



Alternative/Innovative Technology List of Approved Stormwater Practices (August 2017)

Practice Name	Manufacturer	Practice Type	Approval Type	BMP Category	BMP Code	Approval Date
StormCap™	Flex Membrane International /Stormwater Capture Co.	Green Roof	Alternative Surface	A	AGRE	7 /21/2017
Silva Cell Pavement System	DeepRoot Green Infrastructure LLC	Bioretention/Pavement System	ESD-All, Structural WQv, Structural Component	E, S	MMBR, FBIO	6 /16/2017
KBI FlexiPave	K.B. Industries	Permeable Pavement	Alternative Surface	A	APRP	5 /17/2017
StormTreat System	StormTreat Systems, Inc.	Submerged Gravel Wetland & Bioretention/Filter	ESD-All, Structural WQv	E, S	MSGW, MMBR, FBIO	5 /15/2017
LiveRoof Hybrid Green Roof System	LiveRoof Global, LLC	Green Roof	Alternative Surface	A	AGRE	2 /28/2017
StormPro	Environment 21, LLC	Hydrodynamic Separator	Pretreatment	X	XOGS	2 /7 /2017
VR Max Vegetated Roof System	Tremco Incorporated	Green Roof	Alternative Surface	A	AGRE	11/4 /2016
FocalPoint Bioretention Systems	ACF-Convergent Alliance	Bioretention	MS4 Retrofit, ESD WQv Only	E, S	MMBR, FBIO	9 /8 /2016
Suntree Nutrient Separating Baffle Box	Suntree Technologies	Hydrodynamic Separator	Pretreatment	S	XOGS	9 /8 /2016

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Columbia Green Technologies Green Roof Systems	Columbia Green Roof Technologies	Green Roof System	Alternative Surface	A	AGRE	9 /2 /2016
PaverGuide	PaverGuide, Inc.	Base/Storage Reservoir for Permeable Pavers	Alternative Surface	A	APRP	8 /29/2016
HydroBlox	HydroBlox Technologies, Inc.	Drainage/Conveyance Alternative	Structural Component	X	XOTH	5 /31/2016
Henry Green Roof Products	Henry Company	Green Roof System	Alternative Surface	E	AGRE	2 /5 /2016
Opti RTC Continuous Monitoring and Adaptive Control (CMAC)	OptiRTC, Inc.	Structural control component for wet ponds	Structural Component	X	XOTH	1 /27/2016
PerkFilter	Oldcastle Precast	Cartridge (Sand) Filter	Structural WQv	S	FSND	9 /16/2015
Hydropack Green Roof System	Vegetal i.D. Inc.	Green Roof	Alternative Surface	A	AGRE	9 /10/2015
Modular Wetland System - Linear	Modular Wetland Systems, Inc.	Bioretention/Micro-Bioretention/Submerged Gravel Wetland	MS4 Retrofit, ESD WQv Only, Structural WQv	E, S	MMBR, MSWG, FBIO	9 /8 /2015
AWD SITEDRAIN Strip 9624	American Wick Drain	Underdrain Alternative	Structural Component	X	XOTH	4 /6 /2015
MP Eco-Grid	USA EcoSystems	Reinforced Turf System	Alternative Surface	E	ARTF	1 /22/2015
Rotondo Bio-Filter	Rotondo Env. Solutions, LLC	Bioretention System	MS4 Retrofit	E, S	MMBR, FBIO	1 /9 /2015
Hydrotech Green Roofing System	American Hydrotech, LLC	Green Roof System	Alternative Surface	E	AGRE	1 /9 /2015
Stormcrete	Porous Technologies, LLC	Permeable Pavement	Alternative Surface	E	AGRE	12/9 /2014
Green Roof Outfitters Modular Roof System	Green Roof Outfitters, LLC	Modular Green Roof	Alternative Surface	E	AGRE	11/20/2014

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Eco-Roof	Eco-Roofs, LLC	Green Roof System	Alternative Surface	E	AGRE	4 /18/2014
StormTank StormShield	Brentwood Industries, Inc.	Vault/Filter System	Pretreatment	S	XOGS	3 /5 /2014
Rotondo Bio-Pod	Rotondo Env. Solutions, LLC	Permeable Pavement/Vault System	Pretreatment	S	XOTH	1 /7 /2014
AquaLok GLU	FGP Enterprises, LLC	Rainwater Harvesting	ESD-All	E	MRWH	1 /7 /2014
Clay Brick Pavers	The Brick Industry	Permeable Pavement	Alternative Surface	E	APRP	8 /12/2013
CrystalClean Separator	CrystalStream Technologies	Hydrodynamic Device	Pretreatment	S	XOGS	5 /30/2013
Aqua Bric/Bio-Pave	Filtterra Bioretention Systems	Interlocking Paving System	Alternative Surface, ESD-All, Structural WQv	E	APRP	3 /19/2013
SAFL Baffle	Upstream Technologies	OGS/Filter System	Pretreatment	S	XOGS	3 /12/2013
COREgravel	Core Systems	Reinforced Turf	Alternative Surface	E	ARTF	3 /12/2013
EZ Roll Grass and Gravel Pavers	NDS, Inc.	Reinforced Turf	Alternative Surface	E	ARTF	3 /12/2013
EcoCline Living Roof System	Furbish Company	Green Roof	Alternative Surface	E	AGRE, AGRI	2 /25/2013
Filtterra Bioretention System	Filtterra Bioretention Systems	Bioretention	ESD WQv Only, Structural WQv	E, S	MMBR, FBIO	2 /22/2013
Grasscrete	Storm-Services, LLC	Reinforced Turf	Alternative Surface	E	ARTF	12/3 /2012
Nicolock Pavers	Nicolock Paving Stones	Permeable Paver	Alternative Surface	E	APRP	8 /3 /2012
AquaLok Panels	FGP Enterprises, LLC	Green Roof/ Rainwater Harvesting	Alternative Surface, ESD-All	E	AGRE, MRWH	6 /20/2012

