

EXPECT SUSTAINABLE SURFACE BOXES Expect...

SYNTHETIC SURFACE BOXES

AVK Plastics has been involved in the development, manufacturing and sales of synthetic surface boxes to well-known gas and water utilities since 1986. Millions of AVK synthetic surface boxes have been produced and successfully installed all over the world.

Why choose synthetic surface boxes?

- Lightweight, ensuring safe and easy handling in compliance with Health and Safety Regulations
- Maintenance and corrosion free. Easy access throughout the year; no need to clean or grease seat to protect against corrosion or frost
- Silent in traffic zones; synthetic materials absorb noises
- 100% recyclable and significantly less use of energy resources compared to production of cast iron surface boxes
- **Optimised design**; flexibility in tooling enables suitable designs for each installation and application
- Locates securely in road; the ribs in the surface box housing provide a secure fit and remove the risk of movement
- Various lid inscriptions/colours available
- Heat resistant max. 250 °C

WIDE RANGE OF APPLICATION AREAS



Design and innovation

AVK Plastics uses the latest development software, enabling both 3D engineering and analysis of crucial features before products are actually produced.

Competence in synthetics and extensive material selection studies, combined with automated and continuous processes, guarantee consistent and high quality products. Acting upon customer feedback and demand, AVK Plastics continuously improves existing and introduces new products to meet customer expectation.

Quality

AVK has earned a reputation for service and quality, and continually strives to satisfy customer expectations. The quality process starts with high acceptance criteria applied to purchasing raw materials, extends to control of production processes, and ends with a comprehensive and precisely defined series of tests and quality evaluations. In this way AVK Plastics ensures that only quality products are released into the market. The Quality Department is equipped with advanced testing and analytical equipment and the Quality Management System is certified according to EN ISO 9001.

ENVIRONMENTALLY FRIENDLY





Sustainability

Recycled materials are used in the AVK Plastics production process, creating products that last for decades and which can also be recycled at the end of their life. Additionally this, in turn, provides savings in cost, energy and materials. Being ISO 14001 certified, AVK has committed itself to have a strong focus on continuous reduction on the environmental impact. The carbon footprint (CO₂ emission) and the energy consumption of synthetic surface boxes, measured from resource to final product, is significantly smaller compared with the surface boxes made of cast iron making the AVK surface boxes ecologically sound.



HEIGHT ADJUSTABLE OPTIMAL INSTALLATION

AVK Plastics offers a wide range of height adjustable surface boxes, which are specially designed for tarmac installation. Using height adjustable surface boxes enables easy and precise installation, thanks to flexible positioning of the top part. Height adjustable surface boxes save time and money when roads are renovated and prevent costly corrections after installation.



HEIGHT ADJUSTABLE WITH REINFORCED RIM

Reinforced surface box

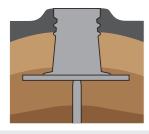
with locking system

tamperproof.

The robust design of AVK Plastics' height adjustable surface boxes with reinforced rim. registered by AVK, makes the surface box perfectly suitable for heavy duty application areas. The reinforced rim ensures a better support of the top part, a unique advantage compared to the traditional height adjustable surface box.

Features

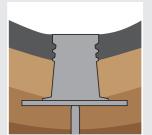
- Large height range and flexible positioning of top part
- Inscription in lid to be positioned easily
- No costly corrections after installation
- Design registered by AVK
- · Reinforced rim ensures better support of top part
- Strong rim makes product suitable for heavy duty application areas



Potential problem (1)

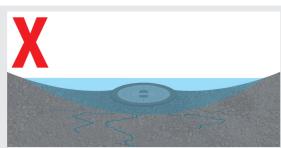
Difficult to align top of surface box with road level causing the box to protrude. The surface box does not follow the road settlement over time, resulting in road damage, disruption and noise pollution.

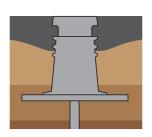




Potential problem (2)

The fixed height surface box is positioned too low, or has sunk over time, due to insufficient support caused by poor compaction of the soil or lacking a support tile.

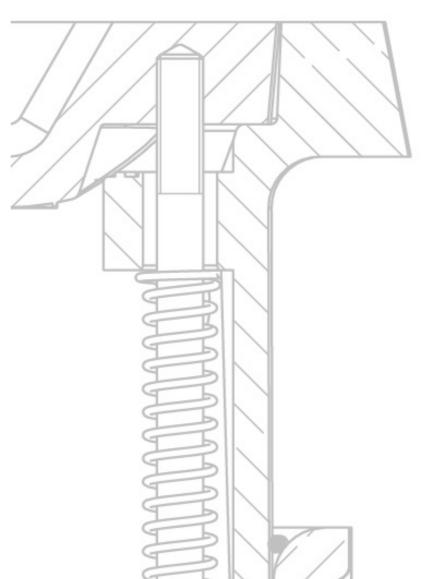




Perfect installation Height adjustable top part adapts to road level during installation and also over time. This ensures a perfect installation and saves

time and money.





