

TECHNICAL NOTICE ANZTN028

RAUTITAN FOR USE IN AUTOMATIC FIRE SPRINKLER SYSTEMS CONFORMING TO FPAA101D

Products: RAUTITAN platinum / red / One
Date: 23 June 2020 (v3)

Change to the NCC-

NCC 2019 (effective from 1st May 2019) now requires all new Class 2 and 3 residential buildings with a rise in storeys of four or more (and an effective height of 25 metres or less), to have automatic fire sprinklers installed under the Deemed-to-Satisfy (DTS) provisions.

In addition to the increased requirement the NCC references a new type of sprinkler system as defined by the standard FPAA101D. This type of system reduces the cost and draws water from the drinking water supply of the residential building and as such, requires PE-X pipe and fittings to be WaterMarked to AS 2492 and AS/NZS 2537 respectively.

RAUTITAN System Solution-

REHAU's RAUTITAN PE-Xa pipe and accompanying fittings are WaterMarked and certified to the applicable standards. RAUTITAN is the only PE-X system in Australia with pipe sizes from 16-63mm.

Commissioning Procedure-

When RAUTITAN is installed in a system conforming to FPAA101D, to be in alignment with our commissioning procedure for fire systems, it is compulsory to completely flush the system and confirm flow at each sprinkler connection point. As such the RAUTITAN fire system procedure is as follows:

- a) Commissioning as per FPAA101D

In addition, completely flush the sprinkler piping network and confirm flow at each sprinkler connection point, prior to the connection of sprinklers.

- b) Pressure test in accordance with the RAUTITAN Technical Information

System Identification Requirements-

FPAA101D does not explicitly state any requirements for identification of the sprinkler system. Should an installer or a particular project require marking / pipe identification, we recommend that the marking / labelling be non-adhesive (e.g. no stickers etc) and not detrimental to PE-X material. See example images below.



Typical RAUTITAN FPAA101D Fire Sprinkler System-

The below schematic is Figure 1 from FPAA101D, showing a Sample system diagram of an FPAA101D sprinkler system. For each sprinkler scenario (Marked A – D), the accompanying diagrams and table outline the respective RAUTITAN Solution.

Please note: The sizes indicated are as anticipated based on experience and market feedback and do not represent the actual required sizes for any given installation situation / project and are not intended to replace actual hydraulic calculations.

