

# **Rainwater Solutions**

www.nidagraveluk.co.uk

### Underground solutions

# EP range



### **EXTERNAL DIFFUSION**

#### Infiltrate / control flood risks

Nidaplast EP product range is used in the construction of SUDS-type (Sustainable Urban Drainage Systems) public or private underground structures with external spreaders, to ensure the collection, storage and outflow of rainwater by regulated or limited flow infiltration and/or evacuation.

#### Self-contained storage modules

Honeycomb-block-based Nidaplast EP range storage modules are lightweight. Their large size allows for guick implementation. They do not require any fastening. Offset laying ensures structure stability.

Their upper and lower sides are covered with a welded geotextile, thus avoiding fine particle ingress into storage modules.

#### **Excellent hydraulic conductivity**

Combined with one or more external spreading channels between the upstream and downstream manholes, the structure ensures excellent hydraulic conductivity.

A hydro-clogging study at Sheffield University (UK) showed that this type of structure, fitted with an external spreader, avoids pollution ingress into blocks. Thus, the macrowaste in rainwater remains trapped in the sedimentation and diffusion channel and does not enter the blocks.

Throughout the structure's lifespan, only the external spreaders need to be monitored and cleaned at high pressure, thus greatly facilitating the structure's maintenance, supporting its durability and limiting associated operating costs.

Complementary products



Nidavortex Flow controller.



### STRUCTURE SPECIFICATIONS

Self-contained storage module

 Spreading channel is monitorable and suitable for high-pressure cleaning

- Reduced operating costs
- Speed of Implementation
- Cost-effective solution



### EP range OPERATION PRINCIPLE

#### INFILTRATION BASIN

Infiltration basins are used to retain rainwater in the structure during rainy events. Water return occurs by ground infiltration. Naturally, it is necessary to ascertain ground infiltration capacity and infiltrated water quality, and, if necessary, to provide for pre-treatment systems upstream of the structure. An overflow device must be installed in the downstream manhole to ensure flow continuity in the event of overflow.

#### WATER CONTROL OR LIMITING BASIN

In the case of flow-regulated or flow-limited water outflow, rainwater return is effected via flow-regulating or flow-limiting devices. The structure may be combined with a waterproofing complex installed pursuant to accepted standards.

#### WATER REUSE BASIN

In this case, the structure is to be combined with a waterproofing complex that must be installed pursuant to accepted standards. Rainwater is stored in the structure during rainy conditions. Water requirements and basin storage capacity must be taken into account in determining a suitable volume. A pumping device also needs to be installed if wishing to use rainwater for applications such as watering, fire extinguishing, etc.

#### Geotextile 300g/m<sup>2</sup> or waterproofing complex

Geotextile provides a barrier to prevent soil constituents from entering the structure. In the case of a retention or regulation basin, a waterproofing complex is used to create a waterproof envelope around the structure.

Upstream

manhole

Nidaplast alveolar blocks Combined with an external diffuser which functions as a sedimentation channel, Nidaplast blocks are not subject to clogging. The blocks require neither inspection nor maintenance. Water circulation in elementary modules is vertical and/or horizonta

VENT DN100 perforated road drains, class SN8, Nidaevent type, connected to all ventilated manholes upstream and

downstream of basin.

Ventilation



Overflow

Leakage rate

Separation geotextile

An anti-punching geotextile must be positioned between last block layer and ventilation layer. This geotextile is not required when using geoflow as a ventilation layer.

#### 2/3-perforated external diffuser

These inspectable drains, suitable for high-pressure cleaning, are placed in granular materials. Only the external spreader needs to be inspected and high-pressure cleaned, thus greatly facilitating structure maintenance, ensuring its durability and limiting its operating costs.



Drain is routed through a gravel bed under the blocks.



