

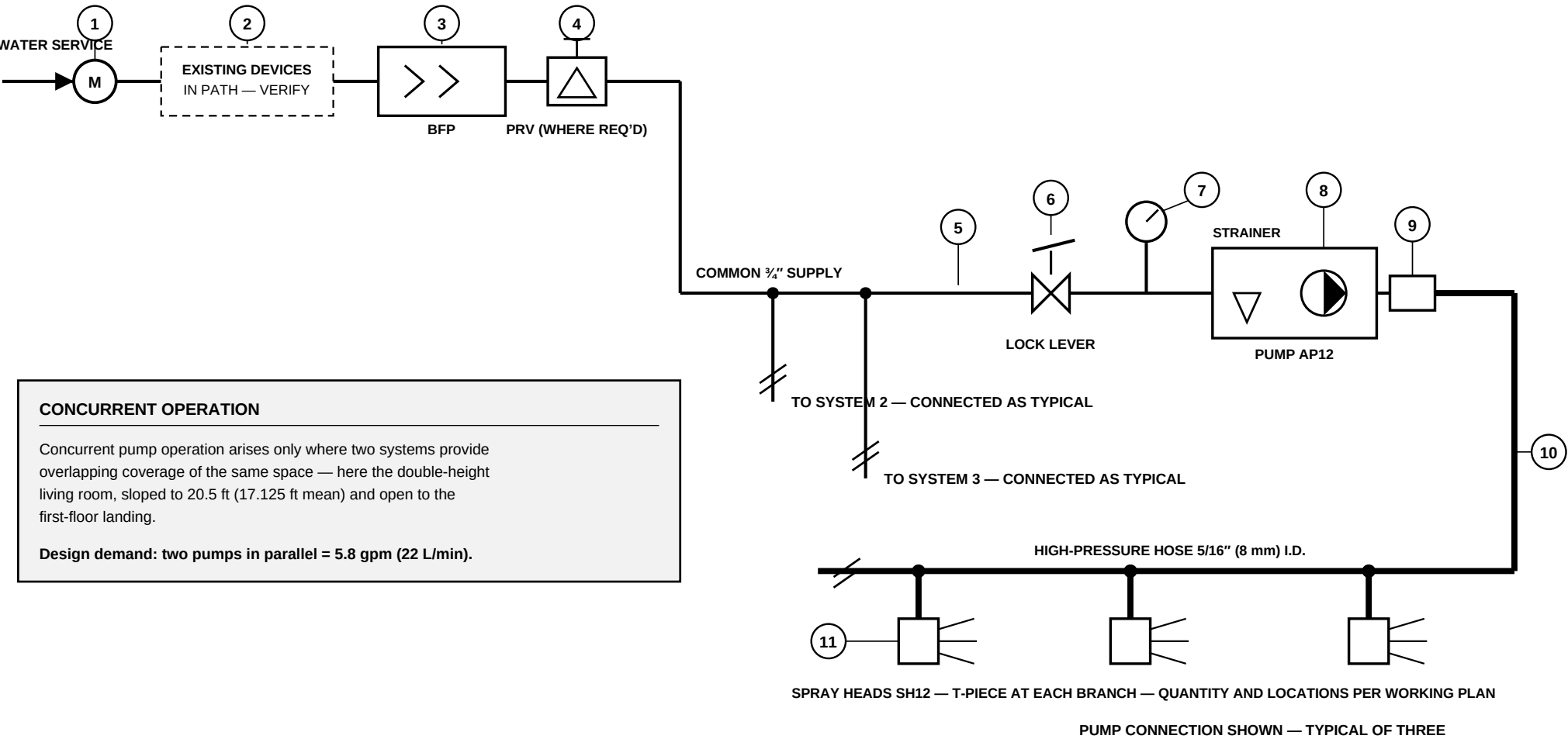
WATER SUPPLY CONNECTION SCHEMATIC

Plumis Automist targeted water mist system — UL 2167A, Certificate UL-US-2440774-0 — Ref. 316811, 113N Iliff St
All section and figure references are to the Automist AP09 & AP12 DIOM, Version 2.0, 4 August 2025.

