



2018 Safety Equipment Specification Rules v2018.01 Issued: 25th January 2018

Text highlighted in bold, red, italics, indicates a change from the previous version of this document.

Definitions used in these Rules

FHR	Frontal Head Restraint (including HANS, Hutchens, Defender and similar type devices)
BORSE	British Oval Racing Safety Executive
Junior Drivers	Drivers aged 15 and under

General Notes

- It is the competitor's responsibility to ensure that they and their team comply with all safety specification rules **at all times** (including scrutineering, practise, and racing).
- Any necessary safety equipment specification rule changes during the course of a season will be notified to competitors through the official ORCi / WatchItRaceIt website (orci.co.uk / watchitraceit.co.uk), and individual formulas' own approved communication channels. Change advisories received from any other source should be checked against these official sources for authenticity and accuracy.
- Proposals for any change(s) to the safety equipment specifications **MUST** be submitted in writing to the ORCi through one of the following channels:
 - Mail: ORCi, PO Box 9889, Birmingham, B43 6WA
 - Web: Use the online contact form at <http://orci.co.uk>
 - Email: safety.rules@orci.co.uk
- Proposed changes will be considered by BORSE and an official response duly made as appropriate.
- Competitors must **NOT** use unapproved items, or make modifications to existing items, that do not meet the current safety equipment specifications, whether they believe they have a case for them or not. A process for approval exists and should be followed by all competitors.

900 General

- 900.1** All safety equipment specification rules apply to all competitors in all ORCi and ORCi affiliated formulas unless otherwise stated.
- 900.2** All safety equipment must be worn/engaged at all times when on track during racing, practise or test sessions, and at ANY other time when moving at a speed greater than walking pace (4mph).
- 900.3** Clothing that does not conform to the standards below may only be worn underneath the mandated safety equipment. For example, hooded tops must only be worn underneath a race-suit/overall, and the hood MUST be tucked inside.

901 Helmets and Goggles/Visors

901.1 Helmets

901.1.1 A helmet conforming to at least one of the approved standards MUST be worn.

901.1.2 Helmets MUST meet or exceed the MINIMUM standard as directed by BORSE.

The current approved standards permitted for all drivers are:

- FIA 8860-2004
- FIA 8860-2010
- FIA 8859-2015
- Snell SA2005 (*The continued use of this standard will be reviewed for 2019*)
- Snell SA2010
- Snell SAH2010
- Snell SA2015
- Snell EA2016
- SFI Foundation 31.1A
- SFI Foundation 31.2A
- SFI Foundation 31.1
- ECE R22.05 (in Fibreglass, Carbon or Tri-Composite form ONLY)

The following approved standards are permitted for Junior drivers only in addition to those above:

- Snell CMR 2007
- Snell CMS 2007
- Snell CMR 2016
- Snell CMS 2016
- SFI 24.1

901.1.3 The use of polycarbonate helmets is NOT permitted.

901.1.4 The helmet MUST fit the competitor correctly, according to the manufacturer's sizing/fitting guidelines.

901.1.5 All helmets MUST display the current "ORCi Approved" helmet sticker.

901.2 Goggles/Visors

901.2.1 Shatterproof goggles or a shatterproof visor MUST be worn with the helmet at all times.

901.2.2 The use of tinted visors is NOT advisable.

902 Clothing

902.1 Race-Suits/Overalls

902.1.1 A flame resistant race-suit/overall MUST be worn.

902.1.2 Flame resistant race-suits/overalls MUST be manufactured from Proban, or material of a higher specification, e.g. Nomex.

902.1.3 Flame resistant race-suits/overalls MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

902.1.4 Race-suits/overalls MUST be maintained in a clean and tidy condition.

902.1.5 Race-suits/overalls manufactured/certified to Karting standards, including, but not limited to, the CIK-FIA Level 1 or Level 2 standards, are NOT permitted as they do NOT provide the appropriate level of heat/flame protection.

902.2 Gloves

902.2.1 Flame resistant gloves MUST be worn.

902.2.2 Flame resistant gloves MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

902.3 Balaclavas

902.3.1 A flame resistant balaclava MUST be worn.

902.3.2 Flame resistant balaclavas MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

902.4 Undergarments

902.4.1 Flame resistant socks and undergarments provide a high degree of protection and are highly recommended to all competitors.

902.5 Wet-Weather Protection

902.5.1 Any wet-weather clothing must be worn in ADDITION to the required flame resistant race-suit/overall specified above.

903 Head/Neck Restraint**903.1 All Junior Formulas (Competitors Under The Age Of 16)**

903.1.1 An FHR or neck-brace MUST be worn.

903.1.2 If a neck-brace is used, it MUST be of the complete-circle type, i.e. it must form a complete circle around the competitor's neck with no gaps.

903.1.3 The use of "U" shaped, or "horseshoe" neck-braces is NOT permitted.

903.2 ORCi Saloon Stock Cars, Lightning Rods And Stock Rods

903.2.1 The use of an FHR or neck-brace is recommended.

903.3 Other Formulas

903.3.1 The use of an FHR or neck-brace MUST be in accordance with the rules laid down by the governing body for each formula, e.g. BriSCA F1, NHRPA, Stoxkarts Ltd., Spedeworth, etc.

903.3.2 Where no specific FHR/neck-brace rules exist for each formula, the use of an FHR or neck-brace is recommended.

904 Safety Harness**904.1 Usage**

904.1.1 A full safety harness MUST be used in accordance with the specifications below.

904.1.2 All mandated straps MUST be used at all times.

904.2 Type And Design

904.2.1 **ALL Formulas, EXCEPT Banger Type Formulas** - the harness MUST comprise of a MINIMUM of 2 shoulder straps, 2 lap straps, and an anti-submarine strap (also referred to as a sub-strap, or crotch-strap) in a MINIMUM 5-point design.

