

PIPEWORK, VALVES AND FITTINGS

	PIPE VERTICAL RISE
	PIPE VERTICAL FALL
	PIPE, FLUE, CIRCULAR DUCT IN SECTION
	DIRECTION OF FLOW
	PIPE GRADIENT
	PIPE ANCHOR
	UNION COUPLING
	FLANGE COUPLING
	HOSE UNION
	FLEXIBLE CONNECTION FOR PIPEWORK
	OPEN VENT
	AIR VENT (MANUAL)
	AIR VENT (MANUAL) WITH AIR BOTTLE
	AUTOMATIC AIR VENT
	DIRT POCKET/RAIN POINT
	TUNDISH WITH TRAP
	DRAIN COCK
	STRAINER
	STRAINER WITH BLOW DOWN COCK
	FILL POINT
	TEMPERATURE SENSOR
	PRESSURE SENSOR
	STATIC PRESSURE SENSOR
	VELOCITY PRESSURE SENSOR
	TEMPERATURE GAUGE
	PRESSURE GAUGE
	STATIC PRESSURE GAUGE
	TEST POINT
	FLOW MEASURING ORIFICE PLATE
	WATER METER
	WATER METER
	GAS METER
	GAS GOVERNOR
	SIGHT GLASS
	ISOLATING VALVE
	GAS COCK
	STOP COCK
	BUTTERFLY VALVE
	NON RETURN VALVE
	DOUBLE CHECK VALVE
	REDUCED PRESSURE VALVE
	LOCK SHIELD VALVE
	DOUBLE REGULATING VALVE
	VARIABLE ORIFICE DOUBLE REGULATING VALVE
	FLOW MEASURING (OR COMMISSIONING) STATION
	PRESSURE DIFFERENTIAL BYPASS VALVE
	EXPANSION VALVE
	PRESSURE REDUCING VALVE
	BALL FLOAT VALVE
	BALL FLOAT VALVE (DELAYED ACTION)
	LANDING OUTLET VALVE
	EXTERNAL FIRE HYDRANT
	RADIATOR VALVE (FLOW)
	REGULATING VALVE
	RADIATOR LOCK SHIELD VALVE
	THERMOSTATIC RADIATOR VALVE
	SAFETY VALVE
	THREE WAY SAFETY COCK
	GAS SOLENOID VALVE
	2 PORT ELECTRIC CONTROL VALVE
	3 PORT ELECTRIC CONTROL VALVE
	4 PORT ELECTRIC CONTROL VALVE

PIPEWORK, VALVES AND FITTINGS

	THERMOSTATIC MIXING VALVE
	ZONE CONTROL VALVE
	DRY RISER OUTLET
	WET RISER OUTLET
	DRY RISER INLET
	FIRE SHUT-OFF VALVE (DEAD WEIGHT)
	EXPANSION VESSEL WITH LOCKABLE ISOLATING VALVE
	EXPANSION VESSEL C/W MANUALLY OPERATED 3 PORT RELIEF VALVE FOR OPERATION WHEN VESSEL IS OUT OF COMMISSION
	REDUCED PRESSURE ZONE VALVE
	SERVICE VALVE
	PUDDLE FLANGE
	HOSE UNION BIB TAP
	CAPPED END
	EXPANSION BELLOWES
	CONDENSE TRAP
	DUPLEX FILTER
	WATER HAMMER ARRESTER AND MANUAL AIR VENT
	AUTOMATIC FLUSHING CISTERN (URINALS)
	WATER SAVING DEVICE, INCORPORATING PASSIVE INFRA-RED DETECTOR C/W CONTROL UNIT AND SOLENOID VALVE, MAINS POWERED
	ELECTRO MAGNETIC WATER CONDITIONER
	WASTE WATER PREVENTER WITH 15C SERVICE VALVE
	HYDRAULIC ACCUMULATOR
	DEAERATOR/DIRT SEPARATOR

PUMPS AND CONTROLS

	DUTY PUMP
	STANDBY PUMP
	IN-LINE TWIN HEAD PUMP WITH INTEGRAL NON-RETURN VALVE
	FLOW SWITCH
	PRESSURE DIFFERENTIAL SWITCH
	COMPRESSOR
	ROOM THERMOSTAT
	ROOM HUMIDISTAT
	BUILDING MANAGEMENT SYSTEM CONTROL

