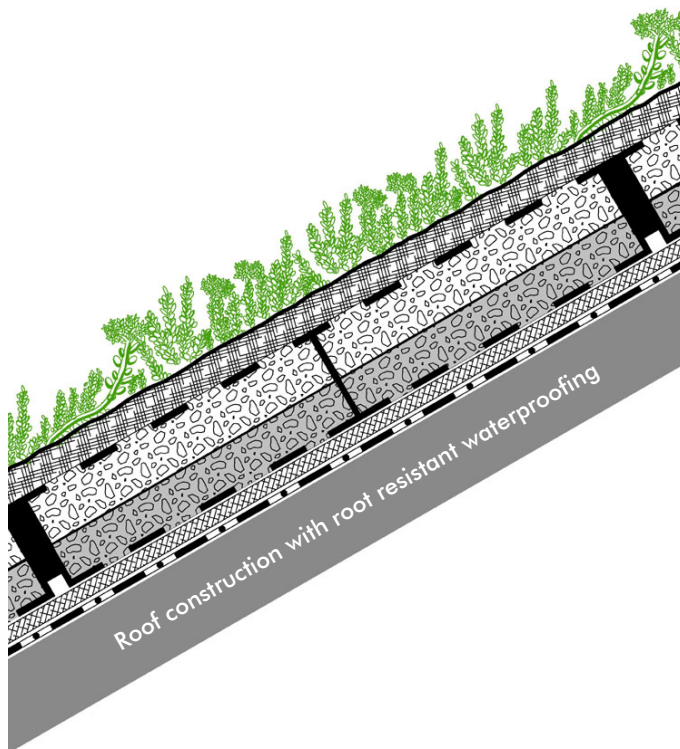


System Data Sheet

"Steep Pitched Green Roof" with Georaster®

Weight kg/m ²		Height mm
dry	water saturated	
89	153	120



Vegetation Mat "Sedum Carpet"

Infill with System Substrate "Heather with Lavender-Light" (ca. 10 mm above Georaster®-Elements)

Georaster®-Elements

Protection Mat WSM 150

Note:

A root resistant waterproofing is a precondition for a green roof; additional root barriers cannot be applied on sloped roof surfaces!

Build-up height:	ca. 120 mm
Weight, saturated (short-term):	ca. 155 kg/m ²
Water storage capacity (slope-dependent):	ca. 64 l/m ²

Description

- Visually appealing pitched green roof build-up for roofs with an inclination of 20° to 35° and a root resistant waterproofing.
- Pitched green roofs require regular maintenance. Depending on the building location, pitch and exposure, an additional irrigation may be required.
- The vegetation can develop in different ways depending on the exposure; especially on roofs at higher pitches interesting differences between the north and south facing surfaces appear with time.

- The Georaster®-elements derive shear forces safely into a stable eaves edging or additional shear barriers.

Measures depending on the roof pitch:

- ≤ 25°: Planting can alternatively be carried out with plug plants according to the plant list "Rockery Type Plants", using the System Substrate "Rockery Type Plants". Instead of the Protection Mat WSM 150, with its high water storage, the Protection Mat BSM 64 can be applied.

- ≥ 30°: From this roof pitch on only pre-cultivated Sedum vegetation mats are to be used.

- ≥ 35°: Here usually project-specific greening solutions are possible, which are to be elaborated in consultation with the ZinCo Technical Department.

- Please note: the build-up described above is suitable for the moderate continental climate of Central Europe. For other climates certain adaptations might be necessary.

Product Data Sheet

Protection Mat WSM 150

Order No. 2015



Non-rotting, needled fleece mat, made of recycled fibres; especially suitable as water retention mat under pitched green roofs in combination with ZinCo-Georaster®.



Technical Data

Protection Mat WSM 150

Non-rotting, needled fleece mat, made of recycled synthetic fibres, electronically tested.

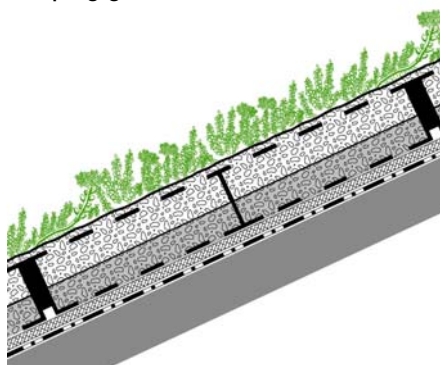
Thickness:	ca. 17–20 mm
Weight:	ca. 1500 g/m ²
Water storage capacity:	ca. 12 l/m ²
Penetration force according To EN ISO 12236:	ca. 2300 N
Strength class:	3
Tensile strength	Lengthwise: ca. 6 kN/m
	Crosswise: ca. 23 kN/m
Dimensions:	
Roll width:	ca. 1.00 m
Roll length:	ca. 15.00 m

Features

- high water storage
- non-rotting
- compatible with bitumen
- biologically and chemically neutral
- tearproof
- made of recycled fibres

Application Example

"Sloping green roof"



Plant layer "Pitched Roof"
System Substrate "Heather with Lavender-light"
ZinCo Georaster®
Protection Mat WSM 150
Roof construction with root resistant waterproofing

Specification Suggestion

Mechanically needled fleece mat of synthetic fibres, non-rotting, compatible with bitumen, weight ca. 1500 g/m², thickness ca. 17–20 mm, water storage capacity ca. 12 l/m², penetration force according to EN ISO 12236 ca. 2300 N, strength

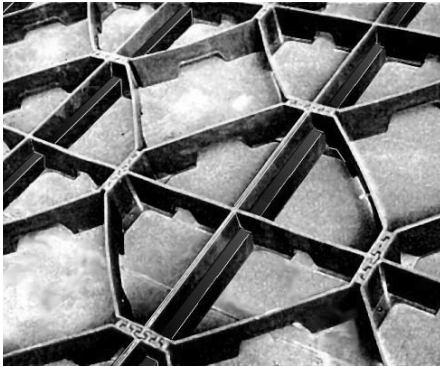
class 3, delivery and installation according to manufacturer's instructions.

