Please note the following requirements to assure proper construction:

• Contact local underground utility companies to locate all utilities prior to construction.

• Check all chambers for shipping damage before installation. Units that have been damaged should not be installed.

• For a large bed that cannot be filled from the sides, use a lightweight tracked vehicle (ground pressure of tracks must not exceed 10 psi for 6" to 12" of cover.

• Infiltrator's requirements for systems with a pavement design (asphalt, concrete pavers, etc.): minimum cover is 18" excluding pavement; maximum cover is 96" including pavement.

• A minimum of 6 inches of gravel must be maintained beneath the tracks at all times.

• Washed, crushed stone 3/4" to 2" in size or stone as defined per septic code. Rounded or recycled stone is not acceptable

• Backfill shall be a well-graded granular soil must be used for backfill to maximum load carrying capacity.

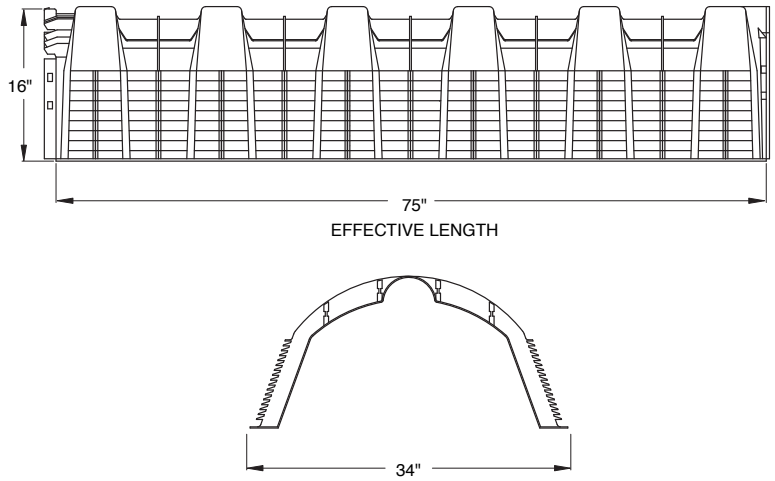
• For gravity distribution, a distribution pipe is not required to run the length of the chambers.

INFILTRATOR® water technologies

H-20 High Traffic Installation Instructions

H-20 Chambers

The High Capacity H-20 chamber can be installed in traffic applications. When installed using the following installation instructions, the chambers can sustain vehicle loads of up to 32,000 lbs (H-20) per axle.



BEFORE YOU BEGIN

When installed using the following installation instructions, the chambers can sustain vehicle loads of up to 32,000 lbs (H-20) per axle.

Like non-traffic bed systems, the soil and site conditions must be approved prior to installation. Be sure that a thorough site evaluation is conducted to determine the proper size and location of the system before proceeding with the installation.

NOTE: The onsite system area is not to be used as a staging area for construction equipment or materials before or after construction of the system. Temporary fencing, warning tape, and appropriately located signs are commonly used to prevent unauthorized traffic from damaging sensitive soils.

NOTE: Due to the installation of stone on the bottom of the bed, system sizing in parking applications must not include any reduction in the absorption area.

EXCAVATING AND PREPARING THE SITE

NOTE: Do not install system in wet conditions or in overly moist soils, as this causes machinery to smear the soil.

1. Locate all underground utilities.

2. Stake out the location of the bed and set the elevation of the tank, pump chamber (if required), pre-treatment devices (if required), piping, and bed bottom. Install sedimentation and erosion control barriers as necessary.

3. Excavate and level the designated area.

4. Rake the bottom and sides if smearing has occurred while excavating. Verify the bottom of the bed is level using a transit, laser or level.

5. Prepare the chamber bed's sub grade soil as outlined in the designer's plans.

6. Place a minimum 3-inch layer of washed, crushed stone over the entire bottom surface of the bed.

7. Compact the stone as necessary using at least two perpendicular passes of equipment to achieve a flat surface.

SPECIFIED FILL MATERIAL

1. If a specified fill material is required, the fill should be placed in lifts not exceeding 6 to 12 inches. The compaction of the fill should meet a minimum density equivalent to 95 percent of the soils Maximum Standard Proctor Density Value (ASTM-D698).

