Saudi Standards, Metrology and Quality Organization (SASO)

Technical Regulation for Front, Rear and Side Barriers for Trucks and Trailers

The update of this regulation was adopted in SASO's Board of Directors Meeting No. (186) held on 01/12/1443 A.H. (30/06/2022 A.D.)

Published in the Official Gazette on 27/02/1444 A.H. (23/09/2022 A.D)

Version 2

Note:

Only the Arabic version of this Regulation is authentic in law and is applicable where there are differences with this translation





Contents

Preamble	3
Article (1) Terms and definitions	4
Article (2) Scope	7
Article (3) Objectives	7
Article (4) Obligations of Supplier	7
Article (5) Labeling	11
Article (6) Conformity Assessment Procedures	11
Article (7) Responsibilities of Regulatory Authorities	12
Article (8) Responsibilities of Market Surveillance Authorities	12
Article (9) Violations and Penalties	13
Article (10) General Provisions	14
Article (11) Transitional Provisions	15
Article (12) Publication	15
Annex (1-A) List of products of trucks and trailers protective barriers and relevatandards	
Annex (1-B) List of Products and Customs Coding	17
Annex (2) Explanatory Data for Barriers	18
Annex (3) Conformity Assessment Form (Type 1a) as per ISO/IEC 17067	19
Annex (4) Visual Inspection Report Form	23
Annex (5) Supplier Declaration of Conformity	30



Preamble

In line with the accession of the Kingdom of Saudi Arabia (KSA) to the World Trade Organization (WTO), as per the Decree No. 244 of the Council of Ministers, dated 21/09/1426 A.H., concerning the approval of documentation on the Kingdom's accession to the WTO, and the requirements by which the KSA shall adapt its relevant systems with the principles of WTO agreements, particularly, the Technical Barriers to Trade (TBT), which stipulates that no unnecessary technical requirements shall impede the flow of commodities among the member states, and that technical requirements and methods of conformity assessment shall not discriminate between products on the basis of origin, through the issuance of Technical Regulations that include the essential requirements and standardized business procedures.

In accordance with Article 3 (Clause-1), Statue of Saudi Standards, Metrology and Quality Organization, issued in accordance with the Council of Ministers Decree No. 216, dated 17/06/1431 A.H. (31/05/2010 A.D.), stipulating that: "SASO shall issue Saudi standards, quality systems and guidelines and conformity assessment, compatible with international standards and guidelines, that meet the requirements of the World Trade Organization (WTO) Agreement, in addition to their compliance with Islamic Sharia and serving the interests of Saudi Arabia";

In accordance with Article 4 (Clause-2), Statue of Saudi Standards, Metrology and Quality Organization, issued in accordance with the Council of Ministers Decree No. 216, dated 17/06/1431 A.H. (31/05/2010 A.D.), stipulating that: "SASO shall issue regulations for conformity assessment procedures of goods, products, and services according to approved standards".

In accordance with Article 4 (Clause-14), Statue of Saudi Standards, Metrology and Quality Organization, issued in accordance with the Council of Ministers Decree No. 216, dated 17/06/1431 A.H. (31/05/2010 A.D.), stipulating that: "SASO shall review the laws and control regulations related to SASO's work fields, and develop them, and propose amendments thereto in line with quality and safety requirements, and refer them to competent bodies in order to review and issue them, in accordance with applicable procedures".

In accordance with Article 6 (Clause-1), Statue of Saudi Standards, Metrology and Quality Organization, issued in accordance with the Council of Ministers Decree No. 216, dated 17/06/1431 A.H. (31/05/2010 A.D.), stipulating that: "Subject to Article 4 of this Statute, SASO shall be the authority in charge of matters related to standards, conformity assessment procedures, granting the quality mark, metrology and calibration. All public and private sectors shall adhere to the Saudi standards in all purchases".





Whereas the standards of the products included in a regulation shall be a basis for the conformity of such products with the essential safety requirements included in the specified regulation. Therefore, SASO has developed this Technical Regulation.

Note: This preamble and all the annexes of this regulation shall form an integral part thereof.

Article (1) Terms and definitions

1/1 When applying the articles of this regulation, terms and expressions hereunder – shall have the meanings indicated in front thereof, unless the context otherwise requires:

KSA: The Kingdom of Saudi Arabia.

The Board: SASO's Board of Directors.

SASO: Saudi Standards, Metrology and Quality Organization.

Technical Regulation: A document approved by the Board that provides, the specifications of products, associated processes and production methods, including applicable administrative provisions; with which compliance is mandatory. It may include or pay attention to terms, definitions, packaging, and requirements of markings or labelling products, services, processes or production methods.

Standard: A document approved by the Board that provides, for the regular and recurring use, non-mandatory rules and instructions, and specifications of products or processes and production methods. It may include, or pay attention to terms, definitions, packaging, and requirements of markings or labelling products, services, processes or production methods.

Essential Requirements: Product requirements, which may affect safety, health, and the environment, to be adhered to.

Market Surveillance: Activities and measures carried out by the market surveillance authorities to verify that products meet the requirements stipulated in the relevant technical regulations, and that they do not pose a risk to health, safety, environment, or any other aspect related to the protective of the public interest.

