

TIMBER TRADE FEDERATION

Permissible clear spans (mm) for domestic floor joists
for timber machined on all four sides in accordance with BS EN 336
imposed load not exceeding 1.50kN/m²
strength class C24 service class 1 or 2

c/c joist joist ref.	dead load kN/m ² excluding self weight of joist																		
	not more than 0.25				*	more than 0.25 but				*	more than 0.50 but				*	more than 0.75 but			
	400	450	480	600	*	400	450	480	600	*	400	450	480	600	*	400	450	480	600
35 x 72	1267	1193	1153	989	*	1218	1149	1112	934	*	1178	1111	1079	888	*	1110	1035	982	592
35 x 97	1948	1838	1781	1591	*	1846	1746	1693	1531	*	1766	1672	1622	1429	*	1641	1556	1517	1278
35 x 120	2554	2454	2401	2161	*	2441	2332	2263	2039	*	2333	2215	2151	1942	*	2146	2039	1982	1726
35 x 145	3081	2961	2897	2684	*	2945	2830	2768	2563	*	2830	2719	2659	2461	*	2642	2536	2480	2224
35 x 170	3606	3467	3392	3144	*	3447	3313	3241	3003	*	3313	3183	3113	2907	*	3094	2971	2905	2629
35 x 195	4129	3970	3885	3602	*	3949	3796	3714	3441	*	3796	3647	3568	3306	*	3545	3404	3343	2989
35 x 220	4651	4472	4377	4059	*	4449	4277	4184	3878	*	4277	4109	4020	3700	*	3995	3863	3741	3346
44 x 72	1421	1340	1297	1157	*	1364	1288	1247	1115	*	1315	1243	1204	1084	*	1236	1170	1136	987
44 x 97	2173	2055	1991	1786	*	2054	1946	1888	1698	*	1960	1859	1804	1626	*	1815	1724	1675	1524
44 x 120	2758	2651	2595	2406	*	2637	2534	2480	2269	*	2534	2435	2382	2157	*	2363	2249	2188	1987
44 x 145	3325	3198	3129	2903	*	3181	3058	2992	2773	*	3058	2938	2875	2664	*	2857	2745	2684	2485
44 x 170	3890	3741	3663	3398	*	3722	3579	3502	3248	*	3579	3440	3366	3119	*	3345	3214	3144	2911
44 x 195	4453	4284	4193	3892	*	4262	4098	4011	3721	*	4098	3940	3855	3574	*	3832	3682	3602	3352
44 x 220	4918	4777	4722	4385	*	4759	4616	4518	4193	*	4616	4438	4343	4028	*	4317	4149	4059	3752
60 x 97	2476	2377	2307	2077	*	2362	2241	2177	1966	*	2246	2133	2074	1877	*	2073	1972	1918	1741
60 x 120	3055	2939	2877	2671	*	2924	2813	2752	2554	*	2813	2704	2646	2454	*	2630	2527	2473	2271
60 x 145	3681	3542	3469	3222	*	3524	3390	3319	3081	*	3390	3260	3192	2961	*	3172	3049	2984	2765
60 x 170	4304	4143	4057	3770	*	4122	3966	3882	3606	*	3966	3815	3734	3467	*	3712	3569	3493	3239
60 x 195	4852	4717	4643	4316	*	4699	4540	4445	4129	*	4540	4367	4276	3970	*	4249	4087	4000	3710
60 x 220	5299	5153	5073	4805	*	5132	4989	4911	4651	*	4989	4847	4771	4472	*	4750	4603	4506	4180
72 x 97	2630	2529	2476	2263	*	2516	2421	2362	2137	*	2421	2310	2246	2037	*	2236	2129	2073	1885
72 x 120	3242	3120	3055	2839	*	3104	2987	2924	2715	*	2987	2873	2813	2610	*	2795	2688	2630	2439
72 x 145	3904	3760	3681	3423	*	3740	3600	3524	3274	*	3600	3464	3390	3148	*	3370	3241	3172	2942
72 x 170	4563	4394	4304	4003	*	4372	4209	4122	3831	*	4209	4051	3966	3684	*	3942	3792	3712	3444
72 x 195	5068	4928	4852	4581	*	4910	4773	4699	4386	*	4773	4635	4540	4218	*	4513	4341	4249	3945
72 x 220	5532	5381	5299	5023	*	5362	5213	5132	4862	*	5213	5068	4989	4724	*	4967	4826	4750	4445
38 x 140	3059	2940	2877	2667	*	2925	2811	2750	2547	*	2811	2700	2642	2446	*	2624	2520	2465	2250
38 x 184	4008	3853	3771	3497	*	3833	3684	3605	3341	*	3684	3541	3464	3208	*	3442	3306	3233	2950
38 x 235	4979	4837	4760	4455	*	4817	4692	4591	4258	*	4692	4510	4413	4099	*	4385	4213	4144	3709