

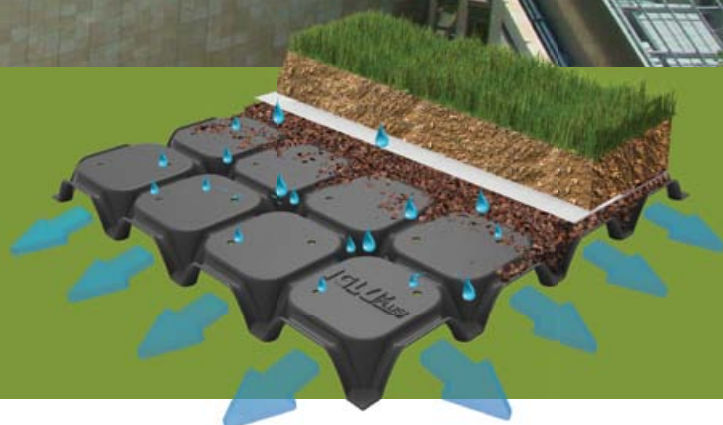


IGLU[®] green roof

www.daliform.com



Systems for roof gardens



dali*form*
GROUP
Building Innovation © Creatori dell'Iglù[®]

LEGEND:



Drainage



Respect for the environment



Environmentally friendly, environmentally compatible



Lightening of the structure



Certifications

SWITCHBOARD

Telephone	Fax
+39 0422 2083	+39 0422 800234

FOREIGN COMMERCIAL SECRETARY OFFICE

Telephone	Fax	e-mail
+39 0422 208352	+39 0422 800234	export@daliform.com



TECHNICAL SECRETARY OFFICE

Telephone	Fax	e-mail
+39 0422 208350	+39 0422 800234	tecnico@daliform.com





Green roof (Paris - France)



IGLU'® green roof

Iglu'® green roof is a system of great environmental significance against the continued overbuilding of our cities for the construction of roof gardens and green roofs to protect the waterproofing, and with a guaranteed life of the garden.

The main problem of green roofs was to adjust the drainage to prevent the death of the vegetation due to excessive stagnation or lack of water.

Today it is possible to adjust the drainage of roof gardens thanks to **Iglu'® green roof** whose surface area allows for adequate water storage and, at the same time, for the drainage of excess water through the "overflow" holes. Creating a roof garden the with **Iglu'® green roof** system can satisfy the public administrations requirements in terms of building parameters, energy saving, and reducing and mitigating the release of water into the sewer system.

Advantages

- **Control of meteoric waters:** the green roof with Iglu® green roof system has a high capacity to retain and store water: up to 90%.
- **Improvement of the macro- and micro-climate:** green roofs humidify the air and contribute to decrease the global warming.
- **Sound insulation:** green roofs using the Iglu® green roof system mitigate the action of sound and electromagnetic waves, preventing them from entering the building.
- **Improvement of air quality:** atmospheric dust is retained and harmful substances are filtered and purified by the vegetation.
- **Ecological balance** habitats for animals and plants are re-created with the formation of ecological corridors.
- **Mitigation of environmental impact:** nature is integrated into the buildings, helping to requalify and ennoble the urban settings, reducing their visual impact.
- **Creation of new accessible surfaces and green areas:** otherwise unused space, become alive and can be used.
- **Increased durability of the cover:** the waterproof coatings remain protected from temperature changes, UV rays, hail and frost.
- **Increased thermal insulation:** with Iglu® green roof, the temperature change is drastically reduced and the cushioning elements of the building remain shielded. The improvement of the microclimate inside the building ensures considerable savings on of air conditioning and heating costs.
- **Increased value of properties:** durability, performance, and aesthetics cause a substantial appreciation of the value of the property.



Extensive green roof.

A roof-top garden is the most successful solution against the continuous cementification of the territory.

They have been used since ancient times, as demonstrated by the roof-top gardens of Babylon.

