GREENFOND
FOR OUR FUTURE

SYSTEM SOLUTIONS

GREEN ROOFS

ECOLOGICAL SOLUTIONS FOR GREENER, HEALTHIER CITIES

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GREEN ROOF SYSTEMS

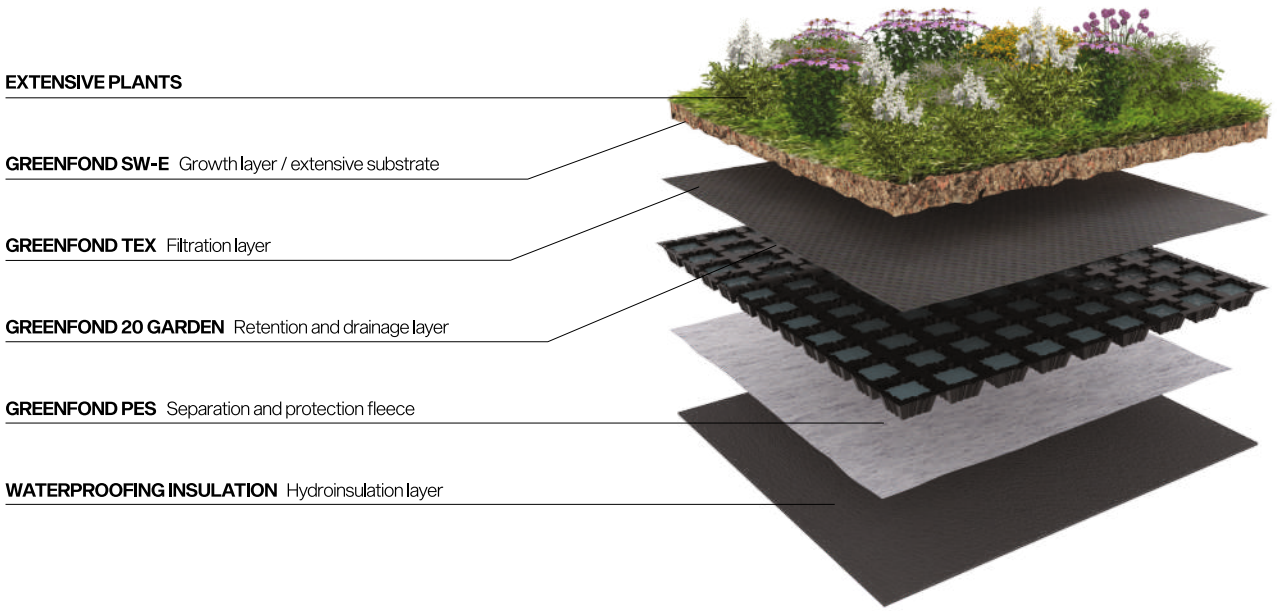
TABLE OF CONTENTS

GREENFOND SDE

01. EXTENSIVE GREEN ROOF

PITCH: UP TO 5°
SYSTEM STRUCTURE THICKNESS: 7 - 15 CM
SATURATED WEIGHT: 114 - 180 KG / M2

Fire class
B_{roof} (t1)



TECHNICAL CALCULATION	SYSTEM PACKAGE SEDUM MATT			SYSTEM PACKAGE SRM, MPR		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
GREENERY LAYER	**GREENFOND SEDUM MATT** Sedum mat	25	2-4	**GREENFOND SMR 110** Plug plants	2	0,5
VEGETATION LAYER	**GREENFOND SW-E** Extensive substrate	80	5	**GREENFOND SW-E** Extensive substrate	160	10
FILTRATION LAYER	**GREENFOND TEX 100** Filter fleece	0,5	0,2	**GREENFOND TEX 100** Filter fleece	0,5	0,2
RETENTION AND DRAINAGE LAYER	**GREENFOND 20 GARDEN**	8	2	**GREENFOND 20 GARDEN PREMIUM**	13,5	2
SEPARATION LAYER	**GREENFOND PES 300B**	2	0,3	**GREENFOND PES 300B**	2	0,3
WATERPROOFING LAYER	**WATER INSULATION**	-	-	**WATER INSULATION**	-	-
TOTAL FOR THE PACKAGE		**115,5**	**10,5**		**178**	**13,0**

GREENFOND SDE

EXTENSIVE VEGETATION

SEDUM MATS - roll 0,6 x 2 m /1,2 m²
- GREENFOND Sedum Matt Tundra R
- GREENFOND Sedum - Herb Matt R
- GREENFOND Sedum Grass-Herbs Matt

SEDUM PLUG PLANTS
IN MULTIPLATES
- GREENFOND SRM 110
- dia. of the root ball 4,5 cm / 110 pcs
- GREENFOND SRM 192
- dia. of the root ball 2,5 cm / 192 pcs

GREENFOND MPR
Mixture of sedum varieties properly selected in the form of shoots for use on extensive green roofs.

GROWTH LAYER – EXTENSIVE ROOF SUBSTRATE

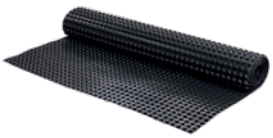
GREENFOND SW-E
Volcanic substrate intended as a vegetation layer on green roofs for extensive vegetation.
Packaging - Big Bag - 1 m³

GREENFOND SW-E
Volcanic substrate intended as a vegetation layer on green roofs for extensive vegetation.
Packaging - bag - 25 kg

FILTRATION LAYER

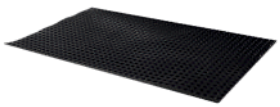
GREENFOND TEX 100
A polypropylene nonwoven is additionally thermally strengthened, thanks to which it retains its parameters in a humid environment, it does not rot and, at the same time, possesses a high mechanical and physical resistance quality. Used as a filtration layer for GREENFOND drainage modules.
Roll - 2 x 50 m /100 m²

RETENTION AND DRAINAGE LAYER



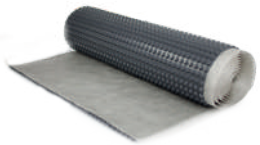
GREENFOND 20 GARDEN
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, arranged in a parallel system.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Sheet - 1 x 2 m /2 m² or roll 2 x 20 m /40 m²



GREENFOND 20 GARDEN PREMIUM
Retention and drainage layer (HDPE) with high accumulation of water and load capacity with a height profile of 20 mm.

Water accumulation: 12 l/m²
Compressive strength: 400 kN
Sheet - 2,05 x 1,05 m /2,15 m²



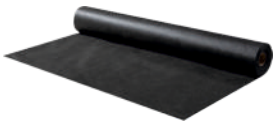
GREENFOND 20 GARDEN DUO
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, integrated with filter geotextile.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Roll - 2 x 10 m / 20 m²

SEPARATION LAYER

GREENFOND PES 300B
Separation and protection layer used for green roofs and drainage of pathways as well as in construction of roads, highways, airports, parking lots or playgrounds.
Roll - 2 x 50 m / 100 m²
Roll - 2 x 25 m / 50 m²

GREENFOND REC
Absorbing mat used as a retention and separation layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds. It is made of a blend of polypropylene and polyester fibers recovered in secondary processing.
REC 600 - roll 2 x 25 m /50 m²
REC 1000 - roll 2 x 20 m /40 m²



GREENFOND WSE
Separation membrane produced in thermobonding technology, composed of polypropylene fiber mesh. Thanks to such a construction it is possible to use it as a separation and diffusion layer in GREENFOND green roof systems.
Roll - 1,53 x 50 m /76,5 m²

GREENFOND RRM

02. LIGHT GREEN ROOF

PITCH : up to 5°
SYSTEM STRUCTURE THICKNESS : 11 - 13 cm
WATER ACCUMULATION : up to 45 l/m²
SATURATED WEIGHT : 59 - 62 kg/m²

