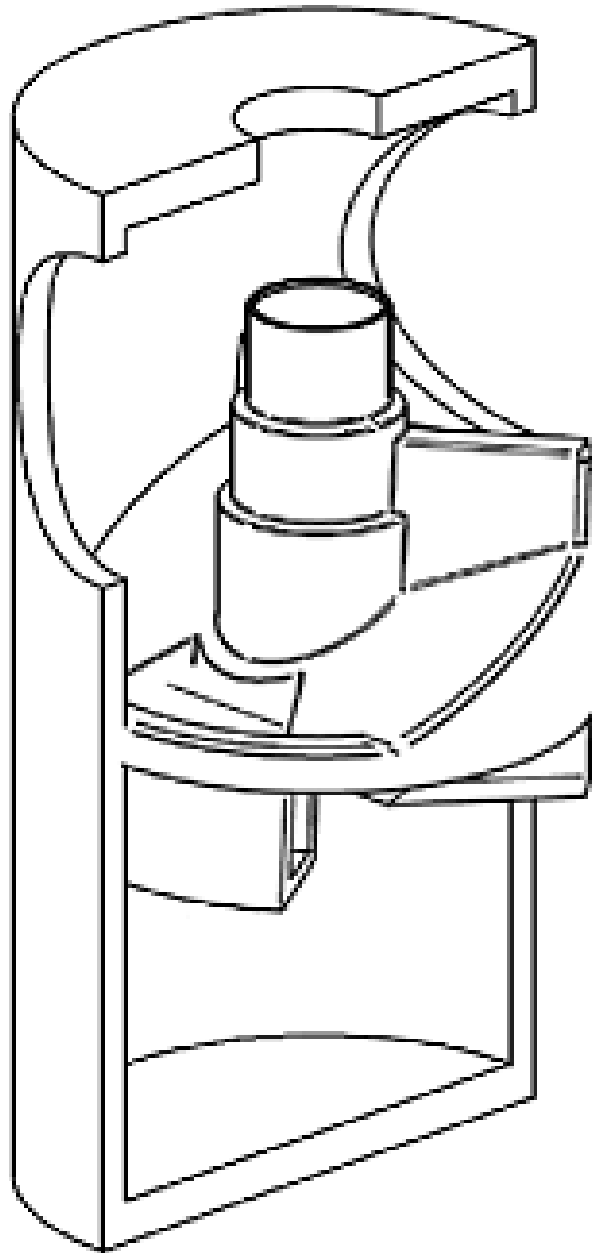
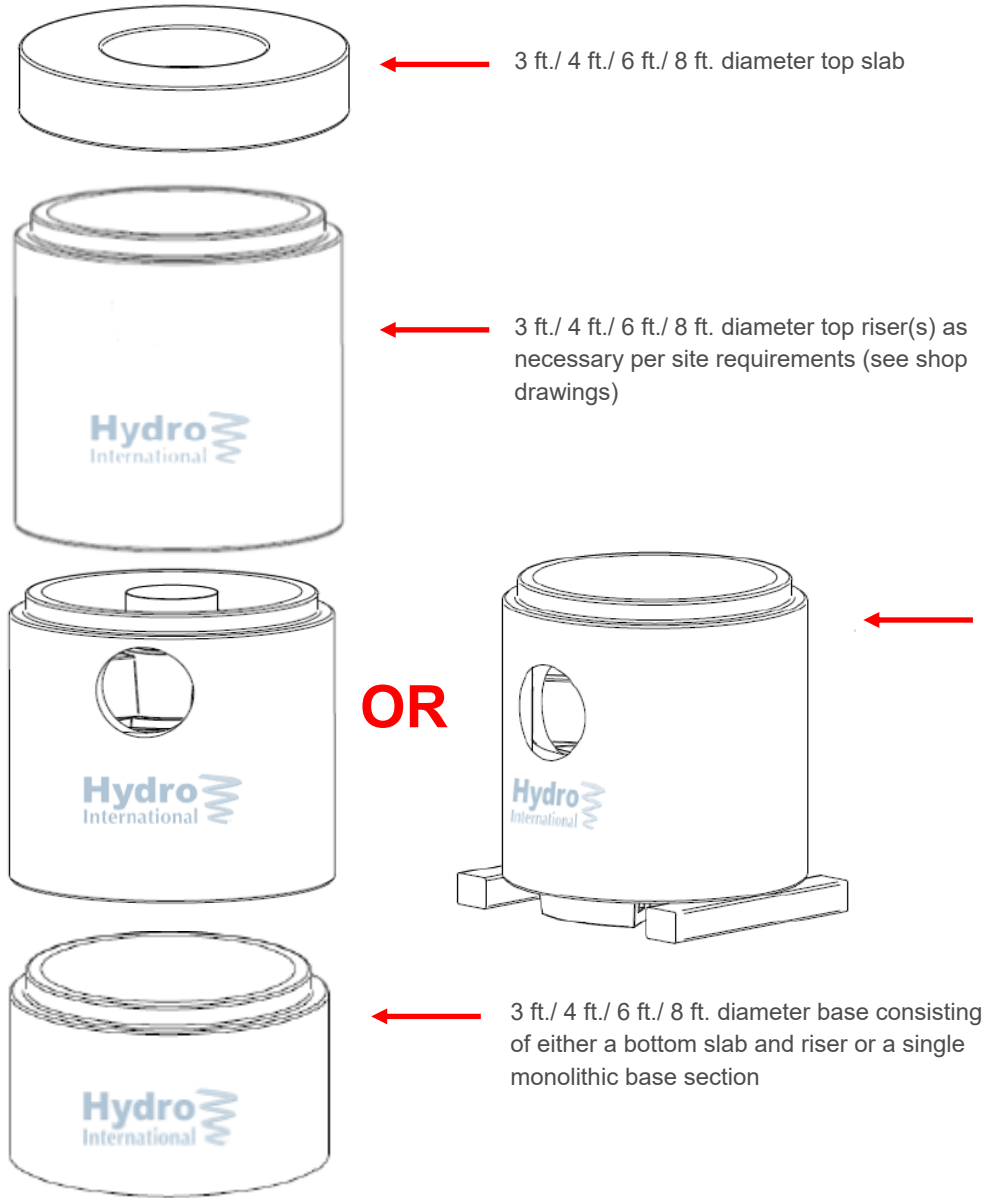


