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Tasmanian Plumbing Code



Tasmania

MINISTER *for* JUSTICE *and*
WORKPLACE RELATIONS
JUNE 2006

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Tasmanian Plumbing Code

2006

First published October 1994
Revised as the Tasmanian
Plumbing Code 2006

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Published by the Department of Justice (Building Standards and Regulation Section) GPO Box 56, Rosny Park, Tasmania, 7018.

ISBN 0-9757152-3-2 Bound
ISBN 0-9757152-4-0 Internet

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PREFACE

The object of this revision of the Tasmanian Plumbing Code is to:

- bring this Code in step with new terminology and references used in the *Building Act 2000*;
- to facilitate the adoption of the relevant provisions of the Plumbing Code of Australia (PCA); and
- to vary the provisions of the PCA or the referenced Standards.

On 7 June 2006, pursuant to section 58 of the *Building Act 2000*, and on the advice of the Building Regulations Advisory Committee (BRAC), the Tasmanian Plumbing Code 2006 was issued by the Honourable Steven Kons MHA, Minister for Justice and Workplace Relations, to provide for requirements in respect of plumbing work, plumbing installations and plumbing products, and to provide for the testing of plumbing products and plumbing systems.

The Tasmanian Plumbing Code references the Plumbing Code of Australia and relevant Australian Standards that are subject to periodic review to keep abreast of progress in industry and are kept up-to-date by the issue of amendments or new editions as necessary. This Code may be amended from time to time, as the need arises, to take account of such changes. It is important, therefore, that users of this Code ensure that they are in possession of the latest edition of this Code, and any amendments to that edition.

Notification of any inaccuracy or ambiguity found in the Tasmanian Plumbing Code should be made without delay in order that the matter may be investigated and the appropriate action taken.

Suggestions for improvements to the Tasmanian Plumbing Code, addressed in writing to the Director of Building Control are welcomed. Correspondence should be addressed to-

Director of Building Control
Workplace Standards Tasmania
Department of Justice
PO Box 56
ROSNY PARK TAS 7018

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CONTENTS AND INTRODUCTION

TABLE OF CONTENTS
INTRODUCTION

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TABLE OF CONTENTS

CONTENTS AND INTRODUCTION		PAGE
INTRODUCTION		5
SECTION A	GENERAL PROVISIONS	7
PART A0	APPLICATION	9
PART A1	INTERPRETATION	13
TABLE A1.3	SCHEDULE OF REFERENCE DOCUMENTS	17
PART A2	ACCEPTANCE OF DESIGN AND CONSTRUCTION	21
SECTION B	WATER SERVICES	23
PART B1	COLD WATER SERVICES	25
PART B2	HEATED WATER SERVICES	27
PART B3	NON-DRINKING WATER SERVICES	29
PART B4	FIRE FIGHTING WATER SERVICES	31
SECTION C	SANITARY PLUMBING AND DRAINAGE SYSTEMS	33
PART C1	SANITARY PLUMBING SYSTEMS	35
PART C2	SANITARY DRAINAGE SYSTEMS	37
SECTION D	STORMWATER DRAINAGE SYSTEMS	39
PART D1	ROOF DRAINAGE SYSTEMS	41
PART D2	SURFACE AND SUBSURFACE DRAINAGE SYSTEMS	43
SECTION E	HEATING, VENTILATION AND AIR-CONDITIONING	45
PART E1	HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS	47
SECTION F	ON-SITE WASTE WATER SYSTEMS	49
PART F1	ON-SITE WASTE WATER MANAGEMENT SYSTEMS	51
PART F2	ON-SITE LIQUID TRADE WASTE SYSTEMS	53
SECTION G	CERTIFICATION AND AUTHORISATION	55
PART G1	CERTIFICATION AND AUTHORISATION	57
PART G2	ON-SITE WASTE WATER MANAGEMENT SYSTEM ACCREDITATION	59
APPENDICES		
A1	ON-SITE WASTE WATER MANAGEMENT SYSTEMS	61
A2	NON-FLUSHING SANITARY FIXTURES	63
B1	ROOFING OF LIQUID TRADE WASTE GENERATION AREAS	65
B2	LIQUID TRADE WASTE PRODUCTS	67

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INTRODUCTION

THE TASMANIAN PLUMBING CODE AND THE PCA

The Tasmanian Plumbing Code (this Code) is produced and maintained by the Department of Justice (Tasmania).

This Code was rewritten to enable the adoption of the Plumbing Code of Australia (PCA) in Tasmania and to provide for variations to the PCA. This Code also sets out the requirements for the authorised use of plumbing products and plumbing systems.

The PCA is drafted as a performance based code. It sets down the *Objectives, Functional Statements, Performance Requirements, Verification Methods* and any relevant *Deemed-to-Satisfy Provisions*, which apply to the design, construction, maintenance and management of plumbing and drainage installations.

THE TPC – CONTENT

The goal of this Code is to enable the achievement of an acceptable standard of plumbing installations, maintenance, safety (including safety from contaminated water supplies), health and amenity, resource and environmental conservation, sustainability and protection of public and private infrastructure for the benefit of the community now and in the future.

These goals are applied so that this Code extends no further than is necessary in the public interest, is cost effective, easily understood, and is not needlessly onerous in its application.

The above goals are achieved by satisfying the relevant performance requirements of the PCA and this code.

To satisfy the performance requirements, this Code:

- (a) creates an accountable and transparent framework for product authorisation;
- (b) establishes national objectives for plumbing work on a performance basis;
- (c) fosters water and *energy conservation*;
- (d) encourages best practice;
- (e) references effective solutions;
- (f) calls up relevant Australian Standards; and
- (g) is compatible with the Building Code of Australia (BCA).

This edition of this Code sets out performance-based technical provisions for the design, construction, installation, replacement, repair, alteration and maintenance of plumbing and drainage installations throughout Tasmania. It also sets out the requirements for the use of materials and products in plumbing and drainage installations and defines the processes for the authorisation and accreditation of plumbing products and systems that require statutory authorisation or accreditation to enable their use in plumbing and drainage installations.

The requirements in this Code are designed to ensure that any plumbing and drainage installation is fit for its intended purpose, do not have an adverse impact on the environment and can continue to function as intended without excessive maintenance. It is to be noted that this Code and its referenced documents may need to be used in conjunction with the BCA which contains detailed provisions for the design and construction and performance of buildings and other structures.

Some overlap necessarily exists between this Code the PCA and the BCA. Consistency between these documents is maintained where overlaps occur. It is expected that unnecessary overlaps will be progressively reduced as each document is reviewed and revised with time through active liaison between the National Plumbing Regulators Forum and the Australian Building Codes Board and the Department of Justice.

USE OF THE TASMANIAN PLUMBING CODE 2006 AND THE PLUMBING CODE OF AUSTRALIA (PCA)

Section 58 of the *Building Act 2000* provides that the Minister may issue a code (the Tasmanian Plumbing Code) to provide for requirements in respect of:

- plumbing work, plumbing installations and plumbing products; and
- the testing of plumbing products and systems.

The *Building Act 2000* also provides that the Minister may authorise plumbing products and to accredit the use of a plumbing system.

This Code is drafted as a performance based code to provide greater flexibility for the use of new and innovative plumbing products, systems and designs.

The Deemed-to-Satisfy Provisions (DTS) in this Code and the PCA are similar to those contained in the 1994 edition of the TPC and include other changes resulting from the ongoing technical improvement program.

A user may choose to comply with the DTS Provisions or may use an Alternative Solution that satisfies the Performance Requirements. Any provision of the PCA may be overridden by this Code. The PCA, therefore, is to be read in conjunction with this Code. To assist users of this Code and the PCA it has been drafted using the same references and set out as the PCA to facilitate easy cross-referencing between the two documents.

Each Part or Section set out in the PCA may be referenced, varied or deleted in part or in its entirety.

WORDS WITH SPECIAL MEANINGS

Words in italics have special meanings and are defined in Part A1.

Some words have special meanings within the legislation.

If a word is not defined in this Code or the legislation, the meaning (if any) attributed to it under the Plumbing Code of Australia and AS/NZS 3500.0 *Glossary of terms*, is to be used.

SECTION **A**

GENERAL PROVISIONS

A0 APPLICATION

A1 INTERPRETATION

A2 ACCEPTANCE OF DESIGN AND CONSTRUCTION

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PART A0 - APPLICATION

A0.1 ADOPTION OF THE PCA

This edition of the TPC adopts the PCA as varied by this Code.