Today, the techniques and materials for their creation have evolved and their use have become fundamentally important.



Intensive green roof.



Extensive green roof.



Extensive green roof.



Intensive green roof.



Intensive green roof.

Proper design of green roofs - the UNI 11235



The **UNI 11235:2007** standard "*Guidelines for the design, execution, monitoring and maintenance of green roofs*" is an **essential tool for designers and implementers of green roofs**.

This standard defines the criteria for the design, execution, control and maintenance of continuous green roofs, depending on the particular circumstances of climatic context, building context, and intended use, as well as the differences between extensive and intensive green roofs, based on energy-related assessments.

Iglü® green roof is ideal for creating roof-top gardens, making them safe to create without damaging waterproofing, solving the problem of the passage of systems and providing solutions for draining and ventilating green spaces, which are necessary for the garden. It also makes it possible to level the surface without burdening the structure.

Extensive roof-top gardens



Advantages of an extensive green roof

- Stratigraphies with reduced thickness.
- Use of self-propagating and self-healing low stem plants or grass.
- It does not require any special maintenance.
- Implementation of specific irrigation systems not necessary.
- Lighter weight on the covering.
- Lower cost of construction and maintenance.
- Use on flat and sloped roofs - up to 30°.
- Industrial and handicraft sheds.
- Shopping centers.
- Underground parking lots.
- Condominium garages.

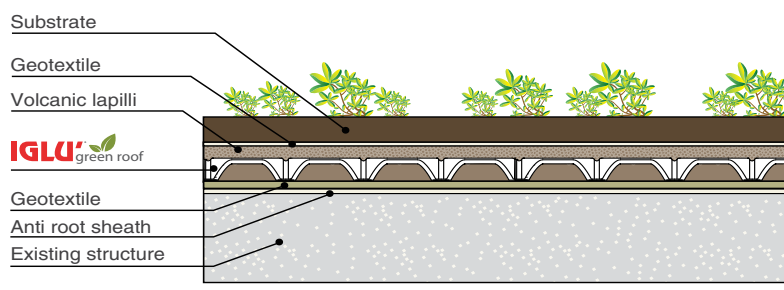
Extensive roof garden (or green roof) is a type of green cover for medium-large surfaces, with reduced load capacity, which does not require special implementation and maintenance costs, given the limited thickness of the substrate and the type of vegetation belonging to very durable species with shallow roots (grass, sedum, herbaceous perennials).

It can be applied on flat or sloped coverings (up to 30°), and it is particularly **suitable for the roofs of industrial buildings, shopping centers, office blocks and garage roofing.**

From the economic point of view, it is a valid solution also for covering residential complexes and single-family houses.

Generally it is not a usable type of covering, but it is important especially for environmental mitigation and compensation in highly urbanized contexts.

The certainty of lower heat loss during the winter, but, above all, the high natural cooling in summer, make the extensive green roofs made with **Iglu® green roof** an ideal solution also for less useful roofs to be turned green.



Intensive green roof



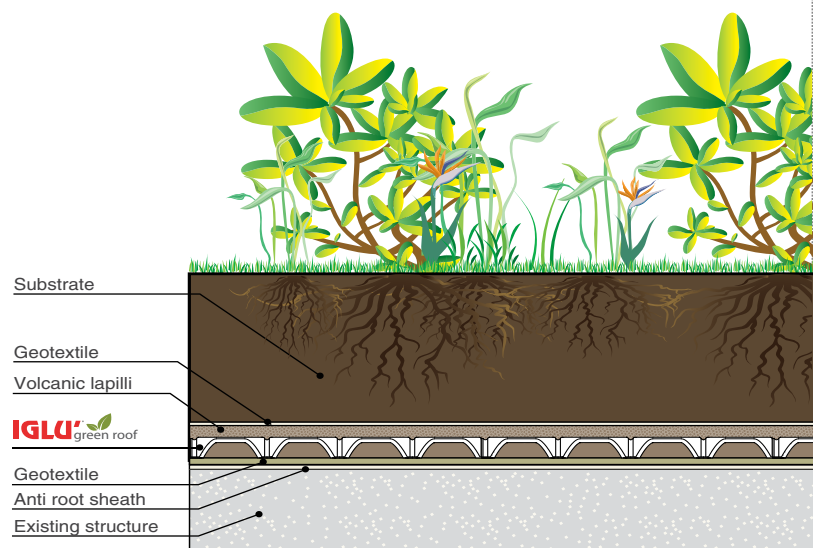
Intensive roof garden (or green roof) is the most representative solution of the traditional garden. This solution allows the choice between a huge number of different species, which also include shrubs and trees of the third magnitude and requires a high degree of maintenance.

