



# FIA STANDARD GUIDELINES COMPETITION AND ADVANCED SEATS

# Preliminary notices and terms

The reproduction or distribution of these FIA Standard Guidelines Seats (“Guidelines”), in whole or in part, without the written permission of the FIA, is prohibited except for FIA affiliated members, and the event organisers approved by them, who are entitled to use this document for non-commercial purposes.

## INTRODUCTION

1. The FIA Standard Guidelines Seats (“Guidelines”) set out general informational guidance and illustrative graphics regarding Helmets approved in accordance with FIA Standards. This document is provided, at the FIA’s discretion, to assist drivers and/or competitors taking part in competitions appearing on the FIA International Sporting Calendar and scrutineers (“Third Parties”).

2. Provision of the Guidelines to any Third Party is strictly subject to the Third Party’s acceptance of and agreement to comply with these Preliminary Notices and Terms.

## DISCLAIMER

3. The contents of the Guidelines (including general informational guidance in relation to health and safety, sporting or technical matters) taken in isolation may not be suitable or appropriate for each and every regional and national “Motor Sport Event” (which incorporates all of the following activities i) motor sports competitions, practices, tests, reconnaissance’s / “recces” and demonstrations, ii) any associated entertainment, marketing or commercial activities and iii) any engineering, scrutineering, maintenance or other technical activities, and begins from the time the relevant locations where these activities are taking place are made accessible to any persons, and ends when the relevant locations are closed to access or the activities end, whichever occurs later). This is because the Guidelines relate to FIA Standards created for competitions appearing on the FIA International Sporting Calendar which operate within a regulatory and safety environment that does not apply to Motor Sport Events that do not appear on the FIA International Sporting Calendar.

4. It is the full responsibility of Third Parties to ensure that they understand and comply with any relevant obligations or duties relating to health and safety, product design, construction/manufacturing or consumer law which are placed on them under i) any applicable National Sporting Authority requirements, regulations and safety standards (“ASN Regulations”), ii) FIA requirements, regulations and safety standards (“FIA Regulations”) and/or iii) any relevant transnational, national and/or local laws, regulations, directives and decrees passed by the government, a quasi-governmental entity or by any entity which has the same authority as the government in any applicable country or other territory, including all applicable local, state and federal laws, and any industry practices, codes of practice and/or codes of conduct incorporated into any of the foregoing, and all binding court orders, decrees, and any decisions and/or rulings of any competent authority that are relevant (“Applicable Laws”). The FIA assumes no responsibility in relation to such understanding or compliance.

5. The Guidelines do not contain any advice or guidance in relation to Applicable Laws, and the FIA makes no representation or warranty that the general informational guidance within the Guidelines complies with the Applicable laws applying to a particular Motor Sport Event. Accordingly, it is the full responsibility of Third Parties to i) take appropriate advice and make their own enquiries as to Applicable Laws and any particular local safety requirements or other relevant considerations applying to a Motor Sport Event and ii) to adapt and implement the Guidelines in a suitable and safe manner depending on the circumstances of the particular Motor Sport Event. The FIA assumes no responsibility in this regard.

6. For the avoidance of any doubt, compliance with the Guidelines in isolation does not guarantee the safety of a particular Motor Sport Event.

7. If there is any conflict, or any doubt as to a conflict, between the contents of the Guidelines and Applicable Laws, Applicable Laws always take precedence. If it is possible to comply both with Applicable Laws and the Guidelines (subject to all appropriate adaptations as per paragraph 5), Third Parties should endeavour to do so.

8. The FIA does not make any representation or warranty, express or implied, and does not assume any responsibility as to the quality, suitability or fitness for purpose:

- a. of any equipment, products or designs that may be referred to within the Guidelines; nor

- b. as to the applicability or suitability of the Guidelines in relation to Motor Sport Events that do not appear on the FIA International Sporting Calendar.

9. All Third Parties are made aware that technology utilised in motor sport vehicles, equipment, structures, installations and products is subject to ongoing change and development, as well as good and best practice evolving over time. As a result, the Guidelines are subject to ongoing review and amendment over time.

