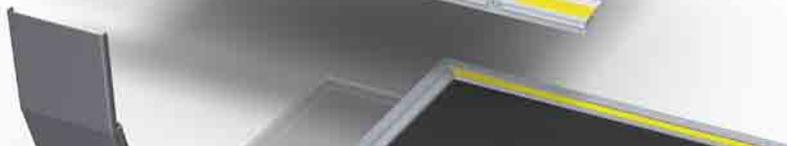
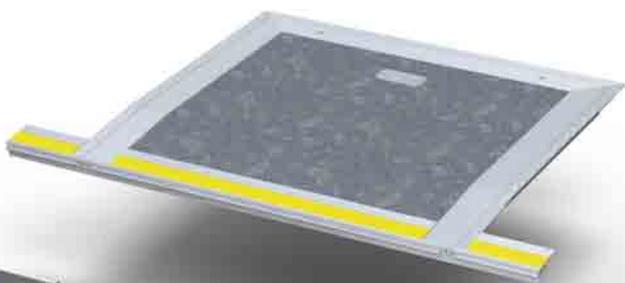
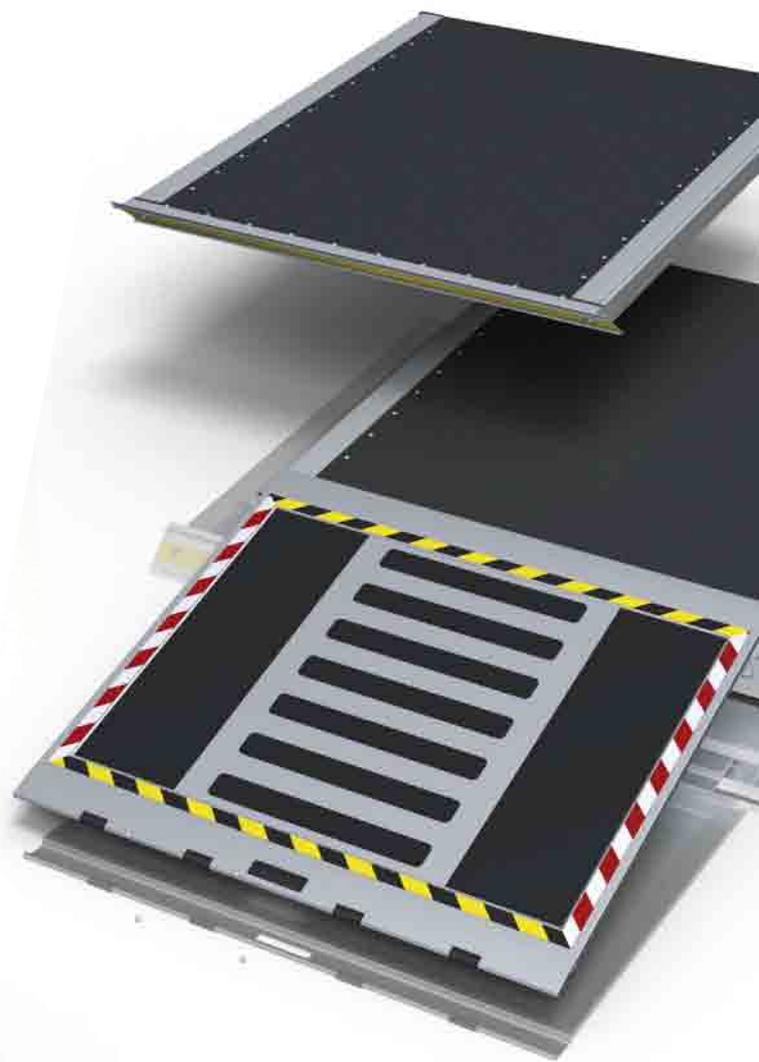
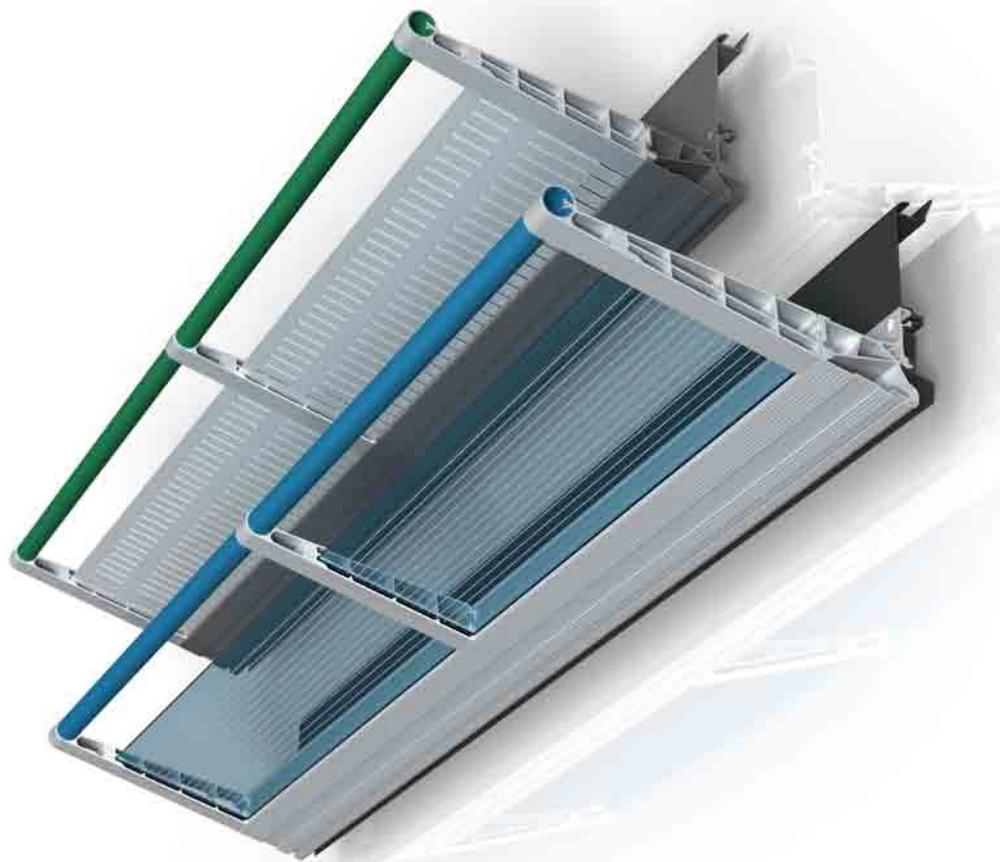




Larisa

solutions for the transport sector

RAMPS & RACKS



PPHU "LARISA" is a reliable and trustworthy partner, designing and producing modern equipment and accessories based on mechanical, pneumatic, electrical, and electronic systems.

"LARISA" creates and continuously improves its own solutions dedicated mainly to manufacturers of means of transport. One of our specialties is the design and production of rear-view mirrors mounted in rail vehicles. For years we have been supplying these products to European markets, as well as to Asian and African ones.

The innovativeness of our solutions is mainly due to the low weight of the structure and miniaturized mechanical and control systems. Our advantages are also short lead times and competitive prices.



LARISA



RESEARCH AND DEVELOPMENT:

"LARISA" is a manufacturer of modern high quality products which have gained recognition of Customers and Users.

In order to ensure continuous development of the product range, as well as constantly increasing quality of products, Larisa invests in the development of machinery and systematically trains its employees. We approach each design individually. Our specialists make every effort to ensure that the solutions offered are both durable and safe to use. All products, before being introduced into serial production, are subjected to restrictive tests concerning both durability as well as functionality and ergonomics.



INDIVIDUAL DESIGNS:

In addition to the ready-made solutions presented in this catalogue, we also prepare individual solutions tailored to the needs of the customer or end user. We are able to make a product both on the basis of the entrusted documentation, as well as to design and produce a new one from scratch, taking into account functional and aesthetic requirements. The implementation of design and production processes is supervised by qualified personnel with appropriate equipment at their disposal, which guarantees the optimum quality level of our products.



QUALITY:

The main goal of our activity is to provide products that meet the requirements of our Customers in terms of technical solutions and aesthetics, which are produced in accordance with the guidelines of standards and regulations, which allows obtaining the necessary approvals and certificates to use the products, among others, in rolling stock.

We have been maintaining high quality for years thanks to the system implemented in accordance with ISO 9001





Ramps: ■ foldable ■ ejectable ■ electric

Since the establishment of PPHU "LARISA" in 2006 and the creation of the first line of ramps, we have been focusing on the safety of use and durability of our products, as well as ease of operation and low weight, which is an advantage over other market products of this group, and makes our ramps extremely comfortable to use even for female staff.

Based on the experience gained in cooperation with our customers and suppliers, we have created a line of EasyAccess® products, consisting of devices used by vehicle operators in an intuitive and safe way, and guaranteeing certainty and satisfaction of using them to the people for whom they were created.

In addition to our series products presented in this catalogue, we carry out individual projects tailored to your needs, using innovative solutions and the appropriately selected materials and specialized technologies for production.



