

Univ.-Prof. Dr. Werner Nachbauer

*Full Professor of Biomechanics of the University of Innsbruck
Expert Witness of Alpine Skiing and Biomechanics of Sports*

Innsbruck, 18.8.2019

CERTIFICATION REPORT FOR FIS RELEASE PANELS

Panel type: LISKI COMPETITION OPENABLE

Producer: LISKI
Via Veneto 8
I-24041 Brembate
T: +39 (0)35 482 61 95
F: +39 (0)35 419 41 92
E-Mail: info@liski.it

Test results:

Test 1: Normal approach The panel must not release from the poles during normal gate approach.	✓
Test 2: Release in case of collision Quasi-static test: The maximal force must not exceed 60 N (3 repetitions) neither at room temperature nor -20° C. Dynamic test: For 3 repetitions the panel has to be released every time.	✓ ✓
Geometrical design, colour and documentation The panel must have the size of ca. 0.75 x 0.50 m (GS, SG, and DH). The panel area must be between 0.375 and 0.3 m². Commonly no colours other than red, blue or orange are permitted. Documentation of producer and year of homologation is necessary.	✓ ✓ ✓
Wind permeability The panel must be made of wind-permeable material.	✓

Picture of the panel:



Judgement: The panel meets the specifications required by the FIS for release panels for pole types A and B.

W. Nachbauer

(Dr. W. Nachbauer)

Remark and Exclusion of Liability:

The certification regards the tested panel with the attached advertising inscription (see Figures) and is only valid for exact identical manufactured panels and inscriptions. Even if a gate panel meets the FIS specifications for release panels, there is no guarantee that the panel will function without error or problem during races and training. The relationship between the FIS requirements measured in the laboratory and the behavior of panels under racing conditions has not been thoroughly enough studied yet. Additionally factors such as weather conditions (precipitation, humidity, wind ...) or different advertising inscriptions have not been considered during test measurements. Because of these reasons, legal liability for damages which may result from a panel malfunction during races or training cannot be assumed by the testing organization or the FIS.