

t e l e s c o p i c
m a n h o l e
c o v e r s



livar
industries

RECOMMENDED METHOD OF INSTALLATION ON NEW ROADS

1. FITTING THE COVER SET:

- possible heights up to the road level range from 180 mm to 260 mm;
- a suitable leg base is necessary (to be placed directly over the shaft, ballast, road ring or concrete base);
- fitting must be carried out in parallel with the road and in the direction of travel;
- fixing the cover set with concrete (5–10 cm, against displacement).

2. LIFTING THE FRAME WITH COVER:

- backfilling and reinforcing with rough asphalt;
- reinforcement by rolling and manual (vibrating) reinforcement
- the height of the reinforced layer is most suitable up to leg height;
- while waiting for the final layer it is possible to lower the frame with the cover to a position outside the guides for engaging the cover into the frame seat.

3. BACKFILLING OF THE FINAL LAYER:

- the envisaged thickness of the final layer should be at least 40 mm;
- if necessary, manual filling under the frame flange.

4. ROLLING OF THE FRAME:

- lowering the frame onto the unreinforced final layer and backfilling the final layer up to the upper level of the frame in a 300 mm radius around the frame;

- a minimum distance of 20 mm between the leg and the frame is envisaged when rolling in the frame onto the final level (in order to prevent the movement of the shaft system with the road);
- rolling across the entire frame surface is obligatory.



RECOMMENDED METHOD OF INSTALLATION DURING ROAD REHABILITATION

1. CUTTING OUT OR DIGGING OUT THE SHAFT COVER TO BE REHABILITATED:

- the minimum opening up to the final level should be 900 mm × 900 mm × 180 mm;
- the maximum depth up to the final level should be 220 mm (in case of a larger depth or uneven surface raise the level using cement or rough asphalt);
- use suitable panelling.

2. PLACEMENT OF A FULL SET INTO A CAVITY:

- ensuring that the cover is installed in parallel with the road and in the direction of travel.

3. LIFTING THE FRAME WITH COVER

4. FILLING WITH ROUGH ASPHALT OR CEMENT AND REINFORCEMENT:

- at the leg up to the upper level of the leg, then at an angle up to the height of the final layer.

5. FILLING UP TO THE FINAL LEVEL (LIKELY TO BE 40 MM)

- Filling is carried out manually under the frame flange.

