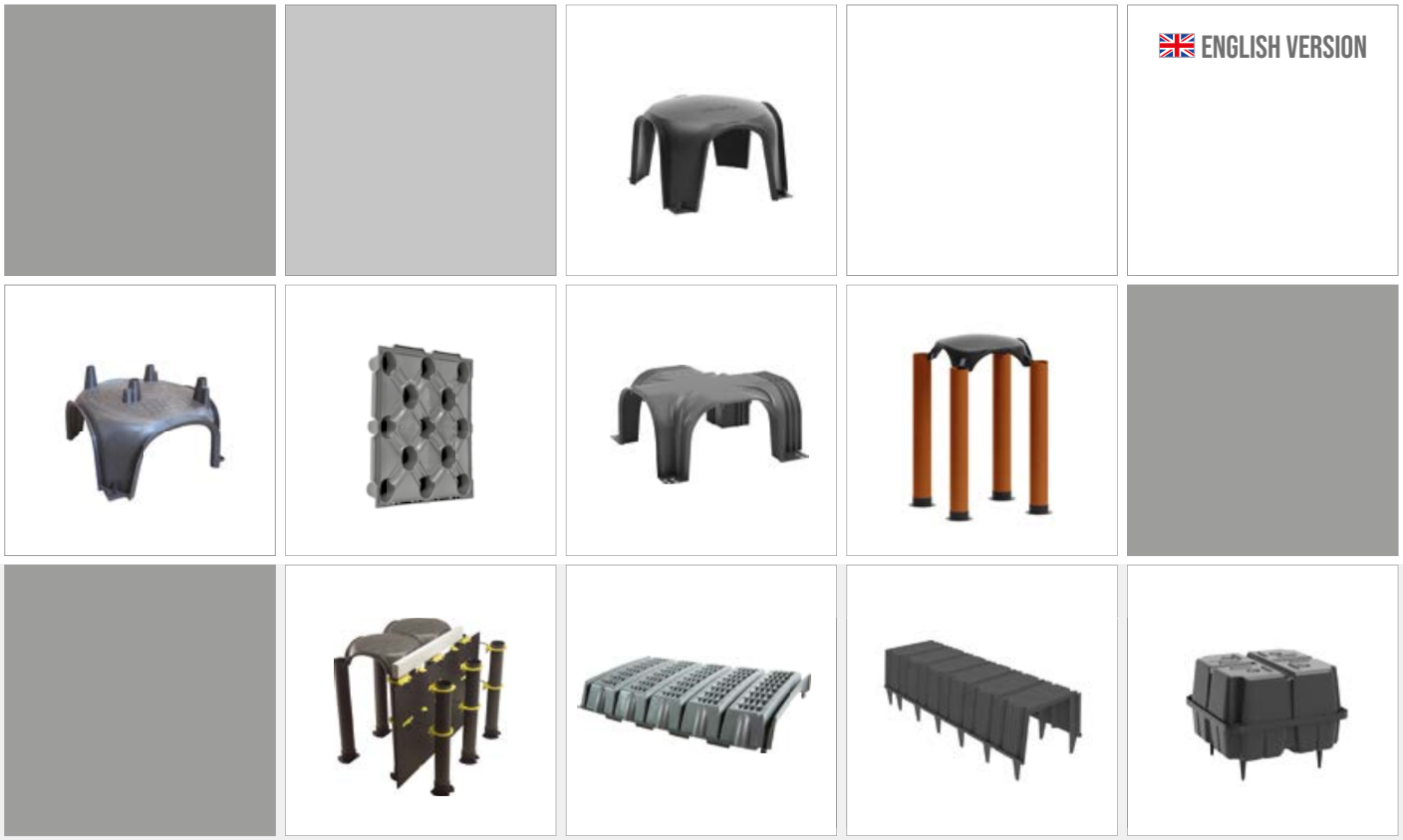


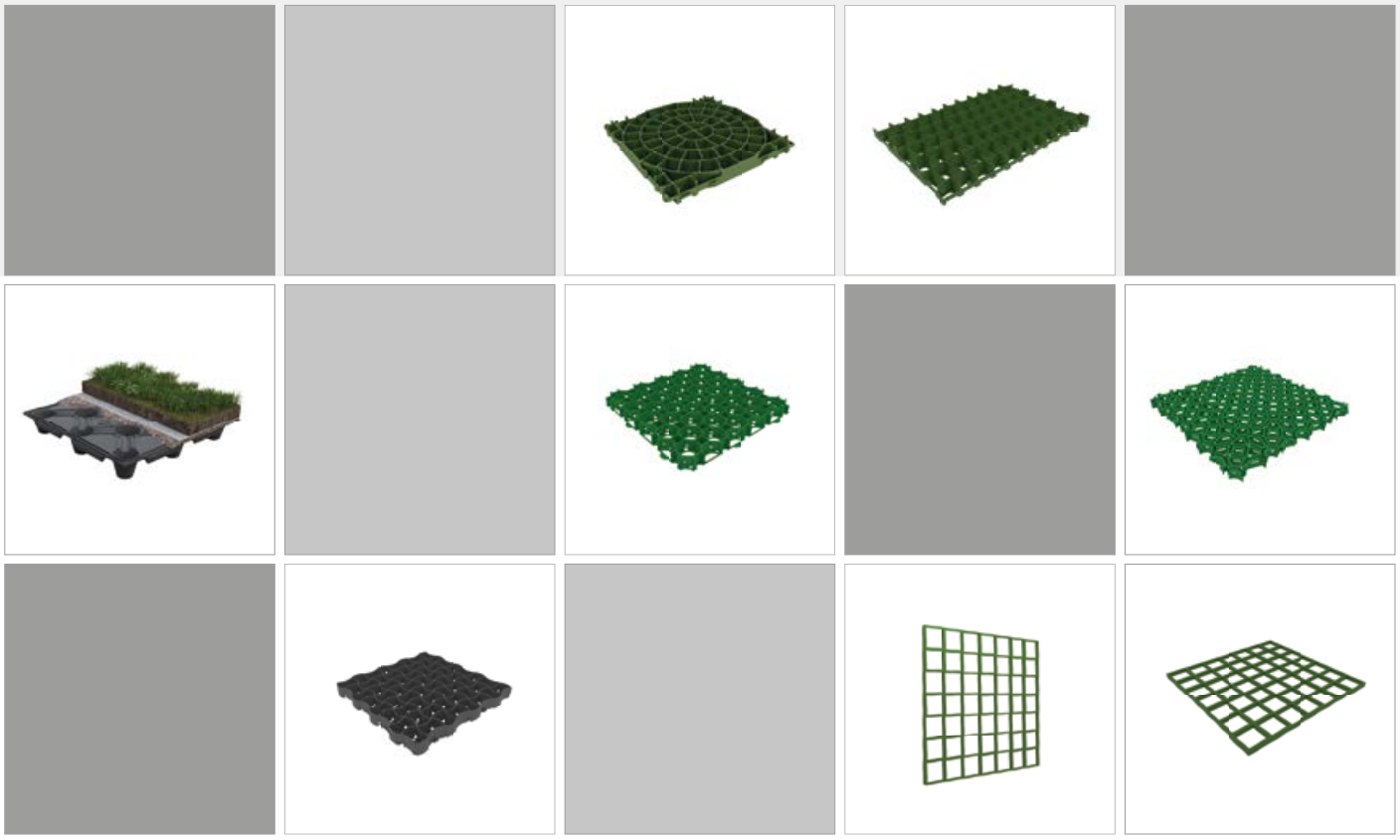
ENGLISH VERSION

daliform GROUP

Building Innovation © Creatori dell'Iglù®

MADE IN ITALY

GENERAL CATALOGUE



DALIFORM GROUP
Tel. +39 0422 2083

EXPORT DEPARTMENT
export@daliform.com

TECHNICAL DEPARTMENT
tecnico@daliform.com

INDEX

About us

Daliform Group srl in 2009 inherited the prestigious and exclusive wealth of knowledge and skills of Daliform srl of Pordenone which since 1993 has been characterized by the ability to create advanced products for the construction in recycled plastic aimed at definitively solving the problem of the rising humidity as well as the concentration of Radon Gas emerging from the subsoil.

This entrepreneurial initiative was initiated in the early 90's due to a law from the Region Friuli Venezia Giulia (number 44 dated 23 August 1985) that, for the first time in Italy, regulated in detail the obligation to use ventilated under-floor cavities due to the strong concentration of Radon gas in the region.

In comparison to traditional implementations (low walls and hollow blocks or attic) Daliform srl proposed its own innovative and revolutionary system of IGLU'® formworks that was met with clamorous success in a short period of time.

Daliform Group is the leading company in the creation and production of plastic products for the world of construction, the reference point in the world of construction for those who design, distribute and build.

The company, with its technical staff of highly qualified engineers, has always been a "hotbed of highly successful innovations"; innovations that have significantly improved the way of building over the past decades with particular reference to ventilated crawl spaces, bidirectional and one-way lightened floors, driveways and vertical greenery, rainwater collection and dispersion tanks .
Daliform Group is always at the forefront, ready to take on tomorrow's challenges with unchanging enthusiasm.

Technical Department

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

FEASIBILITY STUDY
Predimensioning and optimisation of the structures, alternative and/or revised proposals, material and manpower estimates, cost analysis.
Evaluation of forced ventilation in the case of cold rooms.

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.

To contact the technical office: Tel. +39 0422 2083 - tecnico@daliform.com
To obtain updated technical cards, support material, new photos and case studies, go to www.daliform.com

Company certifications

Daliform Group works in compliance with the strictest International Standards in terms of Quality UNI EN ISO 9001, Environment UNI EN ISO 14001, Safety UNI EN ISO 45001 and Social Responsibility SA 8000.

Certified Management System
UNI EN ISO 9001 - UNI EN ISO 14001 - UNI EN ISO 45001 - SA8000

Daliform Group, which is extremely precise with regard to respecting health and environment, first obtained Environmental Compatibility Certification (CCA) for its products and became a member of the Green Building Council Italia.

Membro del
GBC Italia

PRODOTTO CONFORME
COMPATIBILITÀ AMBIENTALE

Products' test and certifications

Daliform Group products are produced in compliance with the highest quality standards and have numerous product certifications:

- Avis Technique issued by the French institute CSTB.
- BBA (UK).
- and more...

To confirm the validity of the products, there is the success of the following tests:

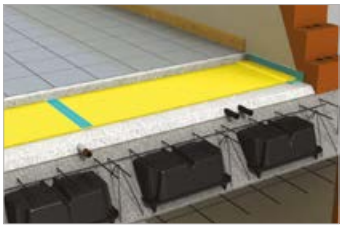
- Technical Construction Certificate issued by the Technical and Test Institute for Constructions Prague (Czech Republic).
- Technical Construction Certificate issued by the Agency for Quality Control and Innovation in Building (Hungary).
- Hygienic Certificate issued by the National Institute of Hygiene (Poland).
- Fire Resistance Certificate REI 180 for U-Boot® Beton issued by the CSI institute in Bollate (MI).
- Certification of a Load Test on an Attic with U-Boot® Beton issued by the University of Darmstadt.
- Acoustic check for the verification of DIN standards.
- Acoustic test according to the standard UNI EN ISO 140-6 – Measurement of acoustic insulation in buildings and building elements; laboratory measurements of the insulation footstep noise issued by the Istituto Giordano di Gatteo (FC).
- Acoustic test according to the standard UNI EN ISO 140-3 – Measurement of acoustic insulation in buildings; Laboratory measurements of the insulation of air-borne noise from building elements issued by the Istituto Giordano di Gatteo (FC).
- Rupture load tests certified by the University of Padua.

Credits

"Reinforced concrete voided slabs subjected gravity and seismic actions – Analysis and design of voided slabs lightened with the U-Boot® Beton system." is the book written at the end of a project, started in 2013 and developed in collaboration with Politecnico of Milano.
The book is addressed to all the consultants of the building sector that would like to learn more about the use of two-way voided slabs with U-Boot® Beton, to improve the seismic response of buildings, since the high seismicity of our Country.
Published by Dario Flaccovio Editore.

Building solutions

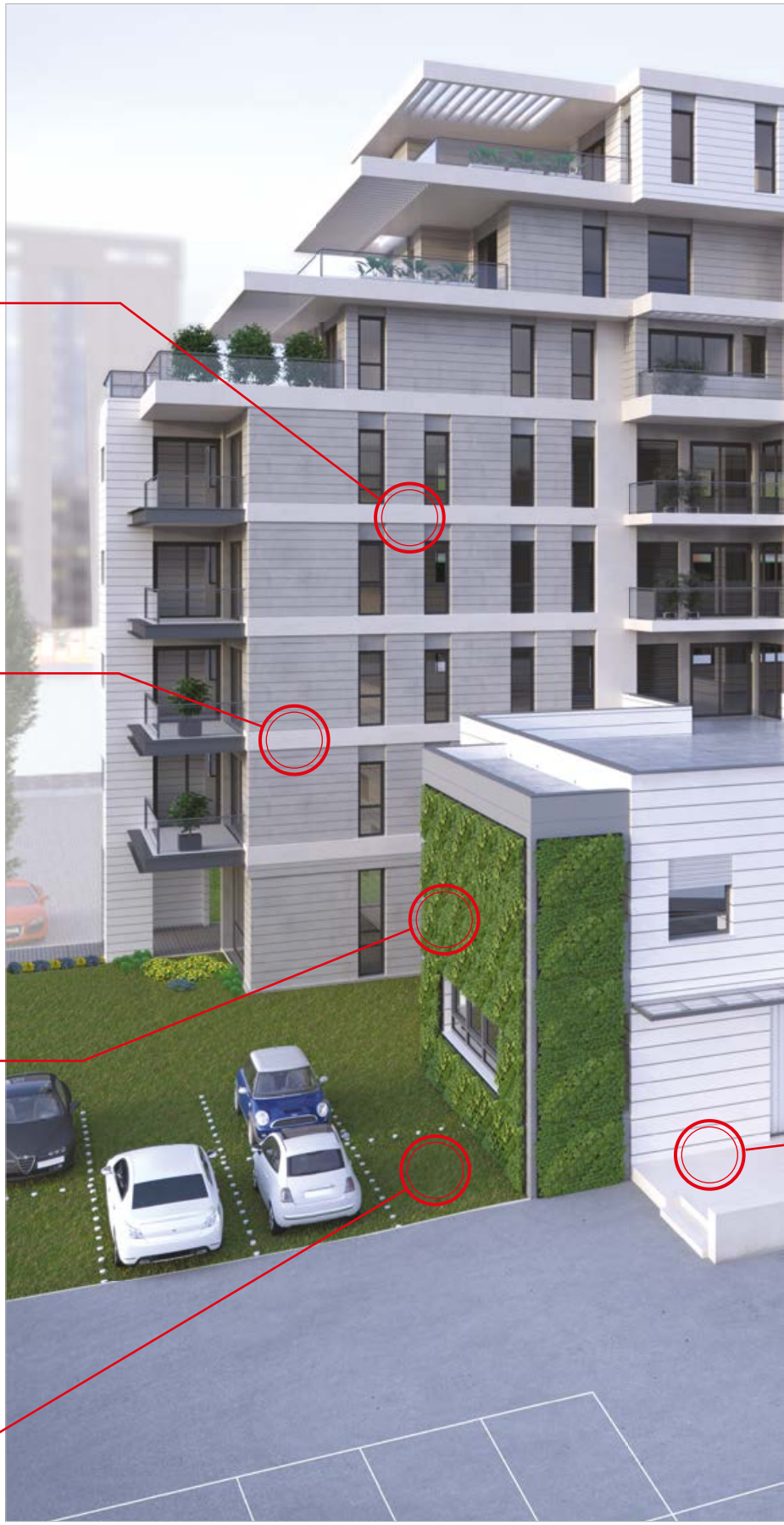
Systems for lightened slabs
bidirectionals U-BOOT® BETON,
monodirectionals U-BAHN® BETON and
monodirectionals FIT SLAB

