

$\sigma_{max} = M/W$ $W = bh^2/6$ (sección rectangular b por h)
 $T_{max} = V/B$ $B = 2bh/3$ (sección rectangular b por h)
 $\epsilon_{max} = \sigma_{max}/E$ (E módulo de elasticidad)
 Flecha $\delta/L = \epsilon_{max} / 5 \cdot L/h$ (pieza aislado)
 $\delta/L = \epsilon_{max} / 10 \cdot L/h$ (pieza continua en un extremo)

MADERA LAMINADA C24 Resistencia 24 N/mm²
 Tensión normal segura a flexión: $10 \text{ N/mm}^2 = 1,0 \text{ kN/cm}^2$
 Tensión tangencial segura a cortante: $1 \text{ N/mm}^2 = 0,1 \text{ kN/cm}^2$
 Módulo de Elasticidad equivalente a largo plazo: $8000 \text{ N/mm}^2 = 800 \text{ kN/cm}^2$
 Flecha tolerable en cubiertas: $1/300$ de la luz

MADERA C24	Ancho de la pieza en centímetros						Canto (cm)
8	10	12	14	16	20	24	12

CORTANTE SEGURO (kN)	6	8	11	13	16	19	22	26	30	34	43	48	56	64	80	96	110	135	160	190	200	240
17	21	26	30	34	38	48	54	67	75	86	110	130	160	190	250	300	400	580	800	1200	1500	2400

MOMENTO SEGURO (mKN)	1,9	2,4	3,4	4,3	5,2	6,6	8,0	9,3	11,5	13,4	15,4	18,2	21	24	27 <th>32 <th>37 <th>42 <th>54 <th>67 <th>84 <th>96 <th>120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th></th></th></th></th></th></th></th></th>	32 <th>37 <th>42 <th>54 <th>67 <th>84 <th>96 <th>120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th></th></th></th></th></th></th></th>	37 <th>42 <th>54 <th>67 <th>84 <th>96 <th>120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th></th></th></th></th></th></th>	42 <th>54 <th>67 <th>84 <th>96 <th>120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th></th></th></th></th></th>	54 <th>67 <th>84 <th>96 <th>120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th></th></th></th></th>	67 <th>84 <th>96 <th>120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th></th></th></th>	84 <th>96 <th>120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th></th></th>	96 <th>120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th></th>	120 <th>140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th></th>	140 <th>170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th></th>	170 <th>210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th></th>	210 <th>250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th></th>	250 <th>330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th></th>	330 <th>400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th></th>	400 <th>580 <th>800 <th>1200 <th>1500 </th></th></th></th>	580 <th>800 <th>1200 <th>1500 </th></th></th>	800 <th>1200 <th>1500 </th></th>	1200 <th>1500 </th>	1500
13,6	17,1	20	24	27	32	37	43	53	66	77	91	107	126	148	174	205	242	286	348	430	534	663	820	1018	1260	1554	2004	2504	3504	4800	6400	8400	11200

PESO PROPIO (kN/m)	0,1	0,2	0,3	0,4	0,5	0,6	0,7	0,8	1,0	1,2	1,5	2,0	3,0	4,0	5,0	6,0	8,0	10,0	12,0	15,0	20,0	24,0	30,0	40,0	50,0	60,0	80,0	100,0	120,0	150,0	
0,2	0,3	0,4	0,5	0,6	0,7	0,8	1,0	1,2	1,5	2,0	3,0	4,0	5,0	6,0	8,0	10,0	12,0	15,0	20,0	24,0	30,0	40,0	50,0	60,0	80,0	100,0	120,0	150,0	200,0	240,0	300,0

FLECHA	13	15	17	20	23	27	35	46	52	70				
Pieza aislada	26	30	34	40	46	52	70	1,0	1,05	1,10	1,15	1,2	1,3	1,4