GREENFOND SEDUM MATT TUNDRA R Sedum mat

GREENFOND RRM Vegetation layer

GREENFOND 60 GARDEN Retention and drainage layer

GREENFOND 300B Separation and protection layer

ANTI-ROOT LAYER

TECHNICAL CALCULATION	SYSTEM PACKAGE RRM			SYSTEM PACKAGE RRM x2		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
GREENERY LAYER	**GREENFOND SEDUM MATT** Sedum mat	25	4	**GREENFOND SEDUM MATT** Sedum mat	25	4
VEGETATION LAYER	**GREENFOND RRM** Vegetation mat	12	2,5	**GREENFOND RRM** Vegetation mat	12	2,5
VEGETATION LAYER	-	-	-	**GREENFOND RRM** Vegetation mat	12	2,5
RETENTION AND DRAINAGE LAYER	**GREENFOND 60 GARDEN**	23	6	**GREENFOND 20 GARDEN**	8	2
SEPARATION LAYER	**GREENFOND PES 300B**	2	0,3	**GREENFOND PES 300B**	2	0,3
ANTI-ROOT LAYER		0,1	0,2		0,1	0,2
TOTAL FOR THE PACKAGE		**62,1**	**13**		**59,1**	**11,5**

GREENFOND RRM

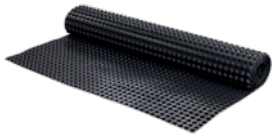
EXTENSIVE VEGETATION

SEDUM MATS - roll 0,6 x 2 m /1,2 m²
- **GREENFOND Sedum Matt Tundra R**
- **GREENFOND Sedum - Herb Matt R**

VEGETATION LAYER

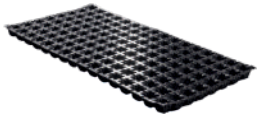
GREENFOND RRM
Lekkie podłoże mineralne do dachów zielonych produkowane na bazie higroskopijnych włokien naturalnych oraz poliestrowych.
Roll - 1 x 15 m /15 m²

RETENTION AND DRAINAGE LAYER



GREENFOND 20 GARDEN
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, arranged in a parallel system.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Sheet - 1 x 2 m /2 m² or roll 2 x 20 m /40 m²



GREENFOND 60 GARDEN
Retention and drainage module (HDPE) with high water accumulation and load capacity. For use in intensive green roof system.

Water accumulation: 20 l/m²
Compressive strength: 450 kN
Sheet - 2 x 1 m /2 m²

SEPARATION LAYER

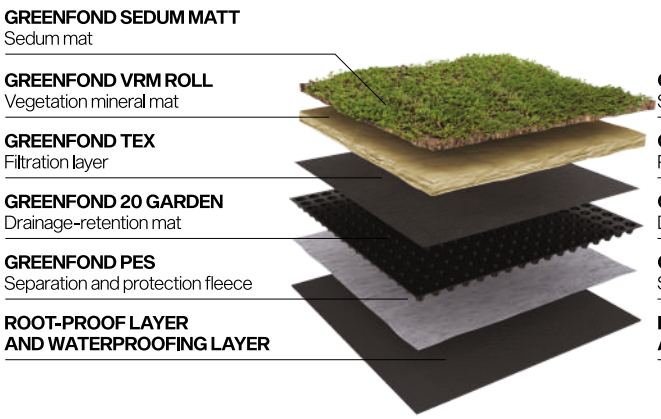
GREENFOND PES 300B
Separation and protection layer used for green roofs and drainage of pathways as well as in construction of roads, highways, airports, parking lots or playgrounds.
Roll - 2 x 50 m / 100 m²

GREENFOND VRM/REC

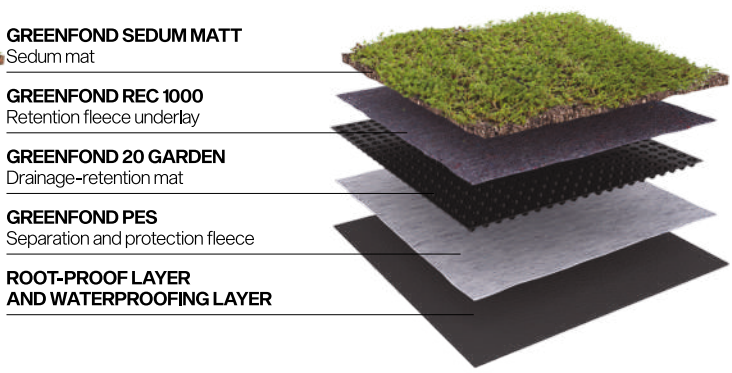
03. LIGHTWEIGHT EXTENSIVE GREEN ROOF

PITCH : up to 5°
SYSTEM STRUCTURE THICKNESS : 7 - 10 cm
SATURATED WEIGHT : 42 - 55 kg/m²

GREENFOND VRM



GREENFOND REC



TECHNICAL CALCULATION	VRM PACKAGE SYSTEM			REC PACKAGE SYSTEM		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
GREENERY LAYER	**GREENFOND SEDUM MATT** Sedum mat	25	4	**GREENFOND SEDUM MATT** Sedum mat	25	4
VEGETATION LAYER	**GREENFOND VRM 2,5**	20	2,5	**GREENFOND REC 1000**	10	1
FILTRATION LAYER	**GREENFOND TEX 100** Filter fleece	0,5	0,2	-	-	-
RETENTION AND DRAINAGE LAYER	**GREENFOND 20 GARDEN P**	8	2	**GREENFOND 20 GARDEN P**	8	2
SEPARATION LAYER	**GREENFOND PES 300 B**	2	0,3	**GREENFOND PES 300 B**	2	0,3
WATERPROOFING LAYER	**WATER INSULATION**	-	-	**WATER INSULATION**	-	-
TOTAL FOR THE PACKAGE		**55,5**	**9**		**45**	**7,3**

GREENFOND VRM/REC

EXTENSIVE VEGETATION

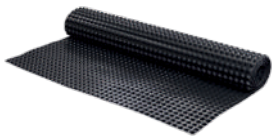
SEDUM MATS - roll 0,6 x 2 m / 1,2 m²
- GREENFOND Sedum Matt Tundra R
- GREENFOND Sedum - Herb Matt R

RETENTION, VEGETATION AND FILTRATION LAYER

GREENFOND REC
Absorbing mat used as a retention and protection layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds.
Roll - 2 x 20 m / 40 m²

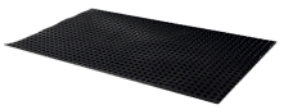
GREENFOND VRM
Light mineral substrate for green roofs produced on the basis of hygroscopic rock wool with a high level of retention and ventilation of the substrate.
VRM 2,5/9 - Roll 900 x 100 x 2,5 cm / 9 m²
VRM 3,5/12 - Roll 1200 x 100 x 3,5 cm / 12 m²

RETENTION AND DRAINAGE LAYER



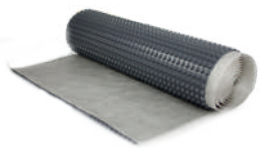
GREENFOND 20 GARDEN
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, arranged in a parallel system.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Sheet - 1 x 2 m /2 m² or roll 2 x 20 m /40 m²



GREENFOND 20 GARDEN PREMIUM
Retention and drainage layer (HDPE) with high accumulation of water and load capacity with a height profile of 20 mm.

