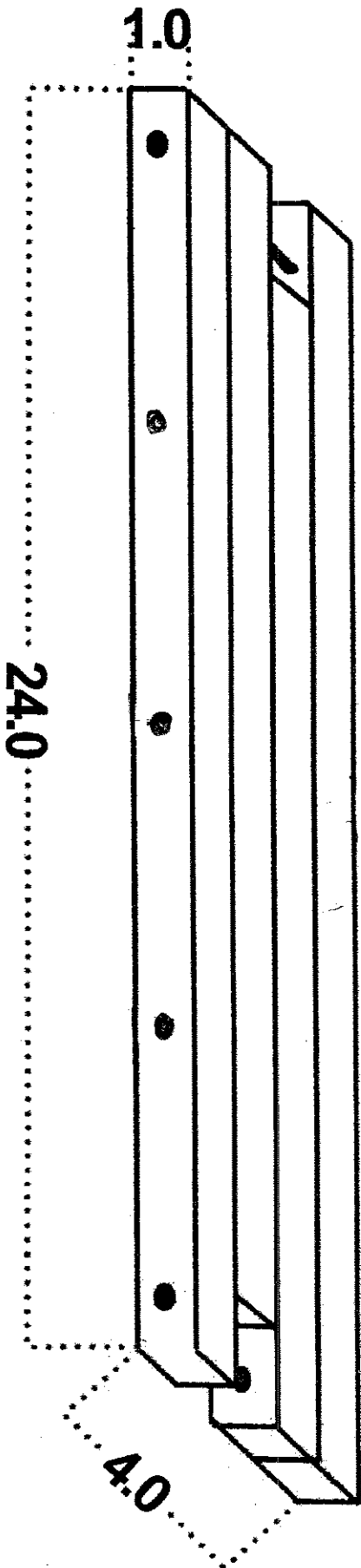


1' X 4' X 24'



- 5 BOLTS -

"TWO END BOLTS ARE 1 1/8", THREE MIDDLE BOLTS ARE 1" CENTER. BOLT IS AT 144", BOLTS ARE SPACED AT 66" ON CENTER, OR AT 12", 78", 144", 210" & 276"

- SPECIES -

"MATS ARE MADE WITH PRIMARILY OAK TIMBERS, BUT MAY INCLUDE OTHER DENSE HARDWOODS, SEE SPECIES CHART FOR SPECIFIC DETAILS

Strength Properties of Commercially Important Woods

Source: U.S. Forest Products Laboratory

Tree Species	Average Specific Gravity, Oven Dry Sample <u>(0-1.0)</u>	Static Bending Modulus of Elasticity (E) <u>10⁶ psi</u>	Impact Bending, Height of Drop Causing Failure <u>inches</u>	Compress. Parallel to Grain, Max Crushing Strength <u>psi</u>	Compress. Perpen. to Grain, Fiber Stress at Prop. Limit <u>psi</u>	Shear Parallel to Grain, Max Shear Strength <u>psi</u>
U. S. Hardwoods						
Alder, Red	0.41	1.38	20	5,820	440	1,080
Ash, Black	0.49	1.60	35	5,970	760	1,570
Ash, Blue	0.58	1.40	-	6,980	1,420	2,030
Ash, Green	0.56	1.66	32	7,080	1,310	1,910
Ash, Oregon	0.55	1.36	33	6,040	1,250	1,790
[Ash, White	0.60	1.74	43	7,410	1,160	1,910]
Aspen, Bigtooth	0.39	1.43	-	5,300	450	1,080
Aspen, Quaking	0.38	1.18	21	4,250	370	850
Basswood	0.37	1.46	16	4,730	370	990
[Beech, American	0.64	1.72	41	7,300	1,010	2,010]
Birch, Paper	0.55	1.59	34	5,690	600	1,210
Birch, Sweet	0.65	2.17	47	8,540	1,080	2,240
Birch, Yellow	0.62	2.01	55	8,170	970	1,880
Butternut	0.38	1.18	24	5,110	460	1,170
Cherry, Black	0.50	1.49	29	7,110	690	1,700
Chestnut, American	0.43	1.23	19	5,320	620	1,080
Cottonwood, Balsam Poplar	0.34	1.1	-	4,020	300	790
Cottonwood, Black	0.35	1.27	22	4,500	300	1,040
Elm, Eastern	0.40	1.37	20	4,910	380	930
[Elm, American	0.50	1.34	39	5,520	690	1,510]
Elm, Rock	0.63	1.54	56	7,050	1,230	1,920
[Elm, Slippery	0.53	1.49	45	6,360	820	1,630]
Hackberry	0.53	1.19	43	5,440	890	1,590
Hickory, Bitternut	0.66	1.79	66	9,040	1,680	-
Hickory, Nutmeg	0.6	1.70	-	6,910	1,570	-
[Hickory, Pecan	0.66	1.73	44	7,850	1,720	2,080]
Hickory, Water	0.62	2.02	53	8,600	1,550	-
[Hickory, Mockernut	0.72	2.22	77	8,940	1,730	1,740]
[Hickory, Pignut	0.75	2.26	74	9,190	1,980	2,150]

