

Gravel stabilisation stabilisation for urban settings

NIDAGRAVEL NG040

URBAN APPLICATIONS

Thick, robust walls

The challenges of making urban settings permeable

New regulations encourage the use of permeable surfacing materials and good rainwater management. In particular, regulations now require the use of permeable surfacing materials to limit surface water runoff. Thus, car parks must now be designed to promote natural rainwater infiltration, while preventing the formation of ruts, holes and puddles.

Stabilised gravel: an alternative solution

In meeting these requirements, gravel is a solution to maintain ground permeability, but it must be stabilised. Nidagravel NG040 gravel stabiliser, with its thick walls and robust construction, is ideal when designing parking spaces for facilities such as shopping centres or supermarkets. It can also be used in building driveways, motorhome parking areas, or fire vehicle access lanes.

Complementary products



Segmentation accessory

Helps absorb the effects of dilation.



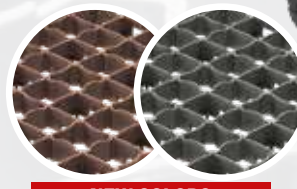
Parking MARKER NG040

Clip-on white or grey marking stud to demarcate parking spaces.



PRODUCT SPECIFICATIONS

- Thick, robust walls,
- 100% permeable
- Suitable for vehicular traffic without surface layer
- Slabs are pre-assembled in batches of 4 (1m²)
- Recycled and recyclable product



NEW COLORS

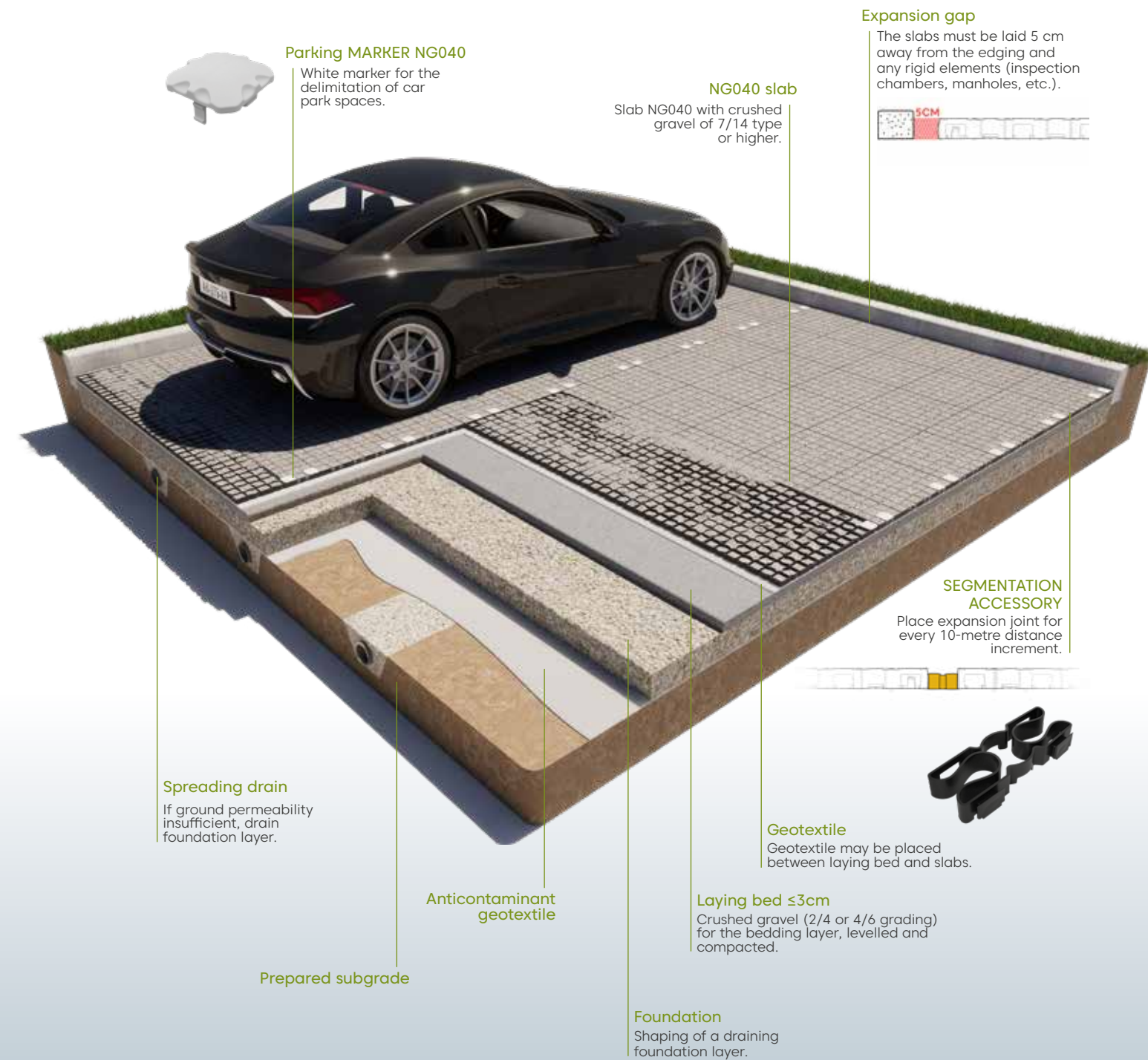
NIDAGRAVEL
Gravel stabilisation for urban settings

