

## Node Data

Node No	X	Y	Z	Node No	X	Y	Z
1	0.000	0.000	9.440	69	-0.065	-1.699	9.300
2	1.060	-0.027	9.440	70	-0.097	-2.548	9.300
3	3.626	-0.093	9.440	71	-0.111	-2.898	9.300
4	4.686	-0.120	9.440	81	4.760	2.778	9.300
5	5.745	-0.148	9.440	82	4.747	2.278	9.300
6	8.312	-0.214	9.440	83	4.705	0.639	9.300
7	9.371	-0.241	9.440	84	4.686	-0.120	9.300
8	10.431	-0.242	9.440	85	4.666	-0.880	9.300
9	13.312	-0.244	9.440	86	4.624	-2.520	9.300
10	14.371	-0.268	9.440	87	4.611	-3.020	9.300
11	15.431	-0.245	9.440	91	9.410	2.659	9.300
12	18.311	-0.247	9.440	92	9.405	2.309	9.300
13	19.371	-0.248	9.440	93	9.386	0.819	9.300
14	20.431	-0.222	9.440	94	9.371	-0.241	9.300
15	22.998	-0.160	9.440	95	9.357	-1.301	9.300
16	24.057	-0.134	9.440	96	9.340	-2.641	9.300
17	25.117	-0.108	9.440	97	9.333	-3.141	9.300
18	27.684	-0.046	9.440	101	14.374	2.655	9.300
19	28.743	-0.020	9.440	102	14.374	2.155	9.300
21	-0.111	-2.898	9.850	103	14.372	0.515	9.300
22	0.164	-2.905	9.850	104	14.371	-0.268	9.300
23	4.336	-3.012	9.850	105	14.371	-1.005	9.300
24	4.611	-3.020	9.850	106	14.370	-2.645	9.300
25	4.886	-3.027	9.850	107	14.370	-3.145	9.300
26	9.058	-3.134	9.850	111	19.337	2.652	9.300
27	9.333	-3.141	9.850	112	19.341	2.302	9.300
28	9.608	-3.143	9.850	113	19.359	0.812	9.300
29	14.095	-3.144	9.850	114	19.371	-0.248	9.300
30	14.370	-3.145	9.850	115	19.384	-1.308	9.300
31	14.645	-3.145	9.850	116	19.400	-2.648	9.300
32	19.131	-3.148	9.850	117	19.406	-3.148	9.300
33	19.406	-3.148	9.850	121	23.987	2.765	9.300
34	19.681	-3.145	9.850	122	23.999	2.265	9.300
35	23.853	-3.040	9.850	123	24.039	0.626	9.300
36	24.128	-3.033	9.850	124	24.057	-0.134	9.300
37	24.403	-3.027	9.850	125	24.076	-0.894	9.300
38	28.575	-2.925	9.850	126	24.116	-2.533	9.300
39	28.850	-2.918	9.850	127	24.128	-3.033	9.300
41	0.111	2.898	9.850	131	28.636	2.878	9.300
42	0.386	2.891	9.850	132	28.649	2.528	9.300
43	4.485	2.785	9.850	133	28.681	1.679	9.300
44	4.760	2.778	9.850	135	28.715	0.739	9.300
45	5.035	2.771	9.850	136	28.743	-0.020	9.300
46	9.135	2.666	9.850	137	28.771	-0.780	9.300
47	9.410	2.659	9.850	139	28.806	-1.719	9.300
48	9.685	2.657	9.850	140	28.837	-2.569	9.300
49	14.099	2.656	9.850	141	28.850	-2.918	9.300
50	14.374	2.655	9.850	151	0.000	0.000	8.780
51	14.649	2.655	9.850	152	0.000	0.000	0.500
52	19.062	2.652	9.850	153	9.371	-0.241	8.780
53	19.337	2.652	9.850	154	9.371	-0.241	0.500
54	19.612	2.655	9.850	155	19.371	-0.248	8.780
55	23.712	2.758	9.850	156	19.371	-0.248	0.500
56	23.987	2.765	9.850	157	28.743	-0.020	8.780
57	24.261	2.772	9.850	158	28.743	-0.020	0.500
58	28.362	2.871	9.850	201	0.000	0.000	0.000
59	28.636	2.878	9.850	202	0.975	-0.025	0.000
61	0.111	2.898	9.300	203	8.397	-0.216	0.000
62	0.097	2.548	9.300	204	9.372	-0.241	0.000
63	0.065	1.699	9.300	205	10.347	-0.242	0.000
65	0.029	0.759	9.300	206	18.396	-0.247	0.000
66	0.000	0.000	9.300	207	19.371	-0.248	0.000
67	-0.029	-0.759	9.300	208	20.346	-0.224	0.000

