

NOTICE

IPEX is a manufacturer of thermoplastic piping products; IPEX does not design or assess piping systems. Review IPEX technical manuals and chemical resistance guides (available at www.ipexna.com) before designing, installing or testing any IPEX piping products. Always consult a licensed piping-design engineering firm for engineering recommendations during the design and installation of a project.

Please be advised that IPEX strongly recommends a job start-up training session by an IPEX representative prior to an installation of our piping products.



Best Practices for Concrete Encasement of PVC and CPVC

It is permissible to encase PVC and CPVC in concrete. IPEX recommends the following best practices to protect the piping system when encasing it in concrete:

- 1. Prevent flotation of the piping system during the concrete pour**
Prior to pouring concrete, the piping system must be adequately secured in order to prevent the piping system from moving during the concrete pour. Consideration should be given to the restraints used to hold the pipe in place. These restraints should be securely fastened to the rebar and should have a minimum 2" wide face in contact with the pipe outer surface. The configurations of the restraints should prevent the piping system from both vertical and lateral movement during the pour. The horizontal distance between the supports should not exceed 5 ft.
- 2. Limit the depth of concrete cover over the top of the piping system**
During the initial concrete pour, the depth of cover over the top of the piping system should not exceed 2 ft. Once the concrete has set and formed around the piping system, additional pours may proceed. Please note that no consideration has been given to the structural properties of the concrete associated with this best practice. The installer shall consult with the project structural engineer prior to installation.
- 3. Prevent physical damage during vibration and agitation of the poured concrete**
During the initial concrete pour around the piping system, extreme care should be exercised in order to prevent the vibrators/agitators from coming in contact with the pipe. Physical damage or cracks in the pipe may occur if impacted by an object. This concern is increased during colder periods or freezing conditions.
- 4. Prevent physical damage during the curing process of the concrete**
During the curing process of the concrete, temperatures within the concrete may very well rise above the ambient temperature conditions. Care should be taken to prevent the piping system from experiencing temperatures above 140°F. Although the idea of blowing cold air through the piping system might achieve the required temperature control, another option is to consider filling the piping system with cold water. The cold water would act as a thermal heat sink.