NIDAGRAVEL NGO40 OPERATION PRINCIPLE

Nidagravel NGO40 slabs, filled with gravel, are used to create stable and permeable surfaces, particularly for parking areas and light vehicle access roads.

Slab NGO40 car park marker makes it easy to delimit parking spaces. Its domed design makes it visible above the gravel.

Our expansion accessory is used to create gravelled areas of significant length. Position accessory every 10 metres to **split** surfaces and secure work.



Expansion gap
The slabs must be laid 5 cm away from the edging and any rigid elements (inspection chambers, manholes, etc.).



SEGMENTATION ACCESSORY
Place expansion joint for every 10-metre distance increment.



Geotextile
Geotextile may be placed between laying bed and slabs.

Laying bed ≤3cm
Crushed gravel (2/4 or 4/6 grading) for the bedding layer, levelled and compacted.

Foundation
Shaping of a draining foundation layer.

Anticontaminant geotextile

Prepared subgrade

Spreading drain
If ground permeability insufficient, drain foundation layer.

IMPLEMENTATION NIDAGRAVEL NGO40

1 EARTHWORK AND FOUNDATION



2 LAYING BED



3 BORDERING



Excavate the ground. Depending on the nature of the subgrade and once its bearing capacity has been assessed, install a draining foundation layer. Cover the foundation layer with a bedding layer of crushed gravel (2/4 or 4/6 grading), with a thickness of up to 3 cm. Compact and level the whole. Concrete edging must be installed in the traditional way. A geotextile may be placed between the bedding layer and the slabs.

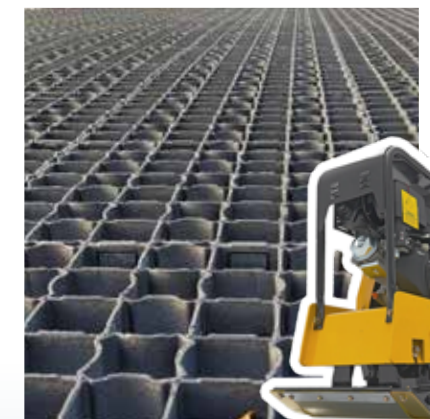
4 LAYING THE PLATES



5 DILATION



6 VIBRATION BEFORE AND AFTER FILLING



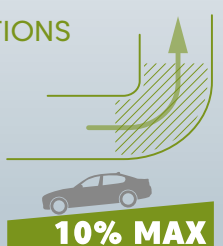
Start laying the slabs from one end of the site, positioning the fastening systems in the direction of installation. The slabs must be laid 5 cm away from the edging and all rigid elements (inspection chambers, manholes, etc.). An segmentation joint accessory must be installed for any length exceeding 10 m or 4 parking spaces to ensure the stability of the installation.

