



CHARLOTTE WATER BACKFLOW PREVENTION BULLETIN

**SUBJECT: Drain Port Requirements for Covers Over
Reduced Pressure Principle Assemblies**

**DATE: October 18, 1994
(Revised 4/12/2016)**

Covers (enclosures) installed over reduced pressure principle assemblies (RP) must include weather-proof drain ports sufficiently sized to handle a full-flow discharge. The minimum total area of the drain port opening(s) is to be no less than that of the drain size required for an indoor installation; see the chart below for minimum drain port sizes. Rectangular or circular openings are acceptable; typical dimensions are shown below. **Note that a minimum elevation difference of 6" must be maintained between the RP's discharge outlet and the top of all drain ports.**

<u>RP SIZE</u>	<u>MINIMUM TOTAL AREA OF DRAIN PORT(S)</u>	<u>TYP. SIZE FOR RECTANGULAR OPENING (IN.)</u>	<u>TYP. # & SIZE FOR CIRCULAR OPENING(S) (DIA.)</u>
3/4" - 1"	12.5 SQ. IN.	2 1/2 h x 5 w	1 - 4"
1 1/2" - 2"	20 SQ. IN.	3 h x 6 1/2 w	2 - 4"
2 1/2" - 3"	28 SQ. IN.	4 h x 7 w	3 - 4"
4" - 6"	50 SQ. IN.	5 h x 10 w	4 - 4"
8" - 10"	100 SQ. IN.	5 h x 20 w	(do rectangular)

- when necessary to install 2 or more drain ports, they should be installed together on the same side of the enclosure so as to avoid creating the opportunity for cross drafts
- other installation requirements and standard details can be obtained from CMUD.

Questions should be directed to Bob Briggs (704-336-2997) or Mark Krouse (704-432-5800).