## Node Data

Node No	X	Y	Z	Node No	X	Y	Z
209	27.769	-0.044	0.000	321	9.395	1.559	-0.600
210	28.743	-0.020	0.000	322	9.395	1.559	-0.800
211	0.107	2.798	0.000	323	9.395	1.559	-3.775
212	0.088	2.298	0.000	324	9.395	1.559	-13.775
213	0.069	1.799	0.000	325	9.395	1.559	-22.475
214	0.050	1.299	0.000	326	9.395	1.559	-24.775
215	0.023	0.600	0.000	327	9.395	1.559	-26.300
216	-0.023	-0.600	0.000	331	9.348	-2.042	-0.600
217	-0.069	-1.299	0.000	332	9.348	-2.042	-0.800
218	-0.069	-1.799	0.000	333	9.348	-2.042	-3.775
219	-0.088	-2.298	0.000	334	9.348	-2.042	-13.775
220	-0.107	-2.798	0.000	335	9.348	-2.042	-22.475
221	9.409	2.559	0.000	336	9.348	-2.042	-24.775
222	9.396	2.059	0.000	337	9.348	-2.042	-26.300
223	9.395	1.559	0.000	341	19.350	1.552	-0.600
224	9.396	1.059	0.000	342	19.350	1.552	-0.800
225	9.380	0.359	0.000	343	19.350	1.552	-3.775
226	9.364	-0.841	0.000	344	19.350	1.552	-13.775
227	9.354	-1.542	0.000	345	19.350	1.552	-22.475
228	9.348	-2.042	0.000	346	19.350	1.552	-24.775
229	9.341	-2.542	0.000	347	19.350	1.552	-26.300
230	9.334	-3.041	0.000	351	19.393	-2.051	-0.600
231	19.338	2.552	0.000	352	19.393	-2.051	-0.800
232	19.350	2.053	0.000	353	19.393	-2.051	-3.775
233	19.350	1.552	0.000	354	19.393	-2.051	-13.775
234	19.350	1.053	0.000	355	19.393	-2.051	-22.475
235	19.364	0.352	0.000	356	19.393	-2.051	-24.775
236	19.378	-0.848	0.000	357	19.393	-2.051	-26.300
237	19.393	-1.551	0.000	361	28.677	1.778	-0.600
238	19.393	-2.051	0.000	362	28.677	1.778	-0.800
239	19.398	-2.551	0.000	363	28.677	1.778	-3.775
240	19.404	-3.048	0.000	364	28.677	1.778	-13.775
241	28.640	2.778	0.000	365	28.677	1.778	-22.475
242	28.658	2.282	0.000	366	28.677	1.778	-24.775
243	28.677	1.778	0.000	367	28.677	1.778	-26.300
244	28.695	1.282	0.000	371	28.809	-1.819	-0.600
245	28.721	0.579	0.000	372	28.809	-1.819	-0.800
246	28.765	-0.620	0.000	373	28.809	-1.819	-3.775
247	28.791	-1.323	0.000	374	28.809	-1.819	-13.775
248	28.809	-1.819	0.000	375	28.809	-1.819	-22.475
249	28.810	-2.323	0.000	376	28.809	-1.819	-24.775
250	28.846	-2.819	0.000	377	28.809	-1.819	-26.300
301	0.069	1.799	-0.600	401	-0.136	-3.547	9.300
302	0.069	1.799	-0.800	402	4.595	-3.669	9.300
303	0.069	1.799	-3.775	403	9.323	-3.791	9.300
304	0.069	1.799	-13.775	404	14.365	-3.794	9.300
305	0.069	1.799	-22.475	405	19.413	-3.798	9.300
306	0.069	1.799	-24.775	406	24.142	-3.683	9.300
307	0.069	1.799	-26.300	407	28.877	-3.568	9.300
311	-0.069	-1.799	-0.600	411	0.135	3.540	9.300
312	-0.069	-1.799	-0.800	412	4.776	3.428	9.300
313	-0.069	-1.799	-3.775	413	9.421	3.309	9.300
314	-0.069	-1.799	-13.775	414	14.374	3.305	9.300
315	-0.069	-1.799	-22.475	415	19.335	3.302	9.300
316	-0.069	-1.799	-24.775	416	23.973	3.415	9.300
317	-0.069	-1.799	-26.300	417	28.613	3.520	9.300

