

Figure PS-3 Seed Mixtures for Permanent Seeding

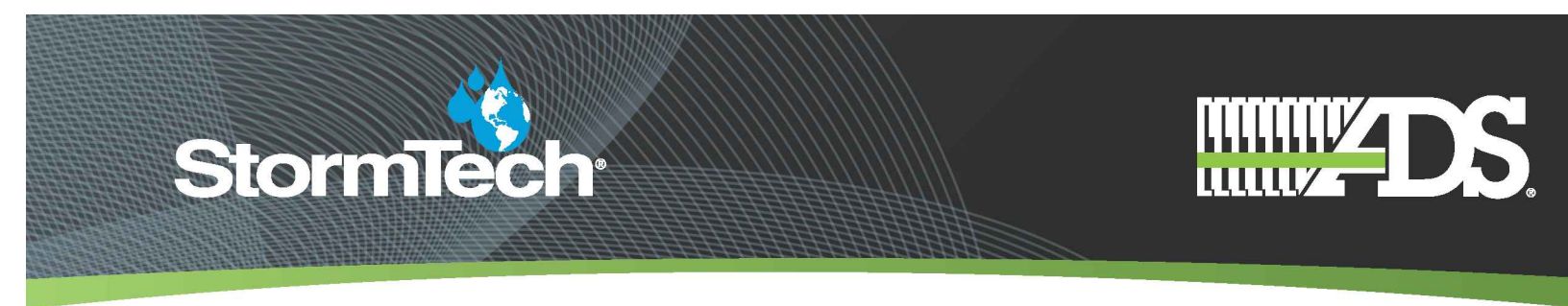
No.	Seed Mixture (Variety) ⁴	Lbs/Acre	Lbs/1,000 Sq. Ft.
15	Kentucky Bluegrass	20	.45
	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
	Perennial Ryegrass (Norlea, Manhattan)	5	.10
	Total	45	1.00
25	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
	Redtop (streaker, Common)	2	.05
	Tall Fescue (Kentucky 31) or Smooth Bromegrass (Saratoga, Lincoln)	20	.45
	Total	42	.95
35	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
	Bird's-foot Trefoil (Empire, Viking) with inoculant ¹	8	.20
	Tall Fescue (Kentucky 31) or Smooth Bromegrass (Saratoga, Lincoln)	20	.45
	Total	48	1.10
45	Creeping Red Fescue (Pennlawn, Wintergreen) or Tall Fescue (Kentucky 31)	20	.45
	Redtop (streaker, Common)	2	.05
	Bird's-foot Trefoil (Empire, Viking) with inoculant ¹	8	.20
	Total	30	.70
55	White Clover	10	.25
	Perennial Rye Grass	2	.05
		10	.25
	Total	12	.30
65	Creeping Red Fescue	10	.50
	Redtop (streaker, Common)	2	.05
	Perennial Rye Grass	20	.50
	Total	42	1.05
75	Smooth Bromegrass (Saratoga, Lincoln)	15	.35
	Perennial Ryegrass (Norlea, Manhattan)	5	.10
	Bird's-foot Trefoil (Empire, Viking) with inoculant ¹	10	.25
	Total	30	.70
85	Switchgrass (Blackwell, Shelter, Cave-in-rock)	10	.25
	Weeping Lovegrass	3	.07
	Little Bluestem (Blaze, Aldous, Camper)	10	.25
	Total	23	.57
95	Creeping Red Fescue (Pennlawn, Wintergreen)	10	.25
	Crown Vetch (Chemung, Penngift) with inoculant ¹ (or Flatpea (Lathco) with inoculant ¹)	15	.35
	Tall Fescue (Kentucky 31) or Smooth Bromegrass (Saratoga, Lincoln)	30	.75
	Total	42 (or 57)	1.00 (or 1.40)
105	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
	Redtop (streaker, Common)	2	.05
	Crown Vetch (Chemung, Penngift) with inoculant (or Flatpea (Lathco) with inoculant ¹)	15	.35
	Total	37 (or 52)	.85 (or 1.25)
115	Bird's-foot Trefoil (Empire, Viking) with inoculant ¹	8	.20
	Crown Vetch (Chemung, Penngift) with inoculant ¹	15	.35
	Creeping Red Fescue (Pennlawn, Wintergreen) or Tall Fescue (Kentucky 31)	15	.35
	Total	45	1.05
126	Switchgrass (Blackwell, Shelter, Cave-in-rock)	10	.25
	Perennial Ryegrass (Norlea, Manhattan)	5	.10
	Crown Vetch (Chemung, Penngift) with inoculant ¹	15	.35
	Total	45	1.05
13-15	Not used		
165	Tall Fescue (Kentucky 31)	20	.45
	Flatpea (Lathco) with inoculant ¹	30	.75
		2	.05
	Total	50	1.20
17-18	Not used		
195	Chewing Fescue	35	.80
	Hard Fescue	30	.70
	Colonial Bentgrass	5	.10
	Total	100	2.3
215	Creeping Red Fescue (Pennlawn, Wintergreen)	20	.45
		20	.45
		20	.45
	Total	60	1.35
225	Creeping Red Fescue (Pennlawn, Wintergreen)	40	.90
	Tall Fescue (Kentucky 31)	20	.45
		20	.45
	Total	60	1.35
235	Creeping Red Fescue (Pennlawn, Wintergreen)	15	.35
	Flatpea (Lathco) with inoculant ¹	30	.75
		20	.45
	Total	45	1.30
24-28	Not Used		
29	Turf Type Tall Fescue (Bonanza, Mustang, Rebel II, Spartan, Jaguar) or Perennial Rye ("Future 2000" mix, Fiesta II, Blazer II, and Dasher II)	175 to 250	6 to 8

