

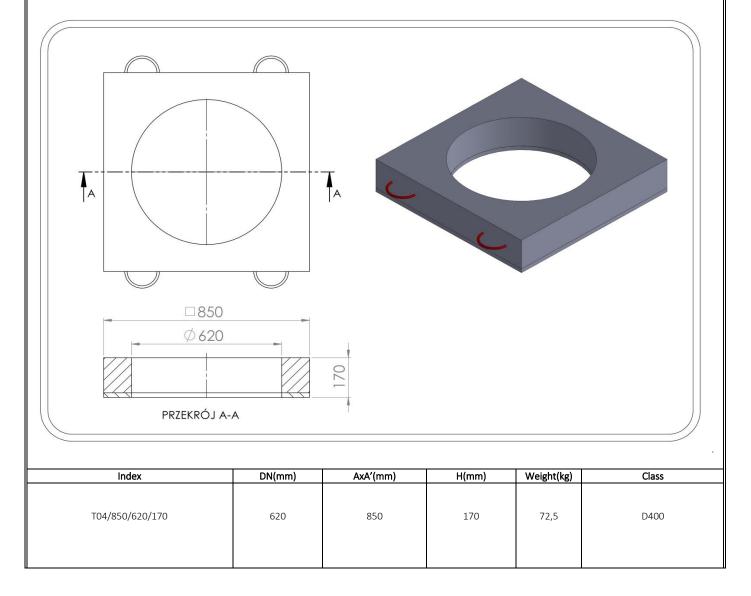
# **PRODUCT TECHNICAL SHEET**

Relieving foundation and settling plate T04/850/620/170

Intended for:

- Relief plate installed around the cone of the plastic manhole DN/OD 610mm.
- height adjustment of concrete manholes ø DN 600 mm, DN625 mm and square 600x600mm, 625x625mm.
- Direct foundation/support of flanged sewer manholes class D400 DN 600 (with the outer diameter of the manhole foot flange max. 850 mm and manholes with an octagonal, square frame 850x850mm with a round cover) made of ductile and gray cast iron go

## Foundation and settling plate T04/850/620/170



### 3. Application :

Transfer of traffic loads to compacted soil, construction of the surface around the plastic manhole DN/OD 610 mm

Square foundation and settling plates made of plastic with external dimensions of 850x850 with an internal opening of Ø 620 mm are intended for height adjustment and for direct support of D400 class manholes with a round manhole DN 600 with a round base and an outer diameter of Ø up to 850 mm or square 850x850 mm.

For use in communication engineering in accordance with the above-mentioned purpose in the field of public roads without limits, internal roads, and railway engineering structures without limits. In the traffic areas of groups 1-4, in class D400 according to PN-EN 124-1: 2015-07

Note: the foundation plate is not a manhole cover plate and is not structurally intended for the use of finials smaller than the diameter and dimensions of the manhole opening.

Technical parameters of Relieving foundation and settling plate T04/850/620/170		
Compressive strength. Class	400kN D400	PN-EN 124-1 07-2015
Tensile strength	ЗМра	PN-EN ISO 527-1:2012
Degree of resistance to frost in water	F150(-2%)	PB IBDIM PB/TB-1/23
Degree of frost resistance in 2% NaCl	F50(-2%)	PB IBDIM PB/TWm-36/98
Absorptivity	<0,2%	PN-EN ISO 62:2008
Mechanical loss	0,33 tg	
Hardness according to Schore	>46	PN-EN ISO 868:2005
Product dimensional tolerance	± 5mm in diameter, ± 3mm in height	
Support surface	4004cm <sup>2</sup>	
Thermal resistance	-30°C do +60°C	In continuous work conditions.
Short-term thermal resistance 170°C	2h	In the conditions of installation in the bituminous surface
PVC / PE material	80%	PN-EN 15346 2009

### Product reference documents:

National Technical Assessment No. IBDiM-KOT-2017/0047 3nd edition National Declaration of Performance No. 12 / EW / 23 Code CN 39259090

#### General assembly tips:

- around the shaft pipe, (reducer) of the manhole cone (at a distance of ≥ 30 cm from the edge of the manhole) compact the subbase for the finial in
  accordance with the rules resulting from the ground conditions, compaction index, type of road structure and traffic load category based on the PNENV standard 1046.
- Compaction should be carried out manually, in layers every 15 cm or with light mechanical equipment in layers, every 30 cm along the entire height of the chamber, evenly around the perimeter and obtain the degree of soil compaction in accordance with the design, the requirements of the manhole assembly instructions:
- in areas with no traffic, the degree of density should be 92% on the Proctor scale, in pedestrian traffic routes (class A), the degree of density ≤95% on the Proctor scale.
- in order to maintain proper compaction, it is recommended to stabilize the soil with cement or use a 1200x1200mm geotextile sheet with a Ø640mm hole
- the ground under the relief plate should be flat and free from point loads, consisting of gravel, sand, lean concrete (crushed stone, etc. point-acting materials are excluded).
- Before starting the assembly works of the cover body T04/850/620/170 check whether all the elements of the near-surface finial of the plastic manhole are structurally suited to the intended use:
- whether the manhole has been properly adjusted to the ordinate, e.g. by cutting the shaft pipes
- whether there is sufficient height between the top of the manhole shaft pipe and the bottom of the manhole protective cover of at least 4cm
- whether the compaction of the foundation around the chamber is properly made and adequate to the location (traffic loads) of the foundation of the relief cone.
- whether the height to the surface elevation is maintained to enable the installation of the sewer manhole
- on the shaft pipe of the plastic chamber from the outside, a gasket should be installed (together with a lubricant)
- place the relief plate centrally over the chamber opening without disturbing the foundation / compacted subgrade, leaving a free space of about 3-4 cm above the top of the pipe.
- the top of the chamber should be made in a tight manner, between all elements of the top, i.e. the relief plate, shaft pipe of the chamber, elastomeric gaskets should be used, and between the horizontal surfaces of the compensating rings, the upper surface of the relief plate and the manhole, polymer sealing and sealing compounds should be used
- in the event of a change in the elevation of the surface, it is possible to make (additional) adjustment of the cover using the TVR T system compensating rings or foundation plates with a height of 20, 50 mm
- compensating rings should be placed centrically over the manhole opening, one on top of the other, pressing firmly until the required adjustment height is reached.
- set the sewer manhole centrically above the manhole opening and anchor it with screws to the relief plate or compensating rings
- around the top of the plastic chamber, make a stable casing and reference to the surface (based on crushed stone (approx. 65-70%) and cement quick-setting masses (approx. 30-35%) or concrete B35 or asphalt mass / hot asphalt concrete,
- the reconstruction of the road surface around the top and the manhole cover is made in layers with appropriate compaction of each hot-applied bitumen layer to reach the level of the surface ordinate
- commissioning should take into account the necessary time for complete cooling of the bituminous mass allowing for operation

#### Notes on installation conditions

During height adjustment of sewage wells with the use of plastic elements of the TVR T System, it is forbidden to:

- installation and assembly of relieving cones on the unprepared, uncompacted base around the chamber, without providing full permanent support for the relief cone.
- use of ground materials for compaction of the substructure that do not comply with the recommendations of the manufacturer of manholes and materials other than those approved for use in road construction described in PN-S 02205, height adjustment, overlapping, placing point destructive elements under the cones
- laying the surface without making the correct foundation, filling and compacting the space around the finial of the manhole