Catalog 2015

pricing effective through Dec 31st 2015



oil separators
solids interceptors
chemical waste tanks



In an effort to offer world-class product solutions in all of its categories, Schier announced the spin-off of its Oil Separator, Solids Interceptor, and Chemical Waste Tank products to a separate and wholly-owned brand, Striem.

Striem (pronounced "Stream") is proud of our deeply rooted association with Schier, and we look forward to applying the Schier mantra of "doing fewer things better" to elevate our products to new heights. With fewer obligations comes increased accountability. We are accountable for these products. We are passionate about this business. We think you will notice.

Our close association has led us to share many of Schier's values, including being family-owned and dedicated to building products of incredible value. However, we look forward to applying our own unique vision and energy in providing you with a memorable product experience.

We look forward to earning your trust and your business.

Table of Contents

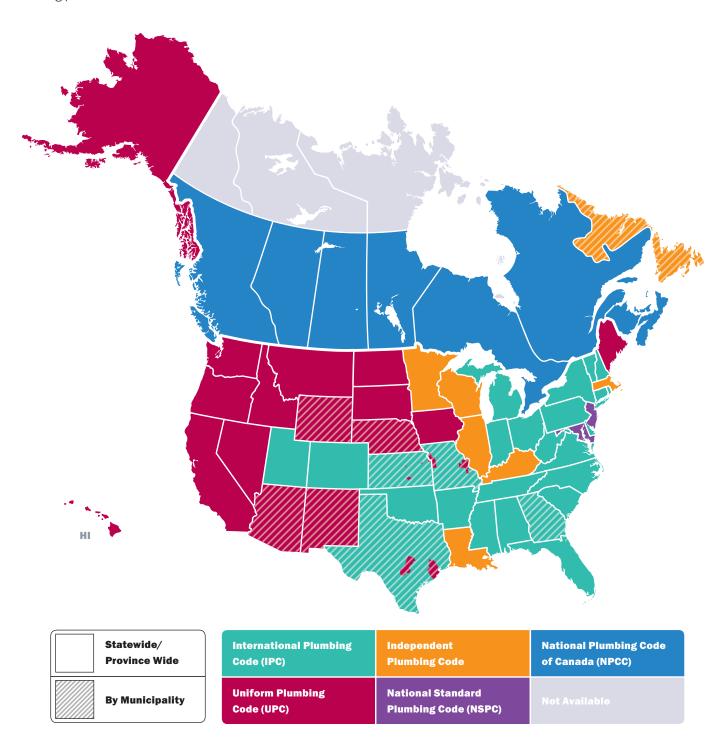
Oil	Separators Oil Reserve™ oil/sand separators
So	Oil Reserve™ oil collection tanks .8 Iids Interceptors .8 HLT/B and USI Series under counter solids interceptors .13 Prospector™ (-B) basket style solids interceptors .14 Prospector™ (-S) screen style solids interceptors .16 Settler™ catch basins for sand and sediment .18
Ch	Emical Waste Tanks 23 Lab Rat™ under counter neutralization tanks 23 Lab Basin™ neutralization tanks 24 NT Series neutralization tanks 26 Command Center™ pH monitoring package 28 Bio Basin™ decontamination tanks 36
Аp	pendix Terms and Conditions

Customer Support

Oil Reserve™ Regulatory Compliance

plumbing code digests

Oil/Sand Separators are required anywhere that oil and sand may be introduced to the public sewer system in applications such as: repair garages, oil change stations, car wash facilities, parking garages, parking lots, hydraulic elevator pits and facilities where oil and flammable liquid waste are produced as a result of manufacturing, storage, maintenance, repair or testing processes.



NOTE: plumbing map and code digests may not be applicable in some situations. Review plumbing codes and any locally adopted ordinances for specific requirements regarding sizing, installation and maintenance of oil interceptors.

Model Plumbing Codes

IPC (2015)¹ – Oil separators are required at repair garages, carwashing facilities, at factories where oily and flammable liquid wastes are produced and in hydraulic elevator pits (unless there is an approved alarm system installed). Oil separators shall be listed and labeled or must meet the design and sizing requirements of sections 1003.4.2.1 and 1003.4.2.2. Sizing in the code applies to garages and service stations and uses the square footage of the area drained. Oil separators are not required in parking garages in which servicing, repairing or washing is not conducted, and in which gasoline is not dispensed. Areas of commercial garages utilized only for storage of automobiles are also not required to be drained through an oil separator.

UPC (2012)² – Oil / flammable liquid interceptors are required for repair garages and gasoline stations with grease racks or grease pits and factories that have oily, flammable or both types of wastes as a result of manufacturing, storage, maintenance, repair or testing processes. The vapor compartment shall be independently vented to the outer air. There are two approved standards for oil interceptors, IAPMO PS-80 or ASTM D6104. Where an interceptor is provided with an overflow line, an approved waste oil tank having a minimum capacity of 550 gallons shall be installed. Oil interceptors shall be listed and labeled or must meet the design and sizing requirements of section 1017.2. Sizing in the code is either based on the number of vehicles serviced, stored or both. Where vehicles are serviced only, the sizing is based on the square footage of the facility.

NPCC (2015)³ – Where the discharge from a fixture may contain oil or gasoline, an oil interceptor shall be installed. Every oil interceptor shall be provided with 2 vent pipes that connect to the interceptor at opposite ends, extend to outside air and terminate not less than 2 meters above ground and at elevations differing by at least 300 millimeters. The vent pipes are permitted to be one size smaller than the largest connected drainage pipe but not less than 1-¼ inches in size, or can be sized in accordance with the manufacturer's recommendations. Every vent pipe that serves an oil or grease interceptor and is located outside a building shall be not less than 3 inches in size in areas where it may be subject to frost closure. There are no standards listed in the code governing oil interceptors.

NSPC (2012)⁴ – Liquid waste containing grease, oil, solvents, or flammable liquids shall be removed by an appropriate separator. Sand and oil separators shall be provided wherever floors, pits or surface areas subject to accumulation of grease or oil from service or repair operations are drained or washed into the drainage system, such as car or truck washing facilities, engine cleaning facilities and similar operations. Drains are only required in a parking garage if the facility has provisions for either washing vehicles or rinsing the floor, and they must be routed through a sand and oil separator. Where oil separators are required in garages and service stations, they shall be sized based on the square footage of the area drained. Oil separators in other applications shall be sized according to the manufacturers rated flow.

Independent Plumbing Codes

Illinois Plumbing Code (2014)⁵ – Commercial vehicle repair garages, gasoline stations with grease racks or pits and oil change facilities shall be provided with floor drains or trench drains connected to a gas and oil interceptor. Approved interceptor materials include cast iron, steel, polyethylene, polymer concrete or fiberglass. Fiberglass interceptors shall not be used for receiving any substance other than oil and gas and poured concrete interceptors are prohibited. Interceptors utilizing an automatic draw off feature must install a separate U.L. approved underground storage tank or storage tank integral with the interceptor. Gas and oil interceptors shall have a depth of at least 2 feet below the invert of the discharge drain and shall have at least a 12 inch water seal with a minimum 90% efficiency rating or have a minimum of an 18 inch water seal. Sizing of gas and oil interceptors is based on the square footage of the facility.

Kentucky State Plumbing Law (2013)⁶ – Liquid waste from buildings using gasoline, benzene, naphtha or other inflammable oils or compounds shall discharge into a separator before it enters a sanitary sewer. The waste line receiving the waste shall be trapped and vented. The separator shall be provided with a 3 inch vent.

Louisiana Plumbing Code (2013)⁷ – All repair garages and gasoline stations with grease racks or grease pits, and all factories which have oily wastes as a result of manufacturing, storage, maintenance, repair or testing processes shall be provided with an oil separator. The vapor compartment shall be independently vented to the outer air. Where an interceptor is provided with an overflow line, an approved waste oil tank having a minimum capacity of 550 gallons shall be installed. Sizing is either based on the number of vehicles serviced, stored or both. Where vehicles are serviced only, the sizing is based on the square footage of the facility.

Massachusetts Plumbing Code⁸ – Interceptors and separators shall be provided to prevent the discharge of oil, gasoline, grease, sand and other substances that are harmful or hazardous to the building drainage system, the public sewer or sewage treatment plant or other sewage treatment processes. There shall be floor drains installed in all commercial motor vehicle parking and storage accommodations, repair garages, repair facilities or auto body repair facilities, service facilities with or without grease racks and grease pits, wash rack areas, wash areas (including automatic car wash structures), and facilities where motor oils, gasoline, anti-freeze and similar hazardous liquid wastes are potentially generated or may potentially spill. Floor drain wastes shall discharge into a gas, sand and oil separator.

Minnesota Plumbing Code (2012)9 – Enclosed garages of over 1,000 square feet or housing more than four motor vehicles, repair garages, gasoline stations with grease racks, work or wash racks, auto washes, and all buildings where oily and/or flammable liquid wastes are produced shall have a separator installed into which all oil, grease and sand bearing and/or flammable wastes shall be discharged. The separator shall be located inside the building. Each separator shall be not less than 35 cubic feet holding capacity, be provided with a water seal of not less than three inches on the inlet and not less than 18 inches on the outlet. The minimum depth below the invert of the discharge drain shall be three feet. The minimum size of the discharge drain shall be four inches. The separator may be constructed from concrete, iron or steel (protected with an approved corrosion resistant coating on both the inside and the outside), or of fiberglass resins that comply with ASTM C-581 and meets IAPMO PS 80-2003b.

Wisconsin Administrative Code (2013)¹⁰ – Oil and flammable wastewater that discharges to a building sewer shall be intercepted or treated by a means acceptable to the department. A covered interceptor or separator shall be provided with an individual vent of at least 3 inches in diameter and shall extend from the interceptor or separator at least 12 feet above grade. The drain pipe to the interceptor or separator shall be provided with a fresh air inlet connected within 2 feet of the inlet of the interceptor or separator and shall terminate at least one foot above grade but not less than 6 feet below the terminating elevation of the vent serving the interceptor or separator and shall be at least 3 inches in diameter.

Puerto Rico Building Code (2011) – The 2011 Puerto Rico Building Code adopted the 2009 International Plumbing Code without amendments. Oil separators are required at repair garages, car-washing facilities, at factories where oily and flammable liquid wastes are produced and in hydraulic elevator pits (unless there is an approved alarm system installed). Oil separators shall be listed and labeled or must meet the design and sizing requirements of sections 1003.4.2.1 and 1003.4.2.2. Sizing in the code applies to garages and service stations and uses the square footage of the area drained. Oil separators are not required in parking garages in which servicing, repairing or washing is not conducted, and in which gasoline is not dispensed. Areas of commercial garages utilized only for storage of automobiles are also not required to be drained through an oil separator.

Oil Reserve™ Product Selection

sizing guidelines

Oil Reserve[™] Oil/Sand Separators incorporate patented Diffusion Flow[™] technology to maximize oil and sand separation. Petroleum based oils are typically lighter than water and will quickly rise to the surface by gravity differential separation according to Stokes Law¹¹.

Common Specific Gravities

The following chart is provided for reference only. Specific gravities less than 1 float while those greater than 1 sink.

substance	specific gravity	substance	specific gravity
Gasoline A	0.74	Chicken Fat	0.924
Petroleum Oil	0.82	Fish Oil	0.928
Hydraulic Fluid	0.86	Water	1
Butter	0.87	Freon 11	1.49
Lard	0.875	Mud	1.73
Olive Oil	0.91	Sand	1.92
Vegetable Oil	0.92		



Option 1: size by drainage area for service facilities

When allowed, use the following sizing chart where motor vehicles are serviced and/or stored. For parking-only areas, consider option 2.

Oil Separator Sizing Chart 12

square feet of drainage area	required capacity: cubic feet	required capacity: gallons	recommended model
Up to 200	Up to 7	52	OS-50
>200 - 1,100	Up to 16	120	0S-75
>1,100 - 3,100	Up to 36	269	0S-100
>3,100 - 6,700	Up to 72	539	0S-100 (2 in series)
>6,700 - 10,400	Up to 109	815	0S-100 (3 in series)
>10,400 - 14,200	Up to 147	1,100	0S-100 (4 in series)

Review plumbing code and locally adopted ordinances for specific requirements.

Option 2: size by flow rate for parking only facilities

Consider drain / supply line flow rates when sizing for applications where motor vehicles are neither serviced nor stored (parking-only areas).