A0.2 SCOPE

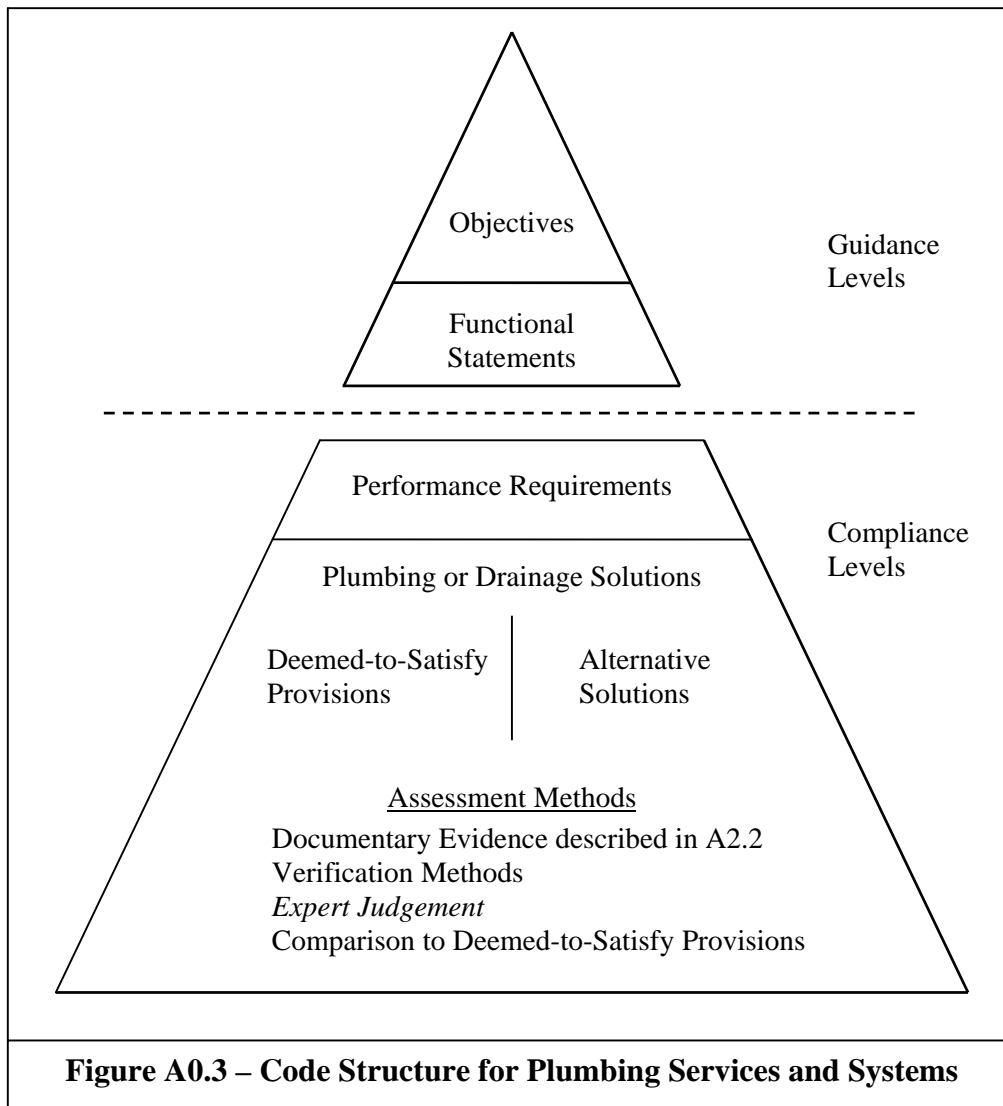
- (a) Sections B to F of this Code and the PCA contain the technical *Performance Requirements* for the design, construction, installation, replacement, repair, alteration and maintenance of:
 - (i) water services;
 - (ii) sanitary plumbing and drainage systems;
 - (iii) stormwater drainage systems;
 - (iv) heating, ventilation and air conditioning systems; and
 - (v) on-site wastewater management systems (including liquid trade waste installations).
- (b) Section G of this Code and the PCA contains plumbing and drainage products and systems authorisation and *accreditation* requirements for their use in new installations, alterations, additions, replacement and repairs to existing installations.

A0.3 STRUCTURE

The structure of Sections B to F of this Code and the PCA comprises the following:

- (a) the *Objectives*;
- (b) the *Functional Statements*;
- (c) the *Performance Requirements* with which all *Plumbing Solutions* must comply; and
- (d) the *Plumbing Solutions*.

This is shown diagrammatically in Figure A0.3.



A0.4 COMPLIANCE WITH THE PLUMBING CODE OF AUSTRALIA

A *Plumbing Solution* will comply with this Code if it satisfies the *Performance Requirements* of the PCA as varied by this Code.

A0.5 MEETING THE PERFORMANCE REQUIREMENTS

Compliance with the *Performance Requirements* can only be achieved by:

- (a) complying with the *Deemed-to-Satisfy Provisions*; or
- (b) formulating an *Alternative Solution* which;
 - (i) complies with the *Performance Requirements*; or
 - (ii) is shown to be at least *equivalent* to the *Deemed-to-Satisfy Provisions*; or
- (c) a combination of (a) and (b).

A0.6 OBJECTIVES AND FUNCTIONAL STATEMENTS

The *Objectives* and the *Functional Statements* may be used as an aid to interpretation.

A0.7 DEEMED-TO-SATISFY PROVISIONS

A *Plumbing Solution* which complies with the *Deemed-to-Satisfy Provisions* as varied by this Code is deemed to comply with the *Performance Requirements*.

A0.8 ALTERNATIVE SOLUTIONS

- (a) An *Alternative Solution* must be assessed according to one or more of the *Assessment Methods*.
- (b) An *Alternative Solution* will only comply with this Code if the *Assessment Methods* used to determine compliance with the *Performance Requirements* have been satisfied.

A0.9 ASSESSMENT METHODS

The following *Assessment Methods*, or any combination of them, can be used to determine that a *Plumbing Solution* complies with the *Performance Requirements*:

- (a) Evidence to support that the use of a material, the design or the form of construction meets a *Performance Requirement* or a *Deemed-to-Satisfy Provision* as described in A2.2.
- (b) *Verification Methods* such as –
 - (i) The *Verification Methods* in this Code; or
 - (ii) Such other *Verification Methods* as the authority having jurisdiction accepts for determining compliance with the *Performance Requirements*.
- (c) Comparison with the *Deemed-to-Satisfy Provisions*.
- (d) *Expert Judgment*.

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PART A1 - INTERPRETATION

A1.1 DEFINITIONS

Unless the contrary intention appears –

Accreditation means in respect of an on-site waste water management system the process of accreditation by the Minister.

Alternative Solution means a *Plumbing Solution* which complies with the *Performance Requirements* other than by reason of satisfying the *Deemed-to-Satisfy Provisions*.

Assessment Method means a method used for determining that a *Plumbing Solution* complies with the *Performance Requirements*.

Certificate of Accreditation means a certificate issued by the Minister stating that a *plumbing* or *drainage* system meets the *Performance Requirements* of the relevant *Parts* of this Code.

Certification mark means a *WaterMark* which is a Trademark owned by Standards Australia.

Code means the Tasmanian Plumbing Code.

Conformity Assessment Body (CAB) means an organisation registered with and approved by JAS-ANZ to conduct assessments leading to product certification and contracted with Standards Australia to issue the *WaterMark licence*.

Deemed-to-Satisfy Provisions means provisions which are deemed to satisfy the *Performance Requirements*.

Drainage means any sanitary, liquid trade waste drainage or stormwater drainage system.

Drinking water means water intended primarily for human consumption but which has other domestic uses – see National Health and Medical Research Council of Australia, Drinking Water Guidelines.

Energy conservation relates to the effective and efficient use of energy through the design, construction, installation, replacement, repair, alteration and maintenance of plumbing installations and systems.

Equivalent means equal in effect.

Expert means a person who has the qualifications and experience to determine whether a *Plumbing Solution* complies with the *Performance Requirements*.

Expert Judgment means the judgment of a person who has the qualifications and experience to determine whether a *Plumbing Solution* complies with the *Performance Requirements*.

Functional Statement describes what the Plumbing Solution needs to do to meet the *Objective*.

JAS-ANZ means the Joint Accreditation System of Australia and New Zealand.

Licence means a formal document which covers the use of the *WaterMark certification mark* owned by Standards Australia and administered by the *NPRF*. It is granted to

manufacturers whose materials or products are manufactured under a Quality Assurance Program endorsed by a *CAB*.