Market Surveillance Authorities: Government authorities responsible for carrying out market surveillance operations.

Regulatory Authorities: Government authorities with regulatory tasks according to their jurisdiction, responsible for implementing or following up the implementation of technical regulations, whether at customs ports, markets, or factories.





Competent Authorities: Authorities legally authorized in KSA to issue licenses for the manufacture of the product and the conduct of the activity, and to apply the provisions of this regulation.

Licensing Authority: The competent authority in KSA to issue licenses to engage in the activity of manufacturing and installation of protective barriers for trucks.

Product: Front, rear and side protective barriers for trucks, trailers, and semi-trailers which maximum weight exceeds 3.5 tons.

Hazard(s): A potential source of harm.

Risk (s): A potential risk causing damage; associated with the severity of damage.

Supplier:

- The product manufacturer, if he or she resides in the KSA, or everyone who presents his or her identity as a product maker by introducing the product by his name or any relevant business description, as well as everyone who renews the product.
- The manufacturer's agent in the Kingdom in the event of the manufacturer's residence outside the Kingdom, or the importer in the absence of an agent for the manufacturer in the Kingdom.
- Everyone in the supply chain whose activity may have an impact on the characteristics of the product.

Conformity Assessment Procedures: A board-approved document explaining the procedure used directly or indirectly for the conformity assessment.

Notified Bodies: Conformity assessment bodies approved by SASO in accordance with the Regulation of Conformity Assessment Bodies Acceptance.

Certificate of Conformity: A certificate issued by SASO or one of the notified bodies, which confirms that the product or any batch thereof, conforms to the requirements of relevant standards.

Supplier Declaration of Conformity: A declaration by the supplier by which it declares that a product conforms to the applicable legislations, without the mandatory intervention of a third party neither in the design stage, nor in the production stage of the manufacturing process, a declaration may depend on testing the product in accordance with the relevant legislations.

Saudi Quality Mark: A mark approved by SASO indicating that the facility has an effective management system that ensures the production of a commodity that conforms to the regulation, granting procedure, and relevant Saudi standards.





Placing on Market: Launching the product for the first time in the Saudi market for which the manufacturer or supplier is responsible.

Supply in the Market: Any supply of the product for distribution, consumption or use in the KSA, in the framework of a commercial activity, in return for payment or free of charge.

Withdrawal: Any procedure that aims to prevent placing product in the market or in a supply chain.

Recall: Any action aimed at retrieving the offered products that were made available to the end user.

Front Protective: A special front protective barrier, part of the vehicle's body or structure (chassis), installed at the front of the vehicle, or other components considered as front-end protective barriers, due to its shape and characteristics.

Rear Protective: A protective barrier or part of the vehicle's body or structure (chassis) installed at the rear of the vehicle, or other components considered being full or partial rear protective barriers, due to the nature of their shape and characteristics.

Side Protective: A side protective barrier, part of the vehicle's body or structure (chassis), installed on both sides of the vehicle, or other components considered as side protective barriers, due to its shape and characteristics.

Truck: A vehicle used to transport goods or to drag a trailer.

Truck Head: A truck head (equipped with tow tray); Designed to tow a semi-trailer, and not designed to carry weights other than the part of the semi-trailer on it.

Trailer: A vehicle whose design takes into account that no essential part of it depends on the towing vehicle (truck) and a semi-trailer with a small flatbed is considered a trailer.

Semi-Trailer: A vehicle designed to be coupled to a truck head with a tow tray, and which relies part of its weight is on the truck head.

Maximum Weight on Axle: The maximum weight specified by the manufacturer for each axis of the vehicle, measured at the level of contact of the tires on the road surface.

Category N: Motor vehicles with at least four wheels designed and constructed for the carriage of goods

• Category N2: Vehicles designed and constructed for the carriage of goods and having a maximum mass exceeding 3.5 tonnes but not exceeding 12 tons.





• Category N3: Vehicles designed and constructed for the carriage of goods and having a maximum mass exceeding 12 tons.

Category O: Trailer (including semi-trailers).

- Category O3: Trailers with a maximum mass exceeding 3.5 tons but not exceeding 10 tons.
- Category O4: Trailers with a maximum mass exceeding 10 tons.

Article (2) Scope

This Technical Regulation shall be applied on front, rear, and side barriers for trucks, trailers, and semi-trailer with a maximum weight exceeding 3.5 tons, for trucks and trailers of categories (N2, N3, O3, O4), and this regulation does not include off-road trucks and trailers, military trucks, and truck designed for specific purposes where such barriers cannot be installed.

Article (3) Objectives

This Technical Regulation aims to lay out the essential requirements for products included in the scope of this regulation, and to identify the conformity assessment procedures with which the suppliers shall comply, in order to ensure the conformity of these products, and the preservation of the health and safety of road users.

Article (4) Obligations of Supplier

The supplier, when manufacturing or importing trucks, trailers or semi-trailers, shall adhere to the following requirements:

4/1 Technical Requirements for Barriers

- 4/1/1 Front, rear and side barriers covered by this regulation shall meet the requirements of the standards set out in Annex (1).
- 4/1/2 Reflective (strips) markings shall be placed on the side and rear barrier, and shall be in yellow and conform to the Saudi standards set out in Annex (1).

