

FIS SPECIFICATIONS FOR WORLD CUP RELEASE PANELS

Due to safety and functional reasons gate panels used in World Cup, World Ski Championships and Olympic Winter Games as from the season 2010/11, must fulfil the following requirements:

1. Normal approach

The panel must not release from the poles during normal gate approach.

Test:

A drop pendulum contacts the inside pole at a height of 70 cm above ground with a momentum of 110 Ns. This corresponds e.g. to the contact of the mass of 10 kg with a velocity of 40 km/h. The panel must not release from the poles during 20 repetitions. The test is conducted for poles of type A (29-32 mm) with a flex pole as the inside pole and a fix pole as the outside pole.

2. Release in case of collision

The panel must release from the pole when athletes collide with the gate. The following tests are conducted for poles of type A (29-32 mm) with a flex pole as the inside pole and a fix pole as the outside pole:

Quasi-static test:

The maximal pull force to release the panel along the poles upwards is determined. The maximal force must not exceed 50 N (3 repetitions) neither at room temperature nor -20° C.

Dynamic test:

The pendulum rod of a drop pendulum contacts the panel in the middle between the poles with a momentum of 70 Ns. This corresponds e.g. to the contact of the mass of 30 kg with a velocity of 8 km/h. For 3 repetitions the panel has to be released every time.

3. Geometrical design and colours

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 or blue are permitted (Exception see ICR 701.3.2 and 1224.1).

4. Wind permeability

The panel must be made of wind-permeable material.

5. Advertising on panels

Advertising on the panel must not affect the requirements 1 to 4.

6. Validity

The FIS certification of release panels is valid for 2 years. Certified panels must have an imprint or an insert documenting the manufacturer and the year of homologation. ICR Art. 680.2.1.2, 690, 690.1, 690.2, 701.3.2, 901.2.2, 1001.3.2 und 1224.1 must be adapted.