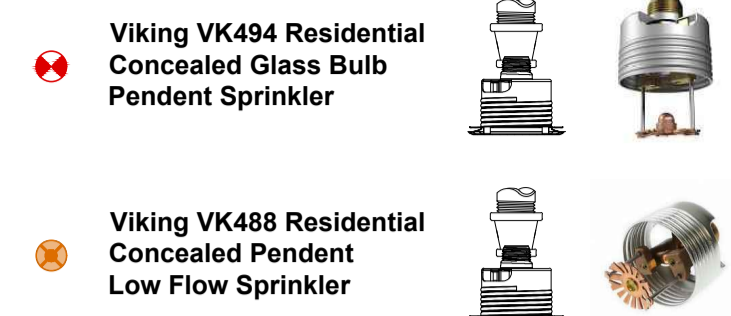


**SPRINKLER LEGEND**



Wall Opening:  
2-5/8" (66 mm) Min.  
3-3/4" (95 mm) Max.



**Blazemaster CPVC pipe & fittings ASTM F442 Specification**

- CONCEALED GLASS BULB HEAD
- LOW FLOW CONCEALED PENDANT HEAD
- 20mm PIPEWORK
- 25mm PIPEWORK
- 32mm PIPEWORK
- 63mm PIPEWORK
- SPRINKLER VALVE SET
- SPRINKLER FIRE PUMP
- MOST FAVOURABLE AREA
- MOST UNFAVOURABLE AREA

**SPRINKLER DESIGN INFORMATION**

**DESIGN SPECIFICATION:**  
FIRE SPRINKLER SYSTEM HAS BEEN DESIGNED TO BS9251:2014  
VARIATIONS - N/A

**HYDRAULIC DESIGN INFORMATION:**  
CATEGORY OF SYSTEM - 1  
TYPE OF OCCUPANCY - INDIVIDUAL FLATS  
NUMBER OF DESIGN SPRINKLERS - 2  
DESIGN DENSITY - 2.04 MM/LIN  
SPRINKLER K FACTOR - 3.0 & 4.9  
MINIMUM FLOW RATE - 30.3 LPM & 49.2 LPM  
MINIMUM PRESSURE - 0.49 BAR & 0.48 BAR  
DESIGN SPACING - 3.7m x 3.7m & 4.9m x 4.9m

**FHC DATA:**  
MOST UNFAVOURABLE - TBC  
MOST FAVOURABLE - TBC

**WATER STORAGE TANK INFORMATION:**  
REQUIRED EFFECTIVE CAPACITY - N/A  
ACTUAL EFFECTIVE CAPACITY - N/A  
TANK MANUFACTURER - N/A  
TANK PART NUMBER - N/A  
REDUCED CAPACITY TANK UTILISED - N/A  
REQUIRED PROVEN RATE OF INFILL - N/A  
ACTUAL PROVEN RATE OF INFILL - N/A  
REDUNDANT PIPE/TANK FEED REQUIRED - N/A