4/2 Obligations of Manufacturer

The manufacturer shall comply with the following requirements:

4/2/1 General Requirements





- A) The factory shall have a license to operate from the competent licensing authorities.
- B) The manufacturer shall cooperate with SASO, the licensing authorities and the competent regulatory authorities by providing the required documents and information upon request.
- C) Provide evidence that the factory has met the requirements set out in Clause 4/1 of this regulation.
- D) Acknowledgment that all information submitted to SASO are correct and proven.

4/2/2 Technical Requirements

A) Documentation of the process of manufacturing and installation of truck protective barriers.

The manufacturer shall identify and document the process of manufacturing and installation process, provided that the documents include the following:

- 1) Models of the barriers intended to be manufactured and installed.
- 2) Persons involved in the process.
- 3) Manufacturing and installation methods applied.
- 4) Equipment and tools to be used.

B) Persons, Employment, Specializations and Responsibilities

The manufacturer shall register and document the following:

- 1) Job description.
- 2) Description of the required qualifications or competence.

C) Preparation and Training

The manufacturer shall identify and document the specific role for each employee during the execution of the manufacturing process/ installation process, and shall keep records of the following:

1) Job description of each employee and determination of duties.





- 2) Identify and provide the training needs.
- 3) Evaluate the efficiency in the manufacturing and installation processes, periodically.
- 4) Prepare the documents, which describe the training and development of each employee.

D) Persons Competence

The manufacturer shall verify the competency of the personnel by assuring the expertise and technical qualifications and the ability to verify the integrity of the barriers and that they are free from defects.

E) Relevant Manufacturing Procedures

The manufacturer shall prepare and document the procedures below, and to maintain the documentation and make them available upon request:

- 1) Manufacturing and installation process.
- 2) Risk assessment in the processes of manufacturing and installation in the facility, to avoid incidental damage to the truck/trailer.

F) Equipment and Tools

The manufacturer shall:

- 1) Provide the necessary equipment for all types of operations to be carried out.
- 2) Ensure the appropriateness of the tools used in the manufacturing and installation processes.
- 3) Calibrate devices and measurement tools used during time periods previously identified, and verify their accuracy during their use, whenever required.

G) Verify the Conformity of Manufactured Barriers

The manufacturer shall:



- 1) Ensure that the manufactured and installed protective barriers are in conformity with the requirements of this technical regulation and the relevant Saudi standards prior to delivering them to the client.
- 2) The distinctive number of the barrier shall be written or engraved on an explanatory data plate in accordance with the coding system set out in Annex (2) of this regulation.
- 3) Store the parts of protective barriers and other used materials in a manner that guarantees their preservation, so that they are suitable for use.

H) Manufacturer Subcontracting

When the manufacturer desires to subcontract for manufacturing and installing the protective barriers, the subcontractor shall be licensed to carry out these operations, or this contract shall include:

- 1) The required competence for the employees who will manufacture and install the barriers.
- 2) Manufacturing and installation methods, technical data and the used tools and equipment.
- 3) Manufacturing and installation processes implemented, and the procedures of verifying that the manufactured protective barriers are in conformity with the agreed requirements.

I) Health and Hygiene

The manufacturer shall meet the following health and hygiene requirements:

- 1) The facility shall be appropriate for work and contain a clean and tidy place to receive customers.
- 2) The factory shall have special facilities such as washers, toilets and other services.
- 3) If there is a place allocated for dining, it shall be separate from the workplace and shall be properly cleaned.





4) The industrial wastes shall be placed in designated locations, away from the work area.

J) Occupational Safety Procedures

The manufacturer shall meet the following occupational safety requirements:

- 1) The factory shall include personal protective devices for personnel and employees.
- 2) All work accidents and corrective actions taken shall be documented.

4/3 Metrological Requirements

International System of Units (SI Units), its multiples, or its parts shall be used during design, manufacturing or trading of products included in the scope of this regulation.

Article (5) Labeling

- 5/1 Labels (explanatory data) shall comply with the requirements set out in Annex (2) of this Technical Regulation.
- 5/2 The explanatory data plate shall be affixed in a place that allows it to be seen clearly and easily accessible.
- 5/3 The explanatory data plate shall be made of a material that is resistant to damage and shall be fixed in a way that is difficult to remove or damage. The data shall be written in Arabic or both Arabic and English in an easy-to-read manner.

Article (6) Conformity Assessment Procedures

- 6/1 The supplier responsible for placement of the product in the market shall obtain a Certificate of Conformity issued by SASO, or whom it authorizes, in accordance with the conformity assessment form (Type 1a Type Approval), as per standard ISO/IEC 17067, set out in Annex (3).
- 6/2 SASO, or whom it authorizes shall have the right to conduct inspection visits to factories to verify manufacturing and installations processes in accordance with the inspection report form set out in Annex (4).
- 6/3 The notified bodies shall implement the conformity assessment procedures according the specified model, in order to ensure fulfillment of the requirements of the Technical Regulation and relevant Saudi standards set out in Annex (1).
- 6/4 A technical file shall be attached, which includes the following:
 - a) Supplier (Manufacturer/Importer) Declaration of Conformity in accordance with the form attached in Annex (5).





