

Onlot System Component Matrix

Absorption Area	Component Classification and Secondary / Advanced Treatment Options	Slope	Minimum Suitable Soil Depth to a Seasonal High-Water Table Limiting Zone	Minimum Suitable Soil Depth to a Rock Limiting Zone	Percolation Rate
Seepage Bed	<p style="text-align: center;">Conventional</p> <p style="text-align: center;">Alternate</p> 1) Peat filter 2) Free-access gravity sand (media) filter 3) CO-OP RFS III recirculating filter with UV light	0-8%	60 inches ⁽¹⁾	60 inches ⁽¹⁾	6-90 minutes per inch (If perc reading is 6-60 minutes per inch, up to 40 percent reduction in absorption area may be taken with peat filter only.)
Standard Trenches	<p style="text-align: center;">Conventional</p> <p style="text-align: center;">Alternate</p> 1) Peat filter 2) Free-access gravity sand (media) filter 3) CO-OP RFS III recirculating filter with UV light	0-25%	60 inches ⁽¹⁾	60 inches ⁽¹⁾	6-90 minutes per inch (If perc reading is 6-60 minutes per inch, up to 40 percent reduction in absorption area may be taken with peat filter only.)
Elevated Sand Mound Bed	<p style="text-align: center;">Conventional</p> <p style="text-align: center;">Alternate</p> 1) Peat filter 2) Free-access gravity sand (media) filter 3) CO-OP RFS III recirculating filter with UV light	0-12%	20 inches ⁽¹⁾	20 inches ⁽¹⁾	3-180 minutes per inch (If perc reading is 3-60 minutes per inch, up to 40 percent reduction in absorption area may be taken with peat filter only.)

Elevated Sand Mound Trenches	<p>Conventional</p> <p>Alternate</p> <p>1) Peat filter 2) Free-access gravity sand (media) filter 3) CO-OP RFS III recirculating filter with UV light</p>	0-12%	20 inches ⁽¹⁾	20 inches ⁽¹⁾	3-180 minutes per inch (If perc reading is 3-60 minutes per inch, up to 40 percent reduction in absorption area may be taken with peat filter only.)
Subsurface Sand (Media) Filter Bed	Conventional	0-8%	72 inches ⁽¹⁾	72 inches ⁽¹⁾	>90 minutes per inch at 12 to 36 inches and 3-90 minutes per inch at a depth between 36 and 60 inches
Subsurface Sand (Media) Filter Trenches	Conventional	0-25%	72 inches ⁽¹⁾	72 inches ⁽¹⁾	>90 minutes per inch at 12 to 36 inches and 3-90 minutes per inch at a depth between 36 and 60 inches
IRSI	<p>Conventional</p> <p>Alternate</p> <p>1) Free-access gravity sand (media) filter 2) Peat filter 3) CO-OP RFS III recirculating filter with UV light</p>	<p>0-4% Agriculture 0-12% Grassed 0-25% Forested</p>	10 inches	16 inches	Test not required
At-Grade Absorption Area	Alternate	0-12%	<p>1) 48 inches ⁽¹⁾ 2-5) 20 inches</p>	<p>1) 48 inches ⁽¹⁾ 2-5) 20 inches</p>	<p>1) 3-180 minutes per inch 2) 3-180 minutes per inch</p> <p>3) 3-60 minutes per inch (Up to 40 percent reduction in absorption area can be taken, but new proposals must prove a full area is available.)</p> <p>61-180 minutes per inch (No reduction in absorption area for new structures; repair situations must maximize system sizing up to the square footage of a full-size system.)</p>

