

Make your Zipline

What is a Zipline
How a Zipline is made
Slopechart

What is a Zipline?

It's an attraction,
an amusement park,
a challenge to ourselves.

In Australia they're known as "Flying Foxes", in the UK as "Aerial Runways", the South Africans call them "Foofy Slides" and in Italian-speaking Switzerland they're "Tirolesi". An old-fashioned name might be "Cableways".

We call them Ziplines,
as they do in the USA and in most of the world.

It consists of riding down one or more cables and, thanks to gravity it's possible to experience the thrill of flight. It involves a load-bearing cable connecting two points at different heights. Riders are fitted with a harness.

Our Ziplines are true amusement parks, the perfect attraction for tourism, combining a thrilling adventure with a unique way of sight-seeing in a location.

There are many solutions for any location.

Zipline Possibilities:

Trail



Unique line



Consecutive lines

Number of lines



Single line



Parallel lines

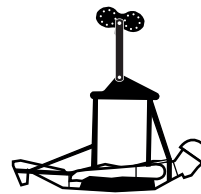
Type of flight



Standard Flight with
carabiner



Standar flight with
Directional Device



Horizontal Flight



Seated Flight

How a zipline is made

A few info.

How is the right location made?

Where a Zipline can be built?

What is the recommended drop between take-off and landing area?

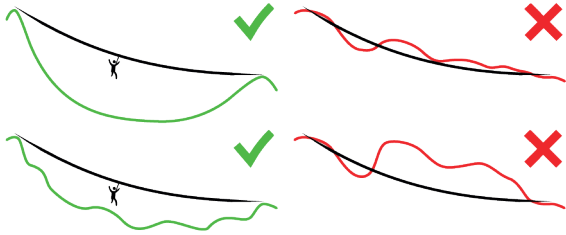
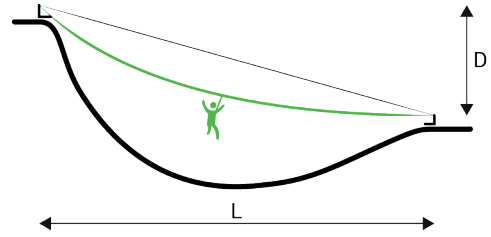
How long can the cable be?

What is the recommended slope?

What is the shape of a Zipline?

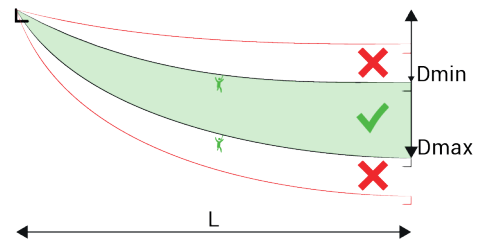
How much the zipline can be tensioned?

Everything depends on the terrain morphology and on the distance in-between take-off and landing area.



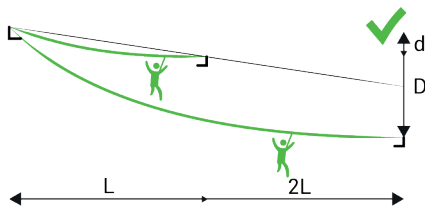
A zipline consists of a cable attached at two points. The line forms a downward catenary. It is not a straight line connecting the start to the finish. The ground must keep this space free so that the rope does not collide with it.

For each length there is a minimum and a maximum drop to be feasible.

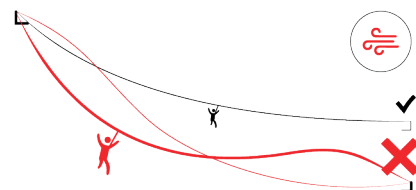


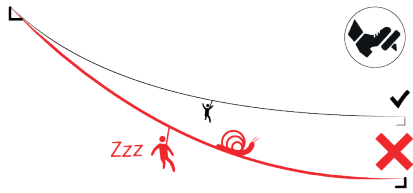
Very important

A very long Zipline requires a much higher slope than a half-length line. For example, a 500 meters long Zipline has a minimum drop of 30 meters to be feasible. Whereas a 1000 (500x2) meters long Zipline needs a minimum drop of 110 meters. Much more than 60 (30x2) meters!



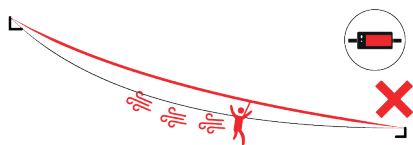
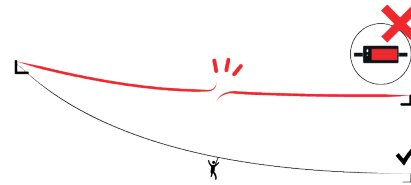
If the slope is too high, the cable is inclined to oscillate a lot under the action of the wind.





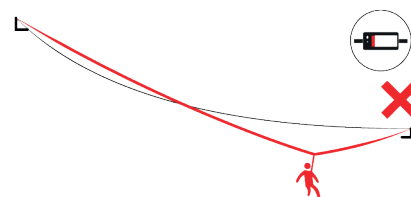
If so, it will be necessary to brake the flight very much to avoid the collision at the end. If there is a very steep cable, the descent will be too slow and not so fun.

If the slope is too low, the cable will break under high tension.



A perfect Zipline has a perfect configuration. If too tight, the descent becomes uncontrolled and should be braked.

If too loose, you can stop halfway through.



The start is usually very steep. The landing is almost horizontal.

Slopechart

Find your line.

Please find attached the range where a zipline is feasible.