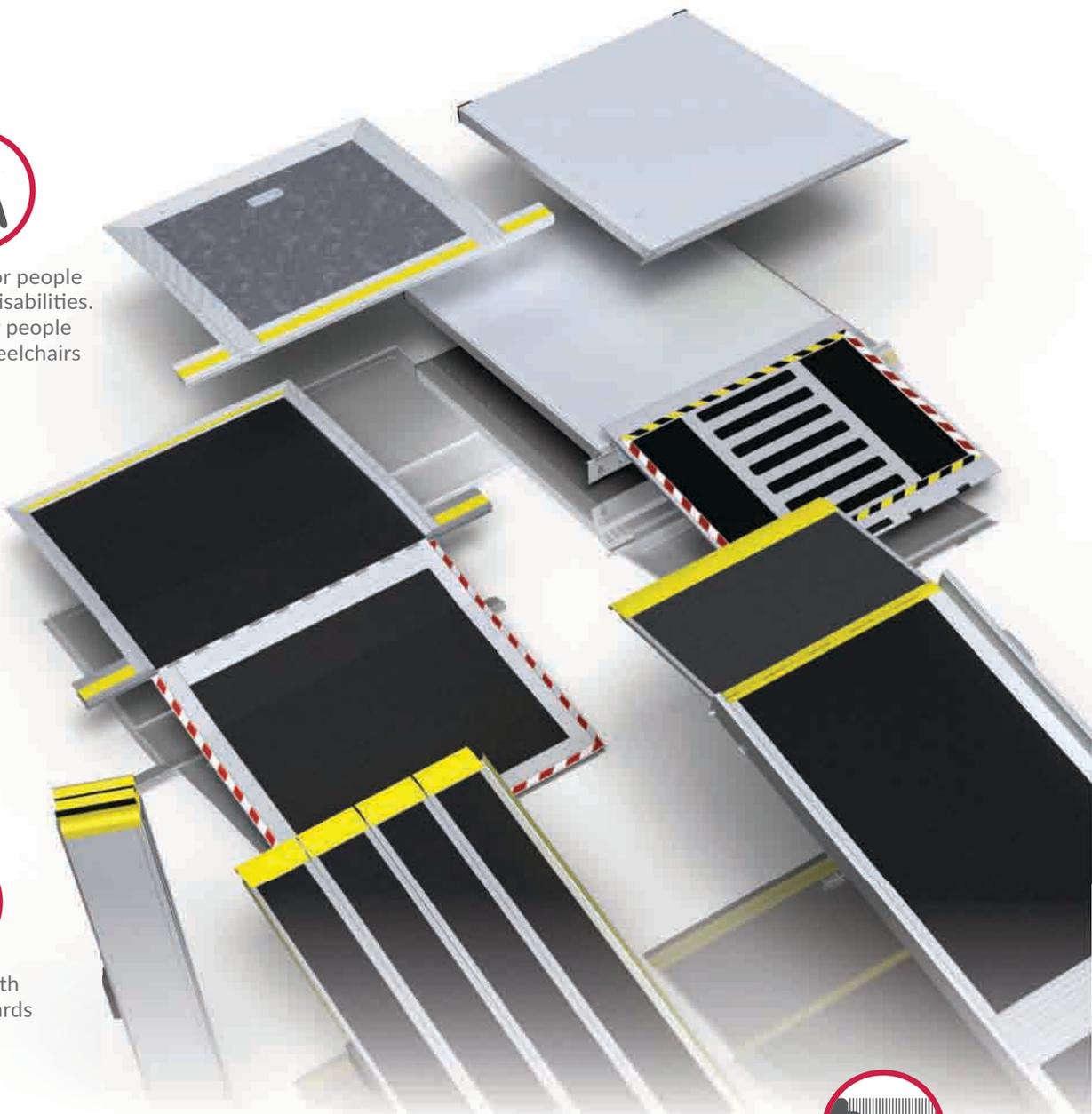
Easy access for people with physical disabilities.
Designed for people moving in wheelchairs



safety



compliance with TSI PRM standards



we adjust the length and width of the ramp individually to the needs of the users.

For the sake of safety in use, all our ramps are manufactured in accordance with applicable standards and regulations, including EU directives, on interoperability:

- EU Directive (TSI PRM)
- UIC Card
- DIN 32985
- DIN 51130
- EN 4554

We have the necessary quality documents (e.g. certificates and test reports) issued by specialised and accredited bodies confirming compliance with the requirements of the relevant normative documents.

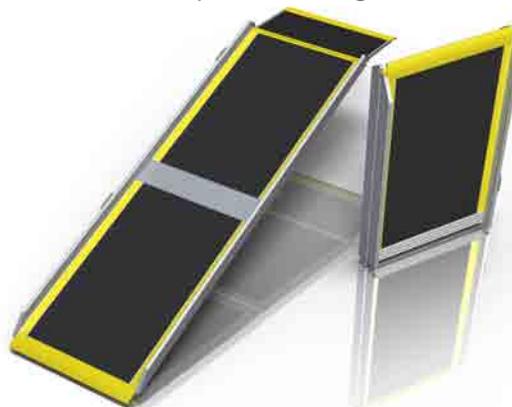
Mobile ramps

Portable ramps are characterized by compactness of construction which contributes to easy handling and unfolding. They can operate entrances on both sides of the vehicles, which saves space for storing the ramp in the vehicle, reducing the total weight of the vehicle and the cost of purchasing equipment.

Mobile ramps can be located at stations and platforms from where they can be quickly moved to any place where they are needed. The proposed solutions allow for the use of our ramps also in infrastructure not adapted to the regulations in force.

weight (kg)	up to 8
length (mm)	up to 700
width (mm)	up to 760
load capacity (mm)	up to 350
security measures	barriers on both sides
usable surface	anti-slip mat
moving	handle

Due to periodical modernization of the offered products, actual weights and dimensions may slightly differ from those given in the catalogue.



Easy access for people with physical disabilities.
Designed for people moving in wheelchairs



quick, easy and inexpensive installation on the vehicle



compliance with PRM TSI standards



we adjust the length and width of the ramp individually to the needs of the users.

ramps type: LWXX-04



safety



lightweight

Each of the offered products is a result of thorough analyses, long-term research and consultations, as well as appropriately selected procedures of the design process. Portable frames manufactured by PPHU "LARISA" are equipped with the proprietary Larisa® RubberFoot system, which provides anti-slip and anti-vibration protection. They are made of materials resistant to corrosion caused by weather conditions, as well as road salt solutions. They are characterized by an optimal ratio of mass to load strength. They are manufactured according to current standards and regulations, as confirmed by test reports and certificates.

Available in a wide range of dimensions and custom-made versions.

TYPE LWXX-04

Ramps type LWXX-04 are the lightest mobile structures in our offer. When folded, they have the shape of a suitcase, which in combination with a comfortable handle and a strong belt with a FastLock velcro fastener and low weight makes it possible to carry them over long distances. It also enables them to be operated by even one not very strong person. All models are equipped with our proprietary Larisa® RubberFoot system, which provides anti-slip and anti-vibration protection. In addition, driveways on both sides are equipped with edge profiles, which prevent accidental driving outside the usable area.

Elements made of anodized aluminium are a guarantee of durability of our product.

Wide range of dimensions allows for free selection of the ramp to individual needs of our customers.

Ramp parameters in the LWXX-04 series

weight (kg)	up 8 to 23
length (mm)	up 830 to 2530
width (mm)	up 800 to 850
load capacity (mm)	up to 350
security measures	barriers on both sides
usable surface	anti-slip mat
moving	handle



TYPE LSXX-02

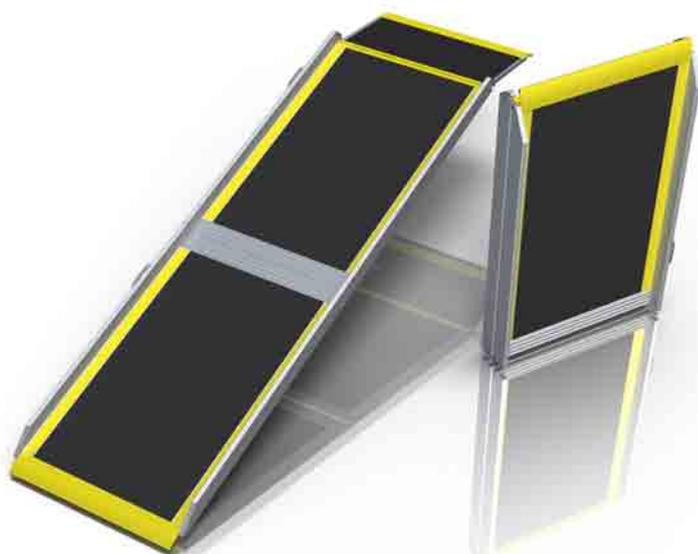
Mobile Ramps type LSXX-02 are characterized by a minimalist design and intuitive and comfortable operation.

They are boarding ramps used mainly in cars and buses. This solution is recommended for vehicles where it is required to use ramps with a length of more than 200 cm and where the difference in height between the platform and floor level is extremely large.

It is possible to equip them with additional handles to attach the ramp to the vehicle structure. In order to make the handling of the gangways maximally easy, it is also possible to use integrated racks equipped with gas springs to support their unfolding. The ramps are offered in a wide range of lengths up to 3.5 m.