## 3ft, 4 ft., 6 ft., and 8 ft. First Defense HC<sup>®</sup> Handling and Installation Instructions



## Materials Supplied By Hydro International

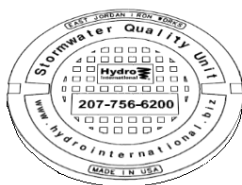


4 ft./ 6 ft./ 8 ft. Middle riser with installed First Defense HC® Internal Components

**\*Note: If installed internal components extend beneath riser be sure to set on base section or suitable blocking to prevent damage to system components**

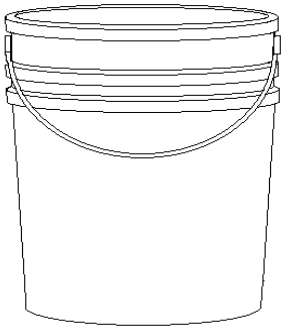


Joint Sealant



30 in. Frames/Grates/Covers

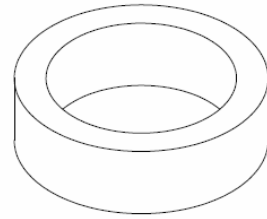
## Materials Supplied By Contractor



Non-Shrinking Grout



Inlet/Outlet Pipes



Applicable Grade  
Rings/Brick and  
Mortar

## Handling and Storage

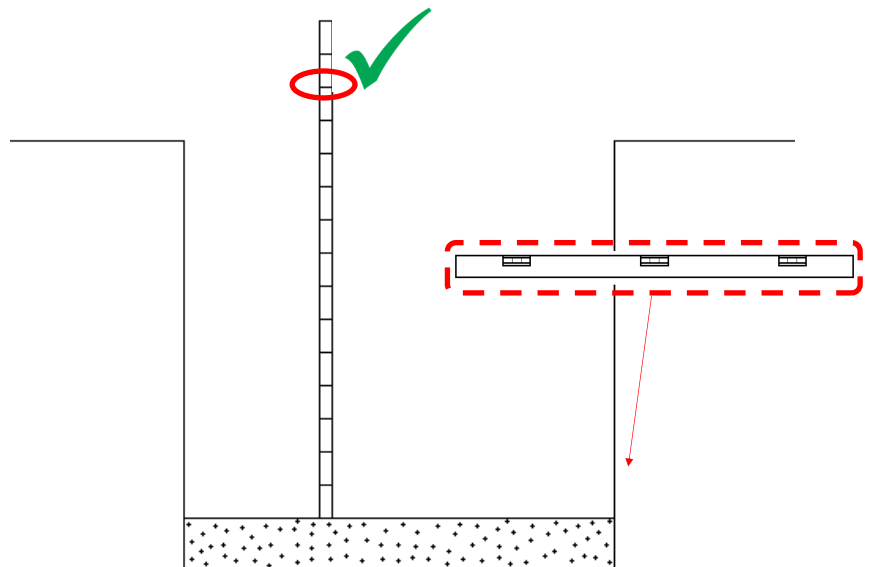
Hydro International's **First Defense HC**<sup>®</sup> internal components are manufactured utilizing highly durable thermoplastics; however, improper handling may result in damage to components and accessories. Failure to comply with handling, and installation instructions voids all warranties.

1. Upon delivery of the **First Defense HC**<sup>®</sup> components, inspect immediately for defects or shipping damage. If any discrepancies are found, notify Hydro International prior to unloading to initiate corrective action. Unloading of a damaged unit without notifying Hydro International voids all warranties and releases liability of costs to repair or replace from Hydro International and places onto the contractor.
