

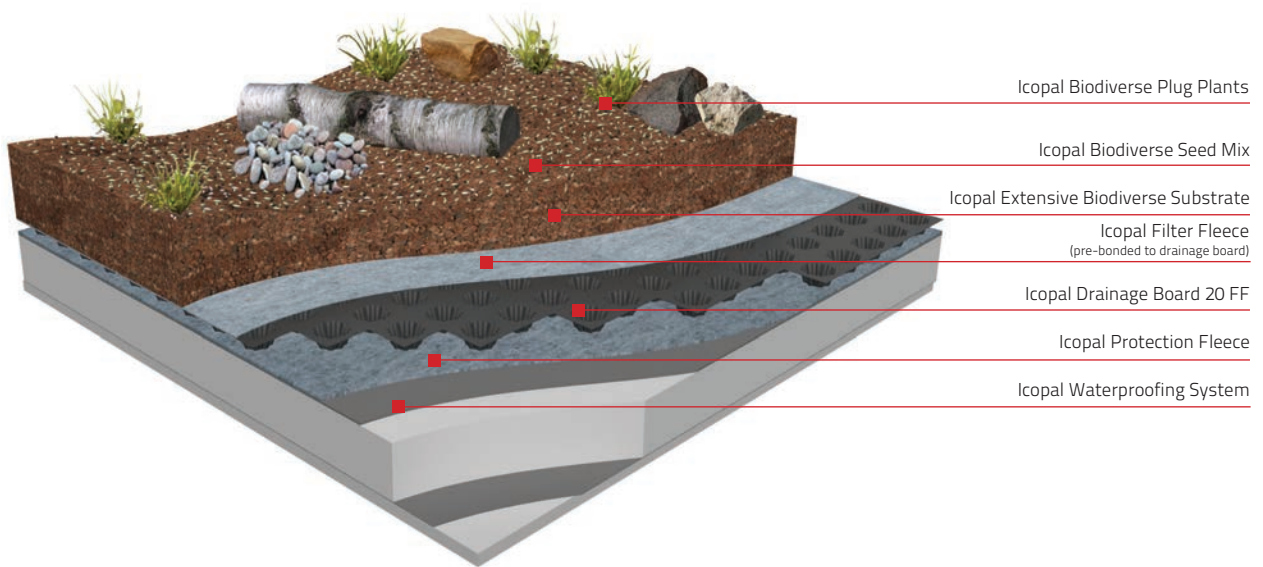


# Icopal ST Biodiverse Seed & Plug System



Code: 3101068

An extensive green roof system designed to create a biodiverse habitat utilising a specially formulated free-draining substrate and drainage board. The vegetation is created using both wildflower / grass seed and plug plant mix which is allowed to grow and develop over time.



## System Properties

The following data relates to the green roof element only.

<b>System Dry Weight:</b>	125 kg/m <sup>2</sup>
<b>System Saturated Weight:</b>	150 kg/m <sup>2</sup>
<b>System Typical Depth:</b>	125 mm
<b>Growing Substrate Depth:</b>	100 mm (settled)
<b>Contouring:</b>	Undulating (75 - 125 mm)



## Key Features

- A system suitable for a range of roof construction types.
- Attractive mix of wildflower and grass species.
- Option to introduce logs and boulders to encourage invertebrates.
- Undulating substrate depths create greater diversity of flora and fauna.
- More flexibility for the layout and planting density.
- More cost effective than a pre-grown mat.
- Excellent range of bio-diversity.
- Excellent provision of pollen and nectar to attract insects.
- Suitable for flat and low pitched roofs.
- Medium – low maintenance.



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## Biodiversity

The wildflower and grass species mix is designed to create food, nectar and pollen sources for a wide range of invertebrate species. These roofs can be left relatively undisturbed to attract ground nesting birds.

Log and stone piles may be placed over the surface to create shelter for an even wider selection of invertebrate species.

The optimum time for sowing is late summer / early autumn, with April-May the next best window. Sow onto the surface but do not rake in. Instead, walk over the newly sown area to firm and level the seed bed and create good seed / soil contact.

## General Notes

The system can be installed on flat roofs and those with shallow pitches, generally no greater than 15°. For slopes over 9° a retention system is required. All slopes over 5° will require a mechanically fixed eaves edge restraint.

## Detailing

A border with a recommended width of 300 – 500 mm of washed river stones (20 – 40 mm diameter) should be used around all roof penetrations and perimeters to provide a vegetation free zone.

## Irrigation

Irrigation required immediately after installation for up to 8 – 12 months until fully established. Once established irrigation is only generally required during prolonged periods of hot dry weather.

**Water Source:** A roof top source with a pressure of 2.5–3 bar and a flow rate of 60 L/min is recommended to connect a temporary system if required.

## Maintenance:

An annual maintenance schedule is recommended to remove invasive plant and weed species, to check outlets are working correctly and to apply granular fertiliser. Vegetation and flower growth is expected to be between 20 and 100 mm. It is recommended that the roof is strimmed in the early spring and autumn (after the flowers have dropped their seed), and all cuttings removed to allow the roof to thrive.

**Flowering Period:** May – August.

**Typical Colours:** Seasonal variation of yellows, whites, reds and pinks. Foliage turns from green to brown in the autumn.

**Planting Density:** 20 plugs/sqm over 20% of the roof surface (generally planted in the deeper substrate areas).

**Sowing Density:** 1 – 3g/sqm over full area.

**Typical Species:** (subject to season variation)

Wildflower species -Agrimonia, anthyllis, centaurea, clinopodium, echium, galium, hypericum, knautia, leontodon, leucanthemum, linaria, lotus, malva, organum, plantago, primula, prunella, ranunculus x 2, reseda, sanguisorba, silene. Grass species -Briza, cynosurus, festuca x 2, phleum, trisetum.

## Flower Attraction

Moderate mixed pollen source, applicable to Bees, hoverfly, Ladybirds.

**Establishment Period:** 12 months and typically 24–36 months to achieve desired ground cover.

For more information please visit

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