Make: Protection Mat WSM 150
Enquiries: ZinCo GmbH,
Phone: +49 7022 6003-0

Product Information

Georaster®

Order No. 3400



Grid element of recycled polyethylene; applicable shear force protection on pitched green roofs; used as reinforcement for pavings, etc.

Technical Data

Georaster®

Stable grid element, applicable as shear force protection on pitched green roofs in connection with stable eaves, or additional shear barriers, or as reinforcement for gravel-lawn pavings.

Material:

Polyethylene (PE-HD),
ca. 80% recycled material

Height:

ca. 100 mm

Grid dimension:

ca. 625 mm

Weight:

ca. 1.8 kg/element

Compressive strength:

max. 8 kN/m in shear direction

Dimensions:

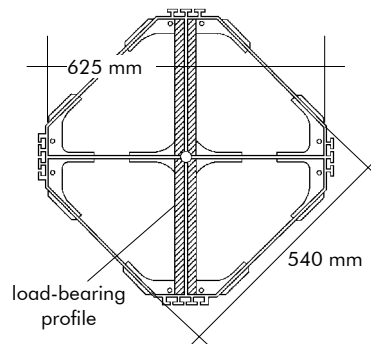
ca. 540 mm x 540 mm

Features

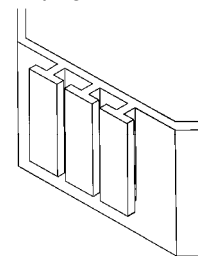
- light weight structure with high load bearing capacity and shear strength
- full reinforcement of the area due to T-plug connections
- walkable
- driveable after complete and compacted filling
- permeable to water
- large root space available
- environmentally friendly
- various applications

Dimensions

"Georaster®"



The connection of the elements is done with T-plug connections



Specification Suggestion

Grid elements of polyethylene (PE-HD), contains 80 % recycled material, height ca. 100 mm, grid dimension 625 mm, with load-bearing profile and integrated T-plug connections, delivery and installation

according to manufacturer's instructions.

Make: ZinCo Georaster®
Enquiries: ZinCo GmbH,
Phone: +49 7022 6003-0



Produkt - Information

Best.-Nr. 6020 / 6141 - 6143

Systemerde

"Lavendelheide"



Vegetationssubstrat für intensive Dachbegrünungen.



Technische Daten



Systemerde "Lavendelheide"

Auf der Basis von Zincolit® Plus (speziell aufbereitete Tonziegel mit ausgewählten Zuschlagstoffen) hergestelltes Substrat, angereichert mit Zincohum® (Substratkompost mit Faserstoffen und Ton).

Speziell geeignet für Intensivbegrünungen mit Pflanzenarten der ZinCo-Pflanzenliste "Lavendelheide" bzw. bei höherer Substratschüttung auch für Sträucher und Bäume*. Die Etablierung der Vegetation erfolgt mittels Pflanzung (z. B. mit ZinCo Flachballenpflanzen FB 50).

Intensivbegrünungen sollten zumindest während andauernder Trockenperioden bewässert werden.

Für eine artgerechte Pflanzenentwicklung empfehlen wir unseren Langzeitdünger ZinCo-Pflanzenfit® 4M (siehe gesondertes Datenblatt). Lieferbar im 20 l-Sack, im Big Bag, als offene Ware und im Silozug. Es ist mit einem Verdichtungsfaktor von 1,25 zu kalkulieren, das heißt, je Quadratmeter und cm einzubauendes Substrat müssen 12,5 l bestellt werden.

<u>Lieferform</u>	<u>Best.-Nr.</u>
20 l-Sack	6020
im Big Bag à 1,5 m³	6141
lose im Kipper	6142
im Silo	6143

Merkmale

- Recyclingprodukt
- gutes Wasserspeicher-vermögen
- hoher Luftgehalt – auch bei Wassersättigung
- frostbeständig und strukturstabil
- blasbar
- Die Basiskomponente Zincolit® steht unter ständiger Kontrolle der Universität Hohenheim



Unter ständiger Kontrolle der Landesanstalt für Landwirtschaftliche Chemie der Universität Hohenheim nach den Richtlinien der FLL



Chemisch-physikalische Eigenschaften

Parameter	Richtwerte
Volumengewicht	
- trocken	1000 g/l (+/- 100 g/l)
- bei max. Wasserkapazität	1500 g/l (+/- 100 g/l)
max. Wasserkapazität	ca. 50 Vol. %
Wasserdurchlässigkeit mod. K _f	0,3–30 mm/min
pH-Wert (in CaCl ₂)	6,5–8,0
Salzgehalt (Wasserextrakt)	< 2,0 g/l
Organische Substanz	< 90 g/l
Verdichtungsfaktor	ca. 1,25

* Bei Substrathöhen von > 35 cm ist zusätzlich das Untersubstrat Zincolit® Plus einzubauen.