Trap TR

The Pevac® TR type Trap is a specially constructed, trapezium-shaped steel blockade that can be embedded in the road surface. The product can be used to impede thoroughfare within a matter of seconds.

Application

The TR Trap has been specially designed for use on access roads to town and village centres, for traffic-calming purposes, to impose priority routing for public transport and to regulate rush hour and commuter traffic flows. The appearance of the Trap also makes the product extremely suitable for closing off car parks within municipalities and on business premises. The Trap represents a robust but inoffensive-looking dynamic blockade that is less vulnerable to vandalism than a barrier. The TR Trap has already been in use for many years in numerous projects and with very satisfactory results. For applications in which the steel blocking element is considered to be less desirable, Pevac has developed a special version of the Trap which is equipped with a so-called removal hood. This is a special construction in which the blocking element detaches from the frame when the Trap is hit by a vehicle at a speed of over 20 kilometres per hour. The obstacle is connected to the Trap's frame by means of an internal steel cable and this ensures that the obstacle is not propelled dangerously out of control. The detached obstacle can easily be re-attached to the frame after a collision. At the client's request, it is possible for other collision speeds to be specified in relation to the detachment of the blocking element.

Size

The TR Trap is supplied in a standard size with a height of 580mm and a width of 500 mm along the top edge. The width along the bottom is 800 mm. The components used in the Trap are fully standardised. This means that it is possible to deliver the product within a short space of time.

Material

The TR Trap is manufactured completely from S235JR (Steel 37) quality steel. The product components used are manufactured entirely on our own premises using advanced equipment which includes a CNC-controlled plasma cutting machine.

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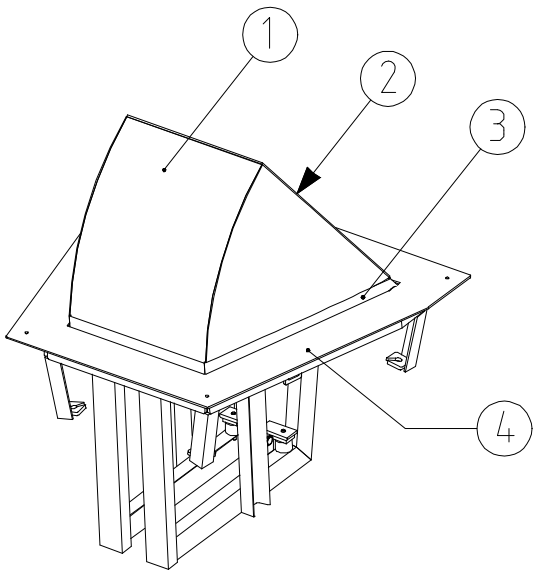
Safety
Safety factor was given the highest possible priority in the development of the Trap. There is no risk that limbs will become jammed as the obstacle is retracting. Its obtrusive colour combination ensures clear visibility at all times. Depending on the application, the optional removable hood mentioned earlier ensures that there is less risk of injury of motorists or pedestrians I/a.

Main components
The diagram below indicates the main components of the TR Trap.



1 – Obstacle (hood)

2 – Top plate

3 – Rotating frame
(removable option only)

4 – Frame

Finish
The special construction of the TR Trap and the well-thought out production method make it possible to hot dip galvanise the Trap's frame entirely with a coating measuring 60 µm (micrometre) in thickness. The hood of the Trap is given two powder coatings each measuring 140 µm in thickness.

Colour
The hood of the TR Trap is provided with a standard white powder coating (RAL 9010). A red retro reflective sticker in the form of the universally recognisable 'Stop' symbol is applied to both the front and the back of the hood. As an option, the colour can be specified by the client from the range of standard RAL colours. The hood of the TR Trap can also be provided with a municipal crest or logo giving the Trap a distinctive appearance and complying with a given corporate style. In the event that a TR Trap is used as part of a car park or access control system, a promotional text can be placed on the blocking element.

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Cylinders
A hydraulic cylinder is a standard element of the construction of the TR Trap. This is connected to the hydraulic drive unit using “quick” couplings. As an option, the TR Trap can be fitted with a pneumatic cylinder. If necessary, the pneumatic valve can also be mounted inside the Trap.

Final position signal
Two standard proximity switches are fitted in the Trap in order to signal the bottom and top positions of the obstacle. The proximity switches are connected to a specially developed connection circuit board which is mounted in a connection box. After assembly, the connection box is filled with a special resin in order to render the electrical connections watertight.
This meets IP-class 68.

Drive
The TR Trap can be driven by means of a hydraulic (standard) or pneumatic (optional) drive unit. The speed with which the TR Trap can be driven up or down can be determined by the choice of the drive unit. The drive unit required can be mounted in an installation box or technical area although these should be situated within a maximum radius of 15 metres from the Trap.

Controls
The Trap can be controlled in various ways, for example, by means of push buttons, a manual transmitter system or an access control system. Selective detection systems can also be applied in order to give access to town or regional buses, emergency services and residents, for example. Detection loops or traffic lights can also be used depending on the traffic situation.

Power supply
The power supply required is 3-phase + neutral, 380 Volt; 50 Hertz and the capacity depends on the drive unit used.

Assembly
The TR Trap is mounted in a concrete foundation. This concrete foundation can be supplied in a prefabricated state. However, the foundations can also be laid on the site in accordance with standard drawings. Recesses are devised in the concrete foundation to allow cables and pipes to be passed through and there is a connection for water drainage.

Maintenance
Thanks to its well-thought out design and the use of high quality components, the TR Trap is virtually maintenance-free.

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Durability
The hallmark of the Trap is its guaranteed durability. When properly used and subjected to regular maintenance, the customer can be confident that the TR Trap will be a long lasting solution for reliable vehicle access and traffic control.

Accessories
A large number of accessories are available for the TR Trap. These are listed below:

- Prefabricated concrete foundations
- Hydraulic and pneumatic drives
- Control boxes
- Installation boxes
- Hydraulic and pneumatic hoses
- Detection loops
- Traffic lights and traffic light poles
- Cabling packages

Options
A number of optional extensions are available which are described briefly below.

Mechanical lock:	A special mechanical lock construction which ensures that the TR Trap cannot descend even when the hoses have been severed.
Emergency descending system:	A special extension of the drive unit which allows the TR Trap to descend automatically in the event of power failure (cannot be combined with the mechanical lock).
Manual pump system:	An extension of the drive unit which allows the TR Trap to be operated by means of a manual pump in the event of a power failure (only for use with a hydraulic drive unit).
Emergency controls:	A back-up system which allows the TR Trap to be operated several more times in the event of a power failure.
Non-standard colour:	As an option, the TR Trap can be supplied in a different standard RAL colour. As a further option, it can also be provided with a special strip, text or logo. This can be applied by means of a sticker or a special coating. It should be noted that the visibility and therefore the safety of the TR Trap application can be reduced as a result.