## Member Data

No	Node Node-I	Node-J	Distance (m)	Material No.	Angle of Rotation (°)	Name of Material
1	1	2	1.060	13		
2	2	3	2.567	1		
3	3	4	1.060	13		
4	4	5	1.059	13		
5	5	6	2.568	1		
6	6	7	1.059	13		
7	7	8	1.060	13		
8	8	9	2.881	1		
9	9	10	1.059	13		
10	10	11	1.060	13		
11	11	12	2.880	1		
12	12	13	1.060	13		
13	13	14	1.060	13		
14	14	15	2.568	1		
15	15	16	1.059	13		
16	16	17	1.060	13		
17	17	18	2.568	1		
18	18	19	1.059	13		
21	21	22	0.275	13		
22	22	23	4.173	10		
23	23	24	0.275	13		
24	24	25	0.275	13		
25	25	26	4.173	10		
26	26	27	0.275	13		
27	27	28	0.275	13		
28	28	29	4.487	10		
29	29	30	0.275	13		
30	30	31	0.275	13		
31	31	32	4.486	10		
32	32	33	0.275	13		
33	33	34	0.275	13		
34	34	35	4.173	10		
35	35	36	0.275	13		
36	36	37	0.275	13		
37	37	38	4.173	10		
38	38	39	0.275	13		
41	41	42	0.275	13		
42	42	43	4.100	10		
43	43	44	0.275	13		
44	44	45	0.275	13		
45	45	46	4.101	10		
46	46	47	0.275	13		
47	47	48	0.275	13		
48	48	49	4.414	10		
49	49	50	0.275	13		
50	50	51	0.275	13		
51	51	52	4.413	10		
52	52	53	0.275	13		
53	53	54	0.275	13		
54	54	55	4.101	10		
55	55	56	0.275	13		
56	56	57	0.274	13		
57	57	58	4.102	10		
58	58	59	0.274	13		
61	41	61	0.550	13		
62	61	62	0.350	13		
63	62	63	0.850	12		
65	63	65	0.941	2		
66	65	66	0.760	13		
67	66	67	0.760	13		
68	67	69	0.941	2		
70	69	70	0.850	12		
71	70	71	0.350	13		

