

DAK-STORM MODULAR SYSTEM



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1. CODE REGISTRY

Code	Description	Measures (mm)	Weight (kg/pc.)	Color	Pkg. / Pallet
MET01-1001	Semi Module	1.000 x 600 x 390	9,20	Black	74
MET01-1001F	Semi Module with Inspection Hole	1.000 x 600 x 390	8,80	Black	74
MET01-1002H1	Long Side Grate for Module	1.000 x 720 x 36	5,80	Black	16
MET01-1003H1	Short Side Grate for Module	600 x 720 x 36	3,80	Black	24
MET01-1002H2	Long Side Grate for Semi Module	1.000 x 430 x 36	3,00	Black	64
MET01-1003H2	Short Side Grate for Semi Module	600 x 430 x 36	2,00	Black	108
MET01-3001	Module Connection Joint	70 x 70 x 30	0,08	Blue	100 / 4.800
MET01-3002	Semi Module Connection Joint	70 x 35 x 30	0,05	Blue	200 / 9.600
MET01-2002	Module Cone Closing Cap	175 x 250 x 35	0,30	Black	864
MET01-2001M	Male Connector	330 x 220 x 110	0,65	Black	108
MET01-2001F	Female Connector	330 x 220 x 80	0,63	Black	108
MET01-4005	Chimney Inspection Port	500 x 500 x 470	-	Black	-

MATERIAL

Modules made of polypropylene (PP) with high mechanical strength through injection molding.

DAK-STORM MODULAR SYSTEM

2. DESCRIPTION

DAK-Storm is an ultra high efficiency solution for advanced management of stormwater in urban, residential and infrastructural contexts. DAK-Storm is a buried, modular, ultra high efficiency system consisting of injection moulded draining blocks made of high resistance polypropylene (PP). Designed to build underground reservoirs for water storage, lamination or dispersion,

DAK-Storm helps manage significant water volumes directly underground, thus making valuable surface areas available for use. It is a tangible and effective response to flooding problems, the need to replenish aquifers, and the necessity to reuse stormwater, which converts a criticality into an opportunity for more resilient and sustainable cities.

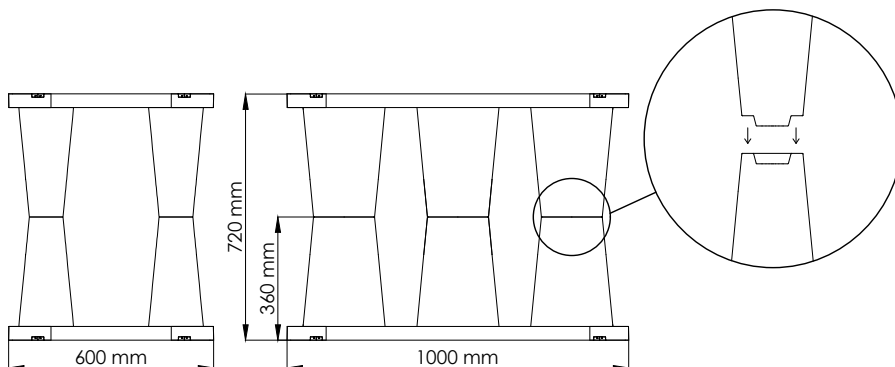
3. USE

The DAK-STORM modular system is used to manage significant volumes of water directly underground as a concrete and effective response to flooding problems, the need to recharge aquifers, and the need to reuse rainwater. Designed to create underground basins for water storage, laminated storage, or dispersion.