Drain Line Flow Rates (GPM) by Pipe Size*

pipe size (nominal)	half pipe flow (design flow)	maximum full pipe flow
2	9.67	19.44
3	29.33	58.67
4	62.96	125.77
6	187.74	375.47
	▲ preferred flow rate	

 $^{^{*}}$ ½4" pitch slope based on Manning's Formula with friction factor N=0.012"

Supply Line Flow Rates

velocity	1/2	3/4
4 Ft./sec	3.77 GPM	6.64 GPM
6 Ft./sec	5.66 GPM	9.96 GPM
8 Ft./sec	7.54 GPM	13.29 GPM
10 Ft./sec	9.43 GPM	16.61 GPM

Option 3: size by flow rate for elevator pits



ASME A17.1-2007/CSA B44-07 is the Safety Code for Elevators and Escalators. It intended to serve as the basis for the design construction, installation, operation, testing, inspection, maintenance, alteration and repair of elevators, dumbwaiters, escalators, moving walks and material lifts. Section 2.2 details the requirements for pits for all elevators governed by the code. 2.2.2.3 mandates that permanent provision be made to prevent accumulation of ground water in the pit, while 2.2.2.4 requires the necessary floor drain or sump pump meet the applicable plumbing code for the jurisdiction. 2.2.2.5 requires all elevators with Firefighters' Emergency Operation to have a drain or sump pump. A sump pump or drain shall have the capacity to remove 3,000 gallons per hour (50 gpm) per elevator.

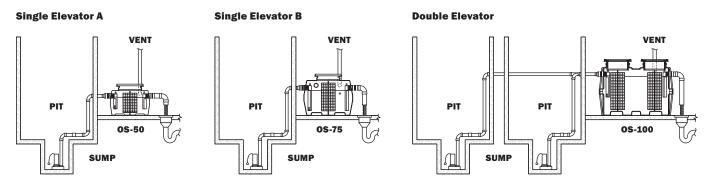
IPC mandates the installation of an oil separator for hydraulic elevator pits, unless there is an approved alarm system installed. The intent of the code is to prevent an oil discharge to the sanitary drainage system. Some manufacturers produce a specially fitted sump pump with an oil sensor and alarm unit which functions to shut off the pump if oil is detected in the pit. For elevators with Firefighters' Emergency Operation the pit must be kept clear of accumulated water as required in ASME A17.1-2007/ CSA B44-07 section 2.2.2.5. However, it may be possible for a sump pump with an oil sensor to shut off during a fire allowing the pit to fill with sprinkler water undermining a firefighting operation. The installation of an oil interceptor downstream of a sump pump satisfies both the elevator and plumbing codes.

Sizing Guidelines Following an Elevator Sump

First, select an oil separator that meets the pump flow rate. Then, choose oil separator with rating that is equal to or greater than the worst possible discharge of hydraulic fluid.

application	pump flow (GPM)	OS model	OS flow rate (GPM)	OS oil capacity (gal.)		
Single Elevator A	50	OS-50	50	34.1		
Single Elevator B	50	0S-75	75	84.4		
Double Elevator	100	OS-100	100	147.5		

Review plumbing code and locally adopted ordinances for specific requirements.



NOTE: all pump fed oil separators should be specified with Clean Sweep™ coalescing media (as shown above) due to emulsification of oil.

Oil Reserve[™]

oil/sand separators

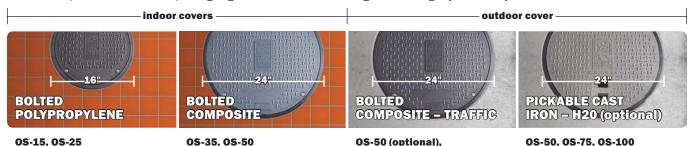
With a standard lifetime warranty and several innovative installation features, the Oil ReserveTM stands alone as the most versatile oil/sand separator series.

Features: above grade or buried installations | easy to carry HDPE design | TeleGlide™ field adjustable risers | models OS-50 through OS-100 suitable for exterior installations



Oil Reserve[™] Covers

Covers are provided with water/air tight gasket seal and are designed to fit tightly into a key-fit frame.



OS-15, OS-25 2,000 lbs. pedestrian load rating

2,000 lbs. pedestrian load rating

OS-50 (optional), OS-75, OS-100

16,000 lbs. highway load rating

OS-50, OS-75, OS-100 16,000 lbs. H20 load rating

Clean Sweep™ Coalescing Media (optional)



When oily wastewater is mechanically emulsified (as in pump applications) oils break into smaller, less buoyant droplets and decrease separator efficiency. Coalescing media provides increased surface area for emulsified oil droplets to merge into larger, more buoyant droplets, greatly improving separator efficiency.

Specify Clean Sweep[™] coalescing media with select Oil Reserve[™] Series models (OS-35, OS-50, OS-75, OS-100) to significantly improve the separation of mechanically emulsified oils.



Clean Sweep™ polypropylene coalescing media has been third party tested to

performance standard CEN EN858-1 for class 1 coalescing separators. The Clean Sweep™ will render effluent quality as low as **5 mg/L** (parts per million) up to the following flow rates:

0S-35 (with single media)	15 GPM
OS-50 (with single media)	15 GPM
0S-75 (with single media)	30 GPM
OS-100 (with single media)	45 GPM
0S-100 (with double media)	90 GPM

Efficiency may decrease at higher flow rates.





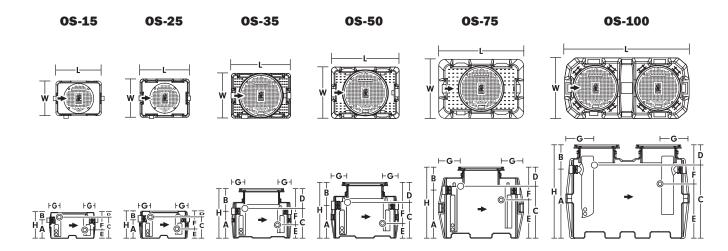






Specifications

	Capacity				Pipe Sizes				Rough-in Dimensions (in.)									Weigh	nt (lbs.)							
Striem Model	Flow	Oil	Cand	Liantial	SC	in End CH.40	Optional Male		Body			Inlet/Outlet		Vent		optional oil draw-off		Vent/ draw-off	Adapter Adjust-							
	Rate (GPM)	ate (gal)	Rate (gal) (gal) (gal)		Sand Liquid .) (gal.) (gal.)					Std.	Optional (see list	Thread (see list prices)	Vent	1	W	Н	A	В	С	D	F	F	_	ability (add to B, D & H)	Dry	Wet
						prices)	p=::000/						_		_	_		-	D, D & 11)							
OS-15	15	10.1	3.9	16	2	3	2, 3	3	25	19	14 1/4	10	4 1/4	11 1/4	3	4	10 1/4	5 ½	n/a	28	160					
OS-25	25	10.3	6.4	22	3	2	2, 3	3	27	21	15	103/4	4 1/4	11 ½	3 1/2	4	11	6 1/4	n/a	31	215					
OS-35	35	19.5	9.5	35	3	2, 4	2, 3, 4	3	33	25	25	15	10	17	8	5 ½	19 ½	7 1/2	3 1/2	77	369					
OS-50	50	34.1	12.5	52	4	3	3, 4	3	37	28	28 ½	18	10 ½	20	8 1/2	6 ½	22	9	3 1/2	92	525					
OS-75	75	84.4	19.2	125	4	6	4, 6	3	46	32	38 ½	26	12 ½	28 ½	10	21 ½	17	12	6	130	1,171					
OS-100	100	147.5	105	275	4	6	4, 6	3	68	33 1/2	51 ½	38	13 ½	40	11 ½	31	20 ½	16	6	230	2,520					



List Prices

			Miscellaneous Options									
Striem Model	Base Unit	High N		Rated	to Highway Bolted ite Cover	*Upgrade Rated Picka Iron Co	able Cast					
		Part #	Price	Part #	Price	Part #	Price					
OS-15	\$1,11	0 n/	'a	n/	′a	n,	/a					
OS-25	\$1,41	2 n/	'a	n/	′a	n,	⁄a					
OS-35	\$1,84	4 n/	'a	n/	′a	n,	/a					
OS-50	\$2,08	6 AK1	\$560	C24-H	\$210	C24-HP	\$210					
OS-75	\$2,91	6 AK1	\$560	inclu	included		n/c					
OS-100	\$5,61	4 AK1	\$560	inclu	ıded	C24-HP (2)	n/c					
Clean Swe	ep Coale	scing Media	Part #	Compa	Price							
(CS1 (sing	(le media)		C	OS-35 / OS-50							
(CS2 (sing	gle media)			OS-75		\$920					
(CS3 (sing	gle media)			OS-100		\$1,208					
C	S6 (dou	ole media)			OS-100**		\$2,416					
	Alte	rnate Pipe Si	zes		D02: Opt	ional 2" Oil Dr	aw-off					
2" through 4" Plain End or Male 6" Plain End			_	5" Male nless steel)	Arm required for use when ordered with Oil Reserve™ oil collection tank.							

^{*} When ordered with oil separator.

n/c

List \$196

TeleGlide™ Riser Order Guide

Desire	ed Riser Heig	sht (in.)		Price			
0S-15 0S-25	0S-35 0S-50	0S-75 0S-100	Risers Needed	Standard	OS-100		
>2 1/8- 16	n/a	n/a	16 Series Riser (SR-16)	\$370	n/a		
n/a	0 - 3½	0-6	24 Series Adapter	inclu	ıded		
n/a	>3½ - 22	>6 - 24	24 Series Short Riser (SR24)	\$528	\$1,056		
n/a	>22 - 37	>24 - 39	24 Series Long Riser (LR24)	\$664	\$1,328		
n/a	n/a	>39 - 43	24 Series Short + Short (SR24 + SR24)	\$1,056	\$2,112		
n/a	n/a	>43 - 58	24 Series Short + Long (SR24 + LR24)	\$1,192	\$2,384		
n/a	n/a n/a >58 - 72		24 Series Long + Long (LR24 + LR24)	\$1,328	\$2,656		

^{**} CS6 double media not available when OS-100 is ordered with 6" connections.

NOTE 1: OS-100 has two covers requiring a set of two TeleGlideTM risers when ordered. **NOTE 2:** When upgraded covers are purchased separately, the full price of \$442 will apply.

Oil Reserve[™]

oil collection tanks

Oil Reserve™ Collection Tanks in conjunction with oil/sand separators maximize oil storage capacity and minimize pump-out frequency. The collection tank also provides more accurate oil level monitoring.



Features: above grade or buried installations | easy to carry HDPE design | TeleGlide™ field adjustable risers | models OCT-50 through OCT-275 suitable for exterior installations | install with Striem oil separator or others Oil/Sand Oil Collection Separator Tank Operating Water Level Static Venting Maximum Adjustable Oil Water Level Oil Capacity Draw-off Arm Spill Line Oil/Sand Oil Separator Collection Cutaway View of Oil Draw-off Arm

Oil Reserve[™] Covers

Covers are provided with water/air tight gasket seal and are designed to fit tightly into a key-fit frame.