- b) Risk Assessment Document.
- c) Design documents.
- d) Country of Origin.
- 6/5 The supplier shall cooperate with the Regulatory Authorities and Market Surveillance Authorities by providing the technical file, Certificates of Conformity, and any other documents proving the conformity of the product with the requirements of this regulation, when required.
- 6/6 SASO or its authorized representatives of the approved conformity assessment bodies are entitled to carry out inspection visits to the factory to verify the extent of conformity of the information provided, when necessary.
- 6/7 SASO or its authorized representatives of the approved conformity assessment bodies shall grant a registration code to each establishment that applies for a type approval certificate, as indicated in Annex (2).

Article (7) Responsibilities of Regulatory Authorities

Regulatory Authorities, as a part of their competence and powers, shall:

- 7/1 Verify that protective barriers fulfill the requirements of the specified conformity assessment procedures, and the technical documents accompanied with the consignment at customs ports and manufactories.
- 7/2 Regulatory Authorities have the right to charge the suppliers with the costs of tests and associated fees to verify the conformity of the barriers.
- 7/3 In case of a non-conformity of the product, the regulatory authority shall withdraw the concerned products from warehouses, and take necessary legal measures.
- 7/4 The competent authorities shall verify the existence of front, rear and side protective barriers on trucks, trailers and semi-trailers while on public roads, in accordance with applicable regulations and procedures.
- 7/5 Licensing Authorities shall grant and renew traffic licenses for trucks, trailers and semi-trailers, after ensuring that the protective barriers are installed on them, in accordance with the requirements of this regulation, based on the results of the periodic inspection process, as per the laws and procedures applicable in KSA.

Article (8) Responsibilities of Market Surveillance Authorities

Market Surveillance Authorities, as a part of their competence and powers, shall:

8/1 Enforce the market surveillance procedures on products stored in the warehouses of manufacturers and the companies, in order to verify the safety of the products





- and the extent of fulfillment of the requirements stipulated in this regulation and relevant standards.
- 8/2 In case of non-conformity of the manufacturer products, or the company using the barriers, with the requirements of this Technical Regulation, Market Surveillance Authorities shall take all administrative measures for such products; Procedures and penalties stipulated in Article (9) shall be applied after taking the necessary actions.

Article (9) Violations and Penalties

9/1 Barrier products included in this regulation:

- 9/1/1 It is prohibited to manufacture, import, or even advertise the front, rear, and side protective barriers of trucks and trailers non-conforming to the articles of this regulation.
- 9/1/2 Failure to meet the requirements of this Regulation shall be a sufficient reason for Market Surveillance Authorities and Regulatory Authorities to consider the product as non-conforming, which may pose a risk to the health and safety of road users, including:
 - A) Failure to issue or improper issuance of the Certificate of Conformity or the Supplier Declaration of Conformity.
 - B) Unavailability or incompleteness of the technical documentation, or containing incomplete or incorrect information.
 - C) Unavailability or incompleteness of product labels, or usage instructions.
- 9/1/3 In case of a violation of the provisions of this regulation, Market Surveillance Authorities as the case may be shall take all necessary actions to eliminate such violation, and its effects. To this end, Market Surveillance Authorities may:
 - A) Mandate the violating party that is responsible for placing the violating product to withdraw the product from the warehouses in order to remedy such violations, if possible, or re-export it or destroy it (depending on the nature of the product) within the period specified by the authorities.
 - B) Withdraw, restrain or destroy the products, or take any other necessary action to recall such products from the markets. Market surveillance Authorities, as the case may be, may announce the recall of the product from the markets, and the violating party shall bear all associated expenses.





- C) Deal with the violating products covered by this regulation in accordance with laws and regulations applicable in the Regulatory Authorities and Market Surveillance Authorities.
- 9/1/4 When a violation of front, rear, side, protective barriers of truck, trailers, and semi-trailers is detected, SASO shall take the necessary actions concerning products non-conforming with the requirements of this regulation, including the cancellation of the relevant Certificate of conformity, while taking the necessary measures with the notified body, which issued the certificate.
- 9/1/5 Without violating any more severe penalty in the applicable regulations, anyone who violates the requirements of the approved standards for the products covered by this Technical Regulation shall be subject to the penalties provided for in the anti-commercial fraud law.

9/2 Trucks, trailers and semi-trailers (categories N2, N3, O3, O4):

- 9/2/1 Trucks, trailers, and semi-trailers that do not have the protective barriers, included in this regulation, installed are considered to be in violation of the laws and regulations in force in the KSA.
- 9/2/2 It is not permissible to issue or renew licenses for trucks, trailers, and semitrailers that do not have the protective barriers installed, which are included in this regulation, in accordance with the laws and regulations in force in the KSA.