4. MODULES

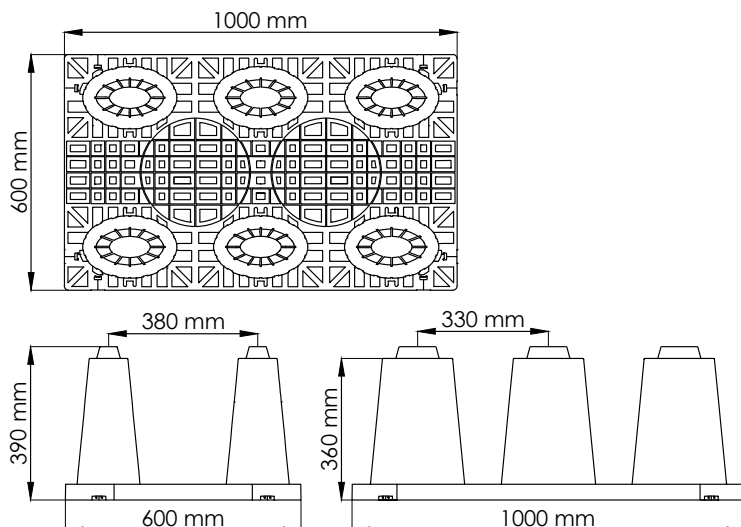
Made of injection moulded, high mechanical resistance, polypropylene (PP-H), the DAK-Storm modules offer high load-bearing capacity. Their optimised internal structure is designed to withstand significant vertical and lateral loads, including in heavy traffic conditions, based on stratigraphy. This offers utmost safety and durability over time, in addition to making the module installable in areas under the stress of heavy loads, such as parking lots, roads, and logistic and industrial zones, without compromising surface usability. The quality of the material and the manufacturing process guarantee constant and reliable performances for decades.

ENTIRE MODULE



MATERIAL	PP-H
COLOR	Black
DIMENSIONS (L x W) [mm]	1.000 x 600
CELL HEIGHT [mm]	720
WEIGHT KG	18,40
GROSS VOLUME [L]	432 L
VOLUME METRO CUBE [L/mc]	415 / 0,415
EMPTY INDEX	96%
TRANSPORT CAPACITY	SLW60
SUPPORT CONES	6

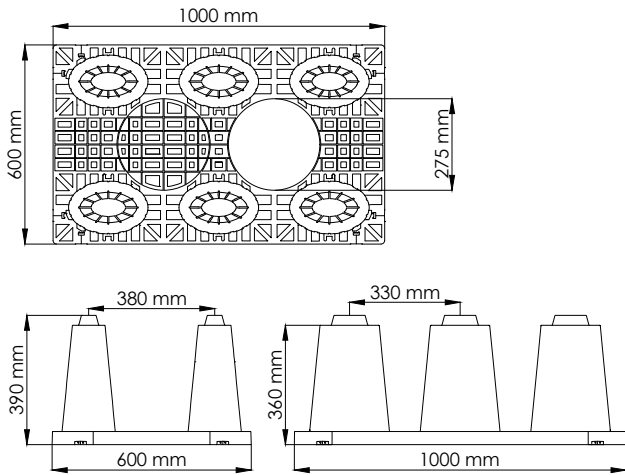
HALF MODULE



MET01-1001	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (L x dD) [mm]	1.000 x 600
CELL HEIGHT [mm]	390
WEIGHT KG	9,20
GROSS VOLUME [L]	216 L
NET VOLUME [L/mc]	207 / 0,207
VOID RATIO	96%
TRANSPORT CAPACITY	SLW60
SUPPORT CONES	6
PIECES PER PALLET	74