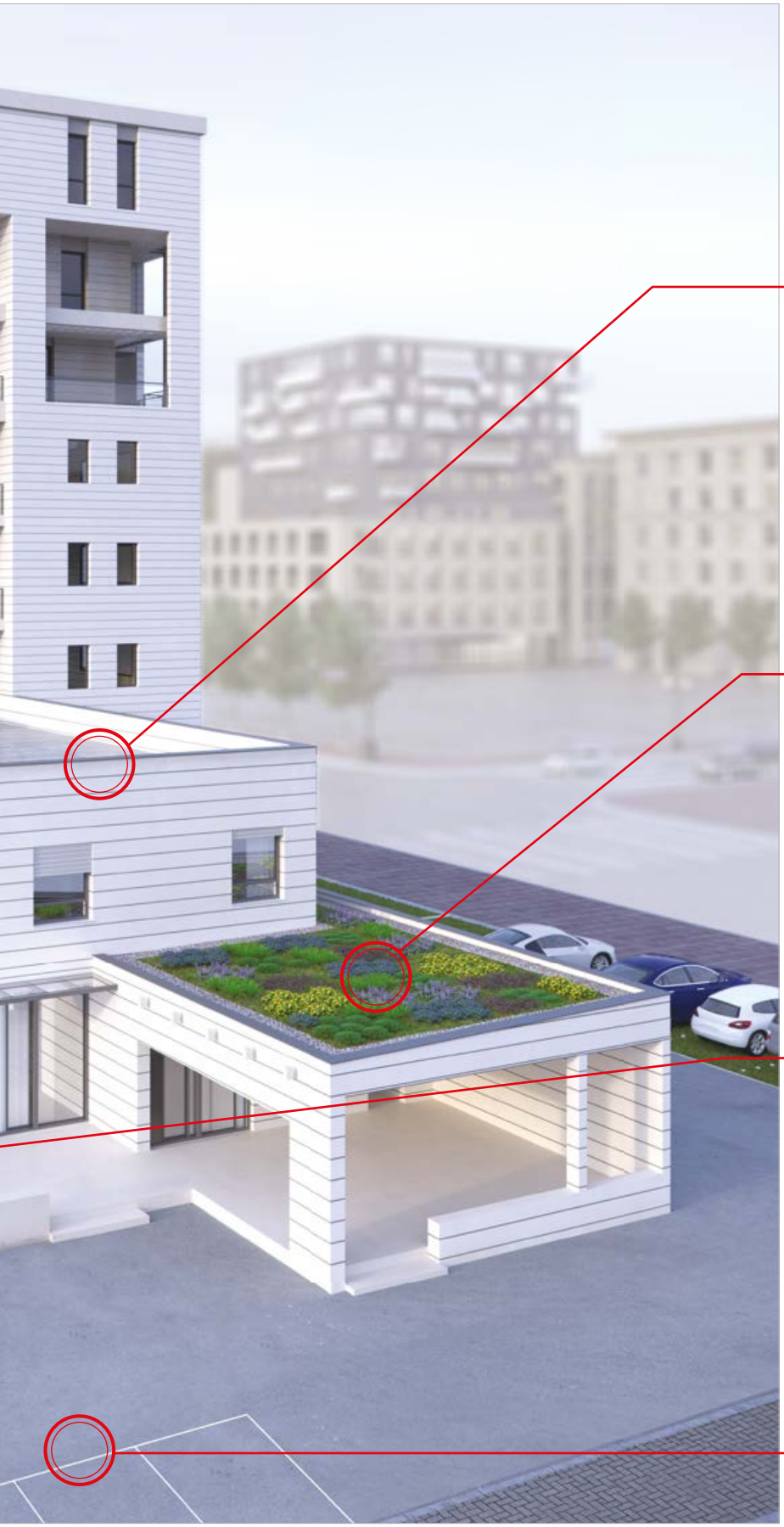


Systems for the acoustic insulation
from airplain's noise and by impact.
U-BOOT® BETON + U-BOOT® SILENCE

Systems for vertical climbing green
V-GREEN®

Systems for driveway surfaces
PRATOPRATICO®, E.C.O. by PRATOPRATICO®
ERBY SALVAPRATO, EASY PARK®, GREEN PARK





Systems for sloped or flat ventilated roofs
IGLU® VENTILATED ROOF

Systems for roof gardens
IGLU® GREEN ROOF

Systems for ventilated under-floor cavities
IGLU®, IGLU® SMART, SISTEMA ATLANTIS

Systems for underground collection tanks
IGLU®, SISTEMA ATLANTIS TANK

IGLU'®

Disposable formwork for ventilated under-floor cavities

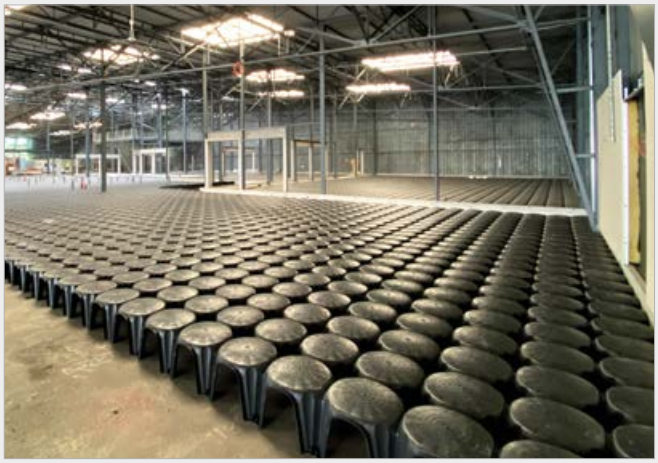
Iglu'® is a market leading product that was created and patented for the realisation of sanitary spaces, ventilated cavities, under-floor cavities, ventilated floors and roofs during the construction and restructuring of civil and industrial buildings.
The innovative capacity of Iglu'® has received numerous successes and recognitions on a national and international level, quickly confirming it as a product of excellence in the building sector.
The modular plastic Iglu'® and Iglu'® Plus formworks, placed side by side in sequence according to a predefined direction, prepare a creation of a self-supporting pedestrian platform above which a layer of concrete is cast in order to simply and economically create a ventilated slab placed on vertical supports.
The below cavity area is available for the passage of systems but, above all, it results being ventilated to counteract rising humidity and radioactive gases.

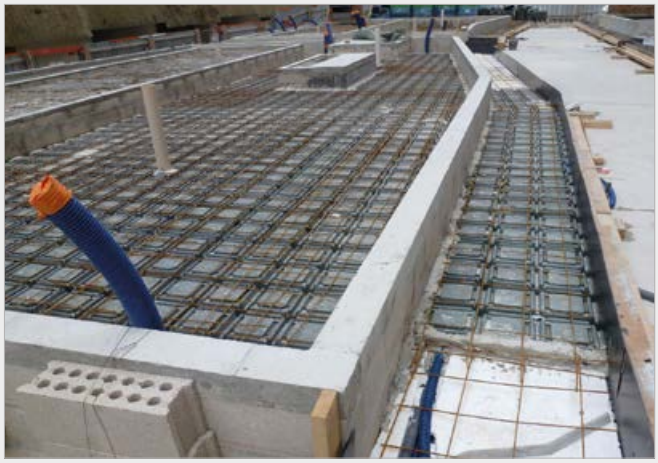
Advantages

- ✓ Possibility to implement, in a single solution, foundation beams and the slab with the help of the L-Plast accessory.
- ✓ Reduction of manpower requirements up to 80% in comparison to traditional systems.
- ✓ Drastic reduction in the use of concrete and aggregates as the arch form permits maximum resistance with a minimum thickness.
- ✓ Adaptable to non-standard spaces as the modules can be cut without underpinning.
- ✓ Easy installation thanks to lightness and simple linking of the modules.
- ✓ Simple adaptation to various perimeters.
- ✓ Quick and immediate cutting and shaping of the modules.
- ✓ Passage of the underground systems in every direction.
- ✓ Creation of a barrier against humidity.
- ✓ Tightness against rising humidity.
- ✓ Effective ventilation in all directions.
- ✓ Disposal of any RADON gas.
- ✓ No point of contact between the concrete and the ground.
- ✓ Perfect transpiration of the perimeter wall.

Applications

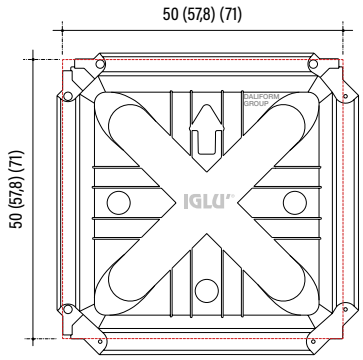
✓ Ventilated under-floor cavities for civil and industrial buildings that are being built new or restored.
✓ Urban infrastructures: squares, sidewalks, sports facilities.
✓ Creation of an intermediate slab or roofing for cavities used for ventilation and the passage of facilites.
✓ Rooms used for humidity and temperature control: drying cells, cold rooms, greenhouses, storage rooms and cellars.
✓ Underground pipes for the passage of utilities. Inspectionable cavities and pits.
✓ By filling it in simply with expanded clay, it can be used to create roof-top gardens.
✓ Underground ducts for the dispersion of water and for drainage.
✓ Overhead sidewalks for passenger loading and unloading or the creation of floating floors.
✓ Levelling height.

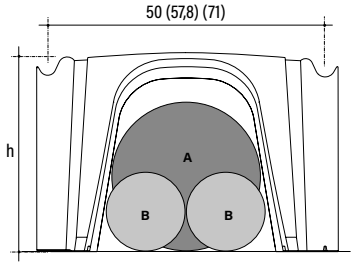




Technical data

IGLÙ®

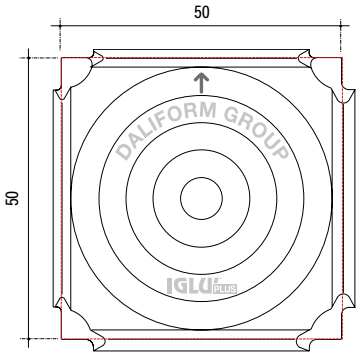


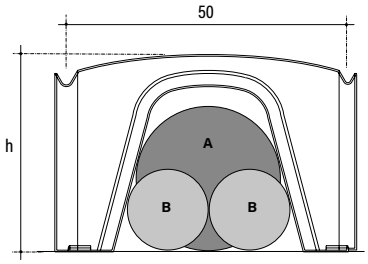


Height (cm)	Dimensions (cm)	Height tunnel clearance h (cm)	Pipe A max diameter 1 x Ø (cm)	Pipe B max diameter 2 x Ø (cm)	Quantity of concrete to the crown (m^3/m^2)	Piece weight (kg)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m^2/PAL)	Pallet weight (kg/PAL)
4	50 x 50	2,2	2,2	2,2	0,006	0,735	110 x 110 x 250	600	150	454
5	58 x 58	1,5	1,4	-	0,014	1,136	120 x 120 x 256	960	320	1.104
6	50 x 50	3,9	3,9	3,9	0,007	0,757	110 x 110 x 253	600	150	467
8	50 x 50	5,9	5,9	5,9	0,010	0,789	110 x 110 x 254	600	150	487
9	58 x 58	5,3	4,7	2,5	0,018	1,190	120 x 120 x 262	996	332	1.199
10	50 x 50	5,8	5,8	5,5	0,013	0,833	110 x 110 x 246	580	145	496
12	50 x 50	7,7	7,7	7,5	0,021	0,865	110 x 110 x 249	580	145	515
13	50 x 50	9,4	9,0	8,5	0,021	1,287	110 x 110 x 256	420	105	554
14	50 x 50	9,8	9,8	9,4	0,028	0,963	110 x 110 x 248	460	115	456
16	50 x 50	11,8	11,8	11	0,030	0,984	110 x 110 x 250	460	115	466
18	50 x 50	13,8	13,8	12,5	0,033	1,179	110 x 110 x 250	380	95	461
20	50 x 50	15,8	15,8	13,5	0,034	1,038	110 x 110 x 251	460	115	491
22	50 x 50	17,8	17,8	15	0,036	1,265	110 x 110 x 256	380	95	494
25	50 x 50	20,5	20,5	15	0,039	1,330	110 x 110 x 254	400	100	545
27	57,8 x 57,8	22,5	22,5	16,8	0,043	1,687	120 x 120 x 250	324	108	561
27	50 x 50	21	21	14	0,035	1,952	110 x 110 x 259	480	120	950
30	50 x 50	26,3	25	13	0,046	1,406	110 x 110 x 243	320	80	463
35	50 x 50	31,3	26,5	14,5	0,052	1,492	110 x 110 x 248	320	80	491
40	50 x 50	36,3	28,5	15	0,058	1,557	110 x 110 x 253	320	80	511
45	50 x 50	41,3	29,5	16	0,064	1,622	110 x 110 x 247	300	75	500
50	57,8 x 57,8	45,5	30,8	16,6	0,077	2,552	120 x 120 x 261	240	80	627
55	57,8 x 57,8	50,4	32,2	17,3	0,080	2,693	120 x 120 x 248	228	76	628
60	57,8 x 57,8	55,4	33,6	18,1	0,083	2,801	120 x 120 x 257	228	76	653
65	71 x 71	60,7	36	20	0,112	4,261	77 x 155 x 246	120	60	527
70	71 x 71	65,7	38	22	0,114	4,402	77 x 155 x 244	116	58	527
75	71 x 71	70,7	40	23	0,117	4,661	77 x 155 x 244	114	56	547
80	71 x 71	75,7	42	24	0,118	4,867	77 x 155 x 248	110	55	551

Technical data

IGLU' PLUS

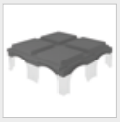




Height (cm)	Dimensions (cm)	Height tunnel clearance h (cm)	Pipe A max diameter 1 x Ø (cm)	Pipe B max diameter 2 x Ø (cm)	Quantity of concrete to the crown (m^3/m^2)	Piece weight (kg)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m^2/PAL)	Pallet weight (kg/PAL)
4	50 x 50	3	3	3	0,004	0,865	110 x 110 x 108	400	100	359
8	50 x 50	4,5	4,5	4,5	0,012	1,460	110 x 110 x 210	400	100	597
12	50 x 50	8	8	8	0,016	1,334	110 x 110 x 226	400	100	546
16	50 x 50	11	11	9,5	0,034	1,536	110 x 110 x 244	300	75	474
20	50 x 50	13	13	10	0,035	1,482	110 x 110 x 234	300	75	457
27	50 x 50	21	21	16	0,040	1,720	110 x 110 x 246	300	75	529
35	50 x 50	29	25,5	14,5	0,056	2,044	110 x 110 x 231	300	75	626
40	50 x 50	34	27,5	15	0,060	2,131	110 x 110 x 230	300	75	652
45	50 x 50	39	27	14,5	0,065	2,239	110 x 110 x 236	300	75	685
50	50 x 50	43	26,5	14	0,067	2,185	110 x 110 x 236	300	75	668
55	50 x 50	44	25,5	13,5	0,090	2,823	110 x 110 x 243	300	75	860

Accessories

L-PLAST
It is used for new constructions to create the slab and foundation beams with a single concrete casting; when restructuring is used to easily create reinforcement curbs for existing foundations. Furthermore, it is ideal for creating air ducts in general or in geothermal applications where air must be blown into the under-floor cavity.



ISO IGLU' - for insulated slabs *(only for IGLU'® PLUS from H 16 cm to H 35 cm)*
The combined use of Iglu'® Plus and Iso Iglu'® is the ideal solution for efficiently insulating buildings from external agents such as humidity, heat and the cold. Above, Iso Iglu'® is preformed with channels or cavities for the pipe coils of the underfloor heating and cooling system, making them quick and easy to lay.

BETON UP - for monolithic slabs *(only for IGLU'® PLUS)*
Beton Up is an accessory for the Iglu'® Plus system (or Atlantis) that prevents the concrete from forming feet. In this way, the formworks take on the simple function of scaffolding on which a monolithic reinforced concrete slab can be created that is bound to the surroundings. With Beton Up the slab is not self-supporting.

PIBI STOP - for diagonal beams
It is a casting stop panel for obstructing, as needed, the "side tunnels" of the individual Iglu'® or Iglu'® Plus. PIBI Stop is optimal for creating foundation beams without the need to use classical wood shuttering and it is particularly suited for reconstruction where an underpinning must be created where the existing structures are often not squared.

POLYPROPYLENE EXTENSION *(only for IGLU'® from H 14 cm to H 80 cm)*
A component in polypropylene which makes it possible to develop a ventilated floor in any shape or size. It permits the casting in a single phase of the substructure grating and the ventilated floor, saving on reinforcement and dismantling operations.

POLYSTYRENE EXTENSION
A component in expanded polystyrene of suitable density to resist concrete pressure, which makes it possible to develop a ventilated floor in any shape or size. It permits the casting in a single phase of the substructure grating and the ventilated floor, saving on reinforcement and dismantling operations.

IGLU' smart

Disposable, horizontally adjustable formworks for creating ventilated cavities

Iglu'® Smart is the innovative disposable formwork which is adjustable in two directions in plan, to facilitate the creation of ventilated cavities that offer even greater flexibility than normal formworks.
The adjustment is due to a special interlocking system that permits to start from 50 cm and reaching 55 cm in vertical and horizontal directions.
With Iglu'® Smart, in addition to standard dimensions 50 x 50 cm, 52.5 x 52.5 cm, and 55 x 55 cm, it is also possible to obtain non-standard dimensions such as 55 x 52.5 cm, 52.5 x 50 cm, 50 x 55 cm, or 50 x 52.5 cm, simply by adjusting the position of the special interlocked between the formworks.
Iglu'® Smart is ideal for covering large surface areas in considerably shorter time frames than with normal formworks without using additional accessories such as extension systems, for example.

Advantages

- ✓ By adjusting the surmount position of the formowork, it allows to easily adjust the plan dimensions in both directions.
- ✓ Possibility to cover large surfaces areas in considerably shorter time frames than with normal formworks.
- ✓ Reduction of manpower requirements by up to 80% in comparison to traditional systems.
- ✓ Adaptable to non-standard spaces as the modules can be cut without underpinning.
- ✓ Ease of positioning due to lightness and simple linking of the modules.
- ✓ Simple adaptation to various perimeters.
- ✓ Quick and immediate cutting and shaping of the modules.
- ✓ Passage of the underground systems in every direction.
- ✓ Creation of a barrier against humidity.
- ✓ Tightness against rising humidity.
- ✓ Effective ventilation in all directions.
- ✓ Disposal of any RADON gas.
- ✓ No point of contact between the concrete and the ground.
- ✓ Perfect transpiration of the perimeter wall.

