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MOBILE MODULAR SAFETY RAIL **TYPE TRE**

EN 795/B TS 16415/B

Notified body which supervises the production of the equipment

APAVE SUDEUROPE SAS - BP 193 - 13322 MARSEILLE CEDEX 16 - FRANCE



Fig. 1 - General view of device TRE

TABLE OF CONTENTS:

| 1. | GENERAL DESCRIPTION | . 1 |
|-----|---|-----|
| 2. | GENERAL DIMENSIONS | . 2 |
| 3. | TIME OF USAGE | . 2 |
| 4. | PERIODIC INSPECTIONS | . 2 |
| 5. | MARKING OF DEVICE TRE | . 2 |
| 6. | MARKING OF ANCHORING TROLLEY ASB500-250 | . 3 |
| 7. | ASSEMBLY | . 3 |
| 8. | USE | . 7 |
| | ESSENTIAL PRINCIPLES FOR USE OF PERSON. PROTECTION EQUIPMENT | |
| 10. | WARRANTY | . 9 |
| 11. | IDENTITY CARD | 10 |

1. GENERAL DESCRIPTION

Mobile Modular Safety Rail type TRE is an anchor point compliant with EN 795/B and document TS16415/B. The device is designed for protection of maximum 3 users at the same time.

The device is made of strengthened anodized or powder-coated aluminium. Rail connector is made of zincanodized and powder-coated steel.

The device consists of individual elements the weight of which does not exceed 25kg. Individual modules are connected with bolts M12 (required use of wrenches #19).

Maximum 3 trolleys (ASB500-250), being anchor points for one person each, travel inside of work rail of the device. Strength of one trolley is min. 12kN vertically down with deflection within spacing of device legs. Strength of the whole device (rail with trolleys) is min. 14kN vertically down with deflection within spacing of device legs.

The maximum load that could be transmitted in service from the device to the static construction - 14kN.

If the device is used as a part of a fall arrest system, the user must be equipped with an element limiting maximum dynamic forces applied on user while arresting a fall to max. 6kN.

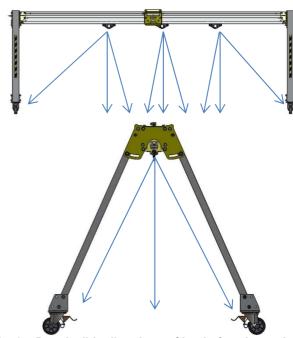


Fig. 2 - Permissible directions of load of anchor point

Complete device TRE comprises:

- 1) Two supports with foldable legs (height approx. 1.5m) (TRE200-003-000) (~13.35kg/module)
- 2) Two work rails with a length of 2m (TRE200-000-001) (~13.1kg/module)
- 3) Work rail connector (TRE200-002-000) (~4.82kg)
- 4) Three anchoring trolleys installed inside work rail (ASB500-250) (~2.55kg).



Fig. 3 - Anchoring trolley AC520-250



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2. GENERAL DIMENSIONS

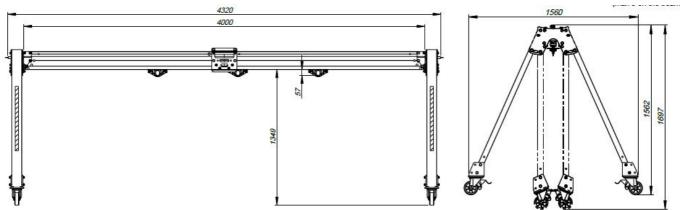


Fig. 4 - Dimensions of device TRE

3. TIME OF USAGE

Maximum time of usage of correctly operating devices is unlimited.

The device must be withdrawn from use immediately and destroyed if it has been used to arrest a fall or there are any doubts concerning its function.

NOTE: Maximum time of usage of the device depends on intensity and environment of use. If the device is used in heavy conditions, being exposed to frequent contact with water, sharp edges, corrosive substances, extreme of temperatures, it may be necessary to withdraw the device after only one use.

4. PERIODIC INSPECTIONS

At least once a year, after every 12 months of use, it is necessary to carry out periodic detailed inspection of the device.

