.7	-13.4	-17.2	-23.0	-31.3	-43.5
$m_{yere,max}$	-	-	13.5	13.4	11.3	9.21	8.54	9.15	10.7	13.1	16.7	22.0	29.7	40.8
$m_{xy2}$	0.27	0.26	0.26	0.27	0.28	0.30	0.31	0.32	0.33	0.34	0.35	0.37	0.38	0.40
100a	4.47	3.81	2.59	1.78	1.19	0.875	0.647	0.494	0.400	0.331	0.278	0.229	0.197	0.172

**Table 56** Three-edge-supported slab, fixed along all three edges



1. Uniform load



$$M_x = p \cdot l_y^2 / m_x, M_y = p \cdot l_x^2 / m_y$$

$$M_{xere} = -p \cdot l_y^2 / m_{xere}, M_{yerm} = -p \cdot l_x^2 / m_{yerm}$$

$$f_m = a \cdot p \cdot l_y^4 / (E \cdot h^3)$$

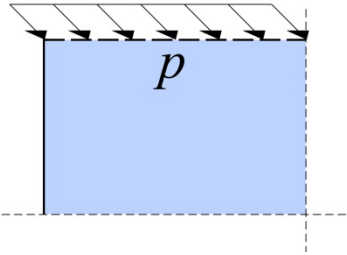
$$V_{xerm} = \rho_{xerm} \cdot p \cdot l_y, V_{yerm} = \rho_{yerm} \cdot p \cdot l_x$$

$$\rho_{xerm} = U_{xerm} \cdot p \cdot l_y, \rho_{yerm} = U_{yerm} \cdot p \cdot l_x$$

$$p_{ij} = \text{equivalent uniform load}$$

$\varepsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	19.24	13.91	10.69	10.64	11.87	13.94	16.73	20.18	24.29	29.02	34.35	40.26	46.71	53.69
$m_y$	104.2	62.46	43.24	41.67	48.00	58.45	72.73	89.55	108.7	131.5	156.5	183.7	213.0	244.6
$m_{xere}$	2.15	2.27	2.71	3.43	4.45	5.77	7.41	9.35	11.59	14.11	16.90	19.94	23.22	26.73
$m_{yerm}$	2.41	2.71	3.61	4.93	6.66	8.81	11.34	14.29	17.59	21.26	25.28	29.66	34.39	39.47
<b>100a</b>	108.1	88.4	54.8	32.7	19.5	11.8	7.4	4.8	3.2	2.2	1.6	1.1	0.8	0.6
$\rho_{xere}$	0.44	0.45	0.50	0.53	0.55	0.54	0.52	0.50	0.47	0.44	0.41	0.38	0.36	0.34
$\rho_{yerm}$	1.03	1.02	0.95	0.85	0.75	0.65	0.58	0.52	0.46	0.42	0.39	0.36	0.33	0.31
$U_{xere}$	0.50	0.50	0.50	0.50	0.49	0.46	0.43	0.40	0.38	0.35	0.33	0.31	0.29	0.28
$U_{yerm}$	0.75	0.70	0.60	0.50	0.42	0.36	0.31	0.28	0.25	0.23	0.21	0.19	0.18	0.17

## 2. Uniformly distributed force on the free edge



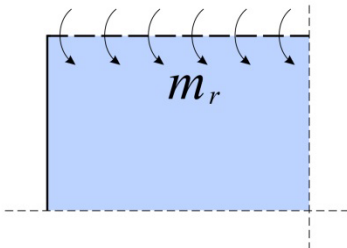
$$M_x = p \cdot l_y / m_x, \quad M_y = -p \cdot l_y / m_y$$

$$M_{xere} = -p \cdot l_y / m_{xere}, \quad M_{yerm} = -p \cdot l_y / m_{yerm}$$

$$f_m = a \cdot p \cdot l_y^3 / (E \cdot h^3)$$

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_x$	7.80	5.64	4.32	4.23	4.57	5.15	5.77	6.47	7.18	7.91	8.64	9.37	10.1	10.9
$m_y$	2.95	3.66	5.72	8.35	11.4	14.0	15.8	17.6	19.7	22.0	24.4	26.8	29.1	31.4
$m_{xere}$	0.99	0.95	0.99	1.11	1.28	1.48	1.71	1.94	2.19	2.43	2.69	2.95	3.23	3.51
$m_{yerm}$	1.26	1.49	2.29	3.88	6.72	13.1	26.3	57.7	130	297	-	-	-	-
100a	3.0	2.5	1.4	0.9	0.6	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.05	0.05

