

# Guideline for plumbing and drainage: Installing *Code Compliant Work* and *Performance Solutions*

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# **1** Standards: Code compliant work

The responsible person for plumbing and drainage work must ensure the work complies with the *Plumbing Code of Australia* (PCA) and other prescribed codes and standards.

Work done in accordance with this provision is Code Compliant

# 1.1 Plumbing Code of Australia

The Plumbing Code of Australia (PCA) sets out performance requirements for the design, construction, installation, replacement, repair, alteration and maintenance of plumbing and drainage installations. It includes '**Deemed-to-Satisfy**' provisions which call up the AS/NZS 3500 series of standards.

Plumbing or drainage work that complies with the provisions of AS/NZS 3500 are deemed-to-satisfy the performance requirements of the PCA.

Performance Solutions can be used as long as they meet the performance requirements of the PCA (Section A).

# 1.2 Code compliant work

For plumbing and drainage work to be code compliant it must satisfy the performance requirements of the PCA. Compliance with PCA performance requirements can only be achieved by:

- a. Complying with the Deemed-to-satisfy provisions;
- b. Formulating a Performance Solution;

or

c. A combination of (a) and (b).

# 2 Deemed-to-satisfy provisions (DTS)

Plumbing and drainage work, as well as materials or products, which comply with the provisions of AS/NZS 3500 are *Deemed-to-Satisfy* (DTS) the performance requirements of the PCA.

This is the default method that the majority of plumbing and/or drainage work will be installed under.

• Plumbing and drainage work installed in accordance with AS/NZS 3500 is *Code Compliant*.



# **3 Performance Solution**

Plumbing and drainage work can comply with the PCA by formulating a solution that meets the performance requirements of the PCA (i.e. a Performance Solution). The Performance Solution must be equal to or exceed the requirements of AS/NZS 3500.

The use of a Performance Solution will require planning, research and documentation by the applicant. The applicant will need to ensure that it complies with all parts of the PCA as required by Section A.

### 3.1 A Performance Solution must comply

The Performance Solution must:

- a. Comply with the performance requirements; or
- b. Be shown to be at least equivalent to the DTS provisions.

### 3.2 Materials and products used in a Performance Solution

Fair Trading require that all materials and products intended to be used in a Performance Solution must be certified and authorised prior to being used or installed.

# 4 **Performance Solution: Submissions**

The Plumbing and Drainage Act (the Act) and the Plumbing and Drainage Regulation (the Regs) require the responsible person to submit a Notice of Work (NOW) together with documents and information related to the proposed Performance Solution no later than 21 days before work is to be started.

All proposed performance plumbing or drainage solutions are to be sent to Fair Trading, Plumbing Inspection Assurance Service (PIAS), Technical team for an initial review of the information provided. The submission should be made via the MyInspections gateway at <u>https://myinspections.fairtrading.nsw.gov.au/MyInspections/</u> and all attachments should be in electronic format and attached to the submission.

Any file attachments larger than 5mb may be provided on digital media, contact PIAS Technical on 1300 889 099 Monday to Friday 8am to 12pm, for an address to send the digital media.

All submissions received will be acknowledged through MyInspections with a reference number starting with AS.



# 4.1 The initial submission requirements

- a. NOW and Initial fee:
- b. <u>Letter from owner</u>: acknowledging the proposed use of an performance plumbing or drainage solution
- c. <u>Letter from the Network Utility Operator (NUO)</u>: giving consent for connection to their system (if NUO systems are available)
- <u>Evidence of suitability:</u> The responsible person must ensure sufficient information has been provided to demonstrate compliance with PCA *Performance Requirements*.
   **Refer to Table 5.1.2**

# 4.2 Evidence of suitability

Evidence of suitability shows that the use of a design, material, product, form of construction or installation meets the *Performance Requirements* or *Deemed-to-Satisfy provisions*.

The responsible person, and/or the recognised expert must assess the proposed Performance Solution for compliance with PCA performance requirements and provide documents and information to Fair Trading that shows evidence of suitability before starting work.

Evidence of suitability provided will include but is not limited to:

- a. The *assessment method/s* used to determine satisfactory compliance with the PCA performance requirements;
- b. The qualifications and experience of the recognised expert determining whether the plumbing and drainage solution complies.

### 4.3 Requests for additional information

Following the PIAS Technical Support review of the initial Notice of Work (NOW) submission, Fair Trading may issue a written notice to the responsible person to supply additional documents and information within a specified timeframe. The responsible person must comply with the notice.