By adjusting the position of the overlap between the formworks, it allows to obtain different dimensions in plan:

1. Laying in position 55 x 55 cm
1 m² = 3,31 pcs

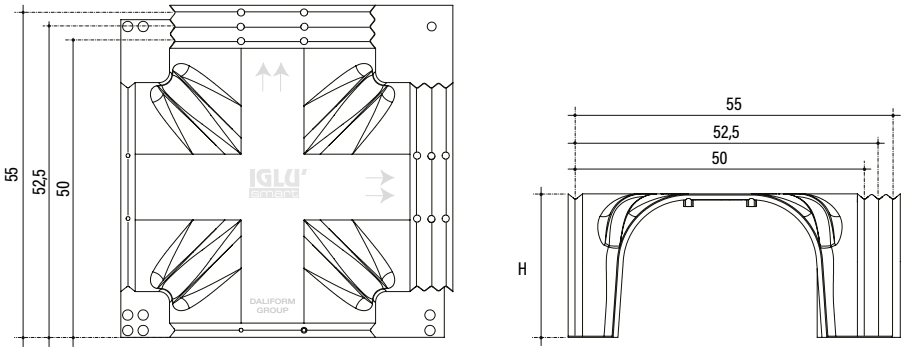
2. Laying in position 52,5 x 52,5 cm
1 m² = 3,63 pcs

3. Laying in position 50 x 50 cm
1 m² = 4 pcs

Applications

- ✓ Ventilated under-floor cavities for civil and industrial buildings that are being built new or reconstructed.
- ✓ Urban infrastructures: squares, sidewalks, sports facilities.
- ✓ Creation of an intermediate slab or roofing for cavities used for ventilation and the passage of systems.
- ✓ Rooms used for humidity and temperature control: drying cells, cold rooms, greenhouses, storage rooms and cellars.
- ✓ Underground pipes for the passage of facilites. Inspectionable cavities and pits.
- ✓ Underground ducts for the dispersion of water and for drainage.
- ✓ Overhead sidewalks for passenger loading and unloading or the creation of floating floors.
- ✓ Levelling height.

Technical data



Height (cm)	Dimensions (cm)	Quantity of concrete to the crown (m^3/m^2)	Piece weight (kg)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m^2/PAL)	Pallet weight (kg/PAL)
H 13	55 x 55	0,029	1,525	120 x 120 x 241	400	121	624
	52,5 x 52,5	0,025	1,525	120 x 120 x 241	400	110	624
	50 x 50	0,022	1,525	120 x 120 x 241	400	100	624
H 15	55 x 55	0,032	1,536	120 x 120 x 243	400	121	628
	52,5 x 52,5	0,027	1,536	120 x 120 x 243	400	110	628
	50 x 50	0,024	1,536	120 x 120 x 243	400	100	628
H 20	55 x 55	0,037	1,828	120 x 120 x 248	400	121	745
	52,5 x 52,5	0,032	1,828	120 x 120 x 248	400	110	745
	50 x 50	0,028	1,828	120 x 120 x 248	400	100	745
H 25	55 x 55	0,042	1,968	120 x 120 x 253	400	121	801
	52,5 x 52,5	0,036	1,968	120 x 120 x 253	400	110	801
	50 x 50	0,031	1,968	120 x 120 x 253	400	100	801
H 30	55 x 55	0,047	2,001	120 x 120 x 258	400	121	814
	52,5 x 52,5	0,039	2,001	120 x 120 x 258	400	110	814
	50 x 50	0,033	2,001	120 x 120 x 258	400	100	814
H 35	55 x 55	0,050	2,044	120 x 120 x 263	400	121	832
	52,5 x 52,5	0,042	2,044	120 x 120 x 263	400	110	832
	50 x 50	0,035	2,044	120 x 120 x 263	400	100	832
H 40	55 x 55	0,053	2,282	120 x 120 x 258	380	115	881
	52,5 x 52,5	0,044	2,282	120 x 120 x 258	380	105	881
	50 x 50	0,036	2,282	120 x 120 x 258	380	95	881

IGLU' BARRIER

Exterior protection for walls in contact with the ground

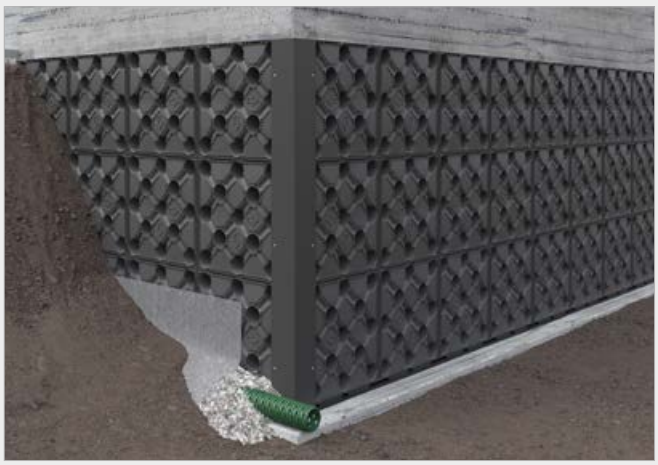
Retaining walls and other walls that are in contact with the ground are exposed to damp due to capillary action; added to this is the possibility of damp air resulting from inadequate thermal insulation. This situation can lead to the formation of mould, unpleasant odours and, more importantly, it can compromise the durability of the structure.
It is therefore imperative to select materials that maintain their impermeability to water and water vapour as well as their rot-resistance and mechanical strength over time, even when under loads from construction-site vehicular traffic.

Iglu'® Barrier is a recycled plastic panel built to protect the waterproof layer of retaining walls. By virtue of its technical characteristics, it guarantees an excellent resistance to compression.
The Iglu'® Barrier creates a ventilated space between the waterproof retaining wall and the backfill, therefore eliminating contact between the ground and the waterproofing.

Advantages

Because the thermal insulation used for the external surface of the wall is subject to extremely high stresses due to its continuous contact with the ground, the associated lithostatic load and the effects of moving loads, as well as contact with rainwater, Iglu'® Barrier offers optimal performance with regard to:

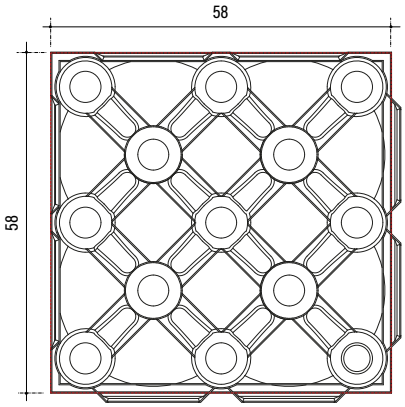
- ✓ protection of the waterproofing membrane;
- ✓ better environmental conditions in underground rooms;
- ✓ lower incidence of problems with humidity and moisture;
- ✓ reducing the "cold wall" effect;
- ✓ effective "impact protection" for waterproofing during the backfilling phases of the excavations;
- ✓ forming a root barrier to protect the waterproofing;
- ✓ reducing installation costs compared to the traditional system using gravel and a dimpled membrane;
- ✓ easy installation;
- ✓ ease of storage and handling on site;
- ✓ suitability for laying under all weather conditions;
- ✓ benefitting the durability of the building, potentially extending its service life and increasing its value.

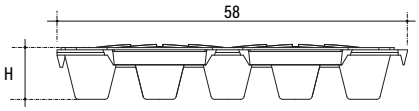


Applications

The presence and diffusion of moisture in construction works generates a multitude of problems. Discomfort and damage affect both the contemporary building sector and various areas within the restoration and conservation sectors.
Capillary rising damp and infiltration into below-ground structures or into structures used to contain soil are among the principle causes of deterioration in building works.
Due to its special configuration and the natural air chamber that forms between the wall and the panel, the Iglu'® Barrier panel protects walls in below-ground living spaces (such as cellars, garages, laundries, taverns, etc.) from both "penetrating damp" (a.k.a. lateral damp) and temperature changes.
The cost reduction compared to traditional systems, the guarantee of eliminating contact between soil moisture and the waterproofing membrane, the excellent resistance to compression combined with the ease of installation and handling on site, make Iglu'® Barrier an essential product for the protection of walls in contact with the ground.

Technical data





Height	Dimensions	Piece weight	Compressive strength	Support foot surface area	Air chamber	Pallet dimensions	Pieces per pallet	Sq.mt. per pallet	Pallet weight
(cm)	(cm)	(kg)	(kg/m²)	(cm²/m²)	(l/m²)	(cm)	(pcs/PAL)	(m²/PAL)	(kg/PAL)
5	58 x 58	1,136	> 10.000	1.240	33,26	120 x 120 x 256	960	320	1.104
9	58 x 58	1,190	> 10.000	609	70	120 x 120 x 262	996	332	1.199

The Iglu'® Barrier formworks are coupled by means of special clips which give stability and an adaptive capacity, even on curved surfaces. The Iglu'® Barrier panel is easy to lay and handle on site. The staggered arrangement of the support feet, which are wide, smooth, circular and rounded, means that the Iglu'® Barrier panel can withstand a ground thrust of over 10,000 kg/m².
In addition, the feet are arranged in such a way that the panel can be shaped with a saw or grinding disc, in any direction and shape, without compromising its mechanical strength.

IGLU' ventilatedroof

Disposable formwork for ventilated roof

An increasingly important topic over the past few years has been the excessive amount of energy used by buildings, a use that can be considerably reduced through roof ventilation achieved by using Iglu'® Ventilated Roof.
By placing Iglu'® Ventilated Roof formworks on the building's horizontal roof, an air cavity is created to protect from the heating in the summer and from the cold in the winter.

The accumulation of heat in the summer and low winter temperatures with the formation of condensation and mold, are phenomena that can find a valid solution with the adoption of a ventilated roof with Iglu'® Ventilated Roof, a system that promotes continuous air flow inside the under-covering.

Advantages

The realization of a ventilated roof (flat and pitched roof) with Iglu'® Ventilated Roof provides greater living comfort both in winter and summer, as well as improving the conservation of the materials forming the roof.

✓ In the winter months, closing the ventilation with a simple register, it can isolate from the cold outside.
✓ In the summer months it can reduce heating of the spaces below thanks to ventilation.
✓ The ventilation also avoids moisture stagnation below the roof surface and thus prevents the formation of mold or other substances which may lead to a degradation of the structure.
✓ Significant savings on energy consumption (heating/cooling).

The height of the interspace is to be determined in function of the technical characteristics of the roof, such as the type of coverage, the length and slope of the pitch and the local weather conditions.
Tests have been performed on roof ventilation using Iglu'® Ventilated Roof, in collaboration with the University of Malta, which have provided very valid results, combining a summer ventilation system with the closure of air inlets in winter, in order to create an insulating cavity.
In the winter, a condensation vacuum tied to specific registers can be prepared to avoid excess moisture inside the cavity.

Applications

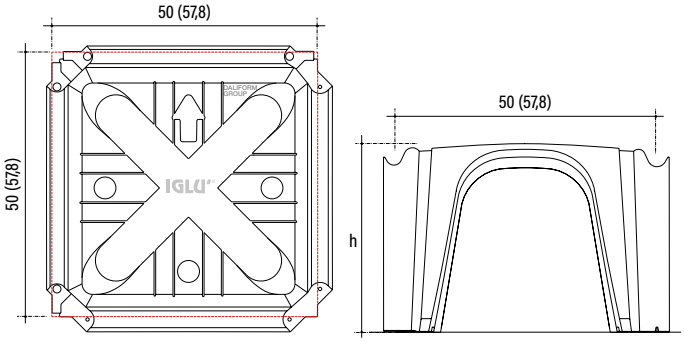
The roof is a very important part of each building to ensure an effective response to environmental factors such as temperature fluctuations and weather.
The use of Iglu'® Ventilated Roof in residential, commercial, industrial or public buildings is essential to create:

✓ comfortable attics with the appropriate hygrothermal characteristics: the creation of an air gap of constant thickness is a brilliant design choice, compatible with any pitched roof in reinforced concrete.

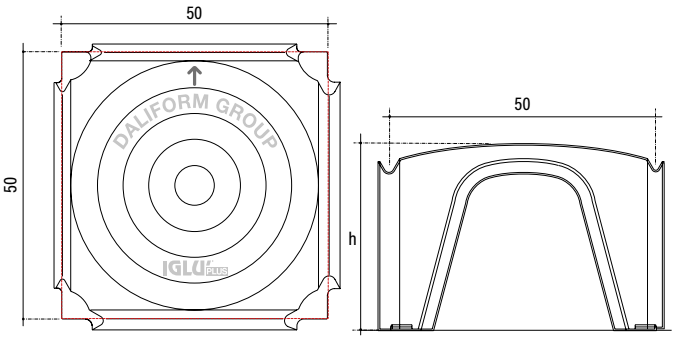
✓ flat roof terraces so up to allow full exploitation of the surface of the built space.

Technical data

IGLU' ventilatedroof



IGLU' PLUS ventilatedroof



Height (cm)	Dimensions (cm)	Quantity of concrete to the crown (m^3/m^2)	Piece weight (kg)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m^2/PAL)	Pallet weight (kg/PAL)
4	50 x 50	0,004	0,865	110 x 110 x 108	400	100	359
4	50 x 50	0,006	0,735	110 x 110 x 250	600	150	454
5	58 x 58	0,014	1,136	120 x 120 x 256	960	320	1.104
6	50 x 50	0,007	0,757	110 x 110 x 253	600	150	467
8	50 x 50	0,012	1,460	110 x 110 x 210	400	100	597
8	50 x 50	0,010	0,789	110 x 110 x 254	600	150	487
9	58 x 58	0,018	1,190	120 x 120 x 262	996	332	1.199
10	50 x 50	0,013	0,833	110 x 110 x 246	580	145	496
12	50 x 50	0,016	1,334	110 x 110 x 226	400	100	546
12	50 x 50	0,021	0,865	110 x 110 x 249	580	145	515
13	50 x 50	0,021	1,287	110 x 110 x 256	420	105	554
14	50 x 50	0,028	0,963	110 x 110 x 248	460	115	456
16	50 x 50	0,034	1,536	110 x 110 x 244	300	75	474
16	50 x 50	0,030	0,984	110 x 110 x 250	460	115	466

COFFRARGILE

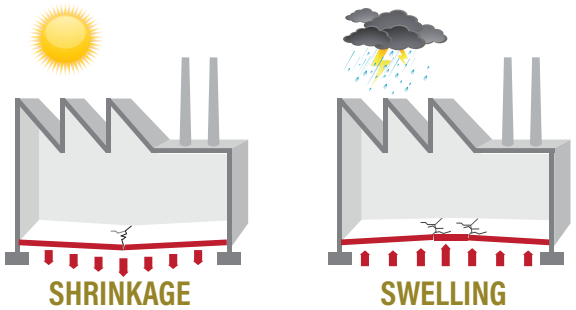
Disposable formwork to effectively handle the movements of clayey soils

With foundation problems in clayey soils, conditions which facilitate a "proactive" approach with regard the soil rarely occur within the scope of the project.
In most cases, the structure is designed and its behaviour is then anticipated as a function of the mechanical characteristics of the soil, while only seldom it's possible to act on these in order to modify unfavourable environmental conditions.
Daliform Group created Coffrargile, a disposable formwork made of recycled plastic, to effectively handle the movements of clayey soils and protect floors from shrinkage/swelling.
Coffrargile is used in combination with Beton Up, an accessory that prevents the reinforced concrete from forming the "pillars" typical of the classic Iglu'® system.
In this way, the formworks take on the function of simple scaffolding on which a load-bearing slab of reinforced concrete can be installed with a cavity below, the purpose of which is to accommodate the swelling and shrinkage of the sediment underlying the foundation due to the special mechanical properties of clayey soils.

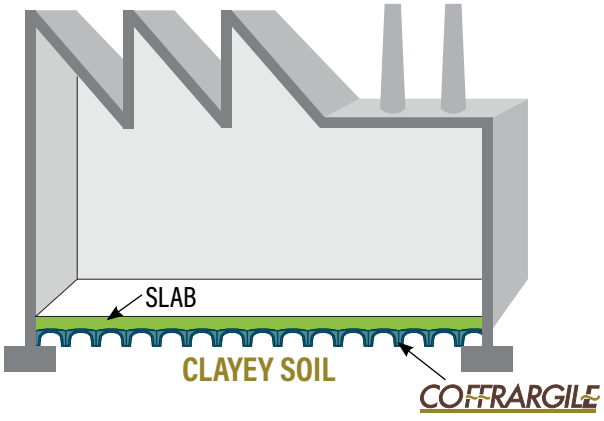
Advantages

✓ Impervious to the weather. Compared to the alternative system which is composed of disposable formwork made of biodegradable cardboard and for which outdoor storage on building sites is unsuitable due to the risk of humidity, fog or precipitation, the Coffrargile system is impervious to the weather.
✓ Ease of storage and handling on site.
✓ Resistant to termites, insects, rodents and other animals which, can in contrast, destroy cardboard elements
✓ Ecological and environmentally compliant. Compared to the alternative system of formwork made of cardboard, Coffrargile leaves no compostable organic residue that can give rise to offensive odours and provide nesting material for various animals.
✓ Greater solidity during the setting of the load-bearing reinforced concrete slab.
✓ Does not transmit stresses to the structures that it supports. Coffrargile provides a void, whose height depends on the thickness of the product, under the load-bearing slab in order to adapt to any problems with the soil, regardless of the amount of swelling anticipated.
✓ Easy installation due to the lightness and simplicity of interlocking elements
✓ Supports the weight/passage of workers on site, avoiding the risk of accidents and injuries.

**Clayey Soils +
Shrinkage or Swelling =
BREAKING FLOOR**



**THE SOLUTION:
COFFRARGILE**



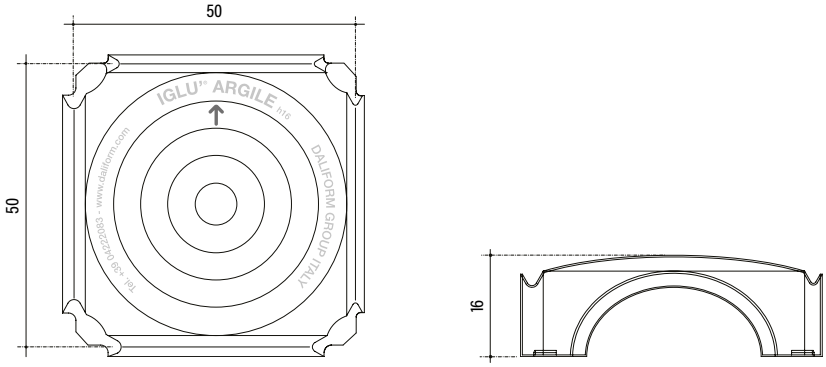
Applications

Coffrargile is the effective solution for creating cast-in-place reinforced concrete slabs that do not suffer from the effects of swelling and shrinkage inherent in clayey soils for the construction of office and commercial buildings as well as civil and industrial projects which are threatened by underlying clayey sediments.