## 3. Uniformly distributed moment on the free edge



$$M_{x,max} = m_r / m_{x,max}, \quad M_{x,min} = -m_r / m_{x,min}, \quad M_y = -m_r / m_y$$

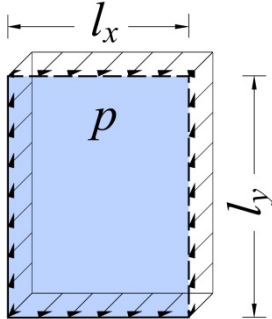
$$M_{xere,min} = -m_r / m_{xere,min}, \quad M_{xere,max} = m_r / m_{xere,max}, \quad M_{yerm} = -m_r / m_{yerm}$$

$$f_m = a \cdot m_r \cdot l_y^2 / (E \cdot h^3)$$

$\epsilon = l_y : l_x =$	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50
$m_{x,max}$	5.40	4.00	3.14	3.07	3.18	3.29	3.40	3.44	3.48	3.49	3.50	3.52	3.53	3.54
$m_{x,min}$	5.98	7.00	8.20	11.6	18.5	29.5	27.8	21.3	18.5	17.5	17.9	18.7	20.4	23.4
$m_y$	1.32	1.52	2.01	2.60	3.36	4.39	6.07	8.62	13.1	21.7	40.0	100	¥	-130
$m_{xere,min}$	0.61	0.57	0.54	0.55	0.56	0.57	0.60	0.62	0.64	0.67	0.69	0.72	0.74	0.77
$m_{xere,max}$	300	69.0	23.2	12.2	7.82	6.03	5.10	4.72	4.52	4.42	4.37	4.33	4.31	4.31
$m_{yerm}$	1.52	2.08	6.05	-29.2	-8.03	-6.90	-7.55	-9.00	-12.7	-18.5	-27.8	-41.7	-66.7	-115
100a	4.4	3.6	2.3	1.5	1.0	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1

**Table 57** Two-edge-supported slab, simply supported along both edges

1. Uniform load  $p$

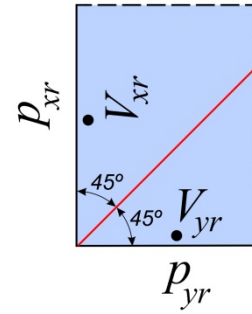


$$K = p \cdot l_x \cdot l_y, M = K/m, f_m = a \cdot p \cdot l_x^4 / (E \cdot h^3)$$

$$V_{xr} = \rho_{xr} \cdot K / l_y, V_{yr} = \rho_{yr} \cdot K / l_x$$

$$\rho_{xr} = u_{xr} \cdot K / l_y, \rho_{yr} = u_{yr} \cdot K / l_x$$

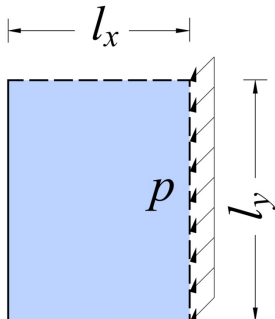
$$\rho_{ij} = \text{equivalent uniform load}$$



$\epsilon = l_y : l_x =$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-4.81	-4.79	-4.72	-4.65	-4.60
$m_{x\max}$	4.81	4.79	4.72	4.65	4.60
$m_{y\min}$	-4.81	-4.79	-4.72	4.65	-4.60
$m_{y\max}$	4.81	4.47	4.29	4.24	4.20
<b>100a</b>	150	235	337	458	600
$\rho_{xr}$	0.58	0.67	0.75	0.81	0.85
$\rho_{yr}$	0.44	0.39	0.34	0.30	0.27
$u_{xr}$	0.50	0.60	0.67	0.71	0.75
$u_{yr}$	0.50	0.40	0.33	0.29	0.25