The written notice may request the following:

- a. Additional expert assessments;
- b. Details of the qualifications of the recognised expert/s the responsible person has relied upon;
- c. Any other requested information on the design and suitability of the proposed Performance Solution.

Note that in the event additional information is requested, work on the installation will be unable to start until the requested information has been supplied to Fair Trading, reviewed, and acknowledged.

Refer to Table 5.1.4

Note that it is the applicant's responsibility to demonstrate that compliance with the PCA has been achieved



# 4.4 Installation of Performance Solution plumbing and drainage work

The responsible person will need to install Performance Solution work in accordance with the design provided to them (by the designer/recognised expert) and as per the version submitted to Fair Trading.

- a. Inspection of the installed work and payment of appropriate fees for the inspection/s is required
- b. Variations or modifications to the original submitted version will require a new submission
- c. Following satisfactory completion of the work the Sewerage Service Diagram (SSD) for the property will be notated that a Performance Solution has been used.

# 5 **Performance Solution: PIAS review**

The following information provides guidelines for Plumbing Inspection Assurance Service (PIAS) Technical Support when checking submissions of proposed Performance Solutions.

To ensure plumbing and drainage work is *Code Compliant,* Fair Trading requires details of a Performance Solution to be submitted prior to starting any work. The purpose of a submission to Fair Trading is to ensure that a responsible person is installing plumbing and drainage work in compliance with the PCA.

Under the requirements of the Act and Regulation all proposals for the installation of a Performance Solution are to be sent to Fair Trading. Following the review, details of the proposal will be sent to the appropriate delegated regulator for any further actions (in areas where Fair Trading is not directly responsible for onsite inspections).

# 5.1 Review of proposed Performance Solutions

#### Important note:

It is not the role of Fair Trading to investigate, prove or disprove that a Performance Solution will meet PCA performance requirements. This is the responsibility of the recognised expert, designer and/or responsible person.

• Fair Trading <u>will not</u> approve or endorse submissions

The review by Fair Trading is to ensure the responsible person has followed PCA process by providing documentary evidence the proposed Performance Solution will meet the Relevant Performance Requirements



#### 5.1.1 Review of initial submission

Due to the nature of Performance Solutions there will be a variation in the actual proposals however there is a basic process to follow as outlined in the regulations.

The Regulation requires the responsible person for plumbing and drainage work to submit an initial bundle of information at the same time a notice of work is submitted.

#### 1) Submitted documents and information

All documents and information provided must be in an electronic format. Large files may be provided on digital media.

- a. MyInspections is the preferred method
- b. Digital media with the relevant documents and information may be mailed only when the information is greater than 5Mb and too large to send via MyInspecitons. (contact PIAS Technical on 1300889099 Monday to Friday 8am to 12pm, for an address to send the digital media)

#### 2) Submission timeframe

Check correct timeframe.

a. The Notice of Work (NOW) and documents must be provided no later than <u>21</u> <u>days before work is to be carried out</u>

#### 3) Document Check

Check the minimum information has been provided, *refer to Table 5.1.2*a. Check for fee, the initial inspection fee is required to be paid at time of submission of NOW

#### 4) Insufficient information submitted

When insufficient information has been provided a written notice is to be issued to the responsible person to provide information or documentation as listed in the notice and within the timeframe specified in the notice.

#### 5) Checking the proposal

It is not the role of Fair Trading to approve proposed installations or to investigate in detail if the work that is proposed meets performance requirements, that is the role of the responsible person and/or the recognised expert providing the evidence of suitability.

However it is still prudent for Fair Trading to ensure the responsible person has followed due process to comply with the PCA, and that:

- the recognised expert/s providing the assessment has suitable industry experience and/or qualifications;
- there are no obvious issues or faults with the proposal that could contravene any requirements or create public health issues.

Accordingly, on a "case-by-case" basis each proposal is to be checked, and Technical Support must be satisfied that:

- a. Correct information and documentation has been provided (refer to Table 5.1.2);
- b. The recognised expert is suitably qualified;
- c. The proposal appears to be satisfactory.



Provided the correct information has been supplied that apparently demonstrates compliance with the PCA the installation of the proposal should proceed.

