



Delap & Waller

DAN BREEN HOUSE

MECHANICAL EQUIPMENT SCHEDULE

PROJECT NO : 22195
DATE : 22/08/2025
REV : T02



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: LOUVER
Status: TENDER
Revision: T02

LOUVER				
LOCATION	FLOOR	REF	MIN FREE AREA	AIR FLOW (L/s)
STORE	Refer to 300 series drawings	LV-01	0.006	15
BATHROOM	Refer to 300 series drawings	LV-02	0.008	20
BATHROOM	Refer to 300 series drawings	LV-03	0.01	25

Notes:

1.Type and colour to be agreed with Architect before ordering



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: EXTRACT FAN
Status: TENDER
Revision: T02

EXTRACT FAN					
LOCATION	FLOOR	REF	MANUFACTURER	MODRL	AIR FLOW (L/s)
STORE/BATHROOM	Refer to 300 series drawings	EF-01	BALUBERG	TRIO 150	Refer to 300 series drawings

Notes:

- 1.Extract Fan to be provided by Baluberg, or equal and prior approved
- 2.Final colour to be agreed with Architect before ordering

Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: EXTRACT GRILLES
Status: TENDER
Revision: T02

EXTRACT GRILLES						
Ref	Manufacturer	Model	Quantity	Airflow (L/s)	Type	Comments
EG-01	Gilberts	GX/125	Refer Vent Drawings	15	Adjustable Disc Valve	c/w ceiling mounting kit
EG-02	Gilberts	GX/125	Refer Vent Drawings	20	Adjustable Disc Valve	c/w ceiling mounting kit
EG-03	Gilberts	GX/125	Refer Vent Drawings	25	Adjustable Disc Valve	c/w ceiling mounting kit

Notes:

- 1.All Ectract Grilles/ Diffusers to be GILBERTS or approved equivalent
- 2.Smoke test to be provided as part of the mechanical contract for each grille type to demonstrate that the air is diffusing in accordance with a high induction swirl diffuser i.e the air must swirl as it exits the grille face and travel horizontally accross the ceiling dropping gradually, to the occupied zone
- 3.All diffusers/grilles to be supplied with proprietry plenum box, plenum box to be fitted with factaory fitted baffle swirl diffusion plate angled within the plenum box to promote good air distribution



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: SHOWER HEATER
Status: TENDER
Revision: T02

SHOWER HEATER			
Unit Ref	Manufacturer	Model	Location
ES-01	TRITON	T90SR	Refer to 200 series drawings

Notes:

1. Shower heater to be provided by Triton, or equal and prior approved
2. Final colour to be agreed with Architect before ordering



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: WATER HEATER
Status: TENDER
Revision: T02

WATER HEATER			
Unit Ref	Manufacturer	Model	Location
WH-01	SANTON	AU 7	Refer to 200 series drawings

Notes:

1. Water heater to be provided by Santon, or equal and prior approved
2. Final colour to be agreed with Architect before ordering



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: WATER TANK
Status: TENDER
Revision: T02

WATER TANK								
Ref	Description	Manufacturer	Type	Capacity (l)	Length (mm)	Width (mm)	Height (mm)	Comment
CWST 01	Cold Water Storage Tank	Tricel	Format 30	454	1040	761	766	Exact dimensions of tank to be confirmed on site prior to ordering.

Notes:

1. Tanks to be manufactured by Tricel or equal / prior approved
2. Water storage tanks to be Potable Format 30 type
3. Access ladder and roof support systems to be provided where required
4. Ball cock and associated valves to be supplied and installed
5. Tanks to be provided with all ancillary equipment for complete installation, commissioning
6. Tanks to be provided with Drip Tray
7. Drip tray and over flow to be connected to the outside building, size of this pipe should be greater than the incoming pipe size
8. Incoming water supply to be provided with filter unit & UV filter



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: WATER METER
Status: TENDER
Revision: T02

WATER METER						
Ref	Manufacturer	Model	Description	Service	Connection Size (mm)	Comments
MWS Meter	Alma Engineering	B-Meter WDE-K50 Woltmann	Cold Water Meter Flanged	Incoming MWS	100	c/w IWM-PL4

Notes:

1.Meters to be supplied by Alma Engineering Supplies, or equal and approved



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: PUMP
Status: TENDER
Revision: T02

PUMP							
Referance	Location	Manufacturer	Model	Type	Flow Rate (l/s)	Total Dynamic Head (kPa)	Comment
CP-01	Plant Room	Grundfos	MAGNA3 D	Twin Head	3.06	69	
CP-02	Plant Room	Grundfos	UPML	Single	-	-	Boiler pumps to be supplied with boilers.
CP-03	Plant Room	Grundfos	UPML	Single	-	-	Boiler pumps to be supplied with boilers.
P-02	Plant Room	Grundfos	MAGNA3 D	Twin Head	2.20	80	
P-03	Plant Room	Grundfos	MAGNA3 D	Twin Head	0.40	61	