10. All Third Parties are made aware of the risks that are inherent in the attendance of any person at or within the vicinity of a Motor Sport Event. Depending on the circumstances of the Motor Sport Event, these risks may include (non-exhaustive): the possibility of incidents (resulting from motor sports or otherwise) resulting in physical and/or mental injury or death; exposure to noise; exposure to / interaction with high voltage or other technical / mechanical equipment; or contracting/spreading communicable diseases.

## LIMITATION & INDEMNITY

11. The FIA disclaims, excludes and limits (to the fullest extent permitted under Applicable Laws) any and all claims, liability, costs, expenses, damages, losses (including but not limited to any direct, indirect, incidental, special, consequential or exemplary damages or losses, property damage, breach of intellectual property rights, breach of contract, loss of profit, loss of reputation or goodwill, use, data or other intangible loss, loss of agreements or contracts, loss of sales of business and all interest, penalties and legal costs) and any personal or mental injury (including nervous shock, disease, disablement and death and any financial losses resulting), sustained by any organisation or person (including Third Parties and their subsidiaries, affiliates, licensors, licensees, agents, co-branders, partners, employees, directors, members, officers, advisors, consultants, representatives, successors and assigns (collectively the “Representatives”)), howsoever arising from any use or implementation of, or reliance placed on the contents of, the Guidelines in relation to a particular Motor Sport Event by Third Parties or their Representatives, including in relation to:

- a. Statements (including false statements), acts or omissions by the FIA or its Representatives or Third Parties and their Representatives; or
- b. Any other negligence, lack of reasonable care, breach of any statutory or other duty or Applicable Laws, careless or wrongful act or wilful default by the FIA or its Representatives or Third Parties and their Representatives.

12. Any use or implementation of, or reliance placed on the contents of, the Guidelines in relation to a particular Motor Sport Event by any Third Party or its Representatives is (to the fullest extent permitted under Applicable Laws) strictly subject to acceptance by the Third Party and its Representatives of the following:

- a. The Third Party and its Representatives agree to waive any rights and/or claims, agree to release, hold harmless and not to sue the FIA or its Representatives in relation to any claims, liabilities, costs, expenses, damages and losses (including those referred to in paragraph 11); and
- b. The Third Party and its Representatives agree to indemnify the FIA and its Representatives in relation to any and all claims, liabilities, costs, expenses, damages and losses (including those referred to in paragraph 11), and this indemnity shall apply whether or not the FIA has been negligent or is at fault; in each case arising from the use or implementation of, or reliance placed on the contents of, the Guidelines in relation to a particular Motor Sport Event.

## GOVERNING LAW & JURISDICTION

13. The Guidelines and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with the Guidelines or their subject matter or formation, shall be governed by and construed in accordance with the laws of France.

14. The courts of France shall have exclusive jurisdiction to settle any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with the Guidelines or their subject matter or formation.

15. Any matters relating to investigation and enforcement of FIA Regulations are subject to the jurisdiction of the internal judicial and disciplinary bodies of the FIA.

# SCOPE

The FIA safety regulations are made up of several different types of document. Some of the documents, such as FIA Standards, FIA Homologation Regulations for Safety Equipment and FIA labelling guidelines, are targeted to the safety equipment manufacturers. Some regulations aim to ensure that the safety equipment used in competitions appearing on the FIA International Sporting Calendar delivers a specified level of safety protection. There are other documents, such as Appendices to the International Sporting Code, Technical and Sporting Regulations, that aim to regulate the use of the safety equipment in competitions appearing on the FIA International Sporting Calendar.

The aim of these new Safety Equipment Guidelines (“Guidelines”) is to complement the FIA safety regulations and to collect all the relevant regulatory information in one place, including the different Standards recognized by the FIA, the differences between them, the importance of safety equipment, the protection delivered, how to select, use and customize safety equipment, and how to avoid critical mistakes. It also gives tips on how to identify non-original products and what to do after an accident.

This document is intended to make the FIA regulations more easily understandable for competitors and scrutineers.

The text written here does not replace the official documents published on the FIA website and it has no regulatory value.

This is a living document that can be updated to reflect any new information, updates to regulatory or guidance documents or clarification that the FIA considers relevant to the competitors and officials. Please ensure that you take into consideration the latest available version.