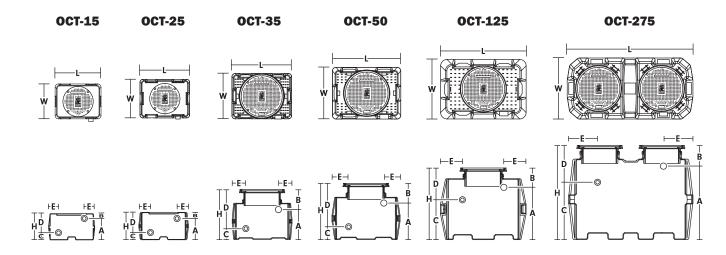






Specifications

	Oil Capacity		Pipe (Plain End	Size SCH.40)	Rough-in Dimensions (in.)								Weight (lbs.)		
Striem Model	Cubic Feet	Gallons	Inlet	Inlet Vent	Body			Vent		Inlet		Vent/ Inlet	Adapter Adjustability	Drv	Wet
					L	W	Н	А	В	С	D	E	(add to B, D & H)	5	
OCT-15	2.1	16	2	3	25	19	14 1/4	11 1/4	3	4	10 1/4	5 ½	n/a	28	166
OCT-25	2.9	22	2	3	27	21	15	11 ½	3 1/2	4	11	6 1/4	n/a	31	220
OCT-35	4.7	35	2	3	33	25	25	17	8	5 ½	19 ½	7 ½	3 1/2	77	369
OCT-50	7	52	2	3	37	28	28 ½	20	8 1/2	6 1/2	22	9	3 1/2	92	525
OCT-125	16.7	125	2	3	46	32	38 ½	28 ½	10	21 ½	17	12	6	130	1,171
OCT-275	36.8	275	2	3	68	33 ½	51 ½	40	11 ½	31	20 ½	16	6	230	2,313



List Prices

	Base Unit	Miscellaneous Options											
Striem Model		High N	Water or Kit	Upgrade to Rated Composi		Upgrade to H-20 Rated Pickable Cast Iron Cover							
		Part #	Price	Part #	Price	Part #	Price						
OCT-15	\$1,004	n/	′a	n/	'a	n/a							
OCT-25	\$1,306	n/	′a	n/	'a	n/a							
OCT-35	\$1,532	n/	′a	n/	'a	n/a							
OCT-50	\$2,040	AK1	\$560	C24-H	\$210	C24-HP	\$210						
OCT-125	\$2,750	AK1	\$560	included		C24-HP	n/c						
OCT-275	\$5,486	AK1	\$560	inclu	ded	C24-HP (2)	n/c						
		Monitoring Packages											

AVA-3: Single Level
Monitoring Package
Remote audio/visual alarm
panel and explosion proof
stainless steel float switch.
List \$2,194

AVA-4: Multi-level
Monitoring Package
Remote audio/visual alarm
panel and explosion proof
multi-level float switch.
List \$4,822

TeleGlide™ Riser Order Guide

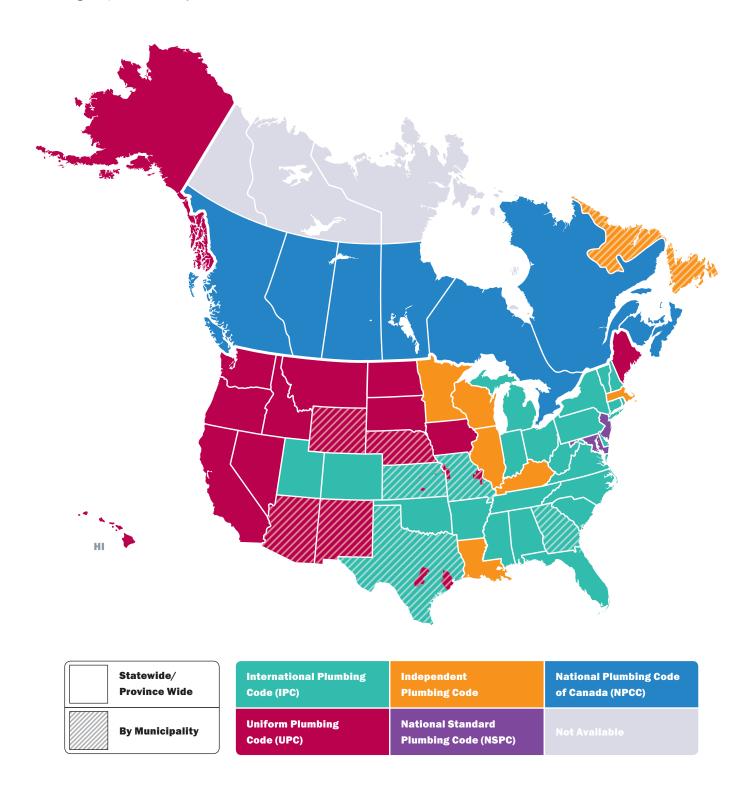
Desire	d Riser Heig	ht (in.)		Pri	ice
0CT-15 0CT-25	OCT-35 OCT-50	OCT-125 OCT-275	Risers Needed	Standard	OCT-275
>2 1/8 - 16	n/a	n/a	16 Series Riser (SR-16)	\$370	n/a
n/a	0 - 31/2	0-6	24 Series Adapter	inclu	ıded
n/a	>3½ - 22	>6 - 24	24 Series Short Riser (SR24)	\$528	\$1,056
n/a	>22 - 37	>24 - 39	24 Series Long Riser (LR24)	\$664	\$1,328
n/a	n/a	>39 - 43	24 Series Short + Short (SR24 + SR24)	\$1,056	\$2,112
n/a	n/a	>43 - 58	24 Series Short + Long (SR24 + LR24)	\$1,192	\$2,384
n/a	n/a	>58 - 72	24 Series Long + Long (LR24 + LR24)	\$1,328	\$2,656

NOTE 1: When ordered with float switch, add 2" measuring finished cover to centerline of all connections and subtract 2" from available riser height. **NOTE 2:** OCT-275 has two covers requiring a set of two risers when ordered. **NOTE 3:** When upgraded covers are purchased separately, the full price of \$442 will apply.

Solids Interceptors Regulatory Compliance

plumbing code digests

Solids Interceptors are required anywhere that heavy and suspended solids may be introduced to the public sewer system in applications such as: barber shops, dentist offices, salons, artist studios, laundry facilities, machine shops, food waste, parking lots, car washes, food processing, livestock and agricultural drainage. These wastes must be separated prior to entering the public sewer system.



NOTE: plumbing code map and digests may not be applicable in some situations. Review plumbing codes and any locally adopted ordinances for specific requirements regarding sizing, installation and maintenance of solids interceptors.

Model Plumbing Codes

IPC (2015)¹ – Interceptors and separators shall be provided to prevent the discharge of substances harmful or hazardous to the public sewer, the private sewage system or the sewage treatment plant or processes. Sand interceptors must have a water seal of not less than 6". Laundry facilities serving more than an individual dwelling unit shall be provided with an interceptor to capture debris such as strings, rags, buttons or other materials detrimental to the public sewage system larger than $\frac{1}{2}$ ". Bottling plants shall discharge process wastes into an interceptor to separate broken glass or other solids prior to discharge to the drainage system. Slaughterhouses shall discharge slaughtering room and dressing room drains into an interceptor to separate feathers, entrails and other materials that cause clogging.

UPC (2012)² – Interceptors and separators shall be provided to prevent the discharge substances harmful or hazardous to the public sewer, the private sewage system or the sewage treatment plant or processes. Sand interceptors must have a water seal of not less than 6". Slaughterhouses (fish, fowl or animal), meat packing or curing (fish, fowl or animal), soap factory, tallow-rendering, fat-rendering, and hide-curing establishments shall discharge drains into an interceptor. A private or public wash rack, or floor or slab used for cleaning machinery or machine parts shall discharge drains into an interceptor. Laundry equipment in commercial and industrial buildings that does not have integral strainers, shall discharge into an interceptor to capture debris such as strings, rags, buttons or other materials detrimental to the public sewage system larger than ½". Bottling plants shall discharge process wastes into an interceptor to separate broken glass or other solids prior to discharge to the drainage system.

NPCC (2010)³ – Where a fixture discharges sand, grit or similar materials, an interceptor designed for the purpose of trapping such discharges

shall be installed. Every interceptor shall have sufficient capacity to perform the service for which is it provided.

NSPC (2012)⁴ – Interceptors or other means shall be provided where required to prevent liquid wastes containing sand, solids or other harmful substances from entering a building drainage system, a public or private sewer, or sewage treatment plant or process. Where oil separators are installed in parking garages and other areas where the waste flow will include sand, dirt, or similar solids, a sand interceptor shall be provided upstream of the oil separator. A combination oil separator and sand separator shall be permitted to be installed. A sand interceptor shall be provided downstream from any drain whose discharge may contain sand, sediment, or similar matter on a continuing basis that would tend to settle and obstruct the piping in the drainage system. A solids interceptor shall be provided where necessary to prevent harmful solid materials from entering the drainage system on a continuing basis, such as aquarium gravel, barium, ceramic chips, clay, cotton, denture grindings, dental silver, fish scales, gauze, glass particles, hair, jewels, lint, metal grindings, plaster, plastic grindings, precious metal chips, sediment, small stones, and solid food particles. Commercial laundries shall be equipped with one or more lint interceptors that will prevent passage into the drainage system of solids $\frac{1}{2}$ " or larger in size including strings, rags, buttons, lint and other materials that would be detrimental to the drainage system. Bottling plants shall discharge their process wastes into a solids separator that will retain broken glass and other solids, before discharging liquid wastes to the drainage system. Drains in slaughtering rooms and dressing rooms shall be equipped with separators or interceptors that will prevent the discharge into the drainage system of feathers, entrails, and other waste materials that are likely to clog the drainage system. Shampoo sinks in barbershops, beauty parlors, and other grooming facilities shall have hair interceptors installed in lieu of regular traps.

Independent Plumbing Codes

Illinois Plumbing Code (2014)⁵ – All motor vehicle wash racks shall drain into a catch basin at least 36 inches in diameter or 3 feet by 2½ feet (rectangle). The bottom shall not be less than 27 inches below the invert of the outlet pipe. The outlet pipe shall be trapped with a catch basin trap, constructed of cast iron or schedule 40 plastic with a seal of at least 6 inches in diameter and a cleanout of at least 4 inches in diameter. Commercial laundries shall discharge into an interceptor having a removable wire basket or similar device to prevent harmful materials from entering the sewage system. Sand, bottle and slaughter houses that will produce wastes that either settle or float shall have an interceptor installed.

Kentucky State Plumbing Law (2013)⁶ – Basic Principle No. 8 says that a drainage system should be designed, constructed and maintained to guard against fouling, deposit of solids and clogging, and with adequate cleanouts so arranged that the pipes may be readily cleaned.

Louisiana Plumbing Code (2013)⁷ – Sand and similar interceptors for heavy solids shall have a water seal of not less than 2 inches. Commercial laundries shall be equipped with an interceptor having a removable wire basket or similar device that will prevent strings, rags, buttons, or other harmful materials ½ inch and larger from entering the drainage system. Bottling plants shall discharge their process wastes into an interceptor to prevent broken glass or other solids from entering the drainage system. Slaughtering room drains shall be equipped with separators to prevent the discharge of feathers, entrails and other materials likely to clog the drainage system.

Massachusetts Plumbing Code⁸ – Wherever a floor drain discharges waste to an oil and gasoline separator, the floor drain shall be equipped with an approved sediment and sand control basket, or the floor drain shall discharge through a sand interceptor. Multiple floor drains may discharge into one sand interceptor. Sand and similar interceptors for heavy solids shall have a water seal of not less than six inches. Commercial laundries shall be equipped with an interceptor having a removable wire basket or similar device that will prevent strings, rags, buttons, or other harmful materials ½ inch and larger from entering the drainage system. Bottling plants shall discharge their process wastes into an interceptor to prevent broken glass or other solids from entering the drainage system. Slaughtering room drains shall be equipped with separators to prevent the discharge of feathers, entrails and other materials likely to clog the drainage system.

Minnesota Plumbing Code (2012)⁹ – Sand and similar interceptors for heavy solids shall have a water seal of not less than six inches. Commercial laundries shall be equipped with an interceptor having a removable wire basket or similar device that will prevent strings, rags, buttons, or other harmful materials ½ inch and larger from entering the drainage system. Bottling plants shall discharge their process wastes into an interceptor to prevent broken glass or other solids from entering the drainage system. Slaughtering room drains shall be equipped with separators to prevent the discharge of feathers, entrails and other materials likely to clog the drainage system.

Wisconsin Administrative Code (2011)¹⁰ – Commercial laundries require a laundry interceptor equipped with a wire basket or other device which will capture string, buttons and other solids ½" and larger. A floor receptor, trench or trough may serve as a laundry interceptor, if no oils or sand are discharged into it. In-line interceptors shall have a minimum inside diameter or horizontal dimension of 24" and shall be provided with a vent. Wastes containing glass of bottling establishments, dairy wastes from dairy product processing plants, and the wastes from meat processing areas, slaughtering rooms and meat dressing rooms, in order to prevent the discharge of feathers, entrails, blood and other materials, shall be discharged through an interceptor. Sand interceptors and other similar interceptors for heavy solids shall be designed so that the outlet is submerged to form a trap with a water seal of at least 12". Plaster sinks shall be provided with plaster and heavy solids trap type interceptors which shall be installed as the fixture trap.

