

The image displays a collection of CPG FirePex plumbing components. In the foreground, a long, orange, flexible PEX pipe lies horizontally. Surrounding it are various brass and chrome-finished fittings, including elbows, tees, and straight connectors. Some fittings feature orange O-rings. A metal bracket with a screw is also visible on the right. The background is a light gray grid with faint technical drawings and arrows, suggesting a professional or industrial setting.

CPG

FirePex



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# PEX DOMESTIC FIRE SPRINKLER SYSTEM

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## AUSTRALIA FIRST PEX PIPES USED FOR DOMESTIC FIRE SPRINKLER SYSTEM

When it comes to domestic fire sprinkler system, CPG pex domestic fire sprinkler system is your best option.



# CPG Firepex

The CPG PEX Domestic Fire Sprinkler System is designed to be used in potable cold water systems. The CPG pipe is a multi-layer composite system. It consists of an inner layer of cross-linked polyethylene (PE-X), an adhesive layer, an aluminium layer, an adhesive layer, an outer layer of distinctive orange coloured cross-linked polyethylene (PE-X) in sizes 25 mm to 32 mm. The colour orange is unique and easily identified. The pipe and fittings have been certified in accordance with AS4176.2 & AS4176.3



EASY INSTALLATION



TIME SAVING



LIGHT WEIGHT



COST EFFECTIVE



25 YEAR WARRANTY





# System Description

The FPAA101D sprinkler system is a fire sprinkler system supplied from the building's drinking water supply system for buildings the FPAA101D sprinkler system extends from the building's drinking water supply system on each floor. This configuration eliminates the need for a dedicated sprinkler system (i.e. dedicated water supply, tapping, pump set, control valve assembly, riser, etc.).



Each floor has a branch from the building's drinking water supply riser to feed both the sprinkler system and drinking water supply system for that floor level. The branch includes an isolation valve to allow the simultaneous isolation of both the drinking water supply system and sprinkler system to that floor level. Downstream of this isolation valve, the sprinkler system separates from the drinking water supply system at a tee to serve the sprinklers and toilets. The sprinkler system incorporates a backflow prevention device downstream of the tee and then reticulates throughout the floor level.

The FPAA101D sprinkler system has the added benefit of having a regularly monitored water supply. Because the sprinkler system is supplied by the building's drinking water supply system, any interruption or reduction in drinking water supply to domestic appliances (taps, showers, etc.) indicates an interruption or reduction in the water supply to the FPAA101D sprinkler system. See Sample System Diagram on following page for an illustration of this system configuration.