# TABLE OF CONTENTS

## **INTRODUCTION** 06

1/ Regulation references

---

## **USER GUIDE & INSTALLATION** 08

- 1/ Seating position of the driver
  - 2/ Foam inserts
  - 3/ Anchorage points for attaching the seat supports
  - 4/ Additional information for cross-country
- 

## **SCRUTINEERING CORNER** 12

- 1/ Pre-event control
- 2/ Post-accident analysis

A racing seat is important to support and restrain a driver or co-driver during both race and crash conditions. The seat is an integral part of the driver safety restraint system, thus the relevant FIA Standards require seats to provide specified levels protection against the loads that can be generated during accidents.

Inside the vehicle, the seat provides strength and support during rear impacts together with more extensive support to the pelvis, shoulder and head during side impacts.

The protection of the seat is fundamental in case of a rearward impact and the seat-side-head, seat-side-shoulder and seat-side-pelvis offer protection for lateral impacts. Furthermore, the seat contains the body of the driver during an impact, and is designed to mitigate the risk of the driver hitting the structure of the car.

The seat-brackets are also approved as part of the seat system, and they must be able to support the loads prescribed by each standard without excessive deformation.

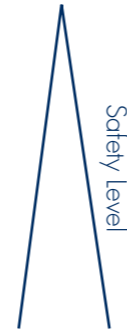
## 1/ REGULATION REFERENCES

The FIA Safety Equipment Homologation programme has been designed to ensure that competitors can purchase high-quality safety products with confidence. That is why the FIA recommends that competitors should always look for the FIA hologram.



Currently, there are 3 FIA Standards for seats:

- 8855-1999 Competition Seats (old standard)  
Designed to support up to 20G (rear) and 15G (side) impacts.
- 8855-2021 Competition Seats (New Standard)  
Designed to support up to 42G impact.
- 8862-2009 Advanced Seats  
Designed to support up to 70G impact.



Check Appendix J of International Sporting Code – Articles 253 and 283 and the Technical Regulations of the specific Championship to understand which one you need.



QR code – FIA.com

## SEATS VARIANTS

### 8855-1999 and 8855-2021

These seats are approved to be used in any type of motor sport competition.

### 8862-2009

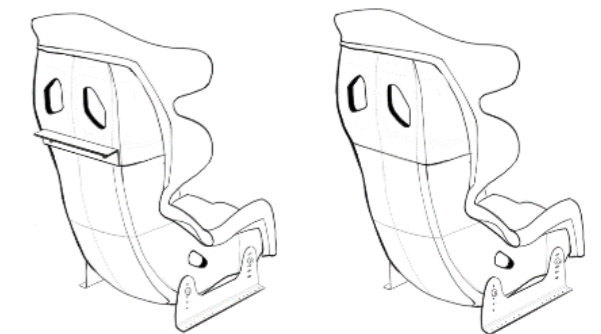
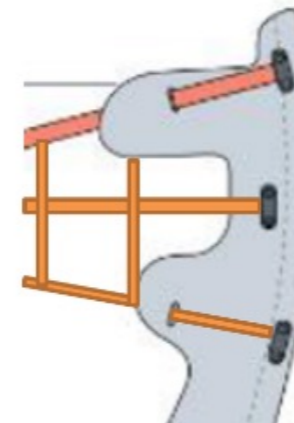
For this Standard there are seats that are approved to be used only in circuit competitions, which present the addition "For Circuit events only", while the other seats can be used on all other competitions.

Numéro homologation Homologation number	Constructeur Manufacturer	Modèle Model	Supports du siège pour circuit Plancher Circuit seat brackets Floor	Supports du siège pour circuit Dossier Circuit seat brackets Back	Supports du siège pour rallye Rallye seat brackets	Début d'Homol. Beginning of homol.	Fin d'Homol. <sup>(1)</sup> End of homol. <sup>(1)</sup>	Produit valide jusqu'au <sup>(2)</sup> Product valid until <sup>(2)</sup>
AS.072.18	<b>RACETECH</b>	RT-BABT62-A1 <i>(for circuit events only)</i>	Ne pas utiliser de supports (Fixation directe au plancher) No need brackets (Floor direct fixation)	JOS-001-A13-095		08.2018	08.2023	2033
AS.073.18	<b>CORBEAU</b>	PREDATOR GT <i>(for circuit events only)</i>	Predator mounting feet 1137B / 1138B 1140B / 1141B	Predator GT Shoulder Mount 1304D		11.2018	11.2023	2033
AS.074.18	<b>MOTORDRIVE</b>	MD20	MD20-1-M01	MD20-1-M02		11.2018	11.2023	2033

For this Standard there are also seats with attachment for racing nets.