# Member Data

No	Node Node-I	Node-J	Distance (m)	Material No.	Angle of Rotation (°)	Name of Material
72	21	71	0.550	13		
81	44	81	0.550	13		
82	81	82	0.500	13		
83	82	83	1.640	4		
84	83	84	0.759	13		
85	84	85	0.760	13		
86	85	86	1.641	4		
87	86	87	0.500	13		
88	24	87	0.550	13		
91	47	91	0.550	13		
92	91	92	0.350	13		
93	92	93	1.490	3		
94	93	94	1.060	13		
95	94	95	1.060	13		
96	95	96	1.340	3		
97	96	97	0.500	13		
98	27	97	0.550	13		
101	50	101	0.550	13		
102	101	102	0.500	13		
103	102	103	1.640	4		
104	103	104	0.783	13		
105	104	105	0.737	13		
106	105	106	1.640	4		
107	106	107	0.500	13		
108	30	107	0.550	13		
111	53	111	0.550	13		
112	111	112	0.350	13		
113	112	113	1.490	3		
114	113	114	1.060	13		
115	114	115	1.060	13		
116	115	116	1.340	3		
117	116	117	0.500	13		
118	33	117	0.550	13		
121	56	121	0.550	13		
122	121	122	0.500	13		
123	122	123	1.639	4		
124	123	124	0.760	13		
125	124	125	0.760	13		
126	125	126	1.639	4		
127	126	127	0.500	13		
128	36	127	0.550	13		
131	59	131	0.550	13		
132	131	132	0.350	13		
133	132	133	0.850	12		
135	133	135	0.941	2		
136	135	136	0.760	13		
137	136	137	0.761	13		
138	137	139	0.940	2		
140	139	140	0.851	12		
141	140	141	0.349	13		
142	39	141	0.550	13		
143	1	66	0.140	13		
144	4	84	0.140	13		
145	7	94	0.140	13		
146	10	104	0.140	13		
147	13	114	0.140	13		
148	16	124	0.140	13		
149	19	136	0.140	13		
151	66	151	0.520	13		
152	151	152	8.280	5		
153	152	201	0.500	13		
161	94	153	0.520	13		
162	153	154	8.280	5		

## Member Data

No	Node Node-I	Node-J	Distance (m)	Material No.	Angle of Rotation (°)	Name of Material
163	154	204	0.500	13		
171	114	155	0.520	13		
172	155	156	8.280	5		
173	156	207	0.500	13		
181	136	157	0.520	13		
182	157	158	8.280	5		
183	158	210	0.500	13		
201	201	202	0.975	13		
202	202	203	7.424	6		
203	203	204	0.975	13		
204	204	205	0.975	13		
205	205	206	8.049	6		
206	206	207	0.975	13		
207	207	208	0.975	13		
208	208	209	7.425	6		
209	209	210	0.974	13		
211	211	212	0.500	7		
212	212	213	0.499	13		
213	213	214	0.500	13		
214	214	215	0.700	7		
215	215	201	0.600	13		
216	201	216	0.600	13		
217	216	217	0.701	7		
218	217	218	0.500	13		
219	218	219	0.499	13		
220	219	220	0.500	7		
221	221	222	0.500	7		
222	222	223	0.500	13		
223	223	224	0.500	13		
224	224	225	0.700	7		
225	225	204	0.600	13		
226	204	226	0.600	13		
227	226	227	0.701	7		
228	227	228	0.500	13		
229	228	229	0.500	13		
230	229	230	0.499	7		
231	231	232	0.499	7		
232	232	233	0.501	13		
233	233	234	0.499	13		
234	234	235	0.701	7		
235	235	207	0.600	13		
236	207	236	0.600	13		
237	236	237	0.703	7		
238	237	238	0.500	13		
239	238	239	0.500	13		
240	239	240	0.497	7		
241	241	242	0.496	7		
242	242	243	0.504	13		
243	243	244	0.496	13		
244	244	245	0.703	7		
245	245	210	0.599	13		
246	210	246	0.600	13		
247	246	247	0.703	7		
248	247	248	0.496	13		
249	248	249	0.504	13		
250	249	250	0.497	7		
301	213	301	0.600	13		
302	301	302	0.200	9		
303	302	303	2.975	9		
304	303	304	10.000	9		
305	304	305	8.700	9		
306	305	306	2.300	9		
307	306	307	1.525	9		

