

PIPEWORK SYSTEM VALVE SYMBOLS	
SYMBOL	DESCRIPTION
	ANGLED LOCK-SHIELD VALVE
	LOCK-SHIELD VALVE
	PLUG VALVE
	ANGLED ISOLATION VALVE
	ANGLED THERMOSTATIC VALVE
	WHEEL VALVE
	DIAPHRAM VALVE
	ANGLED SAFETY VALVE
	THROUGH THERMOSTATIC VALVE
	THROUGH ISOLATION VALVE
	GLOBE VALVE
	THROUGH SAFETY VALVE
	DOUBLE REGULATING VALVE
	DROP WEIGHT VALVE
	DRAIN OFF COCK WITH HOSE UNION
	TWO PORT MOTORISED VALVE
	THREE PORT MOTORISED VALVE
	FOUR PORT MOTORISED VALVE
	GATE VALVE
	BUTTERFLY VALVE
	PRESSURE REDUCING VALVE
	COMMISSIONING STATION SET (CLOSE COUPLED)
	BALL VALVE
	FILTER BALL VALVE
	NON-RETURN PRESSURE REDUCING VALVE
	NON-RETURN VALVE
	DRAIN OFF COCK
	WHEEL VALVE (45°)
	WHEEL VALVE (60°)
	LOCK SHIELD VALVE (50°)
	SAFETY VALVE
	STRAINER
	FLEXIBLE CONNECTION TYPE 1
	FLEXIBLE CONNECTION TYPE 2
	FOUR PORT PNEUMATIC VALVE
	TWO PORT PNEUMATIC VALVE
	THREE PORT PNEUMATIC VALVE
	DOUBLE CHECK VALVE / SINGLE CHECK VALVE
	AUTO FLOW VALVE
	FLANGED CONNECTION
	ORIFICE PLATE
	COMMISSIONING SET
	THREE PORT VALVE / THERMAL MIXING VALVE
	CONSTANT FLOW REGULATOR
	METERING STATION
	PRESSURE INDEPENDENT CONTROL VALVE

PIPEWORK SYSTEM, PLANT AND EQUIPMENT SYMBOLS	
SYMBOL	DESCRIPTION
	RADIATOR PLAN VIEW
	RADIATOR ELEVATION (TBOE)
	RADIATOR ELEVATION (BOE)
	FAN CONVECTOR
	NATURAL CONVECTOR
	RADIANT PANEL
	HEATED TOWEL RAIL PLAN
	HEATED TOWEL RAIL ELEVATION
	UNIT HEATER
	PRESSURISATION UNIT
	BOILER
	INDIRECT CALORIFIER
	DIRECT CALORIFIER
	BUFFER VESSEL
	FINNED TUBE
	WATER STORAGE TANK
	AIR SEPERATOR
	DOSING POT
	AIR COOLED CHILLER
	WATER COOLED CHILLER
	EXPANSION VESSEL

AIR SYSTEM COMPONENTS SYMBOLS 1	
SYMBOL	DESCRIPTION
	SUPPLY DIFFUSER 1
	SUPPLY DIFFUSER 2
	SUPPLY DIFFUSER WITH TERMINAL HEPA FILTER
	SLOT DIFFUSER
	SIDEWALL DIFFUSER
	DISPLACEMENT UNIT 1
	DISPLACEMENT UNIT 2
	EXTRACT GRILLE 1
	EXTRACT GRILLE 2
	EXTRACT GRILLE WITH TERMINAL HEPA FILTER
	EXTRACT GRILLE WITH TERMINAL DANDER FILTER
	EXTRACT GRILLE WITH TERMINAL HEPA AND DANDER FILTERS
	CHILLED BEAM
	FAN COIL UNIT
	FAN CONVECTOR
	UNIT HEATER
	DOOR HEATER
	BELLMOUTH (S)
	BELLMOUTH (E)
	CROSS-TALK ATTENUATOR
	CONSTANT VOLUME DEVICE
	VARIABLE VOLUME DEVICE
	FUME CUPBOARD
	SAFETY CABINET
	EXTRACT HOOD
	FUME EXTRACT POINT
	CEILING MOUNTED EVAPORATOR
	DIRECTION OF AIR FLOW
	DIRECTION OF AIR TRANSFER
	VOLUME CONTROL DAMPER

