



SMARTSOAK®

RESIDENTIAL STORMWATER
MANAGEMENT SYSTEM



0800 247 839 | WWW.CIRTEX.CO.NZ

SMARTSOAK®

Presenting a new way to deal with stormwater runoff from residential properties. In a smart, easy and cost effective kit, the SmartSoak system contains all the components needed to attenuate stormwater from an individual residential site. Hidden underground, SmartSoak stores runoff from the impermeable surfaces in a series of modules wrapped in a geotextile fabric where it slowly soaks away into the surrounding soils and/or is released through an orifice.

- Using the innovative 'Linear Access' pipes (refer to page 5), SmartSoak is a maintainable system which will not silt up over time, like traditional gravel soakage stormwater pits and buried crate systems.
- SmartSoak is smart, cost effective and compact; boasting a 95% void ratio compared with traditional soakage aggregate pits with a void ratio of 30-40% which are not able to be maintained.
- The SmartSoak modules are pre-approved by council* which streamlines the consenting process of the developer and project engineer.
- Available in 4 standard sizes to suit property requirements, the SmartSoak system can be easily installed anywhere on the property. The modules are trafficable meaning they can be installed under driveways and parking areas, providing there is a minimum of 600mm of cover.

SMARTSOAK KIT - Standard Sizes

| Code | Product | Tank Size | Modules |
|-------|------------------------|--------------------|---------|
| 13281 | SmartSoak 3.5m³ System | 2.0 x 2.145 x 0.86 | 15 |
| 13085 | SmartSoak 5m³ System | 2.8 x 2.145 x 0.86 | 21 |
| 13086 | SmartSoak 7m³ System | 4.0 x 2.145 x 0.86 | 30 |
| 13087 | SmartSoak 10m³ System | 5.6 x 2.145 x 0.86 | 42 |

SmartSoak modules and linear access technology hold pre-approval certification from Auckland and Waikato Local Authority SHARED SERVICES. At present, these are the only councils requiring formal approval for underground stormwater devices.



SMARTSOAK UTILISED IN 3 WAYS!

The primary function of SmartSoak is the management of storm runoff from impermeable surfaces.

SOAKAGE

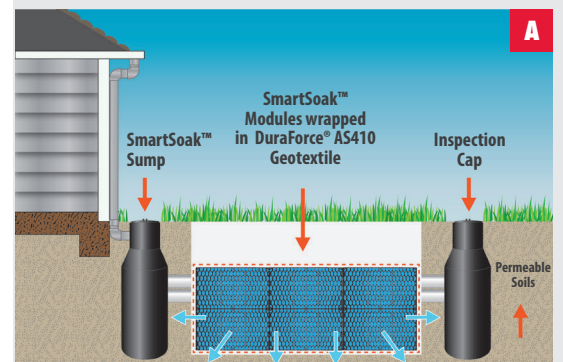
Rainwater is collected in SmartSoak modules and allowed to soak into the surrounding soil over a period of time after the storm has finished. A coarse screen filter is recommended to catch larger objects from blocking the system.

DETENTION

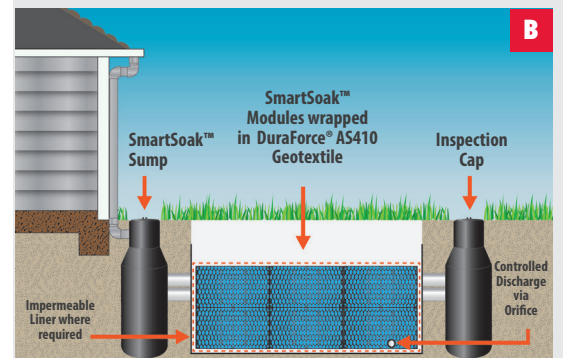
Stormwater is collected in SmartSoak detention module and released at a reduced rate through a flow control orifice into an appropriate outflow pipe. This reduces peak flows from the site, thereby minimising the risk of flooding, erosion and potentially deferring the need to replace hydraulically inadequate stormwater pipes.

