

## Harwood lumber (sawn hardwood timber) specification Requirements in accordance with GOST 2695-83

#	Parameter, attribute, defect of wood, its arrangement	Requirements for grades		
		Grade 1	Grade 2	Grade 3
1	Species of wood	hardwood (deciduous, under the specification of the buyer) birch, aspen, oak, maple, beech etc.		
2	Nominal length, m: from hard-grained deciduous species	from 0,5 up to 6,5 with gradation 0,10		
	from soft deciduous species	from 0,5 up to 2,0 with gradation 0,10 and from 2,0 up to 6,5 with gradation 0,25		
3	Deviations from nominal length, mm	from -25 up to +50		
4	Nominal thickness, mm	19, 22, 25, 32, 40, 45, 50, 60, 70, 90, 100		
5	Deviations from nominal thickness, mm, at thickness up to 32 mm	from -1,0 up to + 1,0		
	at thickness more than 32 mm	from -2,0 up to + 2,0		
6	Nominal width, mm: square edged sawn timber	60, 70, 80, 90, 100, 110, 130, 150, 180, 200		
	unedged and one-edge square edged sawn timber	50 and more with gradation 10		
7	Deviations from nominal width square edged sawn timber, mm, at width up to 100 mm	from -2,0 up to +2,0		
	at width more than 100 mm	from -3,0 up to +3,0		
8	The least face width of unedged sawn timber, mm	40		
9	Sound intergrown knots, the size of not taken into account knots, except for group knots, mm	10	20	50
	the permitted size of knots (the sum of the sizes of knots), mm / number for 1 m length: on faces at width up to 100 mm	20/1	50 (but no more than 50 % of width)/2	(300)/allowed
	at width from 100 up to 200 mm	20/2	50/3	(300)/allowed
	at width from 210 up to 400 mm	40/2	50/3	(300)/allowed
	at width over 400 mm	40/2 or 60/1	50/3 or 70/2	(300)/allowed
	on edges of square edged sawn timber, the size in percentage of thickness, number of knots, at thickness: up to 32 mm	33/1	50/1	allowed
	from 40 up to 60 mm	33/2	50/2	allowed

10	Partly intergrown sound knots and dead sound knots, the size of not taken into account knots (except for group knots), mm	-	15	30
	on faces	20 (in the general number of intergrown knots)	40 (in the general number of intergrown knots)	(150)
	on edges of square edged sawn timber	according to standards for intergrown knots		(150)
11	Loos knots, rotten and unsound knots, the size of not taken into account knots (except for group knots), mm	not allowed	10	25
	the numerator - the permitted size of knots (the sum of the sizes of knots), mm, the denominator - quantity for 1 m length: on faces	not allowed	40/1	(150)
	on edges of square edged sawn timber	not allowed	according to standards for intergrown sound knots	
12	Face cracks and edge cracks (on square edged edges), including extended on the end: depth, percentage of thickness and length of sawn timber	16	33	50
13	Face cracks, extended on both ends, depth, percentage of thickness of sawn timber	not allowed	20	30
	quantity of cracks, pieces	not allowed	1	1  in beech sawn timber with width more than 200 mm the depth of crack have no limit
14	Face and edge through cracks, including extending on the end, length, percentage of length of sawn timber	5	10	33
15	Ring shakes, length, percentage of length of sawn timber	not allowed	5	20
16	Face cracks, depth, percentage of width of sawn timber	75	100	allowed
17	Slant of fibres, %	5	10	allowed
18	Curly grain, the area, percentage from the area of sawn timber's face	25	allowed	

19	Bark pocket, length and width, percentage of length and width of sawn timber: one-sided	5	10	allowed
	through	not allowed	10	allowed
20	Included sapwood	not allowed	allowed	
21	Fungus heartwood stains and strips, the area, percentage from the area of face of sawn timber	not allowed	10	allowed
22	Brown streak, the area, percentage from the area of face of sawn timber	not allowed	5	15
23	Mould, surface blue	stain, strips - are allowed.	allowed	
24	Deep blue, the area, percentage from the area of sawn timber's face	not allowed	10	20
25	Heartwood rot and sapwood rot, the area, percentage from the area of sawn timber' face: uneedged sawn timber	not allowed	5	10
	square edged sawn timber	not allowed		5
26	Hearwood and sapwood fungus brown rot	not allowed		
27	Wormholes, quantity of holes for 1 m length of sawn timber	are not allowed, except for surface wormholes on wane (with depth not more 3mm)	3; large - 1 piece	5
			in oak sawn timber deep wormholes - are not allowed	
28	Mechanical damages and defects of processing	are allowed within the limits of a deviation from the standard sizes		allowed
29	Foreign bodies and impurities	not allowed		
30	Butt trimming, percentage of thickness or width of sawn timber	5	5	5
31	Rough wane, the size of not sawed part, percentage of thickness or width of sawn timber	20	33	50
32	Sharp wane, percentage of length of sawn timber	not allowed	25	50
33	Bow, spring and twist, percentage from length of sawn timber	0,5	1,0	2,0
34	Cup, percentage from width of sawn timber	1,0	2,0	3,0
35	Parameter of the roughness, Rm max, micrometer	1250		

36	Sapwood in square edged oak sawn timber: the size, percentage from width	50		allowed
	the size, percentage from length	33	50	allowed

*The note 1:* The sizes of sawn timber on thickness and on width are established for moisture content of 20%. At the greater or smaller moistness the sizes should be more or less on size of shrinkage in accordance with GOST 6782.2-75.

*The note 2:* The defects of the wood which has been not mentioned in the table, are allowed.

*The note 3:* On edges of square edged sawn timber over 60 mm defects of wood are allowed by thickness on the norms specified for a face.

*The note 4:* At moisture content of wood more 22% the sizes of permitted cracks, bow, spring, cup and twist are decreased twofold.

*The note 5:* Spring in unedged sawn timber it is not standardized.

*The note 6:* The quality rating of quality of sawn timber should be made on the worst face and worst edge.

*The note 7:* Sawn timber of third grade in length more than 3 m, on 50% which of length of grade-making defects are not present, or there are only knots, not taken into account in standards of 1 grade, or on 67% of length of which are defects in norms of 1 grade, are related to 2 grade.

*The note 8:* The presence of one knot with the sizes permitted for adjacent lower grade in sawn timber with length over 3 m is allowed.

*The note 9:* Non-parallelity of faces and edges is allowed within the limits of deviations from nominal thickness or width.

*The note 10:* Sawn timber are delivered dry (with moistness no more than 22%), natural dry or antiseptized.