Water accumulation: 12 l/m²
Compressive strength: 400 kN
Sheet - 2,05 x 1,05 m /2,15 m²



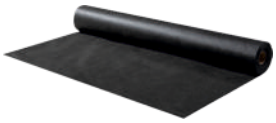
GREENFOND 20 GARDEN DUO
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, integrated with filter geotextile.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Roll - 2 x 10 m / 20 m²

SEPARATION LAYER

GREENFOND PES 300B
Separation and protection layer used for green roofs and drainage of pathways as well as in construction of roads, highways, airports, parking lots or playgrounds.
Roll - 2 x 50 m / 100 m²
Roll - 2 x 25 m / 50 m²

GREENFOND REC
Absorbing mat used as a retention and separation layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds.
It is made of a blend of polypropylene and polyester fibers recovered in secondary processing.
REC 600 - roll 2 x 25 m /50 m²
REC 1000 - roll 2 x 20 m /40 m²



GREENFOND WSE
Separation membrane produced in thermobonding technology, composed of polypropylene fiber mesh. Thanks to such a construction it is possible to use it as a separation and diffusion layer in GREENFOND green roof systems.
Roll - 1,53 x 50 m /76,5 m²

GREENFOND XPS

04. EXTENSIVE GREEN ROOF WITH THERMAL INSULATION

PITCH : up to 5°
SYSTEM STRUCTURE THICKNESS : 17 - 23 cm
SATURATED WEIGHT : 116 - 173 kg/m²

Fire class
B_{roof} (t1)

EXTENSIVE PLANTS

GREENFOND SWE Growth layer / extensive substrate

GREENFOND TEX Filtration layer

GREENFOND 20 GARDEN Retention and drainage layer

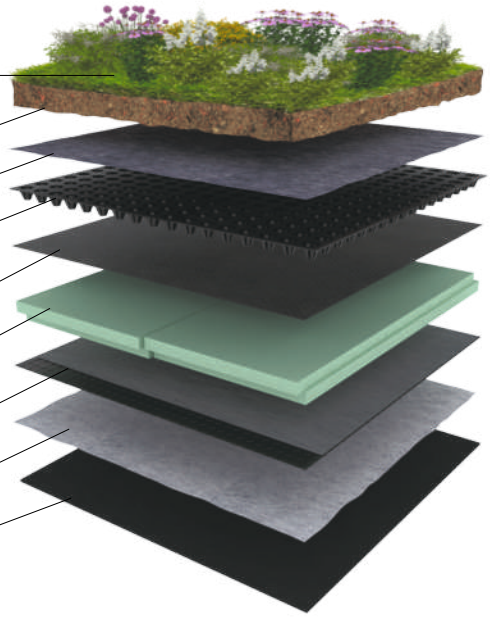
GREENFOND WSE Separation layer

XPS Thermal insulation

GREENFOND TER 4 Drainage layer

GREENFOND PES Separation and protection fleece

GREENFOND EPDM/BITUM Waterproofing layer



TECHNICAL CALCULATION	SYSTEM PACKAGE SEDUM MATT			SYSTEM PACKAGE SRM, MPR		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
GREENERY LAYER	**GREENFOND SEDUM MATT** Sedum mat	25	4	**GREENFOND SRM 110** Plug plants	2	4
VEGETATION AND RETENTION LAYER	**GREENFOND SW-E** Extensive substrate	80	5	**GREENFOND SW-E** Extensive substrate	160	10
FILTRATION LAYER	**GREENFOND TEX 100** Filter fleece	0,5	0,2	**GREENFOND TEX 100** Filter fleece	0,5	0,2
RETENTION AND DRAINAGE LAYER	**GREENFOND 20 GARDEN P**	8	2	**GREENFOND 20 GARDEN P**	8	2
SEPARATION LAYER	**GREENFOND WSE**	0,5	0,3	**GREENFOND WSE**	0,5	0,3
THERMAL INSULATION	**XPS**	1,5	5	**XPS**	1,5	5
DRAINAGE LAYER	**GREENFOND TER 4 150**	0,5	0,4	**GREENFOND TER 4 150**	0,5	0,4
SEPARATION LAYER	**GREENFOND PES 200B**	1	0,2	**GREENFOND PES 200B**	1	0,2
WATERPROOFING LAYER	**WATER INSULATION**	-	-	**WATER INSULATION**	-	-
TOTAL FOR THE PACKAGE		**117**	**17,1**		**174**	**22,1**

GREENFOND XPS

EXTENSIVE VEGETATION

SEDUM MATS - roll 0,6 x 2 m /1,2 m²
- GREENFOND Sedum Matt Tundra R
- GREENFOND Sedum - Herb Matt R
- GREENFOND Sedum Grass-Herbs Matt

SEDUM PLUG PLANTS
IN MULTIPLATES
- GREENFOND SRM 110
- dia. of the root ball 4,5 cm / 110 pcs
- GREENFOND SRM 192
- dia. of the root ball 2,5 cm / 192 pcs

GREENFOND MPR
Mixture of sedum varieties properly selected in the form of shoots for use on extensive green roofs.

GROWTH LAYER – EXTENSIVE ROOF SUBSTRATE

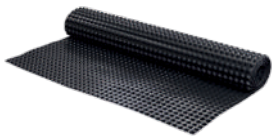
GREENFOND SW-E
Volcanic substrate intended as a vegetation layer on green roofs for extensive vegetation.
Packaging - Big Bag - 1 m³

GREENFOND SW-E
Volcanic substrate intended as a vegetation layer on green roofs for extensive vegetation.
Packaging - bag 25 kg

FILTRATION LAYER

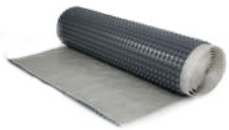
GREENFOND TEX 100
A polypropylene nonwoven is additionally thermally strengthened, thanks to which it retains its parameters in a humid environment, it does not rot and, at the same time, possesses a high mechanical and physical resistance quality.
Roll - 2 x 50 m /100 m²

RETENTION AND DRAINAGE LAYER



GREENFOND 20 GARDEN
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, arranged in a parallel system.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Sheet - 1 x 2 m /2 m² or roll 2 x 20 m /40 m²



GREENFOND 20 GARDEN DUO
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, integrated with filter geotextile.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Roll - 2 x 10 m / 20 m²

DRAINAGE LAYER

GREENFOND TER 4
Drainage layer produced from hardened polyethylene (HDPE) with a height profile of 4 mm.
Roll - 2 x 20 m /40 m² or 2,5 x 20 m /50 m²

GREENFOND DRAIN TER 4
Drainage layer produced from hardened polyethylene (HDPE) with a height profile of 4 mm integrated with filter geotextile.
Roll - 2,5 x 15 m /37,5 m² or 2 x15 m /30m²

SEPARATION LAYER

GREENFOND PES
Separation and protection layer used for green roofs and drainage of pathways as well as in construction of roads, highways, airports, parking lots or playgrounds.
PES 200B - roll 2 x 50 m /100 m²
PES 300B - roll 2 x 50 m /100 m²

GREENFOND REC
Absorbing mat used as a retention and separation layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds. It is made of a blend of polypropylene and polyester fibers recovered in secondary processing.
REC 600 - roll 2 x 25 m /50m²
REC 1000 - roll 2 x 20 m /40m²

GREENFOND WSE
Separation membrane produced in thermobonding technology, composed of polypropylene fiber mesh. Thanks to such a construction it is possible to use it as a separation and diffusion layer in GREENFOND green roof systems.
Roll - 1,53 x 50 m /76,5 m²

GREENFOND SDI

05. INTENSIVE GREEN ROOF

PITCH : up to 5°
SYSTEM STRUCTURE THICKNESS : 20 - 100 cm
SATURATED WEIGHT : 250 - 600 kg/m²

Fire class
B_{roof} (t1)

INTENSIVE PLANTS

GREENFOND SW-I Growth layer / intensive substrate

GREENFOND TEX Filtration layer

GREENFOND 40/60 GARDEN Retention and drainage layer

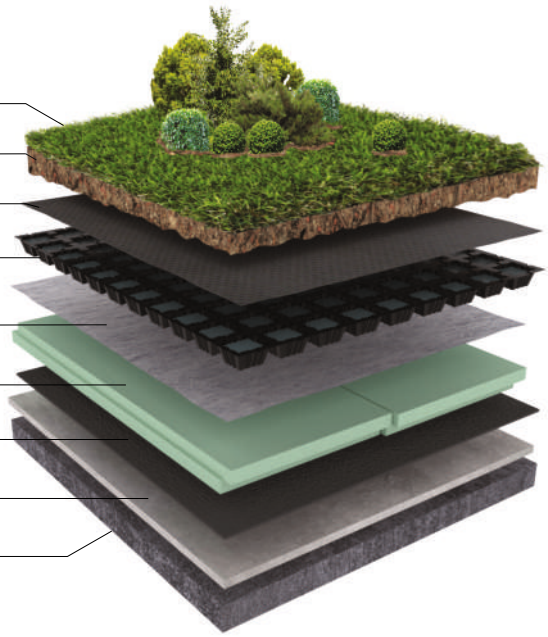
GREENFOND PES Separation and protection fleece