Periodic inspection may be carried out by a properly qualified and skilled person.

After 5 years of use, it is recommended that periodic inspections are carried out by the manufacturer of the equipment or an entity authorised by the manufacturer to carry out such inspections.

5. MARKING OF DEVICE TRE

Marking elements:

- a) Name/ type of device
- b) Device model designation.
- c) Reference number.
- d) Number/year/class of European standard.
- e) CE mark and number of notified body which supervises the production of the equipment.
- f) Month and year of manufacture.
- g) Serial number of device.
- h) Attention: read instruction manual.
- i) Mark of device's manufacturer or distributor.
- j) Maximum number of concurrent users



Fig. 5 – Identity label of device TRE



Fig. 6 - Location of marking of device TRE



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MARKING OF ANCHORING TROLLEY ASB500-250

Marking elements:

- a) Name/ type of device
- b) Device model designation.
- c) Reference number.
- d) Number/year/class of European standard.
- e) CE mark and number of notified body which supervises the production of the equipment.
- f) Month and year of manufacture.
- g) Serial number of device.
- h) Attention: read instruction manual.
- i) Mark of device's manufacturer or distributor.
- j) Maximum number of concurrent users

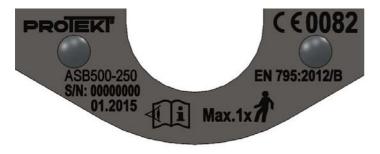


Fig. 7 - Marking of anchoring trolley ASB500-250

7. ASSEMBLY

The device comprises elements the length of which is no more than 2 meters. Therefore the device can be transported in small lifts.

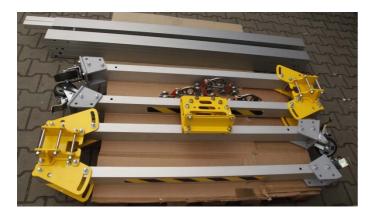


Fig. 8 - Device ready for installation

Assembly of the device will require use of two wrenches #19!



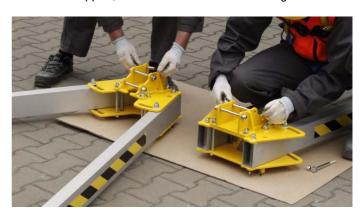
Fig. 9 – Assembly of device will require use of two wrenches #19

Put two supports on a flat and stable ground and unfold the legs completely until locked by a special pawl.





From each support, remove 3 bolts for rail mounting.





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Install rails in support sockets. Screw each rail using 3 bolts M12.







Turn both connected modules for further assembly.



Connect both rail halves using convenient connecting profiles. Now it is possible to readily mount inner anchoring trolleys ASB500-250.







Connect both rail halves using a connector. A connector is formed by two zinc-anodized and yellow powder-coated steel platens connected to each other. A connector comprises two stainless tubes and two sets of bolts M12.



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A connector should be placed as loose on rails to be connected. Inner pins of a connector should go through oval sockets on rail ends.





Push stainless tubes through two outermost holes of a connector. Then push through two bolts M12 and lock into place.





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Next lock upper short bolts of a connector into place.

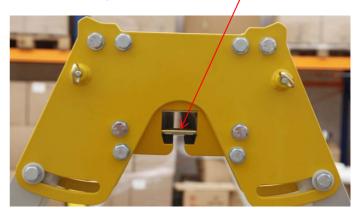






Installation/ removal of anchoring trolleys can be carried out by unscrewing lower bolt M12, which at the same time protects the trolley from derailing, in one of supports.

ATTENTION! - After installation of trolleys make sure that both lower lock screws at both rail ends are installed correctly!





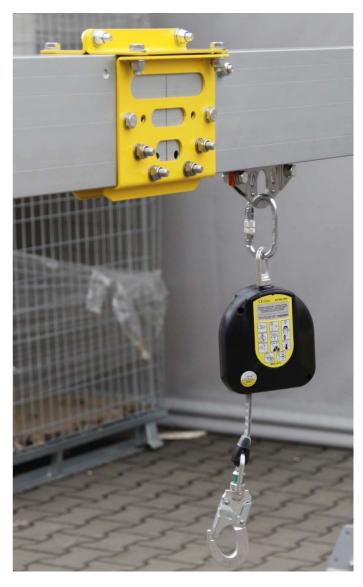


0000579 edition: 1/17.12.2019









Device TRE can be used for rescue of personnel using rescue devices type RUP502 or CRW200 if anchor device TM1, equipped with attachment point of the above devices, is used additionally.