¹ Use proper inoculant for legume seeds, use four times recommended rate when hydros seeding.
² Use Pure Live Seed (PLS) = $\frac{\% \text{ Germination} \times \% \text{ Purity}}{100}$
 EXAMPLE: Common Bermuda seed with 70% germination and 80% purity = $\frac{70 \times 80}{100}$ or $\frac{56}{100}$ or 56%
 $\frac{10 \text{ lbs PLS/acre}}{56\%} = 17.9 \text{ lbs/acre of bagged seed}$

³ DOT All purpose mix
⁴ Wild flower mix containing New England Aster, Baby's Breath, Black Eye Susan, Catcliff, Dwarf Columbine, Purple Cowslip, Lance-leaved Coreopsis, Cornflower, Ox-eye Daisy, Dam's Rocket, Scarlet Flax, Foxglove, Gayfeather, Rocky Larkspur, Spanish Larkspur, Corn Poppy, Spurred Snapdragon, Wallflower and/or Yarrow may be added to any seed mix given. Most seed suppliers carry a wild flower mixture that is suitable for the Northeast and contains a variety of both annual and perennial flowers. Seeding rates for the specific mixtures should be followed.
⁵ Considered to be a cool season mix.
⁶ Considered to be a warm season mix.

Species ⁴	Seeding Rates (pounds/Acre)	Optimum Seed Depth ² (inches)	Optimum Seeding Dates ¹											Plant Characteristics			
			3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/15		2/15		
Annual ryegrass Lolium multiflorum	40	1.0	0.5														May be added in mixes. Will mow out of most stands.
Perennial ryegrass Lolium perenne	40	1.0	0.5														Use for winter cover. Tolerates cold and low moisture.
Winter rye Secale cereale	120	3.0	1.0														Quick germinating and heavy spring growth. Dies back in June with little regrowth.
Oats Avena sativa	86	2.0	1.0														In northern CT, will winter kill with the first killing frost and may throughout the state in severe winters.
Winter Wheat Triticum aestivum	120	3.0	1.0														Quick germination with moderate growth. Dies back in June with no regrowth.
Millet Echinochloa crusgalli	20	0.5	1.0														Warm season small grain. Dies with frost in September.
Sudangrass Sorghum sudanense	30	0.7	1.0														Tolerates warm temperatures and droughty conditions.
Sudangrass Sorghum sudanense	15	0.4	1.0														Hardy plant that will seed itself and is good as a green manure crop.
Weeping Lovegrass Eragrostis curvula	5	0.2	0.25														Warm-season perennial. May bunch. Tolerates hot, dry slopes, acid infertile soils. Excellent nurse crop. Usually winter kills.
DOT All Purpose Mix ³	150	3.4	0.5														Suitable for all conditions.

- May be planted throughout summer if soil moisture is adequate or can be irrigated. Fall seeding may be extended 15 days in the coastal towns.
- Seed at twice the indicated depth for sandy soils.
- See Permanent Seeding Figure PS-3 for seeding mixture requirements.
- Listed species may be used in combinations to be obtain a broader time spectrum. If used in combinations, reduce each species planting rate by 20% of that listed.



