

Product Specification Sheet

RainBloc is manufactured from selected recycled material and is designed for deeper applications which may be subject to regular and heavy traffic loadings, e.g. cars and HGV's.

Technical Specification

| | Crate |
|------------------|--|
| Product Code | 360050 |
| Colour | Black |
| Dimensions (mm) | 1200 x 600 x 420 |
| Weight | 17kg |
| Gross Volume | 300 litres |
| Net Volume | 285 litres |
| Void Ratio | 95% |
| Inspectable | No |
| Vertical Loading | 45 tonnes/m ² (450kN/m ²) |
| Lateral Loading | 15 tonnes/m ² (150kN/m ²) |
| BBA Approved | No |



Maximum depth of installation

Maximum depth of installation - to base of units (m)¹

| Typical soil type | Soil weight kN/m ² | Angle of internal friction (degrees) ² | Landscaped areas | Vehicle weight <9 tonnes ³ | Vehicle weight <30 tonnes | Vehicle weight <40 tonnes |
|------------------------------|-------------------------------|---|------------------|---------------------------------------|---------------------------|---------------------------|
| Over consolidated stiff clay | 20 | 24 | 4.75 | 4.50 | 4.25 | 4.25 |
| Silty sandy clay | 19 | 26 | 5.50 | 5.25 | 5.00 | 5.00 |
| Loose sand and gravel | 18 | 30 | 6.00 | 5.75 | 5.50 | 5.50 |
| Medium dense sand and gravel | 19 | 34 | 6.50 | 6.25 | 6.00 | 6.00 |
| Dense sand and gravel | 20 | 38 | 6.75 | 6.50 | 6.25 | 6.25 |

It is advised that structural design calculations are carried out prior to work commencing. Installation depths and loadings outside of those covered in this table may be permissible depending on site conditions. Contact Graf UK Ltd for more information.

Minimum cover depths

| | Landscaped area | Vehicle weight <3 tonnes ⁴ | Vehicle weight <9 tonnes | Vehicle weight <12 tonnes | Vehicle weight <30 tonnes | Vehicle weight <40 tonnes |
|-------------------------|-----------------|---------------------------------------|--------------------------|---------------------------|---------------------------|---------------------------|
| Minimum cover depth (m) | 0.30 | 0.50 | 0.55 | 0.65 | 0.70 | 1.10 ⁵ |
| Maximum cover depth (m) | 3.0 | 3.0 | 3.00 | 3.00 | 2.75 | 2.50 |

Other vehicle loads are possible. Please contact Graf UK for technical advice

Notes:

- Without groundwater present. RainBloc may be used where groundwater is present, contact Graf UK for technical advice.
- The design is very sensitive to small changes in the assumed value of ϕ , therefore, it is recommended that these values are confirmed by a chartered geotechnical engineer.
- Applicable for car parks or other areas trafficked only by cars or LGVs. Infrequent accidental load from heavier vehicles may be possible.

- This category should be used when considering landscaped areas that may be trafficked by ride on mowers.
- Including 200mm concrete slab.

Assumptions made:

- Ground above and to the sides of the tank is horizontal.
- Shear planes or other weaknesses are not present within the structure of the surrounding soil.