

Solar + Biodiversity on Green Roof. Possibilities and limits.

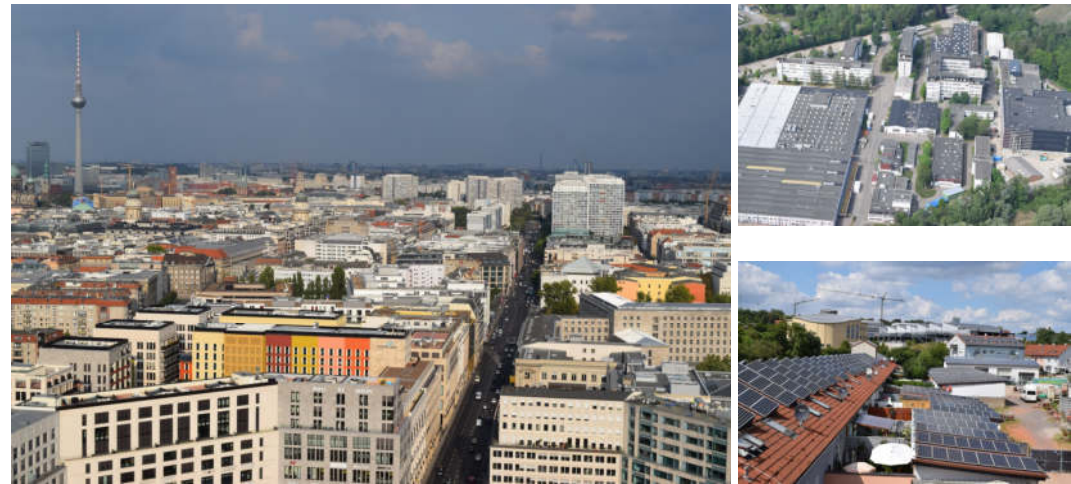


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 (BuGG)

Source of all photos: BuGG, G. Mann

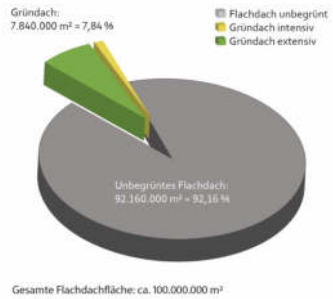
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Today's situation



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Green roofs today. Market and potentials



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New flat roof and green roof area created in 2020

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Green roofs today. Inventory

Existing inventory of green roofs in Germany
 approx. 130,000,000 m²



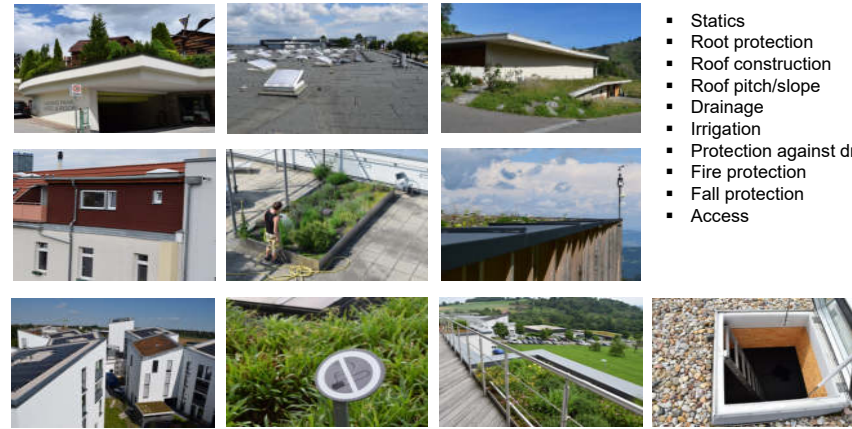
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Urban greenery. Roof, facade, interior greening



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Points to note and planning principles for all green roofs



- Statics
- Roof protection
- Roof construction
- Roof pitch/slope
- Drainage
- Irrigation
- Protection against drift
- Fire protection
- Fall protection
- Access



www.fll.de

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Biodiversity green roof. Extensive green roof.

