SANDWICH TECH

TDS
Technical Data Sheet

Reinforcements Compared

The flex of your ski or board should be viewed as having two different components - bending and twisting.

“Bending” is the lengthwise flex that is resisted by the tensile stiffness of your reinforcement material. Bending flex should be optimized for the weight and speed of the rider as this determines how much force they apply to the ski or board in a turn.

“Twisting” flex is resisted by the torsional stiffness of your reinforcement material. A lower torsional stiffness produces “forgiving” or “playful” skis and snowboards. A greater torsional stiffness produces greater “responsiveness” and “edge-control” in skis and snowboards.

Remember, flex is most dramatically affected by core thickness. Bending stiffness increases as a cubic function of core thickness. 2X core thickness = 8X bending stiffness. The numbers in this table represent the stiffnesses of the reinforcing laminates, not the final composite sandwich.

Reinforcement	**Bending Resistance** (Tensile stiffness) kip/in	**Twisting Resistance** (Torsional stiffness) kip/in
23oz Triaxial FG	87.9	16.3
19oz Triaxial FG	66.0	14.4
18oz 0/90 Biaxial FG	61.6	8.8
18oz 45/-45 Biaxial FG	24.4	16.2

Note: Properties are for a lamination with epoxy and a 55% fiber volume fraction. Values are theoretical given known fiber and epoxy properties.

This technical information provided represents the best of our knowledge. We cannot guarantee this data because conditions of product use are beyond our control.

SANDWICH TECH
17 Bunker Hill St., Lancaster NH 03584
info@sandwich-tech.com
603-333-0310