2. At all times during unloading and installation, avoid unnecessary and extreme impacts to the internal components. All components shall be handled with firm and complete support. At no time shall anyone step, stand, or otherwise place an unnecessary load, on the components.
3. The **First Defense HC**<sup>®</sup> shall be installed as soon after delivery as practical. Pending installation, all components shall be protected from ultraviolet light, vandalism, and impact.

## Installation

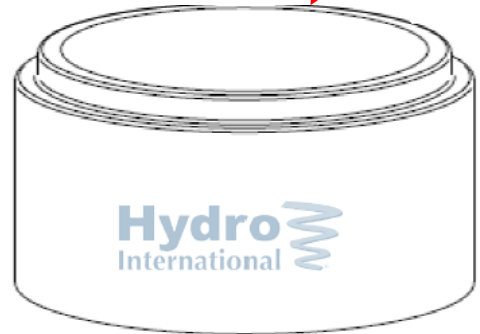
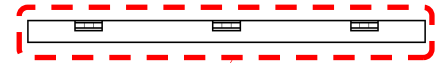
### Step 1

Excavation shall be prepared prior to installation and shall meet all applicable specifications for standards of construction. A sufficient sub-base of compacted stone, leveled and at correct elevation, is required at minimum.



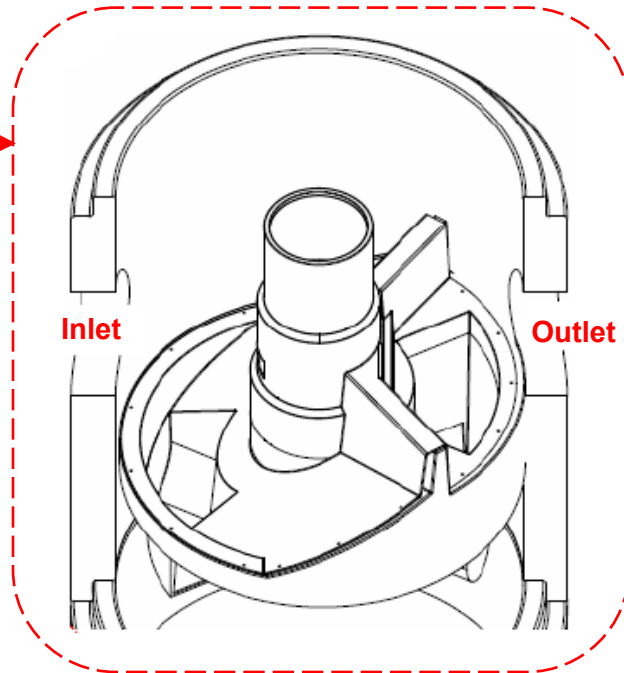
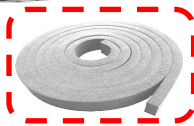
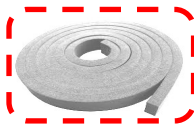
### Step 2

Install the First Defense HC<sup>®</sup> pre-cast base in properly prepared excavation. Base must be level prior to installation of successive risers.