Article (10) General Provisions

- 10/1 Annexes, including the terms and definitions set forth in the standards, shall be deemed an integral part of the provisions hereof. SASO may amend any of these annexes, as required.
- 10/2 This Technical Regulation shall not impede the supplier to comply with all other systems/regulations applicable in KSA; pertaining to circulation and use of protective barriers, in addition to the rules/regulations related to the environment, security, and safety.
- 10/3 Front, rear and side protective barriers covered by this regulation shall be among the points that are checked in the periodic inspection of trucks, trailers and semi-trailers, and verify the information of the barrier, in accordance with the applicable laws in KSA.
- 10/4 The renewal of the licenses of the activity of these factories shall be subject to the extent of which these factories meet the applicable administrative provisions and the provisions of this technical regulation.
- 10/5 Suppliers of protective barriers subject to the provisions of this regulation shall provide the inspectors of the Regulatory Authorities, Market Surveillance





- Authorities, Licensing Authorities, and the competent authorities with all the facilities and information, when required, to carry out their assigned tasks.
- 10/6 If any situation arises that cannot be addressed under the provisions of this regulation, or any disagreement arises in its application, the matter shall be submitted to a competent committee of SASO to issue the appropriate decision on this case or dispute, while taking the public interest into consideration.
- 10/7 Only SASO has the right to interpret the articles of this Technical Regulation, and all beneficiaries of the application of this Technical Regulation shall adhere to the interpretations issued by SASO.

Article (11) Transitional Provisions

- 11/1 The provisions of this regulation shall be applied within no more than 180 days from the date of publication in the Official Gazette.
- 11/2 Subject to the provisions of paragraph (1) of this article, suppliers are given time to take corrective actions in accordance with the requirements of this Technical Regulation within no more than 365 days from the date of publication in the Official Gazette.
- 11/3 This Technical Regulation once adopted shall supersede all preceding regulations in the scope of this Technical Regulation.

Article (12) Publication

This Regulation shall be published in the Official Gazette.





Annex (1)

A) List of products of trucks and trailers protective barriers and relevant standards

No.	Product	Title of the standard in Arabic	Title of the standard in English	Standard No.
1		السيارات – حواجز الحماية الأمامية الشاحنات	Motor Vehicles - Front Underrun Protective Devices for Trucks	SASO 2955
2		السيارات – حواجز الحماية الجانبية الشاحنات والمقطورات	Motor Vehicles - Lateral Underrun Protective Devices for Trucks and Trailers	SASO 2956
3	Protective Barriers for Trucks	السيارات – حواجز الحماية الخلفية للشاحنات والمقطورات	Motor Vehicles - Rear Under Run Protective Devices for Trucks and Trailers	SASO 2957
4		السيارات ـ الأنواع والتسميات والتعريفات	Road Vehicles - Types - Terms and Definitions	SASO GSO 591
5		السيارات ـ الأبعاد والأوزان	Motor vehicles - Dimensions and weights	SASO 469
6		العلامات العاكسة للضوء للمركبات	Retro-Reflective Markings for Vehicles	SASO 2913

Note: The list of standards mentioned in this Annex is subject to review, and suppliers are responsible for verifying through SASO's portal that they are using the latest standards.





B) List of Products and Customs Coding

No.	Product	Customs Coding
1	Bumpers and parts thereof	8708

Note: The products and customs coding found in the Saber electronic platform are the updated and approved version.



Annex (2)

Explanatory Data for Barriers

The barriers shall be coded by the manufacturer according to the following requirements

Serial No.	Model No.	Туре	Facility Registration Code	Country
XXXXXX	XXX	F/R/S	XXX	KSA

- 1) Barrier numbering codes consist of numbers and capital Latin letters as follows:
- 2) Serial Number: Consists of six numbers, where the first two numbers are allocated for the year of manufacture in the Gregorian calendar.
- 3) Model Number: Barrier model number set by the manufacturer, and written on the certificate of conformity issued by SASO or an entity authorized by SASO.
- Type: Barrier type, front barrier (F), rear barrier (R), side barrier (S). 4)
- 5) Facility Registration Code: A code to be obtained by the establishment upon registering with SASO, consisting of a letter and two numbers.
- 6) Country of Origin: According to the abbreviation applicable in each country (e.g. KSA).





Annex (3)

Conformity Assessment Form (Type 1a) as per ISO/IEC 17067

(Type Approval)

1/1 Type Approval

Type approval is defined as one of the conformity assessment procedures, under which a notified body reviews and verifies the technical design of the product and declares that the technical design meets the requirements of the relevant Saudi Technical Regulations.

Type approval may be conducted by one of the two following methods:

- 1) Examination of a representative sample of the entire product, that represent the expected production (production model).
- Assessment of the conformity of the technical design of the product by auditing the relevant technical documentation and manuals (design model), and examining of a representative sample of the expected production for one part or more involving hazardous parts of the product (a combination of the production model and the design model).

