

TABELLA PER IL CALCOLO STRUTTURALE DEL LEGNO LAMELLARE

Tabella delle sezioni b/h [cm] x Legno lamellare



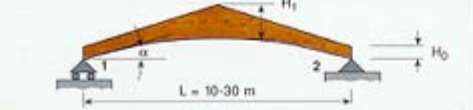


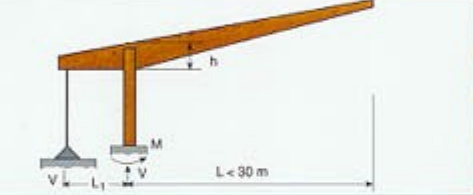
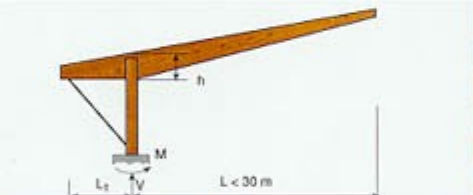
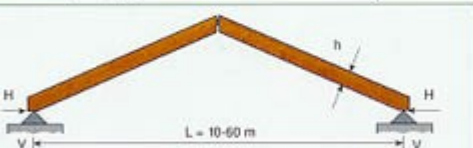
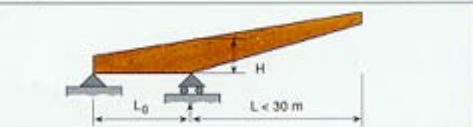

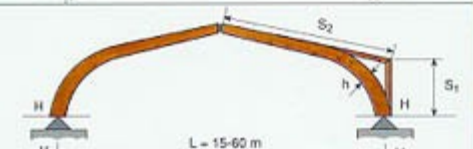
Luce = L (m) • Carico = [da N/m] Legno lamellare II classe – freccia L/200 – L/300

| luce carico | 3 | | 3.5 | | 4 | | 4.5 | | 5 | | 5.5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 12 | |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | b | h | b | h | b | h | b | h | b | h | b | h | b | h | b | h | b | h | b | h | b | h | b | h |
| 100 | 8.0 | 12.9 | 8.0 | 12.9 | 10.0 | 16.3 | 10.0 | 16.3 | 10.0 | 19.6 | 10.0 | 19.6 | 12.0 | 19.6 | 12.0 | 23.0 | 14.0 | 26.3 | 14.0 | 29.7 | 16.0 | 29.7 | 16.0 | 36.4 |
| 150 | 8.0 | 12.9 | 8.0 | 16.3 | 10.0 | 16.3 | 10.0 | 19.6 | 10.0 | 19.6 | 12.0 | 19.6 | 12.0 | 23.0 | 12.0 | 26.3 | 14.0 | 29.7 | 14.0 | 33.0 | 16.0 | 33.0 | 16.0 | 43.1 |
| 200 | 8.0 | 16.3 | 10.0 | 16.3 | 10.0 | 19.6 | 10.0 | 19.6 | 10.0 | 23.0 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 16.0 | 39.7 | 16.0 | 46.4 |
| 250 | 8.0 | 16.3 | 10.0 | 16.3 | 10.0 | 19.6 | 12.0 | 19.6 | 10.0 | 23.0 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 33.0 | 14.0 | 33.0 | 14.0 | 39.7 | 16.0 | 39.7 | 16.0 | 50.1 |
| 300 | 8.0 | 16.3 | 10.0 | 19.6 | 10.0 | 19.6 | 12.0 | 23.0 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 12.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 50.1 |
| 350 | 10.0 | 16.3 | 10.0 | 19.6 | 10.0 | 23.0 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 33.0 | 14.0 | 39.7 | 16.0 | 39.7 | 16.0 | 46.4 | 16.0 | 53.4 |
| 400 | 10.0 | 16.3 | 10.0 | 19.6 | 10.0 | 23.0 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 12.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 46.4 | 16.0 | 56.8 |
| 450 | 10.0 | 19.6 | 10.0 | 19.6 | 10.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 12.0 | 29.7 | 12.0 | 33.0 | 14.0 | 36.4 | 16.0 | 39.7 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 60.1 |
| 500 | 10.0 | 19.6 | 10.0 | 23.0 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 12.0 | 33.0 | 14.0 | 33.0 | 14.0 | 39.7 | 16.0 | 39.7 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 60.1 |
| 550 | 10.0 | 19.6 | 10.0 | 23.0 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 12.0 | 33.0 | 14.0 | 33.0 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 46.4 | 16.0 | 53.4 | 16.0 | 63.5 |
| 600 | 10.0 | 19.6 | 10.0 | 23.0 | 12.0 | 26.3 | 12.0 | 26.3 | 14.0 | 29.7 | 12.0 | 33.0 | 14.0 | 33.0 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 50.1 | 16.0 | 53.4 | 16.0 | 66.8 |
| 650 | 12.0 | 19.6 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 66.8 |
| 700 | 12.0 | 19.6 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 16.0 | 39.7 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 70.2 |
| 750 | 12.0 | 19.6 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 16.0 | 39.7 | 16.0 | 46.4 | 16.0 | 53.4 | 16.0 | 60.1 | 16.0 | 70.2 |
| 800 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 50.1 | 16.0 | 53.4 | 16.0 | 60.1 | 16.0 | 70.2 |
| 850 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 60.1 | 20.0 | 70.2 |
| 900 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 63.5 | 20.0 | 70.2 |
| 950 | 12.0 | 23.0 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 39.7 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 63.5 | 20.0 | 70.2 |
| 1000 | 12.0 | 23.0 | 12.0 | 26.3 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 39.7 | 16.0 | 46.4 | 16.0 | 53.5 | 16.0 | 60.1 | 20.0 | 63.5 | 20.0 | 70.2 |
| 1100 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 43.1 | 16.0 | 43.1 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 60.1 | 20.0 | 63.5 | 20.0 | 73.5 |
| 1200 | 12.0 | 26.3 | 12.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 14.0 | 43.1 | 16.0 | 43.1 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 63.5 | 20.0 | 63.5 | 20.0 | 76.9 |
| 1300 | 12.0 | 26.3 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 46.4 | 16.0 | 53.4 | 16.0 | 60.1 | 16.0 | 66.8 | 20.0 | 66.8 | 20.0 | 80.2 |
| 1400 | 12.0 | 29.7 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 39.7 | 16.0 | 39.7 | 16.0 | 43.1 | 16.0 | 46.4 | 16.0 | 53.4 | 16.0 | 60.1 | 20.0 | 66.8 | 20.0 | 70.2 | 20.0 | 83.6 |
| 1500 | 12.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 39.7 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 63.5 | 20.0 | 66.8 | 20.0 | 73.5 | 20.0 | 86.9 |
| 1600 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 60.1 | 16.0 | 66.8 | 20.0 | 66.8 | 20.0 | 73.5 | 20.0 | 90.3 |
| 1700 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 36.4 | 16.0 | 39.7 | 16.0 | 43.1 | 16.0 | 46.4 | 16.0 | 53.4 | 16.0 | 60.1 | 16.0 | 70.2 | 20.0 | 70.2 | 20.0 | 76.9 | 20.0 | 90.3 |
| 1800 | 14.0 | 29.7 | 14.0 | 33.0 | 14.0 | 39.7 | 16.0 | 39.7 | 16.0 | 43.1 | 16.0 | 50.1 | 16.0 | 53.4 | 16.0 | 63.5 | 16.0 | 70.2 | 20.0 | 70.2 | 20.0 | 80.2 | 20.0 | 93.6 |
| 1900 | 14.0 | 29.7 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 53.4 | 16.0 | 63.5 | 16.0 | 73.5 | 20.0 | 73.5 | 20.0 | 80.2 | 20.0 | 97.0 |
| 2000 | 14.0 | 29.7 | 14.0 | 36.4 | 14.0 | 39.7 | 16.0 | 43.1 | 16.0 | 46.4 | 16.0 | 50.1 | 16.0 | 56.8 | 16.0 | 66.8 | 16.0 | 73.5 | 20.0 | 73.5 | 20.0 | 83.6 | 20.0 | 100.3 |

