PROCEDURES FOR THE RECOGNITION OF FIA INTERNATIONAL DRAG STRIP

2021 Update

1. Implementation

Having been approved by both the FIA Circuits Commission and FIA Drag Racing Commission, these guidelines will be published as of the 10th July 2021. Any new facility being built after this date should aim to comply in full with these standards.

A track will be inspected or re-inspected as part of the procedure to gain its FIA License and should a track fail to comply with part or parts of this guidelines, the FIA may still grant a License providing that alternative procedures, features or equipment be in use instead to ensure that minimum standards are met. The FIA Safety Department, with the support of the Circuits Commission and Drag Racing Commission, will use its discretionary powers in such cases.

2. Definitions

Race distance: Typical race distance is ¼ mile (402.336 metres). The Top Fuel and Funny Car categories will compete over a maximum 1000 feet (304.800 metres) distance and some sportsman categories can compete over the 1/8 mile (201.168 metres) distance. The speed trap length should be checked with the relevant timing equipment manufacturer.

Track: The entire competition area of the facility, including strip, pits, return road, parking area, etc.

Strip: The racing surface of ¼ mile (402.336 metres), in addition the braking and start line areas.

Strip measures/timing: All measurements have to be documented and available for the drag strip inspector. All measurements have to be within a tolerance of 10 mm. The strip and all timing points have to be measured with calibrated measuring equipment, capable of an accuracy of 5 mm in any given length.

Burnout Area: An area ahead of the start line designated to perform a burnout in order to heat up the tires for better traction and to get rid of any debris on the tires.

Shut off (or shutdown, or braking) area: Part of the drag strip past the finish line on which the vehicles decelerate. The first braking area is the "Primary" braking area, which is normally sufficient for the vehicles to slow down and stop, the second braking area is the "Emergency" braking area, which is used in case the first braking area is insufficient to stop the vehicles.

Collection area / return road: The collection area is situated at the end, and on either side, of the strip and is used to hold the race cars until they are picked up by their tow vehicles and pit crew, towing them back to the pits using the return road.

Return road: The return road connects the collection area with the pit area. The return road must be minimum 6-meter-wide and allow vehicles to pass either direction.

Inspection: A visit by an inspector delegated by the FIA in order to establish recommendations in accordance with these Procedures, to verify or approve work performed on the basis of such

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recommendations, or to verify the conditions and services required for the conduct of an international event.

License: A certificate testifying that a drag strip has been inspected by the FIA, stipulating the conditions under which it may be used and the categories of cars and events which may be admitted, for entry on the international FIA calendar.

3. FIA International Drag Strip Specifications

This specification, compiled by the FIA Drag Racing Commission and the FIA Circuits Commission, shall be referred to by FIA motorsport circuit inspectors when determining whether the venues are capable of hosting events that are entered on the FIA International Calendar. To this end, this should be used for initial guidance by course designers and operators.

The specific requirements made of a course by the FIA inspectors will be based on the study of the strip dossier by the FIA and the adaptation of recommendations to each case individually, in particular in consideration of past experience gained in the case of an existing strip, or other special circumstances in the case of a new strip.

These specifications for a FIA International track apply to any venue used for an event entered on the International Sporting calendar or within the framework of an FIA International, Cup, Championship or Trophy. Any drag strip used for a national event must be inspected and approved by the ASN concerned or its authorised sanctioning body in accordance with its national regulations and under its own responsibility.

3.1 The Strip

The following describes the characteristics and the minimum requirements for a FIA International drag strip:

Characteristic	Minimum Requirement
Drag Strip minimum width:	18.5 metres between the walls.
Drag strip maximum width:	22 metres between the walls.
Maximum longitudinal profile of the strip:	1 %
Maximum longitudinal profile of the braking area:	1% decline, 5% incline.
Maximum transversal % profile of the strip:	1 % incline and/or decline from the centre/crown.
Minimum length shutdown braking area for an 1/8 mile (201.168 metres) strip:	600 metres. For existing tracks, shorter distances can be considered should additional arresting provisions be in place.
Minimum length shutdown braking area for a 1000ft (304.800 metres) strip:	800 metres for new tracks. For existing tracks, shorter distances can be considered should additional arresting provisions be in place.
Minimum shutdown braking area for a 1/4 mile (402.336 metres) strip:	800 metres for new tracks. For existing tracks, shorter distances can be considered should additional arresting provisions be in place.
Minimum shutdown area width:	The shutdown area should continue at the same width as the drag strip for its full length until it meets with the arrestor bed. The