Puerto Rico Building Code (2011) – The 2011 Puerto Rico Building Code adopted the 2009 International Plumbing Code without amendments. Interceptors and separators shall be provided to prevent the discharge of substances harmful or hazardous to the public sewer, the private sewage system or the sewage treatment plant or processes. Sand interceptors must have a water seal of not less than 6". Laundry facilities serving more than an individual dwelling unit shall be provided with an interceptor to capture debris such as strings, rags, buttons or other materials detrimental to the public sewage system larger than ½". Bottling plants shall discharge process wastes into an interceptor to separate broken glass or other solids prior to discharge to the drainage system. Slaughterhouses shall discharge slaughtering room and dressing room drains into an interceptor to separate feathers, entrails and other materials that cause clogging.

Solids Interceptors Product Selection

sizing guidelines

For General Applications

Striem recommends that solids interceptors first be sized by pipe size, then by selecting the unit with the appropriate sediment capacity to provide an acceptable cleaning frequency. For flow rate (GPM) sizing by pipe size (see table below).

Flow Rates (GPM) by Pipe Size

pipe size	per	per Manning's Formula*							
(nominal)	half pipe flow (design flow)	maximum full pipe flow							
2	9.67	19.44							
3	29.33	58.67							
4	62.96	125.77							
6	187.74	375.47							
	▲ preferred flow rate								

^{* 1/4&}quot; pitch slope based on Manning's Formula with friction factor N=0.012"

For Lint Applications

Striem recommends the following sizing guidelines.

Step 1 of 2: Select interceptor with appropriate drain line pipe size.

For example, if your primary drain line is 4", choose models with standard 4" connections (models PS-50-S and up).

Step 2 of 2: Complete formula, then select interceptor with appropriate

lint capacity based on maintenance interval.

30-Day Professional Maintenance Interval

Gallons of Lint Per Day	Number x of Machines	× 30 Days	= Gallons of Lint Per Month	Recommended Prospector (-S) Model
0.0495	5	30	7.4	PS-15-S
0.0495	7	30	10.4	PS-25-S
0.0495	12	30	17.8	PS-35-S
0.0495	18	30	26.7	PS-50-S
0.0495	42	30	62.4	PS-125-S
0.0495	141	30	209.4	PS-275-S

Weekly Do-It-Yourself Maintenance Interval

Gallons of Lint Per Day	Number x of Machines	× 7 Days	Gallons of Lint Per Week	Recommended Prospector (-B) Model
0.0495	6	7	2	PS-15-B
0.0495	9	7	3	PS-25-B
0.0495	14	7	5	PS-35-B
0.0495	23	7	8	PS-50-B
0.0495	29	7	10	PS-125-B
0.0495	38	7	13	PS-275-B

NOTE 1: Average wash cycle time of a commercial laundry machine = 42 minutes. Average business hours of a commercial laundry facility = 16 hours. Average lint output per wash of 20-60 lb. commercial laundry machine = 0.009 gallons (1.14 oz.). Average wash cycles per day of a commercial laundry machine = 5.5 cycles. Lint output may vary based on clothes type. For example, towels and linens yield high lint levels while clothing will yield lower lint levels. Data developed by Schier Products with assistance from Alliance Laundry Systems (www.unimac.com) and the Coin Operated Laundry Association (www.coinlaundry.org. **NOTE 2:** Periodic maintenance by professional may be required to fully pump down the interceptor.

HLT/B Series

under counter solids interceptors

,pdf 🔝 .doc formats available online .dwg

Features: lightweight HDPE body | handles temperatures up to 190° F | 4" threaded and gasket-sealed port | removable type 304 stainless steel basket with 3/32" perforations | for hair and lint applications

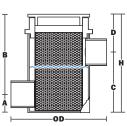
Specifications

	Liguid		Plain End Connections			Weight					
Striem Model	Capacity	Access Location		Вс	Body		ılet Ou		itlet (lbs		.)
	(gal.)			OD	Н	А	В	С	D	Dry	Wet
HLT-1176-1	0.5	Тор	1 1/2	8 1/2	8 3/4	1 1/8	7 1/8	5 %	3 %	5	9
HLT-1176-2	0.5	Тор	2	8 1/2	8 3/4	1 1/8	7 1/8	5 3/8	3 3/8	5	9
HLB-1176-1	0.5	Bottom	1 1/2	8 1/2	8 3/4	3 %	5 3/8	7 1/8	1 1/8	5	9
HLB-1176-2	0.5	Bottom	2	8 1/2	8 3/4	3 %	5 %	7 1/8	1 %	5	9

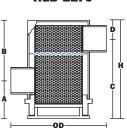
List Prices

Striem Model	Base Unit
HLT-1176-1	\$356
HLT-1176-2	\$356
HLB-1176-1	\$356
HLB-1176-2	\$356

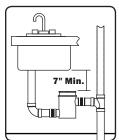
HLT-1176



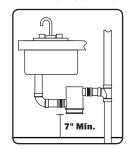
HLB-1176



HLT-1176 Installation



HLB-1176 Installation



USI Series

under counter solids interceptors

Features: lightweight HDPE body | handles temperatures up to 190° F | gasket-sealed cover with hand threaded clamps | removable HDPE bucket with 3/16" filter screen | for plaster, clay and heavy solids

HLT-1176-1 Shown

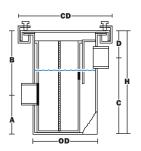
Specifications

	Liquid				Rough-in Dimensions (in.)							Weight	
Striem Model	Capacity .	Access Location	Plain End Connections		Body		In	let	Ou	tlet	(lbs	5.)	
	(gal.)			OD	CD	Н	Α	В	С	D	Dry	Wet	
USI-1180-1	1.2	Тор	1 1/2	7	11	11 ¾	4 3/8	7 3/8	8 %	3 %	8	18	
USI-1180-2	1.2	Тор	2	7	11	11 ¾	4 3/8	7 3/8	8 3/8	3 %	8	18	
USI-1184-1	1.2	Bottom	1 1/2	7	11	11 ¾	3 %	8 %	7 3/8	4 3/8	8	18	
USI-1184-2	1.2	Bottom	2	7	11	11 ¾	3 %	8 %	7 3/8	4 3/8	8	18	

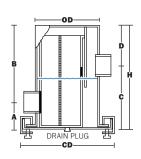
List Prices

Striem Model	Base Unit
USI-1180-1	\$366
USI-1180-2	\$366
USI-1184-1	\$366
USI-1184-2	\$366

USI-1180

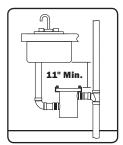


USI-1184

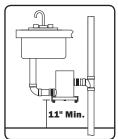


USI-1180-1 Shown

USI-1180 Installation



USI-1184 Installation



Prospector[™] (-B) Series

basket style solids interceptors

Prospector™ Basket-Style Solids
Interceptors provide a removable
filter basket to allow for DIY (doit-yourself) maintenance and to
catch valuables that need to be
retrieved. Intermittent professional
maintenance may be required.

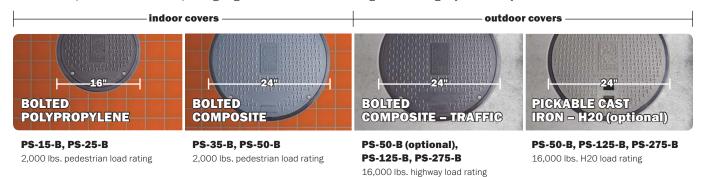


Features: above grade or buried installations | easy to carry HDPE design | 6 models with sediment capacities from 2 gallons up to 197 gallons | removable filter basket | TeleGlide™ field adjustable risers | models PS-50-B through PS-275-B suitable for exterior installations



Prospector[™](-B) Covers

Covers are provided with water/air tight gasket seal and are designed to fit tightly into a key-fit frame.







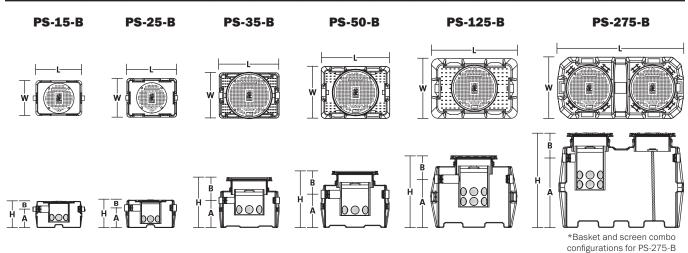






Specifications

	Capacity and Rating		Pipe Sizes			Rough-in Dimensions (in.)					1.)	Weight (lbs.)	
Striem Model	Total	Basket	Plain End SCH.40		Optional Male		Body		Inlet/Outlet		Adapter	D	
	Liquid (gal.)	Capacity (gal.)		Optional Plain (see list prices)		L	W	Н	А	В	Adjustability (add to B & H)	Dry	Wet
PS-15-B	16	2	2	3	2, 3	25	19	14 1/4	10	4 1/4	n/a	32	165
PS-25-B	22	3	3	2	2, 3	27	21	15	10 3/4	4 1/4	n/a	39	223
PS-35-B	35	5	3	2, 4	2, 3, 4	33	25	25	15	10	3 ½	86	378
PS-50-B	52	8	4	2, 3	2, 3, 4	37	28	28 ½	18	10 ½	3 ½	109	543
PS-125-B	125	10	4	6	4	46	32	38 ½	26	12 ½	6	148	1,191
PS-275-B	275	13 basket / 197 screen	4	6	4	68	33 ½	51 ½	38	13 ½	6	259	2,553



Follow Steps 1-4 for complete Prospector[™] quote.

List Prices

	1	2	Miscellaneous Options								
Striem Model	Choose Base Unit	High Water Anchor Kit		*Upgrade to Highway Rated Bolted Composite Cover		*Upgrade to H-20 Rated Pickable Cast Iron Cover		Alternate Plain End Pipe Sizes			
		Part #	Price	Part #	Price	Part #	Price	Size	Price		
PS-15-B	\$1,014	n,	′a	n/a		n/a	n/a		n/c		
PS-25-B	\$1,522	n/	′a	n	n/a		a	2	n/c		
PS-35-B	\$1,850	n,	⁄a	n	/a	n/a	a	2, 4	n/c		
PS-50-B	\$2,370	AK1	\$560	C24-H	\$210	C24-HP	\$210	2, 3	n/c		
PS-125-B	\$4,098	AK1	\$560	included		C24-HP	n/c	6	\$60		
PS-275-B	\$6,572	AK1	\$560	included		C24-HP(2)	n/c	6	\$60		

④ TeleGlide[™] Riser Order Guide

Desire	d Riser Heig	ght (in.)		Price			
PS-15-B PS-25-B	PS-35-B PS-50-B	PS-125-B PS-275-B	Risers Needed	Standard	PS-275-B		
>21/8 - 16	n/a	n/a	16 Series Riser (SR-16)	\$370	n/a		
n/a	0 - 31/2	0-6	24 Series Adapter	inclu	ıded		
n/a	>3½ - 22	>6 - 24	24 Series Short Riser (SR24)	\$528	\$1,056		
n/a	>22 - 37	>24 - 39	24 Series Long Riser (LR24)	\$664	\$1,328		
n/a	n/a	>39 - 43	24 Series Short + Short (SR24 + SR24)	\$1,056	\$2,112		
n/a	n/a	>43 - 58	24 Series Short + Long (SR24 + LR24)	\$1,192	\$2,384		
n/a	n/a	>58 - 72	24 Series Long + Long (LR24 + LR24)	\$1,328	\$2,656		

3 Polypropylene Basket Filter Options (actual sizes shown)

Buttons, Change, Gravel	Lint and Hair, Fish Scales, Gravel and Sand	Precious Metals, Sand
Coarse - 0.3" x 0.27" opening	Medium - 0.1" x 0.08" opening	Fine - 0.03" x 0.025" opening
		-5

NOTE 1: Select appropriate basket filter suffix in step 3 to complete model number. **NOTE 2:** Subtract 1" from adapter and riser range when PS-35-B is ordered with 4" connections. **NOTE 3:** PS-275-B has two covers requiring a set of two risers when ordered.

^{*} When ordered with solids interceptor.

Prospector[™] (-S) Series

screen style solids interceptors

Prospector™ Screen-Style Solids Interceptors provide a removable filter screen to allow for professional pumping maintenance.