SC-310 CHAMBER

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

STORMTECH SC-310 CHAMBER
(not to scale)

Nominal Chamber Specifications

Size (L x W x H)
85.4" x 34.0" x 16.0"

2,170 mm x 864 mm x 406 mm

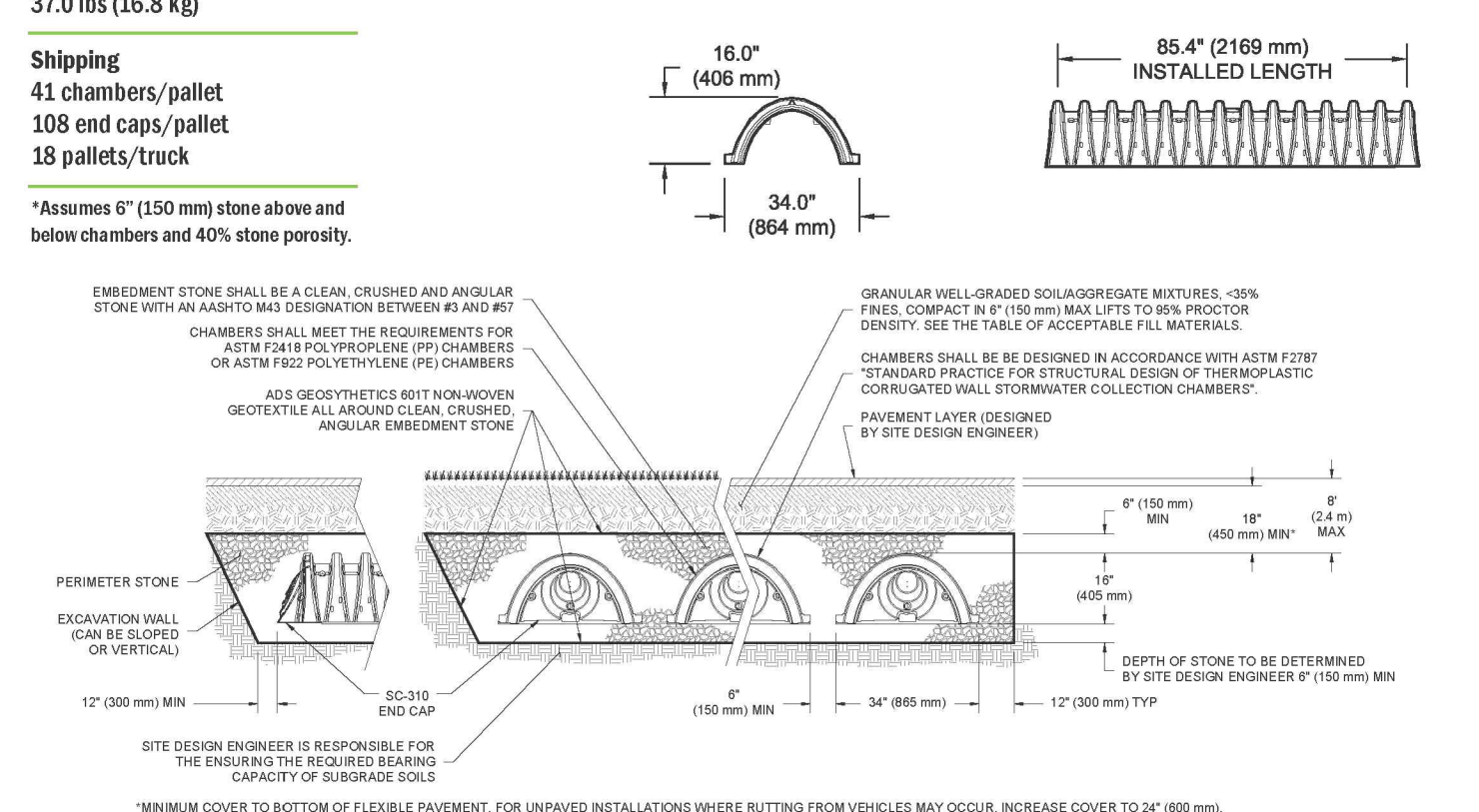
Chamber Storage
14.7 ft³ (0.42 m³)

Min. Installed Storage*
31.0 ft³ (0.88 m³)

Weight
37.0 lbs (16.8 kg)

Shipping
41 chambers/pallet
108 end caps/pallet
18 pallets/truck

*Assumes 6" (150 mm) stone above and below chambers and 40% stone porosity.



ROOF LEADER INFILTRATION CHAMBER DETAIL

NOT TO SCALE

CONSTRUCTION TIME SCHEDULE

- Total construction time for the proposed site improvements on each lot is approximately 12 months. Start construction as soon as possible (Fall 2020).
- All erosion control measures shall be in place and inspected prior to start of Construction.
- STOCKPILE AREAS: Loam and fill stockpile areas shall be seeded per the temporary seeding schedule as soon as possible with minimal disturbance after that time, until the material is required for final installation. All areas of the site not finished graded shall be seeded per the temporary seeding schedule.

