

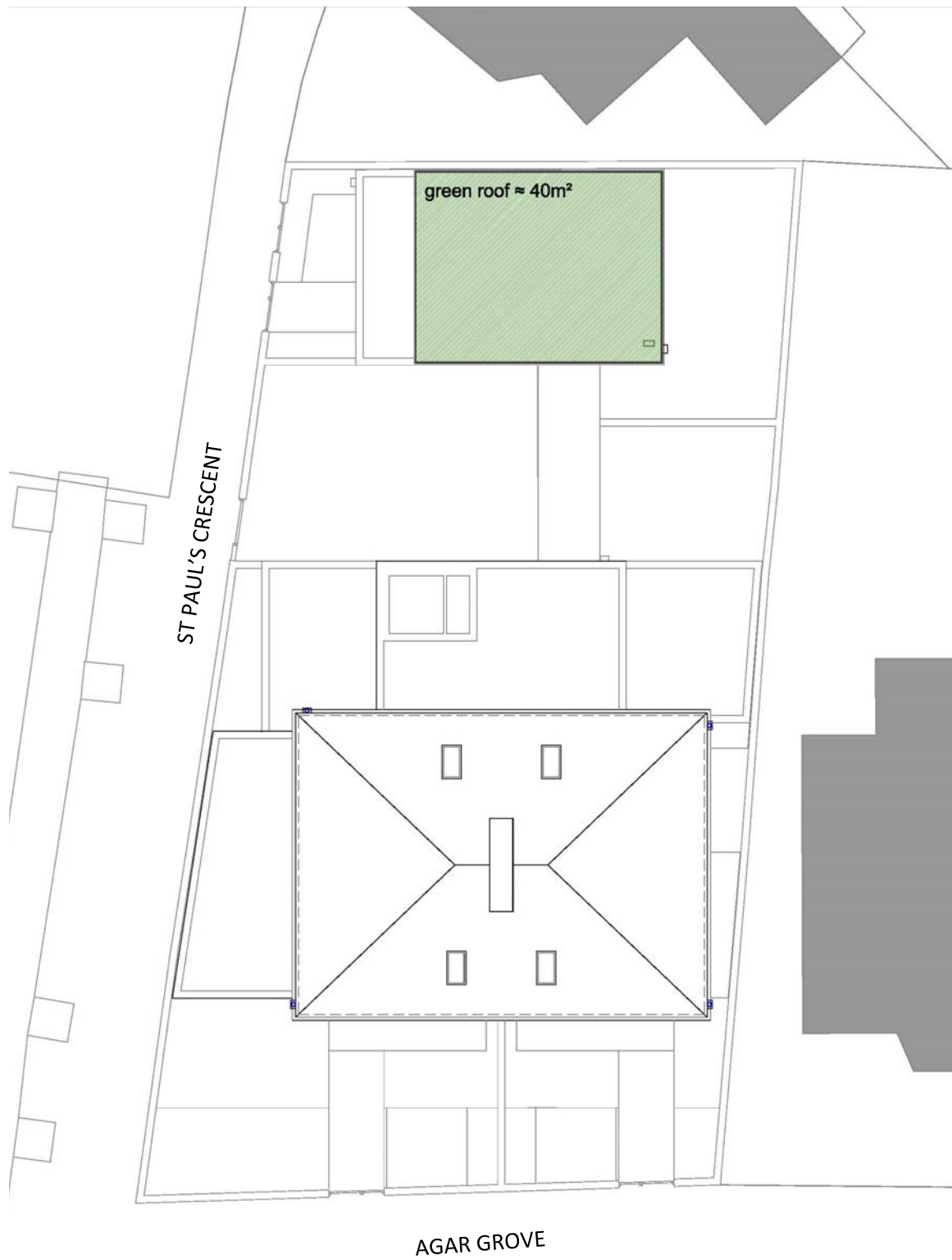
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'Prior to the first occupation of the building fronting onto St Paul's Crescent a plan showing details of a green or brown roof including species, planting density, substrate and a section at scale 1:20 showing that adequate depth is available in terms of the construction and long term viability of the green or brown roof, and a programme for a scheme of maintenance shall be submitted to and approved in writing by the local planning authority. The green or brown roof shall be fully provided in accordance with the approved details prior to first occupation of the new dwelling fronting onto St Paul's Crescent and thereafter retained and maintained in accordance with the approved scheme of maintenance..'