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	shutdown area is allowed to be narrowed down to minimum of 12 meters, maximum taper 5%, 400 meters after the finish line.
Strip surface material and finish:	Concrete or asphalt. It is recommended to use concrete with a Class F1 finish. It is recommended to use asphalt with 6-8 mm stone with 2-3 mm filler.
Strip Surface Flatness:	The strip surface flatness should be maximum +/-3 mm variation in any 5 metre distance when ambient temperature is 20 degree Celsius.
Maximum expansion gap dimensions for concrete surfaces:	20 mm gap after every 110 metres when ambient temperature is 20 degree Celsius.
Drainage:	Adequate space at the side of the strip should be allowed for the drainage of water from the racing surface. Holes (max 150 mm / 6 inch) should be drilled in the concrete walls to allow water to flow from the race surface to the drainage areas, consideration should be taken to stop water flowing from the outside of the wall on to the strip. The drain holes should be on both sides of the strip situated approximately every 10 metres. If drainage channels are utilized on the strip surface, the maximum width must be less than 75mm. Drainage channels are not permitted on the strip surface unless they are situated between the centre lines or directly at the wall.
Lane designation lines:	Lines should be used to mark the boundaries of each race lane and should be painted in a permanent water resistant material, which resistant to fuel, oils or other chemicals used for oil downs. The lines should be 100 mm in width and in a colour that stands out visibly against the strip. Two lines of 100 mm each with a 100 mm gap on the centerline of the strip. The outer edge boundary of the strip is considered the wall. A paint complying with the FIA Standard 3503-2018 is recommended.
Finish line marking:	The wall must be painted yellow after the 1000ft (304.800 metres) finish line (on both sides) for a distance of at least 20m. The wall must be painted red after the 1/4th mile (402.336 metres) finish line (on both sides) for a distance of at least 20m. The finish line in use must also be indicated with flags, Styrofoam poles (or similar) or other markers painted with colour to provide good visibility for the drivers. Only the correct finish line for the category competing should be installed.
Shutdown surface:	Continuation of the strip or other material approved for racing surfaces. The shutdown area should be as smooth as possible and maintained in a clean, dry and dust/debris free condition.
Sand trap or other arrestor method types:	Mandatory. Sand trap should be at the point where the wall ends, and after any final exits, so that the driver cannot avoid the sand trap, but a maximum of 1.5 km after the finish line. Material: gravel, sand or any other FIA approved material. After the sand trap there must be a hard arrestor like a tyre wall, catch net, purpose built plastic tank crash barriers filled with water or similar. The intersection point of the strip and the sand trap must be at the same level, and that level must be maintained. The sand trap must be

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	agitated to loosen the material no more than one week before an event and checked after every rainfall.
Placement and dimensions for Sand Traps:	2 metres wider than the braking area on each side, minimum length 50 metres, depth minimum 1 metre.
Concrete Wall – Strip:	Minimum height 760 mm for the first 1000ft., after 1000 ft (304.800 metres) minimum height 990 mm. A gradual elevation change from 800 mm to 1000 mm should be achieved in no less than one (1) metre distance. The complete wall surface must be at an angle of between 85^{o} and 90^{o} to the strip surface. If the wall is implemented with separate blocks, the attachment must be FIA approved and the gap between two blocks can be maximum 10 mm. The concrete walls must be of a smooth construction including the joining surface areas between any 2 blocks, should the connecting blocks not be a continuous flat surface the transition to the high point must be progressive with no flat edges adjacent to the direction of travel. Holes (maximum 150 mm diameter) to accommodate timing equipment permitted.
Concrete Walls – Shutdown area:	Mandatory, minimum height 990 mm. The complete wall surface must be at an angle of between 85^{o} and 90^{o} to the strip surface.
Escape gates / Emergency response:	To provide an exit for all race vehicles there should be at least 2 (two) escape gates after the finish line. If the shutdown area is longer than 1000 metres, it is recommended to have 3 (three) escape gates. To ensure possible exit, the gate must be built the way that any racer using the gate must kill the speed before they exit. The first gate should be around 100 metres after the finish line. The second gate should be approximate half distance between the finish line and the final exit. The gates should be manufactured in steel. The gates must be built flush with the wall. The minimum width should be 2 X 2000 mm, maximum 2 X 3500 mm. The main frame should be minimum 200 x 200 mm, support frames can be minimum 100 x 100 mm. The gate support of 200 x 200 mm to a depth of 2 metre below the ground. The front plate thickness minimum 6 mm and should be built in such a way that parachutes cannot be caught in any gap. The lower locking mechanism 40 mm solid bar going into a receiver with a material thickness of at least 3 mm. The receiver should be installed minimum 200 mm into the ground. The top of the gate should be locked with minimum 30 x 10 mm flat bar. The gate height must be the same as the wall around it. The gate must open outwards away from, and never into, the strip. The gates must be coloured in a contrasting finish to that of the walls to give the gate better visibility to the racer.
End of strip exit:	The opening at the end of the strip must be minimum 10 metres, maximum 15 metres. A gate is not mandatory.
Timing Equipment:	See Drag Racing: Technical Regulations and Race Procedures, section 9, article 14 – Timing Equipment. The guard beam will be considered the start line and the racing distances are measured from the start line onwards. Any timing equipment past 60ft. must be installed on the outside of the wall (except centre line reflectors).
Burnout Area:	A suitable area is required before the start line for staging and pre-race preparation and burnouts. This should be in line with the racing

