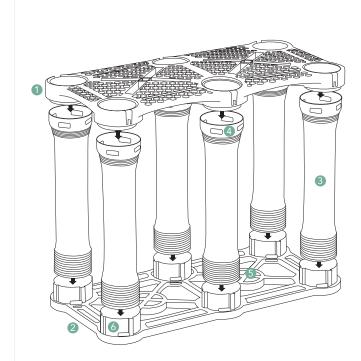
SILVA CELL 2 TECHNICAL SHEET

DeepRoot's Silva Cell 2 supports traffic loads while providing uncompacted soil volumes for large tree growth and on-site stormwater management. The modular framework provides unlimited access to healthy soil — a critical component of tree growth in urban environments — allowing them to manage stormwater, reduce heat-island effect, and improve air quality.

Silva Cells can be used to create underground bioretention systems; they are easily sized to absorb stormwater on-site through soil storage, interception, and evapotranspiration. Trees and soil also offer many water quality benefits, including removal of dissolved nutrients, hydrocarbons, and total suspended solids (TSS).



1 Deck

The top piece of the assembly. The deck is permeable, with wide openings that allow water to easily pass through to soil below. High fit tolerance; removable and reusable.

2 Base

The bottom portion of the Silva Cell 2 assembly.

8 Post

The posts transfer paving loads vertically downward to a compacted sub-base. They are available in two sizes - 1x and 2x - that snap together to form 3x, the tallest.

4 Secure Connections

Different post sizes snap together to form different heights based on the needs of your site.

6 Footpad

Footpad offers a safe and convenient way to walk through the system during installation.

6 Base Cup

Posts snap into base cups with a quarter turn.

1x Stack



2x Stack



3x Stack



Loading: Supports vehicle loading equal to 32,000 lbs (14,500 kg) per axle, which allows use in areas that accommodate 3 - 4 axle vehicles such as those used for emergency, delivery, and maintenance. Generally meets AASHTO HS-20 (USA), CSA-S6, 87.5 and OBC 54KN (Canada), and BS EN 1991-1-1:2002 and BS EN 1991-1-2:2003 (UK) loading standards when used with standard paving profiles.

Utilities: 14" (355 mm) apertures easily accommodate new or existing utilities.

Stormwater in/out: Totally open interior allows for easy movement of water into and out of the system.

Installation: All parts snap or twist together; no additional pieces required.

Spacing: Up to 6" (152.4 mm) spacing delivers soil as efficiently as possible.

Structurally independent: Each stack stands alone; affected area of system easily isolated if utility (service) repairs are necessary.

MATERIAL SPECIFICATIONS & TESTING

Deck: fiberglass reinforced, chemically-coupled, impact modified polypropylene.

Post and base: homopolymer polypropylene.

Proof-load tested and FEA analysis completed at an independent facility. Contact us for a detailed engineering report.

BASE DIMENSIONS

Length: 48" (1219.2 mm) Width: 24" (609.6 mm)

NS DECK DIMENSIONS

Length: 48" (1219.2 mm) Width: 24" (609.6 mm)

SYSTEM HEIGHTS

1x: 16.7" (424 mm) 2x: 30.9" (784 mm) 3x: 43.0" (1092 mm)

ASSEMBLED WEIGHTS

1x: 23.8 lbs (10.80 kg) 2x: 31 lbs (14.06 kg) 3x: 39.4 lbs (17.87 kg)

SOIL CAPACITY

1x: approx. 15.27 ft³ (0.430 m³) 2x: approx. 28.21 ft³ (0.795 m³) 3x: approx. 39.28 ft³ (1.107 m³)



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