nidaplast® RA
lightweight fill honeycomb structures

- Honeycombed structure for lightweight backfill
- Immune to fluctuations in underground water levels
- Drainage
- Resistant to hydrocarbons, chemical agents, mildew and rodents
- Low density (32 to 45 kg/m³)
- Wide range of compressive strengths (300 to 600 kPa)

www.nidaplast.com
**Nidaplast® RA: a highly resistant solution with good drainage**

The use of lightweight nidaplast® RA is a simple and cost-efficient alternative to the traditional ground reinforcement solutions to reduce or eliminate settlements of compressible supporting ground. This solution can also reduce the vertical and horizontal forces exerted on an engineering structure or a building so as to reduce the cost of the structures onto which the backfill is applied.

There are many possible applications:

- **Road backfill on compressible or unstable ground:** bridge abutments, retaining walls, shoreline development, widening of carriageways, landslides etc.
- **Building backfill:** reducing loads on concrete slab, lateral forces on the foundations, lightening of planters filled with earth.
- **Landscape backfill:** lightening of structured plantation works.

The honeycomb structure is particularly well suited to face the challenges related to drainage and installation in damp areas. Its high mechanical strength allows for backfilling directly onto the structure without any need of a load distribution slab. This solution promotes the rapid completion of works in a technically sound and cost-efficient manner.

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**Product properties***

- Extruded polypropylene honeycomb blocks and panels
- Installation of a concrete slab is not required for road subbases
- Backfilling can take place directly onto the Nidaplast structure
- Quick to lay (easy to carry/cut)
- No floatation problem
- Installation possible in damp areas
- Durability of works
- Technically sound and cost-efficient

<table>
<thead>
<tr>
<th>Products</th>
<th>nidaplast® RA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RA 300</td>
</tr>
<tr>
<td>Dimensions</td>
<td>2400 x 1200 mm</td>
</tr>
<tr>
<td>Thickness (on request)</td>
<td>40 / 60 / 100 / 120 / 150 / 520 mm</td>
</tr>
<tr>
<td>Non-woven PET</td>
<td>PET 45 g/m² on both sides</td>
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<tr>
<td>Cell size</td>
<td>50 mm</td>
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<tr>
<td>Mass density</td>
<td>32 kg/m³, 35 kg/m³, 40 kg/m³, 44 kg/m³</td>
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<tr>
<td>Material</td>
<td>Extruded polypropylene</td>
</tr>
<tr>
<td>Colour</td>
<td>Black / Brown</td>
</tr>
<tr>
<td>Compressive strength (20°C) ISO 844</td>
<td>300 kPa, 400 kPa, 500 kPa, 600 kPa</td>
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</table>

* For installation, please refer to the general laying instructions and the technical guide for ultra-light road backfill structures of the Laboratoire centrale des ponts et chaussées (LCPC)

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**Available accessories**

- **Géoflow®**
  - Three-dimensional PEHD grid
  - Very high horizontal drainage capacity
  - Two crossed threads at 60°
  - Geotextile on underside, needle and thermobonded on 1 side
  - Dimensions: 2 m x 50 m (roll)
  - Thickness: 4 mm

- **Nidastyrène® RA**
  - Expanded polystyrene blocks of large dimensions for lightweight backfill.