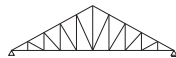
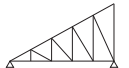



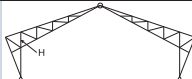
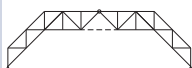
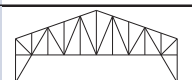
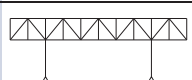


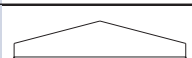
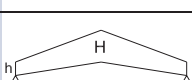
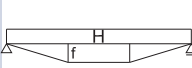
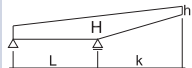
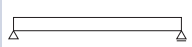





TABELA DE PRÉ-DIMENSIONAMENTO DE ESTRUTURAS DE MADEIRA

Descrição	Sistema Estrutural	Esquema	Vão livre [m]	Altura da viga	Distância entre vigas	Inclinação da cobertura
Tesouras	triangulares		7,5 a 30	$h \geq \frac{l}{10}$	4 a 10 m	12 a 30°
			7,5 a 20	$h_{maior} \geq \frac{l}{10}$	4 a 10 m	12 a 30°
	trapezoidais		7,5 a 30	$h \geq \frac{l}{12}$	4 a 10 m	3 a 8°
			7,5 a 30	$h_{maior} \geq \frac{l}{12}$	4 a 10 m	3 a 8°
treliças		7,5 a 60	$h \geq \frac{l}{12} \rightarrow \frac{l}{15}$	4 a 10 m	-	
		7,5 a 60	$h \geq \frac{l}{12} \rightarrow \frac{l}{15}$	4 a 10 m	-	
Pórcos Trelizados	tri-articulados		15 a 30	$\frac{l}{12}$	4 a 6 m	máx 20°
			25 a 50	$\frac{l}{12}$	6 a 10 m	-
	bi-articulados		15 a 40	$\frac{l}{12}$	4 a 10 m	3 a 8°
			25 a 60	$\frac{l}{12}$	6 a 10 m	-
Vigas Laminadas Coladas	bi-apoiadas		10 a 35	$\frac{l}{17}$	5 a 7,5 m	-
	com corte inclinado simples		10 a 35	$\frac{l}{18} \rightarrow \frac{l}{25}$ H h	5 a 7,5 m	8 a 12°
	com corte inclinado duplo		10 a 35	$\frac{l}{16} \rightarrow \frac{l}{30}$ H h	5 a 7,5 m	3 a 8°
	bumerangues		10 a 35	$\frac{l}{16} \rightarrow \frac{l}{30}$ H h	5 a 7,5 m	máx 12°
	vagonadas		10 a 30	$\frac{l}{40} \rightarrow \frac{l}{12}$ H flecha	5 a 7 m	-
	em balanço		em balanço de 10 a 30	$\frac{l}{k} = \frac{1}{3} \rightarrow \frac{k}{10} \rightarrow \frac{k}{45}$ H h	5 a 7 m	2 a 12°
Vigas Madeira Maciça	bi-apoiadas		1 a 8	$\frac{l}{17}$	0,5 a 5 m	-
Grelhas Laminadas Coladas	grelhas		máx 25	$\frac{l}{18} \rightarrow \frac{l}{25}$ do menor vão livre	-	-
Arcos Laminados Colados	arcos bi-articulados		20 a 100	$\frac{l}{50}$	5 a 10 m	-
	arcos tri-articulados		20 a 100	$\frac{l}{40}$	5 a 10 m	-