REUSE

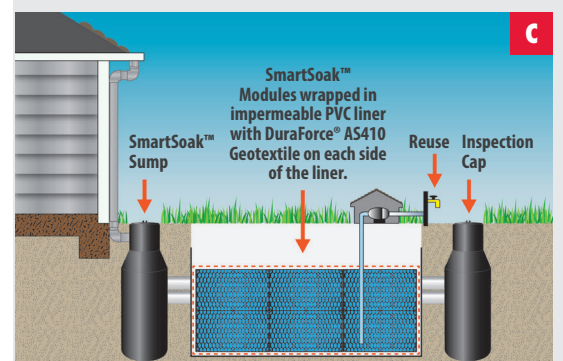
Rainwater from roofs is directed to SmartSoak modules located beneath driveways, lawns and other trafficable or non trafficable surfaces. A coarse screen filter is recommended to remove leaves and rubbish from inflows, thereby protecting the SmartSoak Soakage modules from blocking. Water collected in the tank is suitable for garden watering, laundry use and toilet flushing.



SOAKAGE SYSTEM



DETENTION SYSTEM



REUSE SYSTEM

SMARTSOAK

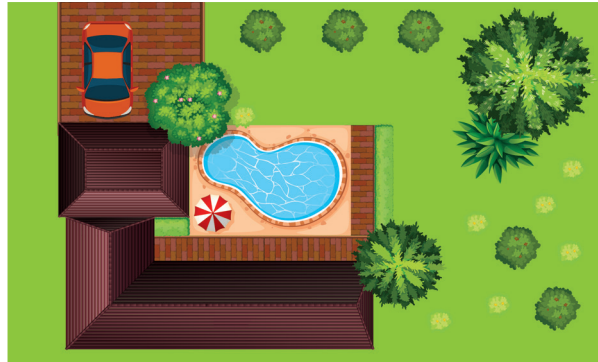
HOW TO WORK OUT WHAT SIZE YOU NEED

To ensure you use the right size SmartSoak for your property, a suitably qualified engineer will consider a number of factors including:

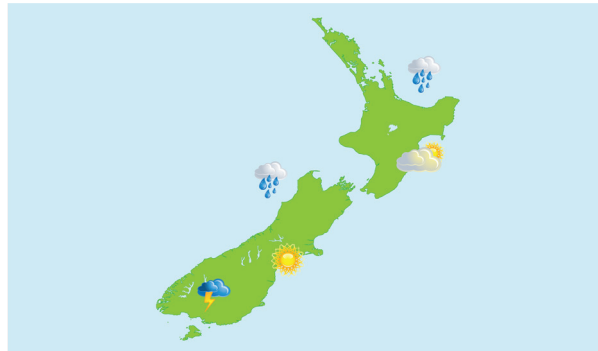
1. SURFACE TYPES AND AREAS

Such as:

- > Roof
- > Driveway
- > Patio
- > Lawn/Landscaped areas

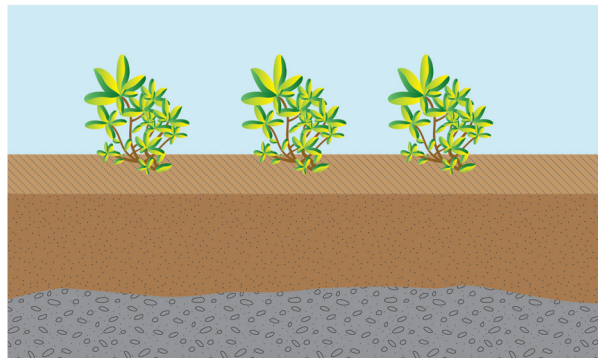


2. ANNUAL RAINFALL DATA & CLIMATE CHANGE FOR YOUR AREA

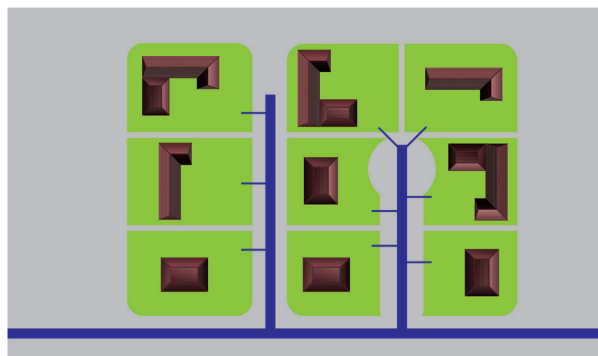


3. THE SOIL CONDITIONS ON YOUR PROPERTY

- > Soakage rate
- > Geotechnical hazards
- > Groundwater



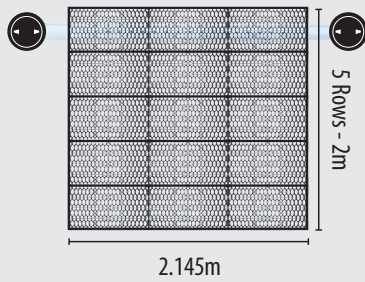
4. Whether you can discharge some stormwater into the council mains, or whether you need to deal with all run-off onsite.



