

URBAN GREEN-BLUE GRIDS

for sustainable and resilient cities

Measures › Water › Making water visible: above-ground drainage › Gutters › Fluted gutters

Fluted gutters



Hunsruckhaus am Erbeskopf_IMG_8599

Data

Length: max. 50 m

Depth: < 50 mm

Slope: 0,5 cm/m

Water ●

Social and economic importance ●

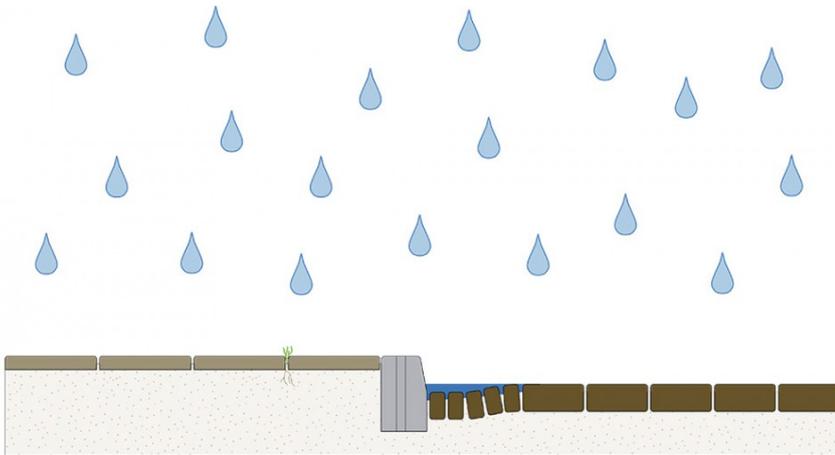
Construction costs ●

Maintenance/management ●

A simple way of creating above-ground drainage is to use so-called fluted gutters. The street profile can be the same as a conventional solution with storm drains but then without the drains. The water collected in the fluted gutter is drained locally to the surface water or is infiltrated into the ground. The maximum length of this open gutter is around 50 metres, which is determined by the depth of the gutter; gutters deeper than 5 cm cannot be cleaned with a road sweeper; and at a width of 30 cm, if the length is more than 50 metres the depth required to drain the water is more than 5 cm. Such a gutter should have a slope of 0.5 cm/m. In

practice this means that the road surface should have the same slope. This form of above-ground drainage can also be applied in existing situations to uncouple gutters. The advantage of this form of disconnection is that there is almost no limit in use and that street profiles do not need to deviate.

These guidelines apply in situations without natural slopes; if a slope is present or if it can be created, it can be used.



Section scheme © atelier GROENBLAUW, Marlies van der Linden



Solar City, Linz, Austria © Atelier Dreiseitl

Source: <http://www.urbangreenbluegrids.com/measures/gutters/fluted-gutters/>

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Green-blue urban grids make cities sustainable, resilient and climate-proof. This website and the design tool will help to

find fitting measures and inspires with attractive examples.