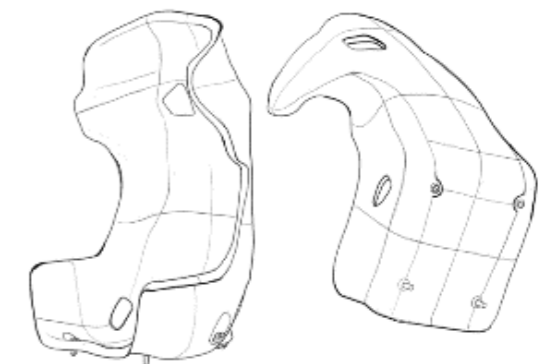
## SEAT BRACKETS

There are currently three types of seat brackets for seats complying with FIA Standards:



a. Lateral and back

b. Lateral



c. Bottom

- Rear straps of racing nets can be attached directly to these specific seats
- The attachments and guides included in the seat for the nets have been evaluated and tested
- If racing nets are not compulsory in the event, the seat can be used without the racing nets (the seat is approved to be used with and without racing nets)
- The installation of the racing net must follow the instructions of the racing net manufacturer and the "FIA Racing Nets Installation Specification for Touring and Grand Touring Cars"

**8855-1999**

For this category any bracket is eligible for all type of competitions.

Some seats can be used either with seat brackets approved by the seat manufacturer or designed by the competitor as long as the seat brackets thickness is 5 mm for aluminium or 3 mm for steel.

Additionally, if the technical list mentions that the seat must be used with lower and back brackets, then even if the competitor designs his own seat brackets, the seat must be fixed with lower and back brackets.

Some of the seats can only be installed with FIA-approved seat brackets. In such cases, the technical list has the following note: "This seat model is only authorised to be used with homologated seat support"

**8855-2021**

For this category any bracket is eligible for all type of competitions but the Seat brackets must be FIA-approved.

The seat can only be installed with FIA-approved brackets in accordance with Technical List No. 91. The details of the FIA-approved brackets can be found in the presentation form.



**8862-2009**

For Circuit racing (please note that autocross and rallycross are considered circuit racing) the seat can only be installed with FIA-approved brackets in accordance with Technical List No. 40.



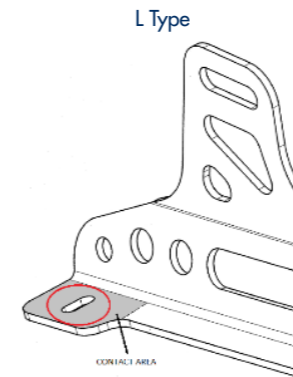
For Rally and cross-country please check Appendix J of the International Sporting Code and the Technical Regulations of the specific championship.

For FIA rally categories, there are two possibilities:

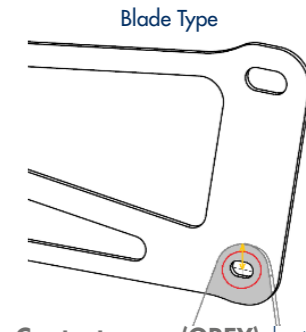
1. The seat can be installed with seat brackets approved as Optional Variant (VO) for WRC and Rally2 Cars homologated before 01.01.2022
2. The seat can only be installed with FIA-approved rally seat brackets for Rally1, WRC 400 and Rally2 Cars homologated from 01.01.2022. The rally seat brackets are also listed in Technical List No. 40.



Seats can have specific rally seat brackets, that can only be used in rally, to ensure that the installation of a seat bracket in the chassis is safe and compliant, the following points in relation to "DETAILS OF THE ANCHORAGES FOR RALLY SEAT BRACKETS HOMOLOGATED ACCORDING TO THE FIA STANDARD 8862-2009", must be respected:



1. Minimum **Contact area (GREY)** between the seat support and the car mounting (mm<sup>2</sup>).
2. The **Minimum radius (RED)** of the contact area (mm).



