

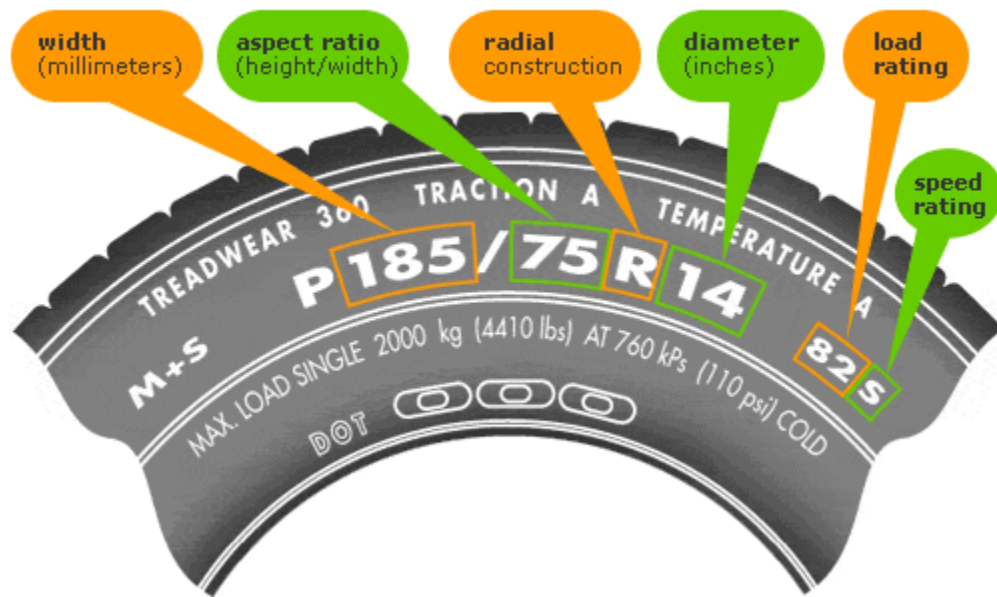
Please take time to understand and follow the speed and load limits of your solar car tires.

At the Body and Sizing station we will weigh your solar car as it would be configured in racing conditions (with driver and ballast) by placing each wheel on a scale. This provides us with the total weight, but more importantly the load on each wheel. We will then check the load rating of each tire by using the code in the following tables and compare it to the load measured by the scale.

If the load rating of your tire is less than the load on the scale, you must do one or a combination of the following: reduce the weight on that wheel(s), redistribute the load of the vehicle so that all loads are less than the maximum rating, or replace the tire with one that has a higher load rating. In the past at ASC and FSGP we have had several teams need to do this before they were allowed to compete in the race. Please know the weight distribution of your solar car *before* purchasing your tires.

Some tires like the Dunlop Solarmax and the Ecopia EP80 do not have tire codes. In past events teams have provided technical data sheets supplied by the manufacturer or distributor with a certified load rating and contact information for the company or individual certifying the ratings. Tires will not be allowed without some form of load rating documentation whether it is on the tire or on an appropriate data sheet.

## Tire Sidewall Information



## Tire Load Rating

Your tire's load rating lets you know how much weight the tire was designed to carry safely. By using the load index chart displayed below, you can match the index number up with the number of pounds the tire can support when it is inflated to its maximum air pressure. For example, if your load rating is 81, you can then determine that the tire was engineered to carry 1,019 pounds when fully inflated.

LI	KG	LI	KG	LI	KG	LI	KG
0	45	35	121	70	335	105	925
1	46.2	36	125	71	345	106	950
2	47.5	37	128	72	355	107	975
3	48.7	38	132	73	365	108	1000
4	50	39	136	74	375	109	1030
5	51.5	40	140	75	387	110	1060
6	53	41	145	76	400	111	1090
7	54.5	42	150	77	412	112	1120
8	56	43	155	78	425	113	1150
9	58	44	160	79	437	114	1180
10	60	45	165	80	450	115	1215
11	61.5	46	170	81	462	116	1250
12	63	47	175	82	475	117	1285
13	65	48	180	83	487	118	1320
14	67	49	185	84	500	119	1360
15	69	50	190	85	515	120	1400
16	71	51	195	86	530	121	1450
17	73	52	200	87	545	122	1500
18	75	53	206	88	560	123	1550
19	77.5	54	212	89	580	124	1600
20	80	55	218	90	600	125	1650
21	82.5	56	224	91	615	126	1700
22	85	57	230	92	630	127	1750
23	87.5	58	236	93	650	128	1800
24	90	59	243	94	670	129	1850
25	92.5	60	250	95	690	130	1900
26	95	61	257	96	710	131	1950
27	97.5	62	265	97	730	132	2000
28	100	63	272	98	750	133	2060
29	103	64	280	99	775	134	2120
30	106	65	290	100	800	135	2180
31	109	66	300	101	825	136	2240
32	112	67	307	102	850	137	2300
33	115	68	315	103	875	138	2360
34	118	69	325	104	900	139	2430

## Tire Speed Rating

The speed rating is a number issued by the U.S. government which signifies how well a tire can reach and maintain a certain speed. Speed ratings are simply letters which correspond to a specific top speed. Keep in mind that these are not recommended speeds to drive at, but simply a way to get a better idea of how well the tire will handle (tires with a hire speed rating are likely to provide better traction and handling). Always choose tires with identical speed ratings. Mixing up the specifications on your tires could result in serious and unsafe driving conditions.

Rating	Max. km/h	Max. mph	Rating	Max. km/h	Max. mph
<b>A1</b>	5	3	<b>K</b>	110	68
<b>A2</b>	10	6	<b>L</b>	120	75
<b>A3</b>	15	9	<b>M</b>	130	81
<b>A4</b>	20	12	<b>N</b>	140	87
<b>A5</b>	25	15	<b>P</b>	150	93
<b>A6</b>	30	19	<b>Q</b>	160	100
<b>A7</b>	35	22	<b>R</b>	170	106
<b>A8</b>	40	25	<b>S</b>	180	113
<b>B</b>	50	31	<b>T</b>	190	118
<b>C</b>	60	37	<b>H</b>	210	130
<b>D</b>	65	40	<b>V</b>	240	150
<b>E</b>	70	43	<b>W</b>	270	168
<b>F</b>	80	50	<b>Y</b>	300	186
<b>G</b>	90	56	<b>ZR</b>	240+	149+
<b>J</b>	100	62			