GREENFOND XPS/EPS Thermal insulation

GREENFOND EPDM/BITUM Waterproofing layer

SLOPE LAYER Light concrete (2-5%)

CONSTRUCTION PLATE Reinforced concrete slab



TECHNICAL CALCULATION	SYSTEM PACKAGE TR			SYSTEM PACKAGE MTR		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
GREENERY LAYER	**GREENFOND TR** Grass in a roll	25	4	**GREENFOND MTR** Grass seed mixture	0,1	0,1
VEGETATION LAYER	**GREENFOND SW-I** Intensive substrate	240	15	**GREENFOND SW-I** Intensive substrate	320	20
FILTRATION LAYER	**GREENFOND TEX 100** Filter fleece	0,5	0,2	**GREENFOND TEX 100** Filter fleece	0,5	0,2
RETENTION AND DRAINAGE LAYER	**GREENFOND 40 GARDEN**	17,2	4	**GREENFOND 60 GARDEN**	23	6
SEPARATION LAYER	**GREENFOND PES 300B**	2	0,3	**GREENFOND PES 300B**	2	0,3
THERMAL INSULATION	**XPS**	1,5	5	**XPS**	1,5	5
WATERPROOFING LAYER	**WATER INSULATION**	-	-	**WATER INSULATION**	-	-
TOTAL FOR THE PACKAGE		**286,2**	**28,5**		**347,2**	**31,6**

GREENFOND SDI

INTENSIVE GREENERY

GRASS IN A ROLL
- GREENFOND TR-K
- 1m² (46x220)
- 1m² (40x250)
- 0,8 m² (40x200)

VEGETATION MATS
- GREENFOND WILDFLOWER MATT
- 0,6 x 2 m / 1,2 m²
- GREENFOND BEES/BUTTERFLIES MATT
- 1,2 x 200 cm / 2,4 m²

GREENFOND SEED/MTR
Mixture of grass seeds properly selected for use on intensive green roofs.
Packaging - bag 10 kg

GROWTH LAYER – INTENSIVE ROOF SUBSTRATE

GFEENFOND SW-I
Volcanic substrate intended as a vegetation layer on green roofs for intensive vegetation.
Packaging - Big Bag 1 m³

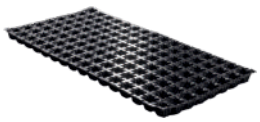
GFEENFOND SW-I
Volcanic substrate intended as a vegetation layer on green roofs for intensive vegetation.
Packaging - bag 25 kg

GFEENFOND SW-T
Volcanic substrate intended as a vegetation layer on green lawn roofs.
Packaging - Big Bag 1 m³

FILTRATION LAYER

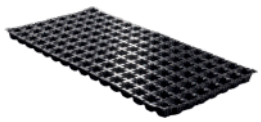
GREENFOND TEX 100
A polypropylene nonwoven is additionally thermally strengthened, thanks to which it retains its parameters in a humid environment, it does not rot and, at the same time, possesses a high mechanical and physical resistance quality. Used as a filtration layer for GREENFOND drainage modules.
Roll - 2 x 50 m /100 m²

RETENTION AND DRAINAGE LAYER



GREENFOND 40 GARDEN
Retention and drainage module (HDPE) with high water accumulation and load capacity. For use in intensive green roof system.

Water accumulation: 15 l/m²
Compressive strength: 400 kN
Sheet - 2 x 1 m /2 m²



GREENFOND 60 GARDEN
Retention and drainage module (HDPE) with high water accumulation and load capacity. For use in intensive green roof system.

Water accumulation: 20 l/m²
Compressive strength: 450 kN
Sheet - 2 x 1 m /2 m²

SEPARATION LAYER

GREENFOND PES 300B
Separation and protection layer used for green roofs and drainage of pathways as well as in construction of roads, highways, airports, parking lots or playgrounds.
Roll 2 x 50 m /100 m²
Roll 2 x 25 m /50 m²

GREENFOND REC
Absorbing mat used as a retention and separation layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds. It is made of a blend of polypropylene and polyester fibers recovered in secondary processing.
REC 600 - roll 2 x 25 m /50m²
REC 1000 - roll 2 x 20 m /40m²

GREENFOND WSE
Separation membrane produced in thermobonding technology, composed of polypropylene fiber mesh. Thanks to such a construction it is possible to use it as a separation and diffusion layer in GREENFOND green roof systems.
Roll - 1,53 x 50 m /76,5 m²

GREENFOND GDS

06. PITCHED EXTENSIVE GREEN ROOF

PITCH : from 0° to 45°
SYSTEM STRUCTURE THICKNESS : 7 - 15 cm
SATURATED WEIGHT : 75 - 130 kg/m²

GDS 15 (0-15°)

GREENFOND SEDUM MATT TUNDRA T
Sedum mat

GREENFOND SW-E
Growth layer, extensive substrate

GREENFOND GDS 15
Green roof system for pitched roofs 1-15°

ANTI-ROOT LAYER

ROOF CONSTRUCTION / SUBSTRUCTURE

GDS 45 (16-45°)

GREENFOND SEDUM MATT TUNDRA T
Sedum mat

GREENFOND SW-E
Growth layer, extensive substrate

GREENFOND GDS 45
Green roof system for pitched roofs 16-45°

ROOF COUNTER-BATTENS

GREENFOND DMS 170
Diffusion membrane

RAFTERS

GREENFOND GDS

TECHNICAL CALCULATION	SYSTEM PACKAGE GDS 15			SYSTEM PACKAGE GDS 45		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
GREENERY LAYER	**GREENFOND SEDUM MATT** Sedum mat	25	2-4	**GREENFOND SEDUM MATT** Sedum mat	25	2-4
VEGETATION LAYER	**GREENFOND SW-E** Extensive substrate	48	3	**GREENFOND SW-E** Extensive substrate	96	6,5
TECHNICAL LAYER	**GREENFOND GDS 15** Pitched roof module	3,96	3	**GREENFOND GDS 45** Pitched roof module	7,3	6,5
WATERPROOFING LAYER	-	-	-	**GREENFOND DMS 170** Diffusion membrane	0,1	0,1
TOTAL FOR THE PACKAGE		**76,96**	**7**		**128,4**	**10,6**

EXTENSIVE VEGETATION

SEDUM MATS - roll 0,6 x 2m
- GREENFOND Sedum Matt Tundra T

GROWTH LAYER – EXTENSIVE ROOF SUBSTRATE

GREENFOND SW-E
Volcanic substrate intended as a vegetation layer on green roofs for extensive vegetation.
Packaging - Big Bag - 1 m³

GREENFOND SW-E
Volcanic substrate intended as a vegetation layer on green roofs for extensive vegetation.
Packaging - bag - 25 kg

PITCH ROOF MODULES - GDS SYSTEM

GREENFOND GDS 15
Green pitched roof module, enablingcreating roof gardens, paths and placessitting on roofs with a not-slope of up to 15°.
Dimensions - 60 x 40 cm
Amount per m² - 4.17 pcs.

GREENFOND GDS 45
Green pitched roof module, enabling creating sloping green roofs with an angle slope from 16 - 45°.
Dimensions - 80 x 54 cm
Amount per m² - 2.6 pcs.