2. Uniformly distributed force on line at  $x=l_x$

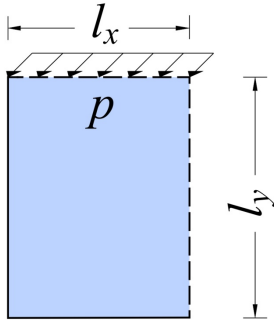
$$K = p \cdot l_y, M = K/m, f_m = a \cdot p \cdot l_x^3 / (E \cdot h^3)$$



$\epsilon = l_y : l_x =$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-2.64	-2.58	-2.52	-2.48	-2.44
$m_{x\max}$	2.64	2.58	2.52	2.48	2.44
$m_{y\min}$	-2.64	-2.58	-2.52	-2.48	-2.44
$m_{y\max}$	1.92	1.91	1.93	1.95	1.95
<b>100a</b>	300	469	674	916	1200

3. Uniformly distributed force on line at  $y=l_y$

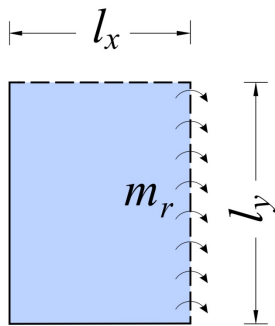
$$K = p \cdot l_x, M = K/m, f_m = a \cdot p \cdot l_x^3 / (E \cdot h^3)$$



$\epsilon = l_y : l_x =$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-2.64	-2.68	-2.72	-2.75	-2.79
$m_{x\max}$	1.92	1.94	1.94	1.95	1.95
$m_{y\min}$	-2.64	-2.68	-2.72	-2.75	-2.79
$m_{y\max}$	2.64	2.68	2.72	2.75	2.79
100a	300	374	449	524	600

4. Uniformly distributed moment  $m_R$  on line at  $x=l_x$

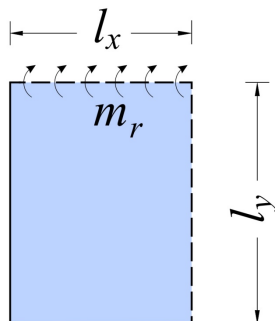
$$K = m_R, M = K/m, f_m = a \cdot m_R \cdot l_x^2 / (E \cdot h^3)$$



$\epsilon = l_y : l_x =$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-0.84	-0.84	-0.81	-0.79	-0.77
$m_{x\max}$	1.10	1.00	0.92	0.86	0.80
$m_{y\min}$	-1.10	-1.00	-0.92	-0.86	-0.80
$m_{y\max}$	1.10	1.00	0.92	0.86	0.80
100a	300	469	674	916	1200

5. Uniformly distributed moment  $m_R$  on line at  $y=l_y$

$$K = m_R, M = K/m, f_m = a \cdot m_R \cdot l_x^2 / (E \cdot h^3)$$

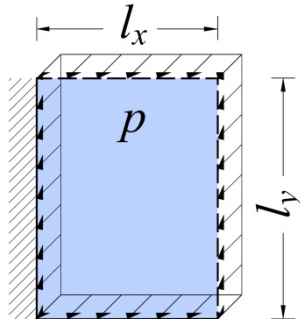


$\epsilon = l_y : l_x =$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-1.10	-1.20	-1.30	-1.40	-1.50
$m_{x\max}$	1.10	1.20	1.30	1.40	1.50
$m_{y\min}$	-0.84	-0.85	-0.85	-0.86	-0.86
$m_{y\max}$	1.10	1.20	1.30	1.40	1.50
100a	300	300	300	300	300



