		Softwood species							
		C14	C16	C18	C20	C22	C24	C27	C30
Strength properties (in N/mm^2)									
Bending	$f_{m,k}$	14	16	18	20	22	24	27	30
Tension parallel	$f_{t,0,k}$	8	10	11	12	13	14	16	18
Tension perpendicular	$f_{t,90,k}$	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4
Compression parallel	$f_{c,0,k}$	16	17	18	19	20	21	22	23
Compression perpendicular	$f_{c,90,k}$	2,0	2,2	2,2	2,3	2,4	2,5	2,6	2,7
Shear	$f_{v,k}$	3,0	3,2	3,4	3,6	3,8	4,0	4,0	4,0
Stiffness properties (in kN/mm^2)									
Mean modulus of elasticity parallel	$E_{0,mean}$	7	8	9	9,5	10	11	11,5	12
5% modulus of elasticity parallel	$E_{0,05}$	4,7	5,4	6,0	6,4	6,7	7,4	7,7	8,0
Mean modulus of elasticity perpendicular	$E_{90,mean}$	0,23	0,27	0,30	0,32	0,33	0,37	0,38	0,40
Mean shear modulus	G_{mean}	0,44	0,5	0,56	0,59	0,63	0,69	0,72	0,75
Density (in kg/m^3)									
Density	ρ_k	290	310	320	330	340	350	370	380
Mean density	ρ_{mean}	350	370	380	390	410	420	450	460

4 Symbols and abbreviations

$E_{0,mean}$ mean characteristic value of modulus of elasticity parallel to grain (in N/mm^2)

$E_{0,05}$ 5-percentile characteristic value of modulus of elasticity parallel to grain (in N/mm^2)

$E_{90,mean}$ mean characteristic value of modulus of elasticity perpendicular to grain (in N/mm^2)

$f_{c,0,k}$ characteristic value of compressive strength parallel to grain (in N/mm^2)

$f_{c,90,k}$ characteristic value of compressive strength perpendicular to grain (in N/mm^2)

$f_{m,k}$ characteristic value of bending strength (in N/mm^2)

$f_{t,0,k}$ characteristic value of tensile strength parallel to grain (in N/mm^2)

$f_{t,90,k}$ characteristic value of tensile strength perpendicular to grain (in N/mm^2)

$f_{v,k}$ characteristic value of shear strength (in N/mm^2)

G_{mean} mean characteristic value of shear modulus (in N/mm^2)

ρ_k characteristic value of density (in kg/m^3)

NOTES:-

1. Values given above for tension strength, compression strength, shear strength, 5% modulus of elasticity, mean modulus of elasticity perpendicular to grain and mean shear modulus, have been calculated using the equations given in clause Annex A
2. The tabulated properties are compatible with timber at a moisture content consistent with a temperature of 20^{0}C and a relative humidity of 65%
3. Timber conforming to classes C45 and C50 may not be readily available.
4. Characteristic values for shear strength are given for timber without fissures, according to EN 408. The effect of fissures should be covered in design codes.