Drain is routed through a draining trench under the blocks



Downstream manhole

> Drain is routed between blocks with use of Nidaflow blocks

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### IMPLEMENTATION EP range

#### **1** EARTHWORK





GEOTEXTILE





Earthworks must include the basin right-of-way and a secure access area (min. 0.50m) at the periphery of the structure. A 300 g/m<sup>2</sup> geotextile or sealing complex must be provided to serve as the basin's envelope. Modules must be placed on the laying bed and raised along the lateral sides of the structure. They will be laid on the upper side of the modules when finalising their installation. Modules are to be implemented in accordance with the layout plan previously established during site preparation phase (up to 100m<sup>3</sup>/day per person).

Upstream and downstream manholes are to be joined by installing an external spreading facility in a granular bed between, or below, the first block level.

### **4** VENTILATION

### 5 BASIN ENCLOSURE





A ventilation system (air evacuation) must also be implemented to allow the proper functioning of the structure when it fills up with water.

Basin must then be backfilled laterally, without generating any asymmetric stresses on the structure, and then covered with the upper backfill, which is to be compacted in successive layers.

FOCUS Pursuant to technical advice: "The bottom feed system, through its self-cleaning principle, provides maximum safety with regard to the risks of clogging or accidental pollution."

Drain is routed between the blocks, with a spreading bed under the blocks



#### **3** WATER SPRADING SYSTEM AND BLOCK INSTALLATION



6 COVERING





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#### EP range ADAPTS TO ALL YOUR PROJECTS.

#### **PROXIMITY TO A ROAD**





2,500M<sup>3 -</sup> CHOLET Two underground basins, located on either side of an existing collector, were built near a busy road to address flooding issues in this area.

#### **TOWN CENTRE**





#### 2,300M<sup>3</sup> - SAINT JEAN DE BRAYE

As the city had already been impacted by flooding in 2018, the city authorities chose to redevelop the city centre and to construct a rainwater storage basin under the city esplanade, prior to proceeding with town square greening works to benefit inhabitants; this is an example of integrating such structures into the urban landscape.

#### **INDUSTRIAL AREA**





#### 9,100M<sup>3</sup> - PRUSZCZ GDANSKI

In 2023, in a peri-urban area, two layers of Nidaplast honeycomb blocks were installed to construct what is certainly one of the largest rainwater retention basins in the world.





SEE PROJECT VIDEOS

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### EP range

SUPERMARKET



300M<sup>3</sup> - VIEUX CONDÉ Rainwater runoff from the roof and car park was taken into account during the construction of this new LIDL supermarket. This collection basin allows for temporary stormwater storage, before gradually allowing said water to infiltrate.

#### UNDER FAST FOOD RESTAURANT CAR PARK



1,250M<sup>3</sup> - LABÈGE To reduce the impact of this new construction and limit rainwater runoff, an underground Nidaflow basin can store nearly 1200 m<sup>3</sup> of water. It thus prevents water systems from overloading during heavy rains, and limits flood risks.

#### **CAR DEALERSHIP**



180M<sup>3</sup> - LA GARDE Waterproof basin located near La Garde Mercedes dealership (Var department), for stormwater runoff storage.



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### ADAPTS TO ALL YOUR PROJECTS.







