

Non-Entry Chamber Tegra 425

Installation guide

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1. As Tegra 425 chambers are small in size, they may be installed in trenches assigned for piping without the need to widen the trench. Individual elements are very light and may be handled and installed by one person. Bases are installed on levelled, stable trench bottom. As the bottom of this chamber is double, its location site should be situated 10 cm lower than a trench prepared for piping. Remove large and sharp rocks from the bottom and form a sand bedding of at least 10 cm thickness.



2. Place the base on the sand bedding and level it out. You may use a level tool placed near the socket connected with the shaft pipe.



3. Connect pipes to the base by pressing them into the socket. While connecting PVC smooth-wall pipes, place seals in grooves. With X-stream PP twin-walls place the seal on the pipe, between two last ribs. To facilitate assembly lubricate connector pipes and seals. Connected elements should be clean and free from sand and gravel. Clean them thoroughly if necessary. Connect sewer pipes adjusting the connection angle (each connector pipe is adjustable within +/- 7.50° in each plane). If possible, assign the same adjusting range for inlet and outlet connector pipe.



4. In order to immobilize connected sewer node it is recommended to backfill the trench at least 10 cm above the top surface of the sewer pipe. The socket for the shaft pipe should stand out above the backfill.



5. Cut the shaft pipe either manually or mechanically to fit the required height of the chamber. Remember to cut between ribs. Correctly cut pipe should fit (including sealing) in the socket of the shaft pipe.



6. Fix the sealing ring delivered with the base on the external side of the pipe between 1st and 2nd rib. As the sealing ring fixed on the corrugated pipe is profiled, its position must be in line with a drawing on the label.



7. Lubricate the internal side of the socket. Protect connection areas against dirt. Clean if necessary.



8. Install the pipe with the seal in the base.



9. Backfill the trench layer by layer (max. 30 cm) along the entire circumference of the base.



10. Compact layers of backfill uniformly along the entire circumference of the inspection chamber. Soil must be compacted adequately to the current ground and water conditions as well as the future external load. It is recommended to compact the soil at the minimum SPD level (Standard Proctor Density) of:

- SPD 90% for green areas,

- SPD 95% for paved areas with limited traffic load,
- SPD 98% for roads with heavy traffic load. In the case of high ground water level (above the chamber bottom level) it is recommended to adopt a stricter installation regime and increase the degree of soil compaction – SPD 95% for the first case, SPD 98% for the second case.



11. If cast-iron covers with telescopic pipe or corrugated pipe are used, fix the sealing ring delivered with the pipes (for corrugated pipes) at the highest groove between the valley of the corrugated pipe. Connect the grating or cover with the telescopic pipe (snap-in-place mechanical connection).

Cover installation

It is recommended to use telescopic pipe longer than the structural thickness of surface layers, that means that seal connection between telescopic pipe and shaft pipe should be located below the hard surface.

When laying the surface, the last 4-5 cm of asphalt/concrete should be poured out layer by layer (minimum 3 times) in the repeatable cycles:

- pour out the layer and compact it (according to the design assumption) pushing the cover body in the surface layers,

- pull out the cover body together with telescopic pipe by using a crowbar, lever the cover body up gradually at its circuit,
- fill thoroughly the space under cover with not compacted material of the next surface layer,
- repeat a, b and c until getting the designed the surface datum – the final result should be 4-5 cm of the surface integrated with the cover body “pressed” into the surface.

See cover solutions – page 73 and installation guides – page 109.

Installation of “In- situ” connector

In situ connectors are designed for “on-site” making additional channel connections above a base (on the height of corrugated pipe). When connections are made in existing and operating sewer network, dig a trench along the entire circumference of

the pipe and after the connection is completed, precisely compact the soil around it, in accordance with chamber installation guidelines.



1. Use special drill crown drill saw to cut an opening in the corrugated pipe. Clean and polish sharp edges of the opening.



2. Install a special seal in the opening and lubricate it. Put special “in-situ” socket in the opening.



3. Such “in-situ” connector is ready to place a smooth-wall, PVC sewer pipe inside it.