Network Utility Operator means a person who:

- (a) Undertakes the piped distribution of drinking water for supply; or
- (b) Is the operator of a sewerage system or a stormwater drainage system.

Non-drinking Water means water which is not drinking water.

Objective means a statement contained in this Code or the PCA which is considered to reflect community expectations.

On-site wastewater management system means on-site waste water management system as defined by the *Building Act 2000*.

Part means the particular part or section of this Code or the PCA.

Performance Requirement means a requirement which states the level of performance which a *Plumbing Solution* must meet.

Plumbing means any water plumbing, roof plumbing or sanitary plumbing system.

Plumbing or Drainage Solution means a solution which complies with the *Performance Requirements* and is:

- (a) an *Alternative Solution*; or
- (b) a solution which complies with the *Deemed-to-Satisfy Provisions*; or
- (c) a combination of (a) and (b)

Professional engineer means a person who is-

- (a) if legislation is applicable – a registered *professional engineer* in the relevant discipline who has appropriate experience and competence in the relevant field; or
- (b) if legislation is not applicable-
 - i. a Corporate Member of the Institution of Engineers, Australia; or
 - ii. eligible to become a Corporate Member of the Institution of Engineers, Australia, and has appropriate experience and competence in the relevant field.

Recognised auditing body means a person or organisation appropriately licensed by the *JAS-ANZ* or one that is accepted by the relevant authority having jurisdiction.

Recognised expert means a person with qualifications and experience in the area of plumbing or drainage in question, recognised by the authority having jurisdiction.

Recognised testing laboratory means a testing laboratory registered with the National Association of Testing Authorities and acceptable to the *CAB* as being competent to conduct type tests under the *WaterMark Certification Scheme*.

Sanitary appliance means an appliance which is intended to be used for *sanitation*, but which is not a sanitary fixture. Included are machines for washing dishes and washing clothes.

Sanitary fixture means a fixture which is intended to be used for *sanitation*.

Sanitation means the activities of washing and/or excretion carried out in a manner or condition such that the effect on health is minimised, with regard to dirt and infection.

Specification means a specification that is approved by the *NPRF* through *WS-031* and *WS-014* as applicable to the material or product being submitted for *authorisation*. A *specification* may be an Australian Standard or *specification* listed in AS 5200 or a

specification prepared by a *CAB* and manufacturer and is in a generic product Standard format, called an Australian Technical specification (ATS).

Verification Method means a test, inspection, calculation or other method that determines whether a *Plumbing* or *Drainage Solution* complies with the relevant *Performance Requirement*.

unique product means a plumbing or drainage product not listed in Table A2.1 of the PCA and which is either:(a)a prototype; or

- (b) made on-site; or
- (c) purpose built and the only one of its type; or
- (c) imported from out of the country for a one-off use; or
- (d) determined by the Minister to be a *unique product*.

WaterMark Certification Scheme (WMCS) means the national certification of plumbing and drainage products scheme administered by the National Plumbing Regulators Forum.

WS-014 means the Standards Australia Standards New Zealand Joint Technical Committee WS-014, Plumbing and Drainage.

WS-031 means the Standards Australia Committee WS-031 Technical Procedures for Plumbing and Drainage Products Authorisation.

A1.2 ADOPTION OF STANDARDS AND OTHER REFERENCES

Where a *Deemed-to-Satisfy Provision* adopts a Standard, rule, specification or provision included in any document issued by Standards Australia or other body, that adoption does not include a provision:

- (a) specifying or defining the respective rights, responsibilities or obligations between any manufacturer, supplier or purchaser; or
- (b) specifying the responsibilities of any trades person or other building operative, architect, engineer, authority, or other person or body; or
- (c) requiring the submission for approval of any material, plumbing component, form or method of construction, to any person, authority or body other than a person or body empowered under statute to give that approval; or
- (d) specifying that a material, plumbing component, form or method of construction must be submitted to Standards Australia or a committee of Standards Australia for expression of opinion; or
- (e) permitting a departure from this Code, the PCA, rule, specification or provision at the sole discretion of the manufacturer or purchaser, or by arrangement or agreement between the manufacturer and purchaser.

A1.3 REFERENCED STANDARDS, ETC

A reference in a *Deemed-to-Satisfy Provision* to a document under A1.2 of this Code refers to the edition or issue, together with any amendment listed in Table A1.3 of this Code or the PCA and only so much as is relevant in the context in which the document is quoted.

A1.4 DIFFERENCES BETWEEN REFERENCED DOCUMENTS AND THE TASMANIAN PLUMBING CODE

This Code overrules in any difference arising between it and the PCA and any Standard, rule, specification or provision in a document listed in Table A1.3 of the PCA.

A1.5 COMPLIANCE WITH ALL SECTIONS OF THE TASMANIAN PLUMBING CODE

Subject to A1.6, *plumbing* and *drainage* systems must be so designed, constructed and installed that they comply with the relevant provisions of Sections A to G (inclusive) of this Code.

A1.6 APPLICATION OF THE PLUMBING CODE OF AUSTRALIA TO TASMANIA

For application within Tasmania, the PCA comprises sections A to G inclusive as amended by this Code. Any variations or additions must be read in conjunction with and takes precedence over the PCA.

A1.7 LANGUAGE

A reference to a water service, *plumbing* or *drainage* service, system or product in this Code is a reference to an entire installation, service, system or product or part of an installation, a service, system or product, as the case requires.

A1.8 ADVISORY NOTES, CIRCULARS AND THE LIKE

The Director of Building Control may issue written advice to deal with arising issues such as interpretation of codes, standards and regulations.

TABLE A1.3

The standards and other documents listed in Table A1.3 are referred to in this Code or the PCA.

Table A1.3			
SCHEDULE OF REFERENCE DOCUMENTS			
Document No.	Date	Title	Clause
AS/NZS 1200	2000	Pressure equipment	PCA E1.2
AS/NZS 1221	1997	Fire hose reels	PCA B4.2
AS 1271	2003	Safety valves, other valves, liquid level gauges, and other fittings for boilers and unfired pressure vessels	PCA E1.2
AS 1324		Air filters for use in general ventilations and air-conditioning	PCA E1.2
Part 1	2001	Application, performance and construction	
AS 1345	1995	Identification of the contents of pipes, conduits and ducts	PCA E1.2
AS 1428		Design for access and mobility	PCA E1.2
Part 1	2001	General requirements for access – New building work	
AS/NZS 1546		On-site domestic wastewater treatment units	PCA
Part 1	1998		C2.2, F1.2
Part 2	2001	Septic tanks	C2.2, F1.2
Part 3	2001	Waterless composting toilets Aerated wastewater treatment system	C2.2, F1.2
AS/NZS 1547	2000	On-site domestic wastewater management	PCA
			C2.2, F1.2
AS/NZS 1571	1995	Copper – Seamless tubes for air-conditioning and refrigeration	PCA E1.2
AS 1668		The use of mechanical ventilation and air-conditioning in buildings	
Part 1	1998	Fire and smoke control in multi-compartment buildings	PCA E1.2
Part 2	1991	Mechanical ventilation for acceptable indoor air quality	PCA E1.2

Table A1.3
SCHEDULE OF REFERENCE DOCUMENTS

Document No.	Date	Title	Clause
AS 2118		Automatic fire sprinkler system	PCA
Part 1	1999	General Requirements	
		Amendment 1, June 2000	B4.2
Part 4	1995	Residential	B4.2
Part 5	1995	Domestic	B4.2
Part 9	1995	Combined sprinklers and hydrant	B4.2
	1995	Piping support and installation	B4.2
AS 2419		Fire hydrant installations	PCA
Part 1	2005	System design, installation and commissioning	B4.2
Part 2	1994	Amendment 1, October 1996	
		Fire hydrant valves	B4.2
AS 2441	2005	Installation of fire hose reels	PCA B4.2
AS/NZS 3500		Plumbing and Drainage	PCA
Part 0	2003	Glossary of terms	Introduction
Part 1	2003	Water services	B1.2, B3.2, B4.2,
		Amendment 1: 2005	E1.2
Part 2	2003	Sanitary plumbing and drainage	C2.1, C2.2, E1.2,
		Amendment 1: 2005	F1.2, F2.2.3
Part 3	2003	Storm water drainage	A2.1, B2.2, B3.2,
		Amendment 1: 2005	C1.2, C2.2, F1.2
Part 4	2003	Hot water services	E1.2
		Amendment 1: 2005	B1.2, B2.2, B3.2
Part 5	2000	Domestic installations	C1.2, C2.2, F1.2
		Amendment 2: 2004	E1.2
AS/NZS 3666		Air handling and water systems of buildings – Microbial Control	PCA
Part 1	2002	Design, installation and commissioning	E1.2
Part 2	2002	Operation and maintenance	E1.3
Part 3	2000	Performance based maintenance of cooling systems	E1.2