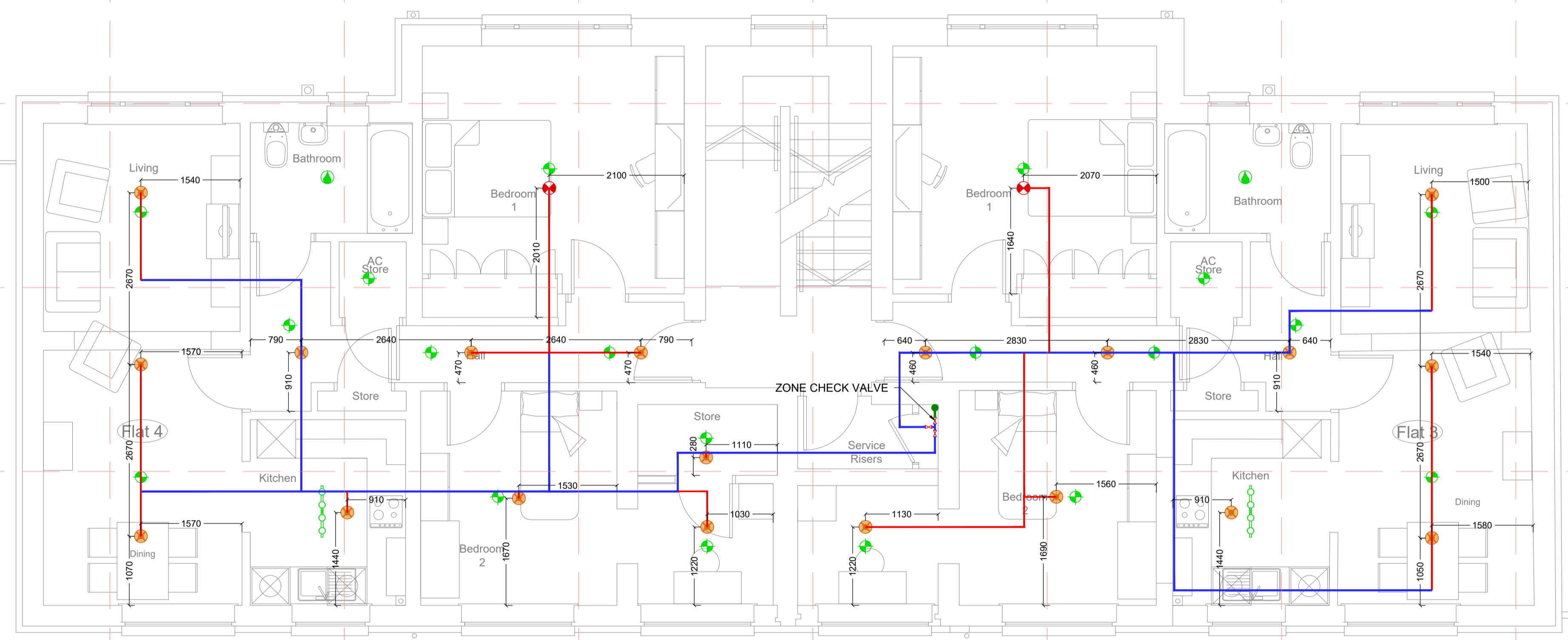
**FIRE PUMP INFORMATION:**  
MANUFACTURER - GRUNDFOS  
PUMP MODEL - TBC



SPRINKLER VALVE SET DETAIL

**NOTES:**

1. CLIENTS ELECTRICIAN TO PROVIDE AN AICO E1129 SWITCH INTERFACE (OR SIMILAR COMPATIBLE) FROM THE HOUSE/APARTMENT INTERLINKED DETECTORS WIRED IN FP200 FIRE RESISTANT CABLE TO THE LOCATION OF AND WIRED INTO OUR SPRINKLER VALVE FLOW SWITCH. PLEASE REQUEST WIRING DIAGRAM.
2. CLIENTS ELECTRICIAN TO PROVIDE A POWER SUPPLY TO OUR PUMP. THIS MUST BE A SEPARATE LOCKABLE BOARD WIRED ON THE SUPPLY SIDE OF THE DB (BETWEEN METER & NORMAL DB). A 20AMP CARTRIDGE TYPE FUSE MUST BE SUPPLIED (NO MCB'S/MCBO'S). THIS SHOULD BE WIRED IN 2.5mm FP200 OR SIMILAR TO A ROTARY ISOLATOR SITUATED CLOSE TO OUR PUMP. ROTARY ISOLATOR TO BE WIRED TO OUR PUMP CONTROLLER IN 2.5mm FP200 OR SIMILAR.
3. CLIENTS ELECTRICIAN TO PROVIDE A SUITABLE POWER SUPPLY FOR OUR 1AMP PSU UNIT. THIS SHOULD THEN BE WIRED TO OUR SOLENOID VALVE (PDV) & OUR SPRINKLER VALVE SET IN 1.5mm FP200 OR SIMILAR. FPS TO SUPPLY PSU, BACK UP BATTERY & PDV UNIT.
4. FPS WILL SUPPLY A SUITABLE SOLENOID VALVE (PDV) FOR INSTALLATION BY YOUR PLUMBER. THIS SHOULD BE INSTALLED ON THE NORMAL DOMESTIC FEED (ABOVE THE SPRINKLER BRANCH CONNECTION) (BUT BEFORE ANY DOMESTIC SERVICE CONNECTIONS)
5. CLIENT FIRE ALARM INSTALLER SHOULD PROVIDE A SUITABLE FIRE ALARM INTERFACE AND CONNECT TO THE FLOW SWITCH ON EACH ZONE CHECK VALVE
6. CLIENT FIRE ALARM INSTALLER SHOULD PROVIDE A SUITABLE FIRE ALARM INTERFACE/S AND CONNECT TO THE CONTROLLER ON OUR FIRE PUMP TO ACHIEVE A FIRE PUMP RUNNING & FAULT SIGNAL TO THE FIRE ALARM CONTROL PANEL.