! Vibrate the empty slabs, then fill them with gravel until level. Once the slabs are filled with gravel, vibrate the entire surface, then top off as needed.

FOCUS USE AND APPLICATIONS

Turning areas
For pronounced turn areas, prioritise a mix of materials if necessary.

Slope
In vehicular access areas, we do not recommend using Nidagravel when slope is greater than 10%.



NIDAGRAVEL **NG040** ADAPTS TO ALL YOUR PROJECTS.

PRODUCTION SITE



350M² - FRESNES SUR ESCAUT

This business chose NG040 slabs for the partial renovation of a production site car park, and to deliver 30 parking spaces for company employees. The use of about twenty car park markers per space allowed contractors to define the spaces in an appealing, functional way. The slabs stabilise the gravel while preserving ground surface permeability and preventing the formation of ruts.



MOTORHOME AREA



1,740M² - MIMIZAN

When developing this motorhome area in a natural setting, NG040 slab was chosen to stabilise the gravel. These 60 parking spaces, spread out over 1,740 m² of land, allow holidaymakers to enjoy a stable, pleasant setting. The slab structure promotes rainwater drainage, while preventing the formation of ruts, holes and water puddles, as well as sinking table and chair legs. Clear gravel use mitigates the effects of the heat reflected from the ground in the summer months.



RESIDENTIAL PROPERTY



200M² - SEIGNOSSE

The company SARL OLIVIER completed a 200 m² residential parking lot in Seignosse using NG040 slabs to stabilize the gravel. This system provides a drivable, permeable, and durable surface. These de-impermeabilized surfaces were designed to reduce rainwater runoff from the property and relieve downstream drainage systems.



NIDAGRAVEL **NG040** ADAPTS TO ALL YOUR PROJECTS.

CAR DEALERSHIP



2,400M² - NANNINE

Car dealerships usually need ample parking space to display their vehicles. It was essential that such a large surface area remain permeable. Stable, passable for vehicles and visually appealing, these slabs blend in perfectly with the style of this Belgian dealership.



COMMERCIAL OFFICES



300M² - VALENCIENNES

During the layout of these commercial offices, a parking area was created. This solution was chosen for employees' walking convenience around the site and disabled accessibility. When designing a large parking area, an segmentation joint accessory must be laid every 10 metres.



SHOPPING CENTRE



1,100M² - BELBERAUD

As part of a car park extension project, and in order to maintain the permeability of the areas affected by new construction work, the designers of this commercial area opted for a stabilised gravel solution combined with the NG040 slab and its parking markers.