WETLANDS APPLICATION DATA

- This project involves the subdivision of the property into 8 residential building lots. The development of each lots consists of a house, driveway, municipal water service, subsurface sewage disposal system, site grading and the construction of water quality features (rain gardens).
- The rain gardens have been designed to collect and treat the first inch of stormwater runoff from impervious surfaces. Grass lined swales are proposed to direct stormwater runoff to the rain gardens and provide additional water quality treatment.
- The property contains 0.09 acres of inland wetlands. No disturbance is proposed within the inland wetlands or regulated area due to construction activities.

1.0 POST CONSTRUCTION INSPECTION & MAINTENANCE

Post-construction, regularly scheduled inspections and maintenance will be necessary to ensure the permanent structural features such as the rain gardens remain optimally functional and continue to provide water quality.

The Land Owner shall be responsible for the inspection and maintenance of the rain gardens. Inspections should be performed at a minimum of twice per year (April 1st and Nov 1st). Inspections and maintenance should be performed as described below within this section.

1.1 Inspection

Overall Site Inspection

The overall site, embankments, vegetation and swales should be inspected after every major rain event of 0.5 inch or greater in a 24-hour period and twice per year (April 1st and Nov 1st). The inspections should include but are not limited to:

- Density and condition of vegetation and ground cover.
- Erosion, differential settlement or cracking of embankment.
- Bulging or sliding of toe of embankments.
- Sedimentation of swales.
- Sedimentation of lawn areas of paved areas.

1.2 Maintenance

Overall Site Maintenance

Maintaining vegetative and structural measures for soil protection is necessary to keep the rain gardens functioning properly. Maintenance should occur after every major rain event of 0.5 inch or greater in a 24-hour period and twice per year (April 1st and Nov 1st), and should include but is not limited to:

Seasonal Maintenance

- Vegetated areas should be maintained to promote vigorous and dense growth. Lawn areas should be mowed at least three times a year but may require more frequent mowing depending on the growth rate.
- Accumulation of litter and debris should be removed during each mowing.
- Swale will include periodic mowing, occasional spot re-seeding and weed control. Weeds and woody plants should be eradicated or cut back since they reduce the efficiency of the swale.

Winter Maintenance

- Snow removed from paved areas should not be piled in the rain gardens.
- Use of deicing materials should be limited to sand and environmentally friendly chemical products. Use of salt mixtures should be kept to a minimum.
- Sand used for deicing should be clean, coarse material free of fines, silt, and clay.

Rain Garden Maintenance

- Optimum operation of the rain gardens is dependent on storage capacity, inflow and sediment load. Rain gardens should be monitored periodically for sediment accumulation. Sediments should be removed when capacity has been reduced by 10%, or when 6 inches has accumulated. When sediment removal is required, original grades should be restored. Debris and sediment within the structures shall be removed annually.

CONSTRUCTION SEQUENCE

- Contact the Town of North Haven at least 48 hours prior to commencement of construction activities.
- Clearing limits shall be marked in the field prior to start of work on each lot.
- Install construction entrance, silt sacks, silt fence and other required erosion control measures as shown on the plan.
- Clear and grub the area for the driveway, house, water service and subsurface sewage disposal system. Stockpile topsoil.
- Install double row of silt fence around stockpile areas.
- Begin construction stakeout of house, driveway and subsurface sewage disposal system.
- Install any required storm drainage and proposed utilities.
- Install gravel base for driveway.
- Install topsoil, seed, fertilizer and mulch.
- Install bituminous concrete pavement on driveway.
- Erosion and sediment control measures shall be removed following stabilization of the site.

		<p>DETAILS</p> <p>RESUBDIVISION OF ANDERSON SUNNYSIDE FARM</p> <p>LAND OF GBRSTORZ, LLC</p> <p>318 KINGS HIGHWAY, TOWN OF NORTH HAVEN</p> <p>NEW HAVEN COUNTY, CONNECTICUT</p>	
<p>Design/Calcs LRC CAD File DN20262402.dwg Sheet No.</p> <p>Drawn LRC Project No. 20-2624</p> <p>Checked JW/REM Date 08/27/2020</p> <p>Approved JW/REM Scale AS NOTED</p>	<p>• Land Planning</p> <p>• Civil Engineering</p> <p>• Environmental Services</p> <p>• Land Surveying</p> <p>• Landscape Architecture</p> <p>160 West Street, Suite II Cromwell, CT 06416 Tel: 860.635.2877</p> <p>85 Civic Center Plaza, Suite 103 Pondagogues, NY 12901 Tel: 845.243.2880</p> <p>1 International Blvd, Suite 400 Middletown, NJ 07895 Tel: 908.603.5730 www.lrcconsult.com</p> <p>LRC Engineering & Surveying, DPC LRC Engineering & Surveying, LLC LRC Environmental Services, Inc.</p>	<p>DN-2</p>	