AVK reinforced surface boxes with locking system prevent unauthorized access to underground valves and hydrants. The lid is only to be opened with a special key that is made available for authorized people only. The locking system makes the surface box

Reinforced surface box with spring

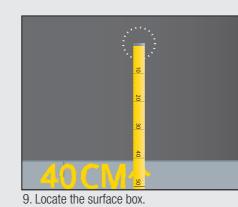
AVK also offers a surface box with a spring around the bolt. It can occur the lids are being lifted when traffic is running over the surface box. This so called, suction effect, is unavoidable due to the high speed of traffic. AVK offers a solution by mounting a spring around the bolt. The spring makes sure the lid stays in its place and avoids unsafe situations.

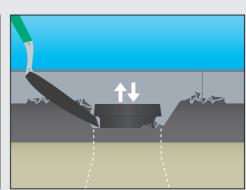
Top part seen from Top part seen fron

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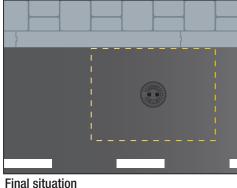
INSTALLATION MANUAL

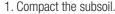
HEIGHT ADJUSTABLE SURFACE BOXES

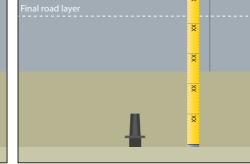




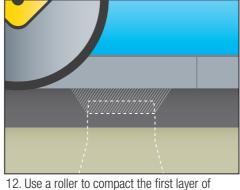
10. Free the top from tarmac and loosen the top 11. Compact the area surrounding the top part. part of the surface box. Create a slope of 45°.



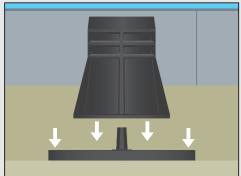




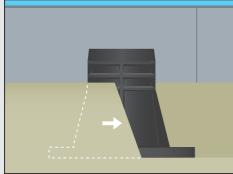
2. Determine the final height of the surface box.

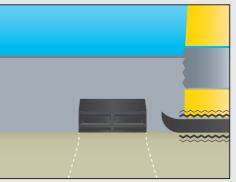


13. Apply release agent on the lid.

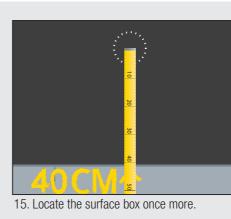


3. Place the support tile (optional) on the subsoil, 4. Surround the surface box with soil/concrete. centre the surface box on the support tile and make sure the top part is in the lowest position.

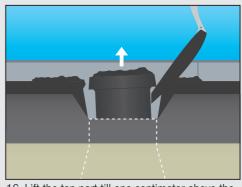




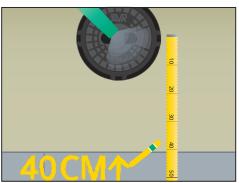
5. Compact the surrounding soil.



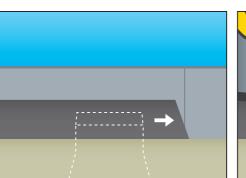
tarmac



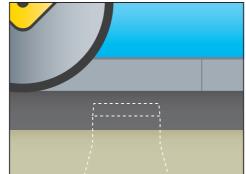
16. Lift the top part till one centimeter above the final layer.



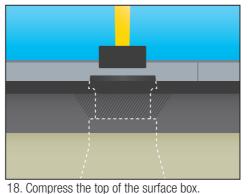
6. Mark the position of the surface box on the curbstone and apply release agent on the lid.

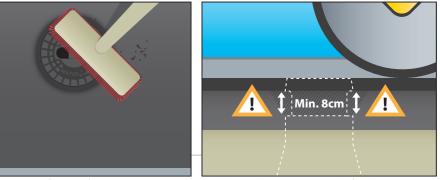


7. Apply the first layer of tarmac. Completely cover the surface box.

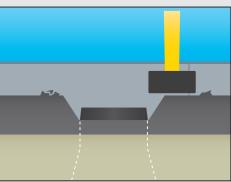


8. Use a roller to compact the tarmac layer

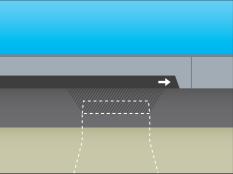




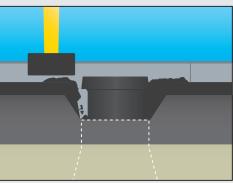
19. Clean the top of the surface box.







14. Apply the final layer of tarmac.



17. Clean the top of the surface box and compact the final layer of tarmac surrounding the top part.

20. Use a roller to compact the final layer.

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