R-Tank\textsuperscript{HD}: High Efficiency Stormwater Storage Under Amish Market Parking

95\% Internal Void Space. Modular Versatility. Minimum Excavation For Maximum Storage & Footprint Efficiency
**R-Tank**<sup>HD</sup> Modular Versatility:

**R-Tank**<sup>HD</sup> does not require complicated and expensive manifolds systems, perfect for projects like this with two separate placement areas.

R-Tank<sup>HD</sup> modules can easily be placed to conform to irregular and/or multiple footprints.
R-Tank™ HD Ease of Installation:

R-Tank™ HD Modules were delivered as unassembled panels and constructed on-site to reduce delivery costs.

Assembled R-Tank™ HD Modules are easily placed without the need for heavy (or even light) equipment, some laborers with a couple of hand trucks got it done!
R-Tank$^\text{HD}$ Modules can be constructed to a wide variety of depths. To take maximum advantage of the depth and footprint of this site, Triple Modules were utilized.

**Height = 50.39”**

**Storage Volume = 12.28 cf**

Standard R-Tank$^\text{HD}$ Modules:
- **Depth = 9.45” to 83.46”**
- **Storage = 2.30 cf to 20.34 cf**

Click here for R-Tank product overview.
Structural Stability – R-Tank Provides:

#1: Eliminates Low Void Space and Compaction Issues.
#2: Stability for Lateral and Vertical Pressures.
#3: Easy To Calculate and Fit in Excavated Area.
Placement of the assembled R-Tank$^{HD}$ continues.

Typical R-Tank$^{HD}$ Infiltration Design:

Outer shell of R-Tank$^{HD}$ Modules are 90% open, increasing groundwater recharge while reducing post-construction Discharge volume.
ACF Environmental provided comprehensive R-Tank™ HD construction layouts and was on-site during the installation, making sure the contractor “Got It Done” right.
After the two pictured R-Tank\textsuperscript{HD} Module segments were encapsulated in geotextile fabric the open area was filled with the same #57 stone as the perimeter fill.
R-Tank\textsuperscript{HD} Modules were connected directly to catch basin structures, a cost and time effective approach.
A key aspect of any R-Tank\textsuperscript{HD} project is proper placement and compaction of the backfill around and on top of the system.

Minimum Fills:
- Min 20” Cover
- 24” Perimeter
- 3” Base
Cover Profile is Built Above the R-Tank^{HD} System up to Final Grade

The R-Tank^{HD} System is protected from construction traffic until paved.

The R-Tank^{HD} System provides HS-20 and HS-25 loading with as little as 20” of cover.
ACF’s Engineering Team can provide project-specific support or you can access the tools below:

- Specifications
- Load Support Documentation
- CAD Details
- Pre-treatment Options
- Inspection Guidelines
- Maintenance Support Kit
- Installation & Maintenance Manuals
- Project Pictorials & Case Studies

CLICK HERE FOR 6 SLIDE PER PAGE PRINTER FRIENDLY VERSION