Ramp parameters in the LSXX-02

weight (kg)	up 12 to 34
length (mm)	up 930 to 3500
width (mm)	up 760 to 860
load capacity (mm)	350
security measures	barriers on both sides
usable surface	anti-slip mat
moving	handle



The structure of LSXXX-03 ramps is based on standard models of access ramps LSXX-02. The main difference is the mechanism used to attach the ramp permanently to a vehicle. It also acts as a system to assist in unfolding and folding the ramp, shortening the time of preparation for use and repositioning it in the transport position. Owing to a unique design solution, the ramps can be operated by one person using little force. A different type of raceway from the other LS series ramps is used here as well, made of perforated sheet metal covered with anti-slip paint with a high coefficient of friction. Due to the place of installation and accessibility of the ramp in order to prevent its uncontrolled use by unauthorized persons, the supporting mechanism was secured with a key-operated lock. An additional trolley and a ramp lock guarantee maximum safety for users.



Easy access for people with physical disabilities.
Designed for people moving in wheelchairs



safety



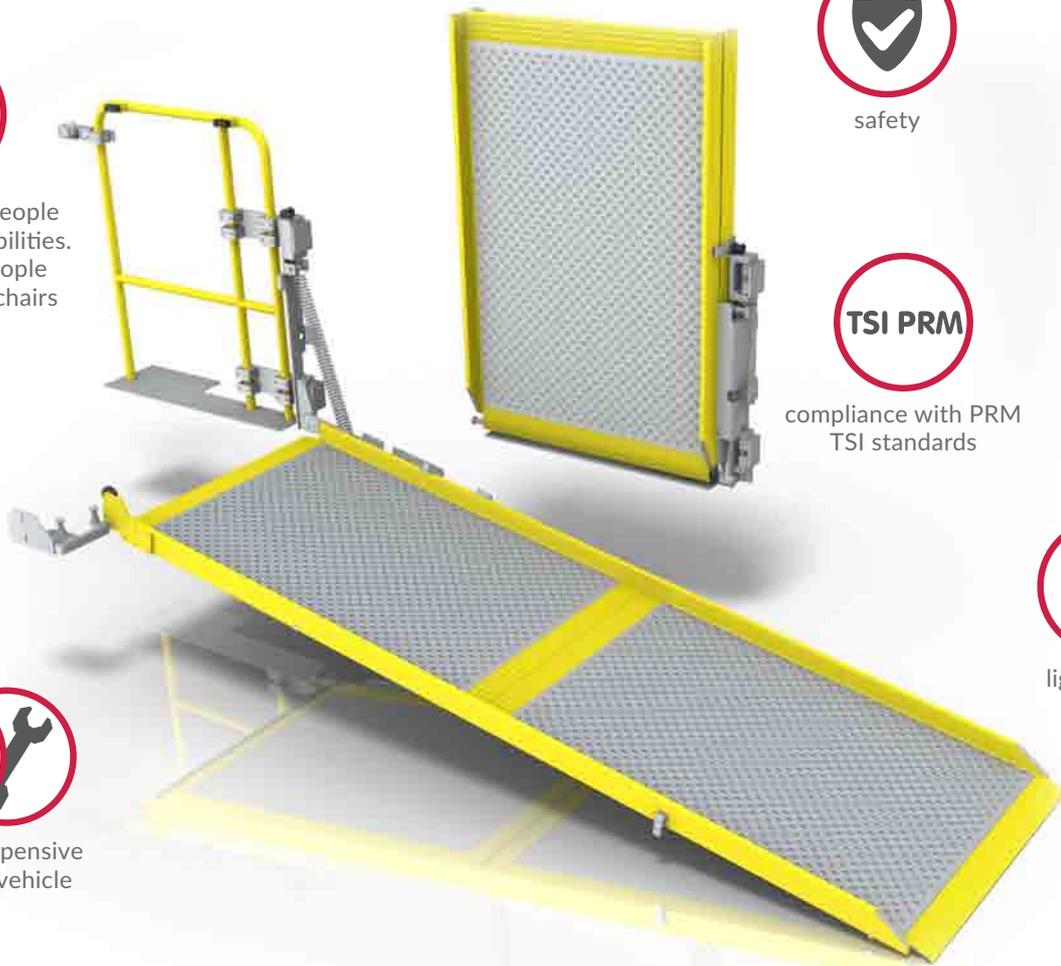
compliance with PRM TSI standards



lightweight



quick, easy and inexpensive installation on the vehicle



Ramp parameters in the LSXXX-03

weight (kg)	47
weight of the unfolding system (kg)	35
length (mm)	2930
width (mm)	968
load capacity (mm)	up to 350
security measures	barriers on both sides, security locks
usable surface	perforated sheet with anti-slip lacquer
way of unfolding	manual unfolding with spring assistance

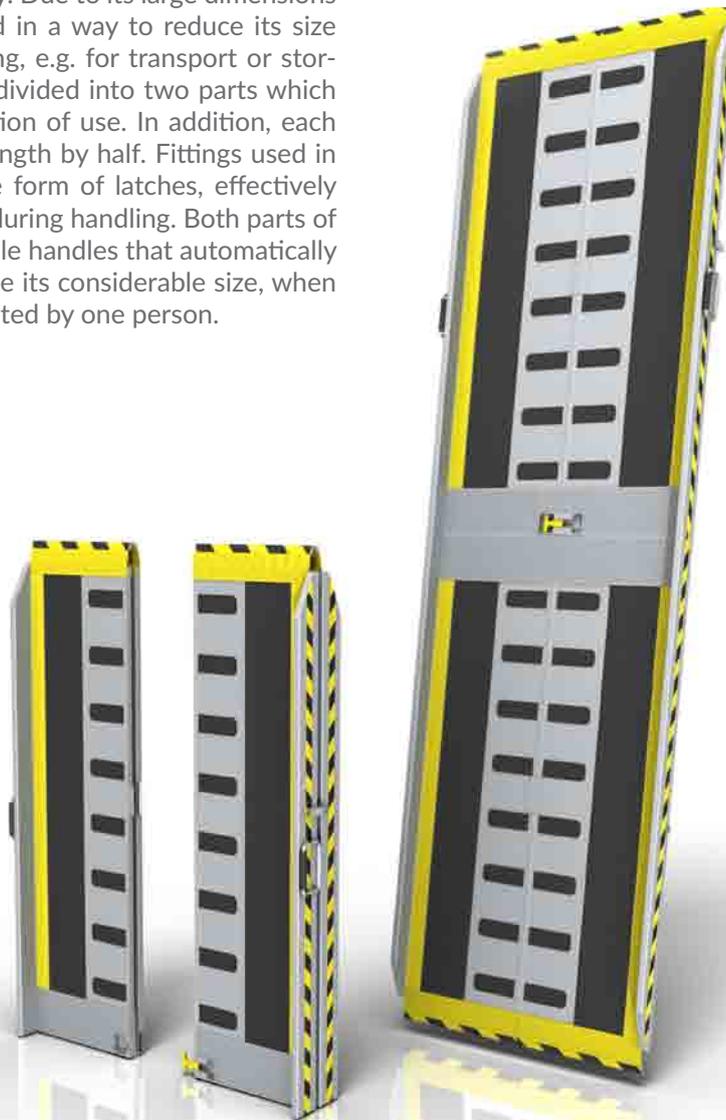
The LA28-04 portable ramp is made of aluminium elements, which significantly contributes to its low weight with a large usable area and high strength, and optimum rigidity. Due to its large dimensions in the unfolded state, it was designed in a way to reduce its size to the necessary minimum after folding, e.g. for transport or storage. For this purpose, the raceway is divided into two parts which are joined together only for the duration of use. In addition, each of them has a hinge to reduce their length by half. Fittings used in both parts of the access ramp, in the form of latches, effectively protect these elements from opening during handling. Both parts of the ramp are equipped with comfortable handles that automatically fold up during use and storage. Despite its considerable size, when unfolded, the ramp can be easily operated by one person.