### TECHNICAL DATA EP range



#### RAINWATER storage and regulation - Underground solutions

TECHNICAL DATA EP range

#### PACKAGING



NIDAPLAST COUNT PER M<sup>3</sup> / PALLE PALLET WE

PACKAGE

PACKAGIN



COUNT PER M<sup>3</sup> / PALLE PALLET WE PACKAGE



NIDAPLAST COUNT PER M<sup>3</sup> / PALLE PALLET WE PALLET HEI

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|--|

Descrition		Nido			
Properties		400	STANDARDS		
Material		Extruded polypropylene honeycomb structure			
Minimum dry density	Nidaplast EP	35	40	44	ISO 845
(kg/m³)	Nidaflow EP	40	44	49	
Length			2,400mm		
Width			1,200mm		100 1007
Thiolynoppo	Blocks		520mm		130 1923
THICKNESSES	Panels	-	120	-	
Cell size			± 50mm		
Colour			Black		
Haat-bandad nanwayan	Side 1		NEEN 20 073-1		
Heat-bonded, nonwoven	Side 2		INFEIN 29 073-1		
/oid fraction					
Buoyancy and moisture uptake		Not sensitive t absor			
Resistance to chemical agents	i	Excellent res			
Pollution		No	t groundwater pollut	ing	
Vertical compression strength short-term (panel thickness 50	Imm)	400kPa	500kPa	600kPa	ISO 844
Vertical compression strength short-term (block thickness 52	0mm)	300kPa 400kPa 500kPa			
Conventional elasticity modulu compression*	us under	25MPa 30MPa 35MPa		XP P 10	
Permissible permanent load (ir safety factor of 2 applied to th permissible vertical pressure vo term, extrapolated to 50 years	ncluding e maximum alue in the long )*	45kPa 65kPa 85k		85kPa	TECHNICAL NOTICES CSTB
Maximum allowable backfill lev blocks*	vel above	2.30m	3.30m	4.30m	

\* maximum values over 3 layers

NOTE: Values indicated in this sheet may be used as guidelines for product use; they should be considered neither as specification limits, nor as guaran or processing are beyond our control and, consequently, are the exclusive user and/or processor responsibility. ees. In addition, product application, use and/

Product name	Code article	Height (mm)	Dimensions (mm)	Units per package	Type of packaging
NIDAPLAST EP400/H520MM/2400X1200MM	10996				
NIDAPLAST EP500/H520MM/2400X1200MM	11000	520	2 400 × 1 200	5	PALLET
NIDAPLAST EP600/H520MM/2400X1200MM	11003	2,400 X 1,200		2,400 X 1,200	
NIDAPLAST EP500/H120MM/2400X1200MM	10998	120		21	
NIDAFLOW EP400/H520MM/2400X1200MM	11730				
NIDAFLOW EP500/H520MM/2400X1200MM	11731	520	2,400 x 1,200	5	Pallet 2 400 x 1 200
NIDAFLOW EP600/H520MM/2400X1200MM	11732				2,400 × 1,200
NIDAPLAST EP-S400/H520MM/1200X800MM	11004	520	1 000 000	4	Pallet
NIDAPLAST EP-S400/H100MM/1200X800MM	11321	100	1,200 X 800	22	1,200 x 800

T / NIDAFLOW BLOCKS	400	500	600	
R PALLET	5			
T	7.5			
EIGHT (KG)	300	330	367.5	
	L	2,400	IM	
DIMENSIONS	W 1,200		1M	
	Н	2,750MM		
G DESCRIPTION		PROFILES PLASTIC WRAF PALLET LABEL WOODEN SOLI	, E	

#### NIDAPLAST EP500 PANEL

COUNT PER PALLET	21			
M <sup>3</sup> / PALLET	7.25			
PALLET WEIGHT (KG)	330			
	L 2,400MM			
PACKAGE DIMENSIONS	W	1,200MM		
	H 2,670MM			
PACKAGING DESCRIPTION	PROFILES PLASTIC WRAP PALLET LABEL DISPOSABLE WOODEN PALLET			

T EPS 400	BLOCK		PANEL
R PALLET	4		22
ET	2	2	2.11
EIGHT (KG)	8	0	115
IGHT (MM)	2,230		2,350
DIMENSIONS	L W		1,200MM 800MM
IG DESCRIPTION	PROFILES PLASTIC WRAP PALLET LABEL DISPOSABLE WOODEN PALLET		Files C Wrap C Label Ooden Pallet

### TECHNICAL DATA EP range

#### NIDAPLAST EP DIMENSIONAL DIAGRAMS





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TECHNICAL DATA EP range

#### NIDAPLAST EP500 PANEL DIMENSIONAL DIAGRAMS



#### **DIMENSIONAL DRAWINGS NIDAPLAST EPS400 BLOCK**



### NIDAFLOW EP DIMENSIONAL DRAWINGS







#### NIDAPLAST EPS400 PANEL DIMENSIONAL DRAWINGS









Side view

## Underground solutions



# azbox

### THREE-DIMENSIONAL DIFFUSION

#### Infiltrate / control flood risks

The AZbox system is used in the construction of SUDStype (Sustainable Urban Drainage Systems), public or private underground structures for rainwater collection, storage and return by infiltration and/or controlled flow evacuation.