Table A1.3
SCHEDULE OF REFERENCE DOCUMENTS

Document No.	Date	Title	Clause
AS/NZS 4020	1999	Products for use in contact with drinking water Amendments 1, May 2001	PCA A2.1, G1.5.2
AS 4041		Pressure Piping Amendment 1, April 2001	PCA E1.2
AS 4118 Part 2.1	1995	Fire sprinkler systems Piping - General	PCA B4.2
AS 4254	2002	Ductwork for air-handling systems in buildings	PCA E1.2
AS 4426	1997	Thermal insulation of pipework, ductwork and equipment – selection, installation and finish	PCA E1.2
AS 4508	1999	Thermal insulation of pipework, ductwork and equipment	PCA E1.2
AS 5200 000	2004	Technical specification for plumbing and drainage products - Procedures for certification of plumbing and drainage products	PCA A1.1, G1.5.3, G1.5.3.3,
AS 5601	2004	Gas installations	PCA E1.2
BCA Volume 1	2006	Building Code of Australia Volume one, Class 2 to Class 9 Buildings	B4.2, E1.2
Volume 2		Volume 2, Class 1 & 10 Buildings – Housing Provisions	
ISO/IEC Guide 67	2004	Conformity assessment – Fundamentals of product certification	G1.5.2, G1.5.4.3
MP 78	1999	Manual for the assessment of risks of plumbing products	G1.2, G1.5.2, G1.5.3.1, G1.5.3.2, G1.5.3.3

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PART A2 – ACCEPTANCE OF DESIGN AND CONSTRUCTION

A2.1 SUITABILITY OF MATERIALS AND PRODUCTS

- (a) Every part of a plumbing or drainage installation must be constructed in an appropriate manner to achieve the requirements of this Code, using materials and products that are fit for the purpose for which they are intended.
- (b) Materials or products listed in Table A2.1 of the PCA which are used in plumbing or drainage installations must be certified and authorised.
- (c) Product Certification and Authorisation must meet the certification and authorisation procedures set out in *Part G* of this Code “Materials and Products Certification and Authorisation”.
- (d) All materials and products intended for use in contact with *drinking water* must comply with AS/NZS 4020 and be certified and authorised in accordance with *Part G* of this Code.
- (e) Any new or innovative material or product must be assessed, certified and authorised, if required, in accordance with *Part G* of this Code prior to their use in a plumbing or drainage installation.
- (f) A material or product exempted from certification under this Code is authorised for use in a plumbing and drainage installation if it is certified as complying with the appropriate Australian Standard(s) in accordance with A2.2.
- (g) A material or product used in a firefighting water service is authorised for use if it is certified by a *recognised auditing body* as complying with the relevant Australian Standard(s) for the specific application.
- (h) A material or product used in a stormwater installation is authorised for use if it is certified by a *recognised auditing body* as complying with Clause 2 of AS/NZS 3500.3 in accordance with A2.2.

A2.2 EVIDENCE OF SUITABILITY

- (a) Evidence to support that the use of a material, product, the design, and form of construction or installation meets a *Performance Requirement* or a *Deemed-to-Satisfy Provision* may be in the form of one or a combination of the following:
 - (i) A *certification mark*.
 - (ii) A current *licence* issued in compliance with the requirements of *Part G* of the PCA or this Code as appropriate.
 - (iii) A report issued by a *recognised expert* showing that the material, the design, construction and installation has been submitted to the tests listed in a report, and setting out the results of those tests and any other relevant information that demonstrates its suitability for use in the plumbing installation.
 - (iv) A certificate from a *professional engineer* or other appropriately qualified person which–

- (A) certifies that a material, design, form of construction or installation complies with the requirements of this Code; and
 - (B) sets out the basis on which certification is given and the extent to which relevant *specifications*, rules, codes of practice or other publications have been relied upon.
- (v) Any other form of documentary evidence that correctly describes the properties and performance of the material, form of construction or installation and adequately demonstrates its suitability for use in the plumbing installation.
- (b) Any copy of documentary evidence submitted must be a complete copy of the original report or document.

A2.3 DOCUMENTATION OF DECISIONS

Decisions made under this Code or the PCA are to be fully documented and copies of all relevant documentation are to be retained.

Examples of the kind of documentation which are to be prepared and retained include:

- (a) Details of the *Plumbing Solution* including all relevant plans and other supporting documentation.
- (b) In cases where an *Alternative Solution* has been proposed –
 - i. details of the relevant *Performance Requirements*; and
 - ii. the *Assessment Method* or methods used to establish compliance with the relevant *Performance Requirements*; and
 - iii. details of any *Expert Judgment* relied upon including the extent to which the judgment was relied upon and the qualifications and experience of the expert; and
 - iv. details of any tests or calculations used to determine compliance with the relevant *Performance Requirements*; and
 - v. details of any Standards or other information which were relied upon.

A2.4 MAINTENANCE

It is the property owner's responsibility to maintain the plumbing and drainage installation on the property and to comply with any specific maintenance requirements referred to in this Code or the Building Act and Regulations. The installer is to provide written advice on the specific and general maintenance requirements for the property owner/agent.

SECTION **B**

WATER SERVICES

- B1 COLD WATER SERVICES**
- B2 HEATED WATER SERVICES**
- B3 NON-DRINKING WATER SERVICES**
- B4 FIRE FIGHTING WATER SERVICES**

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VARIATIONS AND ADDITIONS TO PCA PART B1 - COLD WATER SERVICES

B1.1 SCOPE

This Part:

- (a) adopts Part B1 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part B1 of the PCA which must be read in conjunction with and take precedence over the PCA.

B1.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. BP1.2 (g) and (h) as follows:

Tas.BP1.2 (g) and (h)

- (g) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (h) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

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VARIATIONS AND ADDITIONS TO PCA PART B2 – HEATED WATER SERVICES

B2.1 SCOPE

This Part:

- (a) adopts Part B2 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part B2 of the PCA which must be read in conjunction with and take precedence over the PCA.

B2.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. BP2.3 (g) and (h) as follows:

Tas. BP2.3 (g) and (h)

- (g) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (h) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

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VARIATIONS AND ADDITIONS TO PCA PART B3 – NON-DRINKING WATER SERVICES

B3.1 SCOPE

This Part:

- (a) adopts Part B3 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part B3 of the PCA which must be read in conjunction with and take precedence over the PCA.

B3.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. BP3.3 (f) and (g) as follows:

Tas. BP3.3 (f) and (g)

- (f) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (g) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

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VARIATIONS AND ADDITIONS TO PCA

PART B4 – FIREFIGHTING WATER SERVICES

B4.1 SCOPE

This Part:

- (a) adopts Part B4 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part B4 of the PCA which must be read in conjunction with and take precedence over the PCA.

B4.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. BP4.1 (f) and (g) as follows:

Tas BP4.1 (f) and (g)

- (f) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (g) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

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SECTION **C**

SANITARY PLUMBING AND DRAINAGE SYSTEMS

C1 SANITARY PLUMBING SYSTEMS

C2 SANITARY DRAINAGE SYSTEMS

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VARIATIONS AND ADDITIONS TO PCA PART C1 – SANITARY PLUMBING SYSTEMS

C1.1 SCOPE

This Part:

- (a) adopts Part C1 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part C1 of the PCA which must be read in conjunction with and take precedence over the PCA.

C1.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. CP1.1 (i) and (j) as follows:

Tas CP1.1 (i) and (j)

- (i) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (j) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

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VARIATIONS AND ADDITIONS TO PCA

PART C2 – SANITARY DRAINAGE SYSTEMS

C2.1 SCOPE

This Part:

- (a) adopts Part C2 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part C2 of the PCA which must be read in conjunction with and take precedence over the PCA.

C2.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. CP2.1 (m) and (n) as follows:

Tas. CP2.1 (m) and (n)

- (m) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (n) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

Add Tas. C2.2 (c) and (d) as follows:

Tas. C2.2 (c) and (d)

- (c) A design and installation method for conveying sewage to an *approved disposal system*, and for avoiding the likelihood of foul air entering a building satisfies *Performance Requirements* CP2.1 (e), (g) and (i), if the method complies with Appendix A1, using products authorised under Part G.
- (d) A design and installation method for disposing of sewage using a non-flushing *sanitary fixture*, and for avoiding the likelihood of sewage or foul air entering a building satisfies *Performance Requirements* CP2.1 (e), (g) and (i), if the method complies with Appendix A2, using products authorised under Part G.