Easy access for people with physical disabilities. Designed for people moving in wheelchairs



quick, easy and inexpensive installation on the vehicle



safety



compliance with PRM TSI standards



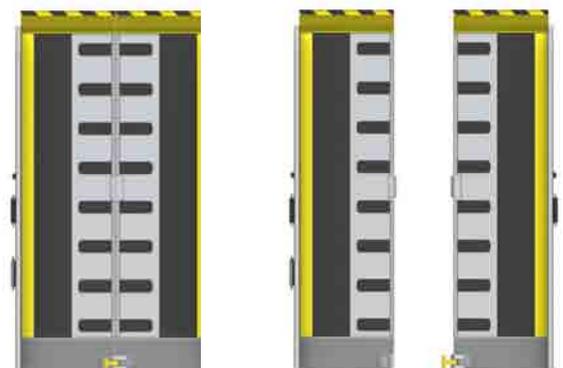
lightweight

Ramp parameters in the LA28-04

weight (kg)	31
length (mm)	2930
width (mm)	845
load capacity (mm)	up to 350
security measures	barriers on both sides
usable surface	anti-slip mat
moving	divided into two parts, folding handles

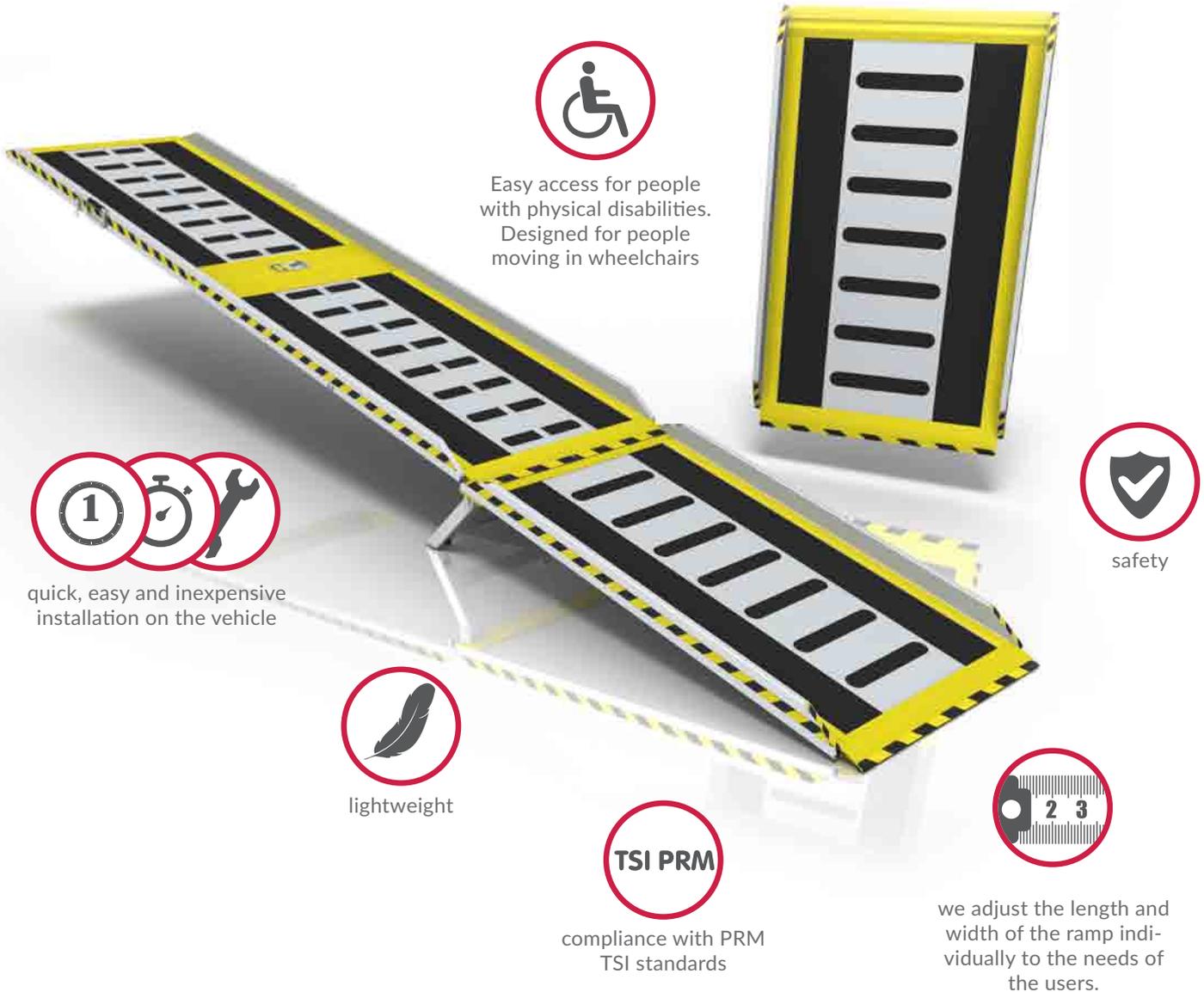


On request, it is possible to make ramps of different length adapted to individual needs.



TYPE LA28-04 Plus (with extension)

The LA28-04 Plus is an extension of the LAXX-04 series. This solution uses an additional raceway pattern to extend the ramp, which, thanks to a dedicated attachment system, can be used optionally depending on the difference in levels between the vehicle floor and the platform. With an additional element, the ramp can be extended up to 4 metres. This allows the appropriate ramp angle to be achieved under specific conditions in accordance with the TSI requirements. The applied solution of dividing the raceway into two parts (ramp and extension) allows to reduce the weight of elements carried by the vehicle operators and to reduce the size of the ramp after folding.



Ramp parameters in the LA28-04 Plus

weight of the ramp/ramp with extension (kg)	31/48
length of the ramp/ramp with extension (mm)	2865/4000
width of the ramp/extension (mm)	760/765
load capacity (mm)	350
security measures	barriers on both sides
usable surface	anti-slip mat
moving	folding handles

Larisa Stationary ramps

Stationary ramps are structurally fixed to the vehicle, i.e. place of use, which significantly facilitates and accelerates their operation. Devices of this type are usually installed in the vehicle floor and used mainly in trams, buses, trolley buses and suburban railways.

Fixed ramps can be installed:

- in the chassis (extending from under the floor)
- in the floor (part of the floor plane)
- in the cabinet at the door (linked by a joint).



compliance with PRM TSI standards



quick, easy and inexpensive installation on the vehicle

TYPE P95-01

Stationary flap ramp TYPE P95-01 is designed for installation in the vehicle floor. It is the most frequently used type of ramp both in trams and buses. It is characterized by a unique ease and fastness of operation.

Its design ensures optimal adaptation to the floor surface without restricting the ability to move around the vehicle for both fully fit and disabled passengers (also in wheelchairs). The use of a special sealing significantly reduces the penetration of moisture and various types of contamination between the ramp flap and the base, reducing the need for frequent maintenance.

The durability and reliability of the device is guaranteed by, among other things, the right construction and light and durable materials used to build the ramp.

The Larisa® RubberFoot anti-slip system and a sensor monitoring the position of the flap provide additional safety for the access ramp users.

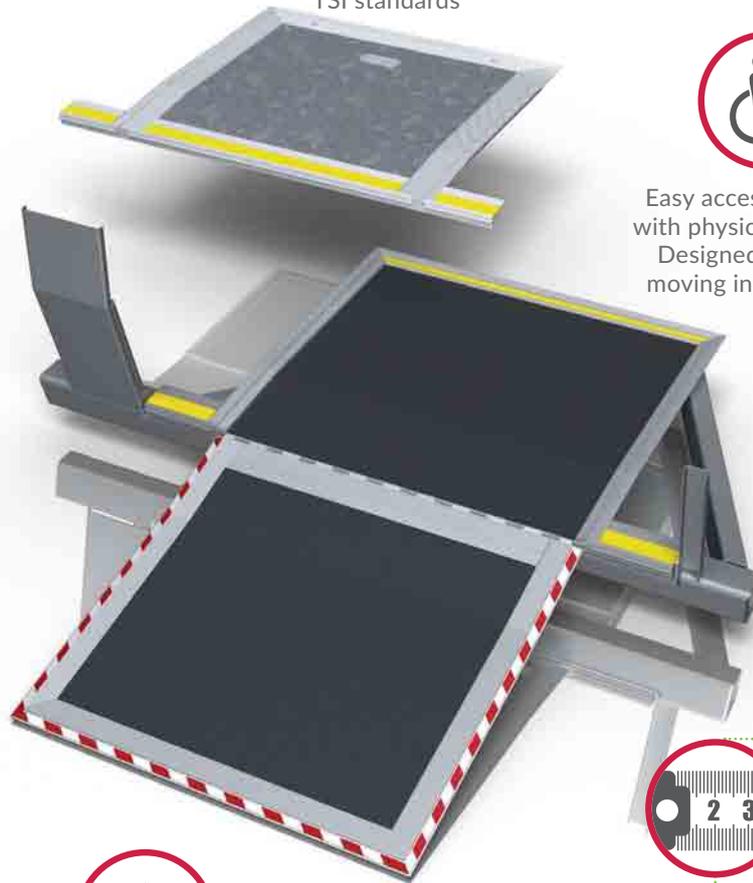
It is possible to modify the dimensions of the ramp to individual order.