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PaveDrain	Ernest Maier, Inc.	Permeable Pavement	Alternative Surface	E	APRP	3 /29/2012
Jellyfish Filter	Imbrium Systems Corporation	Cartridge/Membrane Filter	Structural WQv	S	FUND	3 /12/2012
Floating Treatment Wetlands	BlueWing Env. Solutions	Modular Wetland	Pretreatment	S	XOTH	3 /8 /2012
StormBasin	Fabco Industries, Inc.	OGS/Filter	Pretreatment	S	XOGS	2 /13/2012
StormSafe	Fabco Industries, Inc.	Vault/Filter System	Pretreatment	S	XOGS	2 /13/2012
StormSack	Fabco Industries, Inc.	Catch Basin Insert	Pretreatment	S, A	XOGS, CBC	2 /13/2012
PhosphoSorb Media	ConTech Construction	Filter Media	Structural WQv	S	FUND	11/18/2011
BaySeparator	BaySaver Technologies, Inc.	Hydrodynamic Device	Pretreatment	S	XOGS	8 /10/2011
FlexStorm	Nyloplast	Catch Basin Insert	Pretreatment	S, A	XOGS, CBC	5 /17/2011
V2B1 Hydrodynamic Separator	Environment 21	Hydrodynamic Device	Pretreatment	S	XOGS	10/6 /2010
Flo-Gard	Oldcastle Precast	Inlet Filter	Pretreatment	S	XOTH	8 /19/2010
Sorbitive Media	Imbrium Systems Corporation	Filtering Media	Structural WQv	S	ND, FPER, FO	10/21/2009
Sorbitive Filter	Imbrium Systems Corporation	Filter	Structural WQv	S	ND, FUND, FP	9 /11/2009
UrbanGreen	Contech Construction Product	Filter	Structural WQv	S	FBIO	6 /3 /2009
StormTank	Brentwood Industries	Storage Tank	Pretreatment	S	XFLD	11/6 /2008
FloGard Dual Vortex Separator (DVS)	Oldcastle Precast	Hydrodynamic Device	Pretreatment	X	XOGS	3 /25/2008
ADS/Hancor WQU	ADS Hancor	Hydrodynamic Device	Pretreatment	S	XOGS	3 /25/2008
StormTech Isolator	StormTech, LLC	Storage Tank	Structural Component	S	XFLD	11/7 /2007
No Fault/Smarte Surface	Human & Rohde	Permeable Surfaces	Alternative Surface	E	APRP, ARTF	6 /1 /2007
Flo-Guard Plus	Oldcastle	Catch Basin Insert	Pretreatment	S, A	XOGS, CBC	3 /27/2007

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Up-Flo Filter	Hydro International	Catch Basin Insert	Pretreatment	S, A	XOGS, CBC	2 /6 /2007
Storm-Pure	Nyloplast	Catch Basin Insert	Pretreatment	S, A	XOGS, CBC	11/20/2006
BayFilter	BaySaver Technologies, Inc.	Cartridge Filter	Structural WQv	S	FUND	10/12/2006
Aqua Swirl	AquaShield, Inc.	Hydrodynamic Device	Pretreatment	S	XOGS	5 /5 /2006
Stormfilter	Stormwater Management, Inc.	Cartridge Filter	Structural WQv	S	FUND	4 /11/2005
Terre Kleen	Terre Hill Concrete Products	Hydrodynamic Device	Pretreatment	S	XOGS	3 /28/2005
Ultra-Urban Filter	Abtech Industries	Catch Basin Insert	Pretreatment	S, A	XOGS, CBC	2 /15/2005
Vortfilter	Vortechnics, Inc.	Cartridge Filter	Pretreatment	S	FUND	1 /6 /2005
CDS Media Filtration System	CDS Technologies, Inc	Cartridge Filter	Structural WQv	S	FUND	12/30/2004
FirstDefense	Hydro International	Hydrodynamic Device	Pretreatment	S	XOGS	11/30/2004
Vortechs & Vort Sentry	Vortechnics, Inc.	Hydrodynamic Device	Pretreatment	S	XOGS	6 /1 /2004
Downstream Defender	Hydro International	Hydrodynamic Device	Pretreatment	S	XOGS	5 /4 /2004
CDS Oil / Grit Separator	CDS Technologies, Inc	Hydrodynamic Device	Pretreatment	S	XOGS	8 /15/2003
Aqua Filter	AquaShield, Inc.	Cartridge Filter	Structural WQv	S	FUND	6 /23/2003
BaySaver	BaySaver, Inc.	Hydrodynamic Device	Pretreatment	S	XOGS	6 /11/2002
Stormceptor	Imbrium Systems Corporation	Hydrodynamic Device	Pretreatment	S	XOGS	4 /16/2001

Please contact each vendor/manufacturer for approval letters and more specific product information for each of the above-listed practices. Any formal request to MDE concerning an alternative/innovative technology should be submitted to MDE's Sediment, Stormwater, and Dam Safety Program, 1800 Washington Boulevard, Baltimore, MD 21230. If there are any questions concerning these practices, please contact the Maryland Department of the Environment, Water and Science Administration at 410-537-3543 or at www.mde.maryland.gov.