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SECTION **D**

STORMWATER DRAINAGE SYSTEMS

D1 ROOF DRAINAGE SYSTEMS

D2 SURFACE AND SUBSURFACE DRAINAGE SYSTEMS

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VARIATIONS AND ADDITIONS TO PCA PART D1 – ROOF DRAINAGE SYSTEMS

D1.1 SCOPE

This Part:

- (a) adopts Part D1 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part D1 of the PCA which must be read in conjunction with and take precedence over the PCA.

D1.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. DP2.4 (g) and (h) as follows:

Tas DP1.4 (g) and (h)

- (g) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (h) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

Delete D1.2 and substitute with Tas. D1.2

Tas. D1.2

The design, construction, installation, replacement, repair alteration and maintenance of a roof drainage system must be in accordance with AS/NZS 3500.3 or AS/NZS 3500.5 as appropriate.

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VARIATIONS AND ADDITIONS TO PCA PART D2 – SURFACE AND SUBSURFACE DRAINAGE SYSTEMS

D2.1 SCOPE

This Part:

- (a) adopts Part D2 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part D2 of the PCA which must be read in conjunction with and take precedence over the PCA.

D2.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. DP2.3 (l) and (m) as follows:

Tas. DP2.3 (l) and (m)

- (l) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (m) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

Delete D2.2 and substitute with the following:

Tas. D2.2

The design, construction, installation, replacement, repair alteration and maintenance of a roof drainage system must be in accordance with AS/NZS 3500.3 or AS/NZS 3500.5 as appropriate.

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SECTION **E**

HEATING, VENTILATION AND AIR-CONDITIONING

E1 HEATING, VENTILATION AND AIR-CONDITIONING

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VARIATIONS AND ADDITIONS TO PCA PART E1 – HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS

E1.1 SCOPE

This Part:

- (a) adopts Part E1 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part E1 of the PCA which must be read in conjunction with and take precedence over the PCA.

E1.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. EP1.1 (d), (e) and (f) as follows:

Tas. EP1.1 (e) and (f)

- (e) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (f) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

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SECTION **F**

ON-SITE WASTEWATER SYSTEMS

- F1 ON-SITE WASTEWATER MANAGEMENT SYSTEMS
- F2 ON-SITE LIQUID TRADE WASTE SYSTEMS

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VARIATIONS AND ADDITIONS TO PCA

PART F1 – ON-SITE WASTE WATER

MANAGEMENT SYSTEMS

F1.1 SCOPE

This Part:

- (c) adopts Part F1 of the PCA; and
- (d) sets out the Tasmanian variations and additional provisions to Part F1 of the PCA which must be read in conjunction with and take precedence over the PCA.

F1.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. FP2.1 (e) and (f) as follows:

Tas FP2.1 (e) and (f)

- (e) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (f) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

Add Tas. F1.2 (f) and (g) as follows:

Tas F1.2 (f) and (g)

- (e) An *on-site waste water management system* designed and constructed in accordance with a *Certificate of Accreditation* issued under Part G2 is deemed to satisfy the *Performance Requirements* specified in FP1.1 – FP1.6.
- (f) An *on-site waste water management system* designed, constructed, installed and maintained in accordance with the relevant requirements of AS/NZS 1547:2000 *On site domestic wastewater management* is deemed to satisfy the *Performance Requirements* of B2.7.4 specified in FP1.1 – FP1.5

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VARIATIONS AND ADDITIONS TO PCA

PART F2 – ON-SITE LIQUID TRADE WASTE SYSTEMS

F2.1 SCOPE

This Part:

- (a) adopts Part F2 of the PCA; and
- (b) sets out the Tasmanian variations and additional provisions to Part F2 of the PCA which must be read in conjunction with and take precedence over the PCA.

F2.2 TASMANIAN VARIATIONS AND ADDITIONAL PROVISIONS

Add Tas. FP2.1 (e) and (f) as follows:

Tas. FP2.1 (e) and (f)

- (e) avoid the likelihood of other services impairing access for maintenance and potential branch insertions; and
- (f) avoid the likelihood of potential safety hazards when in close proximity to other services during and after construction.

Delete F2.2.3 and add Tas. F2.2 3 and F2.2.4 as follows:

Tas F2.3 and F2.4

F2.2.3 Pre-treatment facilities not required

Where pre-treatment facilities are not required by the relevant authority having jurisdiction or the receiving *Network Utility Operator*, the minimum requirement for FP2.3 and FP2.4 is compliance with AS/NZS 3500.2, F2.2.3 and Appendices B1 and B2.

F2.2.4 Pre-treatment facilities

- (a) If the Council accepts the discharge of a liquid trade waste to the sewerage system after pre-treatment-
 - (A) the pre-treatment equipment or system is deemed to satisfy the Performance Requirements of FP2.1 – FP2.4, if the equipment or system is capable of discharging liquid trade waste at a quality set under a special plumbing permit issued for that equipment or system; and
 - (B) that part of the installation used to convey the liquid trade waste after treatment must comply AS/NZS 3500.2 and Appendix B1 in so far as the provisions relate to the system.
- (b) The use of a product or system which complies with the details described in Appendix B2 is deemed to satisfy the Performance Requirements of Clauses FP2.3 and FP2.4, in so far as they relate to the product or system.

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SECTION **G**

MATERIALS PRODUCTS AUTHORISATION and SYSTEM ACCREDITATION

- G1** **CERTIFICATION AND AUTHORISATION**
- G2** **SYSTEM ACCREDITATION**

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PART G1 – CERTIFICATION AND AUTHORISATION

G1.0 SCOPE

This Part specifies the requirements that a plumbing or drainage product must meet to enable its use in a plumbing installation in Tasmania.

G1.2 APPLICATION

This part applies to plumbing and drainage products used in new installations, alterations additions and repairs and maintenance to existing installations.

GO1 OBJECTIVE

The objective of this Part is to facilitate a system of plumbing product authorisation to enable the use of materials and products under this Code.

GF1 FUNCTIONAL REQUIREMENT

Plumbing and drainage materials and products must, before installation in a plumbing or drainage installation, be authorised under this Code.

GP1 PERFORMANCE REQUIREMENTS

Plumbing and drainage materials and products must:

- (a) be durable and fit for their intended purpose, and
- (b) meet the *performance requirements* of the relevant *Parts* of this Code; and
- (c) must be *authorised*.

GV3 VERIFICATION METHODS

GV3.1 A product may be verified as meeting the performance requirements of GP1 if it is certified and authorised under the *WaterMark Certification Scheme (WMCS)*, set out under Part G1 of the Plumbing Code of Australia.

GV3.2 A product for use in a stormwater installation may be verified as meeting the performance requirements of GP.1 if it complies with the requirements of Section 2 of AS/NZS 3500.3 Stormwater drainage.

GV3.3 A product not covered by Clause GV3.1 or GV3.2 may be authorised for use in Tasmania under G1.5. A product may be excluded from authorisation in a municipal area under G1.5.

GV3.4 A septic tank for use as a water-borne on-site waste water management system may be verified as meeting the performance requirements of GP1 if it complies with AS/NZS 1546.1 On-site domestic wastewater treatment units - Septic tanks.

GV3.5 A holding tank or collection well for used as part of a water-borne on-site waste water management system may be verified as meeting the performance requirements of GP1 if it complies with AS/NZS 1546.1 On-site domestic wastewater treatment units - Septic tanks.

G1.3 DEEMED TO SATISFY

Performance Requirements GP1.1 (a) to GP1.1(c) are satisfied by complying with G1.4.

G1.4 DEEMED-TO-SATISFY PROVISIONS

G1.4.1 A materials or product used in a plumbing or drainage installation, which is listed in Table A2.1 of the Plumbing Code of Australia (PCA), must be certified and authorised under Part G of the PCA.

G1.4.2 A *unique product* satisfies the performance requirements of GP1 if authorised by the Minister or the Council having jurisdiction under G1.5 provided that it has been certified in accordance with A2.2 of the Plumbing Code of Australia and section 266 of the *Building Act 2000*.

G1.4.3 A unique product which is a septic tank for use as a water-borne waste water management system and is constructed in accordance with AS/NZS 1546.1: On-site domestic wastewater treatment units - Septic tanks is deemed to satisfy the performance requirements of C1.7 if authorised by the relevant permit authority and providing that it is certified as complying with AS/NZS 1546.1 in accordance with A2.2 of the Plumbing Code of Australia.