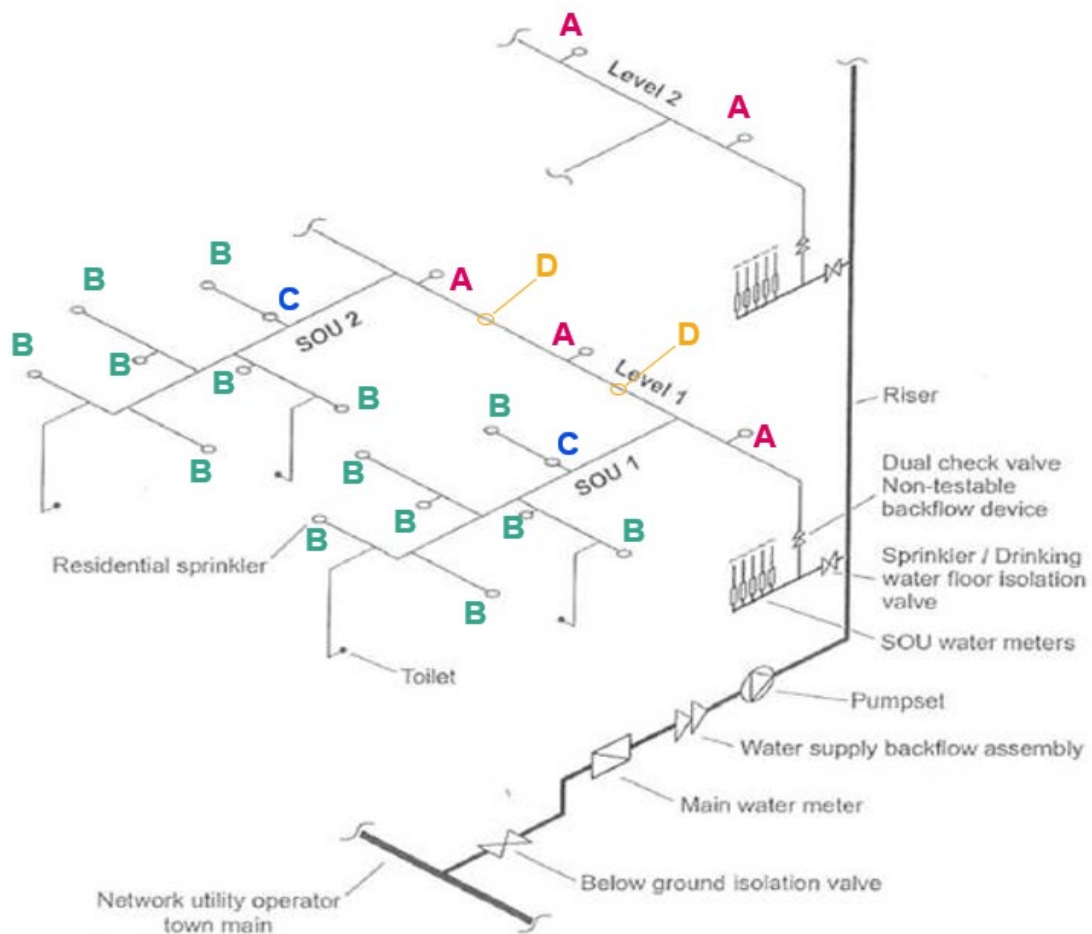
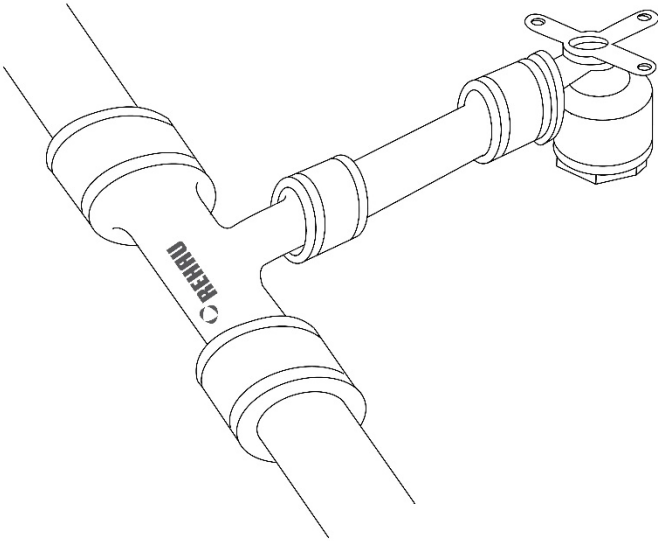


Figure 1 – Sample system diagram of an FPAA101D sprinkler system

Diagrams-

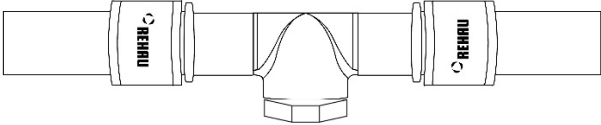
A-



B-



C / D (Q1 2020) -



Sprinkler Scenario	Scenario Description	Scenario Sub-category	Article Description	Article Option	REHAU Article Numbers	Reece Article Numbers
A	Floor lobby / hall - end of line / branch	Sprinkler connection → mainline tee	As per B below			
		Main line to tee (32mm / 40mm)	32mm Pipe	50m Coil	132230-050	1450657
				5m Straight	132330-005	1450639
			32-25-32mm Tee	-	216962	1451021
			32mm PX Sleeve	-	160004	1450513
			40mm Pipe	5m Straight	132340-005	1450658
			40-25-40mm RAUTITAN Tee	-	218061	1451023
40mm RAUTITAN PX Sleeve	-	160005	1450514			
B	SOU end of line / branch	Sprinkler connection → branch	25mm PX Sleeve	-	160003	1450512
			25mm Pipe	50m Coil	132320-050	1450656
				5m Straight	132320-005	1450638
			No. 15	25 – Rp1” FI	218682	1451083
			<i>Bush Reducing Brass</i>	25mm x 15mm	-	207110
<i>Bush Reducing Brass</i>	25mm x 20mm	-	207115			
C	SOU in line	Q1 2020	25mm Pipes & Sleeves	As per B above		
			25-Rp ³ / ₄ ”-25mm Tee	-	456296-001	1451180
			<i>Bush Reducing Brass</i>	20mm x 15mm	-	207075
D	Floor lobby / hall – in line	Q1 2020 (32mm / 40mm)	32mm Pipe & Sleeves	As per A above		
			32-Rp1”-32mm Tee	-	456299-001	TBC
			40mm Pipe & Sleeves	As per A above		
			40-Rp1”-40mm Tee	-	456300-001	TBC
			<i>Bush Reducing Brass</i>	As per B above		

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