2/1 Procedures of Type Approval

2/1/1 Submission of a Type Approval Request to a Notified Body

The manufacturer shall submit a request for type approval to a notified body selected by the manufacturer, such request shall include:

- 1) Name and address of the manufacturer;
- 2) A written declaration not to submit the same request to any other Notified Body.
- 3) Technical documentation facilitating the assessment of the conformity of the product to the requirements of Saudi technical regulations. Such documentation shall include adequate analysis and evaluation of risks.
- 4) Technical documentation shall identify the requirements that apply to the product. Including, as required by the assessment, the design of the product, manufacturing and operation (use) of the product.
- 5) Technical documentation shall include at least the following:
 - A) A general description of the product.
 - B) Design and manufacturing drawings, horizontal projections (diagrams), components, units, subdivisions, etc.
 - C) Description and explanations, referred to therein, necessary to understand the drawings, diagrams, and the operation (use) of the product.





- D) A list of the Saudi standards or any other relevant technical specifications adopted by SASO, whether fully or partially applied, and a description of the adopted solutions to meet the essential requirements of the Saudi technical regulations in case of non-application of the aforementioned standards. In case of partial application of Saudi standards, the technical documentation shall clarify the applied clauses.
- E) Report results (graph calculations) of the design, operation control, conducted tests, etc.
- F) Test reports.
- G) Representative samples of the planned production. The notified body may request additional samples, if necessary.
- H) Evidences (proofs) supporting the appropriateness of the technical solutions applied in the design. Such evidence shall refer to all documents, particularly in case of non-application of the Saudi standards and/or the aforementioned appropriate technical specification. Supporting evidences as applicable shall include results of test conducted in the suitable laboratory in the manufacturer or any other laboratory under the responsibility of manufacturer.

2/1/2 Tasks of the Notified Body

A) With regard to the product, the notified body shall:

Study the technical documentation and supporting evidence for the purpose of assessment of the technical design of the product.

B) With regard to the samples, the notified body shall:

- 1) Ensure that the manufacturing of samples is conformant to the technical documentation, in addition to identifying the elements designed in accordance with the Saudi standards, and the elements designed in accordance with other standards.
- 2) Carry out appropriate examinations and tests, or outsource them in order to verify that the technical solutions adopted by the manufacturer meet the essential requirements specified in the standards, in case of non-application of the relevant standards.
- 3) Carry out appropriate tests or outsource them, in order to verify that in case of non-application of Saudi standards and/or other appropriate standards the technical solutions adopted by the manufacturer meet the essential requirements of the Saudi technical regulations.
- 4) Be in agreement with the manufacturer on the venue where tests should be conducted.





C) As for decisions made by the Notified Body:

- 1) The notified body shall issue an assessment report of the procedures carried out and their outputs. The notified body shall not publish, fully or partially, the report without the approval of the manufacturer.
- 2) In case the type meets the requirements of the Saudi technical regulations relevant to the concerned product, the Notified Body shall issue a Type Approval Certificate for the manufacturer. Such certificate shall include the name and address of the manufacturer, test results, the validity conditions thereof, if any, and all information required for identification of the certified type. The certificate may also include attachments.
- 3) The certificate, along with its attachments, shall include all necessary information required to assess the conformity of manufactured products, according to the tested type and for monitoring during operation.
- 4) In case the type is non-conforming to the requirements of the Saudi Technical Regulations applicable to the product, the Notified Body shall not issue the Type Approval Certificate and shall notify the applicant of its decision, stating detailed justifications for such decision.
- The Notified Body shall follow all recognized technological developments. Whenever such developments indicate that the possibility that the certified type may no longer comply with the requirements of the Saudi Technical Regulations, the Notified Body shall determine to what extent further tests are required, and it shall inform the manufacturer accordingly.
- 6) The manufacturer shall inform the Notified Body, holding the technical documentation related to the Type Approval Certificate, of all modifications of the certified type, which may affect the conformity of the product to the requirements of the Saudi Technical Regulations, or to the terms of validity of the Type Approval Certificate. As such modifications require additional approval other than the primary Type Approval Certificate.
- 7) Notified bodies shall inform SASO of the Type Approval Certificates and any additions issued or withdrawn, and shall periodically, or upon request, provide a list of the Type Approval Certificates and any additions that has been rejected, suspended, or restricted in any way.
- 8) Each Notified Body shall inform the other accredited Notified Bodies of the Type Approval Certificates and any additions that has been rejected, suspended, or restricted in any way. In addition, they shall be informed, upon request, about Type Approval Certificates or any additions released.
- 9) Upon request, SASO and other Notified Bodies can obtain copies of the Type Approval Certificates and/or additions thereto. SASO may obtain





copies of technical documentation and testing results carried out by the Notified Body, upon request. The Notified Body shall keep a copy of the Type Approval Certificate, its annexes and additions, in addition to the technical documentation (including documents attached by the manufacturer) up until the certificate's expiration date.

- 10) The manufacturer shall keep a copy of the Type Approval Certificate, its annexes and additions thereto, in addition to the technical documentation. Furthermore, the manufacturer shall make all documents available to Regulatory Authorities and Market Surveillance Authorities for ten (10) years after placement of the product in the market.
- 11) The supplier may submit the request mentioned in Clause (2/1/1), and carry out the aforementioned tasks on behalf of the manufacturer, on the condition of the manufacturer's consent.





