INTRODUCTION

The test procedure guideline has been prepared to explain the minimum standard for pressure testing condensate drainage pipe work systems prior to making available for further commissioning processes.

Pressure test the pipe work system is sections as they become available.

Procedure recommended drainage pipe work
1. Disconnect the sections of pipe work that are not part of the pressure test
2. Fill the pipework under test and vent
3. With both ends on the test pipework isolated shut pressure test the test pipework to the specified test pressure and verify test pressure using in-situ pressure gauge and test for >10 minutes
4. If water pressure drops and/or leaks found repair and redo test until no loss of pressure in the pipe work system
5. Drain the entire system

Procedure recommended gravity condensate trays
1. Plug the safety tray drain outlet
2. Fill the drip tray with water to the rim
3. If leaks for the tray drain, seal and refill
4. Pull the plug from the drip tray and allow the water to drain away using the condensate pipe work
5. All the water should drain from the tray if not undertake remedial works and do again

Procedure recommended pumped condensate systems
1. Fill the drip tray with water until the pump starts
2. Note the level at which the pump starts and ensure that it is not too close to the rim, adjust pump start accordingly
3. If the pump is fitted with an alarm turn the pump off and refill the drip tray with water until the alarm is activated check that the alarm is above pump start level but not too close to the rim of the tray, adjust if required and redo test

Procedure recommended verifying fall
1. Disconnect the condensate drain from the main stack or drain point
2. Insert a ball bearing into the trap of each drip tray and check that it falls out of the end of the condensate pipe work
3. If the ball bearing does not appear alter the fall of the pipe work and redo until successful

REFERENCE STANDARDS

CIBSE Commissioning Code W – Water Distribution Systems
### Flood Test Condensate Drains Testing Method

#### Statement

<table>
<thead>
<tr>
<th>ITEM</th>
<th>VERIFICATION METHOD</th>
<th>RESULT</th>
<th>RESULT</th>
<th>RESULT</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Pipework portion to be tested identified and cap off both ends</td>
<td>Site Inspection</td>
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<td>2</td>
<td>Fill the pipe work under test with water and vent</td>
<td>Site Inspection</td>
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<td>3</td>
<td>Pressure test to nominated test pressure and verify using in-situ pressure gauges for &gt;10 minutes</td>
<td>Site Inspection</td>
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<td>4</td>
<td>Once satisfactory drain, reconnect to safety trays</td>
<td>Site Inspection</td>
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<td>5</td>
<td>Plug safety tray drain outlet and fill with water to the brim if tray leaks seal and redo</td>
<td>Site Inspection</td>
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<tr>
<td>6</td>
<td>Remove safety tray plug and let water drain away and verify all drains away if not alter safety tray and repeat until all water drains away</td>
<td>Site Inspection</td>
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<td>7</td>
<td>For pumped condensate fill water in tray until the pump starts and verify if not too close to brim of safety tray adjust if necessary</td>
<td>Site Inspection</td>
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<tr>
<td>8</td>
<td>For pumped condensate with pumps fitted with alarms fill the safety tray with water until alarm is activated checking that it is above pump start and below the tray rim adjust if not and redo</td>
<td>Site Inspection</td>
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<tr>
<td>9</td>
<td>Disconnect condensate drain from safety tray and stack connection point insert a ball bearing at the safety tray and retrieve at the drain discharge point. If not retrieved alter fall and redo until ball bearing rolls through the system under gravity.</td>
<td>Site Inspection</td>
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Certified By Sub Contractor (initial):

Date:

Confirmed By (Head Contractor / Client) (initial):

Date: