



## FIS Homologated Gate Panels and Implementation in USSA Competitions

In June of 2011 FIS released new gate panels specifications for GS, SG and DH. Panels meeting those specifications have been used in FIS competitions since that time. Those specifications are attached to this memo.

During the USSA Congress in May 2015, the Alpine Sports Committee passed the following:

**Beginning in season 2015, USSA scored GS, SG and DH competitions must use currently homologated FIS gate panels.**

**Beginning in season 2016, all USSA GS, SG and DH competitions (including masters' competitions) must use currently homologated FIS gate panels.**

Please plan accordingly and have the appropriate panels available for your competitions.

Gate panel phase-in of homologated panels

- Season 2010-11 required for all FIS World Cup competitions
- Season 2012-13 required for all FIS alpine competitions
- Season 2014-15 required for all USSA alpine scored competitions
- Season 2015-16 required for all USSA alpine competitions (scored and non-scored including masters)

May 2015

## FIS SPECIFICATIONS FOR RELEASE PANELS 2012

Due to safety and functional reasons gate panels as from the season 2012/13, must fulfil the requirements listed below. Flex poles with different diameters of the upright pole are used in FIS races (type A: 29-32 mm; type B: 25-28.9 mm) thus release panels may be authorised either for one pole type or for both pole types.

### 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 and/or B 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 and/or B 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 60 N 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 5 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 m<sup>2</sup>. Commonly no colours other than red or blue are permitted (Exception see ICR Art 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.