TAPS AND ASSOCIATED FITTINGS

	TAP (POTABLE) SINK MOUNTED
	LABORATORY TAP (POTABLE)
	LABORATORY TAP (NON-POTABLE)
	LABORATORY SWAN NECK TAP
	LABORATORY GAS TAP
	MIXER TAP
	SHOWER MIXER TAP
	ELECTRIC SHOWER
	SHOWER MIXING VALVE

LINETYPES

	CEILING VOID (IN SINGLE LINE ONLY)
	HIGH LEVEL (IN SINGLE LINE ONLY)
	LOW LEVEL (IN SINGLE LINE ONLY)
	FLOOR DUCT / TRENCH (IN SINGLE LINE ONLY)
	PIPEWORK TO BE TRACE HEATED
	EXISTING PIPEWORK TO BE REMOVED

VENTILATION FITTINGS AND DUCTWORK

	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	AIR DUCT (CROSS-SECTION)
	DUCT RISING UP
	DUCT DROPPING DOWN
	ACCESS PANEL
	MITRE BEND WITH TURNING VANE
	MEDIUM / LONG RADIUS BEND (AS INDICATED)
	DUCTWORK SHOES
	FLEXIBLE CONNECTION IN DUCTWORK
	FIRE OR SMOKE DAMPER OR FIRE AND SMOKE DAMPER (AS INDICATED)
	VOLUME CONTROL DAMPER (SINGLE LINE)
	MOTORISED DAMPER WITH OPPOSED BLADES
	BACK DRAUGHT DAMPER
	VOLUME CONTROL DAMPER WITH OPPOSED BLADES (DOUBLE LINE)
	DUCT MOUNTED THERMOSTAT
	REMOTE MOUNTED THERMOSTAT
	DUCT MOUNTED HUMIDISTAT
	REMOTE MOUNTED HUMIDISTAT
	CEILING MOUNTED SUPPLY GRILLE
	CEILING MOUNTED EXTRACT GRILLE
	CEILING CIRCULAR SUPPLY GRILLE
	CEILING CIRCULAR EXTRACT GRILLE
	ROOF COWL

HEAT EMITTERS

	RADIATOR
	UNDERFLOOR HEATING MANIFOLD
	RADIANT PANEL
	FAN CONVECTOR
	NATURAL CONVECTOR
	TRENCH HEATER
	ELECTRIC HEATER
	FAN COIL UNIT
	CEILING CASSETTE UNIT

SPRINKLER LAYOUTS

	SPRINKLER HEAD
	VOID SPRINKLER HEAD
	LONG THROW SIDEWALL SPRINKLER HEAD
	SPRINKLER HEAD WITH WIRE GUARD
	SPRINKLER FED FROM HIGH LEVEL DISTRIBUTION PIPEWORK
	SPRINKLER PIPEWORK INSULATED AND TRACE HEATED FOR FROST PROTECTION

DRAINAGE

	FLOOR GULLY (ROUND)
	FLOOR GULLY (SQUARE)
	FLOOR DRAIN (SURFACE)
	RODDING EYE (SURFACE)
	RODDING EYE (DRAIN LINE)

MECHANICAL SCHEMATICS & MISC

	SMOKE DETECTOR - DUCT MOUNTED
	CARBON DIOXIDE DETECTOR
	CENTRIFUGAL FAN
	AXIAL FLOW FAN
	WINDOW / WALL MOUNTED AXIAL EXTRACT FAN
	TWIN AXIAL FAN UNIT
	TWIN CENTRIFUGAL FAN UNIT
	HEATER BATTERY
	COOLING BATTERY
	PANEL FILTER
	PRE-FILTER
	VAV BOX WITH ELECTRIC REHEATER
	DOOR TRANSFER GRILLE
	SLOT DIFFUSER
	SUPPLY AIR
	EXTRACT AIR
	FAN COIL UNIT
	OVERDOOR HEATER
	ATTENUATOR
	CROSS TALK ATTENUATOR
	BAG FILTER
	CROSS FLOW HEAT RECUPERATOR
	THERMAL WHEEL
	RUN-AROUND COIL / HEAT PUMP
	LOUVRE
	MOTORISED DAMPER
	STEAM HUMIDIFIER
	ACCESS SECTION
	DIRECTION OF AIR FLOW
	FIRE DAMPER OR SMOKE DAMPER OR FIRE AND SMOKE DAMPER (AS INDICATED)
	BIFURCATED FAN
	FLEXIBLE CONNECTION
	SAND LOUVRE
	ELIMINATOR PLATES
	EQUIPMENT REFERENCE