1. Minimum **Contact area (GREY)** between the seat support and the car mounting (mm<sup>2</sup>).
2. The **Minimum radius (RED)** of the contact area (mm).
3. For blade type supports only: **Maximum vertical distance (YELLOW)** from the mounting point to the edge of the anchorage (mm).

N° Homol.	Supports du siège pour rallye <i>Rally seat brackets</i>	Surface de contact totale entre les support de siège (gauche + droite) et les points d'ancrage sur la voiture (mm <sup>2</sup> ) <i>Total contact area between the seat supports (left + right support) and the mounting points on the car (mm<sup>2</sup>)</i>		Rayon minium de la surface de contact (mm) <i>Minimum radius of the contact area (mm)</i>	Distance vertical maximum du point d'ancrage au bord de l'ancrage (uniquement pour les supports de type lame) (mm) <i>Maximum vertical distance from the mounting point to the edge of the anchorage (only for blade type supports) (mm)</i>
AS.007.10	TA22050229B	1194		11	11
	TA22060295A	1194		11	11
	TA22050299A	1194		11	11
	TA22060341A	1194		11	11
	T30020075-76A	1690		11	N/A
	HC/940	35884		12	N/A
	598802651D 598802652D	5024		12	N/A

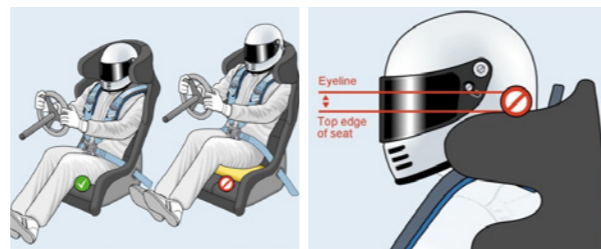


"DETAILS OF THE ANCHORAGES FOR RALLY SEAT BRACKETS HOMOLOGATED ACCORDING TO THE FIA STANDARD 8862-2009"

## 1/ SEATING POSITION OF THE DRIVER

The driver/co-driver should choose a seat that fits well. When seated in the normal racing position, the seat should provide comfortable support at the pelvis, shoulder and head as follows:

- the eyeline must be below the top edge of the side head support and above the bottom edge of the side head support.
- the shoulder must fit within the side shoulder support of the seat.
- the pelvis must be adequately supported by the side pelvis support.



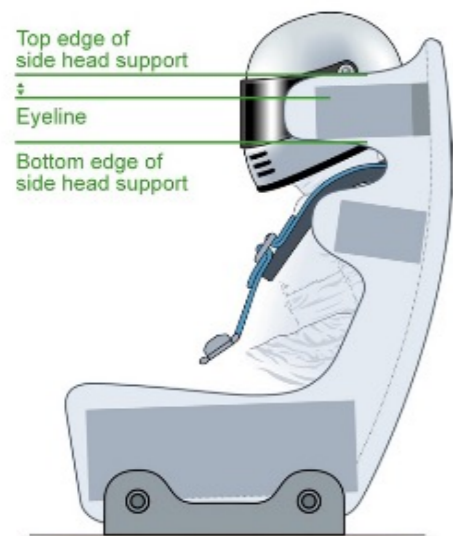
For competitions registered on the FIA International Sporting Calendar or competitions regulated in accordance with FIA regulations, officials can deny participation in a competition if the driver and/or co-driver are not seated in the correct position, through checking compliance with the FIA International Sporting Code under Appendix J (Articles 253 and 283), which regulates the seating position as described above.

When considering seats and seating positions, it is important to highlight the following risks associated with a rollover accident:

- Due to the safety harness webbing elasticity and harness installation, the driver will move vertically.
- The roof may deform while contacting the ground due to safety cage deformation.

In both cases, the gap between the top of the driver's helmet and the car roof/safety cage will be reduced. To mitigate the risk of head and spinal injuries, it is important to ensure that there is enough clearance for the head of the driver and co-driver to allow for some loss of space during rollover.

Various technical regulations define a minimum vertical distance between the top of the helmet and roof or safety cage and/or roll cage padding. Competitors must respect the minimum clearance and sit as low as possible, to maximize this clearance. If the technical regulations do not define a minimum distance, it is recommended that



If the driver's helmet is too high in relation to the seat head support, the seat may not provide lateral and rear support to the helmet in the event of a crash.

