

# StormCap<sup>™</sup>+Detention

Maximum Water-Retaining and Water-Detaining  
Pre-Vegetated System

## Best ROI

All your stormwater  
managed on the roof!



## No more buried cost

Reduce or eliminate  
the cistern

Sedum Blanket

Growing Media

Needled Mineral  
Hydro Blanket

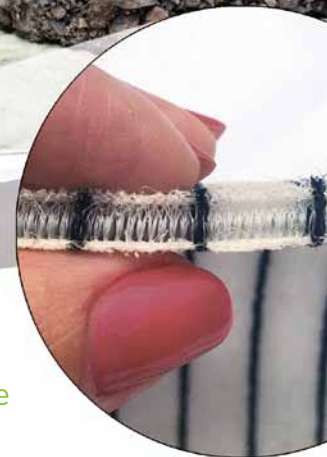
Detention Mat

Root Barrier

Conventional Roofing  
Assembly (CRA)



The Detention Mat replaces the  
Filter Fabric and Drainage Mat  
in the StormCap<sup>™</sup> System

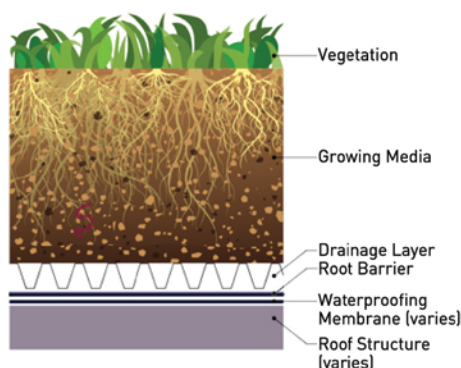


StormCap<sup>™</sup>+Detention manages stormwater on the roof by providing *retention* and *detention*, making it a full-fledged stormwater tool ready to face second day and extra-large storms. Detention provides a clear return on investment. StormCap<sup>™</sup>+Detention reduces or eliminates cisterns and bioretention facilities and frees up valuable space for income-generating development. It even works on a low-sloped roof!

## What to do with all that space?

- Park cars
- Bicycle storage
- Build a fitness centre
- Open a coffee shop
- Childcare space
- More!

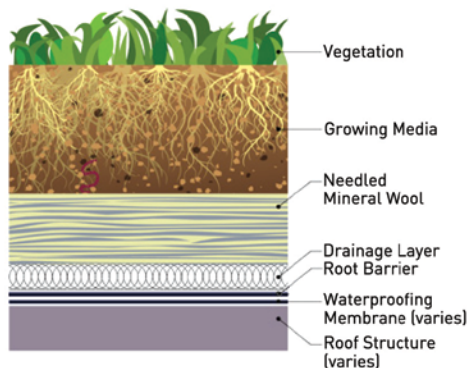
# How does StormCap™+Detention work?



## Traditional

- ☒ Retention
- ☐ Enhanced Retention
- ☐ Detention

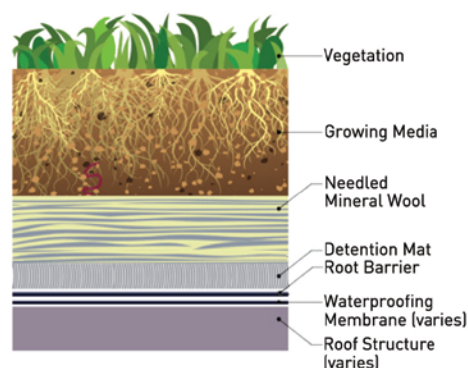
All green roofs provide retention. Retention can be achieved and replicated only when the system dries to a certain level. To become dry, water must leave as vapour through the slow process of evapotranspiration.



## StormCap™

- ☒ Retention
- ☒ Enhanced Retention
- ☐ Detention

Incorporates needled mineral wool for enhanced retention. The rest of the water runs off, particularly in large storms and second-day storms.



## StormCap™+Detention

- ☒ Retention
- ☒ Enhanced Retention
- ☒ Detention

Manages heavy rain events typically controlled by tanks or ponds. Incorporates a surface roughness layer - detention - that helps fill and submerge the system in rainwater, and then slowly empties afterwards.

### SAMPLE PROJECT using a custom assembly of StormCap™+Detention

<u>1696 m<sup>2</sup></u>	Size	<u>6.5 hours</u>	Runoff delay (centroid)
<u>2%</u>	Slope	<u>7.6 hours</u>	Recharge timeframe
<u>Type II 24-hr 157mm</u>	Design Storm	<u>97%</u>	Peak flow reduction
<u>16.8 L/s/ha</u>	Max Outflow Rate	<u>104 m<sup>3</sup></u>	Detention storage
<u>6</u>	Roof drains	<u>46 m<sup>3</sup></u>	Retention storage

#### Project-specific ROI:

- Eliminated stormwater tank
- Dramatically reduced excavation and foundation costs

Contact Sasha Aguilera, Design Ambassador, who will help run calculations specific for your project.  
Sasha@nlsm.ca or 416 637 5772 ext 2.