The ability to recreate environments which are fully comparable to the traditional gardens on the ground, make this type of covering a fully usable structure.

Coverings of this type are particularly **suitable** for **private homes and hospitals, elderly homes, tourist facilities, covers for underground garages, driveways and parking areas**, where high loads and mechanical stress are expected.

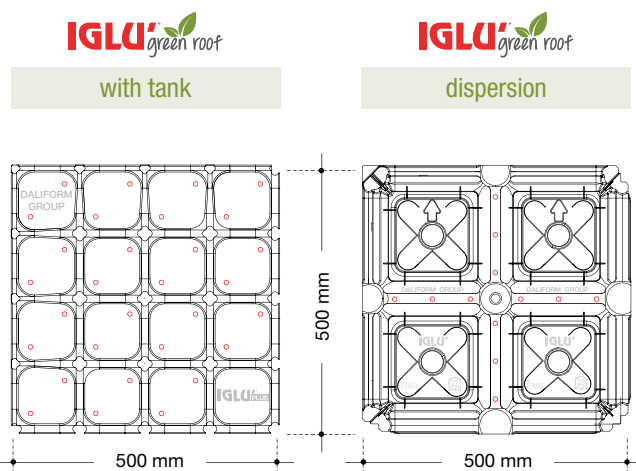
Advantages of an intensive green roof

- Stratigraphies with thicknesses up to over 60 cm;
- Heavy loads on the roof;
- Use of bushy plants, medium height shrubs, and small trees similar to those planted in the soil;
- Implementation of specific irrigation systems;
- Full enjoyment of your garden;
- Frequent maintenance;
- It is possible to add furnishing structures to, as well as both pedestrian and vehicular routes.
- Use on all accessible surfaces except for sloping roofs.

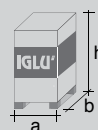


Range

Dimensioni utili*
 Peso del singolo pezzo
 Resistenza a compressione
 Riserva idrica
 Superficie drenante
 Superficie totale piedi "pilastrini"
 Sezione di passaggio dell'acqua
 Dimensioni Bancale



	H cm ▶	tank
		4
Useful dimensions *	cm	50x50
Weight of each unit	kg	0,770
Crush strength	kg/m²	6.000
Water reserve	l/m²	5,5
Drainage area	cm²/m²	~1.000
Total area of feet "pillars"	cm²/m²	1.200
Water passage's section	cm²/m² per side	220
Pallet dimensions	a x b x h	110 x 110 x 110
	kg	310
	Units	400
	m²	100

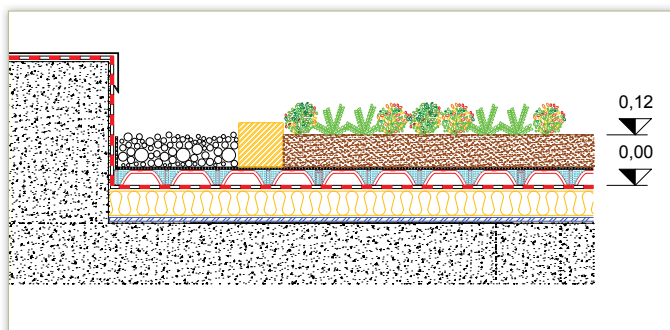


The material does not fear the bad weather and therefore it can be stored outside.
 * * In consideration of the recycled material, it is permitted a size tolerance of $\pm 1,5\%$.