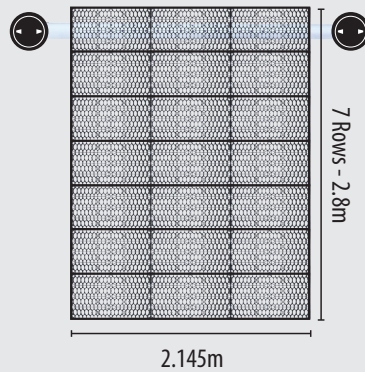
FOR MORE INFORMATION CONTACT CIRTEX
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If an engineer has not already advised what storage volume is required, we would recommend you engage a suitably quality engineer in your area to provide a stormwater report. Please contact us on 0800 247 839 if you require assistance with this.

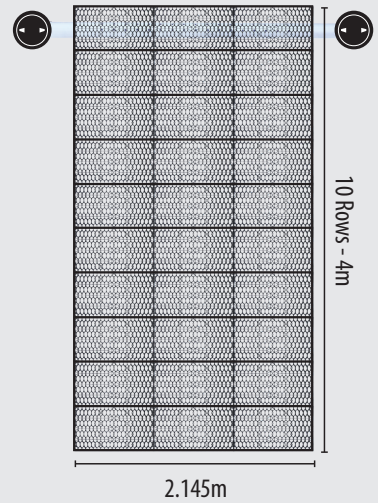
SMARTSOAK SYSTEM SIZES



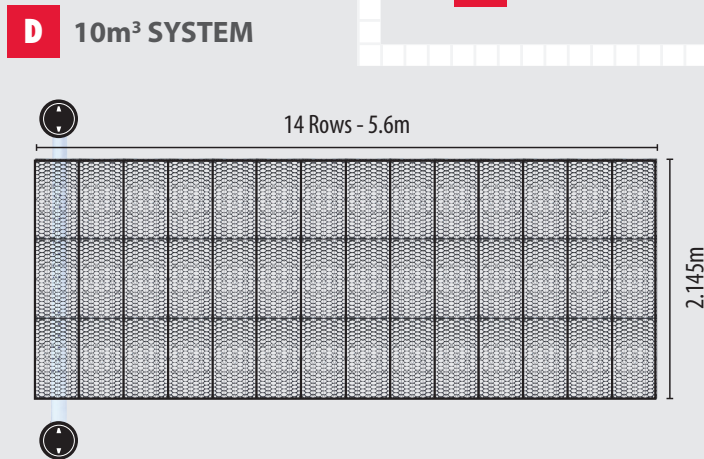
A 3.5m³ SYSTEM



B 5m³ SYSTEM



C 7m³ SYSTEM

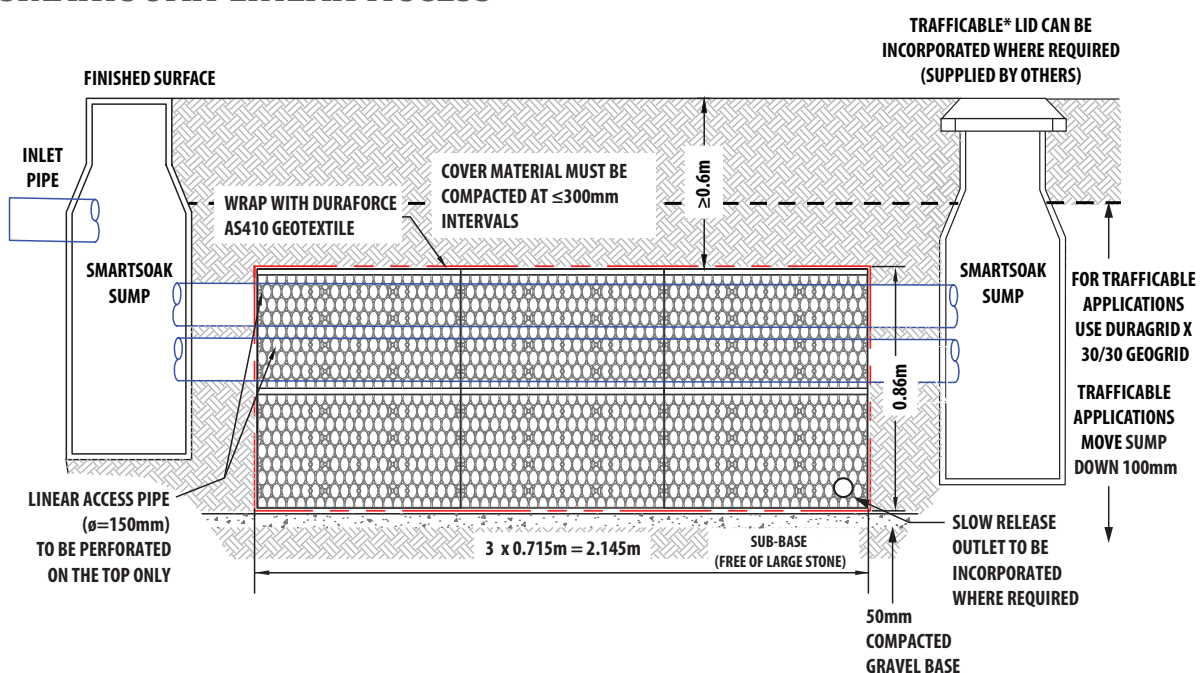


D 10m³ SYSTEM

STANDARD SIZES AVAILABLE

| | | |
|----------|-------------------|--|
| A | 3.5m ³ | *Custom sizes also available on request. |
| B | 5m ³ | |
| C | 7m ³ | |
| D | 10m ³ | |