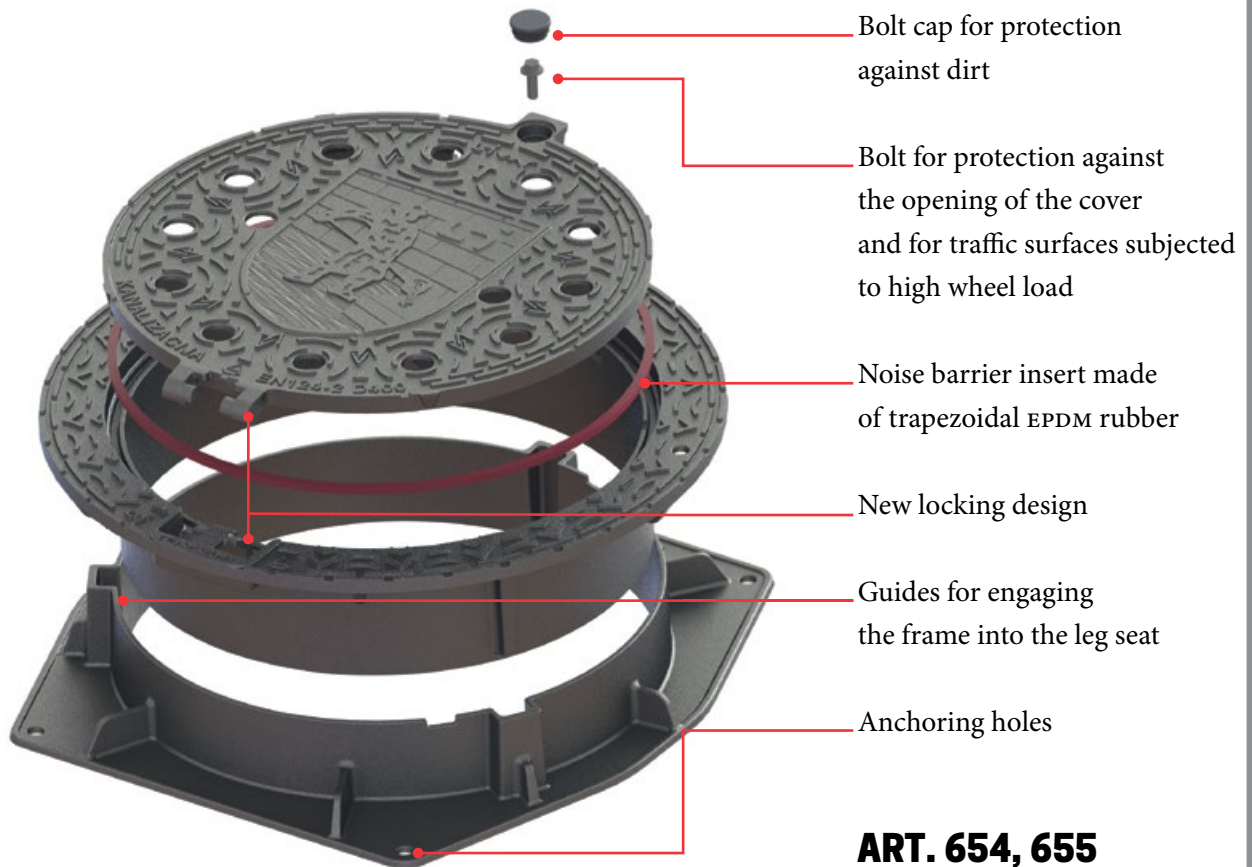
6. LOWERING THE FRAME TO THE UNREINFORCED FINAL LAYER

- In layer thickness under the flange of over 40 mm compaction should be increased manually and a final layer should be added up to the upper level of the frame in a 30 mm radius around the frame.

7. ROLLING OR MANUAL FIXING (VIBRATION):

- rolling necessary across the entire frame surface.

Levelling of the cover frame enabled separately from the leg frame up to 5°.



Bolt cap for protection against dirt

Bolt for protection against the opening of the cover and for traffic surfaces subjected to high wheel load

Noise barrier insert made of trapezoidal EPDM rubber

New locking design

Guides for engaging the frame into the leg seat

Anchoring holes

ART. 654, 655

IN ACCORDANCE WITH THE SIST EN 124-2: 2015 STANDARD

LIVAR, PROIZVODNJA IN OBDELAVA ULITKOV, D. D.

Ljubljanska cesta 43
1295 Ivančna Gorica

T +386 (0)1 786 99 00

F +386 (0)1 787 73 81

E info@livar.si

www.livar.si

ADVANTAGES OF THE LIVAR TELESCOPIC MANHOLE COVER:

- the cover is not in direct contact with the shaft;
- it adapts to the changes on the road, therefore it does not crack along the frame;
- the shaft is subjected to significantly less wheel load;
- the additional construction or installation of a concrete ring is not necessary;
- useful for the rehabilitation of different methods of cover installation (depth, shape, size);
- it can be installed on Ø 600 or Ø 800 tubes;
- self-standing cover opening at a 120° angle with an anti-closing lock at a 90° angle.

INSTALLATION REQUIREMENTS FOR PROPER COVER FUNCTIONALITY:

- the degree of density of the asphalt under the cover flange must correspond to the road surface;
- proper adhesion should be ensured between the frame and the asphalt;
- all frame surfaces in contact with the asphalt should not be coated with a separating agent.