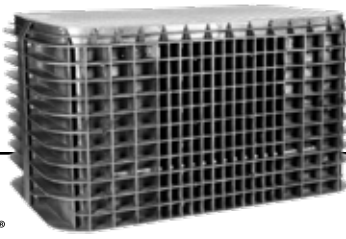


INSTALLATION INSTRUCTIONS



3660-4860

These products come in two depths: 36" and 48" deep. This installation procedure applies to both product depths.

Installation Considerations

This Installation Instruction provides general information useful for installing the Channell **BULK 3660/4860** below grade handhole vaults. This guide cannot anticipate all situations that could be encountered in the field and thus represents information applicable to common installation conditions. Please consult local company practice for proper product configuration for each application.

Site Preparation

1. Ensure that all local, federal, OSHA and company-specific regulations are met prior to beginning and throughout the installation process.
2. Plan the excavation approximately 16 to 20 inches in length and width larger than the outside dimensions of the 3660/4860 handhole. This is to ensure adequate tamping distance on all four sides of the handhole. (See Figure 1)
3. Excavate the hole approximately 6 inches in depth more than the overall height dimension of the handhole. Tamp the floor of excavated pit using either a hand tamp tool and/or a mechanical tamper.
4. Place 5 to 6 inches of 3/4" crushed rock over the entire floor. The rock should be free of soil and other organic matter. Tamp the gravel so that it is even and flat in the area that will support the vault. This important step prevents subsistence of the handhole over time, aids in drainage, and provides a solid foundation for the handhole. (See Figure 2)
 - a. As an alternative, a dry mix of cement and crushed rock in a 1:10 ratio may be used to form a higher strength foundation.
 - b. Note: Do not use "pea gravel" or other "round stone" for this step.
5.
 - a. Place the handhole body into the pit. (See Figure 3)
 - b. Center the handhole body in the excavated pit parallel to the sidewalk and/or curb if applicable.
 - c. Level and adjust the height of the handhole body to grade, as required, by adjusting the crushed rock.

6. Install the center support beam and **Shield™** covers back onto the handhole body to prevent the backfill material from entering the inside of the handhole. Installing bolts at this time is not required but is recommended. However, bolts need to be installed prior to departure of the site. The cover should be level with the ground. Cover bolt and lift pin holes with either duct tape or rubber covers provided. (See Figure 4)

7. Use the excess soil removed from the excavated pit to backfill of the pit.

8. Backfill and Tamping procedure:

- a. First, backfill and tamp both of the bolted (shorter) ends, in 12-18 inch lifts, to half of the height of the handhole. (See Figure 5)
- b. Next, backfill the longer sides to the same level as the bolted ends in 12-18 inch lifts, alternating sides.

Repeat the procedure until the pit is backfilled to grade.

Note: During the backfilling process remove any stones that are 3" and larger.

9. The final backfill shall be tamped with a slope away from the handhole. All excess backfill material shall be removed from the installation site. (See Figure 6)



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

