

'HVLJQ *XLGHOLQHV
6HSWHPEHU ,VVXH

Section 12 Hydraulics.



Revision History

Revision Number	Description	Section Owner	Date
Issue 1	Original Draft	Rob Oudshoorn	-
Issue 2	Internal Review	Rob Oudshoorn	-
Issue 3	First public circulation	Rob Oudshoorn	October 2016
Issue 4	Updated Issue	<i>Rob Oudshoorn</i>	<i>September 2019</i>

Current Document Acceptance

Update Authored	Approved	Date
<i>S. Palmer</i>	<i>Rob Oudshoorn</i>	<i>September 2019</i>

Key Updates from Previous Issue

Revision Item	Details
<i>12.1.2 Key Design Principles</i>	<i>Additional content</i>
<i>12.1.2.2 Maintenance Considerations</i>	<i>Amended content</i>
<i>12.2.3 Hydraulic Design for Fire Service</i>	<i>Section omitted and located in Section 10 Fire and Life Safety</i>
<i>12.2.4 Potable Water Supply</i>	<i>Amended content</i>
<i>12.2.7 Tanks</i>	<i>New content</i>
<i>12.2.8 Overflows</i>	<i>New content</i>
<i>12.2.9 Alarms</i>	<i>New content</i>
<i>12.2.10 Laboratory Gases</i>	<i>New content</i>
<i>12.2.11 Hot Water Systems</i>	<i>New content</i>
<i>12.2.11.1 Domestic Hot Water Systems</i>	<i>New section</i>

<u>12.1</u>	Overview	1
12.1.1	Purpose	1
12.1.2	Key Design Principles	1
<u>12.2</u>	Design Concepts	2
12.2.1		

12.2 Design Concepts

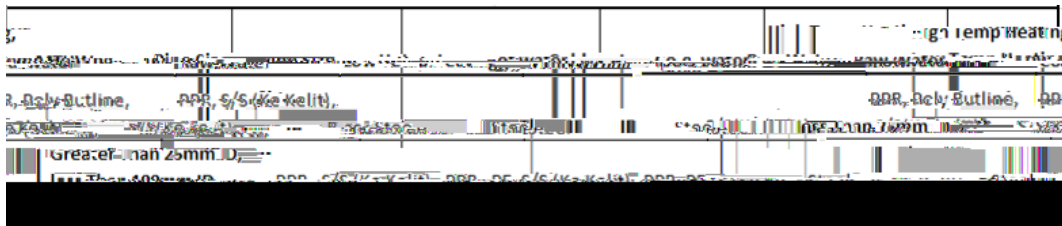
Central calorifier systems are used throughout the
8871 0 595.32 841.92 reL-5(27. Eion13(f)-5ll439.ay)-



12.3 Materials & Equipment

12.3 Materials & Equipment

12.3.1 Domestic Cold Water Pipework & Valves



12.4 Installation Requirements

12.4 Installation Requirements

12.4.1 Installation

Isolation of existing services required for installation of new systems shall be coordinated strictly through University of Canterbury Project Manager (UCPM) by University Maintenance Department.

All potable water storage vessels and pipe systems shall be flushed and disinfected before being placed in service, and provision shall be made for easy access for periodic disinfection.

12.4.2 Pressure Testing

Pumps
General
Cold Water Booster Pumps
Hot water Pumps
Sanitary Plumbing

The consultant shall arrange for preliminary testing of all water supply systems prior to final certified testing for regulatory authority approval.

12.4.3 Commissioning

Commissioning of all services to be in accordance with the requirements and particular system design requirements.

12.4.4 Practical Completion

The consultant shall specify for all necessary plumbing certificates pertaining to the works and ensure these certificates are obtained prior to practical completion.

Prior to Practical Completion the consultant shall ensure that final documentation contains "As-built" drawings provided by the services contractor and a certificate of compliance supplied by Fire Protection Inspection Services (FPIS) or other approved certifier.



12.5 Numbering & Labelling

12.5 Numbering & Labelling

12.5.1 Identification of Pipework

All pipelines shall be identified by colour banding in accordance with NZS 5807:1980 – Code of Practice for Industrial Identification by colour, wording or other coding.

Identification bands should be located at no greater than 4.5 metre centres and provide arrows to indicate direction of flow. Indicate "F" and "R" as applicable on systems featuring flow and return.

Large labels that can be read at floor level are to be used.

Where identification labels on piping, control valves, etc. are provided for the benefit of users, the labels shall spell out the full name of the service.

Labels on piping shall be of the plastic adhesive type.



Compliance Checklist

Project Name:

Date:

Submitting Consultant:

Design Stage:

Section 12 – Hydraulics Compliance Checklist

Complies
Does Not Comply
Not Applicable

Comments:

1.0 Section 01 General



Compliance Checklist

Project Name:

Date:

Submitting Consultant:

Design Stage:

Section 12 – Hydraulics Compliance Checklist

Complies	Does Not Comply	Not Applicable	Comments
----------	-----------------	----------------	----------