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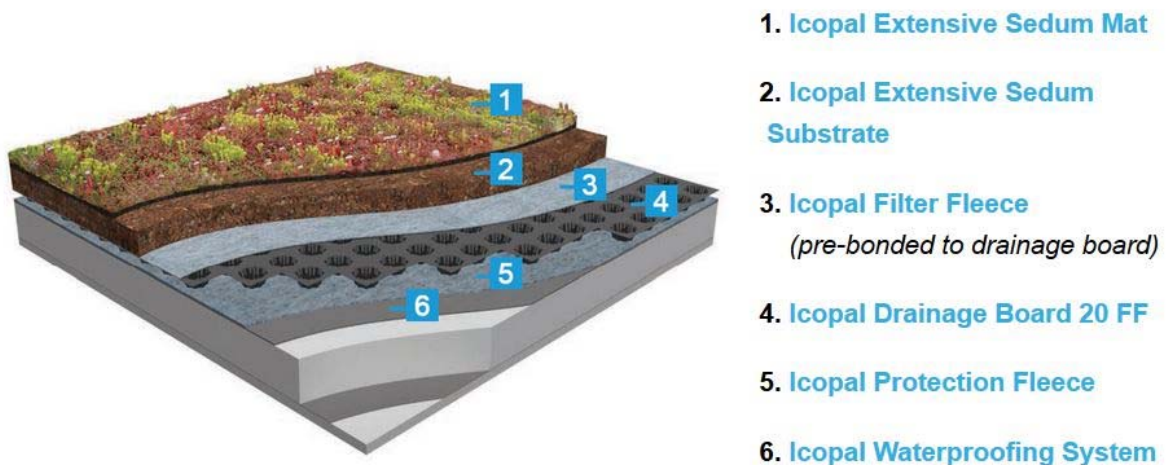
1. Location of the green roof



Roof plan

2. Description of the solution proposed

A lightweight extensive green roof system utilising a pre-grown vegetation mat of 8 – 12 sedum species. Provides an immediate green planting scheme for instant impact. The vegetation mat is installed on a shallow depth of specially formulated free-draining substrate and drainage board.



2.1. Species

The sedum family of flowering plants are succulents and therefore have leaves which are able to store water. The majority grow naturally in arid, well drained areas, often on shallow substrate depths. Therefore they are drought tolerant, and able to survive in extremes of conditions. They generally flower from early summer to autumn.

Typical Species: (subject to season variation)

Sedum acre, Sedum album, Sedum ellacombianum, Sedum floriferum, Sedum forsterianum, Sedum hybridum, Sedum kamtschaticum, Sedum montanum, Sedum oreganum, Sedum reflexum, Sedum rupestre, Sedum selskianum, Sedum sexangulare, Sedum spirium.

Flowering Period: May – August.

Typical Colours: Seasonal variation of yellows, whites, and pinks. Foliage turns from green to red in periods of plant stress.

2.2. Planting density

High density mats of 1.2m x 2.0m with pre-cultivated sedum mat for the rapid establishment of vegetation.

-Mat Weight (dry): 15 kg·m⁻²

-Mat Weight (saturated): 20 kg·m⁻²

-Mat Depth: 20mm

-Sedum Mix Composition: Vegetation Mature sedum plants grown from rhizome and seed

-Typical Plant Height: 20 - 50 mm

2.3. Substrate

The Icopal Sedum Substrate is a lightweight, free draining, low nutrient and moisture. It is a specially blended mix of free draining organic material with clean, screened granular aggregates, recycled from certifiable waste products from the building industry, to provide a low nutrient water retentive growing medium. In compliance with soil association standards and certifications.