Behavior in the case of soil swelling

Behavior in the case of soil shrinkage

Technical data



Height	Dimensions	Quantity of concrete to the crown	Piece weight	Pallet dimensions	Pieces per pallet	Sq.mt. per pallet	Pallet weight
(cm)	(cm)	(m^3/m^2)	(kg)	(cm)	(pcs/PAL)	(m^2/PAL)	(kg/PAL)
16*	50 x 50	0,034	1,536	110 x 110 x 244	300	75	474

*Other heights are available on request

Coffrargile is the disposable formwork, made of regenerated plastic that ensures a perfect surface regardless the dimensions of the slab. Its foot is shaped so as to allow the swelling of the clay without exerting any pressure on the reinforced concrete slab. Standard dimensions 50 x 50 cm - H 16 cm*.

Accessories

BETON UP - for monolithic slabs
Beton Up is an accessory for the Iglu'® Plus system (or Atlantis) that prevents the concrete from forming feet. In this way, the formworks take on the simple function of scaffolding on which a monolithic reinforced concrete slab can be created that is bound to the surroundings. With Beton Up the slab is not self-supporting.

Sistema Atlantis

Disposable formwork for ventilated under-floor cavities and for rainwater collection or dispersion tanks

Sistema Atlantis *(Atlantis System)* is an advanced system for creating cavities in general, under-floor cavities and ventilated floors in new and restored civil and industrial buildings, accumulation tanks, dispersion tanks, honeycomb rafts, low temperature cold rooms.
The Atlantis System is used when the depth of the under-floor cavity or cavity is such that the classic Iglu'® formworks cannot be used, with the advantage that the constant diameter of the elevator pipes makes it possible to minimise the use of concrete for filling. The main system features are speed, simplicity and cost performance.
Furthermore, with Atlantis, a sanitary space is obtained with a suitable humidity barrier and, if properly ventilated through piping connected outdoors, it is a tool for the disposal of the Radon gas present in the ground.

Advantages

- ✓ Easy installation as it is light-weight and simple to install through the linking of the elements, with time savings up to 80%.
- ✓ Minimum use of concrete for level filling thanks to the lowered dome form.
- ✓ The possibility, due to the pipe system, to have any height up to 3 m supplied to the yard.
- ✓ Possibility to bear loads of considerable size by providing the vertical supports with suitable reinforcement.
- ✓ Adaptable to non-standard spaces.
- ✓ Possibility to pose the elements with the help of a single support.
- ✓ Passage of systems under the pavement in all directions.
- ✓ Total ventilation of the space and air flows in all directions.
- ✓ Simple material management in the yard, as it is not bulky and can be exposed to bad weather.
- ✓ The tank can be inspected through a simple inspection pit.
- ✓ Possibility to bear loads of considerable size by providing the pillars with suitable reinforcement.

Applications

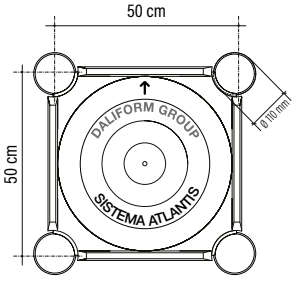
Atlantis is a system for creating under-floor cavities where there is considerable height available. It can be used for the distribution of systems and technological networks under the pavement so they do not need to be buried in screed.
It is suited for creating thermally insulated cavities for cold rooms with or without forced ventilation.

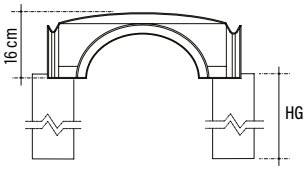
It is the ideal solution for creating accumulation or dispersion tanks and for pool restructuring. Thanks to custom sized elevator pipes, it is the ideal system for creating inclined or multilevel surfaces.
Atlantis, when used in combination with the special Muro formwork, represents an innovative, quick and economic solution for the creation of honeycomb or box foundation rafts (superrafts), a reduced use of concrete and steel makes it possible to obtain extreme stiffness even if the ground does not provide much load bearing capacity.





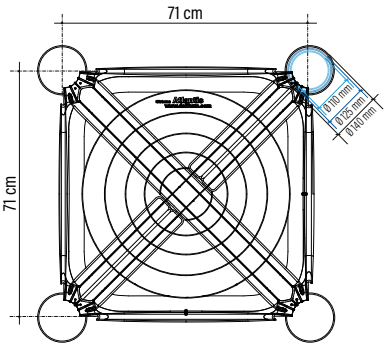

Technical data Atlantis 50 x 50 cm

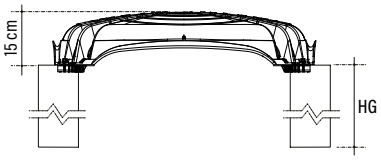




System height	Dome weight	Pipe height HG	Quantity of concrete to the crown pipe Ø 110 mm	Pallet dimensions	Pieces per pallet	Sq.mt. per pallet	Pallet weight
h (cm)	(kg)	(cm)	(m^3/m^2)	(cm)	(pcs/PAL)	(m^2/PAL)	(kg/PAL)
56 / 80	1,680	from 40 to 64	from 0,048 to 0,056	110 x 110 x 250	300	75	490
81 / 110	1,680	from 65 to 94	from 0,056 to 0,068	110 x 110 x 250	300	75	490
111 / 140	1,680	from 95 to 124	from 0,068 to 0,079	110 x 110 x 250	300	75	490
141 / 170	1,680	from 125 to 154	from 0,079 to 0,089	110 x 110 x 250	300	75	490
171 / 200	1,680	from 155 to 184	from 0,089 to 0,100	110 x 110 x 250	300	75	490
201 / 230	1,680	from 185 to 214	from 0,100 to 0,111	110 x 110 x 250	300	75	490
231 / 260	1,680	from 215 to 244	from 0,111 to 0,122	110 x 110 x 250	300	75	490
261 / 300	1,680	from 245 to 284	from 0,122 to 0,136	110 x 110 x 250	300	75	490

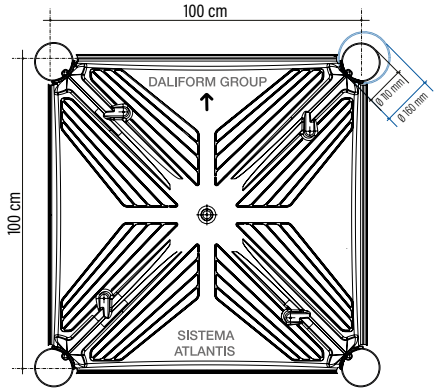
Technical data Atlantis 71 x 71 cm

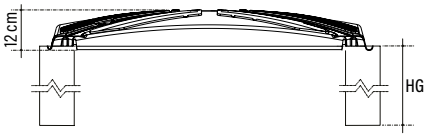




System height	Dome weight	Pipe height HG	Quantity of concrete to the crown pipe Ø 110 mm	Quantity of concrete to the crown pipe Ø 125 mm	Quantity of concrete to the crown pipe Ø 140 mm	Pallet dimensions	Pieces per pallet	Sq.mt. per pallet	Pallet weight
h (cm)	(kg)	(cm)	(m^3/m^2)	(m^3/m^2)	(m^3/m^2)	(cm)	(pcs/PAL)	(m^2/PAL)	(kg/PAL)
56 / 80	3,093	from 41 to 65	from 0,041 to 0,045	from 0,042 to 0,048	from 0,045 to 0,052	76 x 149 x 259	230	115	660
81 / 110	3,093	from 66 to 85	from 0,045 to 0,049	from 0,048 to 0,055	from 0,052 to 0,061	76 x 149 x 259	230	115	660
111 / 140	3,093	from 86 to 125	from 0,049 to 0,056	from 0,055 to 0,062	from 0,061 to 0,069	76 x 149 x 259	230	115	660
141 / 170	3,093	from 126 to 155	from 0,056 to 0,061	from 0,062 to 0,069	from 0,069 to 0,078	76 x 149 x 259	230	115	660
171 / 200	3,093	from 156 to 185	from 0,061 to 0,067	from 0,069 to 0,076	from 0,078 to 0,087	76 x 149 x 259	230	115	660
201 / 230	3,093	from 186 to 215	from 0,067 to 0,072	from 0,076 to 0,082	from 0,087 to 0,095	76 x 149 x 259	230	115	660
231 / 260	3,093	from 216 to 245	from 0,072 to 0,078	from 0,082 to 0,089	from 0,095 to 0,104	76 x 149 x 259	230	115	660
261 / 300	3,093	from 246 to 285	from 0,078 to 0,085	from 0,089 to 0,099	from 0,104 to 0,116	76 x 149 x 259	300	115	660

Technical data Atlantis 100 x 100 cm





System height	Dome weight	Pipe height HG	Quantity of concrete to the crown pipe Ø 110 mm	Quantity of concrete to the crown pipe Ø 160 mm	Pallet dimensions	Pieces per pallet	Sq.mt. per pallet	Pallet weight
h (cm)	(kg)	(cm)	(m^3/m^2)	(m^3/m^2)	(cm)	(pcs/PAL)	(m^2/PAL)	(kg/PAL)
56 / 80	10,164	from 44 to 68	from 0,038 to 0,040	from 0,043 to 0,047	110 x 110 x 254	70	70	700
81 / 110	10,164	from 69 to 98	from 0,040 to 0,043	from 0,047 to 0,053	110 x 110 x 254	70	70	700
111 / 140	10,164	from 99 to 128	from 0,043 to 0,046	from 0,053 to 0,059	110 x 110 x 254	70	70	700
141 / 170	10,164	from 129 to 158	from 0,046 to 0,049	from 0,059 to 0,065	110 x 110 x 254	70	70	700
171 / 200	10,164	from 159 to 188	from 0,049 to 0,051	from 0,065 to 0,070	110 x 110 x 254	70	70	700
201 / 230	10,164	from 189 to 218	from 0,051 to 0,054	from 0,070 to 0,076	110 x 110 x 254	70	70	700
231 / 260	10,164	from 219 to 248	from 0,054 to 0,057	from 0,076 to 0,082	110 x 110 x 254	70	70	700
261 / 300	10,164	from 249 to 288	from 0,057 to 0,060	from 0,082 to 0,088	110 x 110 x 254	70	70	700

Accessories

TYMPANUM
Accessory with occlusion and lateral compensation function, to be used in combination with the wall or whenever necessary. The tympanum is equipped with flexible vertical slats to adhere perfectly to the wall even in the presence of roughness and irregularity of the latter. Available for all sizes of the Atlantis System: cm 50x50, 71x71, 100x100.

SHELF
Accessory with occlusion and support of the compensation panel function to be used whenever the dimensions of the intervention area do not correspond to an exact multiple of the Atlantis formwork measurements. Available for all sizes of the Atlantis System: cm 50x50, 71x71, 100x100.

ANGLE
Angular occlusion element. Universal element that adapts to all pipe diameters available in the Atlantis System. The angle element is made of recycled PP (Alaplen®) and is available for all sizes of the Atlantis System: cm 50x50, 71x71, 100x100.

FLANGE
Accessory with reinforcement to compensation function. The flange element is made of recycled PP (Alaplen®) and is available for all sizes of the Atlantis System: cm 50x50, 71x71, 100x100, but only with the Ø 110 mm pipe.

HOOK
Accessory with reinforcement to compensation function. The flange element is made of recycled PP (Alaplen®) and is available for all sizes of the Atlantis System: cm 50x50, 71x71, 100x100.

COMPENSATION PANEL
Accessory with compensation function.

SPACER
Accessory used to ensure the perpendicularity of the Atlantis System pipes. The Spacer is made of recycled PP (Alaplen®), is available for all sizes of the Atlantis System: 50x50 cm; 71x71 and 100x100 and it is usable only with the UNIVERSAL foot.

Cassaforma Muro

Disposable formworks for the simultaneous casting of foundation beams and the slab

Cassaforma Muro *(Wall Formwork)* was designed as an alternative to traditional wood shuttering, which permits casting walls at a height, reversed beams and foundation bases, drastically reducing the time for creating the foundation. This disposable formwork consists of a combination of pipes, panels, collars and stirrups all made of polypropylene.

In combination with the Atlantis System, the Wall Formwork makes it possible to build foundation beams and a slab, which optimises and speeds up the work in the building site, with considerable economic implications.
For this reason this system is greatly appreciated for the fabrication of water collection and/or dispersion tanks, which are always needed in various construction contexts. Due to its easy, quick positioning, it is also perfectly suited for creating ribbed rafts, where the empty spaces between the beams are filled by Atlantis System formworks.

Advantages

Muro Formwork in coherence with its purpose, which is quick and easy work in the construction site, is characterised by simple, lightweight parts that permit intuitive and quick assembly with multiple advantages:

- ✓ Less time used for shuttering and deshuttering.
- ✓ Saving time in cleaning the planking, which will be smooth and clean.
- ✓ Saving time and expenses related to storing, depositing and transporting formworks; the material is not bulky and is not affected by bad weather.
- ✓ A specialised workforce is not required.
- ✓ Simultaneous casting of the foundation beams and slab if combined with the Atlantis system.

Applications

For the creation, in a single solution, of an upper slab (cavities) and internal and perimetric foundation beams for a structure.
For the creation of ribbed rafts (structures not used often normally due to the excessive work of shuttering and deshuttering).
For the creation of water dispersion and/or collection tanks.
For any project that requires, for a variety of reasons, elaborate and geometrically complex shuttering.

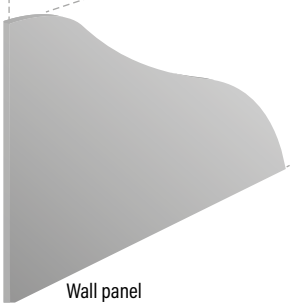
Technical data

Component quantity table based on the height of the Atlantis unit

Atlantis height h (cm)	Stirrups (pcs/ml*)	Collars (pcs/ml*)	Inner Stirrups (pcs/ml*)	Panel ml/ml*
60	2	2	2	1
70	2	2	2	1,3
80	4	4	2	1,5
90	4	4	2	1,7
100	4	4	2	2
110	4	4	2	2
120	4	4	2	2,3
130	6	6	2	2,5
140	6	6	2	2,7
150	6	6	2	3

* Linear metres in reference to the length of each formwork wall

The Wall panel can be easily adopted in height and width to project needs with a simple yard tool, guarateeing maximum assembly speed and flexibility.



Wall panel

Tympanum

Stirrups bracket

Intermediate Stirrups

Collar

u-boot® beton

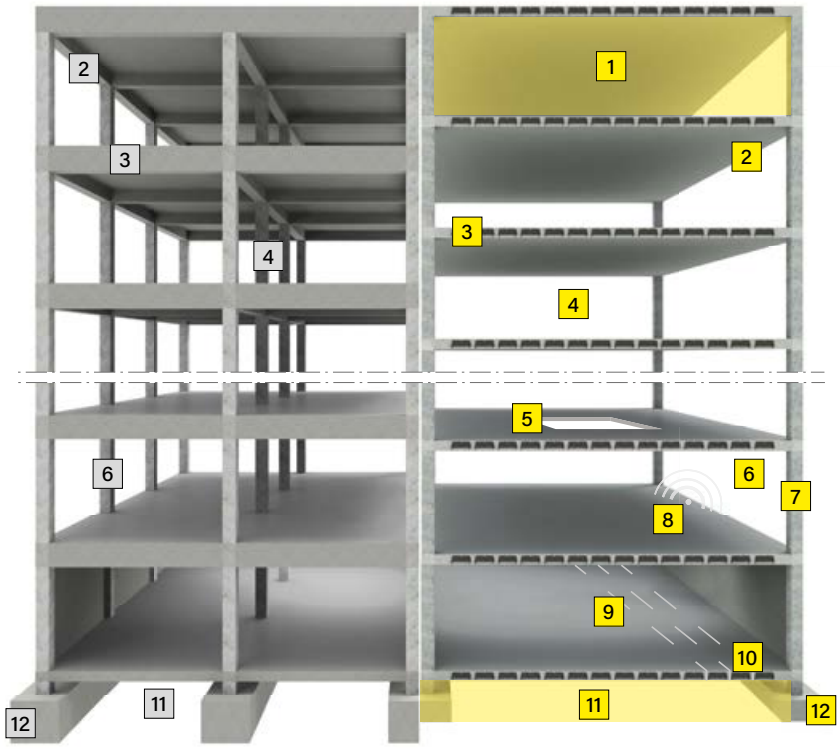
Disposable formwork for two-way voided slabs in reinforced concrete cast on site

U-Boot® Beton is a recycled polypropylene formwork that was designed to create lightened slabs and rafts. The use of U-Boot® Beton formwork makes it possible to create mushroom pillars, with the possibility to have the mushroom in the thickness of the slab.
Thanks to the conic elevator foot, immerging the U-Boot® Beton formworks in the concrete casting will create a gridwork of mutually perpendicular beams closed from the bottom and the top by a flat plate that is built with a single casting; this results in considerable reduction in the use of concrete and steel.
The product is available also in the U-Boot® Beton Cone version, provided with a central cone that facilitates the execution operations. In fact, it allows a visual check of the completion of the lower slab, a better yield of the exterior finishing of the intradox, the decrease of the lifting force during casting, a greater resistance to walkability, the air vent.