TECHNICAL DATA

NIDAGRAVEL NG040



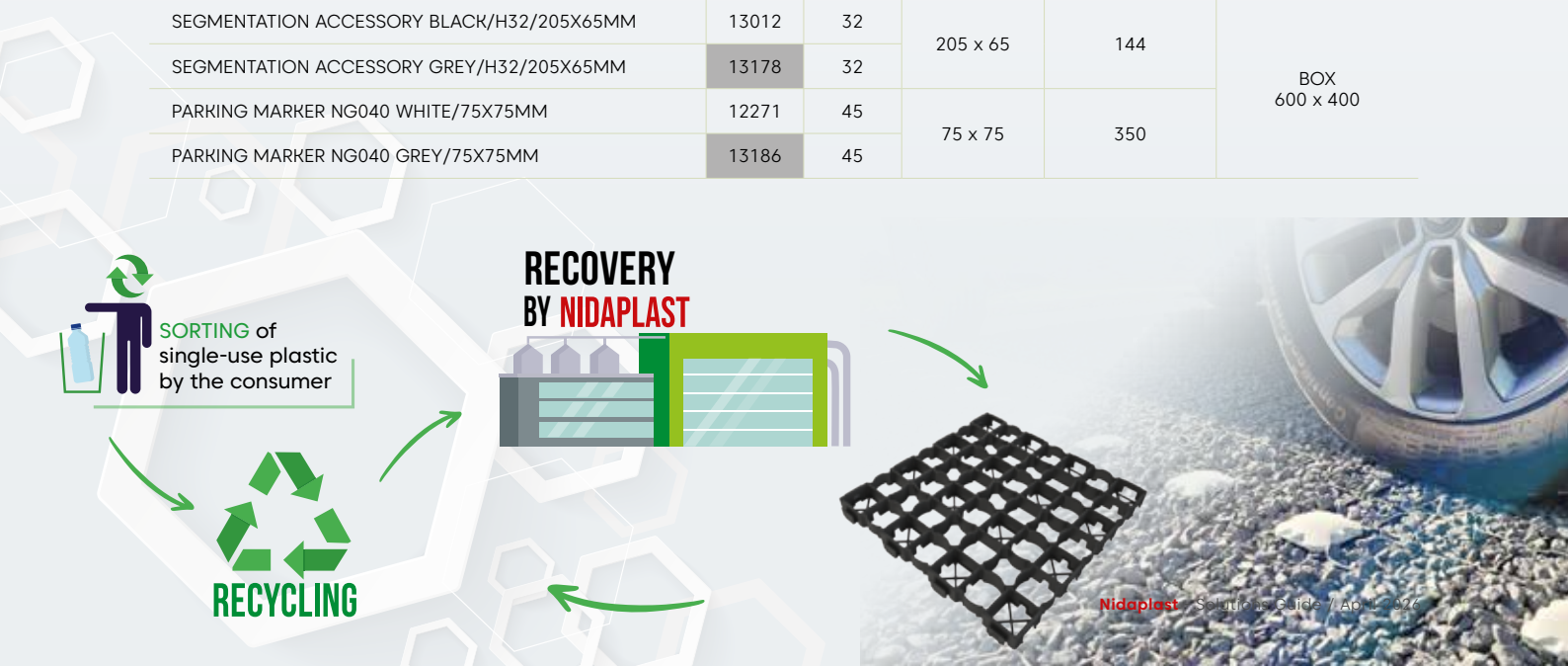
SPECIFICATIONS

Properties		NG040	STANDARDS
Material		LDPE - 100% recycled	
Mass per unit area (kg/m²)		5.20	ISO 845
Length (mm)		500	ISO 1923
Width (mm)		500	
Thickness (mm)	Slab	40	
	Walls	3 to 5.5	
Cell size (mm)		Variable ± 65	
Colour		Black or Grey	
Anchoring points		Four per side / 8 per linear metre	
Resistance to chemical agents		Excellent resistance to water and most acids, bases and salt solutions	
UV-resistant		Anti-UV treatment	
Compression resistance*		up to 800 t/m²	ISO 844
		Areas for pedestrians, cyclists and light motorcyclists	
		Light vehicle driveways	
		Light vehicle parking areas	
		Fire vehicle access (please consult us)	

*varies depending on nature of filling material
**Applications are specified in the case of a filled slab