**Table 58** Two-edge-supported slab, fixed along one edge and simply supported along the other edge

1. Uniform load  $p$

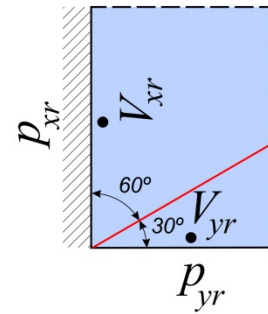


$$K = p \cdot l_x \cdot l_y, M = K/m, f_m = a \cdot p \cdot l_x^4 / (E \cdot h^3)$$

$$V_{xr} = \rho_{xr} \cdot K / l_y, V_{yr} = \rho_{yr} \cdot K / l_x$$

$$\rho_{xr} = u_{xr} \cdot K / l_y, \rho_{yr} = u_{yr} \cdot K / l_x$$

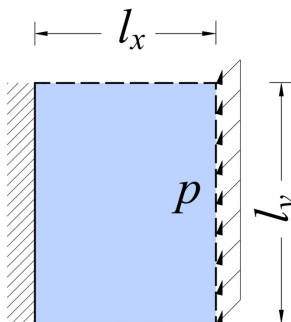
$p_{ij}$  = equivalent uniform load



$\varepsilon = l_y : l_x =$	0.50	0.60	0.80	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-1.94	-2.00	-2.20	-2.45	-2.81	-3.20	-3.61	-4.03
$m_{x\max}$	6.45	7.17	9.42	10.5	11.7	13.1	14.7	16.5
$m_{y\min}$	-7.73	-8.42	-9.52	-10.5	-11.7	-13.1	-14.7	-16.5
$m_{y\max}$	7.05	7.25	7.25	7.43	7.90	9.00	10.3	11.6
100a	420	269	129	69.8	88.9	104	117	126
$\rho_{xr}$	1.04	1.12	1.21	1.23	1.20	1.16	1.11	1.08
$\rho_{yr}$	0.70	0.60	0.47	0.38	0.31	0.26	0.22	0.19
$u_{xr}$	0.43	0.52	0.64	0.71	0.77	0.81	0.84	0.86
$u_{yr}$	0.57	0.48	0.36	0.29	0.23	0.19	0.16	0.14

2. Uniformly distributed force on line at  $x = l_x$

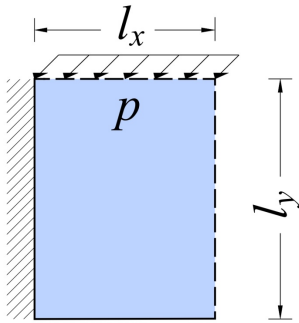
$$K = p \cdot l_y, M = K/m, f_m = a \cdot p \cdot l_x^3 / (E \cdot h^3)$$



$\varepsilon = l_y : l_x =$	0.50	0.60	0.80	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-1.47	-1.43	-1.43	-1.49	-1.61	-1.77	-1.96	-2.16
$m_{x\max}$	2.82	2.82	2.92	3.13	3.50	3.96	4.48	5.06
$m_{y\min}$	-2.82	-2.82	-2.92	-3.13	-3.50	-3.96	-4.48	-5.06
$m_{y\max}$	1.99	2.01	2.14	2.36	2.64	2.99	3.45	3.84
100a	486	382	252	175	226	269	302	329

3. Uniformly distributed force on line at  $y=l_y$

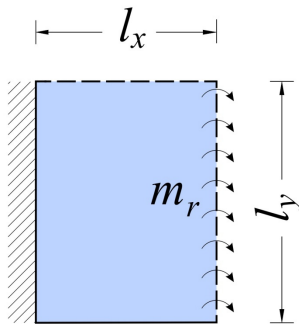
$$K = p \cdot l_x, M = K/m, f_m = a \cdot p \cdot l_x^3 / (E \cdot h^3)$$



$\varepsilon = l_y : l_x =$	0.50	0.60	0.80	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-0.90	-0.89	-0.89	-0.91	-0.91	-0.93	-0.95	-0.97
$m_{x\max}$	3.10	3.35	3.90	4.49	4.97	5.32	5.45	5.64
$m_{y\min}$	-3.95	-4.00	-4.22	-4.63	-5.45	-5.92	-6.33	-6.93
$m_{y\max}$	4.26	4.79	5.96	7.16	8.80	5.46	8.95	8.48
<b>100a</b>	851	548	268	150	160	166	169	170