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	surface and provide for vehicles up to 10 metres in length. Burnout Box should locate 15 to 20 metres before the start line.
Start area protection	There should be barriers arranged in a way to protect the starting line officials from vehicles in the burnout area. The barrier must be minimum of 600 mm in height. The barrier must be of sufficient strength to withstand an impact from a low speed vehicle.
Fixtures outside the wall:	The minimum distance between any fixture (scoreboards, mobile tv units, lighting units, etc.) and the wall should be at least 10 metres.
Spectator bridge or tunnel:	Spectator bridge is allowed only behind the burnout area, and should be built in such a way that it is not possible to view or drop anything on the strip. If a tunnel is built, it must be built in such a way that it stretches between spectator areas, and the openings of a tunnel should be a minimum of 10m from the edge of the strip. Any construction on top of the strip must be at least 10 metres above the strip.
Restricted area:	Restricted areas will be considered as locations in which members of the public are not permitted. All restricted areas must be clearly identified with appropriate signage. Restricted areas will include: • The strip. • The area between the wall and the spectator viewing area on each side of the strip may be used by media representatives for the first 50 metres. Areas beyond 50m may only be accessed by Officials or rescue services. Strictly no VIPs, team members, media representatives, etc, are permitted in this area, unless given express permission by an official.
Speed limit:	The speed limit outside the strip must be limited to an appropriate level according to local laws and with the aim of creating a safer environment for public, teams and officials to work. The speed limit must be clearly identified with appropriate signage.

3.2 Pits and Staging Lanes (Line Up)

The pit area must be designed in a way that all teams have assigned pit spaces. The space must be minimum 7 x 18 metres and identified with a race number. The pits must be designed to allow passage for spectators, teams and Race vehicles to move around. There must be enough room for emergency vehicle to attend any possible emergency. The same applies for cleaning and maintenance vehicles.

A single phase (minimum 10A) and three phase (minimum 16A) electricity supply must be available for all teams (at a reasonable cost).

Environmental issues should take into consideration any local/national requirements. It is recommended to have oil absorbent mats placed under the race vehicle. A sufficient number of Oil disposal units must be available. There should be sufficient number of bins to accommodate the number of entries and spectators.

The pit area must be secured to limit unauthorized access. It is the event organizers responsibility to limit non-race vehicle movements so as not to block the race traffic. There must be means to limit spectator movements in case of emergencies. There should be information boards for spectators to provide instructions on emergency procedures.

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Line up area must be a restricted access area, with no spectators allowed there. The line-up area must be large enough to hold a minimum of 16 vehicles complete with tow vehicles. A minimum of five 50-metre lanes are mandatory in the line-up. The line-up area must be connected to the start line area and have direct access to the collection area for tow vehicles.

3.3 The collection area, including return road

The collection area must be wide enough to accommodate race vehicles and their tow vehicles and, in addition to that, there must be at all times open space for emergency vehicles to pass the cars. Minimum 20 metres wide and 600m^2 in total not including the return road. The collection area must connect to the return road that will lead the cars into the pits. Emergency vehicle access must be maintained at all times.

3.4 Technical Area ***(Scrutineering Area)***

The technical area must be located in an area not accessible to the public, with adequate signage labelling it as a restricted area.