#### Stackable, inspectable modules, suitable for highpressure cleaning

AZbox constituent parts are lightweight and easy to implement. Stackable, with a limited footprint, they support logistics optimisation, both during transport and on-site. They can be assembled to create a solid, resistant assembly of high absorption capacity.

The spacing between module pads, combined with the provision of inspection wells, enables inspection and highpressure cleaning via a 350-mm linear channel.

#### **Three-dimensional diffusion**

Water enters directly into the structure from one or more injection modules. From that point, water circulation in the elementary modules is of a three-dimensional nature.

To limit the ingress of solid particles into the storage structure, special attention must be paid during the study phase.

Complementary products



Nidavortex Flow controller.



### STRUCTURE CHARACTERISTICS

- Three-dimensional diffusion
- Storage module is inspectable from all levels
- 350mm inspection channel
- Lightweight for fast implementation
- Optimised site logistics

## azbox OPERATION PRINCIPLE

#### INFILTRATION BASIN

Infiltration basins are structures used to store rainwater during rainy conditions. Water return occurs by ground infiltration. Naturally, it is necessary to ascertain ground infiltration capacity and infiltrated water quality, and, if necessary, to provide for pre-treatment systems upstream of the structure. An overflow device must be installed in the downstream manhole to ensure flow continuity in the event of overflow.

#### CONTROL BASIN

In the case of regulated water outflow, the latter is effected via flow-regulating devices. The structure may be encased in a sealing complex installed pursuant to established construction principles.

#### WATER REUSE BASIN

In this case, the structure must be encased in a waterproofing complex installed pursuant to accepted standards. Rainwater is stored in the structure during rainy conditions. Water requirements and basin storage capacity must be taken into account in determining a suitable volume. A pumping device also needs to be installed if wishing to use rainwater for applications such as watering, fire extinguishing, etc.



#### 1 EARTHWORK







Earthworks must include the basin right-of-way and a secure access area (min. 0.50m) at the periphery of the structure. A laying bed must be provided to guarantee structure stability and facilitate implementation. A 300 g/ m<sup>2</sup> geotextile or sealing complex must be provided to serve as the basin's envelope. Modules must be placed on the laying bed and raised along the lateral sides of the structure. They will be laid on the upper side of the modules when finalising their installation.

Modules are to be implemented in accordance with the layout plan previously established during site preparation phase.

#### **4** BASIN ENCLOSURE

### 5 COVERING





For the proper functioning of the structure, access points and ventilation systems are to be implemented in conjunction with the project and construction managers.

Basin must then be backfilled laterally, without generating any asymmetric stresses on the structure, and then covered with the upper backfill, which is to be compacted in successive layers.

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The latter are used for enclosing the basin on its entire periphery, and constitute a perfect support for laying geotextile.

## 

### **3** LAYING THE MODULES





### FOCUS

#### **INSPECTION / VENTILATION** SHAFTS

For inspection shafts, saw discshaped openings between the studs, at each level. For ventilation purposes, saw a disc-shaped opening only on the last layer of the basin.

Install an adaptor sleeve followed by a corrugated tube. Provide a concrete frame and a cast iron buffer suitable for a road finish.



# azbox Adapts to all your projects.

#### **PUBLIC CAR PARK**





#### 630M<sup>3</sup> - BESANÇON

As part of major road works, the urban community of Grand Besançon elected to collect and store stormwater under a public car park, in an underground basin consisting of AZBOX modules.