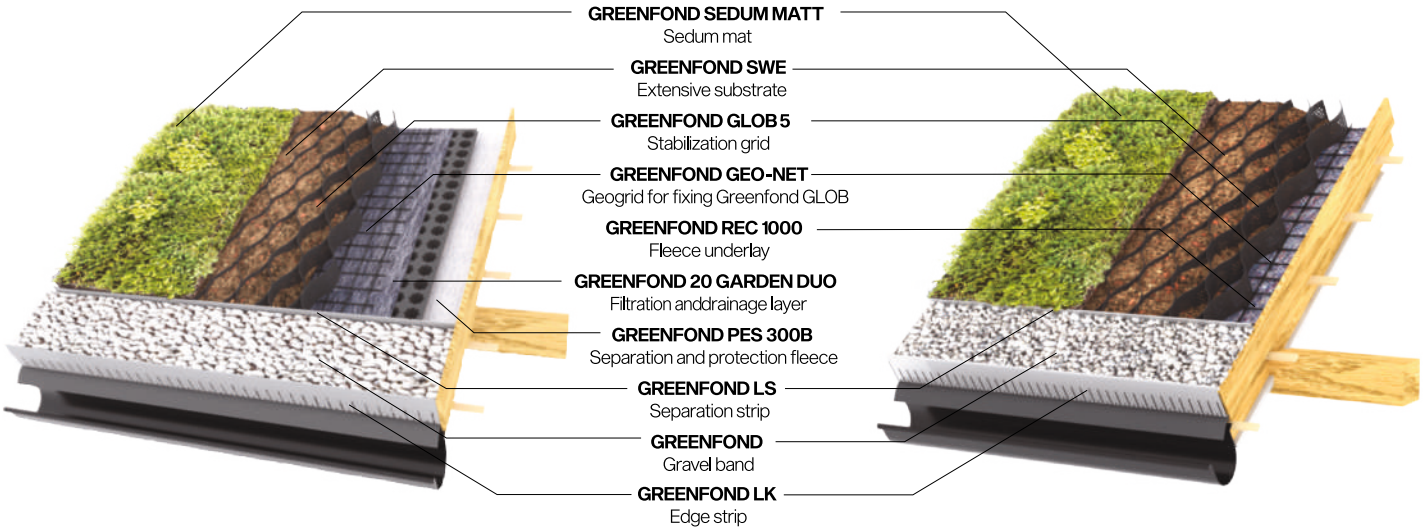
GREENFOND SPE

07. PITCHED EXTENSIVE GREEN ROOF

PITCH : up to 35°
SYSTEM STRUCTURE THICKNESS : 10 - 12 cm
SATURATED WEIGHT : 115 - 170 kg/m²

GREENFOND SPE DUO

GREENFOND SPE REC



TECHNICAL CALCULATION	SYSTEM PACKAGE SPE DUO			SYSTEM PACKAGE SPE REC		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
GREENERY LAYER	**GREENFOND SEDUM MATT** Sedum mat	25	2-4	**GREENFOND MPR** Sedum shoots	0,08	0,5
VEGETATION LAYER	**GREENFOND SW-E** Extensive substrate	80	5	**GREENFOND SW-E** Extensive substrate	160	10
TECHNICAL LAYER	**GREENFOND GLOB 5** Substrate stabilization grid	1,35	5 including substrate	**GREENFOND GLOB 5** Substrate stabilization grid	1,35	5 including substrate
TECHNICAL LAYER	**GREENFOND GEO NET** Geogrid for mounting GLOB	0,2	0,3	**GREENFOND GEO NET** Geogrid for mounting GLOB	0,2	0,3
RETENTION AND DRAINAGE LAYER	**GREENFOND 20 GARDEN DUO**	7	2	—	-	-
SEPARATION LAYER	**GREENFOND PES 300B**	2	0,3	**GREENFOND REC 1000**	10	1
WATERPROOFING LAYER	**GREENFOND EPDM**	-	-	**GREENFOND EPDM**	-	-
TOTAL FOR THE PACKAGE		**115,5**	**10,6**		**171,6**	**11, 8**

EXTENSIVE VEGETATION

SEDUM MATS - roll 0,6 x 2m
- GREENFOND Sedum Matt Tundra R
- GREENFOND Sedum - Herb Matt R

SEDUM PLUG PLANTS
IN MULTIPLATES
- GREENFOND SRM 110
- dia. of the root ball4,5 cm / 110 pcs
- GREENFOND SRM 192
- dia. of the root ball 2,5 cm / 192 pcs

GREENFOND MPR
Mixture of sedum varieties properly selected in the form of shoots for use on extensive green roofs.

GROWTH LAYER – EXTENSIVE ROOF SUBSTRATE

GREENFOND SW-E
Volcanic substrate intended as a vegetation layer on green roofs for extensive vegetation.
Packaging - Big Bag - 1 m³

GREENFOND SW-E
Volcanic substrate intended as a vegetation layer on green roofs for extensive vegetation.
Packaging - bag - 25 kg

SUBSTRATE STABILIZATION LAYER

GREENFOND GLOB
Spatial HDPE geocomposite for stabilizing the roofing material on pitched green roofs and soil on slopes and embankments.
GLOB 5 - 2,6 x 6,3 m /32,24 m²
GLOB 10 - 2,6 x 12,4 m /22,5m²

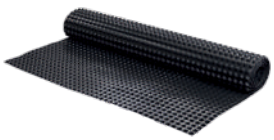
GREENFOND GEONET 20/20
Two-way geocomposite with an open structure in the form of a geogrid as a technical element in a pitched roof, as a mounting system for GREENFOND GLOB.
Dimensions: 4 x 75 m /300m²

FILTRATION LAYER

GREENFOND TEX 100
A polypropylene nonwoven is additionally thermally strengthened, thanks to which it retains its parameters in a humid environment, it does not rot and, at the same time, possesses a high mechanical and physical resistance quality.
Roll - 2 x 50 m /100 m²

GREENFOND REC 1000
Absorbing mat used as a retention and separation layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds.
It is made of a blend of polypropylene and polyester fibers recovered in secondary processing.
Roll - 2 x 20 m /40 m²

RETENTION AND DRAINAGE LAYER

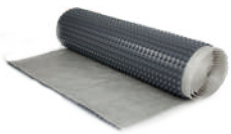


GREENFOND 20 GARDEN
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, arranged in a parallel system.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Sheet - 1 x 2 m /2 m² or roll 2 x 20 m /40 m²

GREENFOND 20 GARDEN PREMIUM
Retention and drainage layer (HDPE) with high accumulation of water and load capacity with a height profile of 20 mm.

Water accumulation: 12 l/m²
Compressive strength: 400 kN
Sheet - 2,05 x 1,05 m /2,15 m²



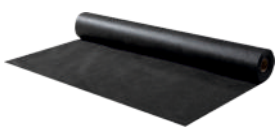
GREENFOND 20 GARDEN DUO
Retention and drainage layer made of hardened polyethylene (HDPE) with a height profile of 20 mm, integrated with filter geotextile.

Water accumulation: 7 l/m²
Compressive strength: 180 kN
Roll - 2 x 10 m / 20 m²

SEPARATION LAYER

GREENFOND PES 300B
Separation and protection layer used for green roofs and drainage of pathways as well as in construction of roads, highways, airports, parking lots or playgrounds.
Roll 2 x 50 m /100 m²
Roll 2 x 25 m /50 m²

GREENFOND REC 600
Absorbing mat used as a retention and separation layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds.
It is made of a blend of polypropylene and polyester fibers recovered in secondary processing.
Roll 2 x 25 m /50m²



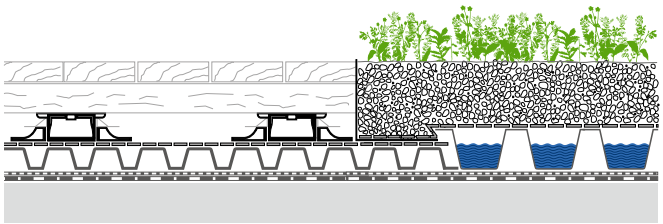
GREENFOND WSE
Separation membrane produced in thermobonding technology, composed of polypropylene fiber mesh. Thanks to such a construction it is possible to use it as a separation and diffusion layer in GREENFOND green roof systems.
Roll - 1,53 x 50 m /76,5 m²

GREENFOND SPPG

08. TERRACES AND PARKING SLABS ON FLAT ROOFS.

Drainage layers for terraces and parking slabs on flat roofs Walkways, roads and terrace surfaces made of paving slabs or paving stones are particularly exposed to the impact of changing weather conditions, in particular water and temperature changes.
Therefore, in these areas we recommend the use of properly selected drainage mats from the Greenfond Drain product range depending on intended loads.