## NOTES:

### 01

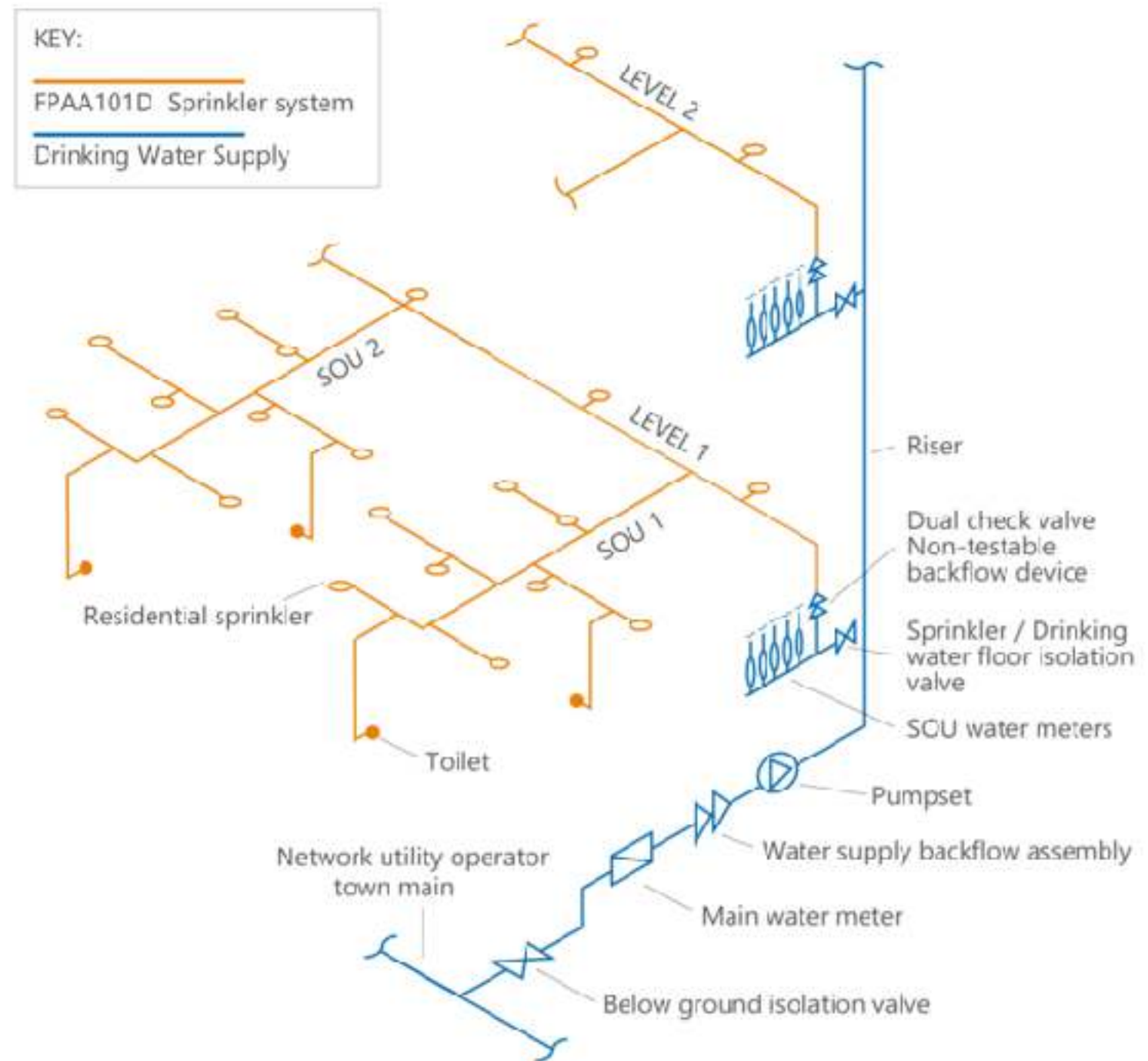
**A building with an FPAA101D sprinkler system would have two pipes entering each Class 2 or 3 SOU:**

- The drinking water supply pipe (as present); and
- The FPAA101D sprinkler system pipe.

### 02

**The connection of the toilets to the sprinkler system pipework effectively provides multiple points of end of-line monitoring for that floor level.**