#### 6) Scenario Examples:

#### 1. Qualifications

- a. <u>Issue</u>: A proposal is received from a responsible person for the installation of a new form of sanitary plumbing "stack-work" to a multi-storey building that deviates greatly from AS/NZS 3500 requirements.
- b. <u>Qualifications of the designer</u>: The provided information indicates the person that designed the system is an engineer but no further details are available (for example, an electrical engineer would not be acceptable).
- c. <u>Response</u>: A written notice to be issued to the responsible person requiring them to provide further information about the qualifications of the person they have relied on to design the system. This should include examples of their experience or previously designed (similar) plumbing installations, as well as their formal qualifications. Refer to Table 5.1.4 Item (8).

#### 2. Design

- a. <u>Issue</u>: A proposal is received from a responsible person for the installation of a drainage system that uses a maximum size of 90mm diameter pipe for the main drain of a commercial building.
- b. <u>Qualifications of the designer</u>: The provided information indicates the person that designed the system has suitable qualifications and experience to design the system.
- c. <u>The design</u>: Technical Support finds that despite the designer's qualifications they are not satisfied the system will work due to insufficient evidence supplied to support the design.
- d. <u>Response</u>: A written notice to be issued to the responsible person requiring them to provide further evidence to support the use of the design and/or additional recognised expert judgement that the drainage solution will comply with the PCA performance requirements. Refer to Table 5.1.2 Item (6) and Table 5.1.4 Item (7).



### 5.1.2 Table 5.1.2 Checklist for initial NOW submission

Table 5.1.2 provides a guide to the type of information required as part of a submission under the Plumbing and Drainage Regulation 2017 for the responsible person to give documents and information at the same time as a NOW.

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Item	Title	Description of requirement
1.	NOW	NOW must be submitted (electronically), and;
	submitted	must be received at least 21 days before work is due to start
	within	
	timeframe	
2.	Fee	Operationally, PIAS require payment of the initial inspection fee at the time of submission (not when work starts)
3.	Covering	Property details, and;
•.	letter	Summary description of the proposal stating if the whole job is to be installed under
		a Performance Solution or part only
4.	Owners	Owner is to acknowledge they have been made aware that a Performance Solution
	letter	is to be used
5.	Network	Letter/evidence supplied of NUO consent to connect to their system/s (relates to
	Utility	connection conditions, discharges to their system etc)
	Operator	
	(NUO) letter	
6.	Evidence of	Evidence in accordance with Section A of PCA;
	suitability	Documentary evidence of the assessment method used to demonstrate the
	,	acceptable performance of the Performance Solution.
		Note: assessment must be by a person that has an appropriate level of
		knowledge and qualifications to determine if it complies.



### 5.1.3 Response to submission

A response notice in writing may be issued to the responsible person requesting additional information and documents as specified in the notice.

### 5.1.4 Table 5.1.4 Response letter checklist

Table 5.1.4 provides a guideline for the type of information requested under the Plumbing and Drainage Regulation 2017 requiring the responsible person to provide documents or information.

Item	Title	Description of requirement
7.	Expert assessment	Provide additional recognised expert assessment of the proposed work.
8.	Qualification and experience	<ul> <li>A Curricula Vitae or similar is required to show demonstrated technical knowledge of the issues involved (appropriately qualified recognised expert)</li> <li>Fair Trading must be satisfied the person responsible for developing the Performance Solution has an appropriate level of knowledge and qualifications</li> </ul>
9.	Plan	Plan of the proposed installation that has been designed by an appropriately qualified recognised expert
10.	Any other information or supporting documents	Any other information or evidence appropriate to support the submission (as specified in the notice)

# 5.2 Satisfactory review

When Fair Trading is satisfied all requirements have been met, a letter of acknowledgment will be issued to the responsible person with details of inspection requirements.

- Letter to acknowledge that PCA requirements appear to have been met
- Letter will detail inspection requirements and contact details for inspections bookings.



# **6 Performance Solutions: Inspections**

### 6.1 Inspections in Sydney and Newcastle areas

For areas where Fair Trading directly conducts on-site inspections, Performance Solution inspections will be conducted using the standard inspection process.

- The initial fee paid covers the first onsite inspection
- Any additional inspections require additional fees
- Details of the Performance Solution will be made available to the inspector
- Inspections of Performance Solutions will involve checking compliance with the submitted design or installation details that were submitted for review.

# 6.2 Inspections in regional areas

For Performance Solution installations in regional areas of NSW where regulation has been delegated, full details of the solution will be referred to the relevant council.

- PIAS Technical Support will continue to liaise with the local regulator for conducting inspections, and provide technical support
- Local inspection process and fees will apply.

# 7 Review

Reviews may be done in response to new legislation, process changes and postimplementation feedback from Business Unit or as required.