FIM RACING HOMOLOGATION PROGRAMME FOR HELMETS

(FRHPhe)

HOMOLOGATION MANUAL - FRHPhe-02
GENERAL TERMS AND CONDITIONS

2024

Int

Contents

I. GLOSSARY

A. General terms of the FIM Racing Homologation programme

Applicant	Legal entity applying for the FRHP before the FIM. The applicant shall be the company that markets the helmet to its end-users through customary sales channels (wholesalers/retailers/direct sales) or sells and/or supplies the helmets. The Applicant may, and in many cases will, also be a helmet manufacturer.
Application Form (homologation or update)	Part of the Homologation Manual, to be completed by the Applicant while applying for the FRHP.
FMN	National Motorcycling Federation affiliated to the FIM.
FRHP	FIM Racing Homologation Programme which grants recognition to products of compliance with safety requirement required for competitions.
FRHPhe	FIM Racing Homologation Programme for Helmets**.** FRHP that grants recognition to helmets that meet the FIM helmets Standard.
FRHPhe-01	Current version of the FIM Helmet Racing Homologation Programme
FRHPhe-02	New version of the FIM Helmet Programme, that will be applied for Circuit and Off-Road helmets. It will be strongly recommended as of 2025 and become mandatory for all FIM Competitions (except for Trial, pedelec, SSV and Land Speed World Records* riders) as of 2026. The technical requirements, different from FRHPhe-01, for this new standard are include a modified oblique test, a hemispherical anvil for normal impact tests and a cheek pad quick removal test.
FIM Racing Homologation	Official confirmation issued by the FIM acknowledging that Products comply with the required technical safety and competition requirement and meet particular specifications related to performance.
FIM Product Standard	Set of testing methods and corresponding performance criteria on the basis of which a Product may be granted an FIM Racing Homologation.
Homologation Emblem	Emblem issued by the FIM that includes the Applicant logo, the FRHP logo, the category of Product and the Product Model.
Homologation Fee	Cost associated with the homologation of a Product by the FIM as set out in this Homologation Manual.

* (Streamliners only)

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Homologation Label	Official label provided exclusively by the FIM to the Applicant once homologation has been granted.
Homologation Manual	Formal document setting out the technical information, criteria and general contractual terms and conditions applying to the Applicant upon submission of its Application Form. The Homologation Manual shall be duly filled in, signed and returned by the Applicant to the FIM. This is a precondition for the homologation to proceed.
Homologation Notice	Contractual document that grants the homologation to the Applicant for a specific Product and sets out the specific conditions applicable to the Applicant.
Homologation Refusal	Formal letter transmitted by the FIM to the Applicant in the event that homologation is not granted to an Applicant for a particular Product Model.
FIM Intellectual Property Rights	All trademarks, trade business names and names of the FIM competitions as provided in article 3 of the FIM Statutes including the titles "World Championship" "Grand Prix" and Prize Events ("World Cup"), patents, copyright (including copyright in a computer program), database rights, design rights, registered designs, utility models, semi-conductor topography rights, inventions, know-how, confidential information and all other intellectual property and rights of a similar or corresponding nature in any part of the world, whether or not registered or capable of registration, in respect of such rights which are registrable and all applications for registration of any of the foregoing rights.
Personal Data	Any information relating to an identified or identifiable natural person; an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.
Product	Any sort of light panel (FRHPlp), helmet (FRHPhe), barrier (FRHPba), and paints (FRHPpa) submitted by the Applicant for the homologation.
Product Model	The Model of Product indicated in the Application Form.
Product Sample	Unit of the Product that must be submitted by the Applicant at its cost to the FIM or the Testing Laboratory.
Supplier	Any third party that provides parts or material to assemble or to manufacture the product submitted by the Applicant for the FHRP.
Testing Laboratory	Private, public or private/public entity that has received an assignment from the FIM to perform tests according to a certain Homologation Manual and for the FRHP.

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Test Report	Document issued by the Testing Laboratory that contains the test results relatively to a specific Application Form.

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B. Terms applicable only for helmets

Accessories	Parts which are designed for the use of the helmet in special circumstances and they are not originality fitted on (e.g. aerodynamic devices, rain devices, hydration systems…)
BrIC	The Brain Injury Criterion (BrIC) is a measure used to determine the risk of inducing traumatic brain injury arising from a sudden head rotation and is calculated so: $$BrIC = \sqrt{\left(\frac{\omega_x}{\omega_{xC}}\right)^2 + \left(\frac{\omega_y}{\omega_{yC}}\right)^2 + \left(\frac{\omega_z}{\omega_{zC}}\right)^2}$$ Where: ω_x, ω_y and ω_z are maximum angular rates on X-, Y-, and Z-axis respectively ω_{xC}, ω_{yC} and ω_{zC} are the critical angular velocities in their respective directions: ○ ω_{xC} = 66.25 [rad/s] ○ ω_{yC} = 56.45 [rad/s] ○ ω_{zC} = 42.87 [rad/s]
Comfort padding	Pieces of soft foam inside the helmet used to fit as good as possible the head of the rider
FIM Helmets standard	Set of testing methods and corresponding performance criteria on the basis of which Helmets may be granted a FIM Racing Homologation.
Headform	Test device used as a human head surrogate in the testing of protective helmets. It is a three dimensional approximation of the human head, excluding facial features and pinnae, which contains a housing for the measuring equipment (sensors) in its centre of gravity.
Helmet	Personal safety equipment intended to protect the head of motorcycles riders in case of an accident. It is composed of a rigid shell, a protective padding, and comfort padding. The helmet is kept in place with a retention system composed of a chin strap and a Double-D ring closing system.
Helmet Model	Helmet size or range of helmet sizes of a certain name/design/shape/material as indicated in the Technical Specifications annexed to the Application Form. It includes all the components that are originality fitted on (e.g. shield, ventilation devices, aerodynamic devices…).
Helmet Sample	Particular unit of a Helmet Model, of a certain Version and of a certain Size.
Helmet Size	Suggested head circumference (expressed in cm) that ideally fits the helmet inner diameter.

HIC	The head injury criterion (HIC) is a measure of the likelihood of head injury arising from an impact for linear accelerations. The HIC is derived from the measurements of an accelerometer mounted at the centre of mass of a crash test dummy's head placed inside the helmet to be tested. It is defined as: $$HIC = \max_{t_1,t_2}\left\{(t_2 - t_1) * \left[\frac{1}{t_2 - t_1}\int_{t_1}^{t_2} a(t)dt\right]^{2.5}\right\}$$ where t1 and t2 are the initial and final times (in seconds) chosen to maximize HIC, and acceleration a is measured in *g*'s (standard gravity acceleration). The time duration, t2 – t1, is limited to a maximum value of 36 [ms], usually 15 [ms].
Normal impact test	During this test a helmet is crashed against a flat or hemispherical anvil to measure, in fully repeatable conditions, the capacity of the helmet to absorb and damp linear and rotational solicitations generated in impacts with only normal forces.
Oblique impact test	During this test a helmet is crashed against an anvil at 45[°] to measure, in fully repeatable conditions, the capacity of the helmet to absorb and damp linear and rotational solicitations generated in impacts combining normal and tangential forces.
PLA	Peak Linear Acceleration is the maximum resultant linear acceleration value recorded during a crash test at the centre of gravity of the headform. It is expressed in [g] (standard gravity acceleration).
PRA	Peak Rotational Acceleration is the maximum resultant rotational acceleration value recorded during a crash test at the centre of gravity of the headform. It is expressed in [rad/s^2].
Protective padding	Crushable inner part of the helmet used to absorb energy during an accident.
Shell	Hard outer part of the helmet used to spread the impact load and prevent helmet penetration.
SFC	Skull Fracture Criterion is a measure used to determine the risk of skull fracture. SFC is defined as the averaged linear acceleration over the HIC time interval: $$SFC = \frac{\Delta V_{HIC}}{\Delta T_{HIC}}$$ Where ΔTHIC is the time interval and ΔVHIC is the change in velocity over the time interval.
Version	Particular variant of a helmet model.

II. FOREWORD

Until now, the FIM has referred solely to existing international standards for the approval of helmets for use in its competitions, except in road racing since the introduction of the FRHPhe-01.

In order to take account of a more complete and demanding evaluation of performance, and give specific and exclusive recognition to helmets that meet more demanding criteria, the FIM International Technical Commission have now launched, the phase 2 of FIM Racing Homologation Programme for helmets (FRHPhe-02), which features the latest state of art methods of testing.

Under this programme, the FIM will grant helmets a homologation certificate and labels, which will be a mandatory prerequisite to be entitled to access in several competitions.