# SAMPLE SYSTEM DIAGRAM

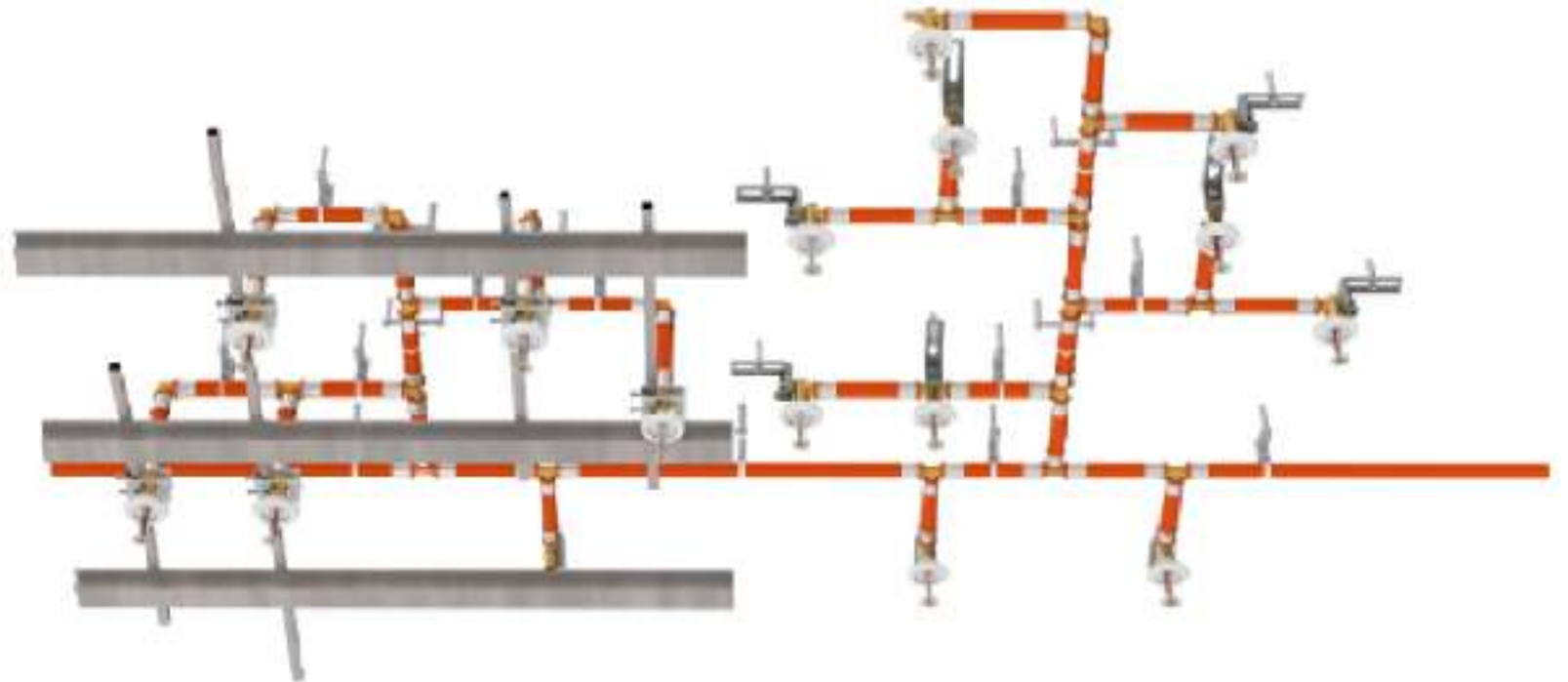




# INSTALLED SYSTEM TOP VIEW



# INSTALLED SYSTEM BOTTOM



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# Features

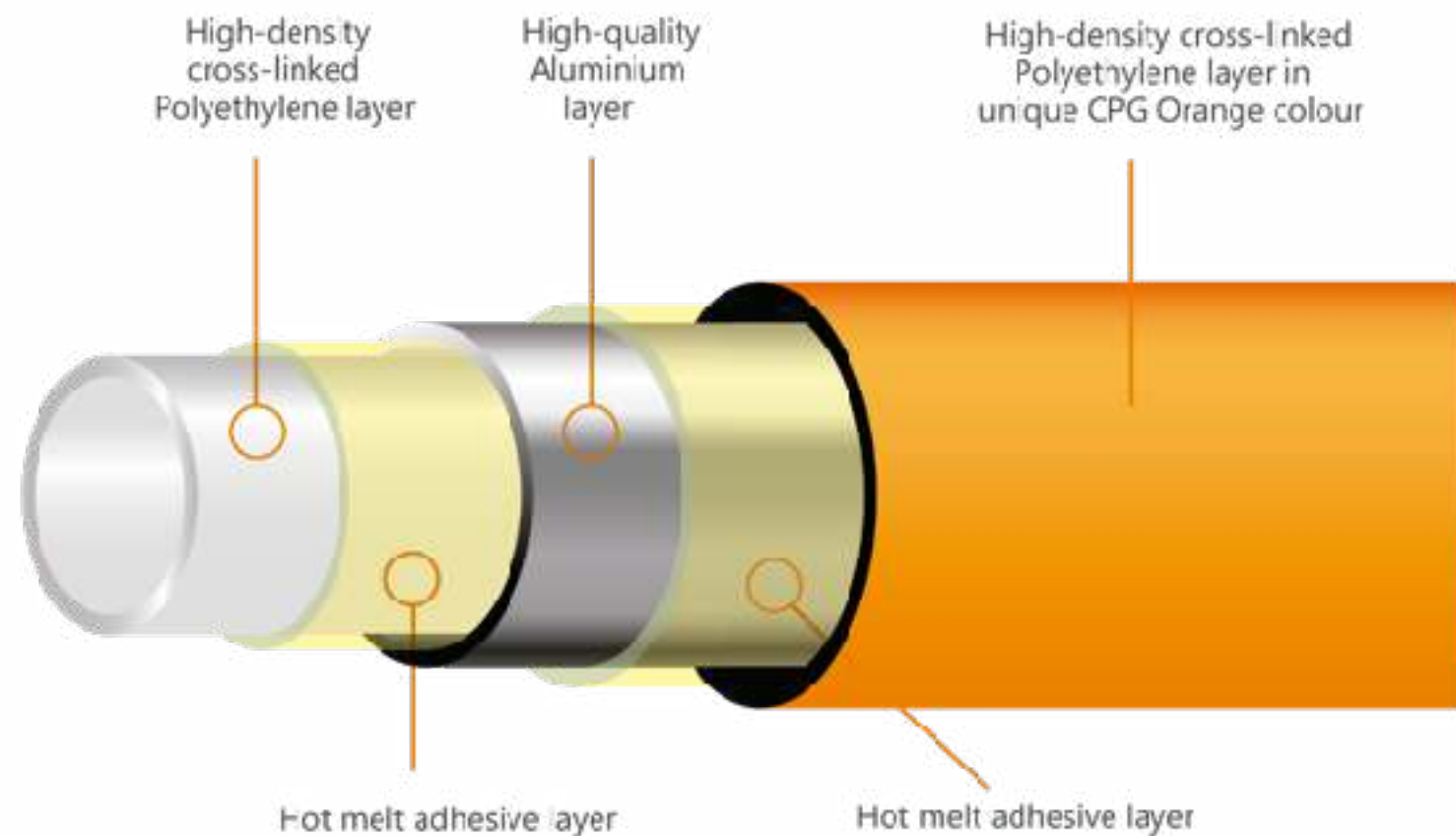
THIS REVOLUTIONARY SOLUTION MAKES INSTALLATION JOB  
QUICKER AND EASIER.