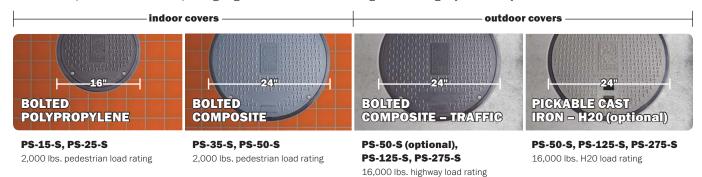


Features: above grade or buried installations | easy to carry HDPE design | 6 models with sediment capacities from 8 gallons up to 210 gallons | removable filter screen | TeleGlide™ field adjustable risers | models PS-50-S through PS-275-S suitable for exterior installations



Prospector[™](-S) Covers

Covers are provided with water/air tight gasket seal and are designed to fit tightly into a key-fit frame.







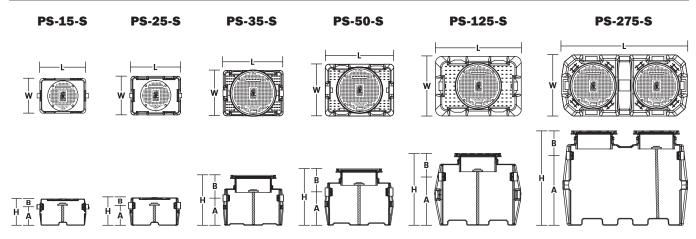






Specifications

	Ca	pacity and	Rating	Pipe Sizes					Rough	n-in Dime	nsions (ir	1.)	Weight (lbs.)	
Striem Model	Total	Solids	No. of		d SCH.40	Optional Male		Body			Outlet	Adapter		
Wodel	Liquid (gal.)	Capacity (gal.)	Washing Machines	Standard	Optional Plain (see list prices)	Thread (no charge)	L	W	Н	А	В	Adjustability (add to B & H)	Dry	Wet
PS-15-S	16	8	up to 2	2	3	2, 3	25	19	14 1/4	10	4 1/4	n/a	29	162
PS-25-S	22	11	up to 3	3	2	2, 3	27	21	15	10 3/4	4 1/4	n/a	35	219
PS-35-S	35	17.5	up to 4	3	2, 4	2, 3, 4	33	25	25	15	10	3 1/2	83	375
PS-50-S	52	26	up to 6	4	2, 3	2, 3, 4	37	28	28 1/2	18	10 ½	3 1/2	106	550
PS-125-S	125	62.5	up to 14	4	6	4	46	32	38 1/2	26	12 ½	6	140	1,183
PS-275-S	275	210	up to 47	4	6	4	68	33 ½	51 ½	38	13 ½	6	270	2,564



Follow Steps 1-4 for complete Prospector[™] quote.

List Prices

	1	2		N	liscellaneo	us Options			
Striem Model	Choose Base Unit		Water or Kit	Hig Rated	rade to hway Bolted site Cover	H-20 Ra Pickable	*Upgrade to H-20 Rated Pickable Cast Iron Cover		
		Part #	Price	Part #	Price	Part #	Price	Size	Price
PS-15-S	\$1,014	n/	′a	n	/a	n/a	3	3	n/c
PS-25-S	\$1,522	n/	′a	n	/a	n/a	a	2	n/c
PS-35-S	\$1,720	n,	⁄a	n	/a	n/a	2, 4	n/c	
PS-50-S	\$2,458	AK1	\$560	C24-H	\$210	C24-HP	\$210	2, 3	n/c
PS-125-S	\$3,982	AK1	\$560	inclu	ided	C24-HP	n/c	6	\$60
PS-275-S	\$6,306	AK1	\$560	included		C24-HP(2)	n/c	6	\$60

④ TeleGlide[™] Riser Order Guide

Desire	d Riser Heig	ght (in.)		Pr	ice
PS-15-S PS-25-S	PS-35-S PS-50-S	PS-125-S PS-275-S	Risers Needed	Standard	PS-275-S
>21/8 - 16	n/a	n/a	16 Series Riser (SR-16)	\$370	n/a
n/a	0 - 31/2	0 - 6	24 Series Adapter	inclu	uded
n/a	>3½ - 22	>6 - 24	24 Series Short Riser (SR24)	\$528	\$1,056
n/a	>22 - 37	>24 - 39	24 Series Long Riser (LR24)	\$664	\$1,328
n/a	n/a	>39 - 43	24 Series Short + Short (SR24 + SR24)	\$1,056	\$2,112
n/a	n/a	>43 - 58	24 Series Short + Long (SR24 + LR24)	\$1,192	\$2,384
n/a	n/a	>58 - 72	24 Series Long + Long (LR24 + LR24)	\$1,328	\$2,656

3 Polypropylene Screen Filter Options (actual sizes shown)

Buttons, Change, Gravel	Lint and Hair, Fish Scales, Gravel and Sand	Precious Metals, Sand
Coarse - 0.3" x 0.27" opening	Medium - 0.1" x 0.08" opening	Fine - 0.03" x 0.025" opening

NOTE 1: Select appropriate screen filter suffix in step 3 to complete model number. **NOTE 2:** Subtract 1" from adapter and riser range when PS-35-S is ordered with 4" connections. **NOTE 3:** PS-275-S has two covers requiring a set of two risers when ordered.

^{*} When ordered with solids interceptor.

Settler[™] **Series**

catch basins

Settler™ Catch Basins allow sand and sediment to collect from the bottom up and may drain either through a drain line (-S models) or directly through a top inlet grate (-G models). An optional removable filter basket may be ordered with -G models to allow for intermittent DIY (do-it-yourself) maintenance and to catch valuables that need to be retrieved.



Features: for buried installations | easy to carry HDPE design | 6 models from 50 to 275 gallons | TeleGlide™ field adjustable riser system | suitable for exterior installations



Settler[™] Covers

Covers are provided with water/air tight gasket seal and are designed to fit tightly into a key-fit frame.













Specifications

		Capacity		Pipe Sizes				Rough	n-in Dime	ensions (ii	า.)	Weight (lbs.)		
Striem Model	Total	Optional Basket	Plain End SCH.40		Optional		Body		Inlet/	Outlet	Adapter	0	14/	
	Liquid Capacity (gal.)		Standard	Optional (see list prices)	Male Thread (no charge)	L	W	Н	А	В	Adjustability (add to B & H)	Dry	Wet	
CB-50-S	52	n/a	4	3	3, 4	37	28	28 ½	18	10 ½	3 ½	86	520	
CB-50-G	52	7	4	3	3, 4	37	28	30 1/8	18	12 1/8	3 ½	187	621	
CB-125-S	125	n/a	4	6	4	46	32	38 ½	26	12 ½	6	123	1,166	
CB-125-G	125	7	4	6	4	46	32	40 1/8	26	14 1/8	6	213	1,256	
CB-275-S	275	n/a	4	6	4	68	33 ½	51 ½	38	13 ½	6	218	2,532	
CB-275-G	275	7 ea. (includes 2)	4	6	4	68	33 ½	53 1/8	38	15 1/8	6	398	2,692	

CB-50-S CB-50-G CB-125-S CB-125-G **CB-275-S** CB-275-G

List Prices

	Base Unit			Mis	cellane	ous Options		Miscellaneous Options										
Striem Model		Optio Bask			Water or Kit	*Upgrad H-20 Ra Pickable Iron Co	ted Cast	Alternate Plain End Pipe Sizes										
		Part # Price		Part #	Price	Part # Price		Size	Price									
CB-50-S	\$1,866	n/a	э	AK1	\$560	C24-HP	n/c	2, 3	n/c									
CB-50-G	\$1,986	BCB-7	\$484	AK1	\$560	n/a		2, 3	n/c									
CB-125-S	\$2,106	n/a	Э	AK1	\$560	C24-HP n/c		6	\$60									
CB-125-G	\$2,500	BCB-7 \$484		AK1	\$560	n/a		6	\$60									
CB-275-S	\$4,104	n/a		AK1	\$560	C24-HP(2) n/c		6	\$60									
CB-275-G	\$4,954	BCB-7(2) \$968		AK1	\$560	n/a		6	\$60									

^{*} When ordered with catch basin.



BCB-7

Optional 7 gal. sediment basket with coarse filter (0.3" x 0.27" openings) for initial separation of large solids. (weighs 10 lbs.). Must be ordered with catch basin.

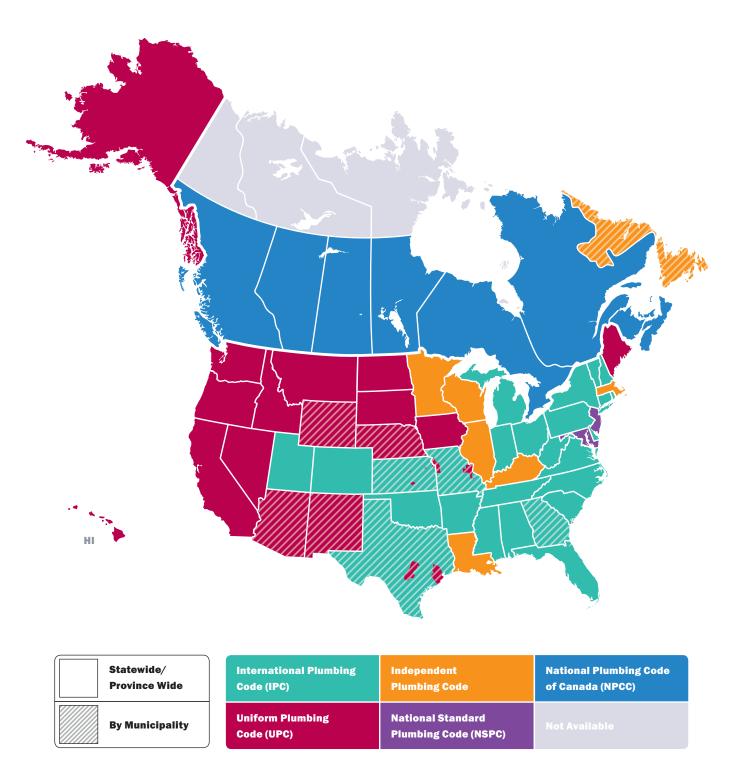
 $\textbf{NOTE:} \ \textit{CB-275-S/CB-275-G} \ \textit{have two covers requiring a set of two risers when ordered.}$

TeleGlide™ Riser Order Guide

Desire	d Riser Height (in.)		Pri	ice
CB-50-S CB-50-S	CB-125-S, CB-125-G CB-275-S, CB-275-G	Risers Needed	Standard	CB-275-S CB-275-G
0 - 3½	0 - 6	24 Series Adapter	inclu	ıded
>3½ - 22	>6 - 24	24 Series Short Riser (SR24)	\$528	\$1,056
>22 - 37	>24 - 39	24 Series Long Riser (LR24)	\$664	\$1,328
n/a	>39 - 43	24 Series Short + Short (SR24 + SR24)	\$1,056	\$2,112
n/a	>43 - 58	24 Series Short + Long (SR24 + LR24)	\$1,192	\$2,384
n/a	>58 - 72	24 Series Long + Long (LR24 + LR24)	\$1,328	\$2,656

Chemical Waste Tanks Regulatory Compliancecode digests

Chemical Waste Tanks are required anywhere that chemical waste may be introduced to the public sewer system in applications such as: school laboratories, linen cleaning facilities, printing shops, photography studios, battery charging stations, biotechnology laboratories, chemical manufacturers, industrial textile plants, food/beer/wine processing plants, hospital decontamination, fire/police stations, manufacturing, nuclear facilities, industrial process, or anywhere an emergency shower or eyewash exists. These wastes must be treated before entering the public sewer system.



NOTE: plumbing code map and digests may not be applicable in some situations. Review plumbing codes and any locally adopted ordinances for specific requirements regarding sizing, installation and maintenance of chemical waste tanks.

Model Plumbing Codes

IPC (2015)¹ – A chemical waste system shall be completely separated from the sanitary drainage system. Corrosive liquids, spent acids or other harmful chemicals that destroy or injure a drain, sewer, soil or waste pipe, or create noxious or toxic fumes or interfere with sewage treatment processes shall not be discharged into the plumbing system without being thoroughly diluted, neutralized or treated by passing through an approved dilution or neutralizing device.

UPC (2012)² – Chemical or industrial liquid wastes that are likely to damage or increase maintenance costs on the sanitary sewer system, detrimentally affect sewage treatment, or contaminate surface or subsurface waters shall be pretreated to render them innocuous prior to discharge into a drainage system.

NPCC (2010)³ – Where a fixture or equipment discharges corrosive or acid waste, it shall discharge into a neutralizing or dilution tank that is connected to the sanitary drainage system. Each neutralizing or dilution tank shall have a method for neutralizing the liquid.