2. The fill material, as a minimum, should meet state and local criteria. However, sands with less than 5% passing the U.S. #200 sieve are usually acceptable provided their saturated hydraulic conductivity (after compaction) is greater than 5 feet per day.

3. Compact the fill using a large piece of machinery, (example: backhoe or bulldozer) or a vibratory roller. (Maximum gross vehicle weight of 12,000 lbs and a maximum dynamic force of 20,000 lbs.)

4. After the fill has been placed and compacted, verify the bottom of the bed is level using a transit, laser or level.

PREPARING THE POSILOCK END PLATES

1. With a hole saw, cut an opening for the inlet pipe using one of the pre-marked circles on the end plate as a guide. Pre-marked circles allow for 4-inch corrugated, 4-inch SDR 35, 4-inch SCH 40 and 3-inch and 2-inch pressure dosing pipe.

NOTE: Pipe size may vary according to state/ county regulations or designer specifications.

2. Attach end plate to the inlet end of the chamber by lining up the locking hubs wit the corresponding chamber end. Apply firm pressure to lock the hubs in place on one side of the chamber and then the other.

NOTE: The end plate is clearly marked **'Inlet Side Toward Chamber'** to ensure proper installation.

3. At the inlet end of the end plate, insert the appropriate diameter pipe into the previously drilled hole. Fasten the pipe in place with a 2-inch screw to secure it to the end plate. (End plates are required only at the beginning and end of each row of chambers. They are reversible to fit either end of the chamber.)

NOTE: The end plate is designed so effluent will flow in through the pipe corresponding inlet hole and spill out of the opening on the other side. When inserting the inlet pipe. it will only extend into the end plate one inch before reaching a stop.

INSTALLING THE SYSTEM

1. Install piping per plan. A d-box or manifold may be installed if allowed/required by law.

NOTE: For pressurized systems, it may be easier to install the piping before constructing the chamber bed.

2. Check the header pipe to be sure it is level or has the prescribed slope.

3. Set the invert elevation at the appropriate height by measuring from the bottom of the bed to the bottom of the inlet. I

4. Construct the chamber bed by joining chambers length-wise in rows (if possible, be sure chamber placement does not exceed the reach of the construction equipment used to place fill).

5. To connect the chambers, lift and place the end of the next chamber onto the previous one at a 45° angle. Line up the notches on the center end of the chamber and lower it to the ground to engage the interlocks.

6. Continue connecting the chambers until the first row is completed.

7. Check the first row of chambers to be sure that it is level.

8. Continue connecting chambers until the bed is complete. As the chambers are installed, verify that they are level.

9. Determine that the chamber rows are parallel following the steps above. Keep the required istance between each row of chambers.

NOTE: Separation distance between chamber rows varies per code. If possible, Infiltrator Water Technologies recommends 6 inches of separation.

10. The last chamber in the row requires an end plate. Attached a closed end plate onto the outlet end of the chamber. Do not cut an opening in the closed or outlet end plate. The existing opening on the end plate must face outward when installed on the closed or outlet end of the chamber. Repeat this step for each row in the bed.

NOTE: Lopping the outlet end of the bed may be required by state/local code or specified by design. Infiltrator recommends drilling a hole in the end plate at the specified invert height.

11. Insert the loop manifold through the end plate and determine that the manifold is level before backfilling the system.

COVERING THE SYSTEM

1. To ensure structural stability, carefully anchor chambers by ladling approved gravel between the chamber rows making sure not to dislodge the units. Be sure the gravel extends above the louvers a minimum of 2 inches.

2. Place 6 inches of stone over the top of the chamber system, filling the space between chambers.

NOTE: For a large bed that cannot be filled from the sides, a light-tracked vehicle or stone slinger can be used. The ground pressure of the tracks must not exceed 10 psi for 6" to 12" of cover. Be sure to maintain a 6 inch minimum of compacted cover beneath the tracks at all times.

