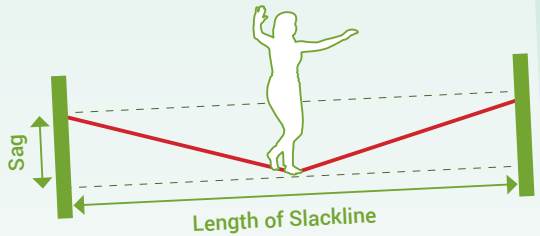
6. ESTIMATING FORCES MADE EASY

How it works:

1. **Estimate the length of the line** or count your steps as you walk along
2. **Estimate sag in the middle** by sitting on the line
3. **Calculate force using this formula**



$$\frac{\textbf{Body weight (lbs or kg)} \times \textbf{Length (ft or m)}}{\textbf{Sag (ft or m)} \times 4} \approx \textbf{Force in System (lbf or kgf)}$$

Use either metric or imperial units. 1 kN ≈ 220 lbf or 100 kgf

Typical Loads of Slackline Styles

Rodeolines
220 to 440 lbf
100 to 200 kgf (= 1 to 2 kN)

Low tensions
440 to 1760 lbf
200 to 800 kgf (= 2 to 8 kN)

Medium tensions
1760+ lbf
800+ kgf (= 8+ kN)

Contact / Notes

Basics of SLACKLINING

It's easy and safe to learn for everyone!

Swiss Slackline
www.swiss-slackline.ch

Austrian - Slackline-Verband
www.slacklineverband.com

Slackline U.S.
www.slackline.us

www.slackline.us www.slacklineverband.com www.swiss-slackline.ch

1. CHOOSING A SPOT: WHERE TO GO?

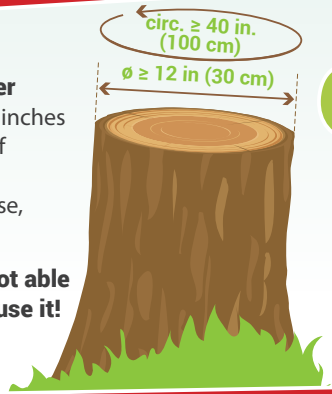
find us on facebook

SMS WhatsApp

- **Talk to other slackliners in your area,** on the web and in social media.
- **Do not cross paths and avoid crowded parks**
  - when in doubt, choose another spot
- **Do not leave your slackline unattended**
  - so that no one trips over or runs into it
  - increase the visibility of your line if necessary
- **Take your slackline down before dusk**

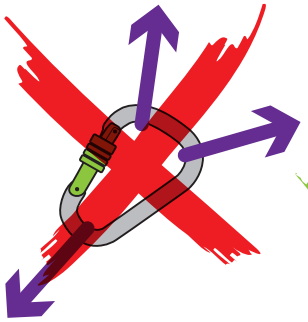
2. ANCHORING: HOW TO ATTACH IT?

- **Choose healthy trees with a diameter of at least 12 inches (30 cm)** and 40 inches (100 cm) circumference at the height of attachment.
  - If the tree moves during setup and use, it is not suitable.
- **Posts, lamps and rails are usually not able to take the loads. If in doubt, don't use it!**



Tip!
Use your anchor slings to measure the tree. By adding markers on them you can make a simple measuring tape.

3. CLIMBING GEAR: DON'T USE IT!



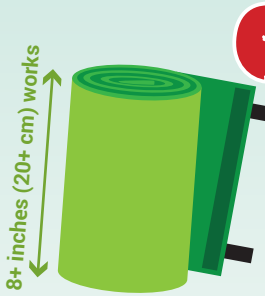
Carabiner
(Avoid triloading)

Shackle

- **Aluminium carabiners can break when used in slackline systems!** If already used in slacklines, don't use for climbing.
- **Do not load carabiners in three directions** (see diagram on the left). **Also applies to steel carabiners**

Tip!
Prefer shackles over (aluminum) carabiners (much larger breaking load)!
Shackles with 1-2 tons working load limit (=WLL) are most versatile.

4. SETTING CLEAN & SAFE ANCHORS



Info!
Tree protection absorbs the friction between the anchor slings and bark

- **Always use wide and sturdy tree protection going all around the tree!**
  - Make sure the tree protection absorbs all of the friction
- **Align anchors in the direction of the load**
- **Rodeolines:**
  - Girth hitch reduces friction
- **Tensioned Slacklines:**
  - Use wide slings (min. 2 inches or 5 cm) and spread out slings to distribute the pressure more evenly

5. ALWAYS DOUBLE CHECK EVERYTHING!

- **Four eyes principle:** Check each other's work when setting up and taking down.
- **Doublecheck:** Apply low tension first then then double check the entire system before finishing tensioning.
  - Check: Are all shackles closed properly?

Tip!
Backup all metal parts with the remaining line and spare rope