If the driver is seated too high, as shown in the example below, the helmet may roll over the top of the seat head support, which may induce neck injuries.

the clearance between the top of the helmet and any hard surface is at least 80 mm.

Ensuring these steps are taken to give drivers and co-drivers the correct seating position will help prevent injury to competitors in the event of an accident.

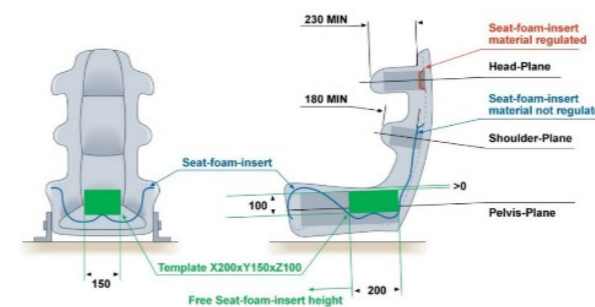
## 2/ FOAM INSERTS

### Cars fitted with a seat in compliance with FIA standards 8862-2009 or 8855-2021

If a foam insert is used between the homologated seat and the driver, at least minimum lateral support to the driver's head, shoulders and pelvis must be guaranteed as follows:

- 230 mm minimum at seat-side-head support along the head-plane.
- 180 mm minimum at seat-side-shoulder support along the shoulder-plane.
- 100 mm minimum in height at seat-side-pelvis support along the pelvis-plane over a length of 200 mm min.

This requirement must be verified using a parallelepiped template of dimensions X 200 x Y 150 x Z 100 mm.



### Cars fitted with a seat in compliance with FIA standard 8855-1999

If there is a cushion between the homologated seat and the occupant, the maximum thickness of this cushion is 50 mm.

Note: The cladding materials must be tested for flammability

in accordance with ISO standard 3795. The speed of combustion must be less than or equal to 75 mm/min.

### GAP BETWEEN HELMET AND SIDE HEAD SUPPORT

#### Cars fitted with a seat in compliance with FIA standards 8862-2009 or 8855-2021

For Circuit:

With the driver seated in his normal driving position, the lateral distance between the helmet and the side head support (measured at 150 mm from the forward face of the side head support) must not be greater than 40 mm, and may be adjusted by means of additional foam. The material of the foam extension must be the same as that in the head support of the given seat. The mounting of the foam extension must be approved by the FIA.

For Rally:

The lateral distance between the helmet and the side head support (measured at 150 mm from the forward face of the side head support) must not be greater than 50 mm and may be adjusted by means of additional foam properly fixed to the seat. The material of the foam extension must be the same as the one in the head support of the given seat.





## 1/ PRE-EVENT CONTROL

Please ensure that you have downloaded the latest version of the technical list. The technical list contains very useful information to allow you to check that the safety equipment is in compliance with the FIA Safety Regulations.



In addition, FIA-approved competition seats according to FIA standard 8855-2021 have a presentation form. In case of doubt, you can compare the safety equipment with the presentation form. You need to ensure you consult the last version updated on the FIA website. The presentation forms are accessible through the link on the technical list:



In the presentation form you will be able to check the following information:

- Shell design
- Detail on the mounting assemblies
- Brackets
- Racing net guides
- Slot edges
- Complementary information

### FIA LABELS

The FIA-approved label is affixed on the products only if they comply with the FIA's safety requirements. It is easy to identify which products have been subject to the stringent tests defined in the FIA Standard: simply look for the FIA hologram and/or label on the product.

STANDARD	LABEL	SAMPLE
8855-1999	White Label with Silver Hologram	
8855-1999 re-validated	Homologation Label (see above) + Life Extension Label with 2 more years validity	
8855-2021	White Label with Blue Hologram	
8862-2009	LABEL	SAMPLE
General	White Label with Gold Hologram on the seat + White label with FIA logo for homologated brackets with brackets model name	
Seats approved for Circuit Events Only	Homologation label has the mention: "For circuit events only"	
Approved Rally Seat Brackets	Bracket label has the mention: "For rally events only"	



8862-2009	LABEL	SAMPLE
Seat with Racing Net Attachments	Homologation label has the mention: "Valid for attaching racing nets (optional)"	
Circuit specific seat with Racing Net Attachments	Homologation label has the mention: "For circuit events only" + "Valid for attaching racing nets (optional)"	

Use the above example of labels to check conformity with the technical list and prove the authenticity of the equipment. In case of doubt, contact your ASN or the officials for the event.