- ✔ Hygienic and non-toxic
- ✔ Easily identified
- ✔ Lowering material and labour costs
- ✔ Convenient and reliable installation
- ✔ Flexible
- ✔ 25 year warranty
- ✔ High temperature and high pressure resistance
- ✔ Oxidation resistance
- ✔ Corrosion resistance
- ✔ No welding required for installation
- ✔ Light weight



# CPG PEX PIPE LAYER DIAGRAM

The CPG Pex Pipe is a five-layer construction. The pipe consists of a layer of welded aluminium with polyethylene inner and outer layers which are bonded together with a special purpose hot melt adhesive.



# Technical Data

## WATER PRESSURE LOSS TABLE FOR PIPES AND FITTINGS

| PIPES SIZE      |               |                 |               |                 |               |                 |               |
|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
| Ø 16 x 2 mm     |               | Ø 20 x 2.2 mm   |               | Ø 25 x 2.6 mm   |               | Ø 32x 3.4 mm    |               |
| Volumetric flow | Pressure Loss | Volumetric flow | Pressure Loss | Volumetric flow | Pressure Loss | Volumetric flow | Pressure Loss |
| Q               | Hf            | Q               | Hf            | Q               | Hf            | Q               | Hf            |
| (l/s)           | (kPa/m)       | (l/s)           | (kPa/m)       | (l/s)           | (kPa/m)       | (l/s)           | (kPa/m)       |
| 0.16            | 1.79          | 0.16            | 0.52          | 0.16            | 0.17          | 0.16            | 0.05          |
| 0.19            | 2.46          | 0.19            | 0.72          | 0.19            | 0.23          | 0.19            | 0.07          |
| 0.22            | 3.23          | 0.22            | 0.94          | 0.22            | 0.31          | 0.22            | 0.09          |
| 0.25            | 4.09          | 0.25            | 1.20          | 0.25            | 0.39          | 0.25            | 0.12          |
| 0.27            | 4.71          | 0.27            | 1.38          | 0.27            | 0.45          | 0.27            | 0.14          |
| 0.32            | 6.46          | 0.32            | 1.89          | 0.32            | 0.61          | 0.32            | 0.19          |
| 0.37            | 8.45          | 0.37            | 2.47          | 0.37            | 0.80          | 0.37            | 0.24          |
| 0.42            | 10.69         | 0.42            | 3.13          | 0.42            | 1.01          | 0.42            | 0.31          |
| 0.48            | 13.69         | 0.48            | 4.01          | 0.48            | 1.29          | 0.48            | 0.39          |
| 0.53            | 16.44         | 0.53            | 4.81          | 0.53            | 1.56          | 0.53            | 0.47          |
| 0.64            | 23.31         | 0.64            | 6.83          | 0.64            | 2.21          | 0.64            | 0.67          |
| 0.74            | 30.51         | 0.74            | 8.93          | 0.74            | 2.89          | 0.74            | 0.87          |
| 0.85            | 39.43         | 0.85            | 11.55         | 0.85            | 3.73          | 0.85            | 1.13          |
| 0.96            | 49.40         | 0.96            | 14.46         | 0.96            | 4.67          | 0.96            | 1.42          |
| 1.06            | 59.35         | 1.06            | 17.38         | 1.06            | 5.61          | 1.06            | 1.70          |
| 1.33            | 90.36         | 1.33            | 26.45         | 1.33            | 8.55          | 1.33            | 2.59          |
| 1.59            | 125.77        | 1.59            | 36.82         | 1.59            | 11.90         | 1.59            | 3.61          |
| 1.86            | 168.16        | 1.86            | 49.23         | 1.86            | 15.91         | 1.86            | 4.82          |
| 2.12            | 214.27        | 2.12            | 62.73         | 2.12            | 20.27         | 2.12            | 6.14          |
| 2.39            | 267.54        | 2.39            | 78.33         | 2.39            | 25.30         | 2.39            | 7.67          |
| 2.65            | 323.92        | 2.65            | 94.84         | 2.65            | 30.64         | 2.65            | 9.29          |