To obtain such homologation, the helmet will have to meet the high performance and quality standard set by the FIM, in addition to be approved according to selected international standards.

The helmet properties will be evaluated through a test protocol which aims to trigger the development of helmets offering an optimal protection for riders. An optimal protection is understood as providing a minimised risk of skull fracture and of the multiple forms of brain damage, as well as a measured and controlled mechanical performance of the protective padding and the shell.

The FIM test approach will first assess the helmet response to very high and medium-low severity linear impacts, randomly in 9 to 13 out of 22 pre-established locations distributed all over the helmet surface. This aims at evenly assessing the level of protection against skull fracture and at featuring the mechanical properties of the protective padding (or liner).

Innovatively, the FIM test procedure will then pioneer the assessment of the helmet response to medium severity oblique impacts, aiming at evaluating the level of protection against brain injuries generated by critical rotational accelerations. The oblique test constitutes the most novel and modern aspect of the methods of testing and reflects a very common scenario occurring in real world accidents, although never addressed in international standards so far.

In addition, a penetration test will be included in the protocol and used to check the shell resistance to impacts against sharp objects.

FIM Homologated helmets of FRHPhe-02 will be strongly recommended as of 2025 and become mandatory as of 2026, in all FIM competitions, except for Trial events, pedelec, SSV and Land Speed World records (for Streamliners only). The homologation will allow the FIM to ensure a more complete and high-end protection for its riders and in particular to better track and control helmets used in FIM competitions. It will also tend to preserve the interests of the homologated helmets' manufacturers. The FIM is hopeful that the new testing protocol can evolve still further, while serving as an inspiration for and cascading to international standards for road use.

This document was prepared under the direction of the FIM International Technical Commission, in collaboration with the Laboratory of Impact of the University of Zaragoza and leading road and off-

road helmet manufacturers. The document provides the TECHNICAL INFORMATION AND CRITERIA and the TERMS AND CONDITIONS, for interested parties wishing to apply to the Programme.

This document may be subject to amendments as determined by the FIM.

III. SCOPE

The FIM Homologated helmets of FRHPhe-02that will be strongly recommended as of 2025 and become mandatory as of 2026 for eligibility in all FIM competitions, (except for Trial events, pedelec, SSV and Land Speed World Records (for Streamliners only)).
For further information concerning the events at which FIM racing homologated helmets are mandatory, please refer to the specific Regulations yearly issued for each kind of competition.

IV. TERM

The terms and conditions of this Homologation Manual shall enter into force from the submission of the Application Form or the signature of this Homologation Manual by the Applicant, whichever is the earlier; they shall remain in force either during the Term of the Homologation Notice if the FIM Racing Homologation is granted, or until the Application is withdrawn if the FIM Racing Homologation is rejected.

V. TECHNICAL INFORMATION AND CRITERIA

V.1 ELIGIBLE HELMETS

A helmet is eligible for homologation if it is certified compliant with at least one of the following standards:

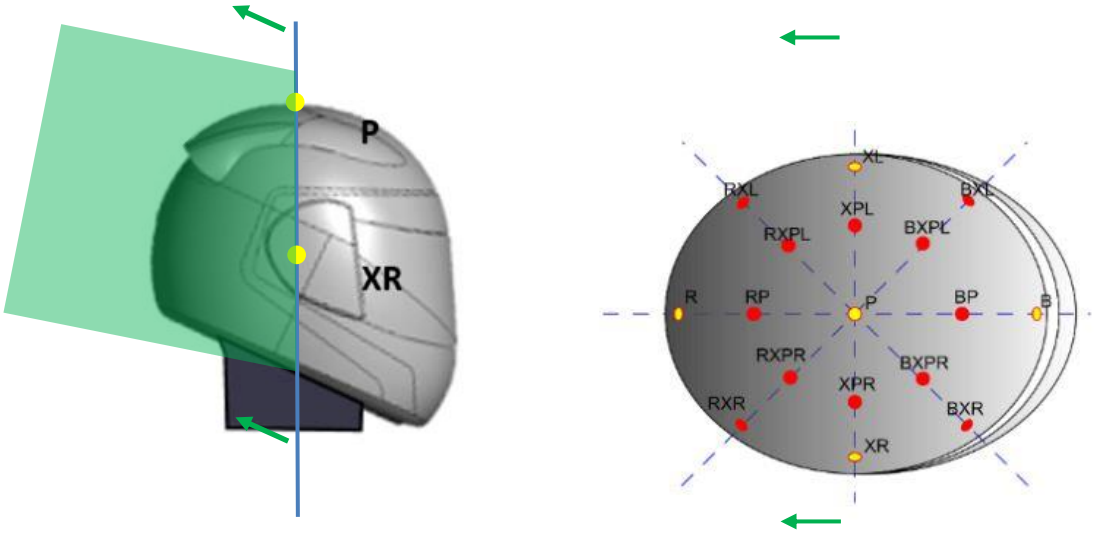
- UNECE 22.06 Type P
- Snell M2015 or M2020R or M2020D
- JIS T8133 2015 Type 2 Full face

Moreover, eligible helmets must meet the following requirements:

- a protective lower face cover must be present and must be not detachable or moveable;
- the shell shall be constructed in one piece (example: without any seam), and designed in such a way that it has no modular function;
- a retention system with a strap and the double D-ring closing system must be present;
- cheek pads must incorporate a quick release system, identified by a generic marking method (red strap for example).

For circuit racing helmets, the aerodynamic accessories must adhere to the following requirements. Additional parts such as wings or assimilated aerodynamic appendage can be proposed for homologation with the hereafter restrictions (spoiler, airvents, ducts are not concerned).

- It must be fixed behind the plane passing through points XL, XR, and P (green side).
- No part of the accessory can overlap the aforementioned plane.
- The direction of the “wing” must be toward the back, to avoid an anchor point with the kerbs.
- Sharp edges or sharp material are forbidden.
- With sole exception of the rear spoiler that must follow the streamline of the helmet. No aero appendixes may protrude more than fifteen (15) mm from the surface of the helmet outer shell (measured at 90°) from the outer shell surface in all points of the wing(s)).
- The maximum “wings” are limited to one on each side.



V.2 TESTING PROCEDURES

The FRHPhe homologates a range of Sizes (those wished by the Applicant) of a specific Helmet Model, if all the test results fulfil the conditions as defined hereinafter. Within one Size, the homologation is valid for the declared accessories if any and not for others (see hereinafter). If two consecutive sizes are manufactured with the same shell, protective padding and the corresponding test headform is also the same, the two sizes will be homologated, approving only one of them. Consecutive sizes refer to sizes with a maximum circumference difference of 2 cm between the smallest sizes and between the largest sizes specified for each size (examples: XS (53-54 cm) and S (55-56 cm) or M (57 cm) and L (59 cm)).

Within a helmet model, testing procedures described in this document imply the use of 6 Helmet Samples per Size, excepted for 2 consecutive sizes with the same shell as described previously, distributed in the different test phases as follows:

- Sample #1: Impact tests against flat anvil and lower face cover test (chin bar test).
- Sample #2: Impact tests against hemispherical anvil.
- Sample #3: Impact tests against oblique anvil and quick removal cheek pads test.
- Sample #4: Penetration tests.
- Sample #5: Storage.
- Sample #6: Extra tests if needed.

For consecutive sizes that are manufactured with the same shell, protective padding and the corresponding test headform is also the same. In this case, 6 helmet samples of one of the sizes will be requested and 1 reference sample of the other size.

The Homologation of other helmet versions and some accessories may imply additional specific testing. A detailed description of the test phases is given hereinafter.

The helmets are homologated per Helmet Model and per declared Size. The Applicant shall declare all accessories that may be fitted to the helmet and used in competition events. The homologation of some accessories may imply additional specific testing.

The Applicant shall declare the cover paint and the comfort padding used. The correspondence between the Helmet Size and the corresponding EN960:2006 headform to be used in the test shall be according to Table 1.

Helmets of Size 50 cm or smaller shall be tested with the headform "A". Helmets of Size 62 cm or larger shall be tested with the headform "O".

		Largest Size specified (cm)												
Smallest Size Specified (cm)		50	51	52	53	54	55	56	57	58	59	60	61	62
	50	A	A	C										
	51		A	C	C									
	52			C	C	E								
	53				C	E	E							
	54					E	E	E						
	55						E	E	J					
	56							E	J	J				
	57								J	J	J			
	58									J	J	M		
	59										J	M	M	
	60											M	M	O
	61												M	O
	62													O

Table 1: Correspondence between test headforms and Helmet Sizes.

