

Tow Rope Guide

by Bruce Stein

Aircraft Weights and Allowable Rope Strengths

Aircraft	Max. Gross Weight	Max Rope Strength	Min. Rope Strength
2-33A	1040	2080	832
1-26E	700	1400	560
Blanik L-33 Solo	750	1500	600
Grob 103 II	1279	2558	1023

Typical Tensile Strengths

Rope	Tensile Strength	Use
5/16" Nylon	2550 lbs.	Main Tow Rope
1/4" Nylon	1650 lbs.	Weak Link: 2-33's and private ships
1/4" Polypropylene	1250 lbs.	Weak Link: 1-26's and private ships
5/16" Dacron (polyester)	1800 lbs.	Weak Link at Tow Plane and Glider Permanently spliced onto tow rope

Weak Link Selection

Weak Link	Use
1/4" Polypropylene w/ Schweizer Ring	1-26E only
1/4" Polypropylene w/ Tost Ring	L-33 and private ships
1/4" Nylon w/ Schweizer Ring	2-33A only
1/4" Nylon w/ Tost Ring	Private ships
None on glider end	Grob 103 II