GREENFOND SPPG - DRAIN



TERRACE, PARKING LOT, FIRE ESCAPE ROUTE

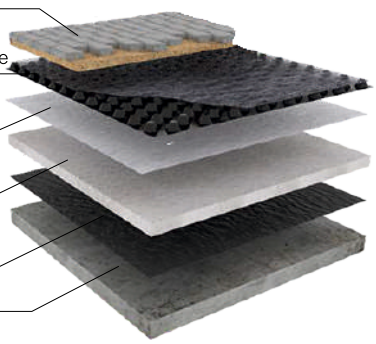
GREENFOND DRAIN
Drainage mat integrated with filter geotextile

GREENFOND PES
Separation and protection fleece

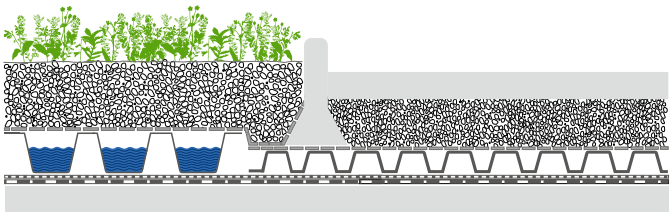
THERMAL INSULATION LAYER

GREENFOND EPDM/BITUM
waterproofing layer

CONCRETE SLAB



GREENFOND SPPG - DRAIN XPS/TER4



TERRACE, PARKING LOT, FIRE ESCAPE ROUTE

GREENFOND DRAIN
Drainage mat integrated with filter geotextile

GREENFOND WSE
Separation and protection fleece

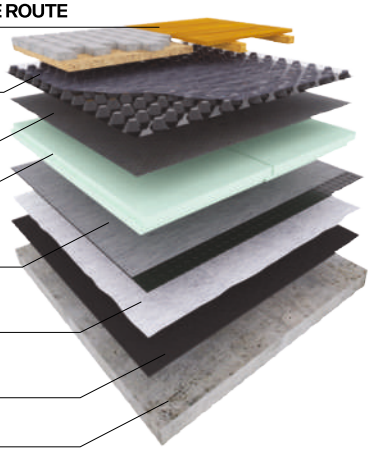
XPS Thermal insulation

GREENFOND TER 4
Drainage layer

GRENFOND PES 200
Separation and protection fleece

GREENFOND EPDM/BITUM
Waterproofing layer

CONCRETE SLAB



TECHNICAL CALCULATION	SYSTEM PACKAGE SPPG - DRAIN			SYSTEM PACKAGE SPPG - DRAIN XPS/TER4		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
SURFACE	Concrete blocks or slabs, terrace boards	-	4-8	Concrete blocks or slabs, terrace boards	-	4-8
SUBSTRUCTURE	Sand and gravel ballast	-	according to a project	Sand and gravel ballast	-	according to a project
DRAINAGE LAYER	**GREENFOND DRAIN**	0,6-1	0,8	**GREENFOND DRAIN**	0,6-1	0,8
SEPARATION LAYER	**GREENFOND WSE**	0,2	0,2	**GREENFOND WSE**	0,5	0,3
THERMAL INSULATION	-	-	-	**XPS**	-	-
DRAINAGE LAYER	-	-	-	**GREENFOND TER 4**	0,5	0,4
SEPARATION LAYER	-	-	-	**GREENFOND PES 200B**	0,2	0,2
WATERPROOFING LAYER	**WATER INSULATION**	-	-	**WATER INSULATION**	-	-

GREENFOND SPPG

SURFACE LAYER

Concrete paving blocks, wooden terrace + adjustable base, concrete slab.

ADJUSTABLE BASE FOR CONCRETE SLABS

JUSTI FIX JK
Adjustable base for terrace boards, made of high quality polypropylene with a pressure strength of 6 kN / pc. and UV resistance, reducing the drop to 3%.

JUSTI FIX ADAPTER
Extension piece for the JUSTI FIX JK base.

STABILIZATION LAYER

Sand and gravel ballast or just gravel (not included in the calculation).

WARSTWA DRENAŻOWA

GREENFOND DRAIN
Drainage layer produced from hardened polyethylene (HDPE) is characterized by high load resistance and efficient drainage, integrated with filter geotextile.

Drain 100	pressure of 100 kN /m²	- pedestrian traffic routes with low traffic intensity and light surface layer.
Drain 150	pressure of 150 kN /m²	- pedestrian traffic routes with moderate traffic intensity.
Drain 250	pressure of 250 kN /m²	- pedestrian traffic routes with high traffic intensity.
Drain 400	pressure of 400 kN /m²	- pedestrian and vehicle traffic routes for housing estate traffic.
Drain 700	pressure of 700 kN /m²	- traffic routes for heavy vehicles, fire service road.

WARSTWA DRENAŻOWA

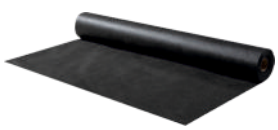
GREENFOND TER 4
Drainage layer produced from hardened polyethylene (HDPE) with a height profile of 4 mm.
Roll - 2 x 20 m /40 m² or 2,5 x 20 m /50 m²

GREENFOND DRAIN TER 4
Drainage layer produced from hardened polyethylene (HDPE) with a height profile of 4 mm integrated with filter geotextile.
Roll - 2,5 x 15 m /37,5 m² or 2 x15 m /30m²

WARSTWA SEPARACYJNA

GREENFOND PES 200B /300B
Separation and protection layer used for green roofs and drainage of pathways as well as in construction of roads, highways, airports, parking lots or playgrounds.
PES 200B - roll 2 x 50 m /100 m²
PES 300B - roll 2 x 50 m /100 m²

GREENFOND REC 600/1000
Absorbing mat used as a retention and separation layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds.
It is made of a blend of polypropylene and polyester fibers recovered in secondary processing.
REC 600 - roll 2 x 25 m /50m²
REC 1000 - roll 2 x 20 m /40m²



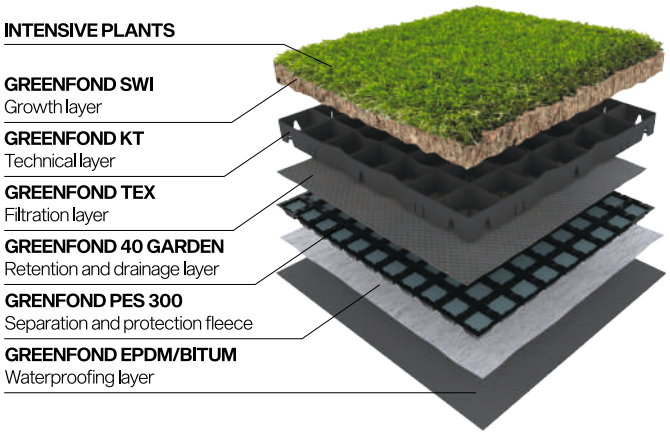
GREENFOND WSE
Separation membrane produced in thermobonding technology, composed of polypropylene fiber mesh. Thanks to such a construction it is possible to use it as a separation and diffusion layer in GREENFOND green roof systems.
Roll - 1,53 x 50 m /76,5 m² or 2 x 50 m /100 m²