1. Marking

Each helmet submitted for approval shall bear on the helmet, the corresponding approval mark from the primary homologation, the reference of the helmet model (and version if any), an indication of the size (in letter and cm) and the year of production.

2. Helmet conditioning and weight

Prior to any type of further conditioning for impact and penetration tests each helmet must be conditioned with a quantity approximately 25 ml of a solvent mix of 30% toluene and 70% isooctane. Using a cotton cloth approximately 150 mm square soaked in the solvent, apply the solvent to all regions of the shell within 50 mm of the retention system fixings, and keep these regions wet with the solvent for (7.5 ± 2.5) s. Repeat the procedure on the remainder shell, keeping these regions wet for (12.5 ± 2.5) s. After solvent conditioning, the Samples shall be stored in an atmosphere with a

temperature of (25 ± 5) °C and a relative humidity of (50 ± 20) % for a period of not less than 4h. No further conditioning is required prior to test.

The weight of the helmet fitted with the corresponding accessories as it will be used in competition and with standard paint shall be measured and recorded.

A. Impact tests: sample #1, sample #2 and sample #3

This set of tests is designed to measure the impact absorption capacity of helmets and the capacity of helmets to mitigate the effects of rotational solicitations. These capacities are determined by dropping in guided free fall a headform fitted with the helmet at a specific impact velocity upon a fixed steel anvil.

1. Headforms

A set of six headforms defined as follows shall be used:

- the external dimensions shall be according to EN960:2006
- the resonance frequency shall be according to EN960:2006
- the mass shall be according to EN960:2006 (instrumentation included)
- the position of the center of gravity shall be according to EN960:2006

The headform inertia matrix of reference for the homologation is according to Table 2 (with regards to the center of gravity):

Headform denomination	Circumference [mm]	Mass [Kg]	Ixx [Kg cm^2] (± 5%)	Iyy [Kg cm^2] (± 5%)	Izz [Kg cm^2] (± 5%)	Ixz [Kg cm^2] (± 5%)
A	495*	3.1 (± 0.10)	142.2	166.6	95.0	9.7
C	515*	3.6 (± 0.10)	172.6	203.3	113.2	13.8
E	535*	4.1 (± 0.12)	202.9	238.6	141.3	12.8
J	575*	4.7 (± 0.14)	264.0	318.3	193.1	17.0
M	605*	5.6 (± 0.16)	337.4	402.7	252.7	20.2
O	625*	6.1 (± 0.18)	383.6	461.1	293.5	23.6

Where the headform coordinate system has its origin in the center of gravity and:

- X-axis is defined as a line in the vertical longitudinal plane (midsagittal plane), parallel to the base plane (transverse plane). The X-axis is positive toward the front.
- Y-axis is defined as a line perpendicular to the vertical longitudinal plane (midsagittal plane). The Y-axis is positive to the left.
- Z-axis is defined as a line perpendicular to the base plane (transverse plane). The Z-axis is positive downwards.

*Tolerances according to EN960:2006

Table 2: Properties of the headforms.

2. Headform coating

For impacts against the oblique anvil, the headforms shall use an external additional coating. The coating is applied to the headform before the helmet is placed on the headform to be tested. The coating consists of a thin layer of high-performance platinum cure liquid silicone, with the technical data as indicated in Table 3. A quantity of 30 g of liquid silicone shall be spread uniformly on the A, C and E headform surfaces. A quantity of 40 g of liquid silicone shall be spread uniformly on the J, M and O headform surfaces.

Technical Data of the Coating		
Mixed viscosity	23	[Pa*s]
Specific gravity	1070	[kg/m^3]
Specific volume	9.32*10^{-4}	[m^3/kg]
Shore A hardness	10	A
Tensile strength	3.275	[MPa]
100% modulus	0.1517	[MPa]
Elongation at break %	1000	%
Die B tear strength	17.863	[kN/m]
Shrinkage	<0.1	%

Table 3: Properties of the additional coating.

3. Positioning of the helmet

The headform shall be positioned inside the helmet according to the following instructions:

- Helmet Positioning Index (HPI): the headform shall be positioned inside the helmet respecting the HPI. as declared by the Applicant; The HPI is defined as the vertical distance from the front edge of the helmet shell in the vertical median plane to the basic plane of a reference headform. The HPI shall respect the requirements of annex 5 of UNECE 22.06;
- chinstrap tension: the retention system shall be adjusted under the chin of the headform and tightened to a tension of 75 ± 5 N (over strap friction) with a deflection angle of 45 ± 5°.
- Before each impact, the helmet shall be re-positioned according to the HPI and the retention system re-tensioned.

4. Measuring assembly

Headforms shall be fitted with an assembly of instruments containing a set of three linear accelerometers and three angular rate sensors, located at their center of gravity. The linear accelerometers and the angular rate sensors shall be oriented according to the headform coordinate system defined in table 2.

The assembly shall enable the measurement at the center of gravity of the three components of the linear acceleration (ax, ay, az) and the angular rate (wx, wy, wz) over time.

The accelerometers shall be capable of withstanding a maximum acceleration of 2000 g without damage. The acceleration data shall be sampled at a frequency of 10000 Hz and filtered in accordance with the latest edition of ISO 6487 (CFC 1000).

The angular rate sensors shall have a measurement capacity of 8000 deg/s, between 0 and 2000 Hz. The angular velocity data shall be sampled at a frequency of 10000 Hz and filtered in accordance with the latest edition of ISO 6487 (CFC 180).

5. Anvils

- Flat anvil: the flat steel anvil shall have a circular impact face of diameter 130 ± 3 mm.
- Hemispherical anvil: the hemispherical steel anvil shall have a radius of 48 ± 0.5 mm.
- Oblique anvil: the oblique steel anvil shall have a solid rectangular impact face of 450 x 130 mm with an inclination of 45 ± 0.5 degrees. The impact face shall be covered in abrasive paper. The abrasive paper shall be a sheet of grade 40 close-coat aluminum oxide abrasive paper with X cloth backing. The abrasive paper shall be replaced after significant damage (up to 4 tests).

  The oblique anvil shall not move more than 2 mm in the horizontal direction when dropping the J (575) headform at a vertical impact velocity of 4 m/s. The headform must be positioned in the Lateral Left (270°) impact layout and impacted against the center of a circular Modular Elastomer Programmer (MEP) located at 65 mm from the upper and lower edges of the oblique anvil. The MEP must be a cylindrical polyurethane rubber pad of 130 mm in diameter, 25 mm thick and must have a durometer of 60 ± 2 Shore A.

6. Impact sites for flat and hemispherical anvil

Four impact tests shall be performed on Sample #1 and Sample #2. The impact points shall be selected among the 17 points as listed below and depicted in Figure 1, respecting the indicated order. The selected impact points shall not be less than 120 mm apart. Only one impact per site shall be performed.

B, in the frontal area (0º) of the outer surface of the helmet shell, situated in the vertical longitudinal plane of symmetry of the helmet and at an angle of 20° measured from a point situated in the central vertical axis of the headform, 12.7 mm above the reference plane.

BP, in the front-superior area (0º) of the outer surface of the helmet shell, situated in the vertical longitudinal plane of symmetry of the helmet and at a midpoint between the point B and the point P.

BXL, in the left front-lateral area (315º) of the outer surface of the helmet shell, situated in the vertical plane and at an angle of 20° measured from a point situated in the central vertical axis of the headform, 12.7 mm above the reference plane.

BXR, in the right front-lateral area (45º) of the outer surface of the helmet shell, situated in the vertical plane and at an angle of 20° measured from a point situated in the central vertical axis of the headform, 12.7 mm above the reference plane.

BXPL, in the left front-lateral-superior area (315º) of the outer surface of the helmet shell, situated in the vertical plane and at a midpoint between the point BX and the point P.

BXPR, in the right front-lateral-superior area (45º) of the outer surface of the helmet shell, situated in the vertical plane and at a midpoint between the point BX and the point P.

XL, in the left lateral area (270º) of the outer surface of the helmet shell, situated in the intersection of the central transverse vertical plane and the reference plane of the headform.

XR, in the right lateral area (90º) of the outer surface of the helmet shell, situated in the intersection of the central transverse vertical plane and in the reference plane of the headform.

XPL, in the left lateral-superior area (270º) of the outer surface of the helmet shell, situated in the central transverse vertical plane and at a midpoint between the point XL and the point P.

XPR, in the right lateral-superior area (90º) of the outer surface of the helmet shell, situated in the central transverse vertical plane and at a midpoint between the point XR and the point P.

P, in the superior area of the outer surface of the helmet shell, situated in the central vertical axis of the headform.