G1.4.4 Products included on a list published for this purpose by the Department of Justice satisfy the performance requirements of GP1.1.

G1.5 STATE AUTHORISATION

G1.5.1 SCOPE

This section applies to materials and products for use in water supply, sanitary plumbing and drainage, hot water, stormwater, and trade waste installations.

G1.5.2 APPLICATION

This section covers products not covered by Table A2.1 of the Plumbing Code of Australia. This section also overrides Part G1 of the PCA in certain cases.

G1.5.3 AUTHORISATION

A plumbing product is authorised for use in a plumbing installation in Tasmania if it has been authorised by the Minister or where provided for under this Code, by the Council having jurisdiction.

PART G2 ON-SITE WASTE WATER MANAGEMENT SYSTEM ACCREDITATION

G2.0 SCOPE

This Part sets out the requirements for the accreditation of *on-site waste water management systems* to enable their use in a plumbing installation in Tasmania.

G2.1 Application

This Part applies to all *on-site waste water management systems* except for systems:

- (b) exempted under the Tasmanian Plumbing Regulations; or
- (c) under the jurisdiction of the Environmental Management and *Pollution Control Act 1993*; or
- (d) which form part of a councils infrastructure.

GO2 Objective

GO2.1 The objective of this Part is to facilitate the use of:

- (a) plumbing or drainage systems for which there is no applicable or appropriate Australian Standard; and
- (b) an *on-site waste water management system*.

GF2 Functional Requirement

GF2.1 A plumbing or drainage system for which there is no applicable or appropriate Australian Standard must be issued with an accreditation.

GF2.2 An on-site waste water management system must be issued with an accreditation under this part.

GP2 Performance Requirements

GP2.1 A plumbing or drainage system used in a plumbing installation must:

- (a) be durable and fit for purpose;
- (b) meet the performance requirements of the relevant parts of this Code; and
- (c) be issued with a Certificate of Accreditation.

GV2 Verification Method

GV2.1 A Plumbing or drainage system used in a plumbing installation may be verified as meeting the performance requirements of this Part if it has been issued with a Certificate of Accreditation.

GV2.2 A plumbing or drainage system or an on-site waste water management system used in a plumbing installation is deemed to satisfy the performance requirements of this Part if a Certificate of Accreditation for the system has been issued.

G2.2 DEEMED TO SATISFY

Performance Requirements GP2.1 (a) to GP2.1(c) are satisfied by complying with G2.3.

G2.3 DEEMED-TO-SATISFY PROVISIONS

G2.3.1 An on-site waste water management system used in a plumbing installation must be issued with a Certificate of Accreditation.

APPENDIX A1 - ON-SITE WASTE WATER MANAGEMENT SYSTEMS

Scope

This appendix sets out the requirements for the connection of water flushed *sanitary fixtures* and *sanitary appliances* to a *water-borne waste water management system* other than a *sewerage system*. It also sets out installation requirements for *on-site waste water management systems*.

Installation requirements

1. Installation is to be in accordance with the figure A1.1.
2. Installation is to be in accordance with Parts C1 and C2 for pipework and venting arrangements.
3. An overflow relief gully must be installed and positioned so as to provide protection against surcharge of sewage into a building.
4. An alternative to the ground vent may be used by extending a vent to terminate as if an upstream vent, with the vent connection between the last *sanitary fixture* or *sanitary appliance* and the *water-borne waste water management system*.
5. Inspection openings located at the inlet to a *water-borne waste water management system* or a land application system are to terminate as close as practicable to the underside of an approved inspection opening cover installed at the finished surface level.
6. Access openings providing access for desludging or maintenance of *on-site waste water management systems* chamber(s) must terminate at or above finished surface level.

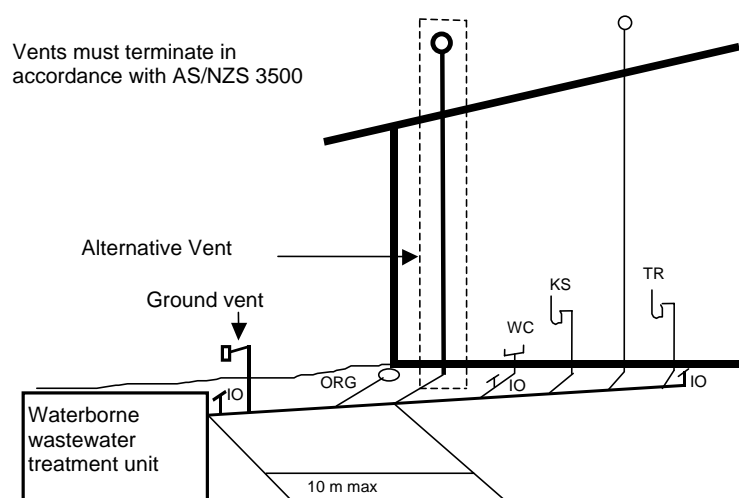


Figure A1.1 Alternate venting requirements

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APPENDIX A2 - NON-FLUSHING SANITARY FIXTURES

Scope

This appendix sets out the requirements for the installation of non-flushing *sanitary fixtures*.

Installation requirements

1. The fixture is to be an authorised fixture.
2. The fixture is to be installed in accordance with Clause Tas F2.102, Volume One of the Building Code of Australia or Part 3.8.3.4, Volume 2 of the Building Code of Australia as appropriate.

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APPENDIX B1 - ROOFING OF LIQUID TRADE WASTE GENERATION AREAS

Scope

This appendix sets out the requirements for the roofing of liquid trade waste generation areas to prevent ingress of stormwater to the sewerage system.

Installation requirement

When a liquid trade waste generating process does not fully occur within a building, suitable roofing must be installed to prevent the ingress of stormwater to the system. For a structure where one or more sides is open to the weather, 10° degrees from the vertical overhang of the roofing is a minimum acceptable cover.

To ensure that no surface water can flow onto the liquid trade waste generating process area a bund/speed hump at least 150mm high around the area is required. On the upper side of the area a stormwater drain alone is not adequate as stormwater flow will often bridge over the grate and enter the area. The overall surface water flow across the site is to be considered and the height of the bund/speed hump may have to be increased to prevent stormwater flow onto the process area.

Under extreme storm conditions, this design might allow rainwater to blow under the roof. The roof should overhang by an amount not less than that shown in the sketch below.

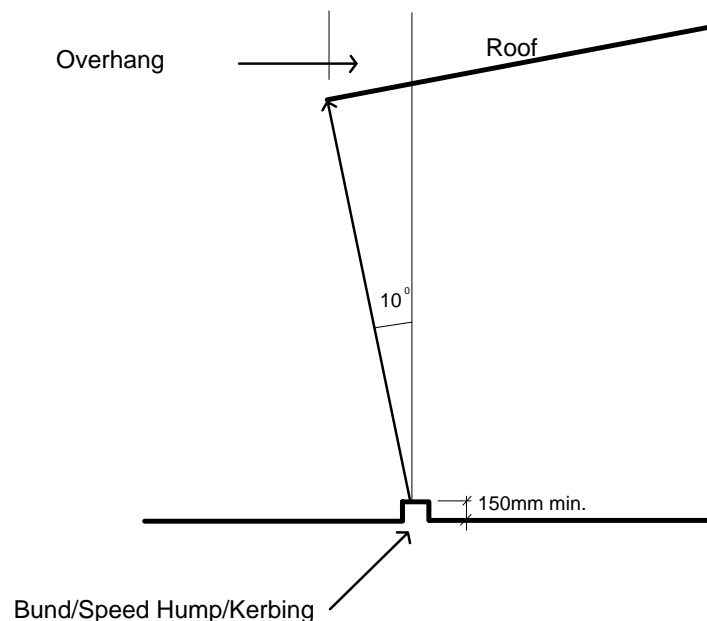


Figure B1.1 Roofing of liquid trade waste generation areas

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APPENDIX B2 – LIQUID TRADE WASTE PRODUCTS

Scope

This appendix depicts trade waste products or installations.

Application

Trade waste products or installations depicted in this appendix may be used if they are installed in accordance with the details shown.