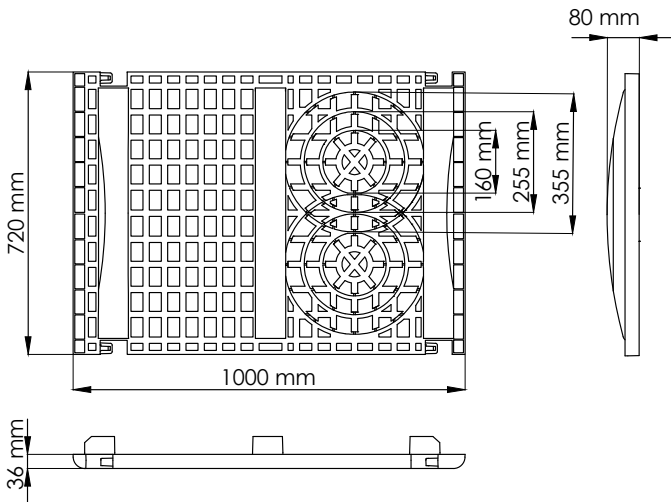
DAK-STORM MODULAR SYSTEM

CATCH-PIT MODULE



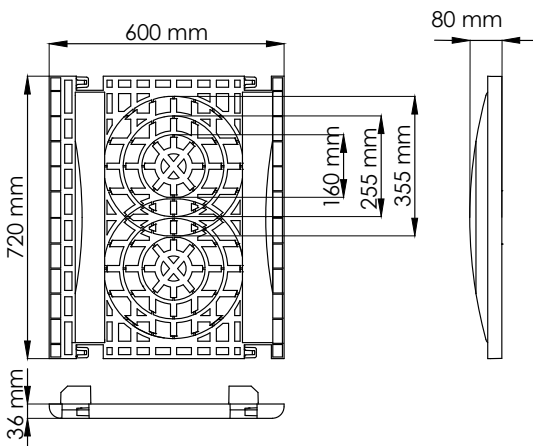
MET01-1001F	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (L x D) [mm]	1.000 x 600
CELL HEIGHT [mm]	390
WEIGHT KG	8,80
GROSS VOLUME [L]	216 L
NET VOLUME [L/m ³]	207 / 0,207
VOID RATIO	96%
TRANSPORT CAPACITY	SLW60
SUPPORT CONES	6
HOLE DIAMETER mm	275
PIECES PER PALLET	74

LONG SIDE GRILLE FOR ENTIRE MODULE



MET01-1002H1	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (L x D) [mm]	1.000 x 720
THICKNESS [mm]	80
WEIGHT KG	5,80
PIECES PER PALLET	16
PRE-DRILLED HOLE DIMENSIONS mm	160 / 255 / 355

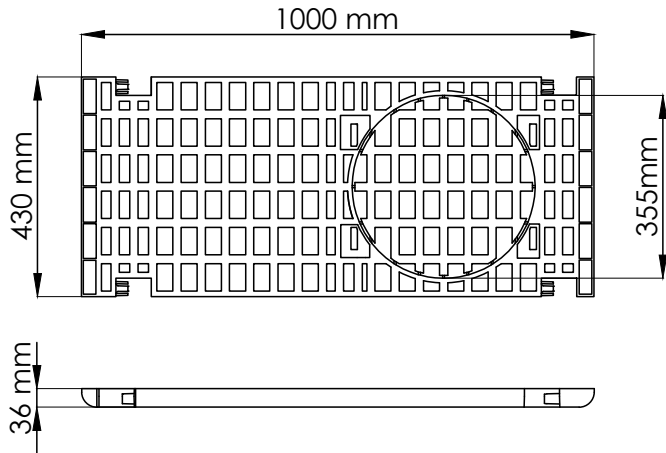
SHORT SIDE GRILLE FOR ENTIRE MODULE



MET01-1003H1	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (L x D) [mm]	600 x 720
THICKNESS [mm]	80
WEIGHT KG	3,80
PIECES PER PALLET	24
PRE-DRILLED HOLE [mm]	160 / 255 / 355

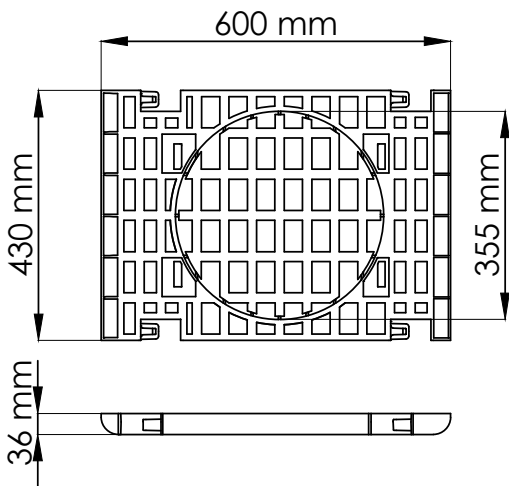
DAK-STORM MODULAR SYSTEM

LONG SIDE GRID FOR SEMI MODULE



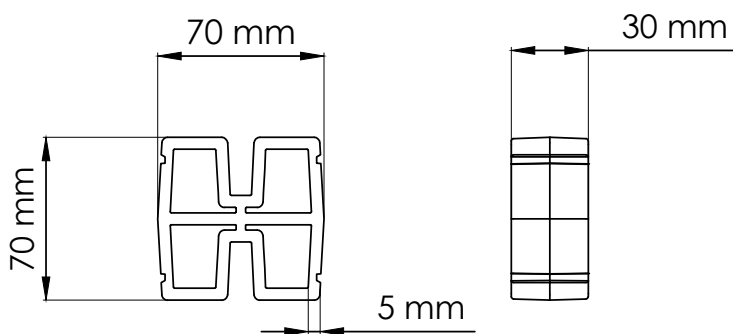
MET01-1002H2	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (L x D) [mm]	1.000 x 420
THICKNESS [mm]	36
WEIGHT KG	3,00
PIECES PER PALLET	64
PRE-DRILLED HOLE [mm]	355