SMARTSOAK LINEAR ACCESS

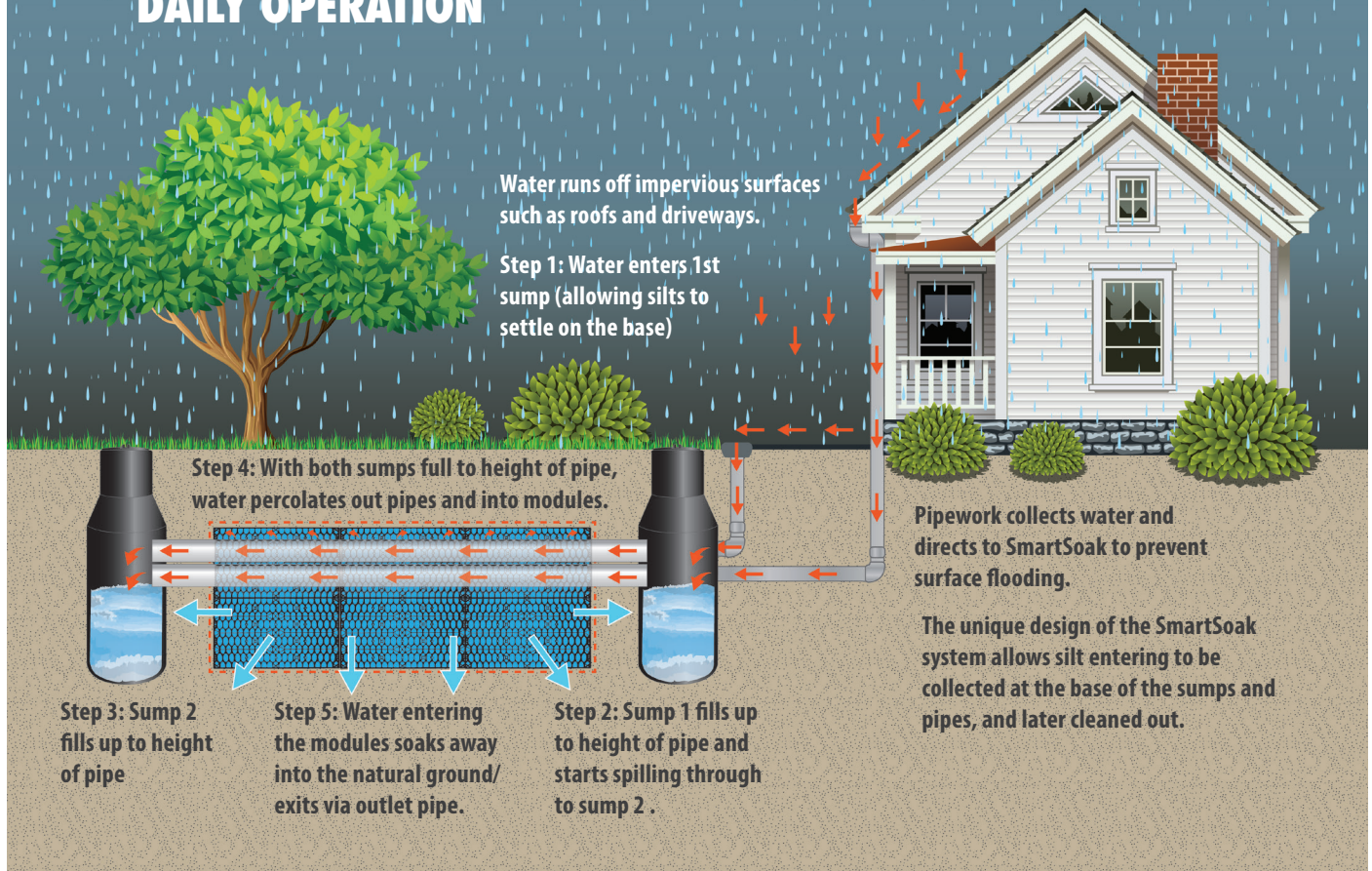


*Supplied by others (typically and cast iron lid and frame)