Easy access for people with physical disabilities. Designed for people moving in wheelchairs



lightweight



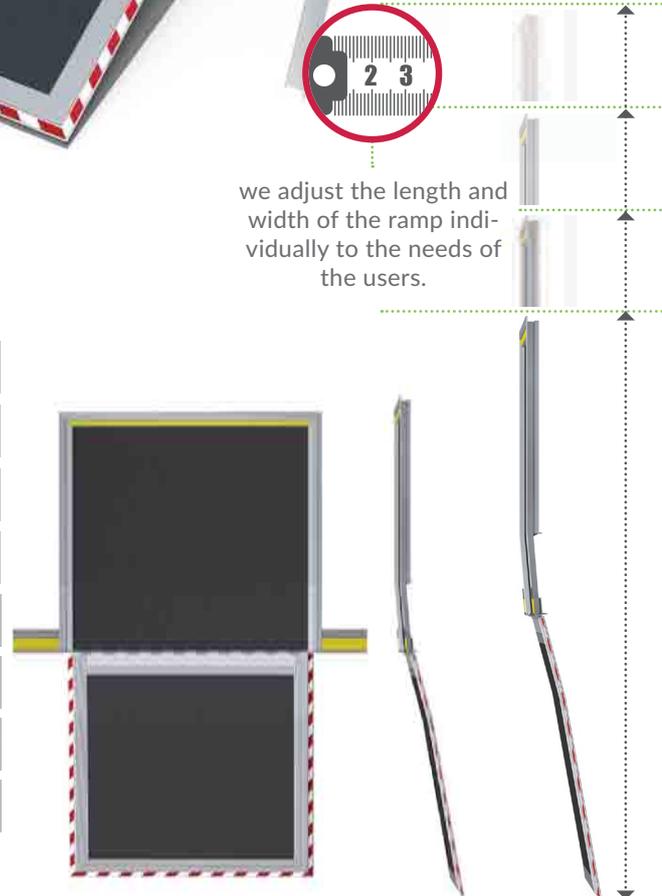
safety



we adjust the length and width of the ramp individually to the needs of the users.

Ramp parameters in the P95-01

weight of mobile platform (kg)	13
total weight of the ramp (kg)	27
length of moving platform (mm)	990
width of moving platform (mm)	1070
load capacity (mm)	up to 350
usable surface	anti-slip mat
functions	opening from the vehicle floor
opening signalling	24V NC inductive sensor



TYPE R09-02

The design of the R09-02 stationary ramp for installation in the vehicle chassis was developed in response to the growing demand for a simple, economical and reliable design, operated by the tram or car driver. The solution of extending the ramp from a cassette mounted in the vehicle chassis is an alternative to flap ramps installed in the floor. Owing to this, the floor plane in the passenger compartment is free of additional elements that make cleaning difficult.

As with all offered ramps, R09-02 models are made of properly selected materials that ensure resistance to the conditions of use and are equipped with Larisa® RubberFoot anti-slip system and an induction sensor that tracks the position of the ejectable access ramp.

It is possible to adjust the dimensions of the ramp to individual customer needs.



compliance with PRM TSI standards



safety



Easy access for people with physical disabilities. Designed for people moving in wheelchairs



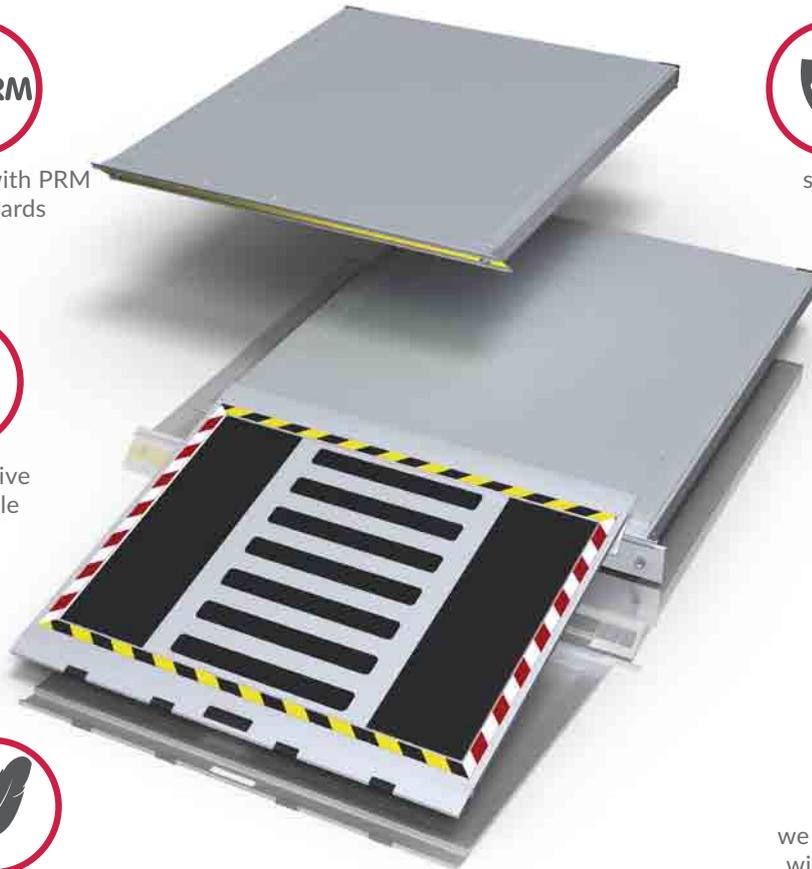
quick, easy and inexpensive installation on the vehicle



lightweight

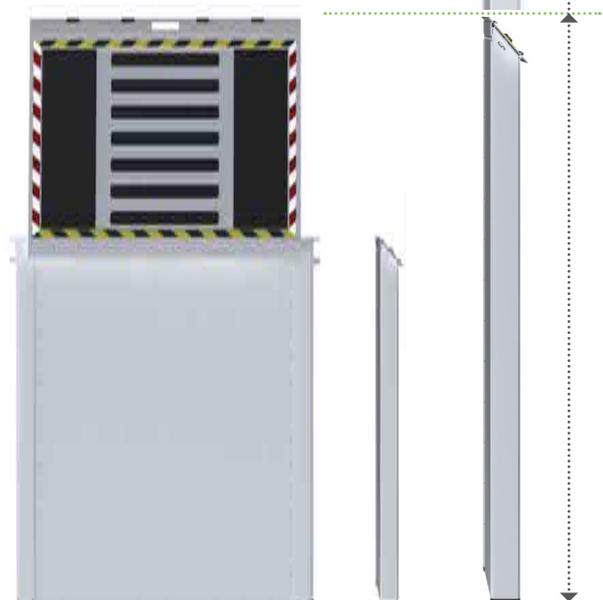


we adjust the length and width of the ramp individually to the needs of the users.



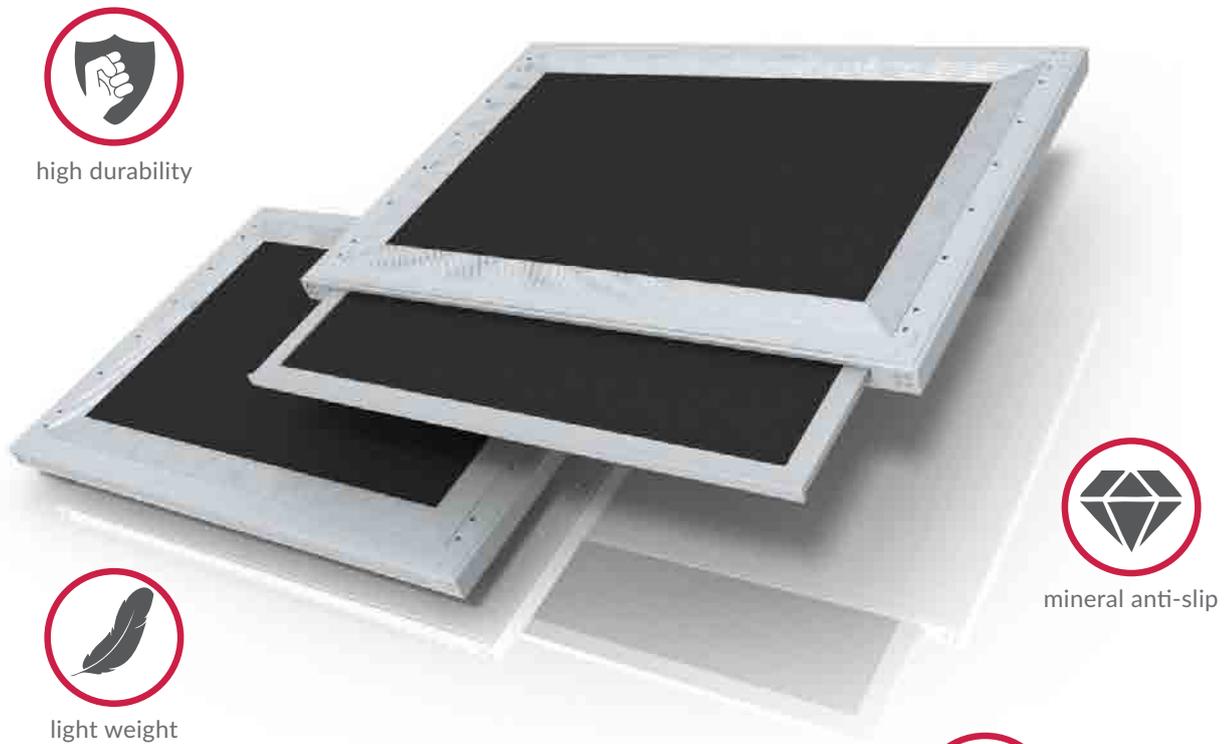
Ramp parameters in the R09-02

weight of the ejectable platform (kg)	11
total weight of the ramp (kg)	38
length of moving platform (mm)	910
width of moving platform (mm)	910
load capacity (mm)	350
usable surface	anti-slip mat
functions	ejection from under the floor



As a result of the completion of the project „Design and construction of an automatic withdrawable bridge for people with disabilities” co-financed under the OPERATIONAL PROGRAM Intelligent Development priority axis 2, Support for the environment and business potential to conduct business R+D+I activity 2.3 Pro-innovative services for enterprises sub-measure 2.3.2 Innovation vouchers for MŚP – general contest, PPHU LARISA purchased R&D services from a research unit, consisting in the development of an innovative product, which is an automatic sliding bridge for the disabled for urban rail vehicles.