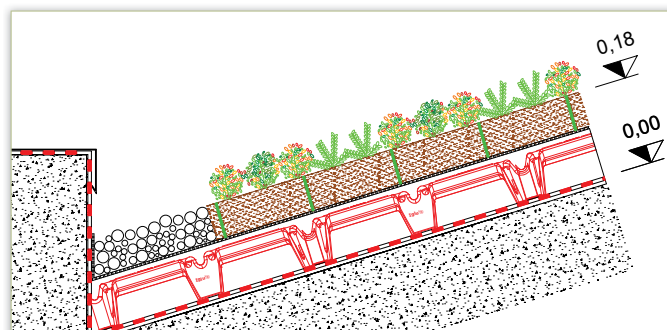
IGLU® green roof with tank. Formwork for water reserve.

The conformation of the Iglu® green roof (with tank) crown allows water to drain only in case of "overflow".

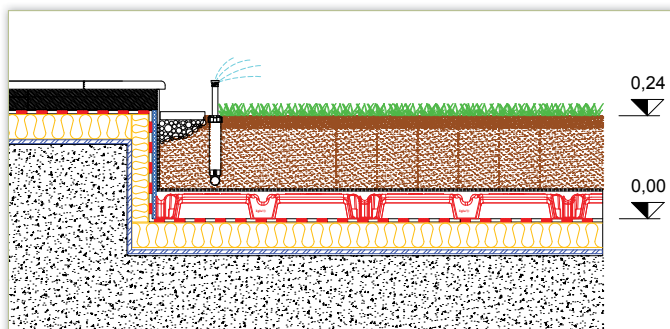
Construction details



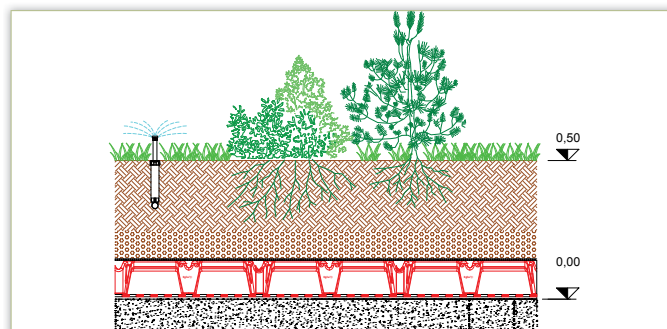
Construction detail of an extensive green roof.



Construction detail of an extensive green roof on sloped roof.



Construction detail of an extensive green roof.



Construction detail of a heavy intensive green roof.

To obtain the construction details, please visit the website www.daliform.com



dispersion	dispersion	dispersion	dispersion	dispersion
4	6	8	10	12
50x50	50x50	50x50	50x50	50x50
0,800	0,840	0,875	1,200	1,225
5.000	5.000	5.000	5.000	5.000
-	-	-	-	-
~1.000	~1.000	~1.000	~1.000	~1.000
210	205	200	300	260
120	280	420	440	600
110 x 110 x 252	110 x 110 x 254	110 x 110 x 256	110 x 110 x 220	110 x 110 x 220
500	520	640	576	576
600	600	600	480	480
150	150	150	120	120

IGLU'® green roof with dispersion. Formwork for water dispersion.

The conformation of the Iglu'® green roof (dispersion) lower side allows water to drain in order to ensure the maximum dispersion in the shortest possible time.

Daliform Group technical office



FEASIBILITY STUDY

Predimensioning and optimisation of the structures, comparative and/or revised proposals, material and manpower estimates, cost analysis.

CALCULATION REPORT

Reports certifying the execution of Daliform Group constructive systems.