7. CLIENTS PLUMBER TO PROVIDE A BRANCH CONNECTION FROM THE INCOMING 63mm+ WATER SUPPLY IN 50mm+ MDPE. A SUITABLE FULL BORE/FULL WAY LOCKABLE ISOLATION VALVE SHOULD BE INSTALLED IMMEDIATELY AT THE BRANCH CONNECTION FOLLOWED BY A FULL FLOW WRAS APPROVED SINGLE CHECK VALVE AND DRAIN VALVE TERMINATED IN A 1 1/4" FEMALE BSP CONNECTION FOR OUR SPRINKLER FEED.



**MAXIMUM WEIGHT LOADING AND SPACINGS FOR BLAZEMASTER PIPEWORK SEE BS 9251**

NOMINAL BORE (mm)	OUTSIDE DIAMETER (mm)	WEIGHT / METRE (kg) - EMPTY	WEIGHT / METRE (kg) - CHARGED	MAXIMUM SUPPORT SPACING (m)
20	26.7	0.350	0.637	1.67
25	33.4	0.390	1.005	1.82
32	42.2	0.622	1.606	1.98
40	48.3	0.816	2.109	2.13
50	60.3	1.278	3.310	2.43
65	73.0	1.871	4.844	2.74
80	88.9	2.778	7.186	3.04

**MAX SUPPORT SPACINGS DISTANCE IN LINE SPRINKLER HEAD DROP TEE**

NOMINAL PIPE SIZE (mm)	<100PSI (m)	>100PSI (m)
20	1.22	0.91
25	1.52	1.22
32	1.83	1.52
40-80	2.13	2.13

**MAX SUPPORT SPACING DISTANCE END SPRINKLER DROP ELBOW**

NOMINAL PIPE SIZE (mm)	<100PSI (mm)	>100PSI (mm)
20	228.6	152.4
25	304.8	228.6
32	406.4	304.8
40-80	609.6	304.8

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PIPE WORK COMMISSIONING TESTS TO COMPLY WITH BS 6251

SERVICES TO BE PROVIDED BY CLIENTS UNLESS OTHERWISE STATED: ALL BUILDERSWORK, HOLES THROUGH WALLS, FLOORS, SLEEVING, FIRE STOPPING, THRUST BLOCKS, TRENCHES, GROUTING & MAKING GOOD.

Rev	Date	Details	Chkd

Fire Protection Services Ltd  
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Enterprise Park  
Swansea  
SA6 8RA  
01792 774085  
www.fpsfire.co.uk

Fire Protection Services

Client

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**Drawing Status**  
WORKING DRAWING

Date	Scale	Drawn	Checked	Approved
09.01.2019	1:50 @A1	OCS/WW	TH	TH

**Project Title**  
LLANSAWEL CRESCENT  
BRITON FERRY

**Drawing Title**  
FIRST FLOOR  
SPRINKLER LAYOUT

Drawing Number	Rev
FPS-M-487	-