The area must be designed in such a way that it is as safe as possible to work in. A suitable location for the technical area is on the return road before vehicles return to the pits. The return road must be designed in such a way that competitors can enter the technical area with their race cars before entering the pits. The area must be designed in such a way that when scrutineering, etc, is ongoing, it is possible to pass the area in both directions at all times.

3.4.1 Weighing Facilities

An area with a flat, level and firm surface measuring a minimum of 3m x 15m containing the scales, which must be recessed so as to be level with the surface as per below image. Scales must have a valid calibration certificate, which should be on-site and available for inspection if required.
An appropriate structure that can accommodate the officials and equipment at the weighing facility is mandatory. Electricity, lights, means of communication, and appropriate fire extinguishers must be available.
A suitable method of communicating the Event live timing data to the weighing facilities must be provided.
The weighing facilities should be situated on the return road in an area not accessible to the public, with adequate signage labelling it as a restricted area.

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3.4.2 Fuel test facilities

There should be a structure for examination or disassembly of a vehicle, etc. A secure, well ventilated operating office with a refrigerator must be available in order to conduct fuel testing. Electricity, lights, means of communication, and appropriate fire extinguishers must be available.

3.4.3 Secure storage facilities

A securable Garage or equivalent must be available in order to secure a race car in case of an incident, protest or other needs for confiscating a vehicle.

3.5 Buildings / Rooms

Facilities	Specifications
Race control	Race control contains areas for race direction, timing and announcers. The race control should be located so that there is good visibility to the start line, the end of the strip and to the start of the line-up. If visibility is poor to any of the above-mentioned areas, then CCTV is one way to improve visibility.
Medical Centre	FIA requirements for medical centre can be found in Appendix H to the FIA ISC. A helipad should be located near the medical centre. If the medical centre is located in a restricted area, it is recommended to have additional medical services in a public area.
Media Centre	A room where media representatives can work, there should also be tables and chairs, electricity, internet, printers & a photocopier, refreshment facilities and services.
Event Secretary Office	The office of the Event Secretary is used for competitor sign-on and should be in a public area so that people can access it before they get their credentials.
Official noticeboard	Official noticeboard should be located in an area where all racers and crew have direct access at all times. There may be several locations all of which should be noted in the final instructions. The noticeboard should be in an area where there is enough light or it should have a light in it so that racers and crew can read the documentation. It is recommended that it is locked and protected from the elements and tampering. It should be big enough to host all official paperwork for the event, results for all categories, bulletins, decisions etc.
Stewards room	The steward's room should be secure and have reasonable soundproofing. The ideal location is next to the race control and secretariat of the event. The steward's room will be of a reasonable size to allow seating for up to 10 people. The room will need a board room style desk and enough chairs and refreshments. The room must be made available at all times for Steward Meetings and briefings.
Scrutineering building	Please refer to Art 3.4.
Storage - facility	Please refer to Art 3.4.3

3.6 Media Zones

The start line is a high-risk area where incidents can escalate very quickly. Therefore, to minimise risk, Media personnel should be kept at an appropriate distance so as to not hinder the work of Emergency Personnel and Recovery Crews.

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Markings should be in place so as to show the limit of Media access, including on the outside of the barriers and set at a maximum distance of 50m from the start line. Instructions will have been given during Media signing on about restricted areas.

3.7 Public Areas

All public areas must be at least 10 metres away from the edge of the strip wall.

Typical buildings in the public areas can include grandstands, toilets, restaurants, concession stands, waste stations and the medical centre. Disabled viewing areas and toilets must be in compliance with local legislation. Public safety and evacuation routes must be considered when designing these areas. Every building must have a minimum of two evacuation route from the building. The access road to the strip should be built in such a way that emergency vehicles have unrestricted access to the strip at all times. It is recommended to have an access point exclusive for emergency vehicles.

Parking areas should be built the way that safety vehicles have access to the possible incident in any parts of the parking area. It is highly recommended to have a secondary access road only for emergency vehicles.

3.8 Lighting for Night Racing

In cases where night racing may take place, the lighting provided must be sufficient at all areas of the track for officials and crews working, and for drivers to have suitable visibility at all speeds on the strip and shutdown areas. The below lighting standards are recommended:

- Starting Line: 30 Foot Candles or 325 Lumens
- Strip: 25 Foot Candles or 270 Lumens
- Shutdown: 20 Foot Candles or 215 Lumens

Any lighting fixtures must be at least 10 metres away from the strip.

4. Recommendations and Best Practice

Pit space: It is good practice to pre-assign pit spaces to the teams and mark them with race numbers.

