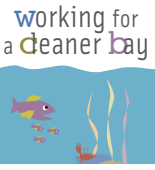


Infiltration Pit Fillers



Below is a list of suggested materials for use in an infiltration pit or other sub-surface runoff retention and infiltration system, or Best Management Practice (BMP), to meet the city's requirements for the Urban Runoff Pollution Mitigation Ordinance. The city does not endorse any specific product. This list merely identifies those products that the city's Urban Runoff Management Coordinator is aware of, to date, that can work in this specific BMP. Each product has its own advantages, whether it is cost, void space,

or ease of installation. One critical feature is to maximize void space to maximize runoff storage capacity and reduce clogging of void spaces with sediments and debris that may enter the system. While rock is cheaper, generally, it has significantly lower void space and can plug sooner. NOTE: If you choose rock, the pit volume must be increased by 2.5 times, for plastic devices, 1.05.

2.5 inch rock and greater (#3 rock), available from various local or regional rock/quarry/building materials companies throughout Southern California.

PLASTIC INFILL DEVICES

Modular Tanks, plastic, snap together matrix boxes, approximately 95% + void.

Atlantis Matrix Tank Modules, Atlantis Corp., 604.734.6553, linda@atlantiscorp.com.au, www.atlantiscorp.com.au, Bellingham, WA.

CUDO Tank, KriStar Enterprises, 760.743.6328, www.kristar.com, Murietta, CA.

D-Raintank, modular plastic storage chambers, Funke North America Ltd., 705.528.1064, fax 705.528.0970, info@funkenorthamericaltd.com, www.funkenorthamericaltd.com.

EcoRain Tanks/ Stormwater Solutions, 866.786.7690, 818.905.7582, www.stormh2osolutions.com, info@stormh2osolutions.com, Los Angeles, CA.

StormTank, Brentwood Industries, 888.381.0800, www.rginc.com, Sacramento, CA.

Rainstore³, Invisible Structures, Inc., 800.233.1510, www.invisiblestructures.com, a plastic matrix one meter by one meter, four inches high, stackable, 94% void space, with geogrid top covering, best suited for small area, deep BMP depth.

StormCell[®], HydroInternational, 207.756.6200, www.hil-tech.com, a geoplastic modular block, 95% void, with geogrid top covering, structural integrity, best suited for small area, deep depth.

Strata Cube, NSW, LLC., Stormwater Management Systems, 800.368.3610, www.nswplastics.com, a plastic open mesh tube system extruded and joined into various sizes, 99% void, suited for any size areas.

Tensar BX1100, Tensar Technologies, Inc., 800-TENSAR-1, 404-250-1290, www.tensarcorp.com, geogrid covering that provides additional strength for Rainstore³ and StormCell[®].

CONCRETE-METAL-PLASTIC CHAMBERS

Advanced Drainage Systems, Inc, 800.821.6710, www.ads-pipe.com, corrugated plastic pipe, solid and perforated for a variety of urban runoff retention purposes, local contact available.

Blue Seal, Hancor, 888.367.7473, www.hancor.com, corrugated plastic pipe in various lengths and diameters, solid and perforated, suited for small and large areas, shallow and deep areas.

Corrugated Steel Pipe, Pacific Corrugated Pipe Co., 800.338.5858, www.pac-corr-pipe.com, corrugated steel pipe in various lengths and diameters, perforated, 99% void, horizontal with geogrid covering at each end, best suited for small and large areas, shallow and deep depths.

PP Fill Media, Bio-Microbics, Inc., 800.753.3278, 913.422.0707, www.biomicrobics.com, sales@biomicrobics.com, a polypropylene modular bloc, 8'x2'x2', 95% void, best suited for small surface areas and deeper depths.

Recharger[™]/Contactor[™] H-20 Chambers, Cultec, Inc., 800-4CULTEC (428.5832), www.cultec.com, a plastic, concave open-bottom chamber 8.5-32.5" high with various lengths, non-stackable, 99% void, best suited for long area, shallow BMP depth.

StormChamber[™], HydroLogic Solutions, 877.426.9128, 703.492.0686, info@hydrologicsolutions.com, a plastic, concave open-bottom chamber, 34" high, 60" wide, 102" long, HS-20, 99% void, best suited for long area, shallow depth.

StormTech Chambers, StormTech, Inc., Subsurface Stormwater Management, 888.892.2694, www.stormtech.com, a plastic, concave open-bottom chamber 34"x 75"x 16", non-stackable, 99% void, best suited for long area, shallow BMP depth.

StormTrap[™], StormTrap, 87.STORMTRAP, 877.867.6872, www.stormtrap.com, pre-cast concrete modular storm water retention system to hold runoff underground, exceeds H-20 loading.