8. USE

Device TRE is equipped with 3 movable anchor points as trolleys travelling inside work rail. These trolleys can be used for connection of fall protection equipment. Each trolley can be used for safeguarding of one worker. Maximum 3 users working in sewer manholes, shafts, wells and open roof skylights can be attached to a single device TRE.



0000579 edition: 1/17.12.2019



9. ESSENTIAL PRINCIPLES FOR USE OF PERSONAL FALL PROTECTION EQUIPMENT

 Anchor point AT150 must be used in accordance with instruction manuals for personal fall protection equipment and standards:

EN 361 - for full body harness

EN 352-3; EN 355; EN 360 - for personal fall protection equipment

EN 362 - for connectors

EN 795 / TS16415 - for anchor points

- Personal fall protection equipment should be used only by personnel trained in this respect.
- personal fall protection equipment must not be used by a person with medical condition that could affect the safety of the equipment user in normal and emergency use.
- prepare a rescue plan to be implemented whenever necessary.
- it is forbidden to make any alterations or additions to the equipment without the manufacturer's prior written consent.
- any repair shall only be carried out by manufacturer of the equipment or his certified representative.
- Personal fall protection equipment shall not be used for any purpose other than intended.
- personal fall protection equipment provides individual protection and shall be used by one person only.
- before each use make sure that all parts of the fall arresting system cooperate correctly. Periodically examine connections and fitting of components of the equipment to prevent any accidental loosening or disconnection.
- it is forbidden to use a combination of equipment where function of any one item is affected by, or interferes with the function of any other.
- before each use of personal fall protection equipment, a pre-use check should be carried out to ensure that it is in a serviceable condition and operates correctly.
- In particular, inspect all accessible elements of the equipment for any damages, excessive wear,

- corrosion, abrasion, cutting or improper function. On individual devices pay particular attention to:
- ✓ in full body harness and work positioning devices: buckles, regulating elements, attachment points (buckles), webbing, seams, belt loops;
- ✓ in energy absorbers: attachment loops, webbing, seams, housing, connectors;
- in lanyards and textile guides: rope, loops, thimbles, connectors, regulating parts, splices;
- ✓ in lanyards and steel guides: rope, wires, clamps, loops, thimbles, connectors, regulating parts;
- in retractable type fall arresters: lanyard or webbing, retractor and locking mechanism for proper operation, housing, energy absorber, connectors;
- ✓ in guided type fall arresters: body, proper guiding, locking mechanism for proper operation, rollers, bolts and rivets, connectors, energy absorber;
- ✓ in connectors (snap hooks): load-bearing body, rivets, main pawl, locking mechanism functionality.
- at least once a year, after each 12 months of use, personal fall protection equipment must be withdrawn from use to carry out periodic detailed inspection. Periodic inspection may be carried out by a person who is responsible for periodic inspections in an organisation and properly trained in this respect. Periodic inspections can be carried out also by manufacturer of the equipment or his authorized representative, or an authorized company. Inspect in detail all accessible elements of the equipment paying attention to any damages, excessive wear, corrosion, abrasion, cutting or incorrect function (see the above item.) In some cases, if the fall protection equipment has a complex design (e.g. fall arresters), periodic inspections can be carried out by manufacturer of the equipment, or his authorized representative only. After the periodic inspection, date of the next inspection should be arranged.
- Regular periodic inspections are essential in respect of the equipment condition and safety of users which is dependant on functionality and durability of the equipment.
- During periodic inspection it is necessary to check the legibility of all markings on the equipment (identity label of the device).
- all information on fall protection equipment (name, serial no., date of purchase and date of first use, name of user, information on repairs and inspections and withdrawal from use) must be provided in the identity card of the device. It is responsibility of the user organisation to provide the Identity Card and to fill in the required details. The Identity Card should be filled in by a person responsible for protective equipment. It is forbidden to use personal fall protection equipment if the Identity Card is not filled in.
- if the product is re-sold outside the original country of destination the reseller must provide instructions for use, for maintenance, for periodic inspection and for repair in language of the country where the product is to be used.
- personal fall protection equipment must be withdrawn from use immediately if any doubts arise in regard of its condition, or proper operation. The device must not be used until manufacturer of the equipment carries out a detailed inspection and gives his written consent to use the equipment again.



