CASE STUDY: ARVADA, COLORADO

The site plan for the Hilton Garden Inn project in Arvada, Colorado, was tightly designed to work around preexisting constraints, and the corresponding stormwater management system needed to do the same. Traditional pipe and arch-shaped systems were considered as potential solutions for the project but would have required large footprints, using a lot of stone, to get the job done.

With space at a premium, StormTank’s Module system was considered, and ultimately chosen, as an alternative. Easily designed around structures and capable of being stacked, the Module system provided design flexibility that not only enabled more storage in a smaller footprint but required less stone and excavation than competing systems. These features allowed the StormTank system to both fit within the site’s tight constraints and reduce project costs.

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THE MODULE

The StormTank Module is a subsurface stormwater storage unit load-rated for use under surfaces such as parking lots, athletic fields, and parks. Its design provides maximum storage while minimizing the installation footprint to reduce construction costs and allow for utilization of valuable land. The Module is commonly used for detention, infiltration, and rainwater harvesting applications but can also be utilized for flood mitigation and bio-retention.

TOP & BOTTOM PANELS

The Module's top and bottom panels are injection molded from polypropylene. They are engineered for strength and uniformly distribute load to the columns.

HIGH VOID SPACE

The Module offers up to the largest void space of any subsurface stormwater management system currently on the market, with models providing as much as 97 percent.

REINFORCED COLUMNS

Extruded from PVC and designed with reinforcing structural ribs, the Module’s columns maximize strength. System stackability and variable column height accommodate tight site constraints.

SIDE PANELS

Side panels are used around the perimeter of the Module system to prevent fill material from entering and are injection molded from polypropylene.

<table>
<thead>
<tr>
<th>Height</th>
<th>Nominal Void Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 in (457 mm)</td>
<td>95.5%</td>
</tr>
<tr>
<td>24 in (610 mm)</td>
<td>96.0%</td>
</tr>
<tr>
<td>30 in (762 mm)</td>
<td>96.5%</td>
</tr>
<tr>
<td>33 in (838 mm)</td>
<td>96.9%</td>
</tr>
<tr>
<td>36 in (914 mm)</td>
<td>97.0%</td>
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ADDITIONAL STORMTANK PRODUCTS

THE SHIELD

The Stormtank Shield provides a low-cost solution for stormwater pretreatment by reducing pollutant discharge.

THE PACK

The Stormtank Pack is the light-duty solution for subsurface stormwater management.