## Member Data

No	Node Node-I	Node-J	Distance (m)	Material No.	Angle of Rotation (°)	Name of Material
311	218	311	0.600	13		
312	311	312	0.200	9		
313	312	313	2.975	9		
314	313	314	10.000	9		
315	314	315	8.700	9		
316	315	316	2.300	9		
317	316	317	1.525	9		
321	223	321	0.600	13		
322	321	322	0.200	9		
323	322	323	2.975	9		
324	323	324	10.000	9		
325	324	325	8.700	9		
326	325	326	2.300	9		
327	326	327	1.525	9		
331	228	331	0.600	13		
332	331	332	0.200	9		
333	332	333	2.975	9		
334	333	334	10.000	9		
335	334	335	8.700	9		
336	335	336	2.300	9		
337	336	337	1.525	9		
341	233	341	0.600	13		
342	341	342	0.200	9		
343	342	343	2.975	9		
344	343	344	10.000	9		
345	344	345	8.700	9		
346	345	346	2.300	9		
347	346	347	1.525	9		
351	238	351	0.600	13		
352	351	352	0.200	9		
353	352	353	2.975	9		
354	353	354	10.000	9		
355	354	355	8.700	9		
356	355	356	2.300	9		
357	356	357	1.525	9		
361	243	361	0.600	13		
362	361	362	0.200	9		
363	362	363	2.975	9		
364	363	364	10.000	9		
365	364	365	8.700	9		
366	365	366	2.300	9		
367	366	367	1.525	9		
371	248	371	0.600	13		
372	371	372	0.200	9		
373	372	373	2.975	9		
374	373	374	10.000	9		
375	374	375	8.700	9		
376	375	376	2.300	9		
377	376	377	1.525	9		
401	71	401	0.649	13		
402	87	402	0.649	13		
403	97	403	0.650	13		
404	107	404	0.649	13		
405	117	405	0.650	13		
406	127	406	0.650	13		
407	141	407	0.651	13		
411	411	61	0.642	13		
412	412	81	0.650	13		
413	413	91	0.650	13		
414	414	101	0.650	13		
415	415	111	0.650	13		
416	416	121	0.650	13		
417	417	131	0.642	13		

## Material Data

Type1

No	Area A (m2)	Elastic E (kN/m2)	Shear Elastic G (kN/m2)	CTE	Inertia IY (m4)	IZ (m4)	Torsion Constant
1	2.4900	2.65E+007	1.10E+007	1.00E-005	0.580356	0.776962	0.505200
2	2.1600	2.65E+007	1.10E+007	1.00E-005	0.416639	0.484925	0.382100
3	1.9200	2.65E+007	1.10E+007	1.00E-005	0.409600	0.230400	0.494900
4	0.9600	2.65E+007	1.10E+007	1.00E-005	0.204800	0.028800	0.087800
5	1.6000	2.65E+007	1.10E+007	1.00E-005	0.133333	0.341333	0.324800
6	1.4400	2.65E+007	1.10E+007	1.00E-005	0.307200	0.097200	0.267100
7	3.2000	2.65E+007	1.10E+007	1.00E-005	0.682667	1.066667	1.400800
8	3.2000	2.65E+007	1.10E+007	1.00E-005	0.682667	1.066667	1.400800
9	0.0940	2.00E+008	8.33E+007	1.00E-005	0.011019	0.011019	0.022000
10	0.6500	2.65E+007	1.10E+007	1.00E-005	0.013542	0.091542	0.041000
11	1000.0000	2.65E+007	1.10E+007	1.00E-005	0.000000	1000.000000	1000.000000
12	1.9200	2.65E+007	1.10E+007	1.00E-005	0.410000	0.230000	0.495000
13	1000.0000	2.65E+007	1.10E+007	1.00E-005	0.000000	1000.000000	1000.000000