SPAN	DROP			MEDIUM SLOPE			MINIMUM INITIAL SLOPE		
	span length	min. drop	ideal drop	max. drop	with min. drop	with ideal. drop	with max. drop	with min. slope	with ideal. slope
m	m	m	m	%	%	%	%	%	%
100	3	6	8	3.00%	5.50%	8.00%	7.62%	14.68%	21.74%
150	6	11	16	3.67%	7.17%	10.67%	8.51%	19.37%	29.13%
200	8	16	24	4.00%	8.00%	12.00%	9.56%	19.77%	33.13%
250	12	24	36	4.80%	9.45%	14.23%	10.63%	22.52%	35.12%
300	16	31	46	5.33%	10.33%	15.33%	11.52%	25.26%	37.10%
350	17	39	61	4.86%	11.14%	17.43%	9.92%	25.23%	38.38%
400	20	48	75	5.00%	11.88%	18.75%	10.55%	27.76%	42.79%
450	25	56	88	5.56%	12.50%	19.44%	11.54%	28.78%	42.79%
500	30	65	100	6.00%	13.00%	20.00%	12.53%	29.80%	42.79%
550	37	75	113	6.69%	13.64%	20.58%	13.62%	30.88%	44.94%
600	44	85	126	7.27%	14.17%	21.07%	14.71%	31.95%	47.09%
650	51	96	141	7.85%	14.79%	21.72%	15.75%	32.93%	48.57%
700	59	108	158	8.45%	15.48%	22.51%	16.72%	33.81%	49.38%
750	67	121	174	8.97%	16.08%	23.20%	17.70%	34.69%	50.19%
800	75	133	190	9.42%	16.61%	23.80%	18.67%	35.56%	51.00%
850	83	145	207	9.82%	17.07%	24.33%	19.64%	36.44%	51.81%
900	92	159	226	10.22%	17.67%	25.11%	20.57%	37.61%	53.30%
950	101	175	248	10.63%	18.37%	26.11%	21.45%	39.06%	55.49%
1000	110	190	270	11.00%	19.00%	27.00%	22.33%	39.64%	57.23%
1050	122	204	286	11.62%	19.43%	27.24%	23.38%	40.37%	57.21%
1100	134	218	302	12.18%	19.82%	27.45%	24.43%	41.10%	57.19%
1150	146	232	318	12.70%	20.17%	27.65%	25.43%	41.78%	57.36%
1200	158	246	334	13.17%	20.50%	27.83%	26.37%	42.40%	57.72%
1250	170	260	350	13.60%	20.80%	28.00%	27.31%	43.02%	58.08%
1300	182	274	366	14.00%	21.08%	28.15%	28.16%	43.55%	58.79%
1350	194	288	382	14.37%	21.33%	28.30%	29.01%	44.08%	59.50%
1400	208	304	400	14.86%	21.71%	28.57%	29.97%	44.83%	59.76%
1450	224	322	420	15.45%	22.21%	28.97%	31.04%	45.80%	59.57%
1500	240	340	440	16.00%	22.67%	29.33%	32.10%	46.76%	59.37%
1550	256	356	456	16.52%	22.97%	29.42%	33.08%	47.27%	59.94%
1600	272	372	472	17.00%	23.25%	29.50%	34.05%	47.78%	60.51%
1650	288	388	488	17.45%	23.52%	29.58%	35.00%	48.26%	60.88%
1700	304	404	504	17.88%	23.76%	29.65%	35.91%	48.71%	61.07%
1750	320	420	520	18.29%	24.00%	29.71%	36.82%	49.17%	61.26%
1800	340	440	540	18.89%	24.44%	30.00%	37.89%	50.01%	61.66%
1850	360	460	560	19.46%	24.86%	30.27%	38.96%	50.86%	62.05%
1900	380	480	580	20.00%	25.26%	30.53%	40.00%	51.66%	62.43%
1950	400	500	600	20.51%	25.64%	30.77%	41.01%	52.43%	62.78%
2000	420	520	620	21.00%	26.00%	31.00%	42.01%	53.20%	63.13%
2050	440	540	640	21.46%	26.34%	31.22%	42.95%	53.69%	63.74%
2100	460	560	660	21.90%	26.67%	31.43%	43.90%	54.18%	64.35%
2150	481	581	681	22.37%	27.02%	31.67%	44.86%	54.81%	64.83%
2200	503	603	703	22.86%	27.41%	31.95%	45.84%	55.56%	65.20%
2250	525	625	725	23.33%	27.78%	32.22%	46.82%	55.94%	65.56%
2300	551	651	751	23.96%	28.30%	32.65%	46.82%	56.92%	66.37%
2350	577	677	777	24.55%	28.81%	33.06%	46.82%	57.91%	67.18%
2400	602	702	802	25.08%	29.25%	33.42%	47.87%	58.75%	67.91%
2450	626	726	826	25.55%	29.63%	33.71%	49.96%	59.46%	68.56%
2500	650	750	850	26.00%	30.00%	34.00%	52.05%	60.16%	69.22%
2550	676	776	876	26.51%	30.43%	34.35%	53.06%	61.03%	69.92%
2600	702	802	902	27.00%	30.85%	34.69%	54.07%	61.90%	70.62%
2650	728	828	928	27.47%	31.25%	35.02%	55.06%	62.67%	71.29%
2700	754	854	954	27.93%	31.63%	35.33%	56.03%	63.36%	71.94%
2750	780	880	980	28.36%	32.00%	35.64%	56.99%	64.04%	72.59%
2800	808	908	1008	28.86%	32.43%	36.00%	58.07%	64.90%	73.28%
2850	836	936	1036	29.33%	32.84%	36.35%	59.16%	65.75%	73.97%
2900	868	968	1068	29.93%	33.38%	36.83%	60.28%	66.80%	74.93%
2950	904	1004	1104	30.64%	34.03%	37.42%	61.45%	68.05%	76.18%
3000	940	1040	1140	31.33%	34.67%	38.00%	62.61%	69.30%	77.43%