-Growing Substrate Depth: 50mm (settled)

-Composition: Recycled crushed brick and Organic material (Green Waste)

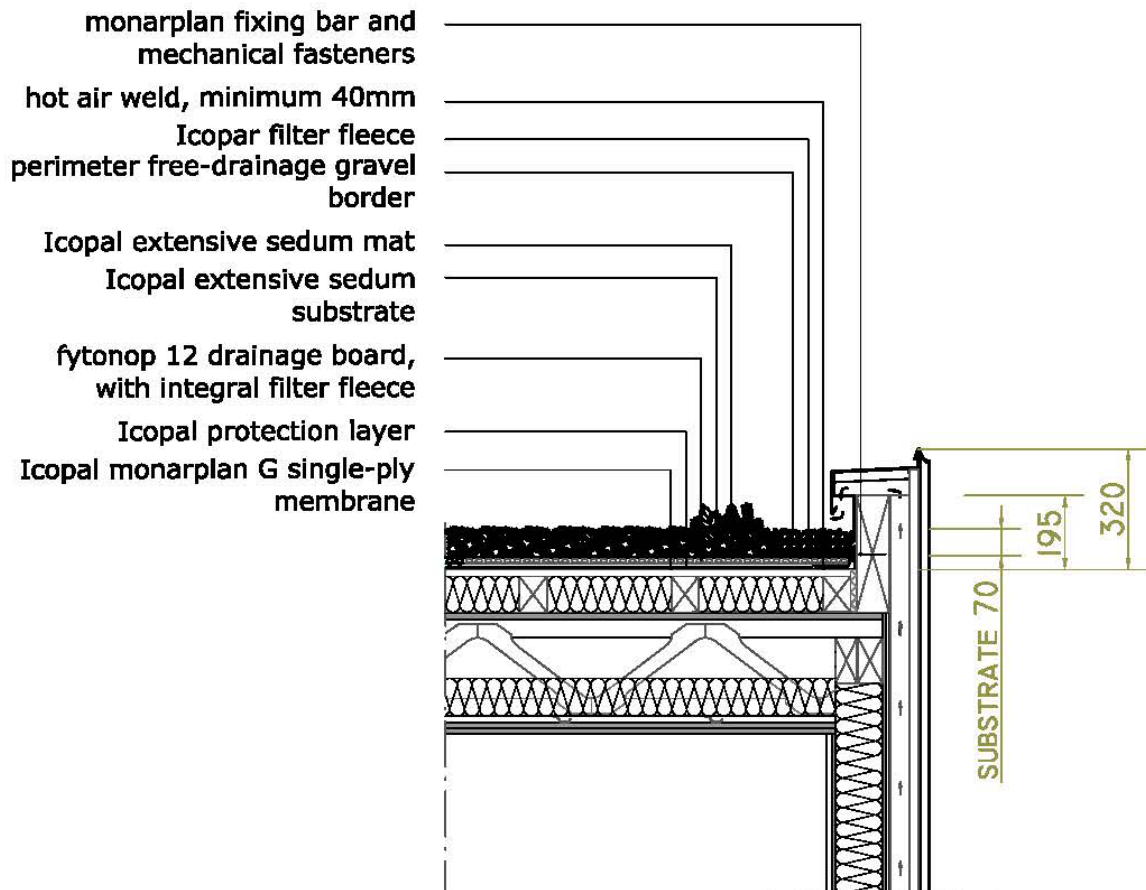
-Weight/Unit Volume dry: 870 kg·m⁻³ Weight/Unit Vol.

-Weight/Unit Volume saturated: 1240 kg·m⁻³

-Compaction: 10%

-Water Retention: 25%

2.3 Section at scale 1:20



Roof Detail
Scale 1:20

Sedum systems are designed to be low maintenance. Species selection ensures that the roof will evolve naturally, however this is an approximate program of the maintenance.

See enlarged version in Appendix A

APPENDIX A

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