Garbage and oil disposal: It is recommended for each facility to provide a recycling area for suitable materials, including used engine oil and any other fluids or debris.

Consideration must be made to tow vehicles travelling parallel to the drag strip. It is recommended that tow vehicles only move during the race vehicle burnouts or when permitted to do so by an official.

5. Drag Strips combined with Circuits

A drag strip may be combined with a race circuit, but the racing area of the strip must be independent from the circuit racing area. The drag strip braking area may be shared with the circuit.

Owners, designers and management of such facilities should be aware that:

- The preparation or use of any part of a circuit for drag racing will change the surface characteristics and in particular the anti-skid properties when wet. For new circuits, the inclusion of the start area and/or timed section of a dragstrip in any part of the strip

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surface or asphalt run-off areas is to be avoided, as is the addition of such features within an existing layout,

- Existing circuits incorporating dragstrips will be required to demonstrate to the FIA circuit inspector that all surfaces have been cleaned of excessive rubber deposits before a circuit licence can be granted and this will be a continuing condition of validity of the licence for circuit races,
- Areas habitually prepared with chemicals for drag racing starts are likely to require resurfacing or to be situated outside the racetrack and its run-off areas before FIA approval.

6. Inspection and Licencing Procedure

6.1 Scheduling and Conducting an Inspection

A valid Drag Strip licence is mandatory for any facility hosting international or FIA International events. A licence can only be issued or renewed following an inspection.

These inspections will be of category B in the first instance and of category A in the second. A category C inspection will be sufficient to extend the validity of the licence, except in the following case: drag strips which have undergone significant changes in terms of layout or safety installations will be submitted to another Category A or B inspection, according to the type of event.

Inspections may also be decided for other reasons, by the World Motor Sports Council, the Commissions or their Presidents, or at the request of drag strip representatives through their ASN.

Inspectors will be appointed by the Circuits Commission or its President, in consultation with the Drag Racing Commission, from the list of approved inspectors.

The inspector must be accompanied at the inspection by a representative of the ASN of the drag strip. All inspection requests must be submitted to the FIA via the ASN of the drag strip.

Prior to the inspection, the inspector must have been able to study the drag strip dossier and plans of any projected work. The structural conformity of the safety installations should be the subject of a structural engineer’s declaration in the dossier.

Failure to meet these conditions may result in cancellation of the inspection.

Representatives of the press will not be admitted at the track during the inspection, and the ASN and drag strip representative will be responsible for ensuring that the inspectors are not in any way impeded in the execution of their task by persons whose presence is not essential to it.

A standard inspection fee, covering all expenses except for the inspector's board and lodging in the country concerned will be charged to the ASN concerned for each drag strip inspected according to the following categories:

A - Major inspection of drag strips intended for FIA International events;

B - Major inspection of all other drag strips;

C - Check inspection to verify work carried out as the result of a category A or B inspection;

These standard fees will be set each year by the FIA.

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Inspectors' reports will be submitted to the FIA administration; only reports sent from the FIA offices to the ASN concerned shall be valid.

6.2 Following an Inspection

Whenever an inspection report, as agreed by the inspectors, is officially sent by the FIA to the ASN of the drag strip concerned, this ASN will have a maximum of six weeks within which to forward to the FIA any comments on the said report. In the absence of any comments, the report will be considered as final, and the schedule of completing the required improvements as accepted.

If, however, after this six-week period there remains a persistent disagreement between the inspectors and the ASN concerned on any point of the report, the Commission Presidents will examine and finally settle the matter.

It is understood that the organization of an international event may not be allowed if the required work has not been fully carried out according to the schedule established by the inspector.

The FIA (or its World Motor Sport Council) is entitled to allow any international events on a drag strip or, if the directions of the Commission have not been complied with, to prohibit them.

6.3 Facility Licence

6.3.1 Duration of Validity

Licences issued in consequence of a category A or B inspection will be valid for a maximum of three years from the inspection date. In case of a category C inspection, the licence may be extended for a maximum of two years. However, drag strips which have undergone significant changes in terms of layout or installations will have their licence cancelled.

6.3.2 Licence grades

The licence shall specify the performance potential based on the elapsed time of the vehicles to be permitted.

6.3.3 Track Maintenance

It is recommended that the ASN should make regular inspections during the period of the licence.

Proper maintenance of the drag strip and its installations is a condition of the licence. Failure to maintain the facility to the level at which it was inspected may result in the licence being revoked.

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