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

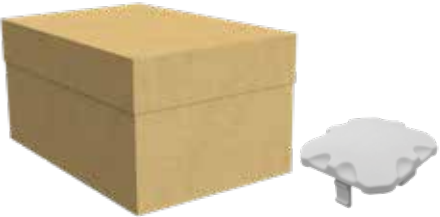
Product name	Code article	Height (mm)	Dimensions (mm)	Units per package	Type of packaging
SLAB NG040 BLACK/H40MM/500X500MM/DUAL	13166	40	500 x 500	2 x 132	DOUBLE PALLET 1,200 x 1,000
SLAB NG040 GREY/H40MM/500X500MM/DUAL	13117	40			
SLAB NG040 BROWN/H40MM/500X500MM/DUAL	13177	40			
SEGMENTATION ACCESSORY BLACK/H32/205X65MM	13012	32	205 x 65	144	BOX 600 x 400
SEGMENTATION ACCESSORY GREY/H32/205X65MM	13178	32			
PARKING MARKER NG040 WHITE/75X75MM	12271	45	75 x 75	350	
PARKING MARKER NG040 GREY/75X75MM	13186	45			



TECHNICAL DATA

NIDAGRAVEL NG040

SLABS NG040 PACKAGING



NG040 SLAB		
COUNT PER DOUBLE PALLET	2 x 132	
M² / DOUBLE PALLET	2 x 33	
DOUBLE PALLET WEIGHT (KG)	360	
PACKAGE DIMENSIONS	L	1,200 MM
	W	1,000 MM
	H	2,540 MM
PACKAGING DESCRIPTION	SLABS, CLIPPED INTO LOTS OF 4 ANGLE IRONS AND STRAPPING PALLET LABEL DELIVERED ON DISPOSABLE TWO DISPOSABLE WOODEN PALLETS	

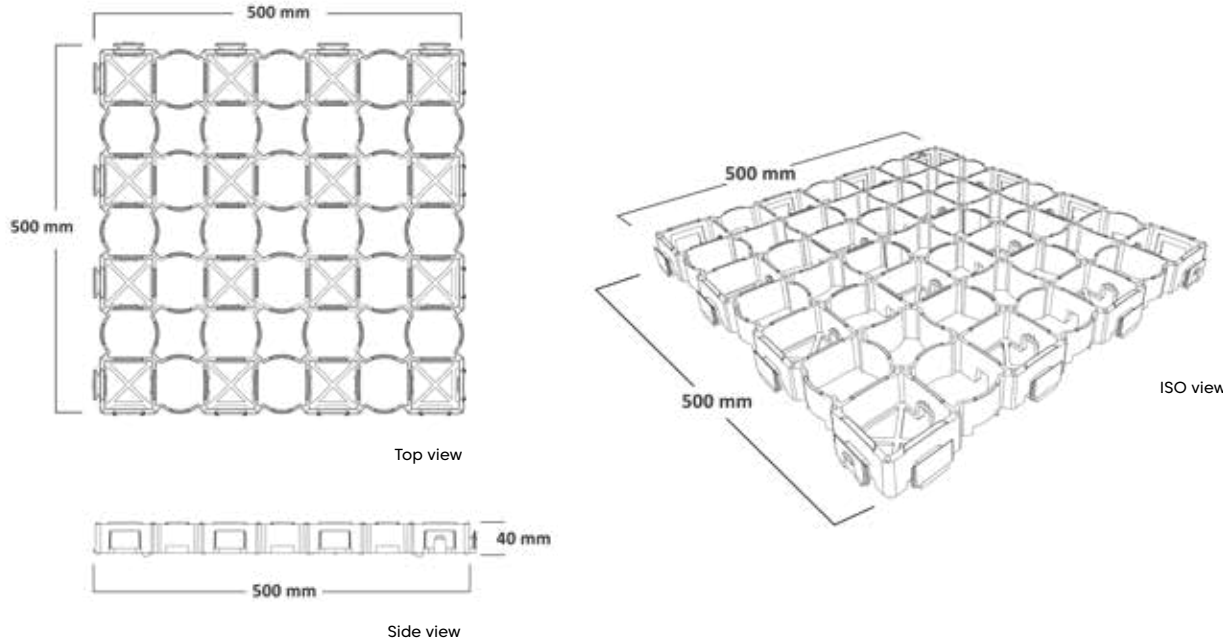
PARKING MARKER NG040		
PACKAGE DIMENSIONS	L	600MM
	W	400MM
	H	310MM
PACKAGING DESCRIPTION	BOX	
COUNT PER BOX	350	
BOX WEIGHT (KG)	14	

