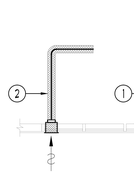
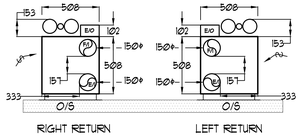


1. EXHAUST DUCTWORK TO BE C/W 25mm THICK THERMAL INSULATION 6FT. FROM EXTERIOR WALL. (TYPICAL)
2. F/A INTAKE DUCTWORK TO BE C/W 25mm THICK THERMAL INSULATION FOR ENTIRE LENGTH FROM EXTERIOR WALL TO ERV FCU. (TYPICAL)

TYPICAL DETAIL: INSULATION FOR INTAKE/EXHAUST DUCTWORK — NTS



NOTE:
- ALL DIMENSIONS IN MM.
- HEIGHT OF FCU IS 2,023.

INSUITE FCU DIMENSIONS — NTS

UNIT	NAME	AREA (SQ. FT.)	# OF WR	# OF POWDER	SIZE (T)	FIXTURE UNITS	BR	SQ. FT/T
514	1C+D	590	2	Ø	1	16	1	590
515	1C+DC2	600	2	Ø	1	16	1	600
516	1C+DM	610	2	Ø	1	16	1	610
517	1D3	480	1	Ø	1	16	1	480
518	2QT	820	2	1	1.5	22	2	547
521	2PT	840	2	Ø	1.5	16	2	560
523	1C+DD	620	2	Ø	1	16	1	620
524	1C+DG	620	2	Ø	1	16	1	620
525	1L3	575	1	Ø	1.5	10	1	383
526	1LA3	570	1	Ø	1.5	10	1	380
527	1L3	615	1	Ø	1.5	10	1	410

GRILLE SIZING TABLE

DESIGNATION	SIZE	L/s (UNLESS SPECIFIED ELSEWHERE)
SG-A	300Ø×100	47-70
SG-B	300Ø×150	71-93
SG-C	400Ø×150	94-140
SG-D	450Ø×150	141-188
EG-A	150Ø×150	35
W-1	225×200	210mm(L)
W-2	425×200	INSULATED
W-3	625×200	WALL BOX

VERTICAL FAN COIL SIZE

DESIGNATION	MODEL	W x D
FCU-1T	450	500×660
FCU-1.5T	600	500×660
FCU-2T	800	500×660
FCU-2.5T	1000	559×660
FCU-3T	1200	559×660

NOTE:
A MIN. OF 125mm IS REQUIRED ON THE SIDE OF PIPE RISER.

DUCT SIZING TABLE
(4.40e m/s, 800 FPM)

DESIGNATION	L/s	DUCT SIZE	DESIGNATION	L/s	DUCT SIZE
A	47	100×150	G	189	350×150
B	71	150×150	H	236	450×150
C	94	200×150	J	283	500×150
D	118	200×150	K	330	600×150
E	141	250×150	L	377	500×200
F	165	300×150			

GENERAL NOTES:

1) CONTRACTOR SHALL CO-ORDINATE ARCHITECTURAL, STRUCTURAL, LIGHTING, HVAC, SPRINKLER DRAWINGS TO AVOID AREAS OF CONFLICT AND TO MAINTAIN CEILING HEIGHTS.
2) CONTRACTOR SHALL REPORT ALL DISCREPANCIES AND AREA OF CONFLICTS TO THE ENGINEER PRIOR TO WORK BEGINS.
3) PROVIDE EXPANSION CHAMBERS FOR ALL KITCHEN SINKS.
4) SEE INSTALLATION DETAILS DRAWING FOR WASHER DOM. H+C WATER, SANITARY CONNECTION DETAILS.
5) SUPPLY AND INSTALL COMPLETE DOMESTIC HOT AND COLD WATER LINES, SANITARY AND VENT LINES TO EACH FIXTURE /EQUIPMENT INCLUDING WATER CLOSETS, LAVATORIES, BATHS, SHOWERS, KITCHEN SINK, WASHING MACHINES, DISHWASHERS, AND FLOOR DRAINS. KITCHEN SINK, LAVATORIES, WATER CLOSETS AND WASHING MACHINE TO BE C/W LOCALIZED SHUT-OFF VALVES.
6) ALL VENT PIPE INSTALLATION TO COMPLY WITH PLUMBING CODES.
7) FOR D.H.+C. W. RISER SIZES, REFER TO RISER DIAGRAM
8) FIRE DAMPERS ARE REQUIRED TO BE LISTED AND ARE TO HAVE FIRE PROTECTION RATING OF THE PENETRATED FIRE SEPARATION.
9) THE PIPING PENETRATING THE VARIOUS FIRE SEPARATION IS REQUIRED TO BE FIRESTOPPED WITH A LISTED FIRESTOPPING MATERIAL IN ACCORDANCE WITH OBC ARTICLE 3.1.9.1
10) THE FIRE HOSE CABINET THAT ARE RECESSED INTO THE EXIT STAIR SHAFTS ARE REQUIRED TO BE SEPARATED FROM THE EXIT STAIR BY A 2 HR. FIRE SEPARATION.
11) NO FLEXIBLE DUCT SHALL BE USED FOR ANY IN-SUITE DUCTWORK.
12) PROVIDE 25MM EXTERNAL INSULATION TO ENTIRE FRESH AIR DUCT FROM EXTERIOR WALL TO ERV FAN COIL UNIT.
13) DRYER EXHAUST DUCT SHALL BE SMOOTH AND CORROSION-RESISTANT MATERIAL (FLEXIBLE CONNECTION IS NOT ACCEPTABLE.).

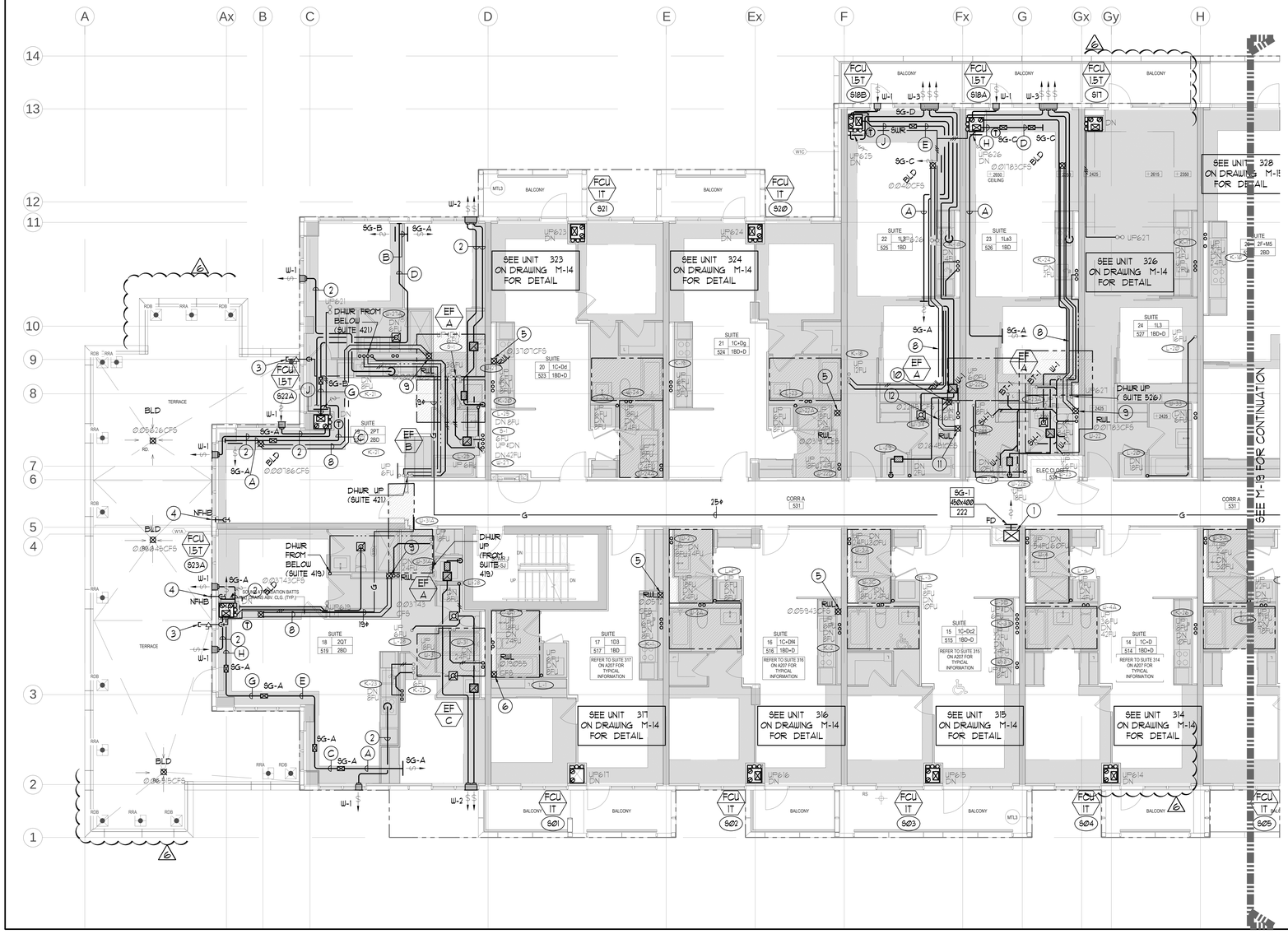
ACOUSTIC NOTES:

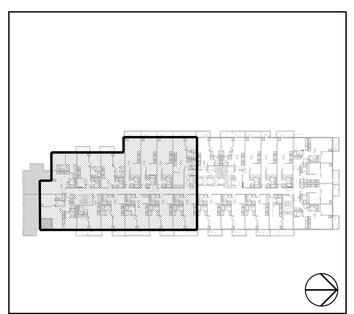
1) ALL SYSTEM/DOMESTIC PIPE LOOPS OR OFFSETS WHICH ARE 50MM DIA. AND LARGER SHALL BE ISOLATED USING NEOPRENE-IN-SHEAR HANGERS, AND ADDITIONAL 25 MM THICK RIBBED OR WAFFLED NEOPRENE PADS IN THE SADDLES OF CLEVIS HANGERS.
2) ALL PIPES SMALLER THAN 50MM DIA. SHALL BE ISOLATED WITH 5MM THICK RIBBED OR WAFFLED RUBBER PADS IN HANGER SADDLES.

CLEAR FLOOR TO UNDERSLAB = 2850mm
CLEAR PRODUCT = 2800mm
EXCEPT UNIT: 503 CLEAR PRODUCT = 2550mm
EXCEPT UNITS: 526/527 CLEAR PRODUCT = 2600mm
UNITS 519/521: DRAINS FROM TERRACE ON 6/F

NOTES:

1. SOUTH F/A SHAFT FROM G/F TO 8/F. DUCT SERVING CORRIDOR FROM G/F TO 8/F. SEE PRESSURIZATION / VENTILATION RISER DIAGRAM FOR DETAILS.
2. 150ø KITCHEN / DRYER / W/R / FCU INTAKE / FCU EXHAUST DUCT. (TYPICAL UNLESS OTHERWISE NOTED)
3. 19ø GAS PIPE c/w VALVE AND CAP FOR BBQ.
4. 19ø DCW FOR NFHB TO BE CONNECTED TO SUITE'S MAIN DCW LINE.
5. 100ø RWL FROM ABOVE AND DOWN.
6. 150ø RWL FROM ABOVE AND DOWN.
7. 100ø RWL FROM ABOVE.
8. 100ø STM @1%.
9. 100ø RWL DOWN.
10. 150ø RWL FROM ABOVE.
11. 150ø RWL DOWN.
12. 150ø STM @1%.





KEY PLAN — N.T.S.