SHORT SIDE GRILLE FOR SEMI MODULE



MET01-1003H3	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (L x D) [mm]	600 x 420
THICKNESS [mm]	36
WEIGHT KG	2,00
PIECES PER PALLET	108
PRE-DRILLED HOLE [mm]	355

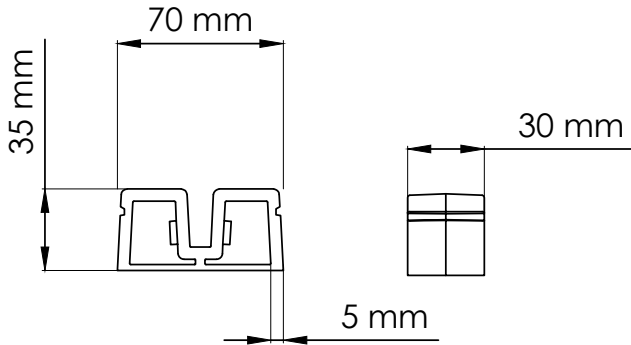
MODULE CONNECTION JOINT



MET01-3001	
MATERIAL	PP-H
COLOR	Blue
PIECES PER PACKAGE	4800

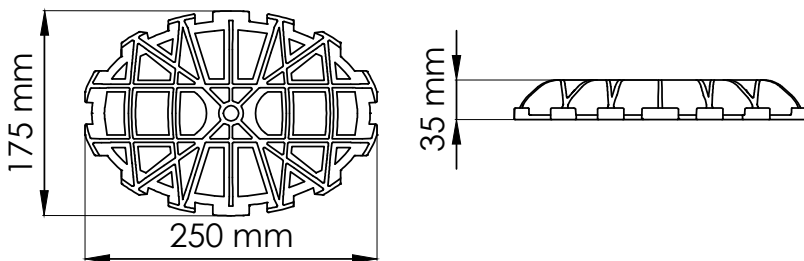
DAK-STORM MODULAR SYSTEM

SEMI JOINT CONNECTION MODULES



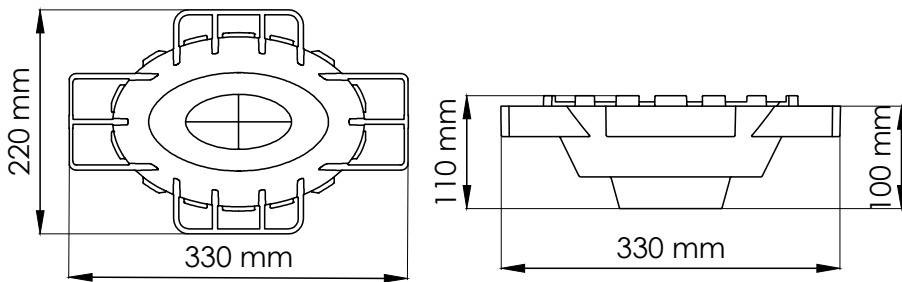
MET01-3002	
MATERIAL	PP-H
COLOR	Blue
PIECES PER PACKAGE	9600

MODULE CONE CLOSURE CAP



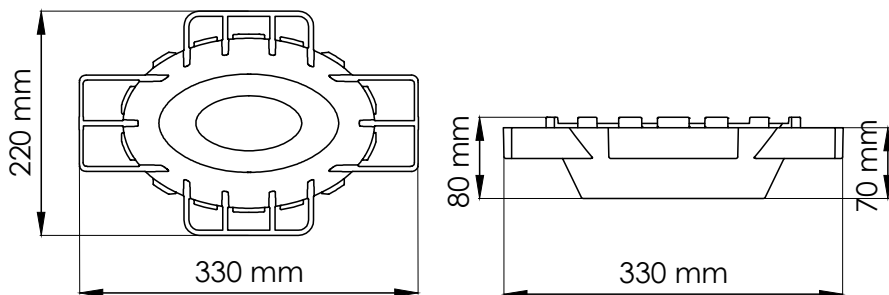
MET01-2002	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (LxD) [mm]	170 x 250
THICKNESS [mm]	35
PIECES PER PACKAGE	864

MALE CONNECTOR



MET01-2001M	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (WxD) [mm]	330 x 220
THICKNESS [mm]	110
PIECES PER PACKAGE	108