4. Uniformly distributed moment  $m_R$  on line at  $x=l_x$

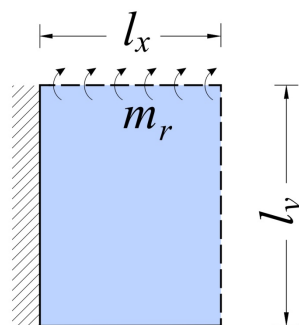
$$K = m_R, M = K/m, f_m = a \cdot m_R \cdot l_x^2 / (E \cdot h^3)$$



$\varepsilon = l_x : l_y =$	0.50	0.60	0.80	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-0.86	-0.86	-0.86	-0.86	-0.86	-0.87	-0.89	-0.89
$m_{x\max}$	1.13	1.13	1.13	1.13	1.09	1.08	1.08	1.10
$m_{y\min}$	-1.13	-1.13	-1.13	-1.13	-1.09	-1.08	-1.08	-1.10
$m_{y\max}$	1.13	1.13	1.13	1.13	1.09	1.08	1.08	1.10
<b>100a</b>	296	289	268	241	319	385	436	476

5. Uniformly distributed moment  $m_R$  on line at  $y=l_y$

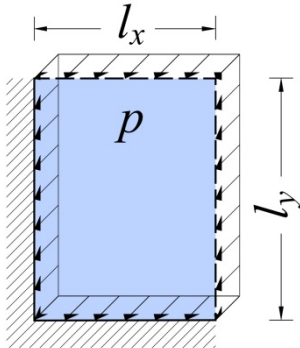
$$K = m_R, M = K/m, f_m = a \cdot m_R \cdot l_x^2 / (E \cdot h^3)$$



$\varepsilon = l_y : l_x =$	0.50	0.60	0.80	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-0.49	-0.49	-0.49	-0.49	-0.53	-0.57	-0.61	-0.66
$m_{x\max}$	3.54	3.54	3.54	3.54	3.57	3.65	3.86	4.07
$m_{y\min}$	-0.81	-0.81	-0.81	-0.81	-0.81	-0.83	-0.86	-0.88
$m_{y\max}$	8.67	8.67	8.67	8.67	5.35	4.95	4.44	4.30
<b>100a</b>	876	577	297	178	175	172	156	152

**Table 59** Two-edge-supported slab, fixed along both edges

1. Uniform load  $p$

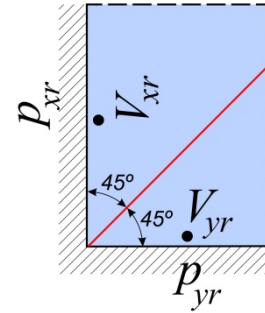


$$K = p \cdot l_x \cdot l_y, M = K/m, f_m = a \cdot p \cdot l_x^4 / (E \cdot h^3)$$

$$V_{xr} = \rho_{xr} \cdot K / l_y, V_{yr} = \rho_{yr} \cdot K / l_x$$

$$\rho_{xr} = u_{xr} \cdot K / l_y, \rho_{yr} = u_{yr} \cdot K / l_x$$

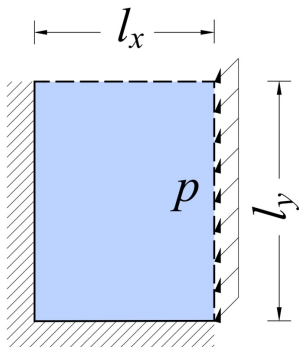
$$\rho_{ij} = \text{equivalent uniform load}$$



