



Image: Rhiannon Slatter

Gardening up high

We're learning more all the time about what plants can thrive, and survive, on rooftops. Elke Haege shares the latest research on your best soil and plant options for living roofs.

WORDS Elke Haege

TO SURVIVE THE HARSH CONDITIONS of rooftop landscapes, certain plants have special adaptations, but it is also critical we provide plants with the right soil and water conditions.

Success or failure with a rooftop garden will most likely come down to your choice of soil and the availability of water. Evapotranspiration (water loss) of plants on windy, sunny rooftops can quickly dry plants out. Soil acts as a buffer and rooftop irrigation is essential.

IRRIGATION

I recommend drip (under the surface)

irrigation so that the water penetrates down into the soil and encourages deeper rooting by plants. As an aside: consider collecting rainwater that falls on other sections of your rooftop for irrigation – is there space on your rooftop for a water tank? [Bearing in mind the structural support needed for a full tank.]

SOIL VOLUME

The right soil and soil depth will give you a successful landscape (more plant growth, healthier plants, less disease, less plant death, more resilience and tastier produce). This is because plant roots

use soil to breathe air, take up water and anchor themselves. A larger volume of the soil provides the nutrients and minerals your plants can tap into which is vitally important on a harsh, windy rooftop.

SOIL TYPE

For rooftop soils you need to consider the topsoil as well as the subsoil (the next layer down). For topsoil, specify E1 (rooftop 'A' Horizon) and for subsoil specify E2 (rooftop 'B' Horizon). Reputable soil supply companies will be able to supply you with these soil types. Make sure you ask for a certificate or letter stating that