At-Grade Absorption Area (<i>cont.</i>)	4) CO-OP RFS III recirculating filter with UV light 5) Recirculating subsurface sand (media) filter with UV light				4) 3-180 minutes per inch 5) 3-180 minutes per inch
Shallow Limiting Zone At-Grade Absorption Area	Alternate 1) Peat filter with UV light 2) CO-OP RFS III recirculating filter with UV light 3) Recirculating subsurface sand (media) filter with UV light	0-12%	10 inches	16 inches	A soil scientist must do a soil morphological evaluation.
Drip Irrigation	Alternate 1) Intermittent sand (media) filter (free access or buried) 2) Free access gravity sand (media) filter 3) Aerobic tank (primary & secondary treatment) 4) Peat filter 5) CO-OP RFS III recirculating filter with UV light	0-25%	20 inches	Must be 20 inches minimum below drip tubing	A soil scientist must do a soil morphological evaluation.
Conventional Subsurface Sand (Media) Filter Bed or Trenches (12 inches of sand may be eliminated in bed)	Alternate Peat filter	0-8% Bed 0-25% Trenches	72 inches	72 inches	>90 minutes per inch at 12 to 36 inches and 3-90 minutes per inch at a depth between 36 and 60 inches
Modified Subsurface Sand (Media) Filter for Fast Percolation, Shallow Bedrock Sites With No Water Table Present	Alternate	0-8% (only beds permitted)	72 inches ⁽¹⁾	See Alternate Guidance Section 10 for explanation for LZ of rock with open joints. 72 inches ⁽¹⁾ – Slowly permeable rock formation or other	<3 minutes per inch at 12 to 36 inches and 3-180 minutes per inch at a depth between 36 and 60 inches

				stratum	
Shallow Placement Pressure-Dosed System	Alternate	0-8% Beds 0-25% Trenches	58 inches ⁽¹⁾	58 inches ⁽¹⁾	6-90 minutes per inch
Steep Slope Elevated Sand Mound Beds	Alternate	≥12-≤15%	20 inches ⁽¹⁾	20 inches ⁽¹⁾	3-30 minutes per inch
Evapotranspiration Bed within a Greenhouse	Alternate	No requirements	No requirements	No requirements	No requirements
Leaching Chambers as aggregate substitute in seepage bed or trenches, elevated sand mound bed or trenches, subsurface sand (media) filter bed or trenches	Alternate	Must meet the absorption area regulatory requirements.	Must meet the absorption area regulatory requirements.	Must meet the absorption area regulatory requirements.	Must meet the absorption area regulatory requirements. (Up to a 40 percent reduction in absorption area may be taken in some cases. See Alternate Guidance.)
Individual Designed Composting Toilet	Experimental	Must meet the absorption area regulatory requirements to dispose of the graywater.	Must meet the absorption area regulatory requirements to dispose of the graywater.	Must meet the absorption area regulatory requirements to dispose of the graywater.	Must meet the absorption area regulatory requirements to dispose of the graywater.
Graywater System (with the use of a waterless toilet)	Experimental	Must meet the absorption area regulatory requirements to dispose of the graywater.	Must meet the absorption area regulatory requirements to dispose of the graywater.	Must meet the absorption area regulatory requirements to dispose of the graywater.	Must meet the absorption area regulatory requirements to dispose of the graywater. (Up to a 40 percent reduction in absorption area may be taken in some cases. See Alternate Guidance.)
Flow Equalization (for facilities with regular, predictable, fluctuating flows; alternating high and low flows)	Experimental	Must meet the appropriate absorption area regulatory requirements.	Must meet the appropriate absorption area regulatory requirements.	Must meet the appropriate absorption area regulatory requirements.	Must meet the appropriate absorption area regulatory requirements. The absorption area must be sized for the controlled daily flow volume plus 15 to 20 percent.
Alternate Aggregates: 1) Round, natural, "Type C," coarse aggregate or tire chip aggregate	Alternate	Must meet the appropriate absorption area regulatory requirements.	Must meet the appropriate absorption area regulatory requirements.	Must meet the appropriate absorption area regulatory requirements.	Must meet the appropriate absorption area regulatory requirements.

2) Glass cullet aggregate					
3) Alternate fine aggregate (sand) – recycled glass fine aggregate					

⁽¹⁾ The top of the limiting zone must be at least four feet below the bottom of the absorption area aggregate.