AIR SYSTEM COMPONENTS SYMBOLS 2	
SYMBOL	DESCRIPTION
	FOUR WAY THROW SUPPLY DIFFUSER/GRILLE
	THREE WAY THROW SUPPLY DIFFUSER/GRILLE
	TWO WAY THROW DIFFUSER/GRILLE
	TWO WAY OPPOSITE THROW DIFFUSER/GRILLE
	ONE WAY THROW SUPPLY DIFFUSER/GRILLE
	RECIRCULATION GRILLE
	EXTRACT GRILLE
	DUCT MOUNTED SILENCER
	DUCT MOUNTED COOLING COIL
	DUCT MOUNTED HEATING COIL
	MANUAL OPPOSED BLADE DAMPER
	MANUAL BUTTERFLY DAMPER
	DUCT MOUNTED FIRE DAMPER TYPE 1
	DUCT MOUNTED FIRE DAMPER TYPE 2
	MOTORISED FIRE DAMPER TYPE 1
	MOTORISED FIRE DAMPER TYPE 2
	ACCESS PANEL
	MANUAL SMOKE CONTROL DAMPER
	MOTORISED SMOKE CONTROL DAMPER
	MOTORISED OPPOSED BLADE DAMPER
	PRESSURE RELIEF DAMPER
	LINEAR SLOT EXTRACT GRILLE
	LINEAR SLOT SUPPLY DIFFUSER/GRILLE
	90° RADIUS BEND
	60° RADIUS BEND
	45° RADIUS BEND
	30° RADIUS BEND

AIR SYSTEM PLANT AND EQUIPMENT SYMBOLS 1	
SYMBOL	DESCRIPTION
	CENTRIFUGAL FAN (DIRECT DRIVE)
	CENTRIFUGAL FAN (BELT DRIVEN IN AIRSTREAM)
	CENTRIFUGAL FAN (BELT DRIVEN OUTSIDE AIRSTREAM)
	AXIAL FAN
	PROPELLOR FAN
	TWIN FAN
	PLENUM
	ACCESS
	ACCESS WITH VISION PANEL
	ELIMINATOR
	DIFFUSER
	HEATER BATTERY
	COOLING COIL
	HEAT RECOVERY COIL
	PANEL FILTER 1
	PANEL FILTER 2
	BAG FILTER
	HEPA FILTER
	DIRECT STEAM INJECTION HUMIDIFIER
	MIXING PLENUM

AIR SYSTEM PLANT AND EQUIPMENT SYMBOLS 2	
SYMBOL	DESCRIPTION
	PLATE HEAT EXCHANGER
	DISCHARGE LOUVRE
	INLET LOUVRE
	ATTENUATOR
	AHU DAMPER
	NON RETURN DAMPER
	ROOF COWL
	CENTRIFUGAL FAN (NO BOX)
	WALL MOUNTED FAN

HVAC CONTROL SYMBOLS	
SYMBOL	DESCRIPTION
	PRESSURE INDICATOR (GAUGE)
	TEMPERATURE INDICATOR (GAUGE)
	PRESSURE TRANSMITTER
	TEMPERATURE TRANSMITTER
	VELOCITY TRANSMITTER
	HUMIDITY TRANSMITTER
	LEVEL TRANSMITTER
	PRESSURE SWITCH
	TEMPERATURE SWITCH
	LEVEL SWITCH - LOW
	LEVEL SWITCH - HIGH
	DETECTOR
	ROOM DETECTOR
	OUTSIDE DETECTOR
	DUCT DETECTOR
	THERMOSTAT
	HIGH LEVEL STAT
	LOW LEVEL STAT
	HOLD OFF STAT
	FROST STAT
	IMMERSION STAT
	TANK STAT
	HUMIDISTAT
	SMOKE SWITCH
	BUILDING MANAGEMENT SYSTEM
	ENVIRONMENTAL MONITORING SYSTEM
	DIFFERENTIAL PRESSURE
	VARIABLE SPEED DRIVE
	ELECTRONIC ACTUATOR
	PNEUMATIC ACTUATOR
	MOTOR CONTROL CENTRE
	AUTOMATIC CONTROL CENTRE
	FUMIGATION CONTROL PANEL
	ENVIRONMENTAL MONITORING PANEL
	PACKAGED CONTROL PANEL
	CONTROL WIRING
	WALL MOUNTED ROOM THERMOSTAT

NOTES:

- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH MECHANICAL, ELECTRICAL & PUBLIC HEALTH DRAWINGS, SPECIFICATIONS & SCHEDULES.
- THIS DRAWING SHALL NOT BE RELIED UPON BY THE CONTRACTOR AS A DESIGN DRAWING. THIS DRAWING HAS BEEN PRODUCED FOR DESIGN INTENT PURPOSES ONLY. ANY PROCUREMENT OR INSTALLATION BASED ON THIS DRAWING IS AT THE CONTRACTORS RISK.

TO1	TENDER ISSUE	01.12.21
Revision	Description	Date
Model Status:		
TENDER		
Engineering Sustainability t +44 (0) 1883 331630 Hillside House, 204b Godstone Road, e info@flattconsulting.com Caterham, Surrey, CR3 6RD w flattconsulting.com		
Client: WSS LTD		
Project: 13-15 JOHN'S MEWS		
Title: SYMBOLS SHEET MECHANICAL SERVICES		
Drawing Status: S4 - FOR STAGE APPROVAL		
Engr: RA	Drwn: NF	Chkd: RA
Appd: MR	Date: 03.11.21	
File Number: 3449-FLATT-XX-XX-DR-M-1000.dwg	Scale: 1:50	Size: A1
Drawing Number: 3449-FLATT-XX-XX-DR-M-1000	Revision: TO1	