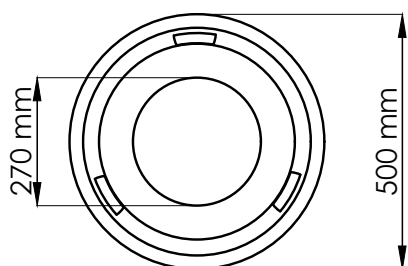
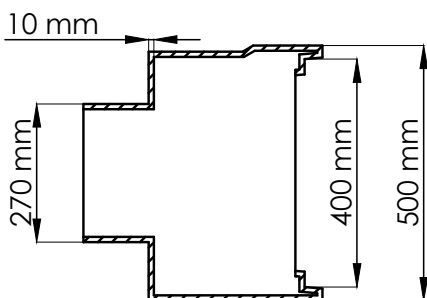
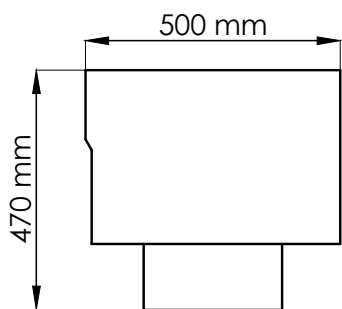
FEMALE CONNECTOR



Code	
MATERIAL	PP-H
COLOR	Black
DIMENSIONS (WxD) [mm]	330 x 220
THICKNESS [mm]	80
PIECES PER PACKAGE	108

DAK-STORM MODULAR SYSTEM

CHIMNEY INSPECTION HATCH



MET01-4005	
MATERIAL	PP-H
COLOR	Black
PIECES PER PACKAGE	

DAK-STORM MODULAR SYSTEM

5. CERTIFICATIONS

Certification according	DIN EN 17150 (2019-11)
Certification body	Polytest Ingenieure GmbH
Test parameters	Vertical-z 380 kN/m ² Lateral-x 80,2 kN/m ² Lateral-y 182 kN/m ²
Material	High mechanical strength PP (PP-H)

6. FIELDS OF APPLICATION

RESIDENTIAL AREAS

- Water management from roofs and courtyards, roof gardens, infiltration systems for villas and apartment buildings.

PARKING LOTS (surface and underground)

- Drainage and storage under permeable or traditional paving to prevent flooding.

COMMERCIAL AND OFFICE AREAS

- Management of large impermeable surfaces (shopping centers, offices), lamination systems for flood prevention.

LOGISTICS AND INDUSTRY

- Storage/infiltration basins for maneuvering yards, storage areas, industrial roofs. Possibility of water recovery for industrial use.

SPORTS FACILITIES

- Drainage of playing fields (soccer, golf), storage for irrigation.

SUSTAINABLE DEVELOPMENT PROJECTS

- LEED/BREEAM certified building systems, hydraulic invariance projects.