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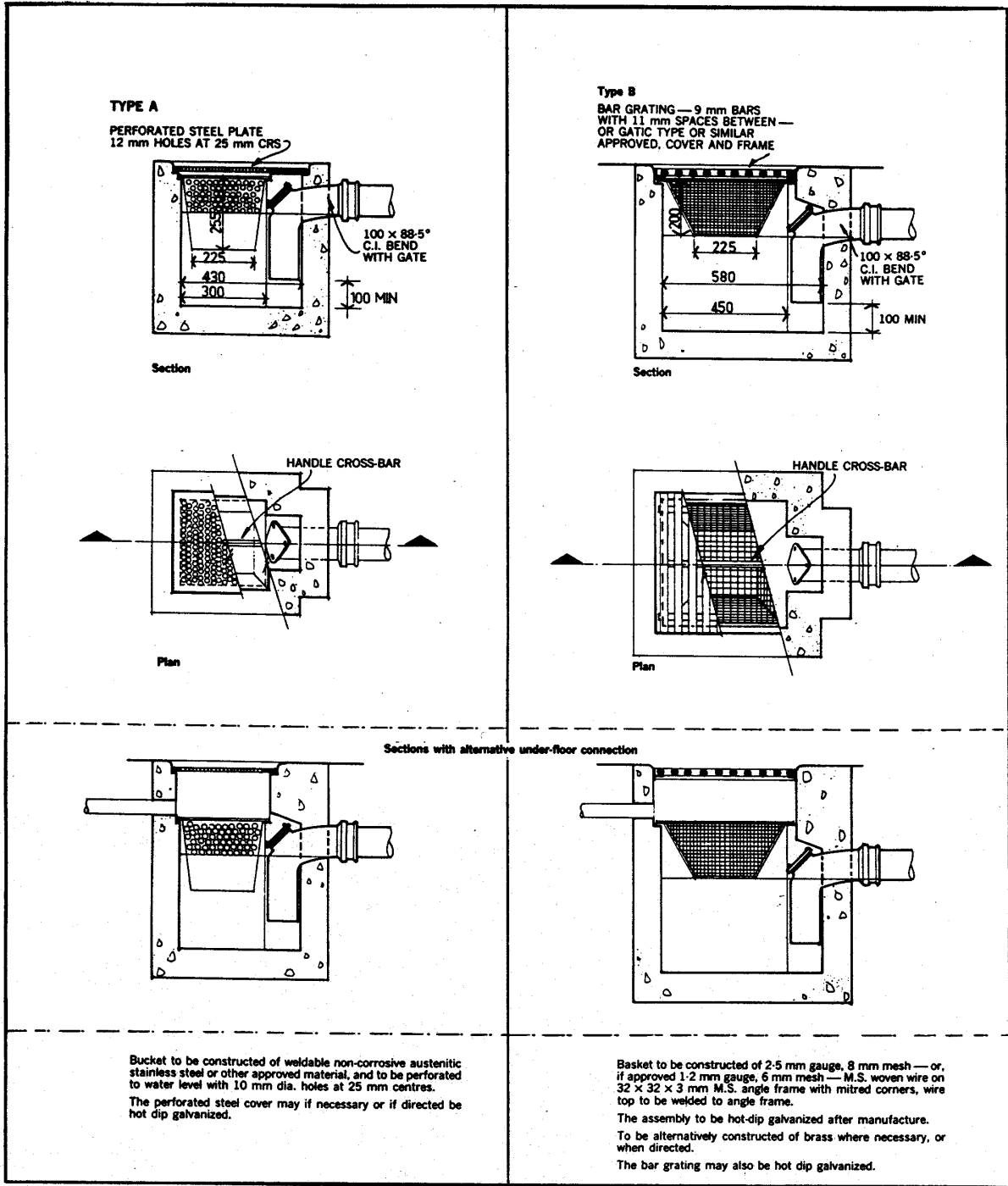
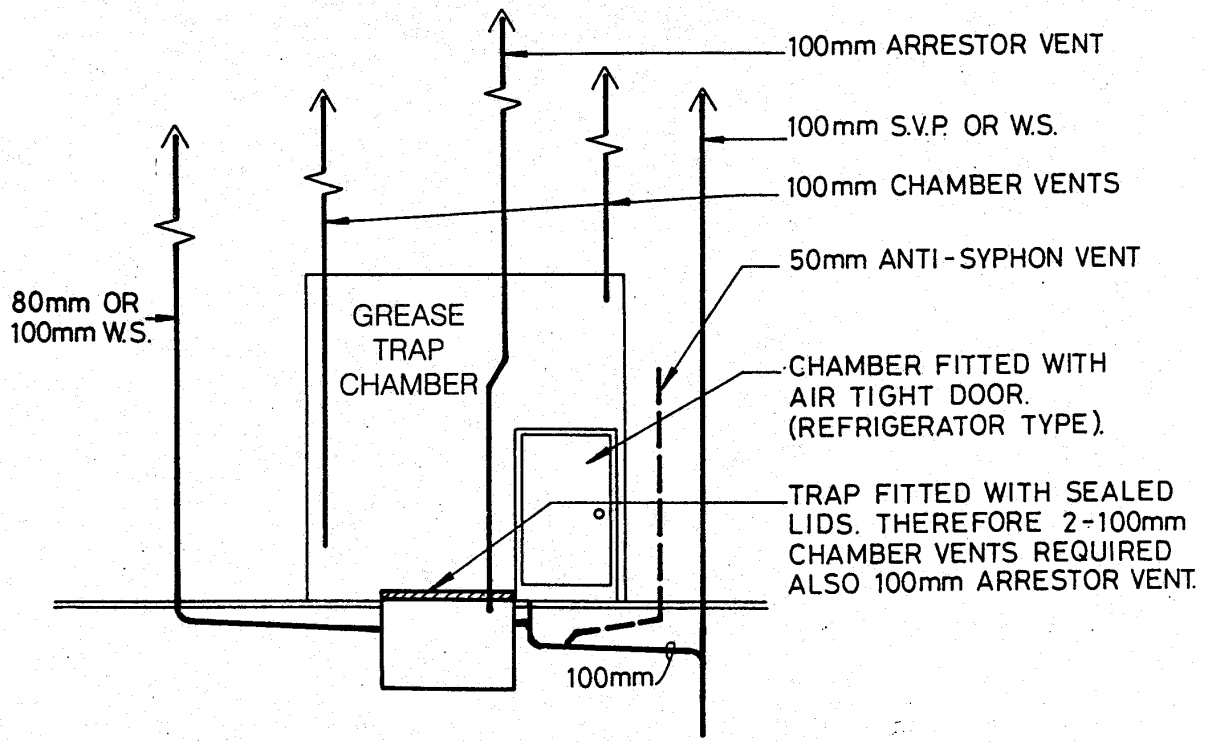


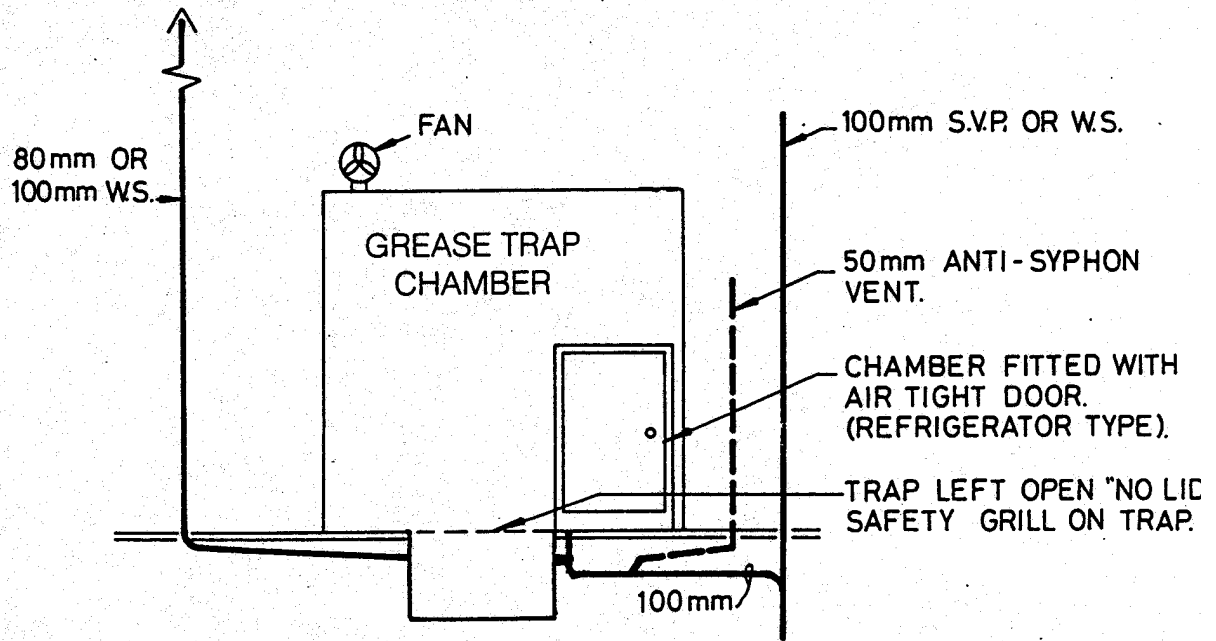
Figure B2.1

Standard silt trap



CHAMBER VENTS MAY BE OMITTED IF MECHANICAL VENTILATION OF CHAMBER IS PROVIDED.

