**STANDPIPE-PAC™ - INSTALLATION FOR PROPER DRAINING**

The purpose of this Technical Note is to provide important information about the drainage of dry standpipes to prevent accumulation of condensation and also to permit full drainage of water used when standpipes are hydrostatically tested.

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![Diagram of STANDPIPE-PAC™ MECHANICAL INSTALLATION DIAGRAM](image)

**Figure 1**

All dry standpipes should always be maintained as dry as possible. This is to minimize internal corrosion year round, as well as to minimize ice accumulation and blockage during cold weather.

To facilitate drainage, the low point of the standpipe must have a main drain valve, and all pipe should be pitched towards that main drain valve. The main drain valve should be opened on a regular basis, permitting any water condensation accumulation or pooled water from testing to drain.

Dry standpipes installed with supervisory systems shall be installed per Figure 1 shown above. The diagram indicates several important facts:

1. Where possible, the STANDPIPE-PAC™ should NOT be the low point of the dry standpipe system.
2. The piping from the STANDPIPE-PAC™ should be pitched away from the STANDPIPE-PAC™ so that accumulated water drains away from the STANDPIPE-PAC™ outlet.
3. A condensate draining device, as shown on Figure 1 and on Figure 2, should be installed to permit drainage of condensate without decreasing/removing the air pressure from the standpipe. This condensate drain, as shown, is commonly known as a drum drip. Follow the detail to properly install this device to permit drainage of the condensate or accumulated water on a regular basis.
UNITED Fire Systems understands that hydrostatic tests of dry standpipes are being performed on a periodic basis. All standpipe systems with STANDPIPE-PAC™s installed should add steps to the method of procedure for hydrostatic testing. This is to isolate the STANDPIPE-PAC™ before testing occurs and to make sure that all water is drained from the vicinity of the STANDPIPE-PAC™ before the STANDPIPE-PAC™ is put back in service.

Therefore, Step 1 of any method of procedure involving hydrostatic tests of the standpipe must be closing the Locking Outlet Ball Valve – ½” NPT, as shown on Figure 1.

Then, the hydrostatic testing steps can be followed and the final steps of the hydrostatic testing method of procedure should be to open the main drain and ensure that all water has been drained from the standpipe as thoroughly as possible. This may take some time as water migrates from upper floors down to the vicinity of the main drain.

After using the main drain, the condensate drain at the STANDPIPE-PAC™ should be used to ensure that the piping leading to the STANDPIPE-PAC™ is completely cleared of water.

Finally, after it is confirmed that no water exists in the standpipe, the Locking Outlet Ball Valve – ½” NPT should be reopened to reintroduce pressure into the dry standpipe.

The use of the condensate drain (see Figure 2) on a periodic maintenance basis and as a tool for ensuring the drainage of water after a hydrostatic test should be done by:

1. Opening the upper ball valve until water accumulates in the vertical pipe.
2. Close the upper ball valve.
3. Remove the plug from the lower ball valve
4. Open the lower ball valve and drain the accumulated water.
5. Alternate opening and closing the 2 valves until no water is present.

UNITED Fire Systems recommends checking for full drainage on a monthly basis.