

**HYDRAULIC SERVICES WITNESS TESTING**

**Medium Hazard Area**

**HCAA-005 – TDCV Commissioning Sheet**

V2021.01 - April 2021

**GENERAL NOTES:** *This form is to be used for the purpose of witness testing a hydraulic installation by* ***a suitably Qualified Hydraulic Consultant****. Completion of all applicable sections is required. This form should be filed to the relevant project folder within 10 business days after witnessing has occurred.*

*Notes: This series of Hydraulic Testing Procedures have been designed to assist the Hydraulic Services Consultant to carry out suitable witness testing at the end of a project. Each set of procedures details an industry accepted, list of objectives, that the Hydraulic Services Consultant should carry out to fulfil their design commission. The series of procedures will offer the client security in the knowledge that the objectives identified have been based on an Industry standard, endorsed by the HCAA (National), which represents the Professional Industry of Hydraulic Services Consultants.*

|  |  |  |  |
| --- | --- | --- | --- |
| Project: |  | Project Number: |  |
| Prepared By: |  | **Report Date:** |  |
| Plumbing Company: |  | **Consulting Company:** |  |
| Plumbers Name: |  | **Consultant’s name:** |  |
| Plumbers license number |  | **Consultant’s certification n**umber: |  |
| Date of Test/Inspection: |  | **Drawing Revision**: |  |
| Equipment | | | |
| Backflow Test Kit Serial Number |  | Backflow Test Kit Verification Date: |  |
| Flow and Pressure Test Kit Serial Number: |  | Flow and Pressure Test Kit Verification Date: |  |

|  |  |
| --- | --- |
| The hydraulic services elements of the Project have been tested in accordance with: | |
| Number | **Title** |
| NCC Volume 1 | Building Code of Australia 2019 |
| PCA 2019 | Plumbing Code of Australia 2019 |
| AS/NZS 3500.1-2018 | Plumbing and Drainage -Part 1: Water services |

|  |  |  |
| --- | --- | --- |
| Plumbers Declaration | I hereby state that that the information provided in this form is a true and accurate record. | |
| **Signature:** | **Date:** |
| Consultants Declaration | I hereby state that that the information provided in this form is a true and accurate record. | |
| **Signature:** | **Date:** |

**The hydraulic services being tested and recorded in this document are:**

|  |  |
| --- | --- |
| Yes | No |
| 1. Backflow prevention valve – Boundary (*Containment*) |  |  |
| 1. Backflow prevention valve – Zone |  |  |
| 1. Backflow prevention valve – Individual |  |  |

|  |  |
| --- | --- |
| Yes | No |
| Installation/registration (Boundary Devices Only) |  |  |
| First test (new device) |  |  |
| Standard test |  |  |
| Decommission/removal |  |  |

1. **Backflow Prevention Valve – Boundary** (*Containment*)

|  |  |
| --- | --- |
| Yes | No |
| Cross Connections Present? |  |  |
| Location Correct? |  |  |
| Back Leakage Occurring? |  |  |

1. **Backflow Prevention Valves - Zone**

|  |  |
| --- | --- |
| Yes | No |
| Cross Connections Present? |  |  |
| Location Correct? |  |  |
| Back Leakage Occurring? |  |  |

1. **Backflow Prevention Valves - Individual**

|  |  |
| --- | --- |
| Yes | No |
| Cross Connections Present? |  |  |
| Location Correct? |  |  |
| Back Leakage Occurring? |  |  |

## **Tools Needed**

* Key for backflow prevention valve box
* Backflow valve test kit

## **Documents Needed**

* Backflow test process requirements
* Drawings that identify the fixtures that the backflow prevention device should service.

## **Objective**

* To identify that the appropriate valve has been installed, sits comfortably and there is no back leakage. For Individual room control, identify that there is no cross connection downstream of the backflow prevention device and that no fixtures used for personal hygiene are supplied through the valve such as hand basins. Furthermore,

## **Performance requirements**

* Prevent backflow.

## **Commissioning Process:**

* Isolate backflow valve and open all fixtures.
* Ensure that the fixtures that do require backflow prevention don’t flow and those that do not require backflow prevention continue to flow.
* Any cross connections YES/NO
* Undertake a backflow prevention test using the test kit.

|  |  |  |
| --- | --- | --- |
| Testing in accordance with AS 2845.3:2010 | Pass | Fail |
| Appendix C: Pressure-type vacuum-breaker |  |  |
| Appendix E: Double check-valves |  |  |
| Appendix F: Reduced-pressure-detector assembly |  |  |
| Appendix G: Double check detector assembly backflow prevention device |  |  |

**Test results***(Duplicate page as required)*

* Valve no: ­­\_\_\_\_\_\_\_\_\_\_\_\_\_
* Room no: ­­\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| Answer |
| Type of Protection (*Boundary/Zone/Individual*) | Boundary / Zone / Individual |
| Device Type and Size | mm |
| Device Model Number |  |
| Device ID Number |  |
| Location |  |
| Time of test |  |
| Mains Pressure | kPa |
| Check Valve 1 | kPa |
| Check Valve 2 | kPa |
| Upstream Valve tight | kPa |
| Upstream Valve tight | kPa |
| Bypass if Applicable | |
| Bypass Check Valve 1 | kPa |
| Bypass Check Valve 2 | kPa |
| Bypass Upstream Valve tight | kPa |
| Bypass Upstream Valve tight | kPa |

**Test results**

* Valve no: ­­\_\_\_\_\_\_\_\_\_\_\_\_\_
* Room no: ­­\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| Answer |
| Type of Protection (*Boundary/Zone/Individual*) | Boundary / Zone / Individual |
| Device Type and Size | mm |
| Device Model Number |  |
| Device ID Number |  |
| Location |  |
| Time of test |  |
| Mains Pressure | kPa |
| Check Valve 1 | kPa |
| Check Valve 2 | kPa |
| Upstream Valve tight | kPa |
| Upstream Valve tight | kPa |
| Bypass if Applicable | |
| Bypass Check Valve 1 | kPa |
| Bypass Check Valve 2 | kPa |
| Bypass Upstream Valve tight | kPa |
| Bypass Upstream Valve tight | kPa |