Figure B2.3 Venting of grease trap chambers



CHAMBER VENTS MAY BE OMITTED IF MECHANICAL VENTILATION OF CHAMBER IS PROVIDED.

**Figure B2.4 Venting of grease trap chambers
Alternative mechanical ventilation**

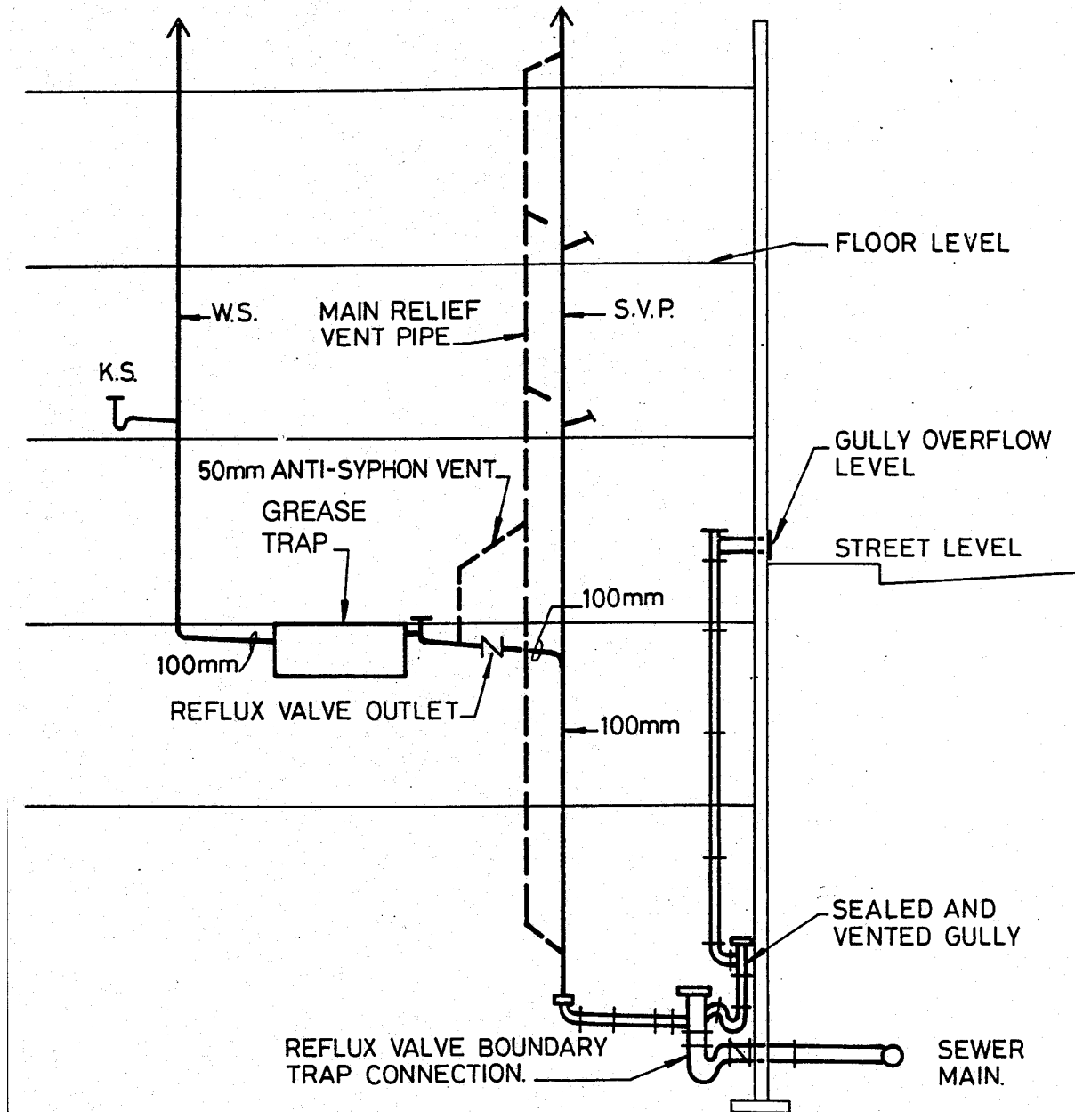


Figure B2.5 Grease trap within multi-storey building

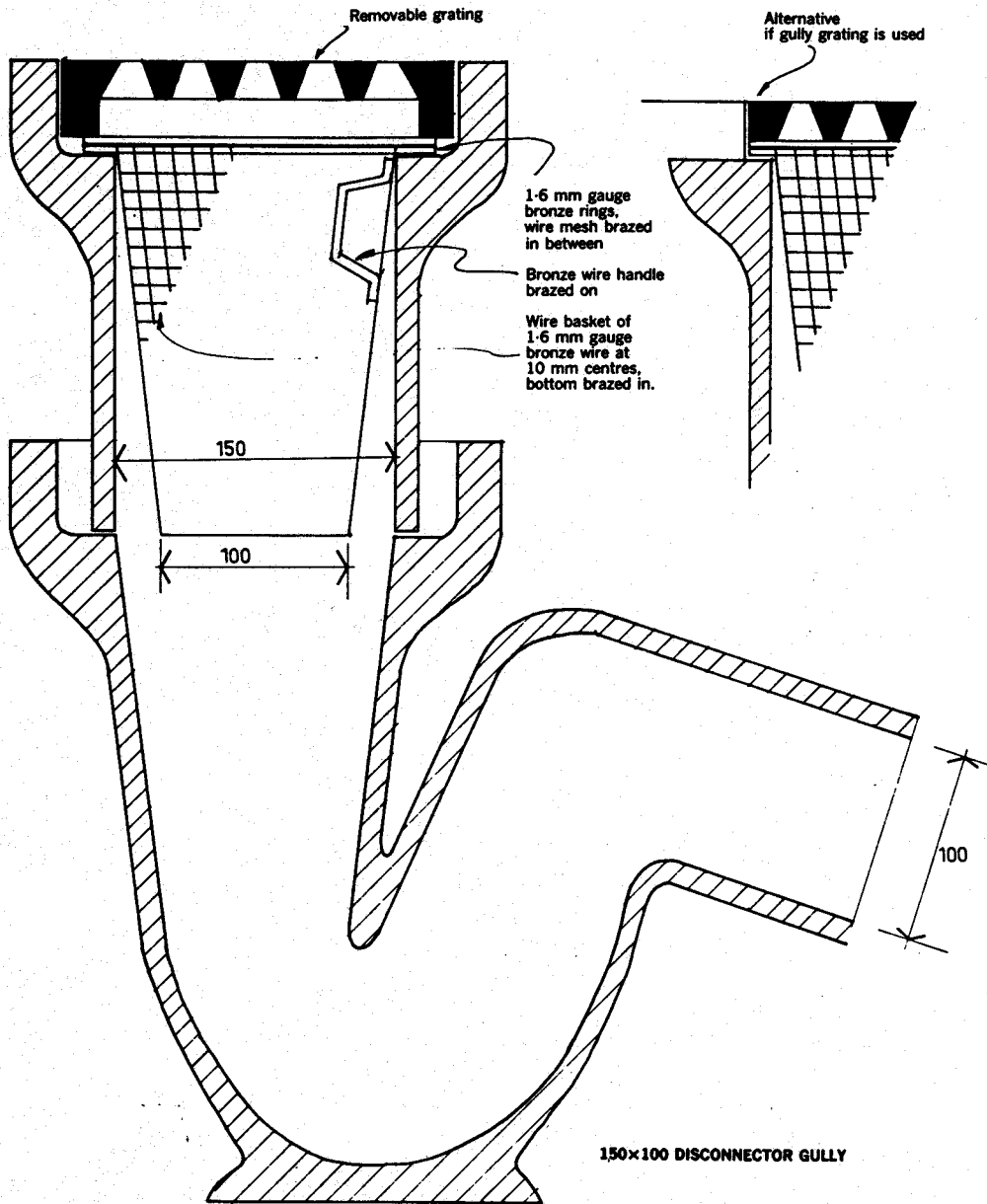


Figure B2.6 Disconnecter gully for food preparation areas

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NOTES

ISBN 0-9757152-3-2
ISBN 0-9757152-4-0

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