

Data Sheet

The PROGREEN Intensive Green Roofing System supports diverse planting schemes including trees, lawns, coppices and paved areas. It is possible to create a 'roof garden' including recreation areas and amenity space. Intensive roofs therefore require higher levels of maintenance compared to other systems.

The PROGREEN Intensive roof is suitable for new build projects with concrete decks. Due to the weight loadings of an intensive system, a structural engineer must be consulted.

The green roof system must be able to drain freely so that the vegetation does not become ponded in water. It is also essential that the system is able to store enough water to survive drought conditions. Therefore, it is important that a Protan approved horticultural consultant assesses the individual roof to specify a suitable system.

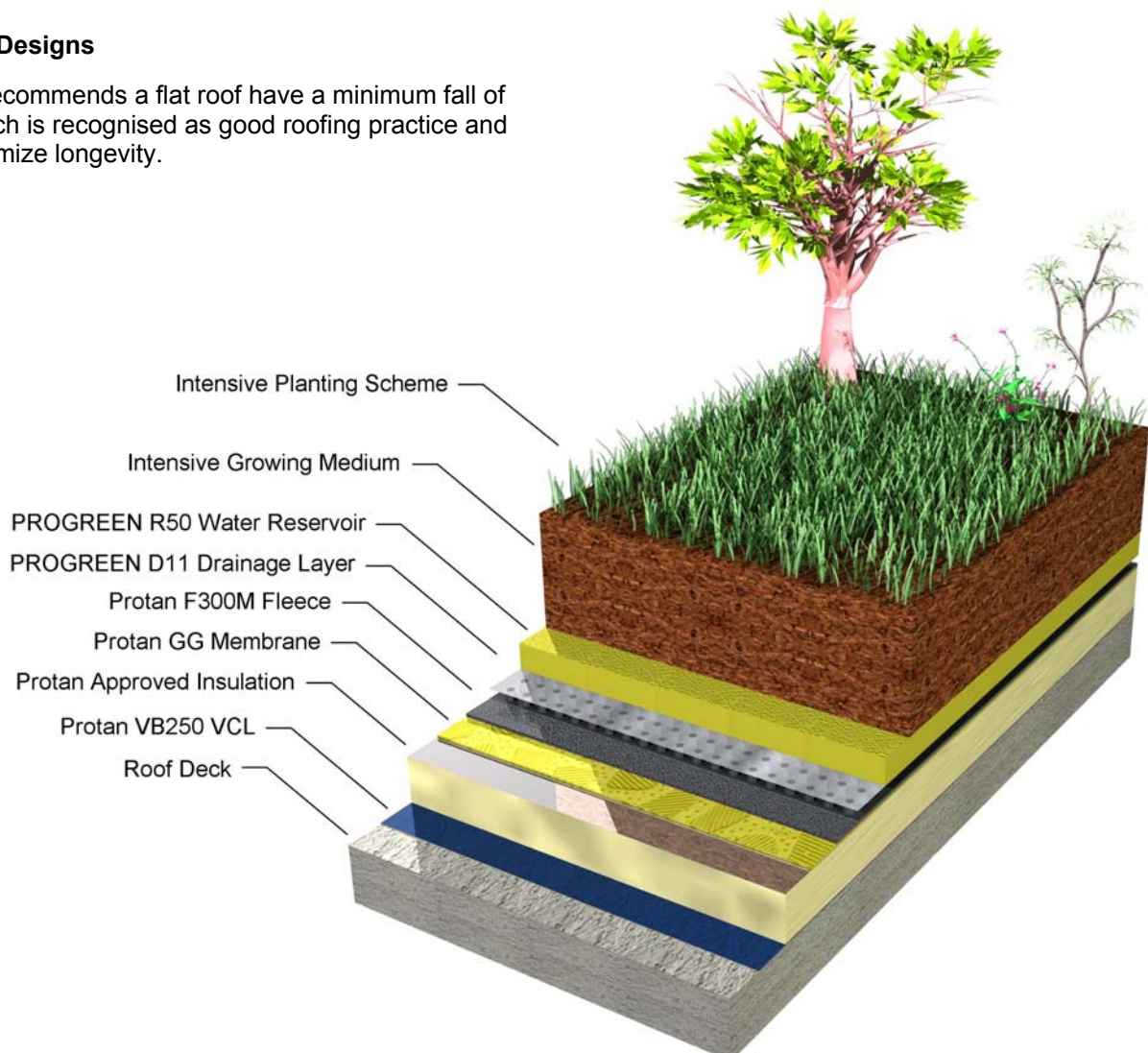
System Designs

Protan recommends a flat roof have a minimum fall of 1:60 which is recognised as good roofing practice and will maximize longevity.

PROGREEN Intensive Roof		
Component	Weight	Depth
Protan GG Membrane	2.15 kg/m ²	2.0 mm
Protan F300M Fleece	0.30 kg/m ²	2.0 mm
PROGREEN D11 Drainage Layer	0.94 kg/m ²	11 mm
PROGREEN R50 water reservoir*	46.0 kg/m ²	50 mm
Intensive Growing Medium*	>205 kg/m ²	>150 mm
Intensive Planting Scheme	>5 kg/m ²	n/a

* Saturated Weight

Suitability of Protan Green Roof Systems are subject to inspection and wind calculations carried out by Protan (UK) Ltd. A structural engineer must be consulted to access the load bearing capacity of the roof and building structure.



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Installation

The waterproofing membrane layer must be installed by Protan approved applicators who have received special training and are regularly updated with information about the system.

The design and layout of the waterproofing system are the responsibility of Protan technical services. All installed roofing membranes must be inspected by a Protan Technical manager during installation.

A leak test must be performed prior to the green roof layers being installed.

The planted element of the system must be installed by a partner green roof contractor who have expertise in the installation and upkeep of a healthy, functional green roofing system.

Environment

The PROGREEN Intensive green roof system delivers a range of environmental benefits, which include:

- Thermal benefits
- Water retention
- Waterproofing membrane protection

For more information on the benefits of green roofs please see the PROGREEN literature.

Maintenance & Inspection

We recommend that the roof area be inspected, in spring and autumn, for evidence of damage, cleaning of gutters and ensuring outlets are clear and free flowing, maintenance regime of the for the upkeep of the planted element.

References

For further technical information please refer to:

- Protan GG Membrane Datasheet
- Protan PROGREEN R50 Reservoir Panel
- Protan PROGREEN D11 Drainage Layer Datasheet
- Protan PROGREEN Planting Options Datasheet
- Protan F300M Protective Fleece Datasheet

For further information please contact Protan (UK) Limited.