#### SHOPPING CENTRE





#### 400M<sup>3</sup> - WATERLOO

As part of the Drève Richelle, Waterloo, site redevelopment, Redevco Belgium developed a new commercial area, pursuant to updated stormwater management requirements. An infiltration basin was installed under one of the car parks.

#### MULTIMODAL TRANSPORT PLATFORM





#### 800M<sup>3</sup> - ANTIBES

The Sophia Antipolis urban community redeveloped its public transport network and created new spaces. As the area is already experiencing network saturation problems, a retention basin was built to collect water and limit the impact on the natural environment.





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#### CARE HOME FOR THE ELDERLY WITH SPECIFIC NEEDS



#### 23M<sup>3</sup> - BOUGUENAIS rainwater buffering and controlled outflow to the wider network.

#### **GREEN SPACES**



100M<sup>3</sup> - TILLOY-LEZ-CAMBRAI While developing a subdivision of single-family houses, two infiltration basins for runoff collection were constructed upstream and downstream of the subdivision.

#### **TRAIN STATION**



2500M<sup>3</sup> - MAUBEUGE Significant development work has been carried out in the Maubeuge train station area. To limit rainwater runoff and flood risks, three watertight retention basins were installed.



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This care home for elderly people with specific needs chose AZbox for the construction of a watertight retention basin, thus guaranteeing





### TECHNICAL DATA azbox



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TECHNICAL DATA azbox

#### PACKAGING



PACKAGE

PACKAGIN

COUNT PER M<sup>3</sup> / PALLE PALLET WE



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COUNT PER PALLET WEIGHT (KG)

COUNT PER PALLET WE

PACKAGE

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Properties		AZbox	STANDARDS
Material		Recyclable injected polypropylene	
Pile material		100% recycled polypropylene	
Length		1,200mm	
Width		600mm	
	One level	660mm	ISO 1923
Height based on the number of levels	Two levels	1,270mm	
constituting basin	Three levels	1,880mm	
Pile colour		Black	
Void fraction		95%	
Resistance to chemical age	nts	Excellent resistance to water and most acids, bases and salt solutions	
Pollution		Not groundwater polluting	
Vertical compression streng short-term	th	>300kPa	XP P 16374
Permissible permanent load (including safety factor of 2 applied to the maximum permissible vertical pressure value in the long term, extrapolated to 50 years)*		45kPa	TECHNICAL NOTICES CSTB
Maximum allowable backfill level above modules*		2.3m	

\* maximum values over 3 layers

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Product name	Code article	Height (mm)	Dimensions (mm)	Units per package	Type of packaging
AZBOX/BLACK PRE-MOUNTED PLATE/H350MM/1200X600MM	10955	350	1,200 x 600	32	PALLET
AZBOX/BLACK STUD/H350MM/420X310MM	11282	350	420 x 310	157	1,200 x 1,200
AZBOX/COVER/H30MM/420X230MM	10952	30	420 x 230	50	Poy
AZBOX/CONNECTORS/70X40X35MM	10951	35	70 x 40	500	BOX
AZBOX/PERIPHERAL PLATE/H50MM/1200X600MM	10953	50	1,200 x 600	43	Pallet 1,200 x 1,200
AZBOX/COVER/H30MM/420X230MM AZBOX/CONNECTORS/70X40X35MM AZBOX/PERIPHERAL PLATE/H50MM/1200X600MM	10952 10951 10953	30 35 50	420 x 230 70 x 40 1,200 x 600	50 500 43	Box Pallet 1,200 x 1,:

	L	1,200MM		
DIMENSIONS	W	1,200MM		
	Н	2,140MM		
IG DESCRIPTION	PLASTIC WRAP PALLET LABEL DISPOSABLE WOODEN PALLET			
R PALLET	32			
ET (ONE-LEVEL PALLET)	7.5			
EIGHT (KG)		440		

