

Table E.1: Fracture test variables for Douglas-fir

Specimen ID	Cap (lbs)	P <sub>Q</sub> (lbs)	Adjusted Specimen Stiffness (lbs/in)	Energy @ Cap (lb-in)	Energy @ P <sub>Q</sub> (lb-in)	Fracture Energy (lb-in)	Specific Fracture Energy (lb-in/in <sup>2</sup> )	Cap/P <sub>Q</sub>
<b>DF</b>								
1	63.1	56.2	2295	1.34	0.84	2.82	0.794	1.12
2	64.7	62.2	8970	0.43	0.28	3.13	0.886	1.04
3	83.1	76.1	4189	1.89	0.86	6.93	1.949	1.09
4	65.6	63.5	3147	1.11	0.79	4.73	1.334	1.03
5	76.6	71.9	4181	1.04	0.75	5.44	1.540	1.07
6	73.6	71.7	2472	1.64	1.26	4.58	1.286	1.03
7	65.8	62.9	3251	1.15	0.74	3.94	1.115	1.05
8	68.3	62.7	3807	1.26	0.63	4.65	1.311	1.09
9	65.1	62.4	4688	0.61	0.50	3.79	1.067	1.04
10	73.1	67.9	4472	0.89	0.62	3.78	1.064	1.08
11	77.1	74.9	7266	1.22	0.58	5.87	1.665	1.03
12	62.3	59.0	4834	0.94	0.48	4.15	1.174	1.06
13	73.9	70.5	5385	0.83	0.66	5.37	1.518	1.05
14	81.3	74.1	8324	0.93	0.43	5.45	1.499	1.10
15	62.4	60.3	5652	0.69	0.46	3.71	1.047	1.03
16	72.5	62.8	3601	1.35	0.65	5.50	1.557	1.15
17	66.4	62.5	3878	0.87	0.64	5.05	1.422	1.06
18	59.9	59.7	4026	0.58	0.56	3.94	1.123	1.00
19	62.7	55.7	4841	0.82	0.43	4.07	1.149	1.13
20	58.1	50.2	3184	0.87	0.50	3.86	1.083	1.16
21	87.0	82.4	4977	1.52	0.83	7.52	2.057	1.06
22	58.2	56.1	4865	0.52	0.42	2.38	0.671	1.04
23	54.5	50.9	4112	0.78	0.45	3.08	0.868	1.07
24	52.2	50.4	4977	0.54	0.35	4.20	1.188	1.04
25	47.0	43.2	4512	0.49	0.28	2.80	0.799	1.09
26	72.2	71.6	2606	1.70	1.13	5.74	1.639	1.01
27	64.3	62.2	3098	1.22	0.82	5.47	1.542	1.03
28	48.9	47.3	4360	0.66	0.36	4.15	1.175	1.03
<b>Mean</b>	66.4	62.5	4499	1.00	0.62	4.50	1.268	1.06
<b>Std Dev</b>	9.9	9.4	1577	0.39	0.24	1.23	0.339	0.04
<b>COV</b>	0.15	0.15	0.35	0.39	0.38	0.27	0.27	0.04

Table E.2: Fracture test variables for spruce-pine-fir

Specimen ID	Cap (lbs)	P <sub>Q</sub> (lbs)	Adjusted Specimen Stiffness (lbs/in)	Energy @ Cap (lb-in)	Energy @ P <sub>Q</sub> (lb-in)	Fracture Energy (lb-in)	Specific Fracture Energy (lb-in/in <sup>2</sup> )	Cap/P <sub>Q</sub>
<b>SPF</b>								
1	78.9	71.3	9472	1.45	0.38	4.45	1.254	1.11
2	77.5	74.5	9618	0.87	0.42	5.11	1.439	1.04
3	70.2	69.2	4968	1.07	0.64	6.11	1.721	1.01
4	66.4	66.4	2501	1.04	1.04	3.50	0.991	1.00
5	53.6	51.6	2819	0.65	0.58	2.95	0.834	1.04
6	72.6	70.5	9740	0.94	0.41	4.74	1.333	1.03
7	62.8	59.6	4936	0.74	0.47	4.10	1.161	1.05
8	49.7	47.8	2388	0.76	0.60	2.58	0.731	1.04
9	82.2	75.1	4426	2.98	0.80	7.93	2.264	1.09
10	97.8	81.2	13531	1.48	0.35	8.06	2.283	1.20
11	66.7	61.5	3020	1.27	0.78	4.70	1.325	1.09
12	65.3	57.5	3650	1.17	0.56	4.40	1.245	1.14
13	77.5	76.9	4904	0.92	0.78	4.30	1.217	1.01
14	83.3	75.9	5745	1.28	0.67	6.93	1.963	1.10
15	77.8	73.5	6681	1.01	0.62	7.15	2.028	1.06
16	65.3	60.6	2926	1.08	0.76	4.76	1.342	1.08
17	57.0	56.2	6542	0.44	0.35	3.49	0.989	1.01
18	66.2	60.7	4708	1.06	0.52	5.15	1.458	1.09
19	80.3	72.9	14636	0.72	0.29	4.83	1.381	1.10
20	62.5	59.5	2335	1.45	0.90	4.45	1.261	1.05
21*	95.3	49.3	3344	3.79	0.50	11.20	3.188	1.93
22	72.8	63.6	3245	1.64	0.77	6.19	1.753	1.14
23	52.9	44.1	3376	0.99	0.37	5.16	1.465	1.20
24	69.6	65.6	5761	0.91	0.49	4.90	1.387	1.06
25	61.7	55.8	5507	0.88	0.39	4.16	1.192	1.11
26*	67.2	42.8	3827	2.30	0.41	6.73	1.905	1.57
27	52.6	46.1	3460	0.93	0.41	3.72	1.055	1.14
28	71.4	64.7	3089	1.55	0.83	5.52	1.554	1.10
<b>Mean</b>	69.0	63.9	5538	1.13	0.58	4.97	1.409	1.08
<b>Std Dev</b>	11.2	10.0	3320	0.48	0.20	1.39	0.397	0.05
<b>COV</b>	0.16	0.16	0.60	0.43	0.34	0.28	0.28	0.05

\* indicates test does not qualify as valid fracture test as capacity/P<sub>Q</sub> > 1.20