SUPPORT FOR THE EXECUTIVE DESIGN

Support by design professionals. Upon request, the formwork positioning plan can be supplied with a list of the products required to carry out the work and the relative accessories.

ON-SITE SUPPORT

If necessary, our technical staff can be present on-site to help the construction company during the operational phase.

The technical consultancy is only valid for the Daliform Group construction systems.

To contact the technical office: Tel. +39 0422 208350 - tecnico@daliform.com

To obtain updated technical cards, support material, new photos and case studies, go to www.daliform.com

Specifications



Extensive roof-top gardens

Supply and installation of anti-root sheath. For extra protection of the waterproofing it is recommended to lay a piece of geotextile (TNT = Non-Woven Fabric) of 200 g/m².

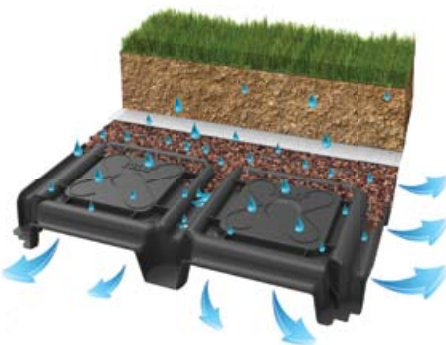
Supply and installation of **Iglu® green roof with tank** made of regenerated plastic material (PP), resistant to organic substances, which acts as a collection and draining layer.

Filling of **Iglu® green roof with tank** to a depth of 2 cm above the edge, with pumice or volcanic lapilli, particle size 10-12 mm, high level of water absorption.

Laying of 150 g/m² geotextile (TNT = Non-Woven Fabric) as a filter layer of separation between the filling material and the substrate.

Substrate to a thickness varying between 8 and 20 cm.

Realisation of an irrigation system, if any.



Intensive green roof

Supply and installation of anti-root sheath. For extra protection of the waterproofing it is recommended to lay a piece of Geotextile (TNT = Non-Woven Fabric) of 200 g/m².

Supply and installation of **Iglu® green roof with dispersion** made of regenerated plastic material (PP), resistant to organic substances, which acts as a collection and draining layer.




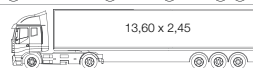


Filling of **Iglu® green roof with dispersion** to a depth of 2 cm above the edge, with pumice or volcanic lapilli, particle size 10-12 mm, high level of water absorption.

Laying of 150 g/m² geotextile (TNT = Non-Woven Fabric) as a filter layer of separation between the filling material and the substrate.

Substrate to a thickness varying between 20 e 150 cm.

Implementation of an ad hoc irrigation system.

Logistics - pallet capacity

MEANS OF TRANSPORT	NO. OF PALLETS	
Tractor (8.20/9.60x2.45)	14/16	     
Trailer (6.20x2.45)	10	
Tractor+ Trailer type "BIG" (8.40+7.20x2.45)	14 + 12	
Semi-trailer (13.60x2.45)	24	
20 feet container	10*	
40 feet container	20*	

* The m² per pallet can vary based on the type of container.

The images are merely indicative, by way of example. The information contained in this catalogue could be changed. Before placing an order, request a confirmation or updated information from the DALIFORM GROUP, which reserves the right to make changes at any moment without notice. In consideration of recycled material, it is specified that there are tolerance margins caused by environmental factors.



www.daliform.com

DG_IGROOF - Rev. 04-09/17

Made in Italy

dali*form*
GROUP
Building Innovation © Creatori dell'Iglù®



Ph. +39 0422 2083 - Fax +39 0422 800234

info@daliform.com - www.daliform.com

Via Serenissima, 30 - 31040

Gorgo al Monticano (TV) - Italy



Certified Management System UNI EN ISO 9001,
UNI EN ISO 14001, BS OHSAS 18001, SA 8000

Partner of
GBC Italia

Rating di legalità: ★★+