Hickory, Shagbark	0.72	2.16	67	9,210	1,760	2,430
Hickory, Shellbark	0.69	1.89	88	8,000	1,800	2,110
Honeylocust	-	1.63	47	7,500	1,840	2,250
Locust, Black	0.69	2.05	57	10,180	1,830	2,480
Magnolia, Cucumbertree	0.48	1.82	35	6,310	570	1,340
Magnolia, Southern	0.50	1.40	29	5,460	860	1,530
Maple, Bigleaf	0.48	1.45	28	5,950	750	1,730
Maple, Black	0.57	1.62	40	6,680	1,020	1,820
Maple, Red	0.54	1.64	32	6,540	1,000	1,850
Maple, Silver	0.47	1.14	25	5,220	740	1,480
Maple, Sugar	0.63	1.83	39	7,830	1,470	2,330
Oak, Black	0.61	1.64	41	6,520	930	1,910
Oak, Cherrybark	0.68	2.28	49	8,740	1,250	2,000
Oak, Laurel	0.63	1.69	39	6,980	1,060	1,830
Oak, Northern Red	0.63	1.82	43	6,760	1,010	1,780
Oak, Pin	0.63	1.73	45	6,820	1,020	2,080
Oak, Scarlet	0.67	1.91	53	8,330	1,120	1,890
Oak, Southern Red	0.59	1.49	26	6,090	870	1,390
Oak, Water	0.63	2.02	44	6,770	1,020	2,020
Oak, Willow	0.69	1.90	42	7,040	1,130	1,650
Oak, Bur	0.64	1.03	29	6,060	1,200	1,820
Oak, Chestnut	0.66	1.59	40	6,830	840	1,490
Oak, Live	0.88	1.98	-	8,900	2,840	2,660
Oak, Overcup	0.63	1.42	38	6,200	810	2,000
Oak, Post	0.67	1.51	46	6,600	1,430	1,840
Oak, Swamp Chestnut	0.67	1.77	41	7,270	1,110	1,990
Oak, Swamp White	0.72	2.05	49	8,600	1,190	2,000
Oak, White	0.68	1.78	37	7,440	1,070	2,000
Sassafras	0.46	1.12	-	4,760	850	1,240
Sweetgum	0.52	1.64	32	6,320	620	1,600
Sycamore, American	0.49	1.42	26	5,380	700	1,470
Tupelo, Black	0.50	1.20	22	5,520	930	1,340
Tupelo, Water	0.50	1.26	23	5,920	870	1,590
Walnut, Black	0.55	1.68	34	7,580	1,010	1,370
Willow, Black	0.39	1.01	-	4,100	430	1,250
Yellow-poplar	0.42	1.58	24	5,540	500	1,190