	MOTORISED IN-EXHAUST FAN
	PANEL FILTER
	BAG FILTER
	RUN-AROUND COIL
	PLATE HEAT EXCHANGER

	THERMAL WHEEL
	SUPPLY / EXTRACT FAN
	HEATING COIL
	HEAT PUMP COIL
	COOLING COIL
	ACCESS SECTION
	ATTENUATOR

ABBREVIATIONS

Ø	DIAMETER
AAV	AUTOMATIC AIR VENT
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
ATT	ATTENUATOR
BCWS	BOOSTED COLD WATER
C/W	COMPLETE WITH
C	CONDENSATE
CHW	CHILLED WATER
COND	CONDENSER WATER
CS	COMMISSIONING STATION
CWS	COLD WATER SERVICE
CT	CONSTANT TEMPERATURE
DC	DRAIN COCK
DFA	DROP FROM ABOVE
DPCV	DIFFERENTIAL PRESSURE CONTROL VALVE
DRI	DRY RISER INLET
DRO	DRY RISER OUTLET
DRV	DOUBLE REGULATING VALVE
DTB	DROP TO BELOW
DW	DRINKING WATER SERVICE
EF	EXTRACT FAN
EG	EXTRACT GRILLE
F & R	FLOW AND RETURN
F & E	FEED & EXPANSION
FA	FROM ABOVE
FB	FROM BELOW
FCU (MECH)	FAN COIL UNIT
FD	FIRE DAMPER
FFL	FINISHED FLOOR LEVEL
FG	FLOOR GULLY
FHRS	FIRE HOSE REEL SUPPLY
FM	FIRE MAIN
FS	FIRE SWITCH
FV	FIRE VALVE
GC	GAS COCK
GL	GROUND LEVEL
HB	HEATER BATTERY
HL	HIGH LEVEL
HTG	HEATING
HTG F	HEATING FLOW
HTG R	HEATING RETURN
HWS	HOT WATER SERVICE
IV	ISOLATING VALVE
K/O	EMERGENCY KNOCK-OFF BUTTON
LL	LOW LEVEL
LPWH	LOW PRESSURE HOT WATER
LTHW	LOW TEMPERATURE HOT WATER
LTHW F	LOW TEMP. HOT WATER FLOW
LTHW R	LOW TEMP. HOT WATER RETURN
LSV	LOCK SHIELD VALVE
MCC	MOTOR CONTROL CENTRE
MD	MOTORISED DAMPER
MWS	MAIN WATER SERVICE
NRD	NON-RETURN DAMPER
NRV	NON RETURN VALVE
PG	PRESSURE GAUGE
PRV	PRESSURE REDUCING VALVE
RE	RODDING EYE
RFB	RISE FROM BELOW
RTA	RISE TO ABOVE
RV	REGULATING VALVE
RWO	RAIN WATER OUTLET
RWP	RAIN WATER PIPE
SC	STOP COCK
SD	SMOKE DAMPER
SFD	SMOKE FIRE DAMPER
SF	SUPPLY FAN
SG	SUPPLY GRILLE
SH	SHOWER
SM	SHOWER MIXING VALVE
SRW	SYPHONIC RAINWATER
ST	STRAINER
SV	SAFETY VALVE
TA	TO ABOVE
TB	TO BELOW
TBV	THERMAL BALANCING VALVE
TG	TRANSFER GRILLE
TRV	THERMOSTATIC RADIATOR VALVE
TS	TIME SWITCH
VP	VENT PIPE
VAV	VARIABLE AIR VOLUME
VCD	VOLUME CONTROL DAMPER
VFR	VOLUME FLOW RATE
VT	VARIABLE TEMPERATURE
WC	WATER CLOSET
WHB	WASH HAND BASIN
WP	WASTE PIPE
WRO	WET RISER OUTLET
WVP	WASTE PIPE VENT
XTK	CROSS TALK ATTENUATOR

-- m ³ /hr	-- Pa/m	A - VOLUME FLOW RATE m ³ /s , m ³ /hr, kg/s, l/s
-- m/s	--	B - VELOCITY PRESSURE DROP Pa, Pa/m
		C - VELOCITY m/s
		D - DIMENSIONS OF DUCT (W x D)mm or Ø

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TENDER

MUSEUM OF OXFORD
HIDDEN HISTORIES



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MECHANICAL SERVICES
SYMBOLS LEGEND

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