Notes:

- 1.All Pumps to be supplied by Grundfos or equivalent
- 2.All pumps to be high energy efficiency
- 3.All heating pumps to be Variable speed drive
- 4.Commissioning to be provided by a manufacturer approved service provider only.
- 5.The Mechanical Sub-Contractor verify and confirm that the equipment selection and system design is correct before installation
- 6.BMS MODUBS interface to be included as standard.
- 7.Boiler pumps to be supplied with boilers.
- 8.Pump to be provided with all ancillary equipment for complete installation, commissioning and operation of the system in line with manufacturers requirements.

Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: BOILER
Status: TENDER
Revision: T02

BOILER					
Referance	Output (KW)	Model	Dimension(HxWxD)	Dry Weight (kg)	Location
B-01	60	EVOMAX-2	850 x 500 x 360	57.5	See Drawings
B-02	60	EVOMAX-2	850 x 500 x 360	57.5	See Drawings

Notes:

1. Boilers shall each be model IDEAL IMAX EXTRA 2 manufactured by IDEAL and supplied by Greentherm, or equal and prior approved
2. Boilers must have modulation ratio of 9:1
3. Boilers must have stainless steel heat exchangers.
4. Commissioning shall be provided by IDEAL Engineers and shall be covered with a manufacturer's comprehensive 5 year warranty.
5. The boilers B-01/02 will be supplied with a cascade frame kit complete with low loss header, gas supply pipes, insulated pipework shell, and pre wired, and & plugged VSD shunt pumps as a minimum.
6. BMS interface to be included as standard.
7. The Mechanical Sub-Contractor to ensure final water quality meets Boiler manufacturers requirements.
8. Condensate discharge to be provided by the Mechcanical Sub-Contractor.
9. Boiler to be provided with all ancillary equipment for complete installation, commissioning and operation of the system in line with manufacturers requirements.

Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: WATER FILTERS
Status: TENDER
Revision: T02

WATER FILTERS				
Ref	Manufacturer	Model	Description	Comments
FILTER UNIT	Residio	F78TS-100FB	Reverse Rinsing Fine Filter	To be supplied with Automatic Reverse Rinsing Actuator (Z11AS)
UV FILTER	HYDROTEC	HydroWELL Standard B20-I	Ultra Violet Disinfection Unit	To be supplied with spare UV lamp for construction & commissioning period

Notes:

- 1.Filter Unit to be manufactured by Resideo, or equal and approved
- 2.UV Unit to be manufactured by HYDROTEC, or equal and approved

Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: ASHP
Status: TENDER
Revision: T02

ASHP							
Reference	Description	Manufacturer	Model	Quantity	Total Output (kW)	H x L x D (mm)	Location
IU-01	Indoor Unit	HITACHI	YUTAKI S 24HW	4	90	890 x 670 x 370	Plant Room
OU-01	Outdoor Unit	HITACHI	RAS- 10WHNPE	4	-	1380 x 950 x 370	Plant Room

Notes:

- 1.ASHP to be manufactured by Hitachi and supplied by Greentherm, or equal and prior approved
- 2.Commissioning to be provided by a manufacturer approved service provider only.
- 3.ASHP to come complete with internal controller.
- 4.ASHP must be certified to EcoDesign requirements including EN16147 and EN14825.
- 5.The Mechanical Sub-Contractor to ensure siting of the ASHP meets manufacturer clearance and service access requirements.
- 6.BMS MODUBS interface to be included as standard.
- 7.The Mechanical Sub-Contractor to ensure final water quality meets ASHP manufacturers requirements.
- 8.Condensate discharge to be provided by the Mechcanical Sub-Contractor.
- 9.ASHP to be provided with all ancillary equipment for complete installation, commissioning and operation of the system in line with manufacturers requirements.

Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: GAS SAFETY
Status: TENDER
Revision: T02

GAS SAFETY					
Ref	Manufacturer	Model	Description	Location	Comments
Gas Detection Panel	Gas Sense	GA-300.E04-W1 4 Chnl GD Panel	Detection of Natural Gas & Carbon Monoxide. Control of gas slam shut solenoid valve.	Plant Room	Output relays for pre-alarm + fault output signals to BMS. Pre-wired in wall mounted enclosure.
Gas Sensors (Natural Gas)	Gas Sense	GS-300.A-MET.50 NG Sensor	Detection of Natural Gas. Non-intrusive calibration via external magnetic adapter.	Plant Room	To comply with EN 50270. Belden 3-core screened cable required to connect sensors.
Gas Sensors (Carbon Monoxide)	Gas Sense	GS-300.A.CO.200 CO Sensor	Detection of Carbon Monoxide. Non-intrusive calibration via external magnetic adapter.	Plant Room	To comply with EN 50270. Belden 3-core screened cable required to connect sensors.
Gas Slam Shut Valve	Gas Sense	2 1/2" H&C AUTO RESET GAS VALVE	Auto reset gas slam shut valve (230V)	Plant Room	Controlled by Gas Detection Panel.
Gas Emergency Lockstop	Gas Sense	H&C Emergency Stop Button	Plant Room	Plant Room	To be located in easy accessible location.