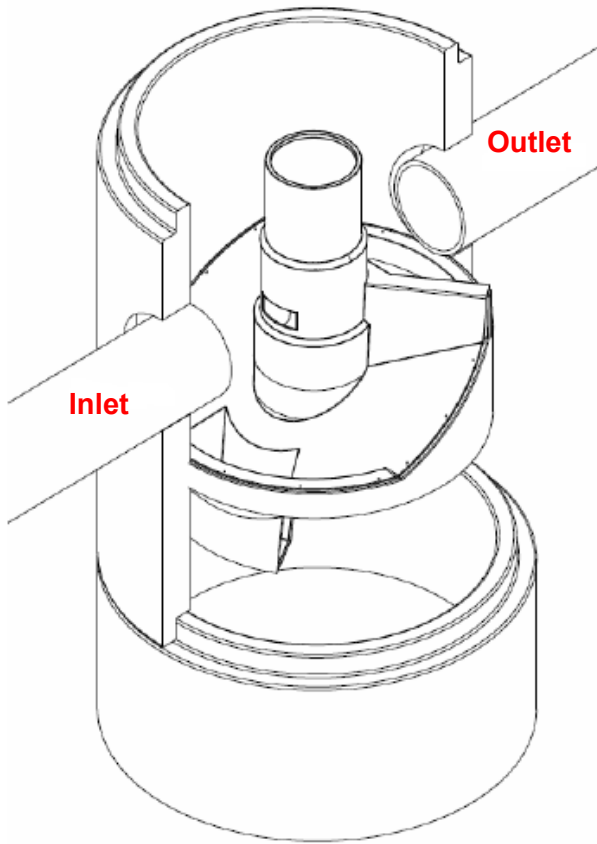


### Step 3

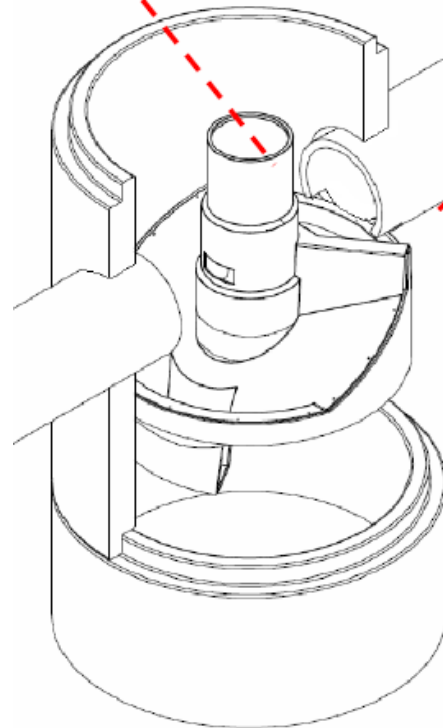
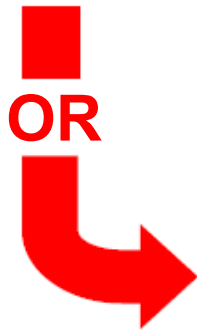
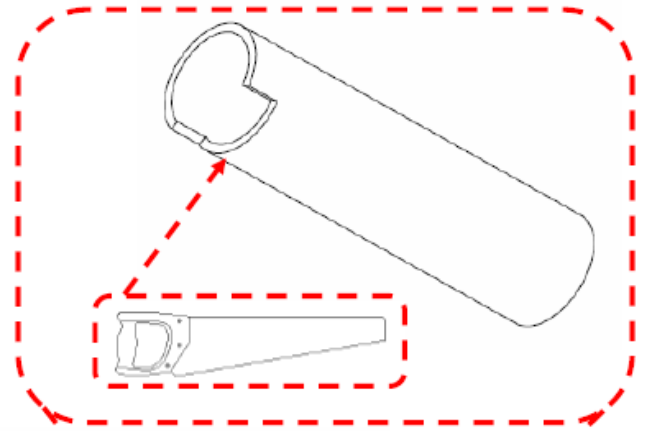
Install successive risers, cleaning joints and placing supplied joint sealant per specifications. Ensure the riser(s) containing the inlet and outlet pipe knockouts is/are orientated per alignment shown on the engineering drawings. Do not install pre-cast lid. Grout pick holes, if applicable, with watertight non-shrink grout.