0000579 edition: 1/17.12.2019

- Personal protection equipment must be withdrawn from use immediately and destroyed if it has been used to arrest a fall.
- full body harness is the only admissible device to be used to support the user body in personal fall protection equipment.
- In full body harness use only attaching points (buckles, loops) marked with capital letter "A" to attach a fall protection system.

10. WARRANTY

The manufacturer grants a warranty for 12 months from the date of purchase of the device. If a defect is found in any part, the warranty and guarantee period for this part is extended by the time of repairs and effective removal of the defect found.

The warranty covers:

- Defects in material,
- Structural defects,
- Anti-corrosion coating defects

According to the requirements of EN 365 the anchoring point shall be subject to periodical inspections carried out at least every 12 months. Periodic inspection shall be carried out by service point authorized by the Manufacturer located at the following address:

PROTEKT Grzegorz Łaszkiewicz ul. Starorudzka 9 93-403 Łódź

or person trained in inspections of such equipment.

A trained person is a person who, based on own specialized education and adequate experience, has sufficient knowledge in installed protective and rescue equipment, and is familiarized with applicable OHS regulations, guidelines and generally acknowledged technical rules to such extent that is able to assess safety of use and correct application of protection devices.

Before each use of the system check whether date of the next inspection is not expired. Do not use the device after this date. Before each use of the system visually check the system for its integrity and technical condition and whether steel cable is tensioned.

If any defect or lack of integrity is found, do not use the point.

If any doubts arise as for the use of the equipment, please contact the manufacturer and never repair the equipment on your own!

A system which has been used to arrest a fall must be withdrawn from use immediately!

The system which has been used to arrest a fall may be admitted for use again after a detailed inspection is carried out by the manufacturer or an authorised service point.

When using the system, pay special attention to risks affecting the protective equipment operation or the user's safety, and in particular to kinks and rope movement on sharp edges, oscillatory falls, electricity, influence of extreme temperatures, equipment damage, negative influence of environmental factors, chemical substances and contamination.

Do not modify, repair components of the system or replace them with non-original spare parts.



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11. IDENTITY CARD

| IDENTITY CARD FOR ANCHOR POINT TRE400-000 (conforming to EN365) | | | | | | | | | |
|---|--------------------|----|-------------------------------|----------------|----------------------|-------------------------|--|----------------------------------|--|
| Reference number of device | | | TRE400-000-000 | | Serial number: | | | | |
| Date of first use (installation) | | | | | Date of manufacture: | | | | |
| Installation location | | | | | | | | | |
| User name: | | | | | | | | | |
| | | | | Inspection and | repair record | | | | |
| No | Date of inspection | Ty | ype of inspection / repair | Remai | ·ks | Date of next inspection | | Name and signature of technician | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
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| 10 | | | | | | | | | |
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| IDENTITY CARD FOR ANCHORING TROLLEY ASB500-250 (conforming to EN365) | | | | | | | | | |
|--|--------------------------------|-------------------------------|----------------|---------------|------------------------|----------------------------------|--|--|--|
| | ference number o | ASB50 | ASB500-250 | | r: | | | | |
| | te of first use stallation) | | | | facture: | | | | |
| In | stallation locatio | n | | | | | | | |
| | User name: | | | | | | | | |
| | | • | Inspection and | repair record | | | | | |
| No | Date of inspection | Type of inspection/ repair | Remarks | | Date of nex inspection | Name and signature of technician | | | |
| 1 | | | | | | | | | |
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