SMARTSOAK

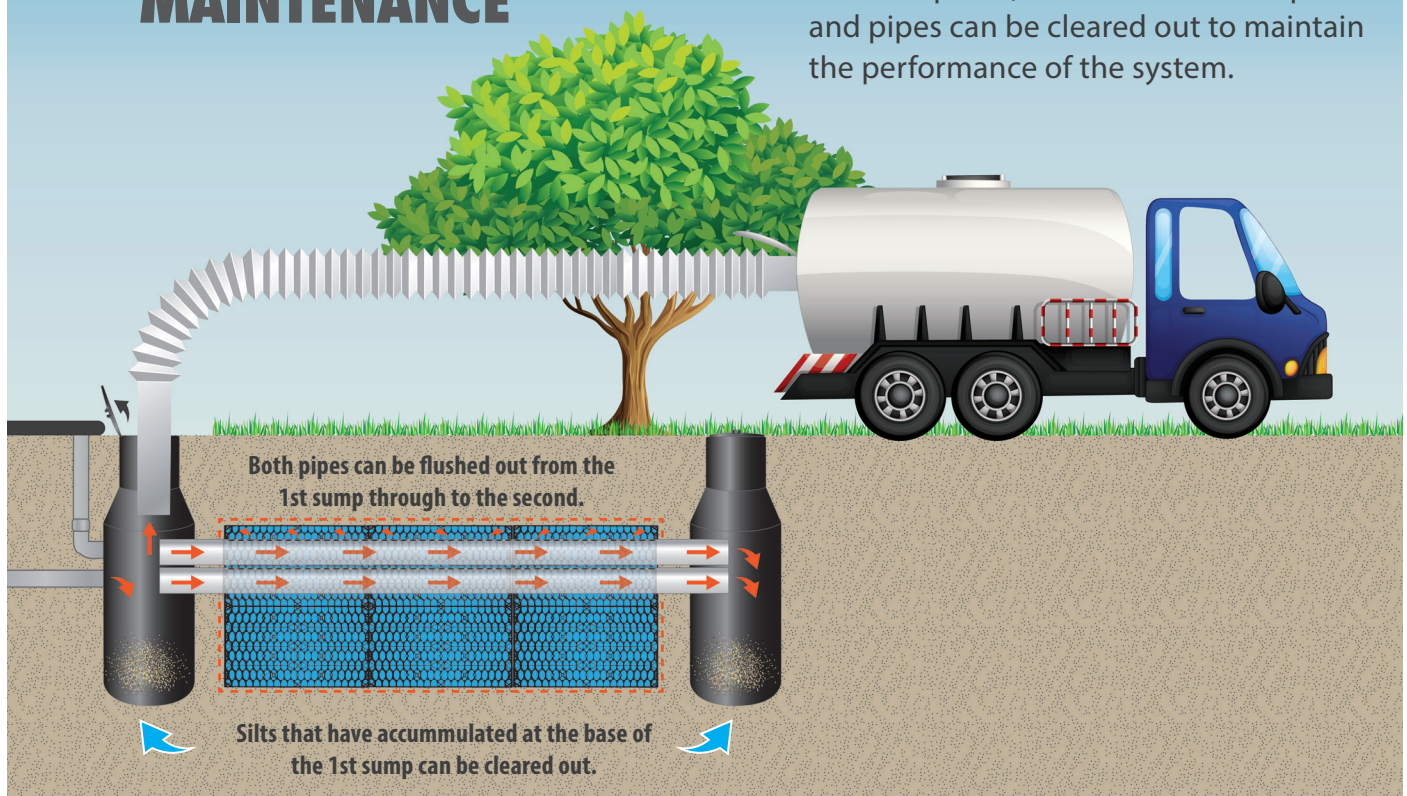
LINEAR ACCESS - HOW IT WORKS

DAILY OPERATION



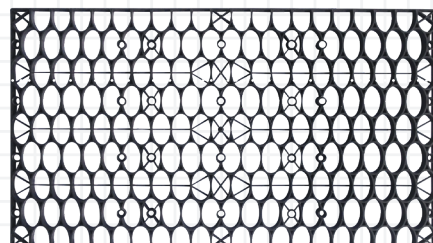
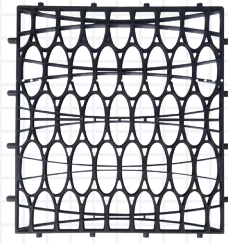
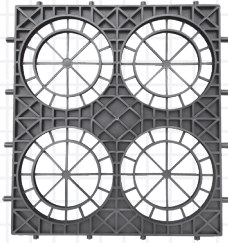
MAINTENANCE

When required, the SmartSoak sumps and pipes can be cleared out to maintain the performance of the system.



FOR MORE INFORMATION CONTACT CIRTEX
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COMPONENTS SMARTSOAK SYSTEM KIT



LINEAR ACCESS PLATES

400mm x 440mm

1 x SmartSoak Kit includes:
3.5m³ Kit: 15 LA Plates
5m³ Kit: 15 LA Plates
7m³ Kit: 15 LA Plates
10m³ Kit: 15 LA Plates

SMALL PLATES

400mm x 440mm

1 x SmartSoak Kit includes:
3.5m³ Kit: 135 Small Plates
5m³ Kit: 195 Small Plates
7m³ Kit: 285 Small Plates
10m³ Kit: 405 Small Plates

LARGE PLATES

400mm x 715mm

1 x SmartSoak Kit includes:
3.5m³ Kit: 105 Large Plates
5m³ Kit: 147 Large Plates
7m³ Kit: 210 Large Plates
10m³ Kit: 294 Large Plates



DURAFORCE® GEOTEXTILE