R, in the rear area (180º) of the outer surface of the helmet shell, situated in the vertical longitudinal plane of symmetry of the helmet and at an angle of 20° measured from a point situated in the central vertical axis of the headform, 12.7 mm above the reference plane.

RXL, in the left rear-lateral area (225º) of the outer surface of the helmet shell, situated in the vertical plane and at an angle of 20° measured from a point situated in the central vertical axis of the headform, 12.7 mm above the reference plane.

RXR, in the right rear-lateral area (135º) of the outer surface of the helmet shell, situated in the vertical plane and at an angle of 20° measured from a point situated in the central vertical axis of the headform, 12.7 mm above the reference plane.

RXPL, in the left rear-lateral-superior area (225º) of the outer surface of the helmet shell, situated in the vertical plane and at a midpoint between the point RXL and the point P.

RXPR, in the right rear-lateral-superior area (135º) of the outer surface of the helmet shell, situated in the vertical plane and at a midpoint between the point RXR and the point P.

RP, in the rear-superior area (180º) of the outer surface of the helmet shell, situated in the vertical longitudinal plane of symmetry of the helmet and at a midpoint between the point R and the point P.

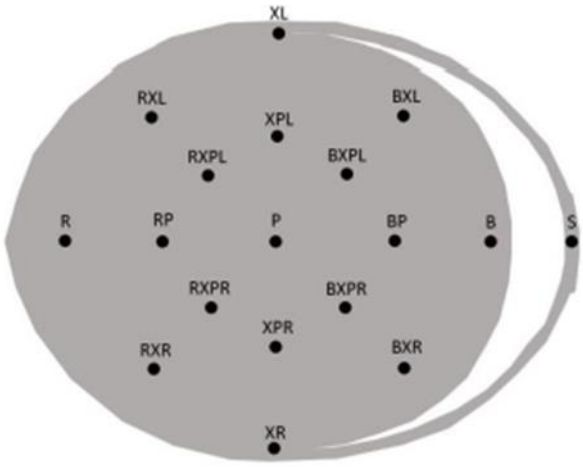


Figure 1: Identification of impact points.

Impacts at points shall be within 10 mm radius of the defined point.

The test headform shall be positioned so that the designated point of the helmet is vertically above the center of the anvil. The plane tangential to the impact point on the shell of the helmet shall be horizontal. Off-road helmets shall be tested without peak/visor fitted on during impacts against flat and hemispherical anvil (if this part is detachable from the shell). If any part of the helmet is detached during a test and it cannot be replaced, the remaining impact tests must be carried out without that part.

7. Impact sites for oblique anvil

Four impact tests shall be performed on Sample #3. The impacts shall be performed in correspondence of the 4 sites listed below and depicted in Figure 2. Only one impact per site shall be performed.

Front (0°): It is a frontal impact, leading to rotation in the vertical longitudinal plane around the Y-axis. The central vertical axis (Z-axis) of the headform is tilted 22.5° forwards. The vertical longitudinal plane of the headform is coincident with the vertical plane of symmetry of the anvil.

Lateral Right (90°): It is a temporal impact on the right side, leading to rotation in the transverse horizontal plane around the Z-axis. The vertical longitudinal plane of the headform is parallel to the impact surface of the anvil (45°). The reference plane of the headform is coincident with the vertical plane of symmetry of the anvil.

Rear (180°): It is a parietal impact on the rear part, leading to rotation in the vertical longitudinal plane around the Y-axis. The central vertical axis (Z-axis) of the headform is aligned to the vertical. The vertical longitudinal plane of the headform is coincident with the vertical plane of symmetry of the anvil.

Lateral Left (270°): It is a parietal impact on the left side, leading to rotation in the transverse vertical plane around the X-axis. The central vertical axis (Z-axis) of the headform is aligned to the vertical. The transverse vertical plane of the headform is coincident with the vertical plane of symmetry of the anvil.

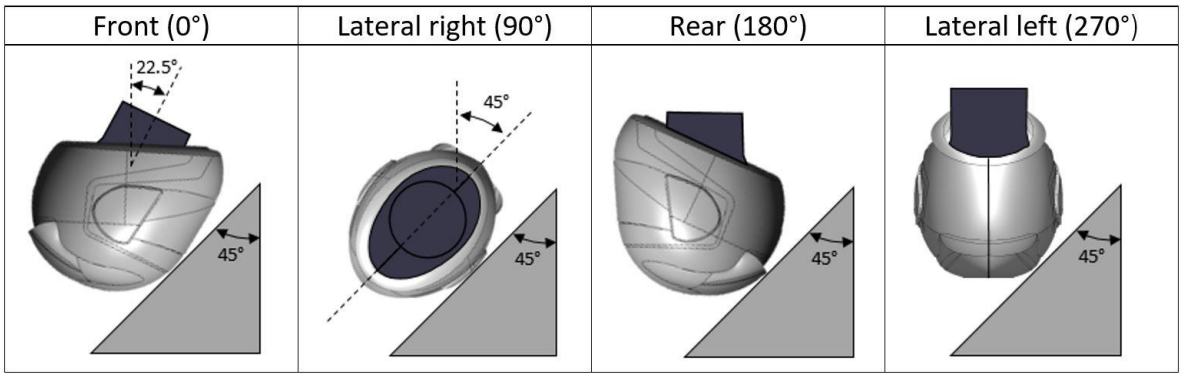


Figure 2: Impact layouts for the oblique impacts.

The first impact point between the helmet and the anvil shall be at least 10 mm away from any edge of the anvil. The test headform shall be positioned so that the designated impact point on the shell of the helmet is centered in the longitudinal impact surface of the oblique anvil. The impact sequence for full-face helmets shall be the following: Rear (180°), Front (0°), Lateral Left (270°) and Lateral Right (90°). The impact sequence for off-road helmets shall be the following: Front (0°), Rear (180°), Lateral Left (270°) and Lateral Right (90°). For all oblique impact layouts, the headform shall be positioned with a tolerance of ± 0.5°. Off-road helmets shall be tested with the peak/visor fitted on during impacts against oblique anvil (at least during the front (0°) impact point). If any part of the helmet is detached during a test and it cannot be replaced, the remaining impact tests must be carried out without that part.

8. Impact velocities

The drop height shall be such to obtain an impact velocity of:

- 8.20 (+0.15, -0.00) m/s for impacts against the flat anvil.
- 7.50 (+0.15, -0.00) m/s for impacts against the hemispherical anvil.
- 8.00 (+0.15, -0.00) m/s for Front (0°), Rear (180°) and Lateral-Left (270°) impacts against the oblique anvil.
- 5.00 (+0.15, -0.00) m/s for Lateral-Right (90°) impacts against the oblique anvil.

The velocity of the moving mass shall be measured between 1 cm and 6 cm before impact, to an accuracy of 1%.

9. Acceptance criteria

The Peak of the resultant Linear Acceleration (PLA) values shall not exceed 275 g in all impact sites against the flat and hemispherical anvil (Sample #1 and Sample #2) and 170 g in all impact sites against the oblique anvil (Sample #3). PLA (reported in g) shall be rounded to the nearest ones.

The Skull Fracture Criterion (SFC) shall not exceed 212 g in all impact sites against the flat and hemispherical anvil (Sample #1 and Sample #2) and 140 g in all impact sites against the oblique anvil (Sample #3). SFC (reported in g) shall be rounded to the nearest ones.

The Brain Injury Criterion (BrIC) shall not exceed 0,78 during the impact time, in all impact sites against flat, hemispherical and oblique anvils (Sample #1, Sample #2 and Sample #3). The final time of the impact is calculated as the time where the resultant linear acceleration decreases at 5 g after its maximum peak. BrIC shall be rounded to two decimal places.

The Peak of the Resultant Rotational Acceleration (PRA) shall not exceed 10000 rad/s^2 in all impact sites against flat, hemispherical and oblique anvils (Sample #1, Sample #2 and Sample #3). The PRA shall be calculated differentiating the rotational velocity values. PRA (reported in rad/s^2) shall be rounded to the nearest ones. Helmet's shield/visor of full-face helmets shall remain closed during the first oblique impact.

The helmet shall not exhibit any breakage or deformation dangerous to the rider. For example, shield/visor and shell significant fractures or any part of the helmet detached that can injure the rider. The inside of the helmet shall not exhibit any sharp edges that represent a risk of laceration or puncture to the rider. The retention system fixings shall not be released.

B. LOWER FACE COVER TEST (CHIN BAR TEST): SAMPLE #1

This test is designed to measure the capacity of helmets to protect the user against chin bar impacts. The test shall be performed according to the impact tests of the present procedure with the following inclusions or modifications:

1. Anvil

- Flat anvil: the flat steel anvil shall have a circular impact face of diameter 130 ± 3 mm.