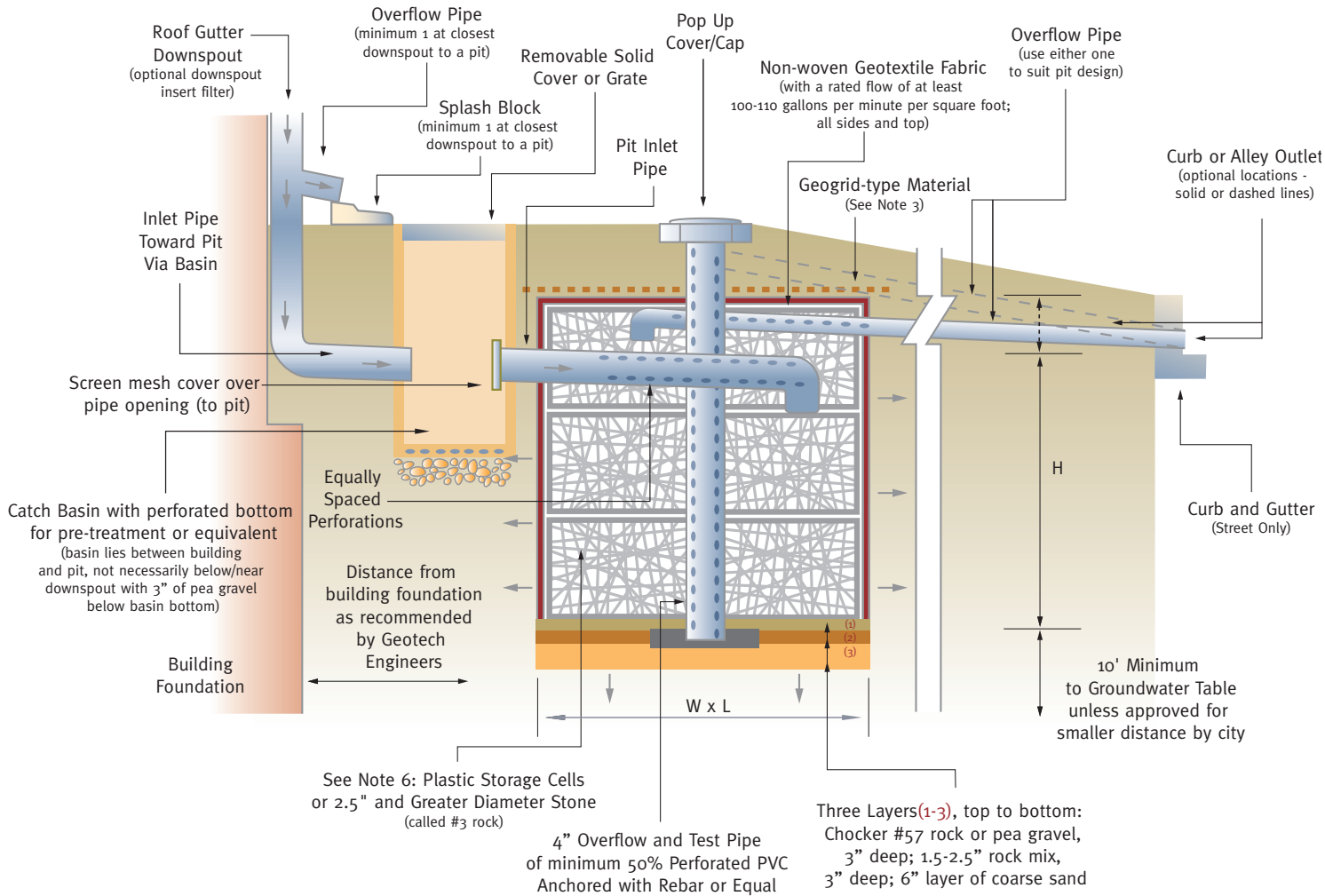
Triton, Triton Stormwater Solutions, 810.222.7652, www.tritonsws.com plastic, concave open-bottom chamber in various lengths, non-stackable, H-20, 99% void, best suited for long area, shallow BMP depth.

Infiltration Pit and Rain Barrel-Cistern Use Details

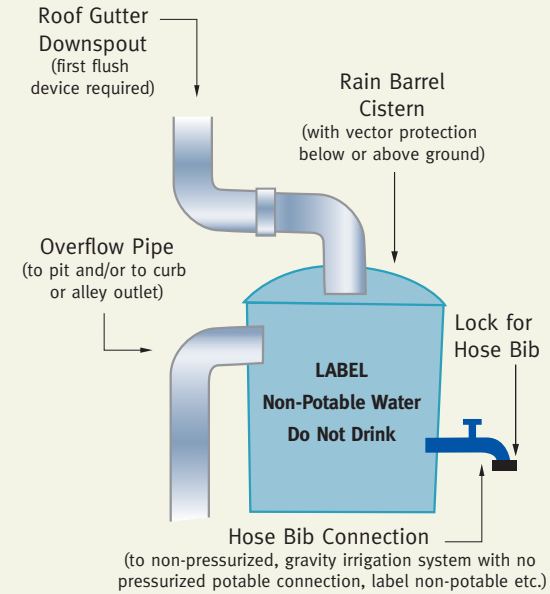
*Infiltration Pit and Rain Barrel-Cistern Use Details or equivalent; for design suggestion purposes; can be modified to meet site-specific needs**



- Detail of optional rain barrel-cistern use system pictured on the right >



- Detail of rain barrel-cistern connected to downspout.



NOTES:

1. The storage pit capacity – See runoff worksheet (in cu. ft.).
2. Runoff on single family lots may discharge to the street over the walk or the alley; other developments may only discharge to the street under the walk.
3. Place Geogrid-type material on top of the geotextile fabric over the plastic storage cells. Should overlap sides by at least one foot. Backfill sides with pea gravel or equal. See list of infill devices on the other side of this sheet.
4. Roof gutters require a screen at the top of downspout opening to trap debris.
5. Biofilters may be used instead of pits on some sites. Check with City Engineering on specific guidelines.
6. When rock used, pit must be 2.5 times larger than if plastic is used.

For a rainwater storage with pressurized irrigation system and with or without a municipal potable water make-up, additional backflow prevention (RP), cross-connection and pipe labeling requirements. Check with the City's Office of Sustainability and the Environment guidelines, 310.458.8972.

*DISCLAIMER: The City of Santa Monica does not prefer or require any one specific runoff mitigation device, i.e. BMP. This infiltration BMP is one of many BMP options from which to select. This one is the most popular runoff BMP for most projects, especially single and multi-family projects. However, numerous other BMPs exist on the market for your review and consideration.