	L	1,200MM	
DIMENSIONS	W	1,200MM	
	н	1,250MM	
IG DESCRIPTION	PLASTIC WRAP PALLET LABEL DISPOSABLE WOODEN PALLET		
R PALLET	240		
EIGHT (KG)		300	

	L	1,200MM
PACKAGE DIMENSIONS	W	1,200MM
	Н	1,280MM
PACKAGING DESCRIPTION	PLASTIC WRAP PALLET LABEL DISPOSABLE WOODEN PALLET	
COUNT PER PALLET	46	
PALLET WEIGHT (KG)		240

		COVERS	CONNECTORS
	L	1,000MM	590MM
DIMENSIONS	W	600MM	390MM
	н	300MM	300MM
IG DESCRIPTION		BOX	
ox		50	500
HT (KG)		22	10

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### TECHNICAL DATA azbox

#### **DIMENSIONAL DIAGRAMS**



Half-module ISO view





330

Stud front view

600

Half-module side view



TECHNICAL DATA azbox

#### **DIMENSIONAL DIAGRAMS**













Connector ISO view

Connector side view



Half-module front view

Connector front view

## Roofing solutions

# nidaroof®

### TEMPORARY ROOFTOP RETENTION

### A solution for rainwater management on rooftop terraces

### Adding value to flat roofs

More than just a flat roof, a rooftop terrace is an opportunity to create new places to live and socialise. Accessible roofs offer many development opportunities. Our Nidaroof product, thanks to the WATEROOF process, provides adapted solutions and offers numerous rooftop conversion options to optimise property uses.

#### A rainwater management alternative

The field of urban planning needs to better consider rainwater management, and integrate it smartly into land use strategies. Rooftop rainwater storage thus appears as a relevant, cost-effective approach. Nidaroof reduces the need for underground structures by regulating rainwater as close as possible to its point of origin. Combined with flow-limiting rainwater inlets, our Nidaroof solution temporarily retains rainwater while permitting continued full use of rooftop terraces.

Complementary products





NIDAROOF Roofing solutions

### **PRODUCT CHARACTERISTICS**

III

- Several thicknesses available

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- Maximum void fraction (95%)
- Non-woven welded on 1 or 2 sides
- Easy to cut into shape

### nidoroof<sup>®</sup> OPERATION PRINCIPLE

Nidaroof honeycomb-structure panel is used to temporarily store rainwater. Geoflow, a drainage separation layer positioned between the waterproofing membrane and Nidaroof, effectively drains water towards outlets.

#### In the case of a regulated-flow roof

Combined with low-flow rainwater inlets, our solution temporarily retains rainwater while permitting continued full use of the rooftop terrace, both during and after rain.

#### In the case of permanent storage combined with a green roof

Combined with raised rainwater inlets, Nidaroof stores rainwater under the substrate and gradually return it to the vegetation, thus promoting vegetation regrowth and supporting it in dry periods.

#### Specific case of slabs on paving supports

In the event of the accidental breakage of a pre-fabricated concrete slab, our Nidaroof product preserves waterproofing. In addition, our non-woven facing retains waste and filters water flowing in the lower section. It also prevents the penetration of fine particles into the cells. It prevents waste maceration, which may become a source of olfactory nuisance in standing water, as well as the proliferation of larvae, mosquitoes or insects.

#### Examples of rooftops with water retention



Our Nidaroof product forms part of the WATEROOF process developed in collaboration with BMI-SIPLAST. See specifications for implementation guidelines: Wateroof-Primo Waterproofing system with rainwater retention for flat roofs.



## nidoroof<sup>®</sup> Adapts to all your projects.

#### **ROOFTOP VEGETABLE GARDEN**



#### 1,000M<sup>2</sup> - PARIS

IN Paris, both elected officials and residents have evinced a strong wish to reinvent the city by introducing natural elements. In partnership with Urbagri, Siplast and Loiseleur, a vegetable garden was arranged on the roof of a Town Hall Annex building. Rainwater originating from the flat roof and the glass roofs is collected and stored in Nidaroof, thus allowing plants and grapevines to draw the water contained in the cells as needed.