LEGEND
MECHANICAL

SYMBOL	DESCRIPTION
	SUPPLY AIR DIFFUSER
	SUPPLY AIR TROFFER
	LINEAR SUPPLY DIFFUSER
T	THERMOSTAT
S	FAN SWITCH
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	RETURN DUCT UP
	RETURN DUCT DOWN
	EXHAUST DUCT UP
	EXHAUST DUCT DOWN
FD	FIRE DAMPER
BD	BALANCING DAMPER
MD	MOTORIZED DAMPER
MFD	MOTORIZED FIRE DAMPER
BDD	BACKDRAFT DAMPER
OBD	OPPOSED BLADE VOLUME CONTROL DAMPER C/W LOCKING QUADRANT
	TURNING VANES
	FLEXIBLE CONNECTION
	ACOUSTIC INSULATION
	TYPE OF EQUIPMENT / EQUIPMENT IDENTIFICATION
	TYPE OF DIFFUSER OR GRILLE / GRILLE SIZE OR DIFFUSER NECK SIZE / AIRFLOW (CFM OR L/S)
	STARTER (3 PHASE / 1 PHASE)
	IN-SUITE ERV MASTER SWITCH
	FAN SWITCH / IN-SUITE ERV OVERRIDE BUTTON
CO	CO SENSOR
	GAS LINE
	GAS METER
	GAS COCK
	PRESSURE REDUCING VALVE
	SANITARY ABOVE GRADE
	SANITARY BELOW GRADE
	STORM ABOVE GRADE
	STORM BELOW GRADE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRCULATION
	SANITARY VENT
	WATER METER
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
HD	HUB DRAIN
RD	ROOF DRAIN
RLD	RLAD DRAIN
AD	AREA DRAIN
BLAD	BI-LEVEL AREA DRAIN
CB	CATCH BASIN
	SANITARY TRAP
	ELBOW UP
	ELBOW DOWN
CO	WALL CLEANOUT
CO	FLOOR CLEANOUT
HB	HOSE BIBB
NFHB	NON-FREEZE HOSE BIBB
	GLOBE VALVE
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE
	CAP
	COPPERWELD AIR OUTLET
	BACKFLOW PREVENTER
	CIRCUIT BALANCING VALVE
	MULTIPLE PIPES / / - DENOTES NO. OF PIPES
T	TEMPERATURE SENSOR
T	THERMOSTER
	2-WAY MODULATING VALVE
	3-WAY MODULATING VALVE
	1/2"x4"(D) THERMOWELL C/W 1/2" BUSHING + 1/2" PLUG
	FLOOR ELEVATION ABOVE LEVEL
	FLOOR ELEVATION TWO LEVEL
	HEADROOM (FLOOR TO U/S HEIGHT)

DATE	NO.	DESCRIPTION	BY
2012/09/11	6	ISSUED FOR SITE INSTRUCTION #11-6	E.P.
2012/08/31	5	ISSUED FOR CITY COMMENTS	E.P.
2012/07/05	4	ISSUED FOR SITE INSTRUCTION #11	E.P.
2012/03/14	3	ISSUED FOR TENDER	E.P.
2011/08/04	2	RE-ISSUED FOR PERMIT	E.P.
2011/06/04	1	ISSUED FOR PERMIT	E.P.

THANK YOU! ALL PRINTS DATED PREVIOUS TO FINAL DATE ABOVE

REVISIONS

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB AND REPORT DISCREPANCIES TO THE ENGINEERS BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS THE PROPERTY OF THE ENGINEERS AND MUST BE RETURNED UPON COMPLETION OF THE WORK.

DRAWINGS ARE NOT TO BE SCALED

NOVA TREND ENGINEERING GROUP LTD.
175 West Beaver Creek Road, Unit 31
Richmond Hill, Ontario L4B 3M1
Tel: 905 882-9449
Fax: 905 882-9447

DRAWING TITLE:
5/F SOUTH
MECHANICAL LAYOUT

PROJECT TITLE:
SQ ALEXANDRA PARK
BLOCK 11
38 CAMERON STREET
TORONTO ONTARIO

DRAWN BY:	CHECKED BY:	SCALE:
G.S.	E.P.	1:50
DATE: FEB. 13	PROJECT NUMBER: 1313	DRAWING NUMBER: M-18 OF 43