NSPC (2012)⁴ – Corrosive liquids, spent acids, or other harmful chemicals that may damage a drain, sewer, soil or waste pipe, create noxious or toxic fumes, or interfere with sewage treatment processes shall not be discharged into the plumbing system without being thoroughly neutralized or treated by passing through a properly constructed and approved neutralizing device.

Independent Plumbing Codes

Illinois Plumbing Code (2014)⁵ – Acid and chemical waste piping and fittings, including the trap, shall be of material that will not be damaged by the waste being discharged. Corrosive liquids, spent acids, or other harmful chemicals shall not be discharged into the building sewer without first being properly diluted or neutralized.

Kentucky State Plumbing Law (2013)⁶ – A corrosive liquid shall not be permitted to discharge into the soil, waste or sewer system unless otherwise permitted by this administrative regulation. The waste shall be thoroughly diluted or neutralized by passing through a properly constructed and acceptable dilution or neutralizing pit before entering the house sewer.

Louisiana Plumbing Code (2013)⁷ – In no case shall corrosive liquids, spent acids, or other harmful chemicals which might destroy or injure a drain, sewer, soil or waste pipe, or which might create noxious or toxic fumes, discharge into the plumbing system without being thoroughly diluted or neutralized by passing through a properly constructed and acceptable dilution or neutralizing device (generally, utilizing limestone chips).

Massachusetts Plumbing Code⁸ – In no case shall special hazardous wastes discharge into the plumbing system without being thoroughly diluted, neutralized, or treated by passing through a properly constructed and acceptable diluting or neutralizing device. All special hazardous wastes shall be conveyed in separate piping systems.

Minnesota Plumbing Code (2012)⁹ – Chemical or industrial liquid wastes which are likely to damage or increase maintenance costs on the drainage system, shall be pretreated to render them innocuous prior to discharge into the drainage system, when required by the administrative authority.

Wisconsin Administrative Code (2011)¹⁰ – All chemical wastes having a pH level of less than 5.5 or more than 10.0 shall discharge to a holding tank for proper disposal or to a drain system. All chemical wastes discharging into a drain system shall be diluted, neutralized or treated to a pH level of 5.5 to 10.0 by passing through an approved dilution or neutralizing basin before discharging to a building sewer.

Puerto Rico Building Code (2011) – The 2011 Puerto Rico Building Code adopted the 2009 International Plumbing Code without amendments. A chemical waste system shall be completely separated from the sanitary drainage system. Corrosive liquids, spent acids or other harmful chemicals that destroy or injure a drain, sewer, soil or waste pipe, or create noxious or toxic fumes or interfere with sewage treatment processes shall not be discharged into the plumbing system without being thoroughly diluted, neutralized or treated by passing through an approved dilution or neutralizing device.

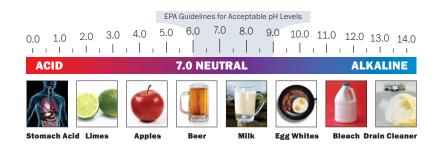
Chemical Waste Tanks Product Selection

sizing guidelines

Did You Know?

Plumbing and pretreatment codes require treatment of acidic waste,

but make no mention of caustic waste. Caustic waste can be just as harmful and must be considered when choosing the neutralization approach.



Step 1 of 6: Determine Characteristics of the Waste Stream

a) If acidic - proceed to step 2.

b) If caustic or caustic and acidic, reagent injection system needed.

Step 2 of 6: Choose Neutralization System Type

Continuous (go to step 3)

Use When • Flow is relatively constant and not characterized by large surges.

- Influent chemistry is relatively constant and not characterized by large swings in pH.
- Effluent chemistry is not critical, such as the first stage in a multi-stage process.

Examples High school, college, and professional labs

Of Batch (contact Striem)

Use When

- Flow is discharged in large batches or there are large fluctuations in flow.
- Influent chemistry is characterized by large swings in pH.
 Effluent makeup is critical and pH must be kept within specific parameters.

Examples Manufacturing, pharmaceutical, and food processing

Step 3 of 6: Determine Size of Tank

For all labs, use "Sizing by Sinks" table below to determine tank size to provide adequate residence time for acid neutralization via limestone treatment. Residence times vary significantly based on strength of acid. For more information on required contact time, see "Contact Time" table below.

Sizing by Sinks

Per ASPE Plumbing Engineering Design Handbook Volume 3

Number of Lab Sinks	Tank Size (Gal.)	Number of Lab Sinks	Tank Size (Gal.)	Number of Lab Sinks	Tank Size (Gal.)
2	5	30	108	150	500
4	15	40	150	175	550
8	30	50	175	200	650
16	55	60	200	300	1,200
22	75	75	275	500	2,000
27	90	110	360	600	3,000

NOTE: Table assumes a "worst case scenario" influent pH of 2 and provides 3 hours residence time at a flow rate of 1 GPH per fixture. See "Contact Time" table for appropriate limestone contact time.

Contact Time For Limestone Neutralization of Acids*



^{*}Data provided via third party test requested by Striem.

Step 4 of 6: Consider Solids Pretreatment

Most lab waste contains solids that can clog the acid waste drain system. It is recommended that a solids interceptor be installed in front of centralized neutralization tanks. See the Prospector™ Series on p. 14-17 for more information.

Step 5 of 6: Determine Tank Material

Striem offers neutralization tanks in both polyethylene and polypropylene. While polyethylene is adequate for most projects, it's important to consider the chemical resistances of polyethylene and polypropylene.

Step 6 of 6: Consider pH Monitoring

All acid waste streams should be monitored. The monitor acts as both an alarm in the event of system failure and to indicate when the neutralization media needs to be replaced. See Striem's Command CenterTM on p. 28-29.

Lab Rat[™] Series

under counter neutralization tanks

formats available online _______.pdf ______.doc ______.dwg ______.rfa

The Lab RatTM Series of under-counter neutralization tanks for school labs is the most versatile design in the industry with standard top or side inlet connections, hand-threaded cover and adaptability for $1\frac{1}{2}$ " or 2" drain lines.

Features: 2 and 5 gallons | for under counter sink installations | gasketed top with captive hand-thread hardware | easy to carry HDPE design | combination 1½" or 2" FPT connections standard | built-in top and side inlet options | optional top vent connection (LB-5 only) | internal sewer gas seal



Specifications

		id Cizing Du	Rough-in Dimensions (in.)						Pipe	e Connections	5	Weight (lbs.)			
Striem Model			Body		Side Inlet/Outlet		Top Inlet		Standard FPT Connections	Outlet	Optional Top Vent	Drv	Wet	Wet with	
			L	W	Н	Α	В	С	D	per ANSI B1.20.1	Location	Connection	1 2		Limestone
LB-2	2	1	9	9	10 1/8	7	2	7	2	1 ½ or 2	Top or Side	n/a	6	23	28
LB-5	5.3	2	14	14	12 %	9	2 1/2	11 ½	2 1/2	1 ½ or 2	Top or Side	included	11	58	80

H IN A W Side View

Top View

Top View

Follow Steps 1-3 for complete Lab Rat™ quote.

LB-2

List Prices

Striem	1 Base	2 Limestone					
Model	Unit	Load (lbs.)	Part #	Price			
LB-2	\$214	25	LS-25	\$31			
LB-5	\$244	50	LS-50	\$62			



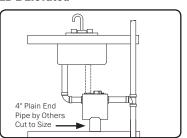
③ For monitoring package see Command Center™ on pages 28-29

When loading Lab Rat™
Series tanks with limestone, use Striem limestone chips 2 - 3" in size with a calcium carbonate content (CACO₃) of 90% or greater. When limestone is depleted contact a waste specialist to evacuate basins.

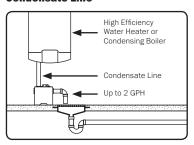


Application Specific Details

LB-2 Elevated

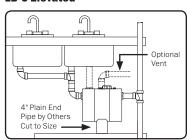


LB-2 with Limestone Serving Condensate Line

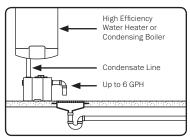


LB-5 Elevated

LB-5



LB-5 with Limestone Serving Condensate Line



Lab Basin[™] Series

neutralization tanks

Lab Basin™ Neutralization Tanks for school labs are designed for above or below grade installation, providing an excellent value for the most common industry neutralization tanks sizes from 15 gallons to 275 gallons.



Features: 15 through 275 gal. | easy to carry HDPE design | above or below grade installations | TeleGlide™ field adjustable riser system | models LB-50 through LB-275 suitable for exterior installations



Lab Basin[™] Covers

Covers are provided with water/air tight gasket seal and are designed to fit tightly into a key-fit frame.



formats available online











Made To Order - Submittal Required

Specifications

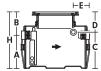
					mended Size				Rougi	n-in Dime	nsions (ir	1.)			Weight (lbs.)	
Striem Model	Striem Number Pequir	Limestone Required	Holding	Inlet &	Inlet & Vent		Body	/ Inlet/Outlet				Vent		Adapter Adjustability	_	
	OI SINKS	(IDS.)	Gallons	Outlet		L	W	Н	А	В	С	D	Е	(add to Dry H & B)	Wet	
LB-15	4	200	15	2	2	25	19	14 1/4	10	4 1/4	12	2 1/4	5 ½	n/a	28	166
LB-25	6	275	22	3	2	27	21	15	10 3/4	4 1/4	11 ½	3 1/2	6 1/4	n/a	31	220
LB-35	9	450	35	3	2	33	25	25	15	10	17	8	7 1/2	3 1/2	77	369
LB-50	15	650	52	4	2	37	28	28 ½	18	10 ½	20	8 1/2	9	3 1/2	92	525
LB-125	35	1,550	125	4	2	46	32	38 ½	26	12 ½	28	10 ½	12	6	130	1,171
LB-275	75	3,150	275	4	2	68	33 ½	51 ½	38	13 ½	40	11 ½	16	6	230	2,313

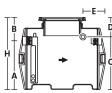
LB-15 **LB-25 LB-35 LB-50** LB-125 LB-275

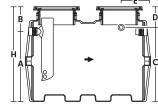












Follow Steps 1-5 for complete Lab Basin™ quote.

List Prices: Add For Tank And Options

	1		Miscellaneous Options										
Striem Model	Base Unit	High Anch	Water or Kit	2 Limes	stone	*Upgrade to Highway Rated Bolted Composite Cover							
		Part #	Price	Part #	Price	Part # Price							
LB-15	\$638	n/	/a	LS-50 (4)	\$248	n/	′a						
LB-25	\$890	n/	/a	LS-50 (6)	\$372	n/a							
LB-35	\$1,320	n/	/a	LS-50 (9)	\$558	n/a							
LB-50	\$1,368	AK1	\$560	LS-50 (13)	\$806	C24-H	\$210						
LB-125	\$2,634	AK1 \$560		LS-50 (31)	\$1,922	inclu	ided						
LB-275	\$5,314	AK1 \$560		LS-50 (63)	\$3,906	inclu	ided						

^{*} When ordered with neutralization tank.

3 List Prices: Pipe Connections

	Plain End ASTM 02665-1											
	Pipe Size	1-1/2"	2"	3"	4"	6"						
\mathcal{O}	No Diptube Outlet & Vent (typical)	\$56	\$60	\$84	\$96	\$148						
	With Diptube Inlet (typical)	\$160	\$180	\$204	\$252	\$262						
	Flanged Connection according to ANSI B16.5 150# bolt pattern											
	Pipe Size	1-1/2"	2"	3"	4"	6"						
	No Diptube Outlet & Vent (typical)	\$150	\$150	\$214	\$238	\$382						
	With Diptube Inlet (typical)	\$250	\$272	\$324	\$428	\$496						

④ TeleGlide™ Riser Order Guide

Desire	d Riser Heig	ght (in.)		Pri	ice
LB-15 LB-25	LB-35 LB-50	LB-125 LB-275	Risers Needed	Standard	LB-275
>2 1/8- 16	n/a	n/a	16 Series Riser (SR-16)	\$370	n/a
n/a	0 - 3½	0 - 6	24 Series Adapter	inclu	ıded
n/a	>3½ - 22	>6 - 24	24 Series Short Riser (SR24)	\$528	\$1,056
n/a	>22 - 37	>24 - 39	24 Series Long Riser (LR24)	\$664	\$1,328
n/a	n/a	>39 - 43	24 Series Short + Short (SR24 + SR24)	\$1,056	\$2,112
n/a	n/a	>43 - 58	24 Series Short + Long (SR24 + LR24)	\$1,192	\$2,384
n/a	n/a	>58 - 72	24 Series Long + Long (LR24 + LR24)	\$1,328	\$2,656



5 For monitoring package see Command Center™ on pages 28-29

NOTE 1: 4" and 6" connections are not available with LB-15 and LB-25. NOTE 2: 6" connections are not available with LB-35 and LB-50. NOTE 3: 3" MPT not available on LB-15 vent. NOTE 4: 1-1/2" and 6" MPT connections are not available. NOTE 5: Subtract 1" from adapter and riser range when LB-35 is ordered with 4" connections. **NOTE 6:** LB-275 has two covers requiring a set of two TeleGlide $^{\text{TM}}$ risers when ordered.

