RainVault Specifications

RainVault is an injection molded underground stormwater detention system made from grade 1, post-industrial recycled polypropylene. Constructed from cross-linked, interconnecting plates, side panels, and a top cover, RainVault systems will meet the physical and chemical properties listed in the table below.

Item	Description	Value	
Void Area	Volume Available for Water Storage	95%	
Unconfined Crush Load VERTICAL	ASTM D 2412 / ASTM F 2418	60 psi	
Unconfined Crush Load LATERAL	ASTM D 2412 / ASTM F 2418	35 psi	
Service Temperature	Safe Temperature Range	-14 - 167 F	
Recycled Content	Use of Grade 1 Post-Industrial Recycled Polypropylene	100%	
Biological and Chemical Resistance	Potential for Deterioration	Unaffected by mold, algae, soil-born chemicals, bacteria, and bitumen	
Minimum Cover HS-20	Required Cover for HS-20 Loading	15 inches (contact Ripple for traffic applications between 12-15")	
Minimum Cover HS-25	Required Cover for HS-25 Loading	16 inches	
Maximum Cover	Cover Depth Not to Exceed	8 feet	

RainVault Dimensions

Module Configuration	Width	Length (inches)	Height*	Displacement	Storage Volume
	(inches / feet)	(inches / feet)	(inches / ft)	(cubic feet)	(cubic feet)
1.0 (Single Stack)	15.16" / 1.26'	30.32" / 2.53'	16.93" / 1.41'	4.50	4.28
2.0 (Double Stack)	15.16" / 1.26'	30.32" / 2.53'	32.68" / 2.72'	8.69	8.25
3.0 (Triple Stack)	15.16" / 1.26'	30.32" / 2.53'	48.43" / 4.04'	12.88	12.23
4.0 (Quad Stack)	15.16" / 1.26'	30.32" / 2.53'	64.17" / 5.35'	17.06	16.21
5.0 (Pent Stack)	15.16" / 1.26'	30.32" / 2.53'	79.92" / 6.66'	21.25	20.19

^{*} RainVault modules require a cap panel which goes over the top layer ONLY.