As a result of this cooperation, on June 12, 2020, PPHU LARISA introduced a new innovative product, an automatic sliding platform for people with disabilities the APW-03



easy cleaning



high durability



Easy access for people with physical disabilities. Designed for people moving in wheelchairs



light weight



mineral anti-slip



safety

Our newest automatic platform, marked with the APW-03 index, has 3 innovations that are unique on a national scale, such as:

- Small dimensions and compact housing - enabling the project to be built into currently used vehicles;
- Platform controller equipped with CAN bus - enabling detailed analysis of product parameters and data exchange with the vehicle controller;
- GSM module - sending data collected from sensors directly to the manufacturer, enabling more effective product risk management and, as a result, increasing the readiness of vehicles for use.

In the near future, PPHU LARISA plans to offer its customers an optional innovative function, consisting in remote warranty and post-warranty diagnostics of the new APW-03 product.



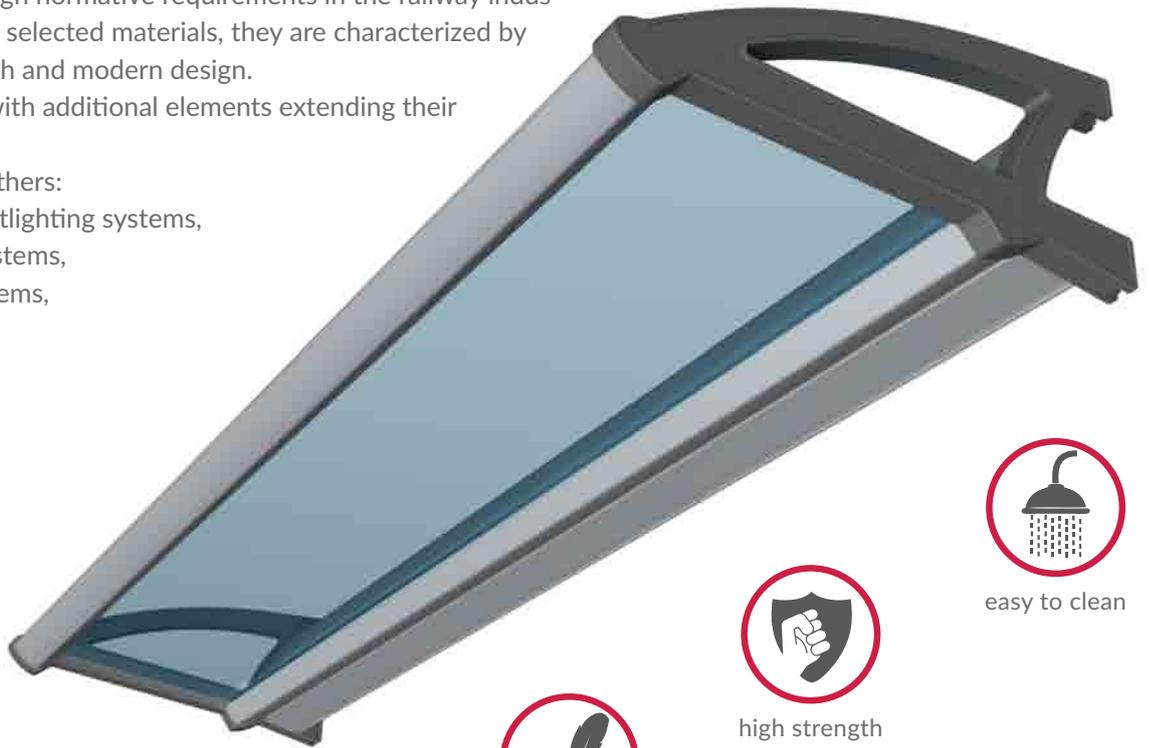
Luggage shelves offered by PPHU "LARISA" are designed for installation in passenger compartments of public transport vehicles.

Their structures meet high normative requirements in the railway industry. Owing to the use of selected materials, they are characterized by low weight, high strength and modern design.

They can be equipped with additional elements extending their functionality.

These include, among others:

- linear lighting and spotlighting systems,
- decorative lighting systems,
- place reservation systems,
- advertising systems,
- sun blind system



anodized coating
for a high scratch
resistance



easy to clean



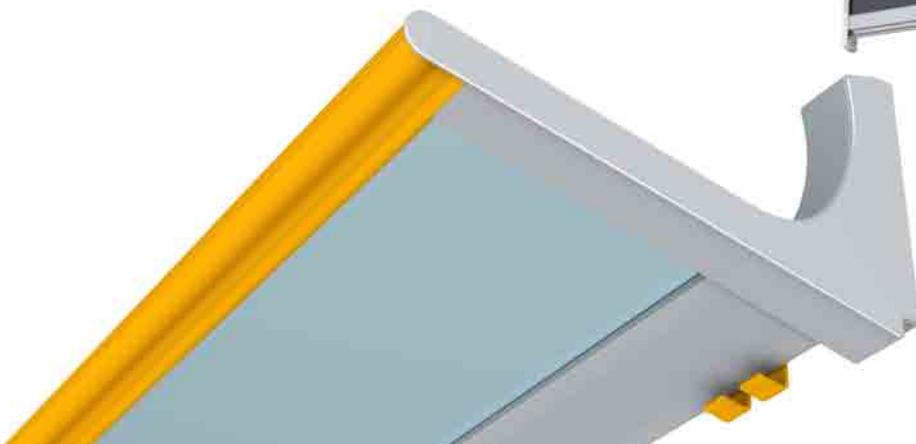
high strength



lightweight

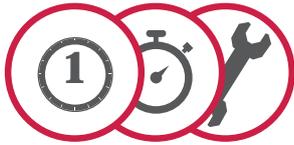
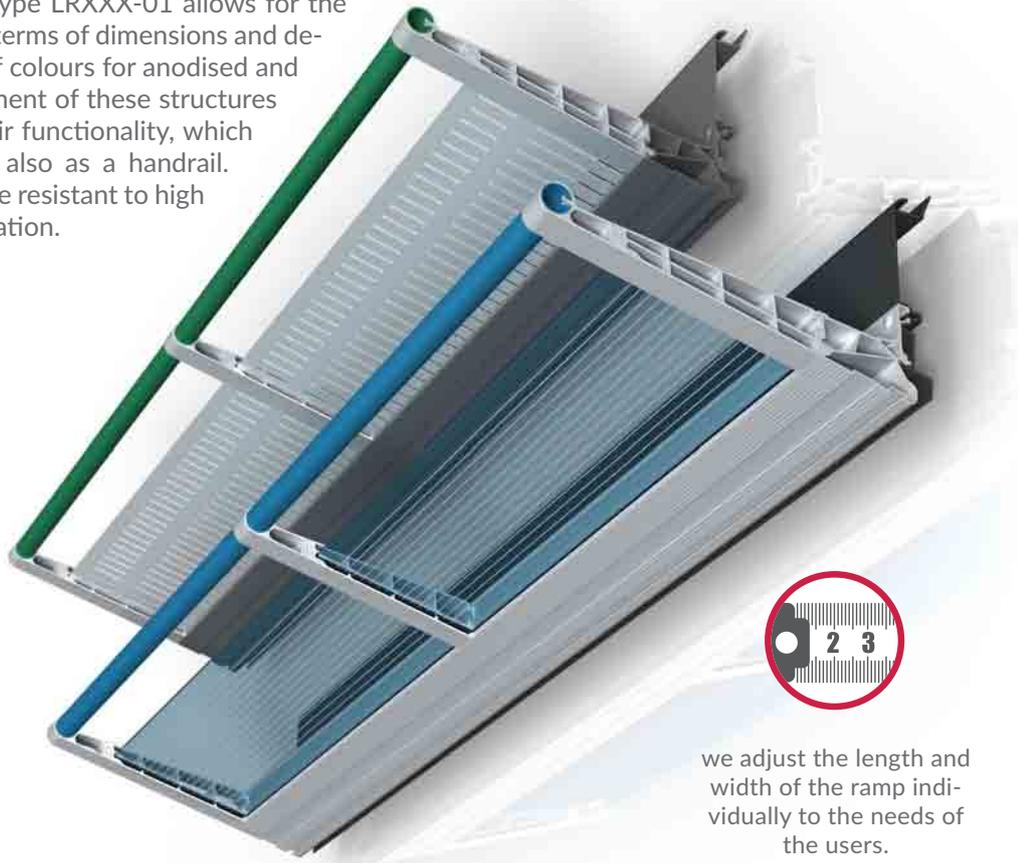


multifunction



Larisa Shelves TYPE LRXXX-01

The modular structure of the shelves type LRXXX-01 allows for the configuration of their elements both in terms of dimensions and design. Models are available in a variety of colours for anodised and varnished finishes. A characteristic element of these structures is the front profile which enhances their functionality, which allows passengers to use the shelves also as a handrail. Both openwork tops and glass panels are resistant to high loads, which guarantees their safe operation.