Extensive green roof Biodiversity green roof

Construction height / weight:
10-30 cm / 120-350 kg/m²

Vegetation:
herbs-grass-sedum, woody plants

Maintenance:
medium

Special benefits:
Water retention: 65 %
Water storage: approx. 40 l/m²
High evaporation capacity
High species diversity

Use:
Flat roof, ecological upgrading of extensive and intensive green roofs.
With suitable statics



Ahnatura, München

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Biodiversity green roof. Biodiversity components.

Biodiversity components

- Substrate mounds with perennials and small woody plants
- Dead wood and cairns
- Sand and gravel areas
- Nesting aids
- Water areas



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Practical examples. Biodiversity green roof



Alukon, Haigerloch

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Practical examples. Biodiversity green roof



Alnatura, München

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Practical examples. Biodiversity green roof



Migros, Gossau

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Solar green roof. Extensive green roof.

Extensive green roof Solar green roof

Construction height / weight:
8-10 cm / 90-120 kg/m²

Vegetation:
Sedum and herbs

Maintenance:
medium

Special benefits:
Water retention: 50 %
Water storage: approx. 20 l/m²
Protection of the roof waterproofing and Interaction with PV system

Use:
On suitable statics

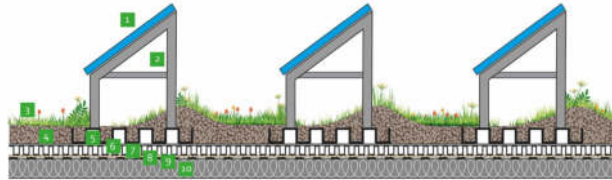


MTZ, München

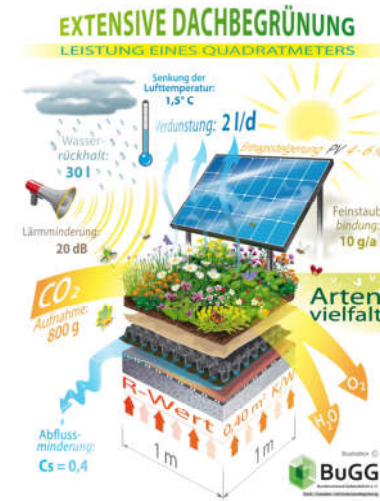
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Solar biodiversity green roof. Success factors

- (1) Avoid shading of the modules
- (2) Sufficiently large row spacing
- (3) Plan watering / water availability
- (4) Regular, professional maintenance
- (5) Use of load-bearing systems
- (6) Timely coordination of the trades involved



Solar green roof. Positive effects



Fauna on biodiversity green roofs



Practical examples. Solar biodiversity green roof



Practical examples. Solar biodiversity green roof



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Practical examples. Solar biodiversity green roof



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BuGG Market Report on Building Greening 2021



- Figures on green roof and facade in Germany
- Green Roof National League
- Green Roof Index
- Municipal funding instruments of all cities over 50,000 inhabitants
- Based on own surveys and research

The new BuGG Market Report on Building Greening 2022 is about to be published!

Expected: early October

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Bundesverband GebäudeGrün e.V. (BuGG)



Founded: 17.05.2018 from FBB + DDV
Seat: Berlin
Office: Saarbrücken
Members: 440
Employees: 13
Branches : Roof, facade and interior greening and associated sectors



- Inform and educate
- Promoting and researching
- Communicate and network
- www.gebaeudegruen.info



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Events 2022 and 2023



www.gebaeudegruen.info/BuGG-Veranstaltungen

- **Advanced Training Programme on Building Greening**

- **BuGG-Gründach-Forum**
 - 20.09.2022 Darmstadt
 - 11.10.2022 Insel Mainau
- **BuGG-Fassadengrün-Forum**
 - 29.09.2022 Bielefeld
 - 05.10.2022 Leipzig

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BuGG-Fachkongress „Solar-Gründach“ am 20.-21.10.2022 (Berlin + Online)



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World Congress of Building Greening am 27.-29.06.2023 (Berlin + Online)



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... thank you very much for your attention!



What questions do you have?

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- www.gebaeudegruen.info



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