# Fittings

| C                          | SIZE (mm) | EQUIVALENT LENGTH (m) |
|----------------------------|-----------|-----------------------|
| Straight Coupling          | 25        | 0.07                  |
|                            | 32        | 0.07                  |
| Reducing coupling          | 32 x 25   | 0.07                  |
| Straigh Male Coupling      | 25        | 0.05                  |
|                            | 32        | 0.06                  |
| Equal 90°Elbow             | 25        | 0.1                   |
|                            | 32        | 0.11                  |
| Equal Tee                  | 25        | 0.16                  |
|                            | 32        | 0.18                  |
| Male Tee                   | 25        | 0.15                  |
|                            | 32        | 0.16                  |
| Female Tee (long )         | 25 x 50   | 0.18                  |
|                            | 32 x 50   | 0.18                  |
|                            | 25 x 90   | 0.24                  |
|                            | 32 x 90   | 0.24                  |
| Female Elbow °90(long)     | 25 x 90   | 0.15                  |
|                            | 32 x 90   | 0.15                  |
| Female Coupling            | 25 x 90   | 0.09                  |
|                            | 32 x 90   | 0.09                  |
| Female Elbow 90°<br>Copper | 25        | 0.11                  |
|                            | 32        | 0.13                  |
| Female Tee Copper          | 25        | 0.14                  |
|                            | 32        | 0.15                  |



# Installation



Cut the pipe to required length with the special pipe cutter.



Ream the pipe by pushing the reamer into the pipe and turning. This cuts the pipe end straight while cutting chamfers on the inside and outside of the pipe end. The design of the reamer will prevent shavings from falling into the pipe.



Inspect the stainless steel sleeve for any cracks and then fit it over the pipe to be flush with pipe end.



Crimp the sleeve with a crimping tool.  
1. Locate the tool's jaws tight against the collar.  
2. Compress the sleeve by closing the crimping tool until the handles meet and make a "clicking" sound.  
Do this only once.



Finished

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# Warranty

CPG pex domestic fire sprinkler system carries a 25 Years warranty from the of purchase

This warranty covers any faults caused by defective manufacturing of the fittings under the brand name of Copper Press. It does not cover faults arising from incorrect installation. This warranty will apply only under following clauses:

## **Installation Must Be Carried Out:**

- By A Licensed Plumber/ Fire Sprinkler Fitter
- In Accordance With CPG Installation Instructions.
- In Accordance With The Relevant Local And National Plumbing Codes And Standards.

## **This Warranty Does Not Include:**

- Faulty Workmanship
- Normal Wear And Tear.
- Lack Of Maintenance.
- Incorrect Installation Method.
- Misuse Of The Product.

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# Contact

For more information or to place an order, please contact us on any of the below methods.

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