NT Series

neutralization tanks

Better Below Grade Value See Lab Basin™ Models on p. 24-25

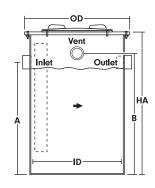
Specifications

	Sizing	Capac	ity (gal.)	Recomn				Rough-	in Dime	nsions (ir	.)		Adapter		Weigh	nt (lbs.)		
Striem Model	by No. of	Total Tank	Liquid Holding	Pipe Inlet /	Size Vent		Во	dy		In/Out C/L to Bottom of Tank	Vent C/L to Bottom of Tank	In/Out C/L to Cover	Adjust- ability (add to	Above	Grade	Below	Grade	Lab Basin™ Equivalent
	Sinks	Idiii		Outlet	Vent	ID	OD	НА	НВ	A	В	C*	HB & B)	Dry	Wet	Dry	Wet	
NT-30H	8	40	30.4	3	2	22	28	24 1/2	33	20	21	13	3 1/2"	40	294	27	281	LB-35
NT-55	12	55	41.1	3	2	22	28	36 1/2	43	27	29	16	6"	50	393	67	410	LB-50
NT-55H	16	70	55	3	2	24	30	36 ½	43 ¾	30	32	13 ¾	6"	70	529	105	564	LB-50
NT-100	27	100	90.6	4	2	28	34	42 1/2	49 3/4	36	38	13 ¾	6"	85	841	119	875	LB-125
NT-100H	32	150	117.6	4	2	31	37	48 %	56 ½	38	40	17 3/4	6"	100	1,081	134	1,115	LB-125
NT-150	32	150	117.6	4	2	31	37	48 %	56 ½	38	40	17 3/4	6"	100	1,081	134	1,115	LB-125
NT-150H	41	200	154.2	4	2	36	40	48 1/2	55 3/4	38	40	17 3/4	6"	125	1,411	214	1,500	LB-275
NT-200	41	200	154.2	4	2	36	40	48 1/2	56 ½	38	40	17 3/4	6"	125	1,411	214	1,500	LB-275
NT-200H	63	275	209.9	4	2	42	48	48 1/2	56 1/2	38	40	17 3/4	6"	160	1,911	253	2,004	LB-275
NT-275	63	275	209.9	4	2	42	48	48 1/2	56 ½	38	40	17 3/4	6"	160	1,911	253	2,004	LB-275
NT-275H	75	350	275	4	2	48	52	48 1/2	56 ½	38	40	17 3/4	6"	200	2,494	329	2,623	LB-275
NT-350	75	350	275	4	2	48	52	48 1/2	56 ½	38	40	17 3/4	6"	200	2,494	329	2,623	LB-275
NT-350H	107	440	350	4	2	52	58	48 1/2	56 ½	41	43	14 3/4	6"	210	3,129	310	3,229	LB-275 (2 in series)
NT-500	135	500	450.5	4	2	52	58	60 1/2	68 1/2	52	54	15 3/4	6"	225	3,982	506	4,263	LB-275 (2 in series)
NT-500H	150	650	501.1	4	2	48	54	84 1/2	92 ½	70	76	21 3/4	6"	300	4,479	455	4,634	LB-275 (3 in series)
NT-1200	291	1,360	1,200	4	2	69	75	87	94 3/4	76	78	18	6"	500	10,216	1,004	10,720	LB-275 (4 in series)
NT-1500	326	1,500	1,304	4	2	73	77 3/4	85 ½	93 1/4	74	76	18 ½	6"	650	11,400	1,040	11,789	LB-275 (5 in series)
NT-2000	432	2,000	1,727	4	2	84	91	86 3/4	94 1/2	74	76	19 3/4	6"	850	15,253	1,240	15,643	n/a

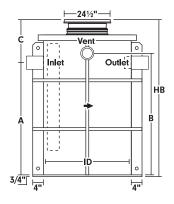
^{*} Inlet/outlet centerline to cover dimensions listed are for below grade (-B) models only.



Above Grade



Below Grade



NT Tank Covers

8" threaded access

Covers are provided with water/air tight gasket seal and are designed to fit tightly into a key-fit frame.



NOTE: Add 34" measurement to A, C, and HB dimensions when models NT-30H through NT-150 are ordered with anchor flange.

15" threaded access











Made To Order - Submittal Required

Follow Steps 1-5 for complete NT Series tank quote.

1 List Prices: Tank And Limestone

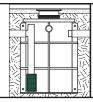
	Polyethylene				Polypro		Add for Limestone			
Above Gr	ade	Below Gr	ade	Above Gr	ade	Below Gr	ade	Dort #	Load	Price
Striem Model	Price	Striem Model	Price	Striem Model	Price	Striem Model	Price	Part #	(lbs.)	Price
NT-30H-A-PE	\$702	NT-30H-B-PE	\$2,190	NT-30H-A-PP	\$1,150	NT-30H-B-PP	\$2,790	LS-50 (8)	375	\$496
NT-55-A-PE	\$786	NT-55-B-PE	\$2,118	NT-55-A-PP	\$1,494	NT-55-B-PP	\$3,052	LS-50 (10)	500	\$620
NT-55H-A-PE	\$944	NT-55H-B-PE	\$3,506	NT-55H-A-PP	\$1,602	NT-55H-B-PP	\$4,922	LS-50 (14)	675	\$868
NT-100-A-PE	\$1,144	NT-100-B-PE	\$3,852	NT-100-A-PP	\$2,196	NT-100-B-PP	\$5,698	LS-50 (22)	1,100	\$1,364
NT-100H-A-PE	\$1,620	NT-100H-B-PE	\$3,492	NT-100H-A-PP	\$2,564	NT-100H-B-PP	\$5,350	LS-50 (29)	1,450	\$1,798
NT-150-A-PE	\$1,620	NT-150-B-PE	\$3,492	NT-150-A-PP	\$2,564	NT-150-B-PP	\$5,350	LS-50 (29)	1,450	\$1,798
NT-150H-A-PE	\$1,712	NT-150H-B-PE	\$6,660	NT-150H-A-PP	\$2,930	NT-150H-B-PP	\$8,782	LS-50 (38)	1,900	\$2,356
NT-200-A-PE	\$1,712	NT-200-B-PE	\$6,660	NT-200-A-PP	\$2,930	NT-200-B-PP	\$8,782	LS-50 (38)	1,900	\$2,356
NT-200H-A-PE	\$2,084	NT-200H-B-PE	\$6,978	NT-200H-A-PP	\$3,260	NT-200H-B-PP	\$9,476	LS-50 (52)	2,575	\$3,224
NT-275-A-PE	\$2,084	NT-275-B-PE	\$6,978	NT-275-A-PP	\$3,260	NT-275-B-PP	\$9,476	LS-50 (52)	2,575	\$3,224
NT-275H-A-PE	\$2,818	NT-275H-B-PE	\$8,944	NT-275H-A-PP	\$5,570	NT-275H-B-PP	\$12,864	LS-50 (66)	3,300	\$4,092
NT-350-A-PE	\$2,818	NT-350-B-PE	\$8,944	NT-350-A-PP	\$5,570	NT-350-B-PP	\$12,864	LS-50 (68)	3,300	\$4,216
NT-350H-A-PE	\$3,260	NT-350H-B-PE	\$14,926	NT-350H-A-PP	\$5,644	NT-350H-B-PP	\$18,830	LS-50 (86)	4,300	\$5,332
NT-500-A-PE	\$3,782	NT-500-B-PE	\$16,766	NT-500-A-PP	\$5,926	NT-500-B-PP	\$20,896	LS-50 (110)	5,500	\$6,820
NT-500H-A-PE	\$4,022	NT-500H-B-PE	\$12,074	NT-500H-A-PP	\$7,120	NT-500H-B-PP	\$15,994	LS-50 (130)	6,500	\$8,060
NT-1200-A-PE	\$13,112	NT-1200-B-PE	\$40,510	n/a	n/a	n/a	n/a	LS-50 (258)	12,900	\$15,996
NT-1500-A-PE	\$16,478	NT-1500-B-PE	\$46,970	n/a	n/a	n/a	n/a	LS-50 (310)	15,500	\$19,220
NT-2000-A-PE	\$22,348	NT-2000-B-PE	\$55,010	n/a	n/a	n/a	n/a	LS-50 (444)	22,200	\$27,528

2 List Prices: Pipe Connections

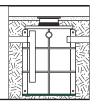
$\overline{\ \ }$	Plain End ASTM 02665-1 or Fe	male Thre	ead (ANSI	B1.20.1)								
\mathcal{O}	Pipe Size	1-1/2"	2"	3"	4"	6"						
	No Diptube Outlet & Vent (typical)	\$56	\$68	\$84	\$96	\$180						
	With Diptube Inlet (typical)	\$160	\$168	\$178	\$252	\$322						
	Flanged Connection according to ANSI B16.5 150# bolt pattern											
	Pipe Size	1-1/2"	2"	3"	4"	6"						
	No Diptube Outlet & Vent (typical)	\$150	\$172	\$214	\$282	\$382						
	With Diptube Inlet (typical)	\$250	\$272	\$324	\$428	\$496						

3 List Prices: Additional Options

DB99: Distributor Box List \$142

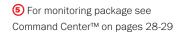


AF-30H150: Anchor Flange Option: NT-30H-B through NT-150-B Standard: All other -B models List \$556



■ TeleGlide[™] Riser Order Guide

Desired Rise	er Height (in.)		Pri	ice
NT-30H	all other NT models	Risers Needed	Standard	NT-1200 NT-1500 NT-2000
0 - 31/2	0 - 6	24 Series Adapter	inclu	ıded
>3½ - 22	>6 - 24	24 Series Short Riser (SR24)	\$528	\$1,056
>22 - 37	>24 - 39	24 Series Long Riser (LR24)	\$664	\$1,328
n/a	>39 - 43	24 Series Short + Short (SR24 + SR24)	\$1,056	\$2,112
n/a	>43 - 58	24 Series Short + Long (SR24 + LR24)	\$1,192	\$2,384
n/a	>58 - 72	24 Series Long + Long (LR24 + LR24)	\$1,328	\$2,656



NOTE 1: 6" connections are not available with NT-30H through NT-100. NOTE 2: NT-1200, NT-1500 and NT-2000 have two covers requiring a set of two risers when ordered.

Command Center[™]

pH monitoring package

The Command Center™ is the industry's only "ready-to-use" pH monitoring package. Simply install the pH sensor and supply power — that's it. The system is pre-programmed to alarm at low and high pH values (6-9 pH) and can be adjusted as required. Up to 1 year of recorded data can be stored to the micro SD card (included) for easy data transfer. Customizations are simple using the easy-to-navigate menus on the color touchscreen display.