### Step 4

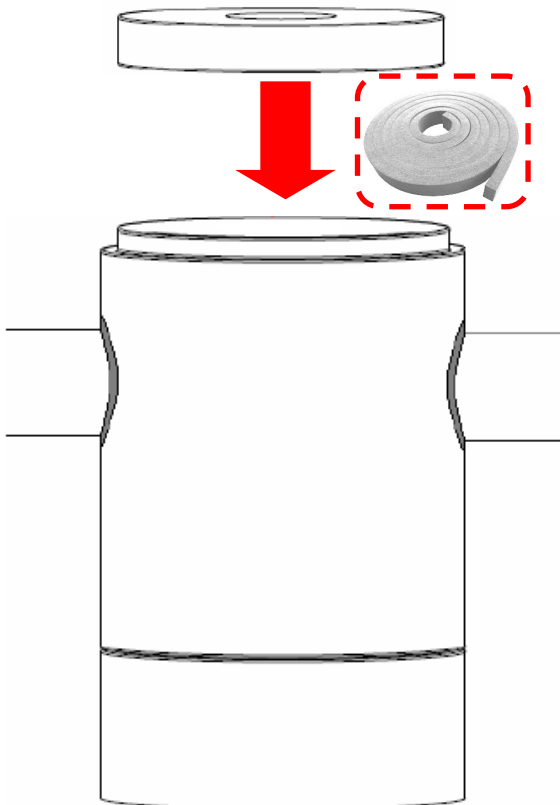
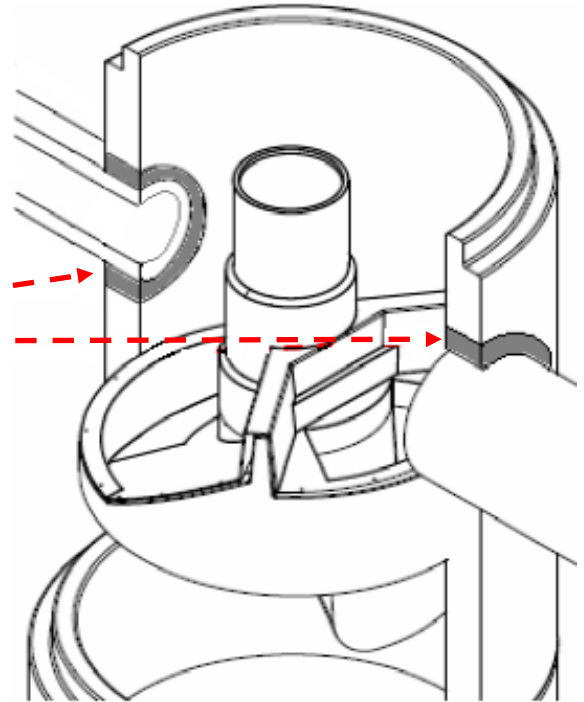
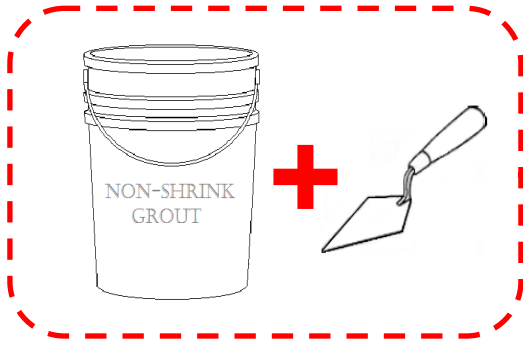


Run inlet and outlet pipes through and center in respective knock-outs. Larger diameter pipes may need to be notched on the bottom at the outlet location if they interfere with the plastic internals. **Invert of the I.D. of the outlet pipe must not fall below the ledge of the FDHC internal components.**



### Step 5

Seal the area between the perimeter of each pipe and the respective cutout with non-shrink grout. Cut the ends of each pipe flush with the interior pre-cast wall. Also ensure grout on the interior is finished to a uniform, smooth surface flush with pre-cast wall. **No grout shall spill inside the unit.**



### Step 6

Prepare the upper most riser joint with supplied joint sealant and install pre-cast lid.

### Step 7

Install cast frame(s) and cover(s) using accepted construction standards of adjusting to grade. Carefully backfill around unit.