U-Boot® Beton is used to create slabs with large span or that are able to support large loads without beams.
Light and quick and easy to position, thanks to their modularity the designer can vary the geometric parameters as needed to adapt to all situations with great architectural freedom.

Advantages

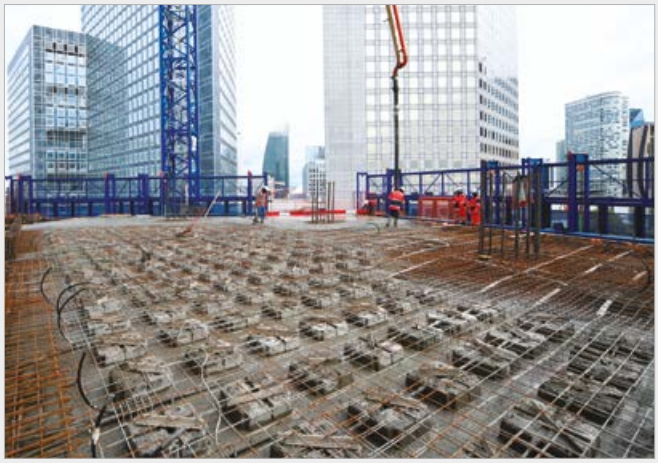
Traditional one way slab	System optimised with U-Boot® Beton



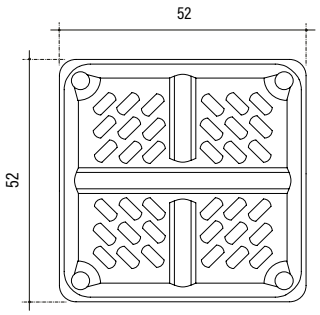
1. INCREASED NUMBER OF FLOORS
2. LACK OF RISING BEAMS
3. REDUCED SLAB THICKNESS
4. LARGE SPAN AND GREAT ARCHITECTURAL FREEDOM
5. FLEXIBILITY IN THE REALIZATION OF OPENINGS AFTER THE EXECUTION OF THE SLAB
6. REDUCTION IN THE NUMBER OF PILLARS
7. OPTIMISATION OF THE SECTION OF PILLARS
8. IMPROVED ACOUSTIC BEHAVIOUR
9. POSSIBILITY OF PASSING UTILITIES IN THE THICKNESS OF THE SLAB
10. POSSIBILITY TO USE IT WITH POST-TENSION
11. REDUCED FOUNDATIONS
12. REDUCTION IN THE OVERALL LOAD OF THE STRUCTURE WEIGHING ON THE PILLARS AND THE FOUNDATION

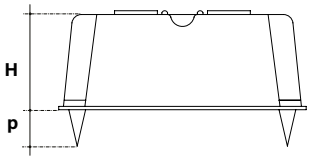
Applications

U-Boot® Beton is used in all applications that require a structural plate together with the need to use less concrete and therefore for a lighter structure.
U-Boot® Beton is the ideal solution for creating slabs with a large span and/or great load-bearing capacity: it is particularly suited for structures that require considerable open spaces, such as executive, commercial and industrial buildings as well as public, civil and residential structures.
It makes it possible to more irregularly distribute the pillars, as beams do not need to be created.
In the case of yards that are difficult to access or restructuring work, U-Boot® Beton, due to its stackability, modularity, lightness and manoeuvrability, can be used to make horizontal structures without the help of handling and hoisting equipment.
With U-Boot® Beton also foundation rafts can be created with a larger thickness with a reduced amount of concrete.



Technical data U-Boot® Beton





SINGLE

Height H (cm)	Dimensions (cm)	Foot p h (cm)	Piece weight (kg)	Volume (m^3/pc)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Pallet weight (kg/PAL)
10	52 x 52	0-5-6-7-8-9-10	1,395	0,0213	110 x 110 x 247	720	1.017
13	52 x 52	0-5-6-7-8-9-10	1,406	0,028	110 x 110 x 212	600	857
16	52 x 52	0-5-6-7-8-9-10	2,044	0,035	110 x 110 x 254	440	912
18	52 x 52	0-5-6-7-8-9-10-12	1,784	0,0396	110 x 110 x 249	440	798
20	52 x 52	0-5-6-7-8-9-10	1,644	0,043	110 x 110 x 236	460	769
22	52 x 52	0-5-6-7-8-9-10-12	1,882	0,047	110 x 110 x 253	440	841
24	52 x 52	0-5-6-7-8-9-10-12	2,033	0,0513	110 x 110 x 254	440	908
25	52 x 52	0-5-6-7-8-9-10	1,849	0,0518	110 x 110 x 249	440	827
26	52 x 52	0-5-6-7-8-9-10-12	2,044	0,055	110 x 110 x 249	420	871
28	52 x 52	0-5-6-7-8-9-10-17	2,152	0,0562	110 x 110 x 236	400	874

Accessories

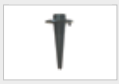
LATERAL SPACER JOINT
It ensures the correct positioning of U-Boot® Beton during the installation phase. Thanks to this system, the connection of the formworks is simple and quick as it is not hampered by the presence of the reinforcement for the ribs.

CLOSING PANEL WITH 4 HOLES
Usable with U-Boot® Beton Single with incorporated feet.

CLOSING PANEL WITH 4 FEET
Usable with U-Boot® Beton Single without incorporated feet.

CLOSING PANEL WITH 5 FEET
Usable with U-Boot® Beton Single without incorporated feet.

MOVABLE FOOT
Available in heights from H 11 cm to H 20 cm - To assemble individually, not above the existing.

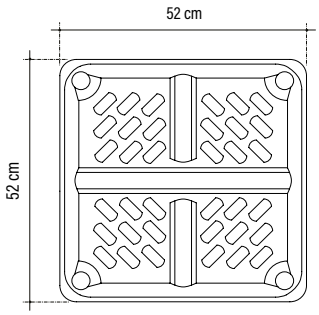


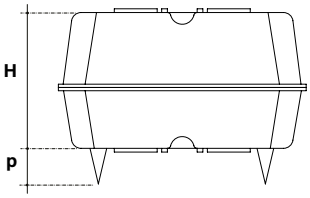
UNMOVABLE FOOT
Available in heights from H 5 cm to H 20 cm - To assemble individually, not above the existing.

UNMOVABLE FOOT H 17 CM
To assemble above the existing.

CONNECTING BRIDGE

Technical data U-Boot® Beton



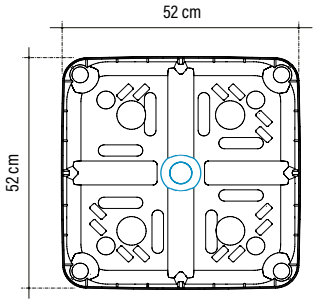


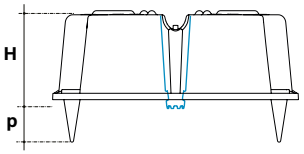
DOUBLE

Height H (cm)	Dimensions (cm)	Foot p h (cm)	Volume (m^3/pc)	U-Boot® UP (h cm)	U-Boot® DOWN (h cm)
20	52 x 52	0-5-6-7-8-9-10-15	0,0426	10	10
23	52 x 52	0-5-6-7-8-9-10-15	0,0493	13	10
26	52 x 52	0-5-6-7-8-9-10-15	0,0563	13*	13*
28	52 x 52	0-5-6-7-8-9-10-15	0,0609	18	10
29	52 x 52	0-5-6-7-8-9-10-15	0,063	16	13
30	52 x 52	0-5-6-7-8-9-10-15	0,0643	20	10
31	52 x 52	0-5-6-7-8-9-10-15	0,0676	18	13
32	52 x 52	0-5-6-7-8-9-10-15	0,07	22*	10*
33	52 x 52	0-5-6-7-8-9-10-15	0,071	20	13
34	52 x 52	0-5-6-7-8-9-10-15	0,0746	24*	10*
35	52 x 52	0-5-6-7-8-9-10-15	0,075	22*	13*
36	52 x 52	0-5-6-7-8-9-10-12-15	0,0792	26*	10*
37	52 x 52	0-5-6-7-8-9-10-15	0,0793	24	13
38	52 x 52	0-5-6-7-8-9-10-12-15	0,0826	25*	13*
39	52 x 52	0-5-6-7-8-9-10-15	0,083	26	13
40	52 x 52	0-5-6-7-8-9-10-12	0,0866	22*	18*
41	52 x 52	0-5-6-7-8-9-10-15	0,0868	28*	13*
42	52 x 52	0-5-6-7-8-9-10-12	0,0909	24*	18*
43	52 x 52	0-5-6-7-8-9-10-12	0,0914	25	18
44	52 x 52	0-5-6-7-8-9-10-12	0,0946	26*	18*
45	52 x 52	0-5-6-7-8-9-10	0,0948	25	20
46	52 x 52	0-5-6-7-8-9-10-12	0,0983	24*	22*
47	52 x 52	0-5-6-7-8-9-10-12	0,0988	25	22
48	52 x 52	0-5-6-7-8-9-10-12	0,1026	24*	24*
49	52 x 52	0-5-6-7-8-9-10-12	0,1031	25	24
50	52 x 52	0-5-6-7-8-9-10-12	0,1063	26*	24*
51	52 x 52	0-5-6-7-8-9-10	0,1068	26	25
52	52 x 52	0-5-6-7-8-9-10-12	0,1075	28	24
53	52 x 52	0-5-6-7-8-9-10	0,108	28	25
54	52 x 52	0-5-6-7-8-9-10-12	0,1112	28	26
56	52 x 52	0-5-6-7-8-9-10-17	0,1124	28	28

* Additional combinations are also possible

Technical data U-Boot® Beton CONE





SINGLE

Height H (cm)	Dimensions (cm)	Foot p h (cm)	Piece weight (kg)	Volume (m^3/pc)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Pallet weight (kg/PAL)
10	52 x 52	0-5-6-7-8-9-10...15	1,579	0,022	110 x 110 x 243	460	739
13	52 x 52	0-5-6-7-8-9-10...15	1,73	0,029	110 x 110 x 248	460	809
14	52 x 52	0-5-6-7-8-9-10...15	1,65	0,031	110 x 110 x 249	460	846
16	52 x 52	0-5-6-7-8-9-10...15	1,784	0,035	110 x 110 x 250	460	834
18	52 x 52	0-5-6-7-8-9-10...15	1,86	0,0387	110 x 110 x 254	460	869
20	52 x 52	0-5-6-7-8-9-10...15	1,806	0,0427	110 x 110 x 249	440	808
22	52 x 52	0-5-6-7-8-9-10...15	1,947	0,0465	110 x 110 x 249	440	870
24	52 x 52	0-5-6-7-8-9-10...15	2,044	0,0503	110 x 110 x 250	440	912
26	52 x 52	0-5-6-7-8-9-10...15	2,195	0,054	110 x 110 x 247	420	935
28	52 x 52	0-5-6-7-8-9-10...15	2,271	0,0576	110 x 110 x 248	420	967
30	52 x 52	0-5-6-7-8-9-10...15	2,25	0,0611	110 x 110 x 251	420	958

Accessories

LATERAL SPACER JOINT
It ensures the correct positioning of U-Boot® Beton during the installation phase. Thanks to this system, the connection of the formworks is simple and quick as it is not hampered by the presence of the reinforcement for the ribs.

CLOSING PANEL WITH 5 FEET
Usable with U-Boot® Beton Cone Single without incorporated feet.

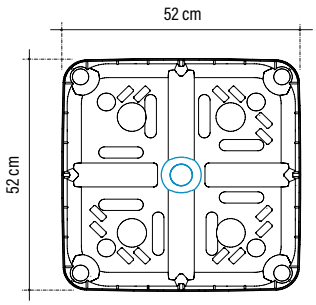
CLOSING PANEL WITH 5 HOLES
Usable with U-Boot® Beton Cone Single with the central cone and incorporated feet.

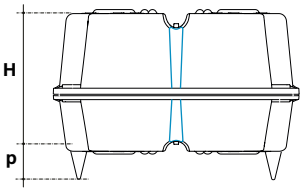
CLOSING PANEL WITH 4 FEET AND A CENTRAL HOLE
Usable with U-Boot® Beton Cone Single with the central cone and without the incorporated feet.

MOVABLE FOOT
Available in heights from H 11 cm to H 20 cm - To assemble individually, not above the existing.

UNMOVABLE FOOT
Available in heights from H 5 cm to H 20 cm - To assemble individually, not above the existing.

Technical data U-Boot® Beton CONE





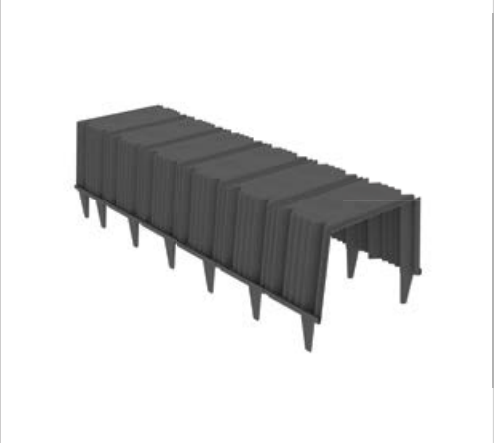
DOUBLE

Height H (cm)	Dimensions (cm)	Foot p h (cm)	Volume (m^3/pc)	U-Boot® UP (h cm)	U-Boot® DOWN (h cm)
20	52 x 52	0-5-6-7-8-9-10...20	0,044	10	10
23	52 x 52	0-5-6-7-8-9-10...20	0,051	13	10
24	52 x 52	0-5-6-7-8-9-10...20	0,053	14	10
26	52 x 52	0-5-6-7-8-9-10...20	0,0581	13*	13*
27	52 x 52	0-5-6-7-8-9-10...20	0,06	14	13
28	52 x 52	0-5-6-7-8-9-10...20	0,0608	18*	10*
29	52 x 52	0-5-6-7-8-9-10...20	0,0641	16	13
30	52 x 52	0-5-6-7-8-9-10...20	0,0647	20*	10*
31	52 x 52	0-5-6-7-8-9-10...20	0,0678	18	13
32	52 x 52	0-5-6-7-8-9-10...20	0,0701	16*	16*
33	52 x 52	0-5-6-7-8-9-10...20	0,0718	20	13
34	52 x 52	0-5-6-7-8-9-10...20	0,0738	18*	16*
35	52 x 52	0-5-6-7-8-9-10...20	0,0755	22	13
36	52 x 52	0-5-6-7-8-9-10...20	0,0778	20*	16*
37	52 x 52	0-5-6-7-8-9-10...20	0,0793	24	13
38	52 x 52	0-5-6-7-8-9-10...20	0,0815	22*	16*
39	52 x 52	0-5-6-7-8-9-10...20	0,083	26	13
40	52 x 52	0-5-6-7-8-9-10...20	0,0854	20*	20*
41	52 x 52	0-5-6-7-8-9-10...20	0,0866	28	13
42	52 x 52	0-5-6-7-8-9-10...20	0,0892	22*	20*
43	52 x 52	0-5-6-7-8-9-10...20	0,0901	30	13
44	52 x 52	0-5-6-7-8-9-10...20	0,093	22*	22*
46	52 x 52	0-5-6-7-8-9-10...20	0,0968	24*	22*
48	52 x 52	0-5-6-7-8-9-10...20	0,1006	24*	24*
50	52 x 52	0-5-6-7-8-9-10...20	0,1043	26*	24*
52	52 x 52	0-5-6-7-8-9-10...20	0,108	26*	26*
54	52 x 52	0-5-6-7-8-9-10...20	0,1116	28*	26*
56	52 x 52	0-5-6-7-8-9-10...20	0,1152	28*	28*
58	52 x 52	0-5-6-7-8-9-10...20	0,1187	30	28
60	52 x 52	0-5-6-7-8-9-10...20	0,1222	30	30

* Additional combinations are also possible

U-bahn® beton

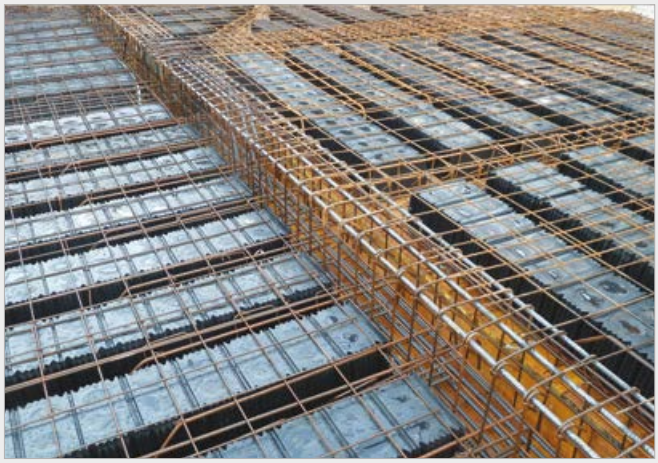
Disposable formwork for one-way lightened voided slabs

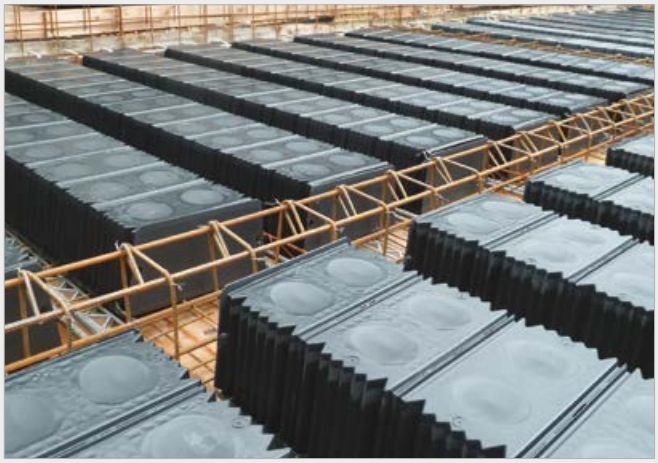


U-Bahn® Beton is a modular formwork in recycled polypropylene that was specifically designed to create one way slabs that are cast on site or semi-prefabricated. The various modules, which overlap on the edges, make it possible to create beams of any length.
Thanks to its conic elevator feet, immersing the U-Bahn® Beton formworks in the concrete casting will obtain thick, parallel beams that are closed from the bottom and top by a flat plate made in sequence with a single casting; this results in reduced use of concrete and steel as well as considerable advantages in terms of fire risk in comparison to formworks in expanded polystyrene. Light and stackable, it is easy to handle during installation, functional in its use, can be exposed to bad weather and is easy to store in the yard with minimum dimensions. Designed according to strict quality criteria, the U-Bahn® Beton formwor is guaranteed to resist without concrete 150 kg concentrated on a load imprint of 8 x 8 cm, as foreseen by current regulations. Unlike with the use of classical hollow brick blocks, the empty space left by U-Bahn® Beton can be used for the passage of cables and systems.

