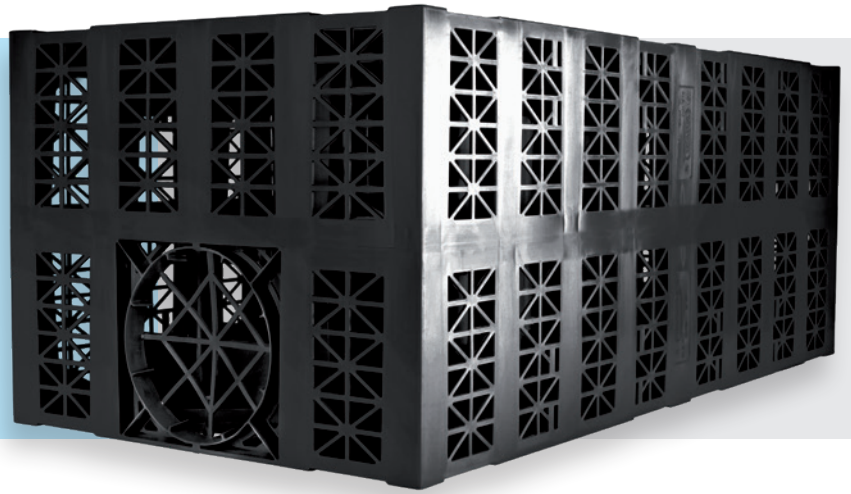


AquaCell Core-R

Product description

AquaCell Core-R has been designed for use in deep applications, subject to regular and heavy traffic loadings, e.g. cars and HGV's. AquaCell Core-R can also be used in both landscaped and deep soakaway applications.



Technical specification

Product code / SAP code	6LB150 / 4064830	Void ratio	95%
Colour	Black	Material	Recycled PP
Dimensions	1m x 0.5m x 0.4m	Vertical loading	66.9 tonnes/m ² (669 kN/m ²)
Weight	11.5kg	Lateral loading	12.3 tonnes/m ² (123 kN/m ²)
Storage volume	190 litres	BBA approval	Certificate 03/4018

Maximum installation depths

Typical soil type	Maximum depth of installation – to base of units (m) ¹				
	Soil weight kN/m ³	Angle of internal friction ϕ (degrees) ^{2,3}	Landscaped areas	Vehicle mass <9 tonnes ^{4,5}	Vehicle mass <44 tonnes
Over consolidated stiff clay	20	24	3.85	3.61	3.36
Silty sandy clay	19	26	4.35	4.09	3.83
Loose sand and gravel	18	30	5.34	5.06	4.78
Medium dense sand and gravel	19	34	5.94	5.68	5.41
Dense sand and gravel	20	38	6.68	6.43	6.18

Minimum cover depths

	Landscaped areas	Car parks with vehicle mass <3 tonnes ⁵	Car parks with vehicle mass <9 tonnes	Car parks with vehicle mass <12 tonnes	Low speed roads with vehicle mass <60 tonnes
Minimum cover depth (m)	0.30	0.50	0.60	0.70	1.11

- Without groundwater present below base of units – AquaCell Core-R may be used where groundwater is present, contact Wavin for technical advice.
- Loosening of dense sand or softening of clay by water can occur during installation. The designer should allow for any such likely effects when choosing an appropriate value of ϕ .
- The design is very sensitive to small changes in the assumed value of ϕ , therefore, it should be confirmed by a chartered geotechnical engineer. In clay soils, it may be possible to utilise cohesion in some cases.
- Applicable for car parks or other areas trafficked only by cars or occasional refuse collection trucks or similar vehicles (typically one per week).
- This category should be used when considering landscaped areas that may be trafficked by ride on mowers.

Assumptions made:

- Ground surface is horizontal
- Shear planes or other weaknesses are not present within the structure of the soil

Source: BBA