$\epsilon = l_y : l_x =$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-3.23	-3.29	-3.51	-3.81	-4.18
$m_{x\max}$	14.5	17.7	21.1	25.7	28.4
$m_{y\min}$	-3.23	-3.41	-3.78	-4.27	-4.88
$m_{y\max}$	14.5	13.1	13.3	14.3	15.8
<b>100a</b>	45.5	67.4	87.6	103	117
$\rho_{xr}$	1.05	1.13	1.14	1.12	1.10
$\rho_{yr}$	1.05	0.89	0.75	0.62	0.52
$u_{xr}$	0.50	0.60	0.67	0.71	0.75
$u_{yr}$	0.50	0.40	0.33	0.29	0.25

2. Uniformly distributed force on line at  $x=l_x$

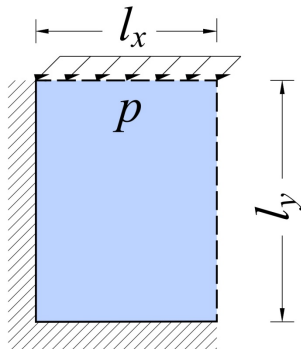
$$K = p \cdot l_y, M = K/m, f_m = a \cdot p \cdot l_x^3 / (E \cdot h^3)$$



$\epsilon = l_y : l_x =$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-2.22	-2.00	-2.01	-2.10	-2.26
$m_{x\max}$	7.72	7.71	7.24	7.86	8.20
$m_{y\min}$	-1.02	-1.13	-1.30	-1.50	-1.74
$m_{y\max}$	4.45	4.44	4.81	5.26	5.91
<b>100a</b>	118	176	228	270	305

3. Uniformly distributed force on line at  $y=l_y$

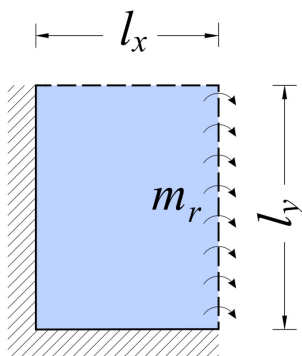
$$K = p \cdot l_x, M = K/m, f_m = a \cdot p \cdot l_x^3 / (E \cdot h^3)$$



$\varepsilon=l_y:l_x=$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-1.02	-0.97	-0.95	-0.95	-0.97
$m_{x\max}$	4.45	4.66	5.17	5.39	5.66
$m_{y\min}$	-2.22	-2.80	-3.76	-5.16	-5.90
$m_{y\max}$	7.72	7.93	7.78	8.12	7.85
<b>100a</b>	118	142	156	163	167

4. Uniformly distributed moment  $m_R$  on line at  $x=l_x$

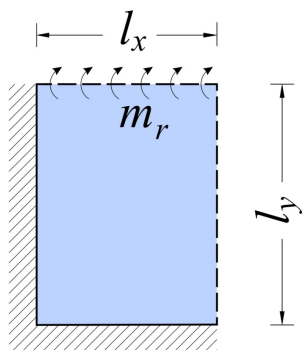
$$K = m_R, M = K/m, f_m = a \cdot m_R \cdot l_x^2 / (E \cdot h^3)$$



$\varepsilon=l_y:l_x=$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-0.82	-0.81	-0.80	-0.78	-0.75
$m_{x\max}$	11.4	12.7	13.1	13.2	15.5
$m_{y\min}$	-0.50	-0.48	-0.49	-0.50	-0.53
$m_{y\max}$	3.53	3.31	3.10	2.96	2.86
<b>100a</b>	174	258	333	397	426

5. Uniformly distributed moment  $m_R$  on line at  $y=l_y$

$$K = m_R, M = K/m, f_m = a \cdot m_R \cdot l_x^2 / (E \cdot h^3)$$



$\varepsilon=l_y:l_x=$	1.00	1.25	1.50	1.75	2.00
$m_{x\min}$	-0.50	-0.53	-0.56	-0.61	-0.65
$m_{x\max}$	3.53	3.72	3.80	3.95	4.14
$m_{y\min}$	-0.82	-0.85	-0.85	-0.86	-0.88
$m_{y\max}$	9.08	6.35	5.76	4.75	4.49
<b>100a</b>	174	173	166	160	153