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SCHEMI STATICI “LEGNO LAMELLARE”

CARATTERISTICHE STRUTTURALI DI PREVALENTE IMPIEGO

| SISTEMA STATICO | DESCRIZIONE | INCLINAZIONE | LUCE[m] L [m] | ALTEZZE H |
|---|--|--------------|---------------|--|
|  | Trave parallela o poco inclinata a doppia pendenza | < 5° | < 40 | $H \cong L / 17$ |
|  | Trave su due appoggi a doppia pendenza | 3-10° | 10-40 | $H_0 \cong L / 30$ $H_1 \cong L / 16$ |
|  | Trave inflessa con curvatura a due falde a doppia pendenza | 3-15° | 10-30 | $H_0 \cong L / 30$ $H_1 \cong L / 16$ |
|  | Trave rastremata | 3-10° | 10-40 | $H_0 \cong L / 30$ $H_1 \cong L / 16$ |
|  | Trave curva su due appoggi | — | 10-40 | $H \cong L / 17$ |
|  | Trave a sbalzo con tirante verticale | < 10° | < 30 | $H \cong L / 10$ |
|  | Trave a sbalzo con tirante inclinato | < 10° | < 30 | $H \cong L / 10$ |
|  | Portale a tre cerniere | > 14° | 10-60 | $H \cong L / 30$ |
|  | Trave a sbalzo con rastremazione | < 10° | < 30 | $H \cong L / 10$ |
|  | Portale a tre cerniere con montante scomposto in tirante e puntone | ≥ 14° | 10 - 45 | $H_1 \cong (S_1 + S_2) / 15$ |
|  | Portale a tre cerniere a sezione variabile | ≥ 14° | 15 - 60 | $H_1 \cong (S_1 + S_2) / 15$ |

| | | | | |
|---|---|------------------|---------|------------------------------|
|  | Capriate a tre cerniere con tirante | $\geq 14^\circ$ | 5-50 | $H \cong L/40$ |
|  | Arco a tre cerniere | $f/L \geq 0,144$ | 20-100 | $H \cong L/50$ |
|  | Portale a tre cerniere con giunto d'angolo a rosa | $> 14^\circ$ | 10-30 | $H_1 \cong (S_1 + S_2) / 13$ |
|  | Portale a tre cerniere con montante scomposto | $> 14^\circ$ | 10-40 | $H \cong (S_1 + S_2) / 14$ |
|  | Trave a più campate | 0° | 10-40 | $H \cong L/20$ |
|  | Capriate reticolare a correnti parallele | 0° | 30-80 | $H \cong L/12$ |
|  | Capriate a struttura reticolare triangolare | $> 10^\circ$ | 30-80 | $H \cong L/B$ |
|  | Cassettonato | — | < 25 | $H \cong L/20$ |
|  | Sistema spaziale | — | < 200 | — |

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