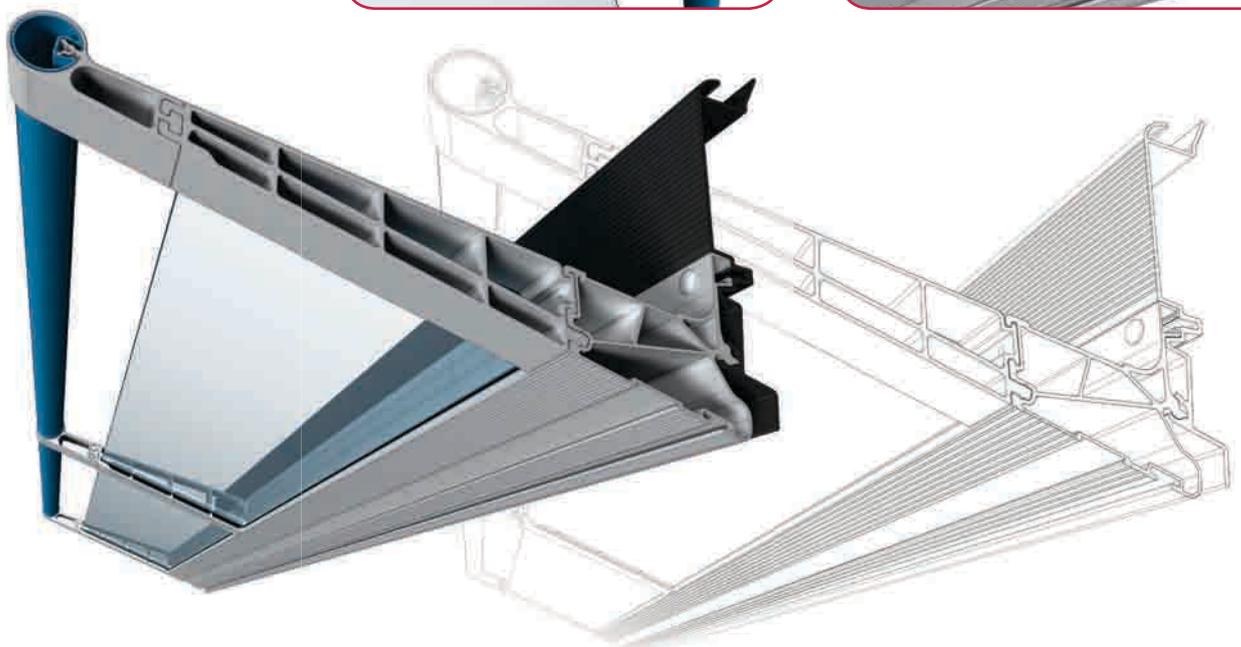
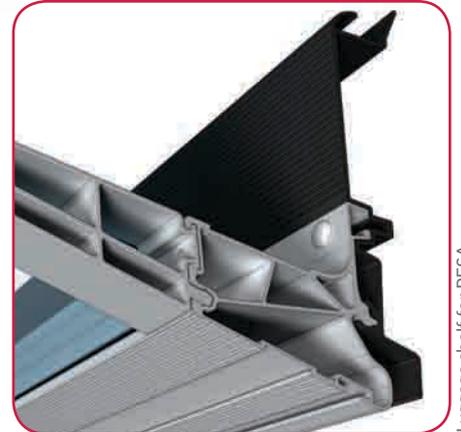
quick, easy and inexpensive installation on the vehicle



we adjust the length and width of the ramp individually to the needs of the users.



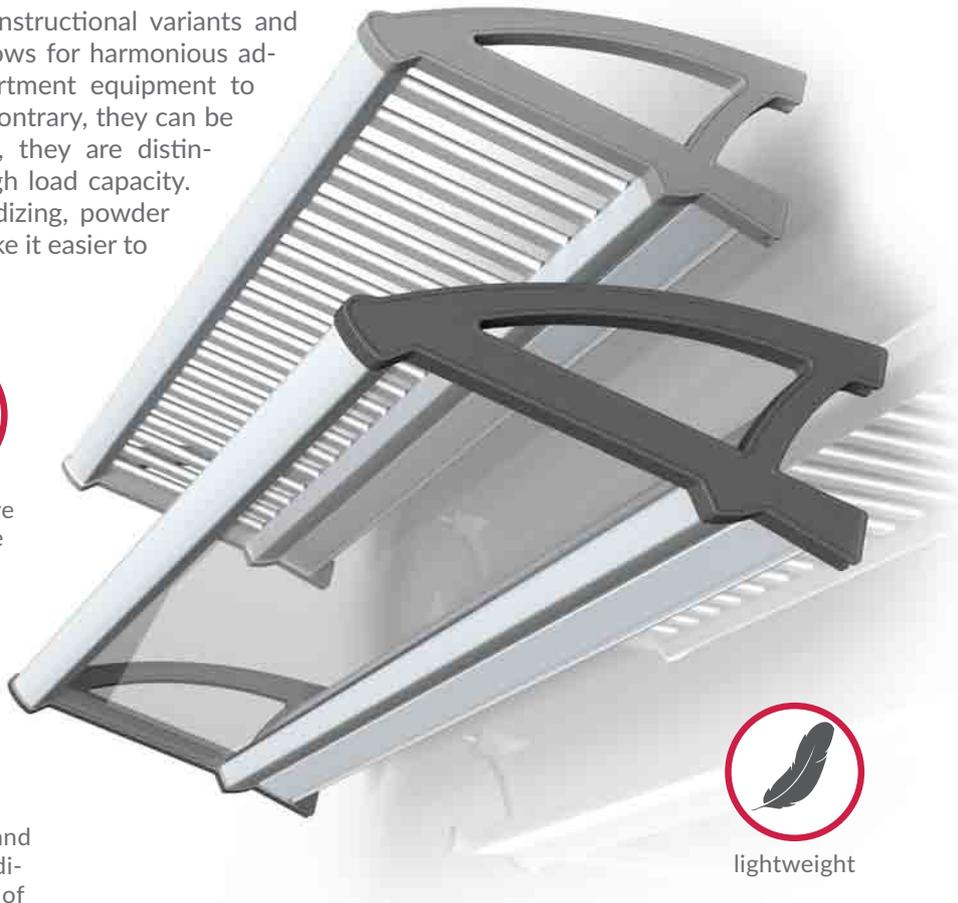
lightweight



Luggage shelf for PESA
For the ELF2 train

Larisa Shelves TYPE LRXXX-02

LRXXX-02 shelves are available in two constructional variants and several dozen of colour versions, which allows for harmonious adaptation of these elements of the compartment equipment to the design dominating in rooms or, on the contrary, they can be a contrasting element. In technical terms, they are distinguished by their ultralight structure and high load capacity. Both the materials and surface finish (anodizing, powder paint), as well as the structure of shelves make it easier to keep them clean.



quick, easy and inexpensive installation on the vehicle



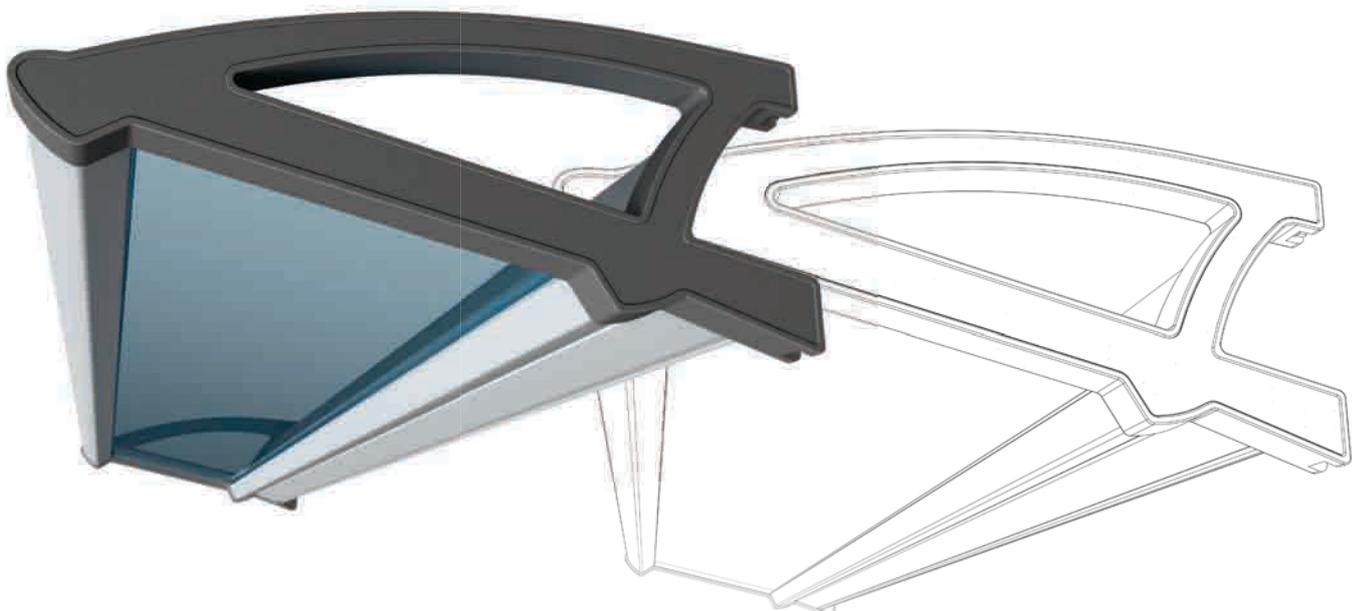
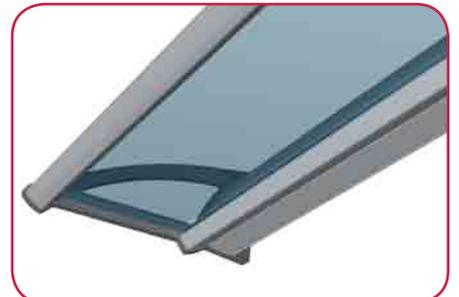
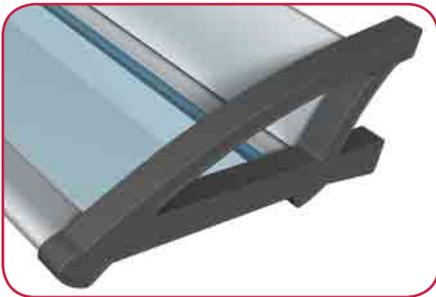
easy to clean



