Issue: FPAA101D Automatic Fire Sprinkler System, Design and Installation – Domestic Water Supply

To: Licensees / Contractors / the Plumbing and Fire Protection/Sprinklers Industry

From: PIAS Strategy, Building Services, Fair Trading Parramatta

Date: August 2019

Scope: Applies to all of NSW

Issue

FPAA101D:2018 to be referenced in the Plumbing Code of Australia (PCA) 2019

Objective

To provide a life safety benefit to occupants in a building by requiring a level of sprinkler protection where none was previously required in Class 2 and 3 Sole Occupancy Units (SOU) in buildings which are more than three stories and less than 25m in effective height, thereby increasing the available safe egress time.

Detail

FPAA101D:2018 is a new technical standard that has been developed to specify the minimum requirements of a fire sprinkler system for buildings which are less than 25m in effective height and contain Class 2 and 3 Parts. This system is supplied from the building’s domestic water supply system and is referred to as a FPAA101D sprinkler system.

AS 2118.5 has been referenced as the basis for FPAA101D:2018 with variations to create the FPAA101D sprinkler system.

The Plumbing Code of Australia (PCA) 2019 edition was adopted on May 1st 2019 and references FPAA101D:2018 adopting the requirements of this technical standard.

Licencing (more information can be found in the license categories table on p3)

The holder of the below license categories can undertake the following types of work:

- **plumber or water plumber**, can install a domestic water service, or any form of fire system (unless a specific exclusion appears on their license).
- **water plumber (fire protection system)**, can install a fire protection system consisting of water pipes, fire hydrants, fire hose reels, fittings, including water storage or pumping facilities, installed solely for firefighting and extinguishing purposes in and around a building or property, and which may include part of a fire sprinkler system.
- **water plumber (fire sprinkler system)**, can install a fire sprinkler system from beyond the sprinkler valve assembly only.

Regulation

Plumbing and drainage work in NSW is regulated under the Plumbing and Drainage Act 2011 (the Act), and excludes the construction of, or work on, fire suppression systems. In relation to the FPAA101D sprinkler system, any part of the domestic water service which supplies a sanitary facility downstream is plumbing and drainage work regulated under the Act. The parts of the service that supply fire sprinklers only are fire suppression and are regulated by the buildings principle certifying authority under the Environment Planning and Assessment Act 1979. (Figure 1)
Pipework indicated in blue is fire suppression regulated under the Environment Planning and Assessment Act 1979 and can be installed by a:
- Plumber,
- Water Plumber,
- Water Plumber – Fire Protection System or
- Water Plumber – Fire Sprinkler System

Pipework indicated in green is plumbing and drainage work regulated under the Plumbing and Drainage Act 2011 and can only be installed by a:
- Plumber or
- Water Plumber.

FPAA101D sprinkler system – Figure 1
License Categories

The below table lists the license categories related to water plumbing as listed in Home Building Regulation 2014, Schedule 4 - Extended Description of Work.

<table>
<thead>
<tr>
<th>Work category</th>
<th>Description of work authorised</th>
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| Plumbing               | Work of water plumbing, work of sewerage or work of sanitary plumbing, but excluding work within the specialist category of drainage or the residential building work category of roof plumbing.  
  For the purposes of this category:  
  work of water plumbing means work carried out in connection with the supply or conveyance of water and includes the installation, alteration, extension, disconnection, removal, renewal, repair and maintenance of pipes, tanks, fixtures, appliances and fittings designed to convey, store, protect, treat, mix, measure, modify or regulate the flow of water, including hot water. |
| Water plumbing         | Work of water supply (being the construction, alteration, extension, disconnection, removal, maintenance, repair, renewal or clearing of any pipes or fittings of any water service connecting or intending to connect, directly or indirectly with a water main) including such work on pipes and fittings, whether or not connected or intended to be connected to a water main, that are in a building in which any part of the sewerage service is connected to an onsite wastewater management system. |
| Water plumbing—Fire protection systems | Water plumbing involved in a fire service as defined in AS/NZS 3500.0:2003, Plumbing and drainage Part 0: Glossary of terms, including a fire sprinkler system and connection of the system to a water main. |
| Water plumbing—Fire sprinkler systems | Water plumbing involved in the fire sprinkler system installed beyond the sprinkler valve assembly. |

Reference

Plumbing and Drainage Act 2011  
Home Building Act 1989  
Plumbing Code of Australia 2019  
Environment Planning and Assessment Act 1979  
Plumbing and Drainage Regulation 2017  
Home Building Regulation 2014  
AS/NZS 3500  
AS 2118

Contact

For more information, please email: PIASstrategy@customerservice.nsw.gov.au

This advisory note has been approved for issue by the PIAS Technical Review Committee. Information contained within this document is current as at March 2019 and refers to codes and standards current at the time of writing.

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