2. Impact sites

An additional impact test shall be carried out on Sample #1 before the four impact tests defined for the impact tests of the present procedure. The impact point is defined below and depicted in Figure 1.

S, in the lower face cover area (0°) of the outer surface of the helmet shell, situated within an area bounded by a sector of 20° divided symmetrically by the vertical longitudinal plane of symmetry of the helmet.

The helmeted headform shall be positioned with the central vertical axis of the headform inclined 65±3º to the vertical with the vertical longitudinal plane of symmetry of the helmeted headform in the vertical position. The designated point shall be positioned vertically above the center of the anvil. If the impact point would be within 15 mm of the rim, the helmeted headform shall be re-positioned so that the impact point is not less than 15 mm from the rim.

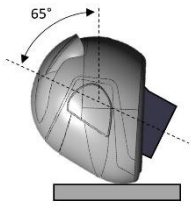


Figure 3: Chin bar impact test configuration

3. Impact velocity

The drop height shall be such to obtain an impact velocity of:

- 6.00 (+0.15, -0.00) m/s

The velocity of the moving mass shall be measured between 1 cm and 6 cm before impact, to an accuracy of 1%.

4. Acceptance criteria

The Peak of the resultant Linear Acceleration (PLA) values shall not exceed 275 g.

Helmet's shield/visor of full-face helmets shall remain closed during the test.

The helmet shall not exhibit any breakage or deformation dangerous to the rider. For example, shield/visor and shell significant fractures or any part of the helmet detached that can injure the rider. The inside of the helmet shall not exhibit any sharp edges that represent a risk of laceration or puncture to the rider. The retention system fixings shall not be released.

C. QUICK REMOVAL CHEEK PADS TEST: SAMPLE #3

This test is designed to qualitatively evaluate the ease with which the cheek pads are removed. The quick removal cheek pads test shall be performed on Sample #3 just after the last impact test against the oblique anvil with the covered headform.

1. General specifications

The quick removal cheek pads systems shall clearly indicate the removal process by means of instruction labels, loops, pull-tabs or any other means.

The quick removal system cheek pads must be identified by a generic marking method (red strap for example)

2. **Helmet removal**

The helmeted headform is placed horizontal with the face upwards. Cut the straps using trauma shears. Remove the cheek pads. Remove the helmet from the headform.

3. **Acceptance criteria**

Cheek pads removal shall be easily removed. After removing the cheek pads, the helmet shall come off with no resistance.

D. PENETRATION TEST: SAMPLE #4

The objective of these tests is to ensure the helmet shell integrity.

The testing procedure is in accordance with JIS T8133:2015 5.2 and 7.5 for a Type 2 protective helmet, with the following inclusions or modifications:

1. **Helmet support**

The support for the helmet being subjected to the penetration test is spherical so as to provide reasonable support for the helmet and conformance with the interior of the helmet immediately beneath the site of the penetration test.

2. **Penetration sites**

The penetration test shall be conducted at a minimum of 2 points located at any site on the helmet on or above the "test line" as defined by Snell M2020. The two points shall be at least 75 mm apart from each other.

3. **Acceptance criteria**

There must be no contact between the striker tip and the spherical support surface in all the spherical support surface in all the tests.

E. Sample #5: Storage

Sample #5 is the so called "reference helmet". The helmet is stored for reference.

F. Sample #6: Extra tests

Sample #6 shall be used for extra tests if needed.

G. Summary of acceptance criteria

A Helmet Model and Size is granted homologation (with the declared accessories if any) if it complies with all the criteria in accordance with the acceptance criteria summarized below

Sample	Specific test	Impact point	Impact severity	Acceptance criteria FRHPhe-02			
				PLA (g)	SFC(g)	BrIC	PRA (rad/s^2)
#1	Lower face cover test	S impact point	6 m/s	≤ 275	-	-	-
	Impact tests against flat anvil	4 among 17	8.2 m/s	≤ 275	≤ 212	≤ 0.78	≤ 10000
#2	Impact tests against hemispherical anvil	4 among 17	7.5 m/s	≤ 275	≤ 212	≤ 0.78	≤ 10000
#3	Impact tests against oblique anvil	Rear, Front and Lateral-left	8 m/s	≤ 170	≤ 140	≤ 0.78	≤ 10000
		Lateral-right	5 m/s	≤ 170	≤ 140	≤ 0.78	≤ 10000
	Quick removal cheek pads test	-	-	Cheek pads shall be easily removed			
#4	Penetration test	At least 2 points	3 kg striker 2 m height	No contact between striker tip and the spherical support surface			

Table 4: Acceptance criteria for FRHPhe-02

Helmet's shield/visor of full-face helmets shall remain closed during the lower face cover test.

Helmet's shield/visor of full-face helmets shall remain closed during the first oblique impact.

The helmet shall not exhibit any breakage or deformation dangerous to the rider. For example, shield/visor and shell significant fractures or any part of the helmet detached that can injure the rider. The inside of the helmet shall not exhibit any sharp edges that represent a risk of laceration or puncture to the rider. The retention system fixings shall not be released.

Notwithstanding the above, to be granted the homologation, the helmet shall not exhibit (after any of all the prescribed tests) any breakage or deformation that is deemed dangerous by the FIM.

H. Test Report

The test report should include all the information recorded as a result of the performance assessment of the helmet in accordance with Section **V.2 TESTING PROCEDURES**. Additionally, the test report should include at least the following information about the test:

i. Photographs of the helmet as well as batch number and date of manufacture;

ii. A complete listing of the tested of accessories,

iii. Any additional information requested at the discretion of the FIM.

I. FIM Marking and Labelling

Each helmet that has passed the requirements of this standard will have to be clearly labelled with FIM Label, which include an FIM hologram, to be firmly sewn on the helmet chinstrap. The FIM Label must be purchased from the FIM.

VI. CONTRACTUAL TERMS AND CONDITIONS

A. Application

In order to apply for the FIM Racing Homologation, the Applicant shall send the present Homologation Manual, duly completed and signed, with the requested information and attached documents (Application Form (homologation) to the FIM International Technical Commission (frhp@fim.ch)). By doing so, the Applicant thereby confirms formal acceptance of the rules and procedures contained in the Homologation Manual, including the Technical Information and Criteria, the Terms and Conditions as well as the Application Form.

The Applicant shall apply for the FIM Racing Homologation for all specific Models of the Product which are intended for use in the related FIM events.

Only complete applications will be taken into consideration and it is the responsibility of each Applicant to ensure that all relevant information and documentation is provided. The FIM may request any further information it deems necessary. Applicants shall respond to any such request promptly and within the specified deadline if any.

Once the application is completed, the FIM will request that the Applicant send free of charge new and virgin Product Samples to, and only to, the following Testing Laboratory.

The Applicant shall not charge the FIM or the Testing Laboratory for the cost of the Product Samples.

Any duties, VAT or other taxes, levies, expenses or other charges payable in relation to the provision and delivery of Product to the FIM respectively the Testing Laboratory and/or the handling of such Products Samples (e.g. delivery cost, shipping cost, customs clearance costs, including the return of any Product Sample, if applicable) shall, irrespective of the place of delivery, be declared and paid by the Applicant at its own cost.

B. Data Protection

By applying to the FRHPhe and to access FIM homologation services and products, the Applicant authorizes FIM to collect, store, process, transfer and use its Personal Data in accordance with the EU General Data Protection Regulation and the Federal Act on Data Protection of Switzerland where FIM is incorporated. Unless the Applicant indicates otherwise, the consent the Applicant provides by applying to FRHPhe shall be considered express and valid indefinitely.

By applying to the FRHPhe the Applicant also authorizes FIM to transfer its Personal Data to any third parties (notably laboratories etc.) assisting in the management and implementation of the FIM homologation services, located in other countries with laws that may not guarantee the same level of data protection as Switzerland. The Applicant authorizes these third parties to use, retain and store its Personal Data for the purposes of the homologation services and products.

Further information concerning the privacy policy of the FIM Racing Homologation Program can be found on this website https://www.frhp.org/.

The Applicant is also entitled to request FIM to withdraw its consent, erase, rectify or obtain any personal data FIM holds about the Applicant by sending its written request to gdpr-request@fim.ch.

In case the Applicant withdraws its consent or requests that its Personal Data be erased, FIM may be totally or partially unable to provide its homologation services or products.