Annex (4)

Visual Inspection Report Form

Notified Body Registration No.: Inspection	on Dat	te:/	'/	
Product description:				
First: Labels of Protective Barriers				
1) General Requirements				
The result (yes/no) shall be placed only after t	the cor	npleti	on of the barriers inspection	
Description	Yes	No	Data or Clarifications	
Manufacturer's name and/or trademark				
Manufacturing date				
Vehicle maximum mass to which the rear				
protective barrier may be installed.				
Country of origin				
Type of the vehicle for which the protective	_	_		
barrier is designed				
Drawings of the structure (chassis) on which the	_	_		
barrier is to be installed				
Detailed description with drawings of the front	_	_		
barrier to be installed				
Detailed description with drawings of the side				
barrier to be installed				
Detailed description with drawings of the rear				
barrier to be installed				
Absence of any offensive data, symbols or phrases				
• The lack of the information set out above shoul	d lead	to co	onditioned inspection results. The	
facility shall take corrective actions.				
• The protective barriers shall be visually inspected to make sure that there is no damage, cracks,				
sharp outer edge or any clear defects.				
• The barriers shall be inspection to ensure that the	distin	ctive l	parrier number exists (explanatory	
data plate)				

2) Requirements for Protective Barriers and Reflective (Strips) Markings



	Yes	No	of the barriers inspection Data and illustrations
Reflective (Strips) Markings Used			A A
 The color of the reflective (strips) markings shall be in yellow. It shall comply with the Saudi Standard SASO 2913 			
It is necessary to avoid placing reflective tape on the barrier			
Yellow reflective (strips) markings shall have no black arrows and shall be placed on the side (lateral) barrier			
• Trucks (N2) and Trailers (O3): The width of a strip (tape) shall be 50 mm with tolerance +2 mm.			00
• Trucks (N3) and Trailers (O4): The width of a strip (tape) shall be 100mm, with tolerance +2 mm.			
 Yellow reflective (strips) markings shall have no black arrows and shall be placed on the rear barrier The width of a strip (tape) shall be 100 mm with tolerance +2 mm for all types of trucks and trailers. 			
The mechanical properties of the barriers material shall have a minimum yield strength of 350 N/mm2, and a minimum tensile strength of 480 N/mm2, and of a material: • Steel-Hot Rolled Or • Aluminum Alloy Series			Provide material test certificate
The minimum mechanical properties of bolts shall have a class of 10.9 or higher			10.9
The minimum requirements for the welder wire material used in welding is AWS electrode number (E90xx), with minimum yield strength of 531N/mm2 and minimum tensile strength of 620 N/mm2.			AWS E90xx



The weld shall be fully connected between two welded pieces and not in a spot welding manner (h) Represents the thickness of the weld		
Welding could only use between the barrier and the support. It is prohibited to weld any part of the barrier to the chassis of the truck or trailer		

$3) \ \ \textbf{Special Requirements for Barriers}$

3,1 Requirements for Front Protective Barriers			
The result (yes/no) shall be placed only after the completion of the barriers inspection			
Description	Yes	No	Data and illustrations
The section height of the FUPD cross-member shall not be less than: 100 mm for goods vehicles of category N2 having a maximum mass between 3.5 and 12 tons 120 mm for goods vehicles of category N3 having maximum mass exceeding 12 tons			3.5tons ≤ Truck weight ≤ 12tons Truck weight ≥ 12tons
The maximum ground clearance with respect to the underside of the FUPD shall be no more than 400 mm			مقدمة الشاحنة المامي الإمان
The lateral extremities of the cross-member shall not bend to the front or have a sharp outer edge; this condition is fulfilled when the lateral extremities of the cross member are rounded on the outside and have a radius of curvature of not less than 2.5 mm.			إنحناء طرف الحاجز
The outermost surfaces of every front guard installation shall be essentially smooth or horizontally corrugated so that domed heads of bolts or rivets may protrude beyond the surface to a distance not exceeding 10 mm.			سطح الحاجز
The minimum thickness of the front barrier is 5 mm			



To 1.11 to 1.1	II	I		
It shall be ensured that all welds used are in accordance with the standards shown in Annex (1)				
3,2 Requirements for Lateral (Side) Protective Barrier	S			
The result (yes/no) shall be placed only after the completion of the barriers inspection				
Description	Yes	No	Data and illustrations	
The side barrier shall not exceed the total width of the vehicle				
The lower edge of the side guard shall be not more than 450 mm above the ground at any point			Max LUPD height 450 mm	
The rails used shall be not less than 50 mm high for vehicles having maximum mass less than 12 tons (category N2) and trailers having maximum mass less than 10 tons (category O3)			الحاجز الجانبي	
The rails used shall be not less than 100 mm high for vehicles having maximum mass more than 12 tons (category N3) and trailers having maximum mass more than 10 tons (category O4)			الحاجز الجانبي	
The rails used shall be not more than 300 mm apart			Max distance between LUPO rails 300 mm	
The distance between the upper edge of the barrier and the loading surface of the truck or trailer shall not exceed 350 mm			Max distance between LUFO and for a 500 mm L	
The distance between the upper edge of the barrier from the surface of the earth does not exceed 950 mm			المسافة بين الحد الطوية للحاجز عن سطح الارش (الإنجادز 350 مم سطح الارش (الإنجادز 350 مم	
The main part of side barrier's outer surface shall not be more than 120 mm in board from the outer most plane of the vehicle.			Max limit 120 mm Max limit 120 mm Max limit 300 mm Max limit 120 mm	