Notes:

1. Gas safety equipment to be manufactured by Gas Sense and supplied by Eurogas, or equal and prior approved.
2. Contractor to verify exact additional gas safety requirements within plantroom, with gas specialist supplier.

Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: EXPANSION VESSEL
Status: TENDER
Revision: T02

EXPANSION VESSEL			
Ref	Manufacturer	Model	Comments
EXP-01	Flamco	Flexcon Premium	Hot Water Vertical Diaphragm Expansion Vessel
EXP-02	Flamco	Flexcon Premium	Hot Water Vertical Diaphragm Expansion Vessel
EXP-03	Flamco	Flexcon Premium	Hot Water Vertical Diaphragm Expansion Vessel

Notes:

- 1.Expansion Vessels to be Flamco or approved equivalent
- 2.The Mechanical Contractor verify and confirm that the equipment selection and system design is correct before installation

Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: PRESSURISATION UNIT
Status: TENDER
Revision: T02

PRESSURISATION UNIT				
Unit Ref	Manufacturer	Location	Quantity	Comments
PU-01	FLAMCO	Boiler Room	1	-
PU-02	FLAMCO	Boiler Room	1	-
PU-03	FLAMCO	Boiler Room	1	-

Notes:

- 1.Pressurisation Units to be supplied and installed by FLAMCO or equivalent
- 2.System to include the following
- 3.User friendly interface that has a 2 line LCD backlight display Healthy
- 4.System Fill for initial fill of system
- 5.System leak alarm
- 6.PU to be provided with BMS BACnet interface



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: ELECTRIC RADIATOR
Status: TENDER
Revision: T02

ELECTRIC RADIATOR						
Reference	Location	Manufacturer	Model	Length (mm)	Height (mm)	Watts (W)
E RAD 01	WC-Northern Building	Merriot	Primo Plus E-A	400	500	500
E RAD 02	Shower-Northern Building	Merriot	Primo Plus E-A	950	500	1500

Notes:

- 1.All Rads to be supplied by Merriot or equivalent
- 2.The Mechanical Sub-Contractor verify and confirm that the equipment selection and system design is correct before installation
- 3.The final colour and location to be agreed with architect.



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: AIR AND DIRT SEPARATOR
Status: TENDER
Revision: T02

AIR AND DIRT SEPARATOR			
Ref	Manufacturer	Model	Comments
AD-01	Flamco	XStream Vent-Clean	-
AD-02	Flamco	XStream Vent-Clean	-

Notes:

1. Air and Dirt Separators to be Flamco or approved equivalent
2. The Mechanical Contractor verify and confirm that the equipment selection and system design is correct before installation

Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: FIRE PROTECTION
Status: TENDER
Revision: T02

FIRE PROTECTION				
Units	Manufacturer/S upplier	Location	Quantity	Comments
2 KG CO2 FIRE EXTINGUISHER	CHUBB	Ref to Drawings	Ref to Drawings	-
6 LITRE WATER HYDROSPRAY FIRE EXTINGUISHER	CHUBB	Ref to Drawings	Ref to Drawings	-
5 KG CO2 FIRE EXTINGUISHER	CHUBB	Ref to Drawings	Ref to Drawings	-
FIRE BLANKET 1.2M X 1.2M	CHUBB	Ref to Drawings	Ref to Drawings	-
9 KG DRY POWDER EXTINGUISHER	CHUBB	Ref to Drawings	Ref to Drawings	-

Notes:

- 1.Fire Protection Equipments to be supplied by Chubb or approved equivalent
- 2.Final quantities and location to be agreed with client



Project: DAN BREEN HOUSE
Project No.: 22195
Date: 22/08/2025
Schedule Title: BUFFER VESSEL
Status: TENDER
Revision: T02

BUFFER VESSEL				
Ref	Manufacturer	MODEL	CAPACITY (L)	Pressure (Bar)
BV-01	Puffer	PS	1500	6

Notes:

1. Buffer Vessels to be Puffer or approved equivalent
2. The Mechanical Contractor verify and confirm that the equipment selection and system design is correct before installation
3. All accessories including FlexTherm Ins. 200L Buffer to be equipped with Buffer Vessel