SCHEMATIC — NOT TO SCALE

Single line. Pipe sizes and lengths as noted.

LOW-PRESSURE SUPPLY HIGH-PRESSURE HOSE



CONCURRENT OPERATION

Concurrent pump operation arises only where two systems provide overlapping coverage of the same space — here the double-height living room, sloped to 20.5 ft (17.125 ft mean) and open to the first-floor landing.

Design demand: two pumps in parallel = 5.8 gpm (22 L/min).

GENERAL NOTES

- A. The system connects to the domestic cold water supply as a low-flow appliance-type connection. Each pump requires not less than 2.9 gpm (11 L/min) at not less than 14.5 psi and not more than 43.5 psi dynamic, measured at the supply valve to the pump.
- B. High-pressure distribution is dry and unpressurised until the pump operates. No sealant, tape or lubricant on any high-pressure connection.
- C. The system is pre-calculated. Supply boundary conditions are identical for every pump irrespective of the number of spray heads or zones served, so the pump connection detail is typical throughout.
- D. Upstream valves and devices shall not reduce the available supply below the DIOM required flow and dynamic pressure at the pump supply valves. No valve or device other than those shown shall be installed between an isolation valve and the spray heads.

KEYNOTES

COMMON SUPPLY

- 1 Water service and meter. Size as noted. Automist simultaneous design demand: 5.8 gpm (22 L/min). Verify available service capacity and minimum dynamic pressure at the applicable pump supply valves under concurrent operation.
- 2 Existing devices in the supply path — softener, whole-house filter, existing regulator, existing check or dual-check valve. Verify on site. Identify any capable of restricting or interrupting flow.
- 3 Backflow preventer, upstream of all pumps. Type, size and pressure loss as noted. Per CFC 904.11.1.3 and the Los Angeles Plumbing Code.
- 4 Pressure reducing valve where required to maintain pump inlet pressure within 14.5–43.5 psi (1–3 bar) under flowing conditions. Set maximum 43.5 psi (3 bar). DIOM §9.1.

PUMP CONNECTION — TYPICAL OF THREE

- 5 Dedicated 3/4" cold water branch to each pump.
- 6 Certified lock-lever isolation valve. Secured open, permanently identified, positioned so the connection point is not obstructed once the pump is installed. DIOM §9.1.
- 7 UL certified low-pressure gauge between the isolation valve and the pump supply pipe. DIOM §9.1.
- 8 Pump AP12, 240 V AC / 60 Hz. 3/4" NPT female inlet. Integral Y-type strainer with inspection and flush-out port; maintain servicing access. DIOM §4.11 and §12.1.1.
- 9 Pump outlet via 1/4" BSP parallel male × M22 × 1.5 metric female adapter. Connect hose to adapter before fitting the adapter to the outlet port. DIOM Figure 36.
- 10 High-pressure hose to spray heads via T-pieces. Per system: 60 m (196.85 ft) total maximum; 30 m (98.42 ft) maximum from pump to furthest spray head. DIOM §4.3.
- 11 Spray head SH12 in AC21 back box, 3.94–4.27 ft (1.20–1.30 m) above finished floor. DIOM §5.2.

NOT SHOWN ON THIS SHEET

Controller CT03, smoke sensors, sensor and data cabling, sounder and zoning. See the Working Plan (DIOM §5.3) and Smoke Sensor Working Plan (§6.3). Dedicated AC circuit per DIOM §8.1.

This system has no riser, feed main, cross main or branch line network and no standing pressure.

VERIFICATION

Flow and pressure measured at each pump supply valve per DIOM §9.1, and re-verified at commissioning stage 4 per §9.9.2.4. Acceptance per §11. Inspection, testing and maintenance per §12.