	П	11	
The side barrier's rearward end shall not be more than 30 mm in board from the outermost edge of the rear tires over at least the rearmost 250 mm			Max limit 130 mm Max limit 130 mm Max limit 300 mm
Truck: The front edge of the side barrier shall not be more than 300 mm tangential to the outer surface of the wheel tire directly in front of the barrier. The trailing edge of the side barrier shall not be more than 300 mm tangential to the outer surface of the tire located directly behind the barrier.		0	Max limit 300 mm
Trailer: The front edge of the side barrier shall be no more than 500 mm tangential to the outer surface of the wheel tire directly in front of the barrier. The trailing edge of the side barrier shall be no more than 300 mm tangential to the outer surface of the tire immediately behind the barrier.			- 120
Semi-trailer The front edge of the side barrier shall not be more than 250 mm from the rear of the mid-transverse plane of the support uprights (the anchor legs of the semi-trailer). If the trailer is equipped with support uprights - and in all cases shall not exceed the distance from the front edge of the barrier to the center of the main hitch bolt in the fifth wheel, in its furthest rear position, more than 2700 mm. The trailing edge of the side barrier shall be no more than 300 mm tangential to the outer surface of the wheel tire immediately behind the barrier.			250 and 250 an
Minimum thickness of side barrier: Trucks (N2) and trailers (O3): 2.5 mm Trucks (N3) and trailers (O4): 3.0 mm Adjacent parts may overlap, provided that the overlapping edge			
faces rearwards or downwards or a gap of not more than 25mm measured longitudinally may be left, provided that the rearward part does not protrude outboard of the forward part The outer surface of the guard shall be smooth, and so far, as			
possible continuous from front to the rear. Domed heads of bolts or rivets may protrude beyond the surface to a distance not exceeding 10 mm and other parts may protrude to the same extent provided that they are smooth and rounded.			
The external edges and corners shall be rounded with a radius not less than 2.5 mm.			
The barrier may consist of a continuous flat surface or of one or more horizontal rails or a combination of surface and rails. It shall be ensured that all welds used are in accordance with the			
standards shown in Annex (1)			



3,3 Requirements for Rear Protective Barriers The result (yes/no) shall be placed only after the completion of the barriers inspection **Data and illustrations Description** Yes No The section height of the RUPD member shall not be less than 100 The ground clearance with respect to the underside of the protective barrier, even when the vehicle is unladen, shall not exceed 450 mm, along the entire width of the barrier П The clearance between the rear barrier width and the measured rear axle width shall be no more than 100 mm on both sides at the furthest point from the wheels Maximum 100 mm Maximum 100 m The individual elements of the underrun protection, including those outboard of the lift mechanism, where provided, must have an effective surface area, in each case, of at least 350 cm2. However, in the case of vehicles having a width of less than 2000 Surface Area for Each Section Shall mm and where it is impossible to achieve the above requirement, Not be Less Than 350 cm2 the effective surface may be reduced on the condition that the Maximum 100 resistance criteria are met. P1 .

Lifting Platform is Less Than 25 mm Rear Axle Width



The maximum lateral clearance measured between the elements of the barrier and the elements of the platform lift, which move through the overlap when the lift is operated, shall not exceed 25 mm.		Surface Area for Each Section Shall Not be Less Than 350 cm2 Maximum 100 Maximum 100 Maximum 100 Maximum 100 Clearance between Underrur Protective Device & Lifting Platform is Less Than 25 mm Rear Axie Width
The minimum thickness of the rear barrier is 5 mm		
The lateral extremities of the cross-member shall not bend to the rear or shall not have a sharp outer edge. This requirement can be considered as complied if the lateral extremities of the cross member are rounded on the outside and have a radius of curvature of not less than 2.5 mm		
The rear barrier shall be located as close to the rear of the vehicle as possible		
The width of the rear barrier at any point shall not exceed the width of the rear axle measured at the point furthest from the wheels		
If the body or component of the vehicle extending beyond the width of the rear axle includes the barrier, the requirement that the width of the rear barrier not exceed the width of the rear axle will not apply		
It shall be ensured that all welds used are in accordance with the standards shown in Annex (1)		
Second: Inspector Notes:	 	
Additional Notes		

Inspector Name: ----- Signature: ---- Date: -----



Annex (5)

Supplier Declaration of Conformity

This form shall be filled out on the company's official paper.

1)	Supp	olier Data
	-	Name:
	-	Address:
	-	Contact Person:
	-	Email:
	-	Phone Number:
	-	Fax:
2)	Prod	luct Details
	-	Trademark of Product
	-	Model:
	-	Product Description (F/R/S):
	-	Reference Standards/Technical Specifications:
	•	declare that the product mentioned herein conforms to the Saudi Regulation () and the Saudi Standards annexed thereto.
Pers	on in (Charge:
Com	pany	Name:
Sign	ature:	Date://