SEGMENTATION JOINT ACCESSORY		
PACKAGE DIMENSIONS	L	600MM
	W	400MM
	H	310MM
PACKAGING DESCRIPTION	BOX	
COUNT PER BOX	144	
BOX WEIGHT (KG)	15	

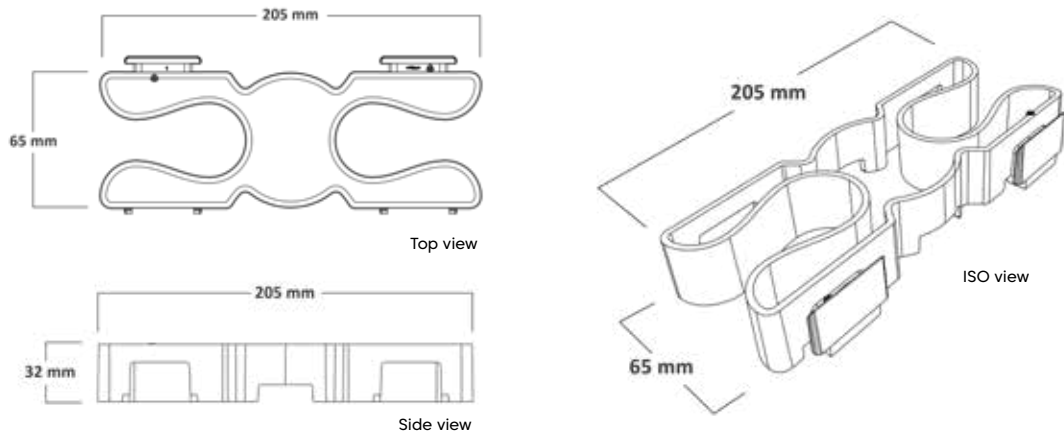
TECHNICAL DATA

NIDAGRAVEL NG040

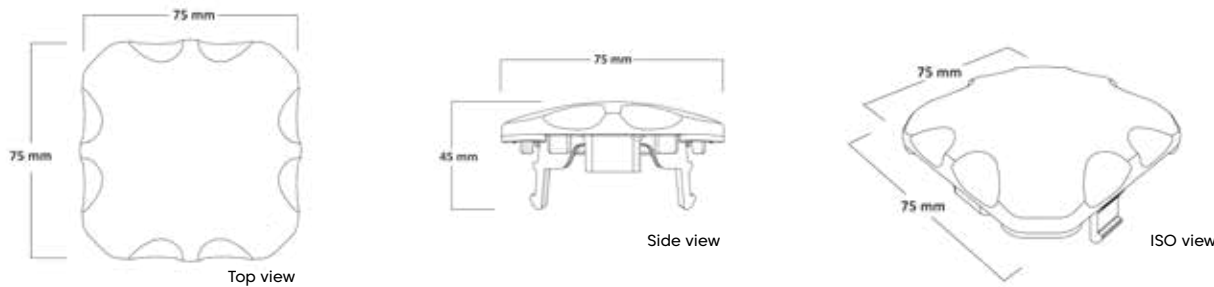
NG040 SLAB DIMENSIONAL DIAGRAMS



SEGMENTATION JOINT ACCESSORY DIMENSIONAL DIAGRAMS



DIMENSIONAL DIAGRAMS FOR PARKING MARKER NG040



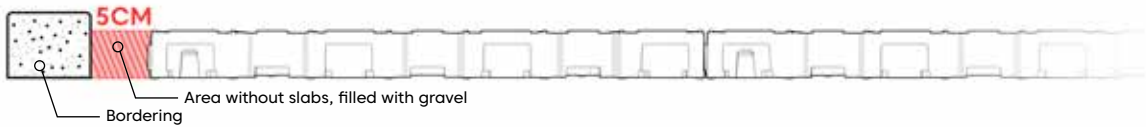
TECHNICAL DATA

NIDAGRAVEL NG040

EXPANSION AND SEGMENTATION DIAGRAMS

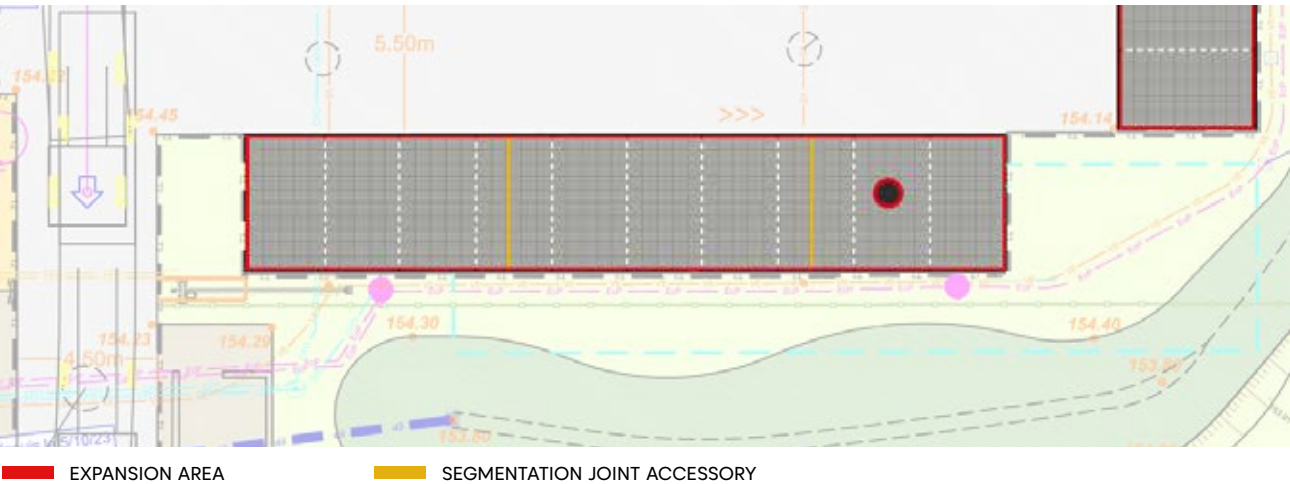