C. FIM Intellectual Property Rights

By applying to the FRHPhe, the Applicant agrees to respect the FIM Intellectual Property Rights during and after the termination of the Homologation Manual or Homologation Notice, such as the names of the FIM and of its competitions together with the titles "World Championship", "Grand Prix" and Prize Events ("World Cup"), the FIM Marks, the FIM Homologation Visuals, Emblem and Labels, the FIM logos, trademarks and/or trade names of or used by FIM (whether registered or unregistered or whether registrable or not) constitute an exclusive property of the FIM and/or that the FIM holds and exclusive title for their usage.

The Applicant shall consequently under no circumstances make any use of the FIM Intellectual Property Rights such as the FIM names, the names of the FIM competitions, together with the titles "World Championship", "Grand Prix" and Prize Events ("World Cup"), the FIM Homologation Visuals, Emblem and Labels, the FIM logomarks, trademarks or trade names in a separate or combined manner either during the Homologation Notice or following its termination, contrary to the provisions of this Homologation Manual.

In addition, the use of the FIM Homologation Visuals, Emblem and Labels, the FIM logos by the Applicant shall under no circumstances give rise (directly or indirectly) to the mistaken impression on the part of the public and consumers (in particular) that the FIM might be considered as the manufacturer (or the manufacturer of any component part) of the Applicant's Product.

The Applicant agrees that it will not register, or cause to be registered, in any territory whatsoever, any of the FIM Intellectual Property Rights, such as the name and/or denomination of any FIM Marks, Competitions or any logos, trademarks and/or trade names of the FIM or used by the FIM (whether registered or not or whether registrable or not) in connection with its activity, or any other trademark, trade name, word, logo or symbol that is identical or similar to any such name and/or denomination of any FIM Marks, the FIM Homologation Visuals, Emblem and Labels, the FIM logos, trademarks or trade names trademark and/or trade name (whether registered or not or whether registrable or not).

By applying to the FRHPhe, the Applicant represents and warrants that its application does not infringe the trademark and trade name rights of any third party. The Applicant is solely responsible for ensuring that this is the case.

The FIM may request evidence of a licence to use a third party's trademark and/or trade name. If the FIM considers that such a licence has not been validly obtained it may at its sole discretion refuse the application, or request that changes be made to the application.

The Applicant shall promptly inform FIM of any infringement of any FIM Intellectual Property Rights that comes to the Applicant's attention.

The Applicant undertakes to provide, free of charge and royalty free, its trademark logo to be used by FIM in the FIM Homologation Emblem.

The Applicant shall indemnify and hold harmless the FIM from and against all claims, damage, losses, costs, (including, without limitation, all reasonable legal costs), expenses, demands or liabilities put forward by third parties for illegal competition, violation of copyright, claims of trademarks or industrial and intellectual property claims that may result from the activity of the Applicant not duly authorised by the FIM.

Regarding the FIM Homologation Emblem and Homologation Label, the FIM and the Applicant agree that:

i. title to any and all rights in the FIM Homologation Emblem and Homologation Label shall vest in the FIM;

ii. all use of the FIM Homologation Emblem and Homologation Label by the FIM shall cease upon termination or expiry of this Homologation Manual or the Homologation Notice. The Applicant shall not be entitled to continue to use the elements of the FIM Homologation Emblem or any of the FIM Intellectual Property Rights after termination or expiry of this Homologation Manual or Homologation Notice;

iii. all use of the FIM Homologation Emblem and Homologation Label by the Applicant shall cease upon termination or expiry of this Homologation Manual or the Homologation Notice;

iv. The Applicant shall not bring any action in respect of the FIM Homologation Emblem without the prior consent of the FIM.

D. Counterfeiting

Any counterfeiting of the FIM Homologation Label or any FIM material subject to the FIM Intellectual Property Rights arising out in relation with the Homologation manual or Homologation Notice constitutes a contractual breach and entitles FIM to claim for damages.

The FIM and the Applicant agree that a close collaboration and an active approach are required to act against counterfeit versions of the FIM Homologation Label.

If the Applicant or the FIM becomes aware that a third party has produced or sold counterfeit versions of the FIM Homologation Label, it shall inform the other party without delay.

If the Applicant becomes aware of counterfeit versions of the FIM Homologation Label, the Applicant may take any measures it sees fit, including without limitation by issuing a warning through different communication channels. The Applicant undertakes to make reasonable endeavours to act at its own cost against counterfeits of the FIM Homologation Labels including without limitation by taking any practical measures to minimise or eliminate the manufacture, sale, distribution, advertising and/or use of counterfeit versions of the FIM Homologation Label. The Applicant shall inform the FIM of any measures and/or actions it takes accordingly.

If the Applicant has clear and unambiguous evidence that a party has produced or sold counterfeit versions of the FIM Homologation Label, and if the Applicant decides to instate proceedings against that party, it shall inform the FIM at its earliest convenience and provide the FIM with a reasonable time delay for the FIM to consider joining the proceedings as a party.

E. Model Stability

With respect to each Product submitted for homologation, the Applicant undertakes not to modify the following (the list is not exhaustive): for the purposes of the FRHP Application:

i. the trademark(s)
ii. the commercial name(s)
iii. the design
iv. the materials
v. the manufacturing process
vi. dimensions
vii. components

In addition to the foregoing and without limitation thereof, the Applicant undertakes not to make any changes that generally alter the FIM racing homologated Product Model substantially without the prior written approval of the FIM.

Failure to respect the aforementioned undertakings may lead to immediate withdrawal of the homologation.

If the Applicant wishes to update an existing homologation in order to take into account one or more of the aforementioned items (the list is not exhaustive) it shall send the present Homologation Manual, duly completed and signed, with the requested information and the related documents attached thereto.

Based on this application, the FIM will assess whether the request falls within the scope of an update of an existing homologation or whether a new homologation is required.

F. Testing

The Testing Laboratory will be the sole entity approved to perform the tests in accordance with the present Homologation Manual.

All the homologation tests will be carried out, regardless of whether or not the samples comply with the requirements.

Subject to the availability of the Testing Laboratory and by appointment with the Testing Laboratory, one representative of each Applicant may attend the homologation tests carried out by the Testing Laboratory for its own samples and in absence of other Applicants.

The Testing Laboratory shall issue a Test Report (dated and signed) on the results of the tests performed and send it exclusively to the FIM. Such Test Report shall be sent to the FIM within a period of 2 (two) months after the date of receipt of the Samples. No Test report will be assessed by the FIM if the Application of the Applicant is not complete by this time.

G. Granting of the Homologation

The FIM will check and study the Test Report issued by the Testing Laboratory and is the sole authority having the power to assess it. When the FIM is satisfied that the homologation can be granted, the FIM will inform the Applicant which will be required to send a signed Homologation Notice. In principle, this Homologation Notice will be sent by the FIM within a month after the date of receipt of Test Report from the Testing Laboratory. The Homologation Notice will notably contain the conditions of use of the Homologation Emblem available for both the Applicant and the FIM. In the case a homologation is updated, an amendment to the existing Homologation Notice will be issued.

The homologation comes into effect only after the FIM has received the Homologation Notice countersigned by the Applicant and once it is signed by the FIM. Only one sample, independently of the size of the homologated helmet, shall be delivered to the FIM headquarters jointly with the submission of the Homologation Notice signed. The Applicant will then be entitled to refer to the homologated Product as "FIM racing homologated" and will be entitled to use the Homologation Emblem in accordance with the FIM's instructions.

In the event that the Product Model does not meet the acceptance criteria and is therefore not granted the FIM Racing Homologation, the Applicant will be informed accordingly through a formal Homologation Refusal.

The FIM may transmit the Test Report to the Applicant upon request.

H. No Assignment

The FIM Racing Homologation shall be binding on and ensure to the benefit of the parties and their respective successors and permitted assigns. The Applicant shall not be entitled to assign or sub-

contract its rights or obligations under the Homologation Notice in whole or in part without the prior written consent of the FIM.

I. Labelling

If the homologation is granted, the Applicant will order a certain quantity of Homologation Labels. The only human-eye visible information on the Homologation Label will be the FRHP logo. The rest of the information will be uploaded on a QR code that is linked to the digital database and can be modified whenever necessary. The QR code carries a unique identification number, which, when scanned, will show the Company name, the Product Model and any other relevant information related to the Product.

The use of Homologation Labels to the Applicant is subject to the prior signature of the Homologation Notice by the Applicant and the FIM.

The Homologation Label shall be firmly be sewn on the chinstrap at an accessible location for easy scanning the Product. The Homologation Labels shall not be available outside the Applicant's premises and shall only be fitted by the Applicant or their official agents on the respective homologated Products. For the avoidance of doubt, only Homologation Labels ordered from the FIM shall be used. Each unit of the respective FIM racing homologated Product model which will be manufactured and used/intended for racing must carry the official Homologation Label.