Features: ready-to-use: pre-programmed audio/visual alarm set points | touchscreen: bright, easy-to-navigate 3.5" color touch-screen display | large memory storage: includes two formatted micro SD cards − each card stores approximately 1 year of history | exports to Excel: recorded data logs, alarm history, and trend data export to Excel for easy data management | remote access: use ethernet connection to remotely manage the Command Center™ through your company's building management system | fresh water flush: pre-programmed with digital output to power solenoid valve for fresh water flush if pH approaches high/low limits | NEMA 4X lockable weather proof enclosure − temperature resistant from 32° F to 122° F | sensor maintenance and calibration kit included (CC-K) | 120 V AC power supply required | all components are UL listed | sensor can be mounted up to 3,000 feet from Command Center™



Touchscreen Interface













Step 1 of 3: Select Your System

Command Center™ with 1 Sensor



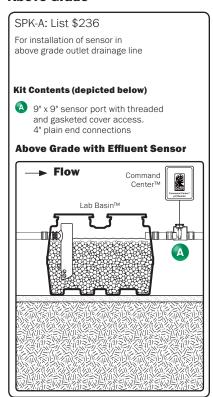
Command Center™ with 2 Sensors



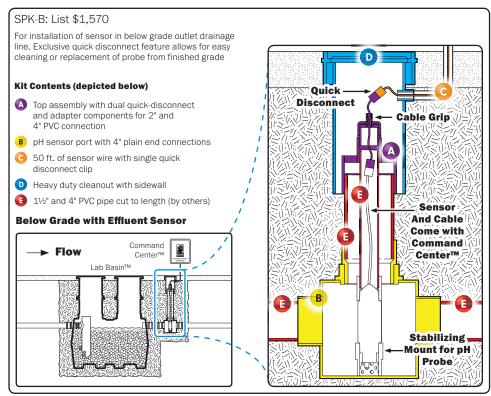
CC-K Sensor Maintenance and Calibration Kit (see step 3 below) is included with order of CC-1 or CC-2.

Step 2 of 3: Select Sensor Placement Kit

Above Grade



Below Grade



Step 3 of 3: Select Accessories and Replacement Components (Optional)

Replacement Sensor with 10 ft. of Cable and Quick Disconnect Clip



Additional Sensor Cable (for use with below grade SPK-B, quick disconnect clip not required)



Quick Disconnect Clip (required when ordering above grade CC-PHW for SPK-A)



Sensor Maintenance and Calibration Kit



Bio Basin[™] Series

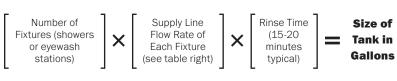
decontamination tanks

Chapter 8 of the UPC and IPC require the pretreatment of liquid wastes likely to damage the building's drain, waste and vent system, public sewer or ground/surface waters. According to the American Institute of Architects (AIA) "water drainage must be contained and disposed of safely to ensure that it does not enter hospital or community drainage systems." The American National Standards Institute Standard (ANSI Z538.1) says

"consideration should be given to the proper disposal of waste flushing fluids from operating emergency eye wash and shower equipment." Other local codes may apply.



Striem recommends the following steps for sizing a decontamination tank:



Sizing Sample:

- 1. A hospital with two emergency showers, each with a $^{3}4$ " supply line carrying a flow rate of 9.96 GPM. 2 fixtures x 9.96 GPM = 19.92 GPM
- 2. 19.92 GPM x 15 minutes = 298.8 gallons
- 3. Select Bio Basin™ model BB-500 (500 liquid holding gallons)

Supply Line Flow Rates

velocity	1/2	3/4
4 Ft./sec	3.77 GPM	6.64 GPM
6 Ft./sec	5.66 GPM	9.96 GPM
8 Ft./sec	7.54 GPM	13.29 GPM
10 Ft./sec	9.43 GPM	16.61 GPM

Bio Basin[™] Covers

Covers are provided with water/air tight gasket seal and are designed to fit tightly into a key-fit frame.









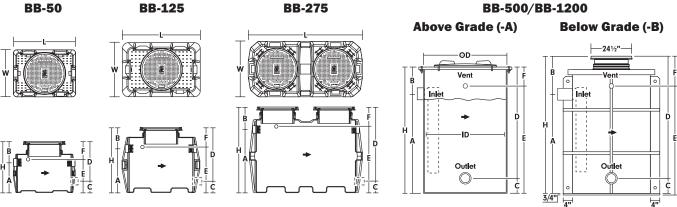




Made To Order - Submittal Required

Specifications

	Capac	city (gal.)	Recomm	nended		Rough-					n-In Dimensions (in.)						Weigh	nt (lbs.)
Striem	Total	Liquid	Pipe	Size			Body				Optional	Optio	nal 4"	Ve	ent	Adapter Adjustability	Drv	Wet
Model	Tank	Holding		Vent			Dody				nnection)		ection)	· `	SIIC	(add to B, D, F & H)	Weight	Weight
			Outlet	VOIIC	L	W	ID	OD	Н	А	В	С	D	Е	F			
BB-50	_	52	4	2	37	28	_	_	28 ½	18	10 ½	6	22 ½	20	8 ½	3 ½"	92	527
BB-125	-	125	4	2	46	32	_	_	38 ½	26	12 ½	8	30 ½	28 ½	10	6"	127	1,168
BB-275	_	275	4	2	68	33 ½	-	_	51 ½	38	13 ½	9	42 1/2	40	11 ½	6"	223	2,306
BB-500-A	650	501.1	4	2	-	-	48	54	84 1/2	70	14 1/2	6	77 3/4	76	7 3/4	n/a	300	4,479
BB-500-B	650	501.1	4	2	-	-	48	54	91 ¾	70	21 3/4	6	85 ¾	76	15 ¾	6"	455	4,634
BB-1200-A	1,360	1,200	4	2	_	_	69	75	87	76	10 1/4	6	80 1/4	78	8 1/4	n/a	500	10,216
BB-1200-B	1,360	1,200	4	2	_	_	69	75	94	76	18	6	88	78	16	6"	1,004	10,720



Follow Steps 1-3 for complete Bio Basin™ tank quote.

1 List Prices

					Miscellane	ous Options		
Striem Model		Bas Uni		High N Anch				
					Part #	Price		
BB-50		\$1,2	78		AK1	\$560		
BB-125		\$2,4	60		AK1	\$560		
BB-275		\$4,9	72		AK1	\$560		
		Base	Unit		*Upgrade to H-20			
Striem	Polyethyl	ene (-PE)	Polypropy	rlene (-PP)	5			
Model	Above Grade (-A)	Below Grade (-B)	Below Grade (-E	(-B St	yle only)			
	Price	Price	Part #	Price				
BB-500	\$4,020	\$11,822	C24-HP	n/c				
BB-1200	\$13,112	\$39,346	n/a	n/a	C24-HP (2	2) n/c		

Monitoring Packages

AVA-3: Single Level Monitoring Package Remote audio/visual alarm panel and explosion proof stainless steel float switch. List \$2,194



AVA-4: Multi-level Monitoring Package Remote audio/visual alarm panel and explosion proof multi-level float switch. List \$4,822

③ TeleGlide™ Riser Order Guide

Desired F	Riser Height (in.)		Pri	ice
BB-50	BB-125, BB-275, BB-500, BB-1200			BB-275, BB-1200
0 - 3½	0 - 6	24 Series Adapter	inclu	ıded
>3½ - 22	>6 - 24	24 Series Short Riser (SR24)	\$528	\$1,056
>22 - 37	>24 - 39	24 Series Long Riser (LR24)	\$664	\$1,328
n/a	>39 - 43	24 Series Short + Short (SR24 + SR24)	\$1,056	\$2,112
n/a	>43 - 58	24 Series Short + Long (SR24 + LR24)	\$1,192	\$2,384
n/a	>58 - 72	24 Series Long + Long (LR24 + LR24)	\$1,328	\$2,656

2 List Prices: Pipe Connections

$\overline{}$		Plain End ASTM 02665-1											
0	1-1/2"	2"	3"	4"	6"								
<u>~</u>	\$56	\$60	\$84	\$96	\$180								
$\overline{}$	Flanged Co	Flanged Connection according to ANSI B16.5 150# bolt pattern											
$(\widehat{\mathcal{O}})$	1-1/2"	2"	3"	4"	6"								
(E)	\$150	\$150	\$214	\$238	\$382								

NOTE 1: When ordered with float switch, add 2" measuring finished cover to centerline of all connections and subtract 2" from available riser height. NOTE 2: BB-275/BB-1200 have two covers requiring a set of two risers when ordered. NOTE 3: 6" connections not available with BB-50.

^{*} When ordered with decontamination tank.

Appendix

100% American Made



All products manufactured by Striem are 100% American Made and meet requirements for the Buy American Act and the "Buy American" provision of the *American Recovery and Reinvestment Act of 2009* (ARRA).

Terms and Conditions

All Customers: The following terms and conditions pertain to qualified customers only.

Striem, at its option, may qualify or disqualify any customer. All prices are subject to change without notice.

International Customers: All border crossing fees are paid by the importing customer. Contact Striem for further information on NAFTA and HTS numbers.

Credit Terms: 2% 10 days, net 30.

A 2% discount may be taken if payment is received on or before the 10th day from date of invoice. Full payment is required on or before the 30th day from date of invoice. A 2% service charge will be applied to all overdue accounts. Accounts that regularly pay beyond net terms will be denied open account status. All prices are subject to change without notice. Invoices may be sent via email upon request.

Freight Terms: Shipments are F.O.B. Edwardsville, KS. Freight charges are pre-paid and billed with product invoice.

Returned Goods: Effective January 1st 2013, standard catalog products may be returned with no restock charge if returned in saleable condition within 6 months of purchase date. The customer is responsible for return freight. A Striem-issued RGA is required before return. If product is damaged or incomplete, additional charges may apply. Made-to-order products are non-returnable.

Lifetime Warranty



Effective March 2^{nd} , 2015 Striem represents and warrants that HDPE and PP products ("Products") will be free from any and all defects in material and workmanship, including corrosion, during the lifetime of the plumbing system in which the Products were originally installed and will, at its option, agree to repair, replace, or supply credit to the original purchaser.

This warranty does not cover damage caused by the Products' normal usage, or wear and tear, nor does it cover damage from naturally occurring phenomenon, including, but not limited to UV, freeze-related damage, or natural disasters. This warranty does not cover the purchaser's cost of routine maintenance including replacement of parts required in routine maintenance. This warranty does not cover fabricated steel products, or any monitoring equipment. This warranty shall be effective if, and only if, the Products were:

- · installed in accordance with Striem's notes, specifications and instructions, for installation, operation, and maintenance;
- installed in conformance with all applicable building and plumbing codes, and passed all applicable testing methods immediately following installation;
- not subjected to misuse or abuse, whether negligent or intentional;
- never modified, repaired, or altered by any individual(s) not authorized by Striem;
- sold through a Striem qualified wholesale distributor.

This warranty is the purchaser's sole and exclusive remedy, and acceptance of this exclusive remedy is a condition of the contract for the purchase of these Products.

In no event shall Striem be liable for any incidental, special, consequential or punitive damages, or for any costs, attorney fees, expenses, losses or delays claimed to be as a consequence of any damage to, failure of, or defect in any products including, but not limited to, any claims for loss of profits, transportation, removal and installation charges. This warranty is exclusive and in lieu of all other warranties or conditions, written or oral, expressed or implied.

References

- ${\bf 1.} \ \ {\bf International\ Plumbing\ Code,\ International\ Code\ Council,\ 2015}$
- $2. \ \ Uniform\ \mathsf{Plumbing}\ \mathsf{Code}, \ \mathsf{International}\ \mathsf{Association}\ \mathsf{of}\ \mathsf{Plumbing}\ \mathsf{and}\ \mathsf{Mechanical}\ \mathsf{Officials}, \ \mathsf{2012}$
- 3. National Plumbing Code of Canada, Canadian Commission on Building and Fire Codes, National Research Council of Canada, 2010
- 4. National Standard Plumbing Code, Plumbing-Heating-Cooling Contractors-National Association, 2012
- Part 890 Illinois Plumbing Code, Joint Committee on Administrative Rules, Administrative Code, 2005
- Kentucky State Plumbing Law, Regulations & Code, Department of Housing, Buildings and Construction, Division of Plumbing, 2013
- Louisiana State Plumbing Code (Chapter XIV Plumbing Sanitary Code State of Louisiana),
 State of Louisiana Department of Health and Hospitals, 2013
- 248 CMR 10.00: Uniform State Plumbing Code, Board of State Examiners of Plumbers and Gas Fitters, Commonwealth of Massachusetts, 2013
- Minnesota Plumbing Code, Minnesota Department of Labor & Industry, Construction Codes and Licensing Division, 2012
- 10. Wisconsin Administrative Code, Chapter SPS 382 Design, Construction, Installation, Supervision, Maintenance and Inspection of Plumbing, Division of Industry Services, 2013
- 11. Plumbing and Engineering Design Handbook 4 Plumbing Components and Equipment, Chapter 8 Grease Interceptors, Page 154, American Society of Plumbing Engineers, 2008
- 12. Plumbing Engineering Design Handbook 2 Plumbing Systems, Chapter 5 Cold Water Systems, page 88 Figure 5-12, American Society of Plumbing Engineers, 2006

Striem

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