904.2.2 **Banger Type Formulas ONLY** - The use of a sub-strap in Banger type formulas is not recommended, and therefore in Banger type formulas the harness MUST comprise of a MINIMUM of 2 shoulder straps and 2 lap straps in a MINIMUM 4-point design.

904.2.3 Shoulder straps with a sternum protection latch are highly recommended.

904.2.4 The harness MUST incorporate a quick-release buckle (including rotary buckles, and NASCAR lever-latch type buckles), to which all straps MUST be connected.

904.2.5 Where a NASCAR lever-latch type buckle is used, it is advisable to fit a method of protection to prevent race-suit/overall sleeves from accidentally unhooking the buckle during racing. A small section of "Tubegrip" elasticated bandage, slid over the hooked buckle is sufficient for this purpose.

904.3 Harness Strap Width – ALL Adult Formulas (Competitors Aged 16 And Over)

904.3.1 **All Harnesses (Unless Specified Below)** – The shoulder and lap/pelvic straps of ALL harnesses MUST measure at least a MINIMUM of 3in/75mm in width, unless explicitly stated below). This applies to, but is not limited to:

- ALL non-homologated harnesses
- ALL harnesses with NASCAR lever-latch type buckles
- ALL harnesses homologated to SFI standards
- ALL harnesses homologated to FIA standards that do not meet ALL FIA criteria below

904.3.2 **FIA Approved Harnesses With Narrower Lap/Pelvic Straps (less than 75mm/3in)** – The use of narrower lap/pelvic straps is permitted on FIA approved harnesses ONLY. The harness MUST meet ALL the following criteria:

- The harness MUST be certified/homologated to the current FIA standards: 8853/98 or 8853-2016
- The shoulder straps MUST measure at least a MINIMUM of 2.75in/70mm in width (unless used in conjunction with an FHR device – see below).
- The lap/pelvic straps MUST measure at least a MINIMUM of 2in/50mm in width.
- The FIA identification/homologation/*date* labels MUST be intact and visible to scrutineers on ALL sections of the harness.
- The harness MUST be within its visibly stated validity period.

904.3.3 **ALL Harnesses** – The anti-submarine strap MUST measure at least a MINIMUM of 1¼in /44mm in width on ALL harnesses.

- 904.3.4** **ALL Harnesses Used With An FHR Device** - Where an FHR device is used by a competitor, it is permitted to use shoulder straps that narrow below the minimum specification (stated above) in order to ensure the correct fitment of the harness/FHR device combination. This exception applies to the shoulder straps ONLY. Any such straps MUST be manufactured by a recognised industry supplier AND be specifically designed for use with an FHR device.
- 904.4** **Harness Strap Width – ALL Junior Formulas (*Competitors Under The Age Of 16*)**
- 904.4.1** The shoulder and lap/pelvic straps MUST measure at least a MINIMUM of 2in/50mm in width.
- 904.4.2** The anti-submarine strap MUST measure at least a MINIMUM of 1¾in /44mm in width.
- 904.5** **Installation**
- 904.5.1** The harness MUST be securely mounted to the floor, roll-cage, and/or chassis of the race car.
- 904.5.2** Harness manufacturers specify their own installation requirements depending on the design of their harnesses. Therefore, harnesses MUST be installed according to the manufacturer's recommended best practice using only approved mounting components/methods.
- 904.5.3** All the major manufacturers have installation information on their websites, and competitors are advised to refer to this when fitting harnesses to their racecars. Useful websites include (addresses correct at time of publication):
- Manufacturer's Websites**
- www.willans.com
 - www.schrothracing.com
 - www.trs-motorsport.com
 - www.racequip.com
- Safety Standards**
- www.sfifoundation.com
 - www.fia.com/homologations
- 904.5.4** Key general guidelines from manufacturers for the installation of harnesses state that:
- Strap lengths should be kept as short as possible to avoid excessive stretching under impact.
 - Shoulder straps should be supported at or just below shoulder level.
 - Shoulder straps should be prevented from moving sideways, such that they may drop off a competitor's shoulders under severe impact/stretching.
- 904.5.5** It is recommended that any seat apertures, through which the straps pass, are lined to prevent chaffing of the straps.
- 904.6** **Condition and Maintenance**
- 904.6.1** Special attention MUST be paid to the condition of straps and fixings once installed.
- 904.6.2** The harness MUST be maintained according to the manufacturer's recommended best practice, and where possible kept free of dirt, oil and grease that could degrade any materials.

905 Window Nets

- 905.1** **Requirement**
- 905.1.1** A quick-release fabric window net MUST be fitted in the driver's side door window aperture of all saloon car formulas, with the exception of Banger type formulas.
- 905.2** **Specification/Installation**
- 905.2.1** The width of the netting holes must NOT exceed a MAXIMUM size of 3in/75mm wide.
- 905.2.2** The window net MUST be fitted such that it hangs down level with the steering wheel.
- 905.2.3** The window net MUST be flexible and easily removable, independent of any movement of the driver's-side door.

906 Fire Extinguishers

- 906.1** **Requirements**
- 906.1.1** A fire extinguisher, meeting the specifications below, MUST be carried in the competitor's tow-vehicle/transporter at all times.
- 906.1.2** The fire extinguisher MUST be within easy reach of the competitor and team members at all times, especially when re-fuelling the racecar.
- 906.2** **Specification**
- 906.2.1** The fire extinguisher capacity MUST be at least a MINIMUM of 2Kg.
- 906.2.2** The fire extinguisher MUST be of a dry powder or gas type.
- 906.2.3** Old type BCF (green) fire extinguishers are NOT permitted.