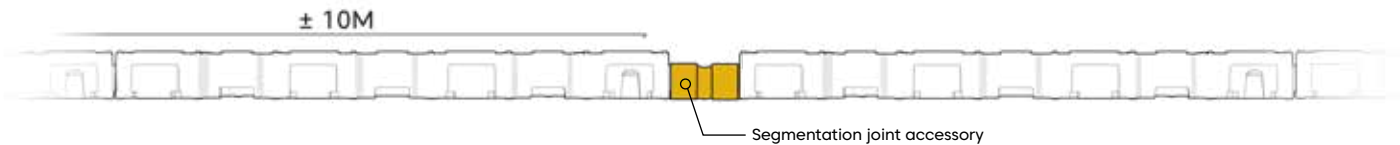
EXPANSION GAP AROUND THE ENTIRE PERIMETER AND AROUND ALL HARD POINTS

Leave a 5 cm gap between the edging, hard points (pulling chambers, inspection covers, etc.) and the NG040 slabs to allow for slab expansion.



SEGMENTATION JOINT ACCESSORY

Provide a segmentation joint accessory between the slabs for all lengths exceeding 10 metres or 4 parking spaces. Provide 2 accessories per slab, corresponding to 4 accessories per linear metre of segmentation.



POSITIONING DIAGRAMS FOR MARKING PADS