GREENFOND KT

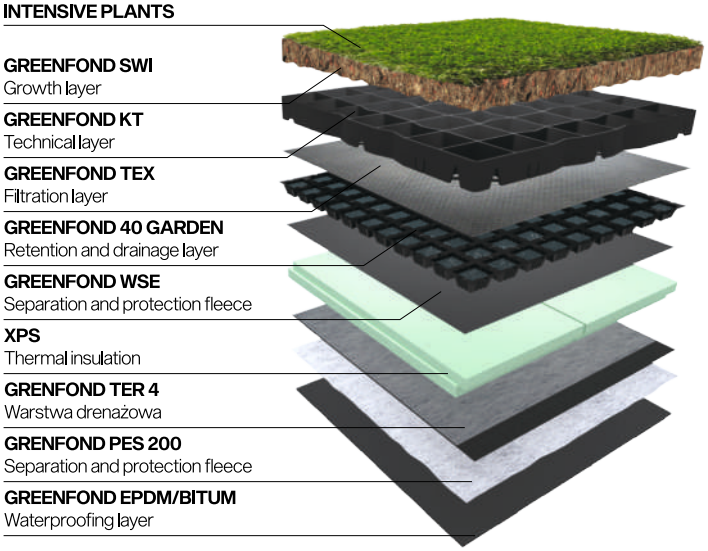
09. GREEN WALKWAYS AND PARKING LOTS

Green walkways and parking lots on floor slabs and roofs In the case of very little ecologically active space in new development areas GREENFOND KT system offers an interesting solution for installation of green zones on walkways and parking lots. Thanks to this system we can create spectacular green areas even though there are lots of limitations due to their location and intended use.

GREENFOND KT



GREENFOND KT XPS/TER4



TECHNICAL CALCULATION	SYSTEM PACKAGE KT			SYSTEM PACKAGE KT XPS/TER4		
	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]	PRODUCT NAME	WEIGHT OF THE LAYER [kg/m²]	HEIGHT OF THE LAYER [cm]
GREENERY LAYER	**GREENFOND MTR** Grass seed mixture	0,1	0,1	**GREENFOND MTR** Grass seed mixture	0,1	0,1
VEGETATION LAYER	**GREENFOND SW-I** Intensive substrate	80	5	**GREENFOND SW-I** Intensive substrate	80	5
TECHNICAL LAYER	**GREENFOND KT**	1,2	5 including substrate	**GREENFOND KT**	1,2	5 including substrate
FILTRATION LAYER	**GREENFOND TEX 100** Filter fleece	0,5	0,2	**GREENFOND TEX 100** Filter fleece	0,5	0,2
RETENTION AND DRAINAGE LAYER	**GREENFOND 40 GARDEN**	17,2	4	**GREENFOND 40 GARDEN**	17,2	4
SEPARATION LAYER				**GREENFOND WSE**	0,5	0,3
THERMAL INSULATION				**XPS**	-	-
DRAINAGE LAYER				**GREENFOND TER 4**	0,5	0,4
SEPARATION LAYER	**GREENFOND PES 300B**	2	0,3	**GREENFOND PES 200B**	0,2	0,2
WATERPROOFING LAYER	**WATER INSULATION**	-	-	**WATER INSULATION**	-	-
TOTAL FOR THE PACKAGE		**101**	**9,6**		**100,2**	**10,2**

GREENFOND KT

INTENSIVE GREENERY

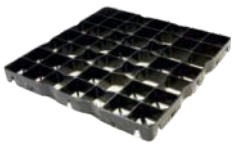
GREENFOND SEED/MTR
Mixture of grass seeds properly selected for use on intensive green roofs.
Packaging - bag 10 kg

GROWTH LAYER

GFEENFOND SW-I
Volcanic substrate intended as a vegetation layer on green roofs for intensive vegetation.
Packaging - Big Bag 1 m³

GFEENFOND SW-I
Volcanic substrate intended as a vegetation layer on green roofs for intensive vegetation.
Packaging - bag 25 kg

TECHNICAL STABILIZATION LAYER

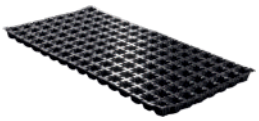


GREENFOND KT
Durable modular grid for fixing permeable surfaces covered with aggregates and for increasing a stable biologically active surface.
Dimensions - 50 x 50 x 5 cm

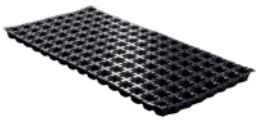
FILTRATION LAYER

GREENFOND TEX 100
A polypropylene nonwoven is additionally thermally strengthened, thanks to which it retains its parameters in a humid environment, it does not rot and, at the same time, possesses a high mechanical and physical resistance quality.
Roll - 2 x 50 m /100 m²

RETENTION AND DRAINAGE LAYER



GREENFOND 40 GARDEN
Retention and drainage module (HDPE) with high water accumulation and load capacity. For use in intensive green roof system.
Water accumulation: 15 l/m²
Compressive strength: 400 kN
Sheet - 2 x 1 m /2 m²



GREENFOND 60 GARDEN
Retention and drainage module (HDPE) with high water accumulation and load capacity. For use in intensive green roof system.
Water accumulation: 20 l/m²
Compressive strength: 450 kN
Sheet - 2 x 1 m /2 m²

DRAINAGE LAYER

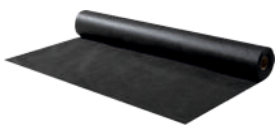
GREENFOND TER 4
Drainage layer produced from hardened polyethylene (HDPE) with a height profile of 4 mm.
Roll -2 x 20 m /40 m² or 2,5 x 20 m /50 m²

GREENFOND DRAIN TER 4
Drainage layer produced from hardened polyethylene (HDPE) with a height profile of 4 mm integrated with filter geotextile.
Roll - 2,5 x 15 m /37,5 m² or 2 x15 m /30m²

SEPARATION LAYER

GREENFOND PES 200B /300B
Separation and protection layer used for green roofs and drainage of pathways as well as in construction of roads, highways, airports, parking lots or playgrounds.
PES 200B - roll 2 x 50 m /100 m²
PES 300B - roll 2 x 50 m /100 m²

GREENFOND REC 600/1000
Absorbing mat used as a retention and separation layer on green roofs. It is characterized by high water storage capacity and resistance to bituminous compounds.
It is made of a blend of polypropylene and polyester fibers recovered in secondary processing.
REC 600 - roll 2 x 25 m /50m²
REC 1000 - roll 2 x 20 m /40m²



GREENFOND WSE
Separation membrane produced in thermobonding technology, composed of polypropylene fiber mesh. Thanks to such a construction it is possible to use it as a separation and diffusion layer in GREENFOND green roof systems.
Roll - 1,53 x 50 m /76,5 m²

ACCESORIES

10. SYSTEM ACCESSORIES FOR GREEN ROOFS.

Green roof is a set of well-chosen and properly arranged individual layers, each of which fulfills its function. However, the correct implementation of the green roof requires an application of complementary elements that, in combination with the basic layers, provide a compatible and durable solution. These products include: edge and separating strips, adhesive and sealing tapes and inspection chambers.

SEPARATION STRIPS AND EDGE STRIPS

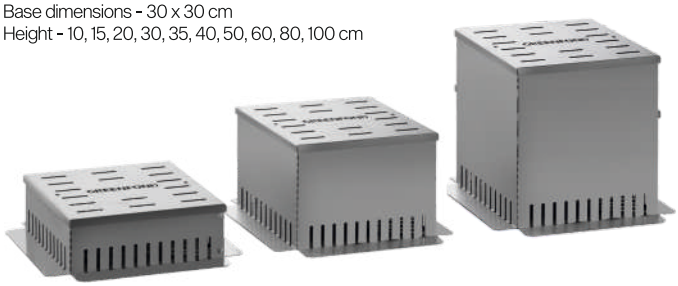
GREENFOND LS-P
Separating strip made of perforated aluminum sheet with increased stiffness, ensuring free flow of water between a roofing substrate and a gravel band on green flat and pitched roofs.
Standard height of the strips:
10, 15, 20, 25 cm and 2 m. length.