7. TECHNICAL SPECIFICATION

Item	Description	U.M.	Price
Dak.D.MET01-xxxxx	Supply and installation of Dakota "DAK-STORM" drainage modules measuring 1.000 x 600 x 720 mm and weighing 18.40 kg. Made of high mechanical strength polypropylene (PP-H), fully recyclable, black in color, for underground installation, suitable for drainage, retention, or accumulation of rainwater. Each module will consist of two semi-elements measuring 1.000 x 600 x 390 mm, formed by 6 elliptical truncated cones with male-female joints at a minimum distance of 250 mm, connected by snap-fit joints to be installed by you on site. Equipped with a double cross-shaped tunnel that can be inspected along the two axes in 4 directions for system management and maintenance, designed for the use of a self-propelled camera for self-cleaning suitable for pipes up to DN250 for high-pressure washing. The "module" must comply with the following mechanical characteristics: Min. storage capacity of 96% equal to 415 L (0.415 m ³); crush resistance 380 kN/m ² and lateral load resistance (60 cm side) equal to 80 kN/m ² in accordance with EN 17152-1. SLW 60 drive-over (total load 600 kN, load per wheel 100 kN) with maximum cover above trench equal to 2.3 m and installation surface not exceeding 4.0 m. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D.MET01-1001	Supply and installation of Dakota "DAK-STORM" drainage SEMI MODULES measuring 1.000 x 600 x 390 cm and weighing 9.20 kg. Made of high mechanical strength polypropylene (PP-H), fully recyclable, black in color, for underground installation, suitable for drainage, retention, or accumulation of rainwater. Minimum storage capacity of 96% equal to 207 L (0.207 m ³); crush resistance 400 KN/m ² and lateral load resistance equal to 100 KN/m ² in accordance with standard EN 17152-1. SLW 60 drive-over (total load 600 kN, load per wheel 100 kN) with maximum cover above trench equal to 2.3 m and installation surface not exceeding 4.0 m. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D.MET01-1001F	Supply and installation of Dakota "DAK-STORM" type drainage SEMI-MODULES WITH INSPECTION HOLE, measuring 1.000 x 600 x 390 mm and weighing 8.80 kg. Made of high mechanical strength polypropylene (PP-H), fully recyclable, black in color, with a hole in the upper part designed to serve as a video inspection and drainage well with a diameter of Ø275. Minimum storage capacity of 96% equal to 207 [L] (0.207 m ³); crush resistance 400 KN/m ² and lateral load resistance equal to 100 KN/m ² in accordance with standard EN 17152-1. SLW 60 drive-over (total load 600 kN, load per wheel 100 kN) with maximum cover above trench equal to 2.3 m and installation surface not exceeding 4.0 m. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D.MET01-1002H1	Supply and installation of LONG SIDE GRATES measuring 1.000 x 720 mm and 36 mm thick for DAK-STORM modules weighing 5.80 kg. Made of high mechanical strength polypropylene (PP-H), fully recyclable, black in color, to be used for closing the vertical external walls of the dispersing trench, to be fixed with quick bayonet coupling. The plate is pre-drilled with Ø 160, 255, 355 holes to facilitate cutting and pipe insertion. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D.MET01-1003H1	Supply and installation of SHORT-SIDE GRATES measuring 600x720 cm and 36 mm thick for DAK-STORM modules weighing 3.80 kg. Made of high mechanical strength polypropylene (PP-H), fully recyclable, black in color, to be used for closing the vertical external walls of the dispersing trench, to be fixed with quick bayonet coupling. The plate is pre-drilled with Ø 160, 255, 355 holes to facilitate cutting and pipe insertion. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-

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Item	Description	U.M.	Price
Dak.D.MET01-1002H2	Supply of XX pcs LONG SIDE GRIDS measuring 1.000 x 420 mm and 36 mm thick for DAK-STORM semi modules weighing 3.00 kg. Made of high mechanical strength polypropylene (PP-H), fully recyclable, black in color, to be used for closing the external vertical walls of the dispersing trench, to be fixed with quick bayonet coupling. The plate is pre-marked with hole templates to facilitate cutting and insertion of Ø 355 pipes. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D.MET01-1003H2	Supply and installation of SHORT SIDE GRATES measuring 600 x 420 mm and 36 mm thick for DAK-STORM semi modules weighing 2.00 kg. Made of high mechanical strength polypropylene (PP-H), fully recyclable, black in color, to be used for closing the external vertical walls of the dispersing trench, to be fixed with quick bayonet coupling. The plate is pre-marked with hole templates to facilitate cutting and insertion of Ø 355 pipes. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D. MET01-3001	Supply and installation of MODULE JOINTS weighing 0.08 kg. Products made of high mechanical strength polypropylene (PP-H) in blue are used for horizontal assembly of "DAK-STORM" blocks. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D. MET01-3002	Supply and installation of SEMI GIUNTO MODULO weighing 0.05 kg. Products made of high mechanical strength polypropylene (PP-H) in blue are used for horizontal assembly of "DAK-STORM" blocks. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D. MET01-2002	Supply and installation of CONE CLOSURE CAPS weighing 0.30 kg. Shaped cap made of high mechanical strength polypropylene (PP-H) for closing the cones to be installed above the semi modules at the first and last layers of the basin.	pc.	-
Dak.D. MET01-2001M	Supply and installation of semi module MALE CONNECTOR weighing 0.65 kg. High mechanical strength polypropylene (PP-H) connection connector to achieve a solid and aligned overlap between the module and the semi module. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-
Dak.D. MET01-2001F	Supply and installation of FEMALE CONNECTOR semi module weighing 0.63 kg. Connection connector in high mechanical resistance polypropylene (PP-H) to achieve a solid and aligned overlap between the module and the semi module. Installation and assembly must be carried out according to the manufacturer's instructions.	pc.	-