Alternatively, compare the label/hologram with another product which you are confident complies with the regulations.

### CHECK LIST TO IDENTIFY SEAT COMPLIANCE WITH FIA REGULATIONS

1. Compare FIA label and hologram affixed on the helmet with label template shown in the respective Technical List.

The way the information is displayed, the font and the use of bold type must be the same as on the template. The standard, manufacturer's name, homologation number, model name, and validity date must be always presented.



2. Compare information shown in the FIA label with the information shown in the respective Technical List.

Numéro homologation Homologation number	Constructeur Manufacturer	Modèle Model	Supports à utiliser Supports to be used	S2000 <sup>(4)</sup>	Début d'Homol. Beginning of homol.	Fin d'Homol. <sup>(1)</sup> End of homol. <sup>(1)</sup>	Produit valide jusqu'au <sup>(2)</sup> Product valid until <sup>(2)</sup>
CS.431.19	SPARCO	CIRCUIT QRT 20	Latéraux / Lateral	X	08.2019	08.2024	12.2029

*Note: The image shows a Sparco label with arrows pointing from the label fields to the corresponding columns in the table above.*

3. Compare the date of manufacture with the homologation date.

The validity of the FIA Standard 8855-1999 is 5 years, while 8855-2021 and 8862-2009 is 10 years.

The number shown in the label must be inferior or equal to the last column of the technical list (Product valid until)

Numéro homologation Homologation number	Constructeur Manufacturer	Modèle Model	Supports à utiliser Supports to be used	S2000 <sup>(4)</sup>	Début d'Homol. Beginning of homol.	Fin d'Homol. <sup>(1)</sup> End of homol. <sup>(1)</sup>	Produit valide jusqu'au <sup>(2)</sup> Product valid until <sup>(2)</sup>
CS.431.19	SPARCO	CIRCUIT QRT 20	Latéraux / Lateral	X	08.2019	08.2024	12.2029

4. In case of doubt, visually compare the seats with the respective presentation form (presentation forms are only available for 8855-2021 approved seats)

protection for which it was designed.

All the relevant technical information of the seat shall be accessible on the presentation form.



In case of cracks in the seat shell or deformation of the shell, the seat must be replaced. The crack location represents the weakest point of the seat shell. A deformed seat shell means that the seat has been subject to high loads and therefore the seat may not be able to support to the driver's body during another accident. If the seat has visible cracks, and in case of another crash, the seat may fail in that location, and may not deliver the

In case of damage to brackets you must check the inserts and seat shell to verify if they suffered any damage. If there is no visible damage, you may replace the seat brackets, but we strongly recommend you to contact the seat manufacturer and ask for further guidance. Please note that the bonding mechanism of the insert to the seat

shell may have been affected even if there is no visible damage.

## 2/ POST-ACCIDENT ANALYSIS



The official responsible for safety on-site (Technical Delegate or Chief Scrutineer) must visually inspect the seat after a severe crash (estimated impact speed > 50 kph in any direction, with focus on rearward or side impact). The seat shell shall be carefully inspected.

The official responsible for safety on-site can strike out the labels (please check if the ASN of your country has any protocol to be followed) which are suspected of possible damage, high loads, stress, etc. This action must be performed if any of the above damage is visible. Seats with labels that have been struck-out could be sent back to manufacturers for checking. However, seats which are tested and confirmed to be ok will get a new sticker and be sent back to the competitor for re-use.

## CUSTOMIZATION

8855-2021 and 8862-2009 - seats cannot be modified (seat shell, energy-absorbing foams and cladding are approved with the seat). The seat manufacturer can add embroidery on the seat cladding to customize the seat to their customers.

8855-1999 - the competitor cannot modify the seat as received from the retailer.



## QR CODES - SUMMARY

FIA.COM



Technical List 91



Technical List 40



Technical List 40



Anchorage for rally seat brackets



Technical List 12



Presentation forms  
(8855-2021)





FIA.COM