#### VEGETATED ROOFTOP WITH PERMANENT STORAGE



#### 2,344M<sup>2</sup> - ORLÉANS

This collaborative project, combining Nidaplast, Siplast and Cerema products, and funded by the Centre Loire Water Agency, utilised Siplast's wateroof system, in conjunction with a 10cm-layer of vegetated substrate. Part of this rooftop was scientifically monitored for two years to observe water behaviour in a rooftop fitted with permanent storage.

#### ACCESSIBLE MULTI-PURPOSE ROOFTOP



#### 630M<sup>2</sup> - BESANÇON

Nidaroof, employed in various flat roof uses and finishes (slabs on pedestals, wooden decking, vegetation, gravel, etc.) ensures that constructions blend in better with the landscape. This rooftop terrace provides a pleasant living space for neighbourhood residents.



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# TECHNICAL DATA



RAINWATER storage and regulation - Roofing solutions

# TECHNICAL DATA

#### PACKAGING



NIDAROOF COUNT PER M<sup>2</sup> / PALLE PALLET WE PALLET HEI

PACKAGE

PACKAGIN



NIDAROOF COUNT PER M<sup>2</sup> / PALLE PALLET WE PALLET HEI

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#### DIMENSIONAL DIAGRAMS





SPECIFICATIONS

Properties		40-1F	60-1F	100-2F	520-2F	STANDARDS
Material		Extruded polypropylene honeycomb structure				
Minimum dry density		≥32kg/m³		ISO 845		
Length		2,400mm				
Width		1,200mm			ISO 1923	
Thickness		40mm	60mm	100mm	520mm	
Cell size		± 50mm				
Colour		Black				
	Side 1	PET 150g/m <sup>2</sup> PET 150g/m <sup>2</sup>		PET 45g/m <sup>2</sup>		
Non-woven	Side 2	- PET 25g/m <sup>2</sup> PET 45g/m		PET 45g/m <sup>2</sup>	NFEN 29 073-1	
Void fraction		95%				
Water storage capaci	ty	109L	164L	274L	1,423L	
Resistance to chemica	al agents	Excellent resistance to water and most acids, bases and salt solutions				
UV-resistant		Anti-UV treatment				
Vertical compression short-term	strength	300kPa		ISO 844		
Allowable vertical load extrapolated to 50 yea	d resistance ars	30kPa		XP-P-16 374		

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Product name	Code article	Thickness (mm)	Dimensions (mm)	m² / Packaging	Units / package	Type of packaging
NIDAROOF 1F/H40MM/2400X1200MM/DUAL PAL	11391	40	2,400 x 1,200	161.28	56	DUAL PALLET 2,400 X 1,200
NIDAROOF 1F/H60MM/2400X1200MM/DUAL PAL	11392	60		103.68	36	
NIDAROOF 2F/H100MM/2400X1200MM/DUAL PAL	11393	100		63.36	22	
NIDAROOF 2F/H520MM/2400X1200MM	11025	520		14.40	5	PALLET 2,400 X 1,200

F DUAL PALLET	40-1F	60-1F	100-2F		
R PALLET	2x28	2x18	2x11		
T	161.28	103.68	63.36		
EIGHT (KG)	365	355	345		
IGHT (MM)	2,540	2,460	2,500		
DIMENSIONS	L	2,400MM			
	w	1,200MM			
G DESCRIPTION	PROFILES PLASTIC WRAP PALLET LABEL DISPOSABLE WOODEN PALLET				

F PALLET	520-2F		
R PALLET	5		
T	14.40		
EIGHT (KG)	310		
IGHT (MM)	2,750		
DIMENSIONS	L W	2,400MM 1,200MM	
IG DESCRIPTION	PROFILES PLASTIC WRAP PALLET LABEL WOODEN SOLE		





#### **DISTRIBUTED BY**



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