

2018 Sporting Regulations APPENDIX V Homologation of tyres

The following applies to:

- FIA World Rally Championship
- FIA Regional Rally Championships
- FIA International Series (Rally)

List of Homologated tarmac tyres:

- The list of homologated tyres is available on the FIA website, under the Regulations section.

At least two weeks before the start of a rally, the tyre supplier must present to the FIA a drawing (or drawings) of the tread pattern(s) to be used in a rally in order to obtain the FIA homologation.

A / TARMAC TYRE REGULATIONS

1. WRC cars in the World Rally Championship:

- For WRC cars in the World Rally Championship, tyres must comply with Article 60.2 of the FIA WORLD RALLY CHAMPIONSHIP regulations (List n°2 ONLY).

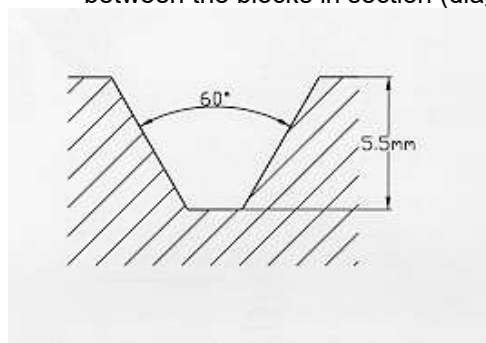
2. Other cars:

Homologation (tread pattern and size):

- 2.1 All Tyres proposed must meet all applicable legal requirements to be used for motor sport competition.
- 2.2 Tread pattern must be moulded.
- 2.3 Control Area:

Width of rim/tyre assembly	Length x Width	Surface	17% Rate	21.5% Rate	27.5% Rate
	mm x mm	mm ²	mm ²	mm ²	mm ²
between 8.5" and 9"	170 x 140	23800	4046	4998	6545
between 8" and 8.5"	161 x 140	22540	3832	4733	6199
between 7.5" and 8"	148 x 140	20720	3522	4351	5698
between 7" and 7.5"	142 x 140	19880	3380	4175	5467
between 6.5" and 7"	133 x 140	18620	3165	3910	5121
narrower than 6.5"	124 x 140	17360	2951	3646	4774

- 2.4 In the control area, the surface taken up by grooves at least 5.5 mm deep, with a maximum angle of 60° between the blocks in section (diagram) and 2 mm wide, must occupy at least 17% of the total surface.



- 2.5 In the control area, the surface taken up by grooves at least 1.8 mm deep, with a maximum angle of 60° between the blocks in section (diagram) and 2 mm wide, must occupy at least 21.5% of the total surface.
- 2.6 In the control area, the sum of the width of the grooves encountered by a radial line must be at least 16 mm.
- 2.7 The bridge blocks and sipes must be considered as part of the tread pattern if they are less than 2 mm wide.
- 2.8 At least 2 circumferential lines / Minimum total width of circumferential lines = 12 mm.

- 2.9 At all times during the rally, the tread depth of the tyres fitted on the car must not be less than 1.6 mm over at least three quarters of the tread pattern. The tyre manufacturer must provide visible control marks.
- 2.10 Each tyre must have a specific permanent moulded barcode number supplied by an approved FIA barcode supplier.

B. / WET TARMAC TYRE REGULATIONS (18" rims only)

- In the control area, the surface taken up by grooves at least 5.5 mm deep, with a maximum angle of 60° between the blocks in section (diagram) and 2 mm wide, must occupy at least 27.5% of the total surface.
- In the control area, the sum of the width of the grooves encountered by a radial line must be at least 16mm
- In the control area, the sum of the width of the grooves encountered by a circumferential line must be at least 4mm
- At least 2 circumferential lines / Minimum total width of circumferential lines = 12
- At all times during the rally, the tread depth of the tyres fitted on the car must not be less than 1.6 mm over at least three quarters of the tread pattern
- Each tyre must have a specific permanent moulded barcode number and a RFID Tag supplied by an approved FIA barcode supplier.

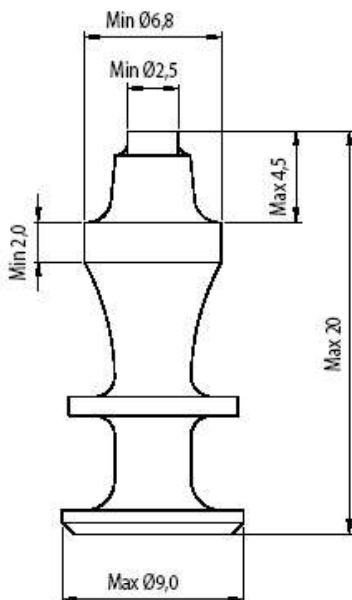
C. / SNOW TYRE REGULATIONS

SNOW TYRES

- SNOW tyres do not require tyre homologation (except WRC list n°1 and list n°2): grooving rate must be more than 25% (see paragraph A Art. 2.3).

7" x 15" rims

The stud dimensions for ice tyres mounted on a 7" x 15" rim are as follows:



Studded tyres may be used during the event. They must be in conformity with the following regulations :

- The studs shall be solid, cylindrical and flatcut
- The cross section of the studs must form a full circle at every point
- The stud is not allowed to be tubular at any point
- The body of the stud must be homogenous and is not allowed, under any circumstances to form a tube or hole.
- Maximum diameter of the flange is 9 millimetres

- Minimum diameter of the metal core in the middle of the stud is 2,5 millimeters. It must be cylindrical, homogenous and flatcut
- The length of the stud is limited to 20 millimeters
- The weight of the stud is limited to 4 grams
- The studs must be mounted in to the tyre from the outside
- The number of studs must not exceed 20 per any decimeter of the wheel circumference.

Measurement will be carried out with a pattern, on a non-pressured part of the tyre. The length of the pattern is 30 cm, and within the pattern there must not be more than 60 studs.

If the number of studs is more than 60 in a 30 cm sections, a further check will be carried out in the next 30 cm section and the total number of studs in both sections must be maximum 120.

8" x 18" rims

The stud dimensions for snow tyres mounted on an 8" x 18" rim must respect the following:

- Only the cylindrical single point studs introduced through the outside of the tread are permitted. They shall in no way go through the tread.

They shall imperatively adhere to the following:

- maximum base diameter: 6.5 mm, tolerance included. Weight: 2 gr;
- stud protrusion beyond the surface of the brand new tyre: maximum 2 mm;
- total stud height including point: 15 mm. Tolerance MAX. 0.5 mm;
- surface density covered;
- the number of studs must not exceed 10 per any decimetre of the wheel circumference apart from a central band of 47 mm that must remain free.
- manual or mechanic removable studs are forbidden.

D. / GRAVEL TYRE REGULATIONS

- Gravel tyres do not require tyre homologation (except WRC list n°1 and list n°2): grooving rate must be more than 25% (see paragraph A Art. 2.3).