GREENFOND LLK
Connecting element for edge strips.
Available for strips with dimensions:
8, 12, 15, 20, 25 cm and a length of 2 m.

GREENFOND LK
Edge strip used as a finish (attic, eaves) on roofs of up to 35% inclination angle, allowing free drainage of water to a gutter.
Standard height of the strips:
8, 12, 15, 20, 25 cm and 2 m length.

INSPECTION CHAMBERS FOR ROOF DRAINAGE SYSTEM

GREENFOND SK
Inspection chambers for controlling a drainage point on green roofs and terraces.
Base dimensions - 30 x 30 cm
Height - 10, 15, 20, 30, 35, 40, 50, 60, 80, 100 cm



GREENFOND SK N
Extension of the inspection chamber which allows for proper matching of the chamber to the height of a green roof.
Base dimensions - 30 x 30 cm
Height - 5, 10 cm

GRAVEL

GREENFOND 16/32 DOUBLE RINSED GRAVEL
Double rinsed gravel to be used as a layer drainage on ballast roofs and as a band filtration on green roofs. Product is double rinse to remove unnecessary pollution.
Packaging: Big Bag 1T / 25 kg bag.

GREENFOND 16/32 GRAVEL
Rinsed gravel to be used as a layer drainage on ballast roofs and as a band filtration on green roofs.
Packaging: Big Bag 1T / 25 kg bag.

MOUNTING ACCESSORIES

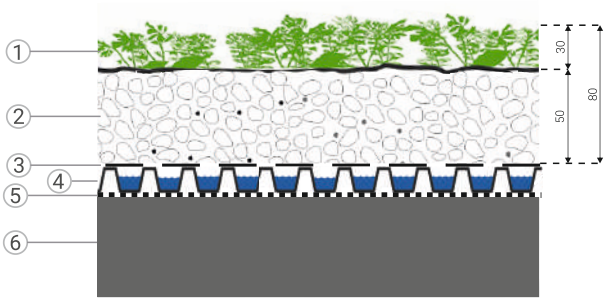
GREENFOND DUO TAPE
Multi-layered, double-sided adhesive tape, used for permanent elastic connections in places of increased moisture, e.g. combining GREENFOND 40 or 60 Garden and TEX 100.

GREENFOND TACKER
Quick connection system for retention and drainage modules.

GREENFOND STAPLES 5000/14
Staples 1000 szt. 14 mm.

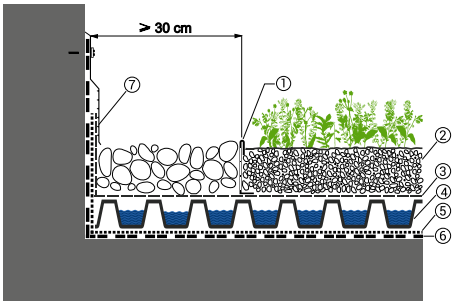
11. TECHNICAL DRAWINGS

01.
Construction of a green tracks on a concrete base



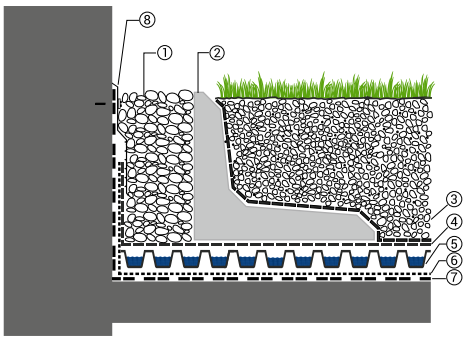
1 - GREENFOND SEDUM MATT TUNDRA R Sedum mat
2 - GREENFOND SWE Growth layer - substrate
3 - GREENFOND TEX 100 Filter fleece
4 - GREENFOND 20 GARDEN PREMIUM Drainage and retention mat
5 - GREENFOND PES 300 Separation and protection fleece
6 - CONCRETE

02.
Connection of the green roof with a structural wall using the accumulation and drainage module.



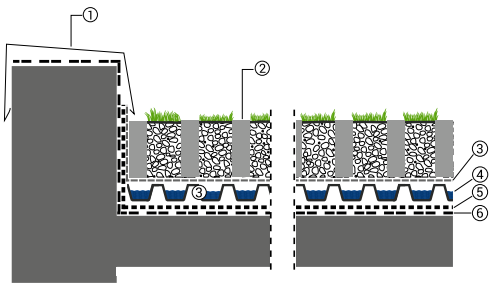
1 - GREENFOND LS-P Separation strip
2 - GREENFOND SWE Growth layer - substrate
3 - GREENFOND TEX Filter fleece
4 - GREENFOND 20 GARDEN PREMIUM Drainage and retention mat
5 - GREENFOND PES 300 Separation and protection fleece
6 - WATERPROOFING LAYER
7 - WALL-MOUNTED SEALING STRIP

03.
Connection of the increased height intensive green roof with a structural wall using the accumulation and drainage module.



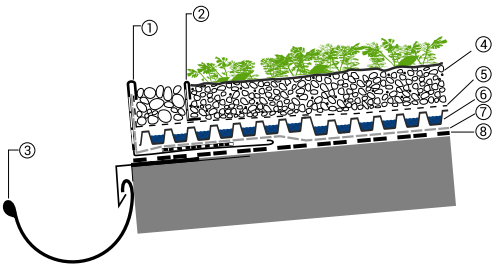
1 - AGGREGATE / GRAVEL 16/32 Gravel band
2 - CURB
3 - GREENFOND SWE Growth layer - substrate
4 - GREENFOND TEX 100 Filter fleece
5 - GREENFOND 60 GARDEN Retention and drainage layer
6 - GREENFOND PES 300 Separation and protection fleece
7 - WATERPROOFING LAYER
8 - WALL-MOUNTED SEALING STRIP

04.
Connection of an attic with the roadway in the green roof system using the lawn grid.



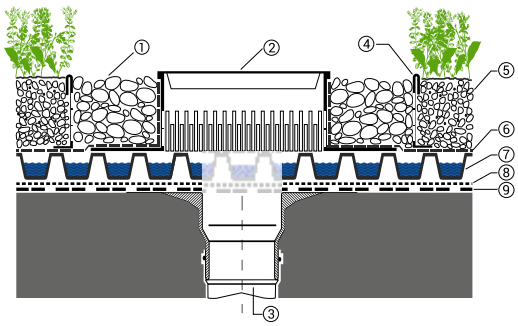
1 - ATTIC
2 - GREENFOND KT 40 Lawn grid
3 - GREENFOND TEX 100 Filter fleece
4 - GREENFOND 40 GARDEN Retention and drainage layer
5 - GREENFOND PES Separation and protection fleece
6 - WATERPROOFING LAYER

05.
Green roof with an inclination angle of up to 5°.



1 - GREENFOND LK Edge strip
2 - GREENFOND LS Separation strip
3 - ROOF GUTTER
4 - GREENFOND SWE Growth layer – substrate
5 - GREENFOND TEX 100 Filter fleece
6 - GREENFOND 20 GARDEN Drainage and retention mat
7 - GREENFOND PES Separation fleece
8 - WATERPROOFING LAYER

06.
GREENFOND SK inspection chamber on the GREENFOND green roof using the GREENFOND 20 GARDEN PREMIUM accumulation and drainage module.



1 - AGGREGATE / GRAVEL 16/32 Gravel band
2 - GREENFOND SK Inspection chamber
3 - ROOF DRAIN
4 - GREENFOND LS SEPARATION STRIP
5 - GREENFOND SWE Growth layer - substrate
6 - GREENFOND TEX 100 Filter fleece
7 - GREENFOND 20 GARDEN Drainage and retention premium mat
8 - GREENFOND PES Separation fleece
9 - WATERPROOFING LAYER

GREENFOND
FOR OUR FUTURE

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