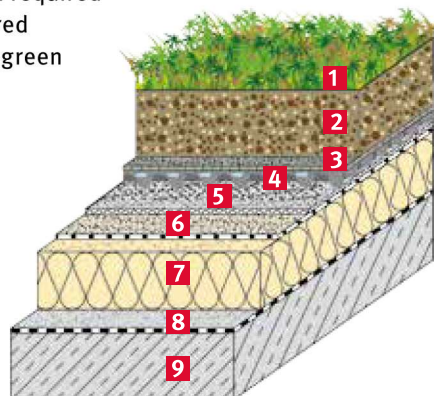


1. Warm roof build-up to a concrete substrate

- Pressure resistant thermal insulation required
- Highly effective vapour barrier required
- Compatible for greening with all Optigreen System Solutions

	P. 8		P. 36
	P. 12		P. 42
	P. 16		P. 46
	P. 20		P. 52
	P. 28		

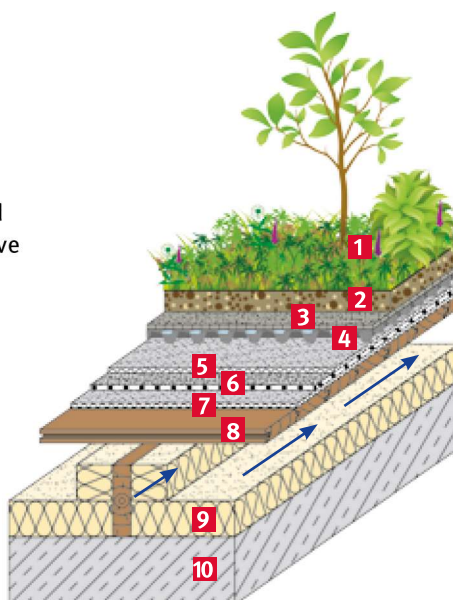


- 1 Vegetation layer
- 2 Optigreen Substrate
- 3 Optigreen Filter Fleece
- 4 Optigreen Drainage and Storage Board FKD
- 5 Optigreen Protection and Storage Fleece RMS
- 6 Roof membrane (root-resistant according to FLL/GRO)
- 7 Thermal insulation
- 8 Vapour barrier
- 9 Concrete deck

2. Cold roof (ventilated roof)

- Suitable ventilation to be provided
- Greening possible with all extensive Optigreen System Solutions

	P. 8		P. 20
	P. 12		P. 28
	P. 16		P. 52

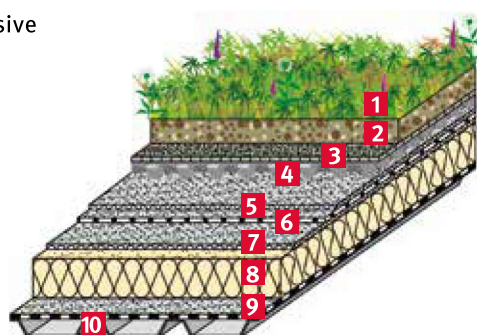


- 1 Vegetation layer
- 2 Optigreen Substrate
- 3 Optigreen Filter Fleece
- 4 Optigreen Drainage and Storage Board FKD
- 5 Optigreen Protection and Storage Fleece RMS
- 6 Roof membrane (root-resistant according to FLL/GRO)
- 7 Protection and separation layer
- 8 Substructure
- 9 Thermal insulation
- 10 Concrete deck

3. Warm roof build-up to a metal profiled deck

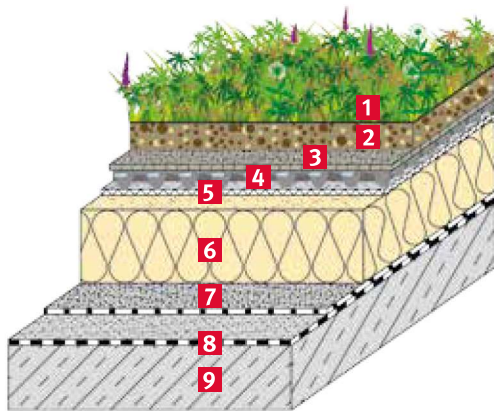
- Greening possible with all extensive Optigreen System Solutions

	P. 8		P. 20
	P. 12		P. 28
	P. 16		P. 52



- 1 Vegetation layer
- 2 Optigreen Substrate
- 3 Optigreen Filter Fleece
- 4 Optigreen Drainage and Storage Board FKD
- 5 Optigreen Protection and Storage Fleece RMS
- 6 Roof membrane (root-resistant according to FLL/GRO)
- 7 Protection and separation layer
- 8 Thermal insulation
- 9 Vapour barrier
- 10 Supporting structure/Trapezoidal

4. Inverted roof



- 1 Vegetation layer
- 2 Optigreen Substrate
- 3 Optigreen Filter Fleece
- 4 Optigreen Drainage and Storage Board FKD
- 5 Optigreen Trickle Protection Fleece RSV
- 6 Thermal insulation
- 7 Roof membrane
(root-resistant according to FLL/GRO)
- 8 Protection and separation layer
- 9 Concrete deck

4.1 Additional notes

In addition to the other design principles, certain points must be specially taken into account for inverted roofs in order to ensure long-term performance of the thermal insulation in conjunction with the roof greening:

Permeability

The green roof structure must make it possible for the moist air from the inside to be given off into the atmosphere via the thermal insulation. This occurs when the green roof structure can dry out and absorb water from “below” or a drainage layer with sufficient ventilation lies above the thermal insulation. No water accumulation on the inverted roof insulation is permitted.

Wind suction protection

The thermal insulation boards are installed loosely on the waterproofing and must be fixed in place with wind suction protection using a superimposed load. The manufacturers of the insulation boards should state the necessary minimum weight loads for the corner, edge and centre areas, which Optigreen should use in its wind suction calculations and thus define the correct green roof structure (see page 88).

Compressive strength

Sufficient, density thermal insulation must be specified and used, especially for deeper green roof build-ups and those accessible to pedestrian and vehicular traffic.

4.2 Suitable green roof build-ups

The following Optigreen System Solutions are suitable for an inverted roof:

Economy Roof

Generally suitable, minimum weight load required to prevent wind suction



P. 8

Nature Roof

Generally suitable, minimum weight load required to prevent wind suction



P. 16

Retention Roof “Flow Control”

Suitable for temporary standing water



P. 22

Pitched Roof

Generally suitable, minimum weight load required to prevent wind suction



P. 28

Solar Green Roof

Generally suitable, however project based consultation necessary



P. 52

Garden Roof

Generally suitable, however project based consultation necessary



P. 36

Landscape Roof

Generally suitable, however project based consultation necessary



P. 42

Public Roof

Only build-ups with FKD 25, FKD 25 plus and FKD 60 possible



P. 46