Advantages

- ✓ Reduction in time and cost related to positioning the formworks.
- ✓ High precision and regularity of the width of the concrete slab ribbing.
- ✓ Flexible, practical and simple creation of lengths below the standard size.
- ✓ Greater yard cleanliness and improved disposal of the waste in comparison to traditional formworks (hollow blocks and EPS).
- ✓ Better work performance guarantee in comparison to expanded polystyrene that, due to its crumbling into granules, tends to attach itself statically to everything, and is difficult to remove, compromising the correct filling of the concrete for the beams and the nodes.
- ✓ Possibility to trim the soffit with immediate economic advantages, avoiding expensive plastering.
- ✓ Possibility to perform a single concrete casting for the creation of lightened slabs with the slab also in the soffit.
- ✓ Quicker execution of prefabricated slabs without the need to prepare specific safety vents in the case of a fire.
- ✓ Providing the slab with greater fire resistance.
- ✓ Considerable reduction in the yard of overall volumes as well as the overhead handling of traditional formworks (hollow blocks and EPS) thanks to its characteristics of stackability, modularity, lightness and manoeuvrability.
- ✓ Better seismic behaviour.
- ✓ Advantage of using the cavities created using U-Bahn® Beton, which run along the entire slab, as an equipment room for various types of systems.



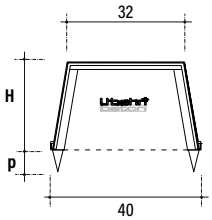


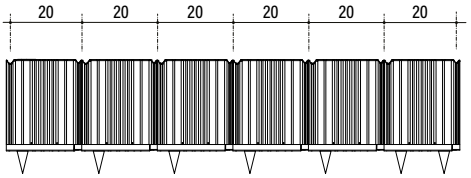
Applications

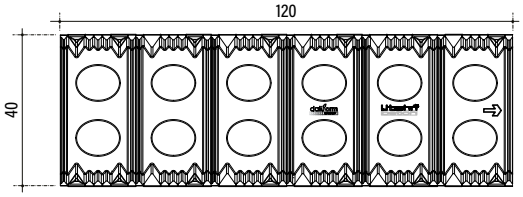
U-Bahn® Beton is the ideal solution for creating lightened one way slabs for all types of structures: residential, commercial, executive, industrial buildings as well as public structures (schools, hospitals, etc).
U-Bahn® Beton is fundamentally used in all applications that require one way beams and slabs as well as a reduced use of concrete and reduced weight. With U-Bahn® Beton slabs with a greater thickness can be created with less concrete.

A particular type of use of U-Bahn® Beton is for underground constructions made with the so-called "top down" technique, where instead of working from bottom to top (as for normal open-air constructions), they proceed building the load-bearing floors from the top to the bottom (precisely top down), alternating the construction of the floor with the excavation of the lower level.

Technical data







Height H (cm)	Dimensions (cm)	Height p h (cm)	Piece weight (kg/pc)	Volume (m^3)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Pallet weight (kg/PAL)
13	120 x 40	0 - 4 - 5 - 6 - 7	2,526	0,055	120 x 120 x 251	300	772
16	120 x 40	0 - 4 - 5 - 6 - 7	2,552	0,068	120 x 120 x 257	300	780
20	120 x 40	0 - 4 - 5 - 6 - 7	2,823	0,086	120 x 120 x 258	300	861
24	120 x 40	0 - 4 - 5 - 6 - 7	3,154	0,102	120 x 120 x 260	300	960

Accessories

FRONTAL CLOSING TYMPANUM
"Stop-flow" panel, necessary to close the "tunnel" created by the U-Bahn® Beton elements.

LOWER CLOSING PLATE
Lower closing plate of the U-Bahn® Beton formwork.

fitslab

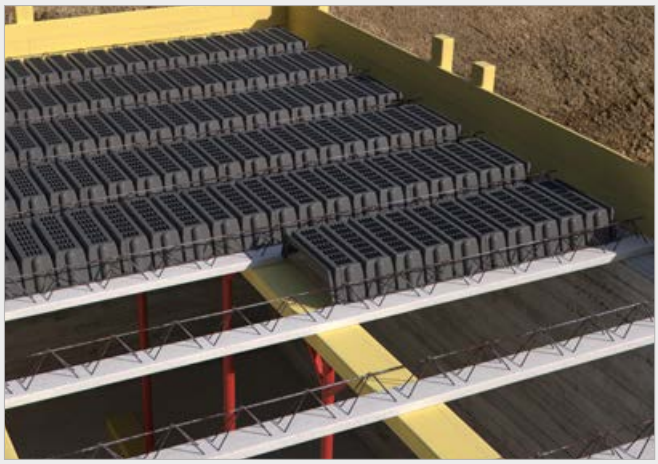
Formworks for voided slabs mixed with reinforced concrete

Fit Slab is a formwork made of polypropylene; its principal function is lightening and, when used in conjunction with prefabricated beams made of pre-stressed reinforced concrete, or lattices or directly on prefabricated lattice slabs, it enables the construction of various types of voided slabs made of reinforced concrete, with extremely quick installation in both reconstructions and new buildings.

This construction technique is quick and practical and yields a higher-performance slab with a lower structural weight compared to that of floor slabs made using conventional methods such as hollow bricks or voided reinforced concrete.
The use of Fit Slab leads to a significant reduction in the loads on the framework and elevated load-bearing walls as well as foundations. In addition, seismic activity which the slab transmits to the elevated structures are reduced in proportion to the weight of the slab.

Advantages

- ✓ Optimal mechanical strength properties;
- ✓ Reduction in costs for the construction of temporary retaining structures.
- ✓ Easily interlocking modules reduce laying time and cost. A team of three men can lay up to 200 square metres of slabs per day.
- ✓ Flexible implementation, practical and simple to scale down both lengthwise and width-wise.
- ✓ Reduction of seismic masses to enhance structural safety.
- ✓ Economical and practical in terms of transportation, handling and outside storage.
- ✓ Gives the slab the best fire resistance properties. For use in public buildings without false ceilings, it can be produced in the Class 1 and 0 versions by specific request.
- ✓ The void below the Fit Slab modules enables the passage of electrical, water and heating installations.
- ✓ Better site clean up and waste disposal compared to conventional lightening measures (hollow bricks and EPS).
- ✓ On-site safety. With the slab shored up at the beams, Fit Slab supports the weight of the workers and the reinforced concrete.
- ✓ Underfoot safety for workers. Eliminates risk of collapse or falls resulting from the fragility of the hollow brick.
- ✓ Option of covering floor plans with articulated forms.



Applications

Fit Slab facilitates the implementation of:

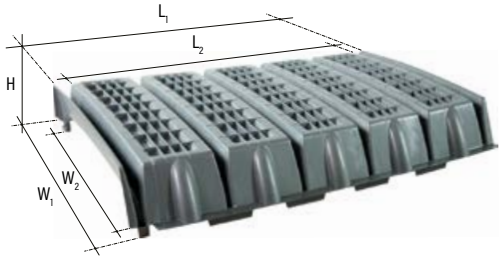
✓ Voided slabs with prefabricated beams made of pre-stressed reinforced concrete or lattices (Bausta);

✓ Voided slabs with plates made of reinforced concrete (prefabricated lattice slabs);

✓ Voided slabs made of reinforced concrete cast in situ with parallel or cross-hatched ribbing;

For both for reconstruction and new buildings, in both civil and in industrial environments. Fit Slab can also be used in seismic risk areas; in fact, the upper reinforced-concrete finishing slab can serve the purpose of a "plane diaphragm", ensuring the complete transmission of horizontal forces to the primary anti-seismic system.

Technical data



Height H (cm)	Dimensions L_1 x W_1 (cm)	Dimensions L_2 x W_2 (cm)	Piece weight (kg/pc)	Volume (m^3)	Pallet dimension (cm)	Quantity (pcs/PAL)	Pallet weight (kg/PAL)
9	79,7 x 56	77,5 x 52	1,911	0,0326	80 x 120 x 244	200	390
14	79,7 x 56	77,5 x 52	1,995	0,05	80 x 120 x 249	200	407

Fit Slab has excellent mechanical strength and solidity properties and is designed so that the formworks interlock with each other. Fit Slab is designed so that, if necessary, it can easily be cut lengthwise or width-wise.

Accessories

ABUTMENT
Placed at the beginning and at the end of each row, acts as a "closing gable" and facilitates the casting of the upper cap of concrete without it overflowing and pouring out of the formworks.

EOLO

Disposable formworks to create perforated floors for air distribution in the composting systems

Eolo represents the efficient, fast and economic remedy for the realisation of a perforated floor in reinforced concrete with high load-bearing capacity, which can be also accessed by heavy vehicles.
Thanks to the vertical asymmetric nozzles, axially perforated, it can be conveniently used for the distribution of air in composting, waste stabilisation systems, deodorising systems and for aerating the floors of the storage rooms for the storage/curing of food products.

It is known since ancient times that storage aeration was required to avoid the formation of humidity which lead to the spreading of undisturbed mould and bacteria, deteriorating the goods (David Macaulay "la città Romana").
Eolo is constructed with recycled plastic and it is eco-compatible, and it is composed of special high nozzles which permit the realisation of a 6 cm high perforated plate.
Through the Eolo elements the air is uniformly distributed in the air cavity and it is then blown into the overhead environment.

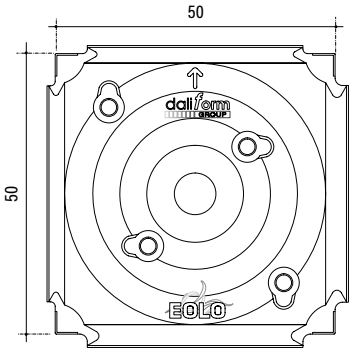
Advantages

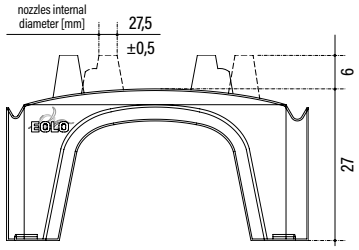
- ✓ Efficient ventilation in all directions thanks to the cavity created by the Eolo formworks.
- ✓ High load-bearing capacity of the structure both in terms of static loads and in terms of moving heavy vehicles.
- ✓ Ease of positioning due to lightness and simple linking of the modules.
- ✓ Possibility of maintenance/cleaning through the inspection channels.
- ✓ Reduction of reinforcement time thanks to the presence of spacers integrated with the nozzles which host the welded mesh.
- ✓ Collection of possible leachate.

Applications

Eolo is used in all applications which require the presence of self-bearing perforated floors and with high resistance both in terms of static loads and in terms of moving heavy vehicles, such as: composting systems; waste stabilisation systems; biofiltration systems; phytopurification tanks; food storage rooms.

Technical data





Height	Dimensions	Quantity of concrete to the crown	Piece weight	Diffuser nozzles	Pallet dimensions	Pieces per pallet	Sq.mt. per pallet	Pallet weight
(cm)	(cm)	(m^3/m^2)	(kg)	internal Ø (mm) / height (cm)	(cm)	(pcs/PAL)	(m^2/PAL)	(kg/PAL)
27	50 x 50	0,04	1,974	Ø 27,5 ± 0,5 / H 6	110 x 110 x 248	220	55	447

4 plugs (internal diameter Ø 28 mm) to close the nozzles with their dirt-stopping grilles are included.

Eolo represents the efficient, fast and economic remedy for the realisation of a perforated floor in reinforced concrete with high load-bearing capacity, which can be also accessed by heavy vehicles.

IGLU' green roof

Disposable formworks for the creation of roof gardens

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

A roof-top garden is the most successful solution against the continuous cementification of the territory. The techniques and materials for their creation have evolved and their use have become fundamentally important.

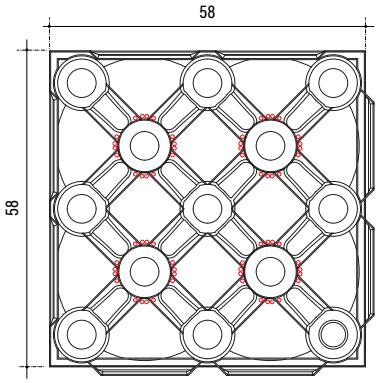
- ✓ Control of meteoric waters.
- ✓ Improvement of the macro- and micro-climate.
- ✓ Sound insulation.
- ✓ Improvement of air quality.
- ✓ Ecological balance habitats for animals and plants are re-created with the formation of ecological corridors.
- ✓ Mitigation of environmental impact.
- ✓ Creation of new accessible surfaces and green areas.
- ✓ 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.

Applications

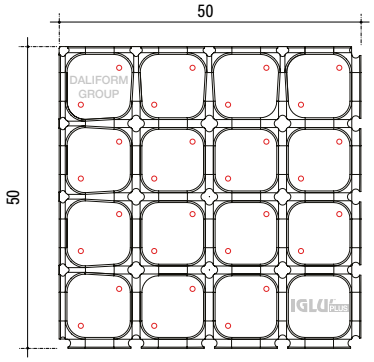
Iglu'® Green Roof is ideal for creating roof-top gardens (extensive or intensive), making them safe to create without damaging waterproofing.
Extensive roof garden (or green roof) is a type of green cover for medium-large surfaces, with reduced load capacity, which does not require special implementation 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).
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.

Technical data

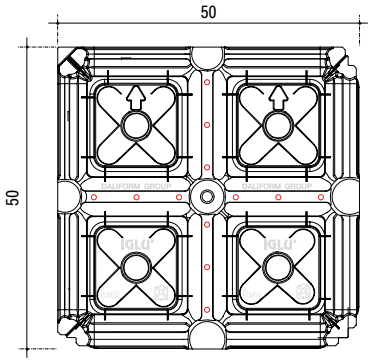
reserve/dispersion



reserve



dispersion



Height	Function	Dimensions	Piece weight	Pallet dimensions	Pieces per pallet	Sq.mt. per pallet	Pallet weight
(cm)	-	(cm)	(kg)	(cm)	(pcs/PAL)	(m^2/PAL)	(kg/PAL)
5	RESERVE / DISPERSION	58 x 58	1,136	120 x 120 x 256	960	320	1.104
9	RESERVE / DISPERSION	58 x 58	1,19	120 x 120 x 262	996	332	1.199
4	RESERVE	50 x 50	0,865	110 x 110 x 108	400	100	359
4	DISPERSION	50 x 50	0,735	110 x 110 x 250	600	150	454
6	DISPERSION	50 x 50	0,757	110 x 110 x 253	600	150	467
8	DISPERSION	50 x 50	0,789	110 x 110 x 254	600	150	487
10	DISPERSION	50 x 50	0,833	110 x 110 x 246	580	145	515
12	DISPERSION	50 x 50	0,865	110 x 110 x 249	580	145	515

PRATOPRATICO®
LA GRIGLIA SALVAERBA

Grid for driveway surfaces with gravel or grass finishing

Pratopratico® represents an ingenious system to make a lawn treadable, protecting it from damage caused by the transit and parking of vehicles, including heavy vehicles, in any kind of atmospheric conditions.

The essence of Pratopratico® is very simple: it's a question of "arming" the natural soil surface with a modular flooring made up of a grating with a highly robust cellular structure where the turf, which remains a few millimitres below the higher limit of the flooring walls, is protected from squashing or stress.
The grating is made of a particular plastic material with high quality technical/mechanical characteristics, non-toxic and unattackable by atmospheric and chemical agents.
The Pratopratico® flooring develops rapidly and economically through the union of various gratings with a male/female hooking system.
The aesthetic, functional and ecological advantages offered by this innovative flooring are evident: a lawn surface naturally filters the soil's meteoric waters, respecting the site's hydrogeological balance.
During the summer period, moreover, it does not produce undesired thermic effects linked to overheating of the surface with natural finishing.