AS410

1 x SmartSoak Kit includes:
1 x DuraForce AS410
1.9m x 50m Roll

SUMP CAPS*

250mm (d)

1 x SmartSoak Kit includes:
2 x Sump Caps

SMARTSOAK SUMP TANKS

1.3m x 450mm (d)

1 x SmartSoak Kit includes:
2 x SmartSoak Sumps

LINEAR ACCESS PIPES

150mm x 2.7m (SN4)

1 x SmartSoak Kit includes:
2 x Top Perforated Pipes

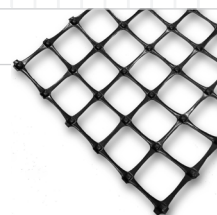


Note: All components on this page are not shown to scale.*Trafficable lid and frames supplied by others

TRAFFICABLE APPLICATIONS - DURAGRID X 30/30 GEOGRID:

3.5m³ kit = 3.95m x 3.8m
5m³ kit = 3.95m x 4.6m
7m³ kit = 3.95m x 5.8m
10m³ kit = 3.95m x 7m

Note: Dimensions allow for extending 900mm beyond SmartSoak footprint.



CIRTEX®
GAIN MORE GROUND

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DISCLAIMER

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APPROVALS:

SmartSoak® RainSmart® stormwater modules are pre-approved for use with Auckland Council and Waikato Local Authority SHARED SERVICES.

