



SERVICE	PIPE MATERIAL	PIPE DIAMETER	INSULATION THICKNESS	INSULATION THICKNESS
LTHW F&R	COPPER	a15	25 mm	
	STEEL	a15	30 mm	MINERAL WOOL
		e20-e50	40 mm	
		a65 & ABOVE	50 mm	
BOWS	COPPER	a15-a35	25 mm	
		a42-a54	30 mm	MINERAL WOOL
		a67-a108	40 mm	
		a133-a159	40 mm	
DHWIS F&R	STAINL. STEEL	a159 & ABOVE	50 mm	
	COPPER	a15-a22	25 mm	
		a28-a42	30 mm	
		a54-a159	40 mm	MINERAL WOOL
	STAINL. STEEL	a159 & ABOVE	50 mm	

FA	FROM ABOVE
TA	TO ABOVE
FB	FROM BELOW
TB	TO BELOW
HL	HIGH LEVEL
LL	LOW LEVEL
ML	MID LEVEL
DTL	DROP TO LOW LEVEL
RTHL	RISE TO HIGH LEVEL
SU	SET UP
SD	SET DOWN
FFL	FINISHED FLOOR LEVEL
SSL	STRUCTURAL SLAB LEVEL
AFFL	ABOVE FINISHED FLOOR LEVEL
IL	LEVEL TO UNDERSIDE FROM FFL
QL	LEVEL TO CENTRE FROM FFL
BOD	BOTTOM OF DUCT FROM FFL
BOCT	BOTTOM OF CONTAINMENT FROM FFL

	MECHANICAL	
LTHW F	LOW TEMPERATURE HOT WATER FLOW	
LTHW R	LOW TEMPERATURE HOT WATER RETURN	
DRVR	DRIVER	
VRF	VARIABLE REFRIGERANT FLOW	
IS	ISOLATION VALVE	
NRV	NON RETURN VALVE	
DOV	DOUBLE CHECK VALVE	
DP	DRAIN/TEST PRESSURE VALVE	
DPVC	DIFFERENTIAL PRESSURE CONTROL VALVE	
3P	3 PORT MOTORIZED VALVE	
FCWR	FLEXIBLE CONNECTION DOUBLE REGULATING VALVE	
2PM	2 PORT MOTORIZED VALVE	
PCV	PRESSURE INDEPENDENT CONTROL VALVE	
STR	STRAINER	
OP	ORIFICE PLATE/MEASURING STATION	
K	COMBINING/SHARING STATION	
CS	TEST POINT	
TP	GAUGES (T=TEMPERATURE, P=PRESSURE)	
S	METER	
FCU	FAN COIL UNIT	
DAC	DRY AIR COOLER	
AB	ARBOR/BOLT	
NC	NONRALLY CLOSED	
FC	FLEXIBLE CONNECTION	
DC	DRAIN COCK	
AV	AIR VENT	
HE	HEAT EXCHANGER	
ROX	RADIATOR	
PCV	PRESSURE CONTROL VALVE	
GV	GATE VALVE	
PRV	PRESSURE REDUCING VALVE	
AAV	AUTOMATIC AIR VENT	
MVHR	MECHANICAL VENTILATION WITH HEAT RECOVERY	
	<u>WATER SERVICES</u>	
BOWS	BOOSTED COOLD WATER SERVICE	
CAT S	COLD WATER SERVICE CAT S	
HW/SF	HOT WATER SERVICE FLOW	
HW/SR	HOT WATER SERVICE RETURN	
MOWS	MIXED WATER SERVICE	
IS	ISOLATING VALVE	
DRV	DRIVER VALVE FOR HWS (ULTRA LOW FLOW TYPE)	
NRV	NON RETURN VALVE	
PRV	PRESSURE REDUCING VALVE	
DOV	DOUBLE CHECK VALVE	
DC	DRAIN COCK	
DP	TEST & DRAIN POINT	
FS	FLOW SWITCH	
PM	THAMES WATER METER	

DRAINAGE	
ARV	AUTO AIR VENT
AP	ACCESS CAP
AP	ACCESS PANEL
FG	FLOOR GULLY
RE	ROODING EYE
RWP	RAINWATER PIPE
SS	STUB STACK
SVP	SOIL VENT PIPE
GSVP	GROUND SOLVENT PIPE
MSVP	MEZZANINE SOLVENT PIPE
RSVP	RETAIL SOLVENT PIPE
SVP	SOIL WASTE PIPE
VP	VENT PIPE
WP	WASTE PIPE
D	DRAIN
BGD	BELOW GROUND DRAINAGE
SNK	SINK
KSK	KITCHEN SINK
DW	DISH WASHER
WM	WASHIN MACHINE
WBS	WASH HAND BASIN
WC	WATER CLOSET
SH	SHOWER
BTH	BATH
TXX	FALL

C02	UPDATED TO DESIGN COMMENTS				SW	IES	11.06.19
C01	CONTRACT ISSUE				SW	IES	31.01.19
Rev	Revision Description				DRN	CHK	Date
drawn by	drawn date	checked by	checked date	approved by		approved date	

CHECK PLOT
UNCONTROLLED DRAWING

UNCONTROLLED DRAWINGS		
A	OK	ready for transmittal
B	Minor Comments	mods to be actioned then ready for transmittal
C	Major Comments	mods to be actioned then returned for checking

signed _____
date _____



client approval	A	Approved	client approval, initials and date
	B	Approved with Comments	
	C	Not Approved	



project
Circle Square
Affinity Living

drawing title
Zone: ZL Level: ZZ
Service: Apartment Mechanical Services
S Bed Type L1

drawing status For Comment	purpose of issue S3		
scale & paper size As indicated @ A0	project number P0700090	drawn by CWC	date 13.07.18
drawing no. CSAL-IES-ZL-ZZ-DR-M-51017	revision C02		

Contract Issue