3. Compact the stone with a walk-behind plate compactor or vibratory roller, not to exceed the dynamic force of 10,000 lbs.

4. Cover the entire installation area with filter fabric by taking it from the perimeter and laying it over the top of the stone. Make sure that it overlaps onto itself by at least 2 feet.

5. Backfill in a 6-inch lift of well-graded,granular solid over the top of the filter fabric. Large rocks and organic matter such as roots, stumps, etc., must not be part of the backfill material.

6. Compact the backfill after this and each additional lift to a minimum of 95% of the standard Proctor density.

7. Lay Tensar BX1100 geogrid or equivalent over the 6 inches of compacted backfill. If two rolls are to be placed side-by-side, or end-to-end, overlap them with a minimum of 2 feet.

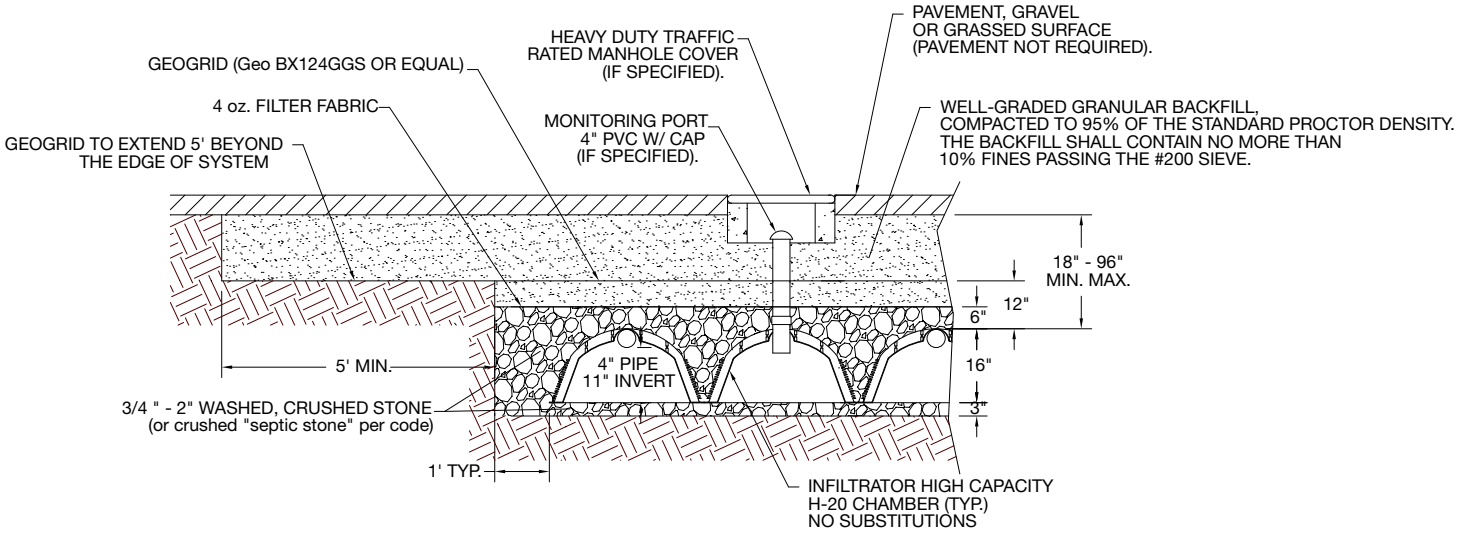
NOTE: Geogrid must extend at least 5 feet beyond the footprint of the chambers. Refer to manufacture's specifications for other installation guidelines.

8. Continue to backfill in 12-inch lifts until the specified height of the system is achieved.

NOTE: Place the backfill in 6-inch lifts in sandy soil, compacting after each lift. R

9. Begin laying the pavement base.

NOTE: The bed must be protected from traffic and stormwater until it is paved.



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