The Applicant undertakes and warrants that it applies the Homologation Label only to Products consistent with the actual Samples submitted to obtain the homologation.

The Homologation Label will be scanned by the FIM, which reserves the right for its officials or the officials of an FMN to remove it, or to remove the Product Model from the digital database, where there are valid reasons to do so.

J. Post-Homologation Controls

The FIM reserves the right to carry out post-homologation control tests on Products selected at random at the production site, at events or via a distribution channel, at any time. It also reserves the right to withdraw the homologation forthwith should the Products subject to random post-homologation controls be found not to be in conformity with the FIM criteria. The Applicant will be notified of the possible non-conformity of the Product.

K. Invoicing

A Homologation fee will be applied by the FIM to the applicant following:

i. 2500 CHF for homologation for the first homologation

ii. 500 CHF for any update of the first homologation

iii. 250 CHF for additional brand name request

iv. 250 CHF for re-branding

A Homologation Label cost will be applied by the FIM to ensure the viability of the FRHPhe by covering notably the related operational, maintenance and development costs. A net amount shall be paid by the Applicant according to quantity of labels per order as define below:

i. 9.50 CHF (Nine Swiss francs and fifty cents) per label for a quantity of 500 labels.
ii. 9.00 CHF (Nine Swiss Francs) per label for a quantity of 1 000 labels
iii. 8.50 CHF (Eight Swiss Francs and fifty cents) per label for a quantity of 2 500 labels
iv. 7.50 CHF (Seven Swiss Francs and fifty cents) per label for a quantity of 5 000 labels
v. 6.50 CHF (Six Swiss Francs and fifty cents) per label for a quantity of 10 000 labels

Payment of the fees and the Homologation Label costs shall be made in full without any set-off, deduction or other withholding whatsoever. For the avoidance of doubt, any possible tax (withholding tax e.g.), duties or charges due on the payment of such fee and Homologation Labels costs shall exclusively be borne by the Applicant. All sums provided for in this Homologation Manual are exclusive of VAT which shall be paid (if applicable) by the Applicant in addition thereto.

In cases where the homologation is granted, the invoice in respect of the Homologation Label cost will be issued together with the Homologation Notice; these shall be respectively paid and signed in due time by the Applicant. The payment of the invoice shall be effected within 30 (thirty) days after receipt and is a condition for valid homologation, without which the homologation can be withdrawn forthwith.

In cases where the homologation is not granted, the only the Homologation Refusal will be issued.

In addition and in any case, the Applicant agrees and acknowledges that a fee will be applied by the Testing Laboratory and charged to the Applicant to cover notably the costs related to the tests requested by the Applicant for each homologation application. The quote related to this fee will be sent to the Applicant by the Testing Laboratory once the Application Form has been validated by the FIM.

Concerning post-homologation controls, if the Product is deemed non-compliant with FIM Product Standard, the FIM will invoice the Applicant the fixed amount of CHF 5’000.- (five thousand Swiss francs). That amount corresponding to the maintenance costs includes notably the costs (if any) of purchasing the Products, the costs of the tests and the administrative costs.

If it is established that if the Product complies with the FIM Product Standard, no costs will be charged to the Applicant.

L. Warranties Regarding Environmental Responsibility and Compliance With Labour, Health And Safety Regulations

The Applicant hereby warrants, represents and undertakes that it has all necessary rights (including but not limited to any intellectual rights), permissions, power and capacity to enter into this

Homologation Manual and to perform the obligations deriving from it and, in so doing, is not in breach of any obligations nor duties owed to any third parties and will not be so as a result of performing its obligations under this Homologation Manual.

The Applicant hereby warrants that the manufacture and assembly of the Product takes place in strict compliance with the applicable legislation and regulations applicable to labour, health and safety (including but not limited to Article 32 of the UN Convention on the Rights of the Child) in the country(ies) in which the Product(s) is/are manufactured or assembled and in the countries in which it conducts business.

The Applicant hereby warrants that it observes the environmental obligations and the provisions of environmental legislation and regulations applicable in the country in which Products are manufactured or assembled and in all countries where it conducts business.

The Applicant hereby certifies that it uses its best efforts to limit emissions and use safe, energy-saving and environmentally friendly technologies in the manufacture and assembly of the Product(s) for which the Application is being made.

M. Indemnities and Liability

The Applicant acknowledges that it has primary and sole legal responsibility for any loss or damage suffered by users and third parties, imputed, directly or indirectly related to the homologated Product of the Applicant.

As the FIM is not involved in any way whatsoever with the manufacturing of the Product, the FIM shall not in any case be liable for any personal injury or property damages related to the use of the Applicant's Product, or any direct, indirect, punitive, special, consequential or incidental loss or damages (whether for loss of profit, loss of business, depletion of goodwill or otherwise caused to the Applicant or third parties arising from any alleged defect(s) related to the Product. In this regard, the Applicant hereby agrees to defend, indemnify, release and hold harmless the FIM, its employees, agents, officials, representatives and volunteers from and against any liability, loss or damage from claims, demands, payments, costs (including attorney's fees and expert fees), investigations, settlements or judgments due to third party claims, whether sounding in product liability, tort, or contract, or due to product recalls, related to alleged defect(s) in the Product.

The Applicant agrees to defend, hold defend, indemnify, release and hold harmless the FIM against all liability, loss, damages from claims, demands, payments, costs, including legal expenses and attorneys' fees, investigations, settlements or judgements arising out of any third-party claims (including but not limited to any intellectual property infringements claims) or allegations related to any breach by the Applicant of its warranties or obligations under this Homologation Manual.

All the warranties and indemnities made under this Homologation Manual shall remain in force indefinitely.

The FIM shall not in any case be liable in contract, tort or otherwise (including any liability for any negligent act or omission) for any direct or indirect, punitive, special, or consequential or incidental loss or damages caused to the Applicant or third parties which may arise from breach or out of or in connection with the FRHPhe. In any event, the FIM's maximum aggregate liability in contract, tort, or otherwise (including any liability for any negligent act or omission) howsoever arising out of or in connection with FIM's obligations to the Applicant under the FRHPhe (e.g. to process the submitted Application Form, open the homologation procedure, assess the Test Report, issue the Homologation Notice or Homologation Refusal within a month of receipt of the Test Report, ship labels on Applicant's request, send Test Report on Applicant's request) in respect of any one or more incidents or occurrences in the framework of the FIM Racing Homologation shall be limited to a sum equal to the amount of CHF 5'000.- (five thousand Swiss francs). Such exclusion or limitation of liability shall also apply to the personal liability of employees, agents, representatives, officials and volunteers of the FIM.

For the avoidance of doubt, nothing in this Homologation Notice shall limit the liability of the Applicant towards the end-users or to other third parties or shall cap the Applicant's liability to the FIM.

N. Confidentiality

The FIM and the Applicant undertake to keep the terms of the Homologation Manual and Notice strictly confidential.

The FIM undertakes to treat and keep confidential any details provided by the Applicant and not to divulge any information as to testing of the Product Samples, materials used by, or manufacturing processes employed by the Applicant, or any designs, drawings, specifications, or other technical or confidential information as to the Applicant's products or prototypes of products, to anyone without prior written permission of Applicant.

It is understood that only the FIM may publish, or share general data derived from testing without disclosing any tradename or Applicant/Supplier identifications.

The FIM's obligation of confidentiality shall be limited in so far as local laws and/or safety considerations and/or instances of counterfeiting may require certain information to be divulged.

The Applicant hereby waives all requirements of confidentiality with respect to its Suppliers and Distributors vis-à-vis the FIM.

Except for promotional purposes as provided for in this Notice, no public announcement shall be made by the Applicant in relation to the FRHPhe without the prior written consent of the FIM.

O. Insurance

The Applicant hereby certifies that it is properly insured against all risks which may arise from or in connection with the Product and that it will at all times maintain an appropriate product liability

insurance policy in respect thereof. The Applicant hereby agrees to provide a copy of the policy contracted upon simple request of the FIM.

The Applicant shall maintain at its own expense general and professional liability insurance and public liability insurance for adequate amounts for any one occurrence or series of occurrences arising out of any one event. Such insurance policies shall include cover in respect of product liability insurance for third party claims, and for the indemnification of the Applicant's obligations under the Homologation Manual and Notice.

The Applicant undertakes and warrants that it shall not do anything or omit to do anything that may affect the validity and/or compromise the applicability of any insurance coverage referred to in this Homologation Manual.

