SPEL Stormsack
At Source Gross Pollutant Trap
The SPEL Stormsack is specifically designed for the capture of gross pollutants: sediment, litter, and oil and grease. Ideally suited for storm drain retrofits, the SPEL Stormsack’s unique design allows maintenance to be performed using conventional vacuum suction equipment.

SPEL Stormsack filtration solutions are highly engineered water quality devices that are deployed directly in the stormwater system to capture contaminants close to the surface for ease of maintenance. Easily retrofitted into new or existing structures, SPEL Stormsack filtration technology is a decentralized approach to stormwater treatment that essentially repurposes traditional site infrastructure and customizes it to meet specific site water quality goals. In this way, it satisfies important objectives of today’s LID (Low Impact Development) criteria.

From an operations perspective, catch basins with SPEL Stormsack filters are also easier and quicker to clean out because pollutants are trapped just under the grate.

**APPLICATIONS**
- Council storm drain retrofits
- Commercial / retail / residential
- Litter prone urban areas
- Scrap metal / solid waste / oil storage
- Part of treatment train
- Construction sediment / erosion

**BENEFITS**
- Can be modelled in MUSIC in conjunction with bio-retention
- Low cost gross pollutant capture
- Quick & easy installation
- Simple maintenance
- At source capture
- Adjusts to custom pit sizes

The SPEL Stormsack was introduced to the Australian market in 2012 and field testing is underway at several locations in South-east Queensland. Laboratory testing has shown capture of 99.99% of gross pollutants up to the bypass flow rate.* Further results will be provided as they become available.

Recommended minimum clearance from bottom of SPEL Stormsack to inside bottom of vault is 50mm. Typical frame adjustability range of 127mm in each direction.
HOW IT WORKS

This technology is a post developed stormwater treatment system. The SPEL Stormsack provides effective filtration of solid pollutants and debris typical of urban runoff, while utilising the existing or new storm drain infrastructure. The Stormsack is designed to rest on the flanges of conventional catch basin frames and is engineered for most hydraulic and cold climate conditions.

Installation procedures shall include removing the storm grate, cleaning the ledge of debris and solids, measuring catch basin clear opening and adjusting flanges to rest on grate support ledge. Install SPEL Stormsack with splash guard under curb opening so the adjustable flanges are resting on the grate support ledge. Install corner filler pieces. Reinstall storm grate directly on support flanges rise shall be no more than 3mm.

Maintenance: Typically the SPEL Stormsack is serviceable from the street level, and therefore maintenance does not require confined space entry into the catch basin structure. The unit is designed to be maintained in place with a vacuum hose attached to a sweeper or a vactor truck. Use only SPEL replaceable parts.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Efficiency</th>
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<tbody>
<tr>
<td>Gross Pollutants (GP)</td>
<td>100%</td>
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<tr>
<td>Total Suspended Solids (TSS)</td>
<td>61%</td>
</tr>
<tr>
<td>Total Phosphorus (TP)</td>
<td>28%</td>
</tr>
<tr>
<td>Total Nitrogen (TN)</td>
<td>45%</td>
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*Contact Spel to confirm approved performance for the project LGA

<table>
<thead>
<tr>
<th>Application</th>
<th>Regulatory Issue</th>
<th>Target Pollutants</th>
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<tbody>
<tr>
<td>Council Storm Drain Retrofits</td>
<td>At-source litter capture</td>
<td>Sediment, Litter, O&amp;G</td>
</tr>
<tr>
<td>Commercial/Retail/Residential Storms</td>
<td>Stormwater Compliance</td>
<td>Sediment, Litter, O&amp;G</td>
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<tr>
<td>Litter Prone Urban Areas</td>
<td>Cost effective litter control</td>
<td>Litter ≥ 5 mm</td>
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<tr>
<td>Scrap Metal/Solid Waste/Oil Storage/</td>
<td>Industrial Multi-Sector General</td>
<td>Gross Pollutants, O&amp;G</td>
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<tr>
<td>Etc</td>
<td>Permit</td>
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<tr>
<td>Part of Treatment Train</td>
<td>Council Stormwater Quality Improvement Targets</td>
<td>Sediment, Litter, O&amp;G</td>
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<tr>
<td>Construction Sediment/Erosion</td>
<td>Sediment Control Plan</td>
<td>Sediment/Erosion Control</td>
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</tbody>
</table>

**FEATURES**

1. **Ultra-Durable Aluminium Frame**
   - Available in 450x450mm, 600x600mm, 600x900mm and 900x900mm sizes
   - Custom pit arrangements upon request

2. **Black Poly Surround riveted to Frame**
   - Can be cut to suit on site

3. **Reinforced Stormsack Bag**
   - Bag has sewed eyelets
   - Square bottom design for even distribution

4. **Karabiners attach Bag to Frame for easy service & replacement**

5. **Aluminium Support Angles & Fixings**

Standard SPEL Stormsack to suit Pit Sizes
- 450x450mm
- 600x600mm
- 900x600mm
- 900x900mm

Custom sizes (i.e. 1200x900mm) can be manufactured on short lead times.
### TECHNICAL DRAWINGS

**PARTS LIST**

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<th>ITEM</th>
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<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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**NOTE:**
- All dimensions to closest 10 mm & +/- 30 mm
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**PLAN VIEW**

**ELEVATION VIEW**

**SECTION A-A**

**SECTION B-B**

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**TECHNICAL DRAWINGS**

**ISOMETRIC VIEW**

**ELEVATION VIEW**

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**NOTE:**
- Please check with SPEL STORMWATER for confirmation of current specifications.
- All dimensions to closest 10 mm & +/- 30 mm.
**TECHNICAL DRAWINGS**

**PARTS LIST**

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<td>HDPE COVER POLY PLASTIC 11</td>
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<td>ALUMINIUM CARABINER CLIP   163</td>
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<td>HDPECATCHMENT BAG14</td>
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<td>STAINLESS STEEL 304 BAG SUPPORT - METAL MESH15</td>
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<td>HDPE COVER POLY PLASTIC 11</td>
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<td>POLYESTER STRAP 50mm26</td>
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<td>GALVANIZED GAL. SUPPORT BRACKETS47</td>
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<td>10</td>
<td>248</td>
<td>STAINLESS STEEL 304BLIND RIVET248</td>
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</tbody>
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### Section A-A

**Description:**

- Rev. 1: 08/11/2021 R.R. INITIAL RELEASE
- Tolerance: All Dimensions to Closest 10 mm & +/- 30 mm
- 700 x 450 x 1000 mm
- Frame 900 x 600
- STORMSACK

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- Please check with SPEL STORMWATER for confirmation of current specifications.
NOTE: BY USING THE STORMSACK THE GRATE WILL BE APPROX. 3-5mm HIGHER

DETAIL 'A'

SECTION VIEW

NOTE: TOLERANCE: ALL DIMENSIONS 10mm UNLESS OTHERWISE STATED.
We believe clean water is a right not a privilege and we work to ensure a joy in water experience for you with your children and grandchildren.