we adjust the length and width of the ramp individually to the needs of the users.



lightweight





Shelves TYPE LRXXX-10

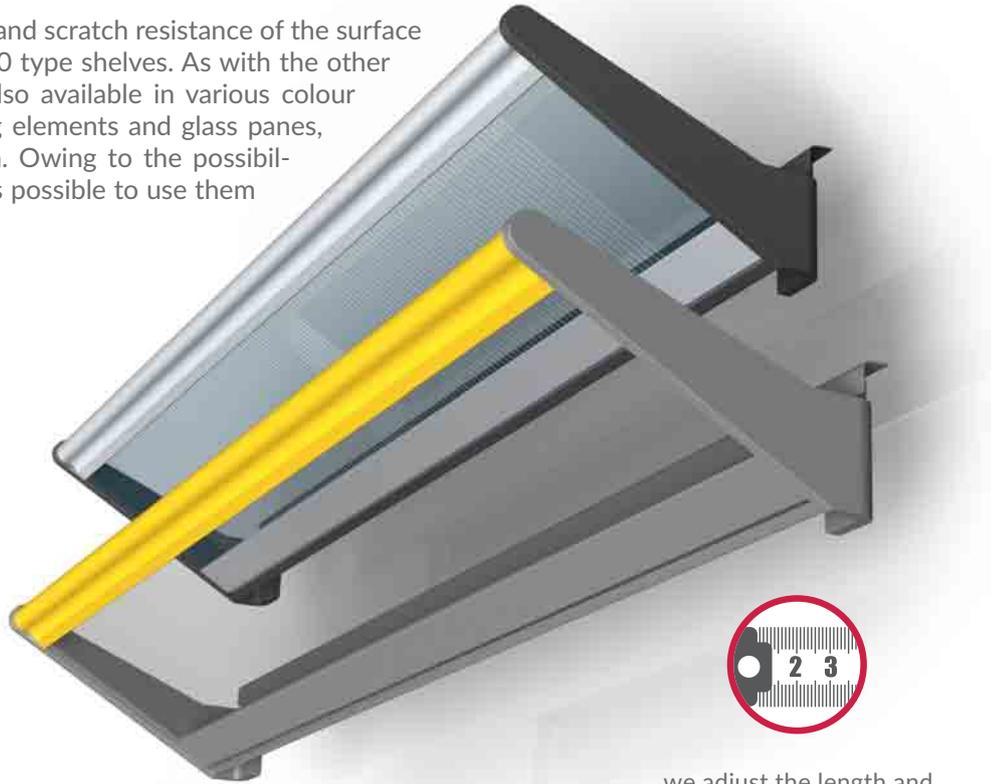
Simple structure and optimal strength and scratch resistance of the surface are the basic features of the LRXXX-10 type shelves. As with the other offered products, these shelves are also available in various colour variants of both aluminium supporting elements and glass panes, which can be permanently printed on. Owing to the possibility of a smooth selection of widths it is possible to use them in both large and small spaces.



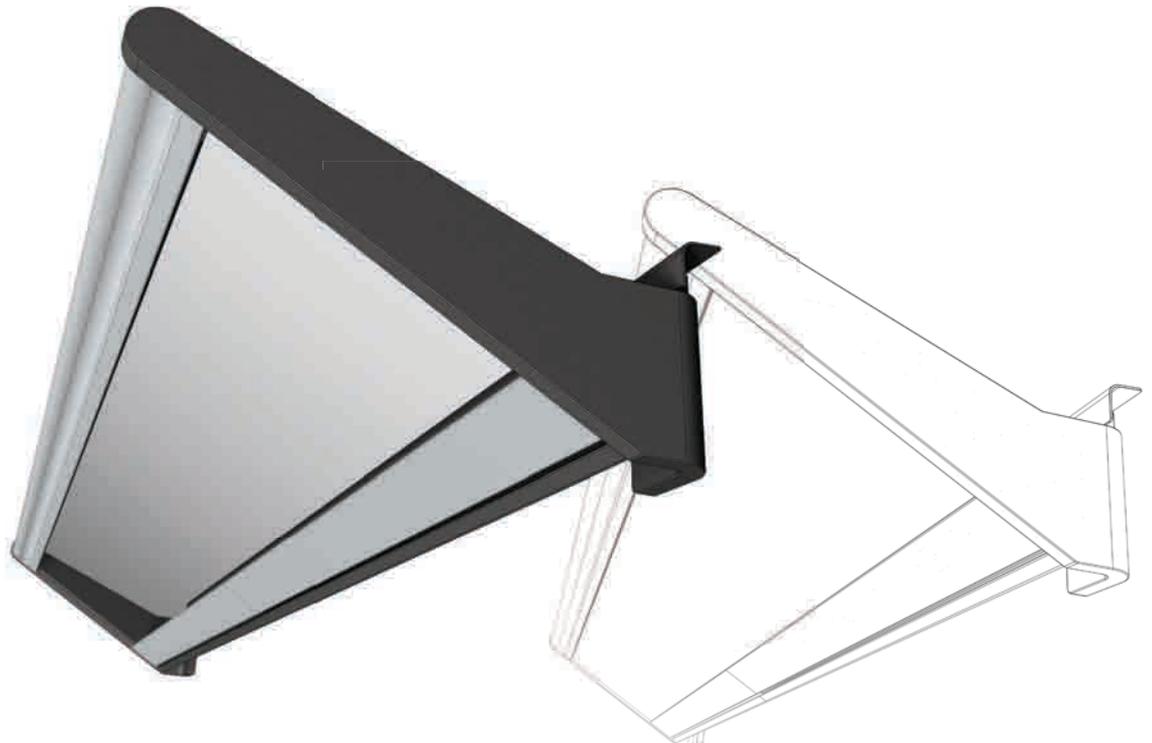
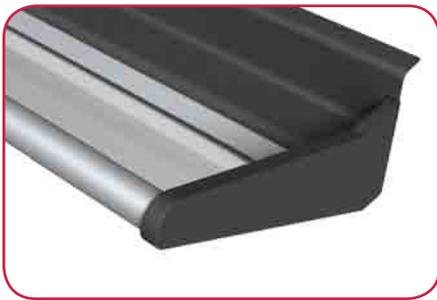
quick, easy and inexpensive installation on the vehicle



lightweight



we adjust the length and width of the ramp individually to the needs of the users.



LARISA Shelves TYPE LR02

Shelves type LR02 are elements of equipment combining several functions. In addition to the primary purpose of storing luggage for the time of travel, they also provide a stable handrail that can be used by passengers. The equipment in the form of spotlights with LED light and switches significantly affects the comfort of travellers who need additional lighting. The whole is complemented by a set of hooks allowing for comfortable suspension of wardrobe elements. As in the case of other offered shelves, a modular structure was used here as a preference, which allows you to adjust the dimensions of the shelf to the place of their installation.



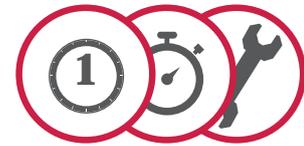
easy to clean



high strength



we adjust the length and width of the ramp individually to the needs of the users.



quick, easy and inexpensive installation on the vehicle



THE TESTS OF OUR PRODUCTS CERTIFIED BY THE

RAILWAY INSTITUTE:

- Climatic tests;
- Strength and electrical efficiency tests;
- Electromagnetic compatibility tests.

INSTITUTE OF AVIATION

- Impact resistance tests;
- Vibration resistance tests.

In 2013, LARISA implemented an ISO 9001 Quality Management System.



ISO 9001

LL-C (Certification)



Larisa

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European Funds
Smart Growth



Republic
of Poland



European Union
European Regional
Development Fund

