RSP FIRE SPRINKLER SYSTEMS

WATER SUPPLIES FOR RESIDENTIAL & DOMESTIC SPRINKLER SYSTEMS

RSP FIRE SPRINKLER SYSTEMS

IT'S ALL ABOUT FLOW RATES & PRESSURE

RSP FIRE SPRINKLER SYSTEMS

FLOW RATES
PROVIDE SUFFICIENT VOLUME OF WATER TO CONTROL A FIRE
(Measured in litres/per minute)

RSP FIRE SPRINKLER SYSTEMS

PRESSURE

ISURES THE WATER GETS TO ALL SPRINKLE
RTICULARY THOSE THAT ARE FURTHEST AW
AND AT THE HIGHEST POINT IN A BUILDING

(measured in Bar)

RSP FIRE SPRINKLER SYSTEMS

A typical flow and pressure requirement for A three bedroom house

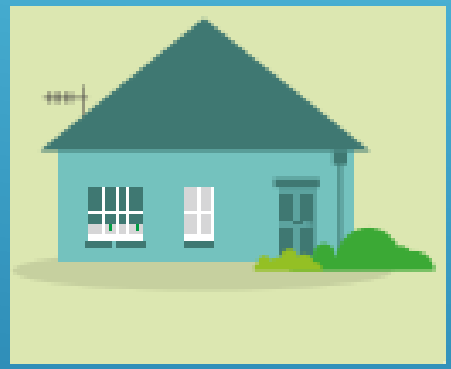
Say 68 litres/min @ 1.5 Bar

RSP FIRE SPRINKLER SYSTEMS

DWR CYMRU WELSH WATER GUARANTEE JUST 9 LITRES/MIN AT 1 BAR

RSP FIRE SPRINKLER SYSTEMS

GUARANTEED
9 LITRES @ 1 BAR



REQUIRED
68 LITRES @ 1.5 BAR

FLOW & PRESSURE TEST

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FLOW TEST FAILS TO MEET FLOW & PRESSURE REQUIREMENTS

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Not very practical!

RSP FIRE SPRINKLER SYSTEMS

FLOW TEST ACHIEVES FLOW RATE BUT NOT PRESSURE REQUIREMENTS

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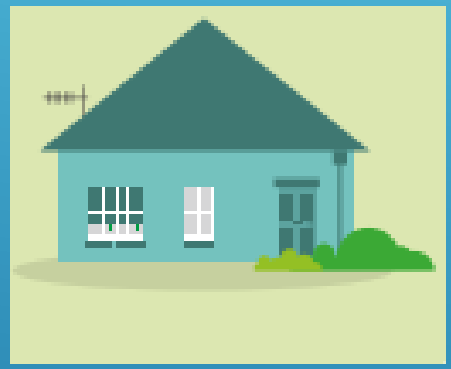
Usually Manageable

RSP FIRE SPRINKLER SYSTEMS

GUARANTEED
9 LITRES @ 1 BAR



REQUIRED
68 LITRES @ 1.5 BAR

FLOW & PRESSURE TEST

RSP FIRE SPRINKLER SYSTEMS

Pump duty

Unanswered

Test location

Resi riser under kitchen sink

Flow in litres per minute

45L

Pressure in bars

1.5 Bar

Most remote test location

Unanswered

AVOID SYSTEM FAILURE BY PRE CONSTRUCTION

RSP FIRE SPRINKLER SYSTEMS

THE FAILSAFE ALTERNATIVE (but with regulatory issues!)

WATER SUPPLIES

DEDICATED SPRINKLER ‘RING’ MAIN WITH PRESSURE AUGMENTATION PUMP

A concrete base & plinth will need to be installed by the principal contractor within the sprinkler

Panel to incorporate
13A single phase fused spur
(see slide 15 for Western Power Data)

Tube heater