Advantages

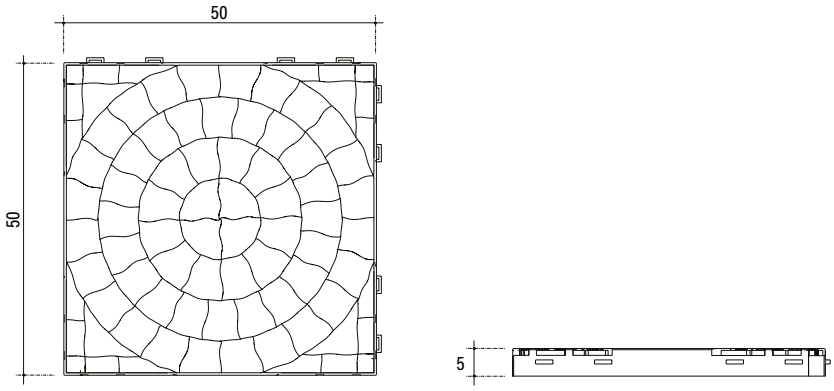
- ✓ It protects the lawn from damage caused by the transit and parking of vehicles.
- ✓ Easy to pose, it allows the creation of great surfaces in less time.
- ✓ It respects the soil's vital structure and protects the lawn in a non-invasive way.
- ✓ It favours drainage and the exchange of nutritional elements that benefit a rapid and solid root growth.
- ✓ It allows natural meteoric waters to filter in the soil while respecting the hydrogeological balance of the site.
- ✓ It acts as a surface stabilizer; it can be used to contrast soil wash away and erosion phenomena on slopes.
- ✓ It does not absorb humidity and does not transmit heat, allowing the grass to grow naturally.
- ✓ During the summer period it does not produce undesired thermic effects linked to overheating of the surface with natural finishing.
- ✓ It gives the grass a spectacular "mosaic effect".
- ✓ The curvilinear shape considerably improves the resistance of the vertical walls to compression and bending.
- ✓ The product can be entirely recycled in full respect of the environment.

Applications

✓ Access areas for cars and motor vehicles.
✓ Public and private parking areas.
✓ Bicycle tracks and pedestrian walkways.
✓ Paths in golf courses and sport plants.
✓ Equipped areas (gazebo and barbecue areas, etc.).
✓ Ornamental gardens.
✓ Gravel paths.
✓ Pool borders and beach paths (not presenting any sharp corners, the flooring can be treaded barefoot).
✓ Lawn protection.
✓ Consolidation of slopes to contrast wash away and erosion phenomenons.
✓ Temporary surfaces, on chance pieces of land for various events (fairs, markets, tent theatres, etc.).
✓ Surrounding surfaces for tree trunks.
✓ Heliports and strips for ultralight aircraft.
✓ Protection of lawn surface against damages caused by animals (dogs, etc.).
✓ Roof gardens.
✓ Covers for flat roofs and terraces for the protection of the waterproofing layer.

With Pratopratico® it is possible to respect urban constraints and render the areas, which have to be green areas by precept, functional.

Technical data



Color	Dimensions (cm)	Pieces per sq.mt. (pcs/m²)	Piece weight (kg)	Resistance (t/m²)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m²/PAL)	Pallet weight (kg/PAL)
GREEN	50 x 50 x 5	4	1,593	> 320	100 x 120 x 220	212	53	346
BROWN	50 x 50 x 5	4	1,593	> 320	100 x 120 x 220	212	53	346
WHITE	50 x 50 x 5	4	1,593	> 320	100 x 120 x 220	212	53	346

Accessories

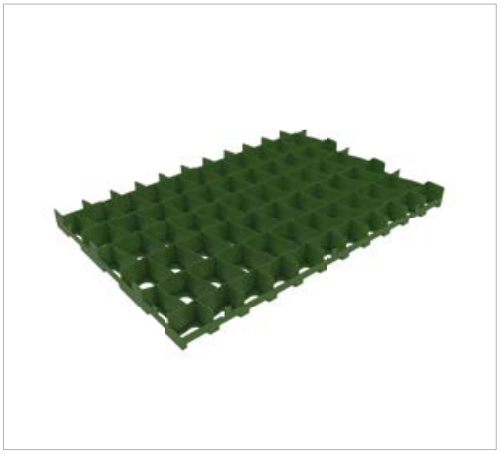
SIGNALLING ELEMENT
These are available in the catalogue in the classic 3 colours provided by the Highway Code: white (free parking area), yellow (reserved parking area, for ex. parking spaces reserved for invalids) and blue. It is possible to manufacture colours ad hoc on request.

DEEPLY PENETRATING STAKES
Deeply penetrating stakes to anchor the grating on slopes.

E.C.O. PRATOPRATICO®

LA GRIGLIA SALVAERBA

Grid for driveway surface with grass finishing



E.C.O. by Pratopratico® is an ornamental element suitable for vehicles that allows the creation of grassy driveways or paths and equipped areas, keeping the soil compact and protecting the grass from being crushed, especially in frequently used areas.
The essence of E.C.O. is very simple: it's a question of "arming" the natural soil surface with a modular flooring made up of a grating with a highly robust cellular structure where the turf, which remains a few millimetres below the higher limit of the flooring walls, is protected from squashing or stress.

E.C.O. by PRATOPRATICO® is made of a particular plastic material (half pure with high technical and mechanical performance and half recycled) that is able to offer an excellent quality/price ratio.
Is made with 50% virgin material, in order to favorably combine cost-effectiveness and product quality. The use of recycled material represents a laudable initiative from an ecological point of view.

Advantages

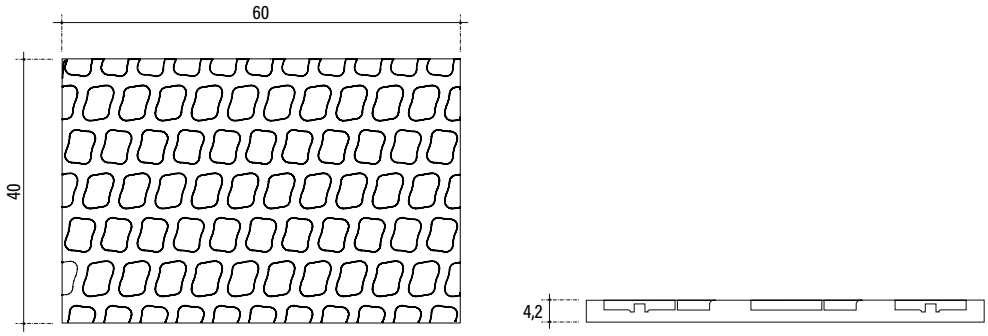
- ✓ It protects the lawn from damage caused by the transit and parking of vehicles.
- ✓ Easy to pose, it allows the creation of great surfaces in less time.
- ✓ It respects the soil's vital structure and protects the lawn in a non-invasive way.
- ✓ It favours drainage and the exchange of nutritional elements that benefit a rapid and solid root growth.
- ✓ It allows natural meteoric waters to filter in the soil while respecting the hydrogeological balance of the site.
- ✓ It acts as a surface stabilizer; it can be used to contrast soil wash away and erosion phenomena on slopes.
- ✓ It does not absorb humidity and does not transmit heat, allowing the grass to grow naturally.
- ✓ During the summer period it does not produce undesired thermic effects linked to overheating of the surface with natural finishing.
- ✓ The curvilinear shape considerably improves the resistance of the vertical walls to compression and bending.
- ✓ The product can be entirely recycled in full respect of the environment.

Applications

✓ Access areas for cars and motor vehicles.
✓ Public and private parking areas.
✓ Bicycle tracks and pedestrian walkways.
✓ Paths in golf courses and sport plants.
✓ Equipped areas (gazebo and barbecue areas, etc.).
✓ Ornamental gardens.
✓ Lawn protection.
✓ Consolidation of slopes to contrast wash away and erosion phenomenons.
✓ Temporary surfaces, on chance pieces of land for various events (fairs, markets, tent theatres, etc.).
✓ Surrounding surfaces for tree trunks.
✓ Heliports and strips for ultralight aircraft.
✓ Protection of lawn surface against damages caused by animals (dogs, etc.).
✓ Roof gardens.
✓ Covers for flat roofs and terraces for the protection of the waterproofing layer.

With E.C.O. by Pratopratico® it is possible to respect urban constraints and render the areas, which have to be green areas by precept, functional.

Technical data



Color	Dimensions (cm)	Pieces per sq.mt. (pcs/m²)	Piece weight (kg)	Resistance (t/m²)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m²/PAL)	Pallet weight (kg/PAL)
GREEN	60 x 40 x 4,2	~ 4	1,297	> 300	100 x 120 x 218	260	62,4	345
WHITE	60 x 40 x 4,2	~ 4	1,297	> 300	100 x 120 x 218	260	62,4	345

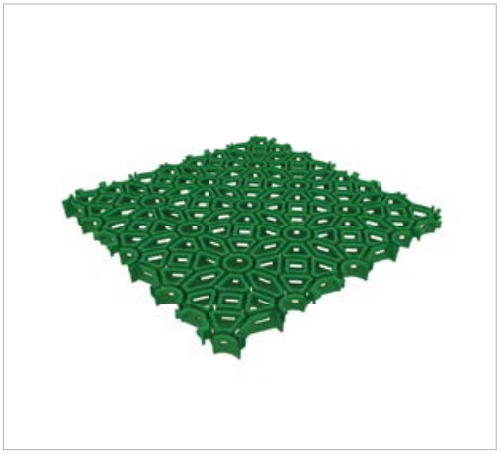
Accessories

SIGNALLING ELEMENT
These are available in the catalogue in the classic 3 colours provided by the Highway Code: white (free parking area), yellow (reserved parking area, for ex. parking spaces reserved for invalids) and blue. It is possible to manufacture colours ad hoc on request.

DEEPLY PENETRATING STAKES
Deeply penetrating stakes to anchor the grating on slopes.

greenpark

Grid for driveway surface with grass finishing



Green Park is a modular product made of environmentally friendly, recyclable thermoplastic resin. It makes grassy areas suitable for vehicular traffic by protecting the surface from damage caused by the transit and parking of wheeled vehicles, including heavy equipment.
It is distinguished by its ornamental effect, easy to install, maintenance-free, and withstands the stresses of use under extreme environmental conditions over time.
The different contouring on the two opposite sides make Green Park extremely versatile, in that it can be installed with either side facing upwards; when it is installed with the thinnest ribs facing upwards, this creates drive-over areas and paving with grassy or gravel finishes, and installation with the thinnest ribs facing downwards creates temporary green areas for pedestrian use.
It is available in green and white to harmonise with any finish, even with gravel while preventing its dispersion, among other things.

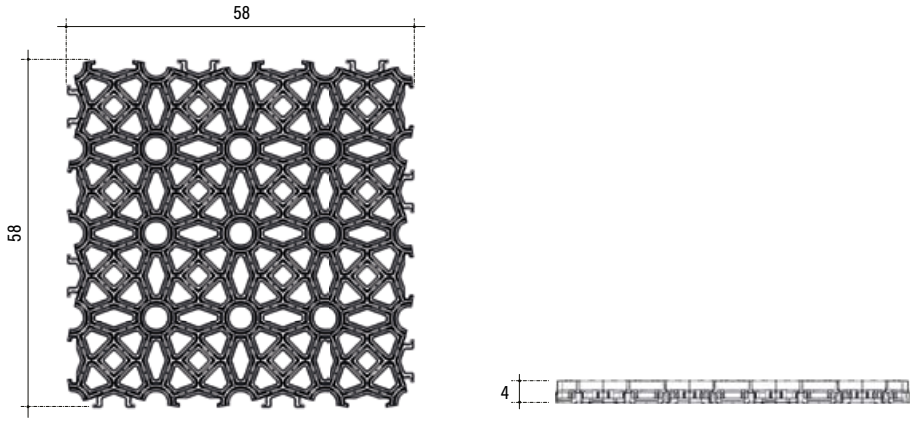
Advantages

- ✓ Ecological due to the use of recyclable, environmentally friendly, reusable materials.
- ✓ Light and easy to pose.
- ✓ It respects the soil's vital structure and protects the lawn in a non-invasive way.
- ✓ Due to its unique coupling system, the grid can be mounted either horizontally or vertically in the same layout plan, at right angles or staggered, and even overlapping or with alternating sides in the same substrate.
- ✓ If used temporarily on an existing lawn, it can be removed and repositioned at any time, so that it can be used several times over the course of its service life.
- ✓ Individual cut pieces can be coupled with intact pieces, virtually eliminating product waste or scraps.
- ✓ The interior of Green Park offers a water grid (tubing) with the capacity to accumulate a water reserve of 1.5 l/m^2.
- ✓ This guarantees the gradual distribution of water, prevents stagnation and favours the uniform growth of the lawn.
- ✓ With Green Park, the draining properties of the soil remain unaltered (by more than 90%), keeping the surface passable during all seasons and under any weather conditions, thereby avoiding the formation of mud and always keeping the surface dry.
- ✓ During the summer it does not produce unwanted thermal effects due to overheating of the sealing surfaces such as those in the asphalt.
- ✓ It gives the turf a spectacular ornamental effect.
- ✓ Both sides of the grating have non-slip surfaces which makes it suitable for installation in walkways.

Applications

- ✓ Access areas for cars and motor vehicles.
- ✓ Public and private parking areas.
- ✓ Bicycle tracks and pedestrian walkways.
- ✓ Paths in golf courses and sport plants.
- ✓ Equipped areas (gazebo and barbecue areas, etc.).
- ✓ Ornamental gardens.
- ✓ Lawn protection.
- ✓ Consolidation of slopes to contrast wash away and erosion phenomenons.
- ✓ Temporary surfaces, on chance pieces of land for various events (fairs, markets, tent theatres, etc.).
- ✓ Surrounding surfaces for tree trunks.
- ✓ Heliports and strips for ultralight aircraft.
- ✓ Protection of lawn surface against damages caused by animals (dogs, etc.).
- ✓ Roof gardens.
- ✓ Covers for flat roofs and terraces for the protection of the waterproofing layer.

Technical data



Color	Dimensions (cm)	Pieces per sq.mt. (pcs/m²)	Piece weight (kg)	Load capacity with empty cells (t/m²)	Load capacity with full cells (t/m²)	Water reserve (l/m²)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m²/PAL)	Pallet weight (kg/PAL)
GREEN	58 x 58 x 4	~ 3	1,796	187	360	1,5	120 x 120 x 240	420	140	768
WHITE	58 x 58 x 4	~ 3	1,796	187	360	1,5	120 x 120 x 240	420	140	768

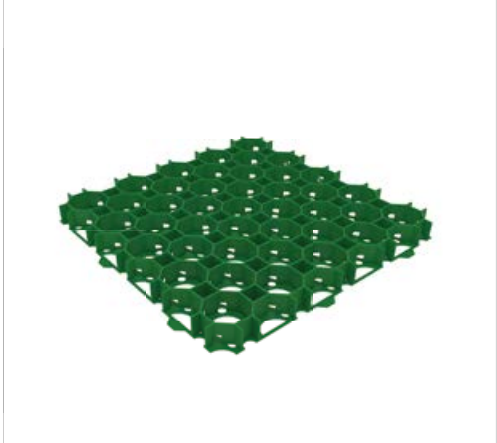
Accessories

SIGNALLING ELEMENT
These are available in the catalogue in the classic 3 colours provided by the Highway Code: white (free parking area), yellow (reserved parking area, for ex. parking spaces reserved for invalids) and blue. It is possible to manufacture colours ad hoc on request.

LOCKING RINGS
Locking rings to strengthen the joining of the grids where needed; this is mandatory for installation on inclined surfaces.

erby SALVAPRATO

Grid for driveway surface with grass finishing



Salvaprato ERBY is a modular plastic grid for outdoors that allows to realize paved driveways with lawn finish, with great aesthetic, functional, ecological and economic advantages.
Salvaprato ERBY with its particular structure protects, in any weather, the turf from the stresses produced by the passage and parking of motor vehicles and, at the same time, it promotes the growth and rooting of natural grass. The principle is to arm the natural surface of the soil with the grids provided with a very robust cellular structure in which the sward, remaining few mm below the vertical walls of the pavement, is protected from crushing.
Easy and intuitive to install thanks to the male/female interlocking hooking system, it allows you to prepare large areas quickly.
With Salvaprato ERBY you get the immediate consolidation of the soil that can be immediately used by vehicles and which only requires normal cultural practices. Furthermore, the possibility to make use of grassy areas in urban centers allows the creation of green spaces, natural habitats of insects and small animals. Salvaprato ERBY allows high values of compressive strength depending on the type of the underlying soil, substrate, and corresponding thicknesses.

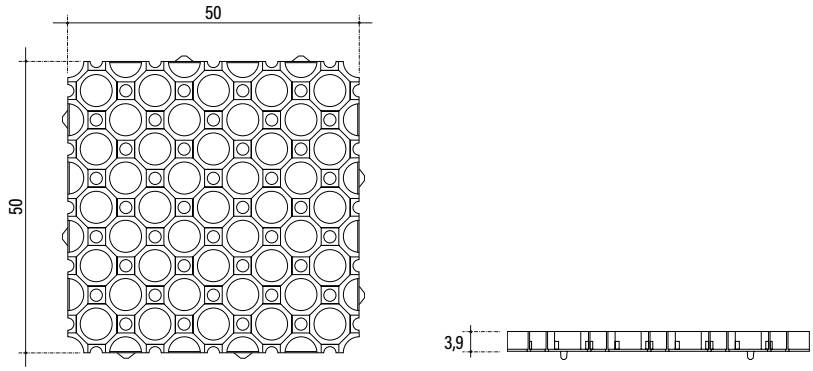
Advantages

- ✓ Ecological due to the use of recyclable, environmentally friendly, reusable materials.
- ✓ It protects the lawn from damage caused by the transit and parking of vehicles.
- ✓ Easy to pose, it allows the creation of great surfaces in less time.
- ✓ It respects the soil's vital structure and protects the lawn in a non-invasive way.
- ✓ It favours drainage and the exchange of nutritional elements that benefit a rapid and solid root growth.
- ✓ It allows natural meteoric waters to filter in the soil while respecting the hydrogeological balance of the site.
- ✓ It acts as a surface stabilizer; it can be used to contrast soil wash away and erosion phenomena on slopes.
- ✓ It does not absorb humidity and does not transmit heat, allowing the grass to grow naturally.
- ✓ During the summer period it does not produce undesired thermic effects linked to overheating of the surface with natural finishing.
- ✓ The product can be entirely recycled in full respect of the environment.

