



**Simple  
intensive  
green roofing  
with capillary  
irrigation.**

**System build-up  
“Summer Meadow”**



**Engineering+Green Roof Systems**

# With this build-up, we have re-invented capillary irrigation!

Up to now, simple intensive green roofs were irrigated either from above with a water sprinkler or from below through the build-up of water on the roof waterproofing membrane. With the system build-up, summer meadow, however, ZinCo is treading new paths. This system is made possible by combining the water retaining element, Aquatec® AT 45, which has been registered for patent, with the wicking mat WM 40.

The build-up can be used on flat roofs and sloped roofs (up to about 5° pitch) and even on inverted roofs. The basic principle involves the distribution and retention of water in the element cells. The water is fed through drip lines and is drawn upwards through the wicks incorporated into the wicking mat where it is available to the substrate.

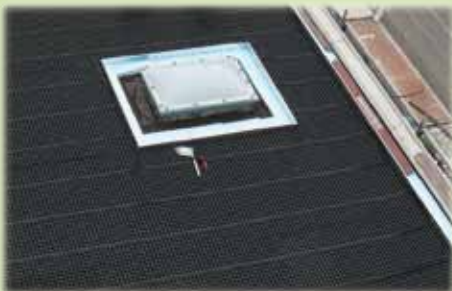
The level of water consumption with this type of irrigation is considerably lower than is the case with irrigation from above, as the water is available directly in the root area and does not

evaporate, even in part, at the surface. Another advantage is that it is no longer necessary to fill the drainage elements. This saves on weight, material and labour, and therefore, on cost.

Compared with irrigation only with drip lines, significantly fewer pipes are required as the water is distributed right across the area covered by the water retaining elements. The pipes are clipped into the channels integrated into the Aquatec® system. Ingenious control technology regulates the flow of water, as required.



## Overview of work stages and functions



System filter PV is covered with Aquatec® water retaining elements.



The pipes are inserted into specially-made recesses and are then connected up to the control technology.



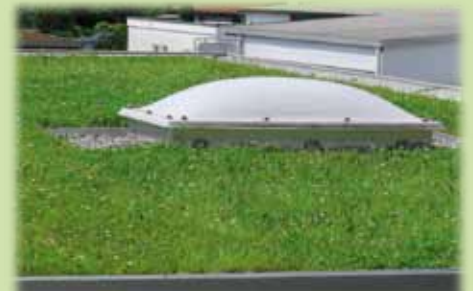
Once installed, the wicks in the wicking mat reach down into the storage cells and transport the water towards the substrate.



The substrate depth depends on the type of green roof required.



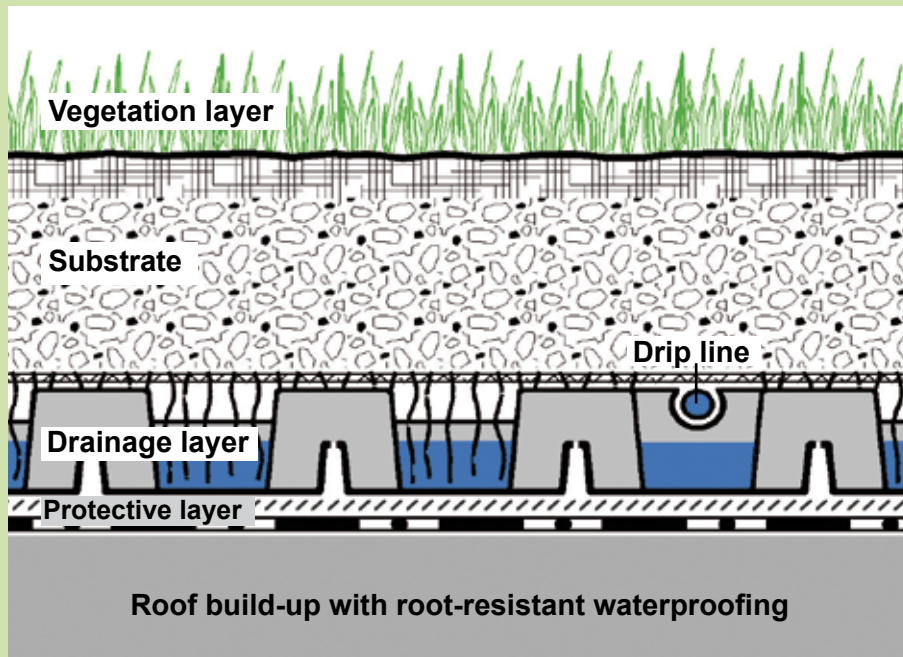
With some special lawn mixtures, e.g. : 10 cm of substrate is sufficient.



Once the desired vegetation has been planted, irrigation is unseen but effective.



Weight kg/m <sup>2</sup>		Height cm
dry	water saturated	
95	140	min. 10
4	25	5
99	165	



Plant community  
"summer meadow"

System  
substrate lawn

Wicking mat  
WM 40  
Aquatec® AT 45  
with drip line

System filter PV

**Build-up height:**

**from 15 cm**

**Weight, water saturated:**

**from 165 kg/m<sup>2</sup>**

**Water storage volume:**

**from 65 l/m<sup>2</sup>**