P. Withdrawal

Without this giving rise to any indemnity whatsoever, any decision will not give rise under any circumstances to any claim against the FIM from the Applicant. The FIM may immediately and without notice (in addition to and not in substitution for any of its other rights and remedies under this Homologation Manual or in law) withdraw the FIM Racing Homologation granted to the Applicant in the following cases:

i. where the Product submitted for homologation no longer meets the (new and/or amended) standards required for entry and/or the acceptance criteria as defined by the FIM (see inter alia Section **VI CONTRACTUAL TERMS AND CONDITIONS, J. Post-Homologation Controls** above);

ii. where any conduct (e.g. act or omission, behaviour, public statement, etc.) whatsoever on the part of the Applicant, his management, employees, representatives or agents, which causes or may cause any prejudice (e.g. any direct or indirect or consequential loss or damages (whether for loss of profit, loss of business, depletion of goodwill or otherwise and including but not limited to any damage to property or death or injury)) to the FIM or its reputation;

iii. in the event that the Applicant commits a breach of any of its obligations under this Homologation Manual.

Q. Consequences of Withdrawal

Upon withdrawal of the FIM Racing Homologation:

i. all of the rights granted by the FIM in the framework of the FRHPhe (including those granted under this Homologation Manual) shall forthwith terminate and, where applicable, automatically revert to the FIM;

ii. the Applicant shall not use or exploit its previous connection with the FRHPhe, whether directly or indirectly;

iii. all sums due and payable to the FIM by the Applicant at the date of withdrawal of the FIM Racing Homologation shall be paid immediately together with any accrued interest on the same;

iv. in the event that the withdrawal of the FIM Racing Homologation arises from non-payment by the Applicant of any sum due under this Homologation Manual, the FIM shall, without prejudice to any other rights under this Homologation Manual or law, be entitled to receive the balance then outstanding of the total Homologation Fee and Homologation Labels costs as set out in Section **VI CONTRACTUAL TERMS AND CONDITIONS,** .K. **Invoicing** of this Homologation Manual;

v. the Applicant shall not have any right to any indemnity or payment of compensation or damages;

vi. the FIM may make a public announcement regarding the withdrawal of the FIM Racing Homologation.

If the FIM Racing Homologation is withdrawn by the FIM pursuant to Section **VI. CONTRACTUAL TERMS AND CONDITIONS**, **P Withdrawa**l above, the Applicant shall be required to pay the FIM a penalty in the amount of CHF 5'000.- (five thousand Swiss francs). The penalty is payable even if the FIM has not suffered any loss or damage.

Furthermore and in any case of withdrawal of the FIM Racing Homologation, the FIM is entitled to recover from the Applicant any losses and damages as may be allowed under the law.

To apply for re-homologation for a withdrawn Product Model, the Applicant should follow the normal application process. The application will be treated as a new submission.

R. Waiver

Failure or neglect by either party to enforce at any time of the provisions hereof shall not be construed nor shall be deemed to be waiver of either party's rights hereunder nor in any way affect the validity of the whole or any part of this Homologation Notice nor prejudice either party's rights to take subsequent action.

S. Announcement

No announcement shall be made by the Applicant in relation to the FRHPhe without the prior written consent of the FIM.

T. Transparency

The Applicant has a duty of transparency and disclosure towards the FIM as the homologating body.

Any sporadic or regular malfunction or sporadic or systemic defect affecting the Product that arises at any time shall immediately be reported to the FIM and remedial measures proposed. Where necessary, the homologation will be withdrawn.

U. Severability

If any provision of this Homologation Notice shall be held to be invalid, illegal or unenforceable, then both parties shall be relived of all rights and obligations arising under such provision and such provision shall be modified to the extent necessary to make it valid, legal and enforceable whilst preserving the intent of the parties. All other provisions of this Homologation Notice shall be regarded as fully valid and enforceable unless otherwise proved.

V. Termination

The Applicant may withdraw its Application and terminate the FIM Homologation Manual and Notice upon written notice to the FIM before the grating of the FIM Racing Homologation or upon at least thirty (30) days' notice once the Homologation is granted.

Either party (the Applicant or the FIM) may terminate this Homologation Notice with immediate effect upon written notice to the other party f at least one of the following conditions is met:

i. if the other party is dissolved (other than pursuant to a consolidation, amalgamation or merger);

ii. If the other party becomes insolvent or is unable to pay its debts or fails or admits in writing its inability generally to pay its debts as they become due;

iii. if the other party seeks or becomes subject to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for it or for all or substantially all its assets;

iv. if the other party has a secured party take possession of all or substantially all its assets or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all its assets and such secured party maintains possession, or any such process is not dismissed, discharged, stayed or restrained, in each case within thirty (30) days thereafter; or

v. if the other party causes or is subject to any event which, under the applicable laws of any jurisdiction, has an analogous effect to any of the events specified in clauses *i* to *iv* inclusive above (of this **Section VI CONTRACTUAL TERMS AND CONDITIONS., V**).

W. Termination Consequences

Upon termination of the FIM Homologation Manual or Notice:

i. all of the rights granted by the FIM in the framework of the FRHPhe (including those granted under the Homologation Manual and Notice) shall forthwith terminate and, where applicable, automatically revert to the FIM;

ii. the Applicant shall not use or exploit its previous connection with the FRHPhe, whether directly or indirectly;

iii. all sums due and payable to the FIM by the Applicant at the date of termination of the FIM Racing Homologation shall be paid immediately together with any accrued interest on the same;

iv. in the event that the termination of the FIM Racing Homologation arises from non-payment by the Applicant of the FIM Racing Homologation fees and payable amounts, the FIM shall, without prejudice to any other rights under this Homologation Notice and Manual or law, be entitled to receive the balance then outstanding of the total Homologation fee and the Homologation Label;

v. the Applicant shall not have any right to any indemnity or payment of compensation or damages.

vi. the Applicant shall immediately surrender to the FIM all the unused FIM Homologation Labels and any other materials or documents issued to it pursuant to this Notice.

vii. the FIM may make a public announcement regarding the termination of the FIM Homologation

The termination of the Homologation Notice and Manual will not under any circumstances give rise to any liability on the part of FIM to pay any compensation to the Applicant, including but not limited to, for loss of profits or goodwill.

X. Notices

Any notice given under the Application shall be in writing and signed by authorised representatives on behalf of the party giving it and shall be sent by hand, prepaid recorded or special delivery post, courier, fax and/or email, marked for the attention of the relevant party and to the address and/or number set out below:

In the case of the Applicant:

To the Address, email and telephone indicated in the Application.

In the case of the FIM:

Attention of:	FIM Racing Homologation Programme responsible
	Route de Suisse 11
	CH-1295 Mies
	Suisse
Email:	frhp@fim.ch
Fax N°:	+41 22 950 95 00

Y. Applicable Law and Arbitration

The Applicant shall comply with the FIM regulations, including the FIM Statutes and By-Laws, the FIM Sporting Code, the FIM Disciplinary and Arbitration Code as well as any other FIM regulation that may be relevant for the homologation requested by the Applicant.

Any dispute arising from or in connection with the FRHP (including the validity or interpretation of this Homologation Manual) shall be governed by and interpreted exclusively in accordance with Swiss law and shall be submitted exclusively to the Court of Arbitration for Sport (CAS) and resolved definitively in accordance with the Code of Sports-related Arbitration in force on the date on which the Request for Arbitration is submitted.

The Panel shall consist of one or three arbitrators, which shall be independent of the Parties and appointed in accordance with the Code of Sports-related arbitration of the CAS. The seat of the arbitration shall be Lausanne (Switzerland). The arbitral proceedings shall be conducted in English.

The Expedited Procedure shall apply to the arbitration proceedings including to the provisional and super-provisional measures. The time-limit with respect to the designation of an arbitrator shall be 15 (fifteen) days. If the circumstances so justify, the Panel may extend or shorten the above time-limit.

Notwithstanding the above, the parties may agree at any time to submit the dispute to mediation in accordance with the CAS Mediation Rules.

Furthermore, the Applicant may not seek damages or take action to gain compensation for any inconvenience or other loss incurred. Finally, any decision to withdraw the FIM Racing Homologation will have immediate effect and the stay of its execution will not be entertained in any circumstances by the CAS Panel and cannot therefore be submitted to arbitration.

The Applicant confirms that he has read and agreed to the present Homologation Manual. In particular, the undersigned Applicant confirms that he is cognisant with and accepts the Term and Conditions contained in this Homologation Manual.

Applicant's representative

Name Signature

On ____/____/____

Note: Please initial each page in the dedicated boxes

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