Applications

- ✓ Access areas for cars and motor vehicles.
- ✓ Public and private parking areas.
- ✓ Bicycle tracks and pedestrian walkways.
- ✓ Paths in golf courses and sport plants.
- ✓ Equipped areas (gazebo and barbecue areas, etc.).
- ✓ Ornamental gardens.
- ✓ Lawn protection.
- ✓ Consolidation of slopes to contrast wash away and erosion phenomenons.
- ✓ Temporary surfaces, on chance pieces of land for various events (fairs, markets, tent theatres, etc.).
- ✓ Surrounding surfaces for tree trunks.
- ✓ Heliports and strips for ultralight aircraft.
- ✓ Protection of lawn surface against damages caused by animals (dogs, etc.).
- ✓ Roof gardens.
- ✓ Covers for flat roofs and terraces for the protection of the waterproofing layer.

Technical data



Color	Dimensions (cm)	Pieces per sq.mt. (pcs/m²)	Piece weight (kg)	Resistance (t/m²)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m²/PAL)	Pallet weight (kg/PAL)
GREEN	50 x 50 x 3,9	4	1,365	> 210	100 x 120 x 218	240	60	336

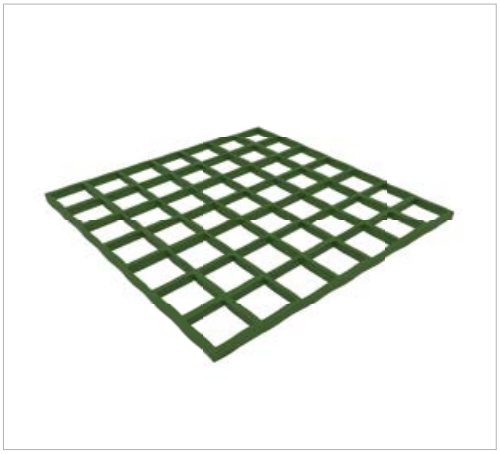
Accessories

SIGNALLING ELEMENT
These are available in the catalogue in the classic 3 colours provided by the Highway Code: white (free parking area), yellow (reserved parking area, for ex. parking spaces reserved for invalids) and blue. It is possible to manufacture colours ad hoc on request.

DEEPLY PENETRATING STAKES
Deeply penetrating stakes to anchor the grating on slopes.

easypark®

Protective grid for already established lawns



Easy Park® is a highly versatile technical grating to pave natural surfaces, made of thermoplastic resin, UV-stabilized and environmentally friendly.
It represents the ideal solution for permanently (or provisionally) creating driveways, parking areas, walkways, or islands according to various needs.
Lightweight, easy and intuitive to install, Easy Park® is especially suitable for already turfed lawn areas where the grating only has to be laid.
Thanks to the modular development and to the simple male/female interlocking hooking system, it allows you to prepare large areas quickly. If necessary, it is easily and quickly removable, ready to be reused.

Easy Park® protects the natural surface of the soil that can be immediately used for transit and parking of motor vehicles.
The principle is to arm the surface with technical grids provided with a very robust cellular structure in which the sward, remaining few mm below the vertical walls of the pavement, is protected from crushing.
The weight of the car is thus distributed over a large flooring surface, which, in turn, presses the underlying soil enough to compact it.
This avoids constipation of the soil, which, especially in the presence of rain, would cover the area with mud making the site non-viable and that would result in bad drainage and asphyxiation of the roots.
Easy Park®, is highly resistant to weathering, is environmentally friendly, and respects the natural characteristics of the soil, facilitating the permeability and the exchange of nutrients of the substrate.

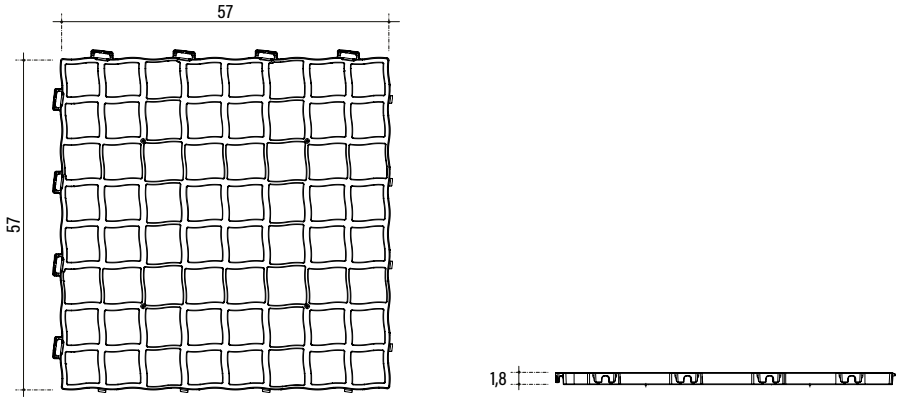
Advantages

- ✓ Extreme versatility, easy to position, light-weight, intuitive interlocking hooking system with male/female guides that makes it possible to cover larges surfaces in a short period of time, with a resulting reduction in installation costs.
- ✓ Ecologic thanks to the use of material that is recyclable, ecocompatible and reusable.
- ✓ Particularly flexible, it follows the profile of the ground even in the case of uneven surfaces.
- ✓ It respects the vital structure of the ground, protecting the lawn in a non-invasive manner.
- ✓ Promotes draining and the exchange of nourishing elements, which benefits quick and solid root formation.
- ✓ It permits the rain water to filter naturally through the ground, respecting the site's hydrogeological balance.
- ✓ It enhances the beauty of the lawn.

Applications

Easy Park® can be used to permanently or temporary protect a lawn in the case of events, concerts, exhibitions, festivals, as a landing area for helicopters and microlights, on any surface and also as a parking area.
It is ideal for quickly creating pedestrian paths, lanes, parking areas, equipped emergency areas, tent cities, reception centres, without it modifying the status of the locations or changing the environmental impact.

Technical data



Color	Dimensions (cm)	Pieces per sq.mt. (pcs/m²)	Piece weight (kg)	Resistance (t/m²)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m²/PAL)	Pallet weight (kg/PAL)
GREEN	57 x 57 x 1,8	3	0,877	> 200	120 x 120 x 120 120 x 120 x 240	240 480	80 160	224 440
GREY	57 x 57 x 1,8	3	0,877	> 200	120 x 120 x 120 120 x 120 x 240	240 480	80 160	224 440

At the end of a growing season the entire flooring will be fully integrated into the lawn. In case of immediate use of the paved surface, the possible presence of roughness or bumps may raise, even if only momentarily, the flooring subjected to the pressure of the tires. In these cases you should use anchoring forks until the natural growth of the grass gives solidity to the whole system by enveloping the grating.


Easy Park® just after installation


Easy Park® after a few days


Easy Park® after 10 days

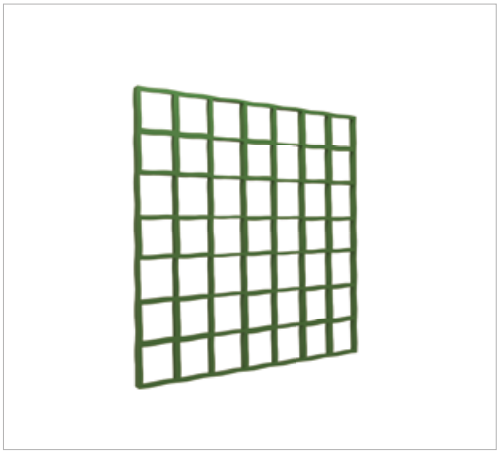
Accessories

SIGNALLING ELEMENT
These are available in the catalogue in the classic 3 colours provided by the Highway Code: white (free parking area), yellow (reserved parking area, for ex. parking spaces reserved for invalids) and blue. It is possible to manufacture colours ad hoc on request.

DEEPLY PENETRATING STAKES
Deeply penetrating stakes to anchor the grating on slopes.

V-GREEN®

Grid for vertical climbing green



The ongoing global warming, the pollution in urban areas and the need to reduce energy consumption require solutions to mitigate the effects of these phenomena. Then predict greater use of "green" for buildings is a viable technical solution to these economic and aesthetic problems.
For this reason, the theme of the vertical green has become a constant in recent years in the architectural design for both new and renovated buildings.

The **V-Green®** *(Vertical Green)* system is an opportunity to bring life and greenery in urban gray.
V-Green® is a support for climbing plants to employ for the vegetable covers of perimetric walls of a building. V-Green® offers easy and affordable realization of true vertical gardens, which produce effects of compensation, mitigation and improvement not only on the building but also on the surrounding environment, thanks to the purifying action of the absorption of CO_2 and fine dust, as well as to one beneficial aesthetically and psychologically.

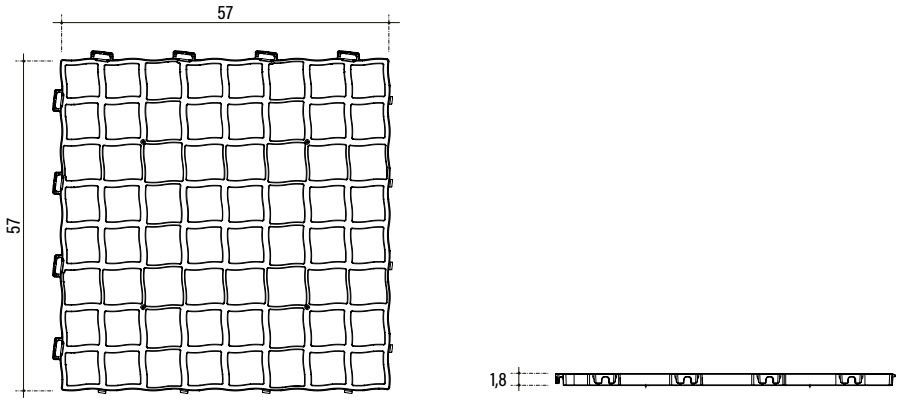
Advantages

- ✓ Protection of building surfaces from sunlight and from the effects of rainwater.
- ✓ Thermal insulation and barrier protection from the wind, resulting in energy savings.
- ✓ Improvement of the microclimate by lowering the external heating: at night the vegetation prevents heat loss, while in daylight hours, it absorbs the heat due to perspiration keeping the building cooler.
- ✓ Sound insulation: the presence of green and its substrate opposes a natural barrier to the spread of noises.
- ✓ Improving air quality: through chlorophyll synthesis, plants absorb carbon dioxide and release oxygen, and certain species, also absorb particulate matter and pollutants.
- ✓ Improvement of the aesthetics and reduction of visual impact.
- ✓ Increased biodiversity: it creates ideal habitats for plants and birds.
- ✓ Visual and psychological benefits: the presence of vegetation, especially in cities, where it is lacking, spreads positive feelings, reduces the stress and relaxes.

Applications

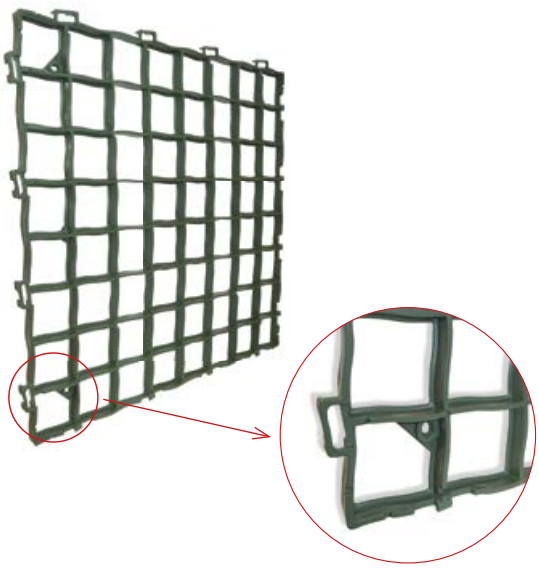
V-Green® is an excellent tool for urban architecture that condenses, into a single application, aesthetics, technical performance of insulation, protection of the building's external surface and improvement of the environment.
V-Green® is used on new or renovated buildings for any use: residential, office, commercial, industrial and public buildings such as schools, hospitals, ministries.

Technical data



Color	Dimensions (cm)	Pieces per sq.mt. (pcs/m²)	Piece weight (kg)	Resistance (t/m²)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m²/PAL)	Pallet weight (kg/PAL)
GREEN	57 x 57 x 1,8	3	0,877	> 200	120 x 120 x 120 120 x 120 x 240	240 480	80 160	224 440
GREY	57 x 57 x 1,8	3	0,877	> 200	120 x 120 x 120 120 x 120 x 240	240 480	80 160	224 440

The V-Green® grid is permanently fixed to the wall by means of plugs to be inserted into the holes.
Easy and intuitive to install, allows you to prepare large areas quickly. V-Green® is a modular and flexible product made from recycled plastic (PE LD) UV-stabilized and environmentally friendly.



EASY RIDE

Grid for the solidification of equestrian foundations

Easy Ride is a grid made out of recycled plastic that is environmentally friendly and UV ray stabilised, which makes it possible to improve and stabilise surfaces crossed by animals, also large ones, preserving mobility and safeguarding the general hygiene of their living environment.
Easy Ride, thanks to its elasticity and stability, is particularly suited to the field of horse riding because it prevents the horse from suffering limb injuries, especially those resulting from jumping or running a high speed, providing it with greater adherence to the ground and therefore improved dynamic equilibrium.

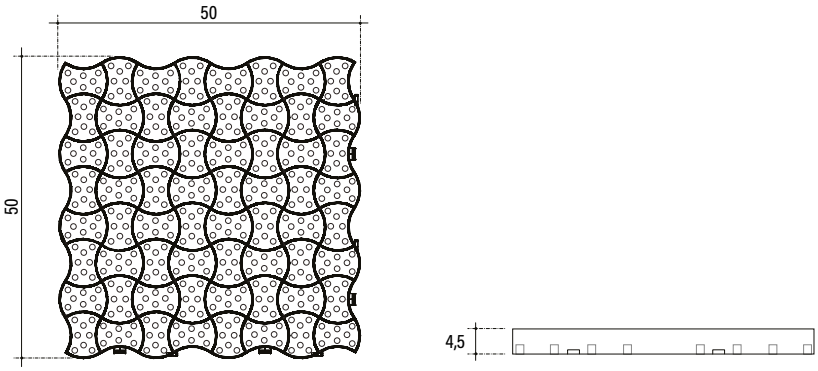
Advantages

- ✓ Elimination of the mud, providing the ground with a considerable draining capacity due to its very high permeability: 88%.
- ✓ Stabilisation of uneven and rough surfaces, thanks to its high resistance due to the tensile support structure that effectively distributes the loads.
- ✓ Reduction in maintenance work for the foundation thanks to the elimination of holes and ditches.
- ✓ Considerable draining capacity.
- ✓ Preservation of the stratigraphy of the technical base.
- ✓ Greater hygiene of the parking and manoeuvring areas as the surfaces are easier to clean.
- ✓ Antislip finish.
- ✓ Ecologic as it is made with recycled plastic that is ecocompatible and UV ray stabilised.
- ✓ Extremely easy to install thanks to its lightness and interlocking hooking system with male/female guides.

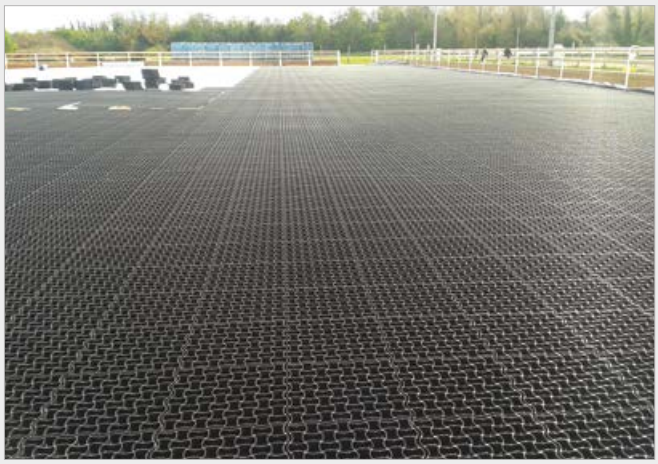
Applications

Easy Ride is recommended for the solidification of covered and uncovered riding grounds, for stabilising the ground in free stalls, covered riding arenas, dressage riding arenas, paddocks and jousts for horses.
Suitably combined with specific material for riding, Easy Ride is also ideal, thanks to its technical features, for solidifying the ground in competition areas, bridling zones and loading and pasture access zones.

Technical data



Color	Dimensions (cm)	Pieces per sq.mt. (pcs/m²)	Piece weight (kg)	Resistance (t/m²)	Pallet dimensions (cm)	Pieces per pallet (pcs/PAL)	Sq.mt. per pallet (m²/PAL)	Pallet weight (kg/PAL)
GRIGIO	50 x 50 x 4,5	4	1,491	> 200	100 x 120 x 220	212	53	324



Easy Ride improves and stabilises surfaces crossed by animals, also large ones, preserving mobility and safeguarding the general hygiene of their living environment.

NOTE

www.daliform.com

GENERALE - Rev.01_07/2022

Made in Italy

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Building Innovation © Creatori dell'Iglù®

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Member of GBC Italy

Rating di legalità: ★★+