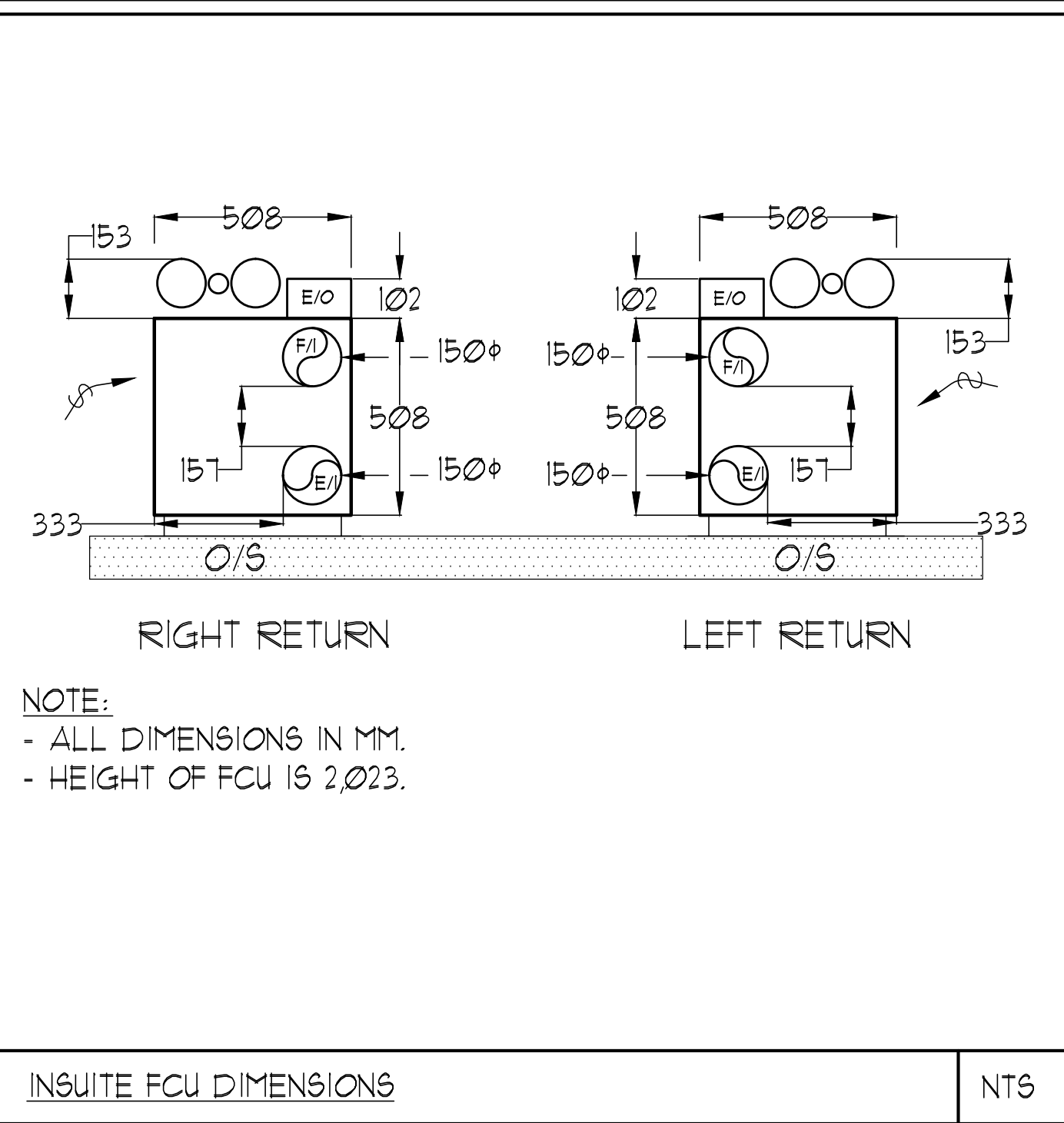
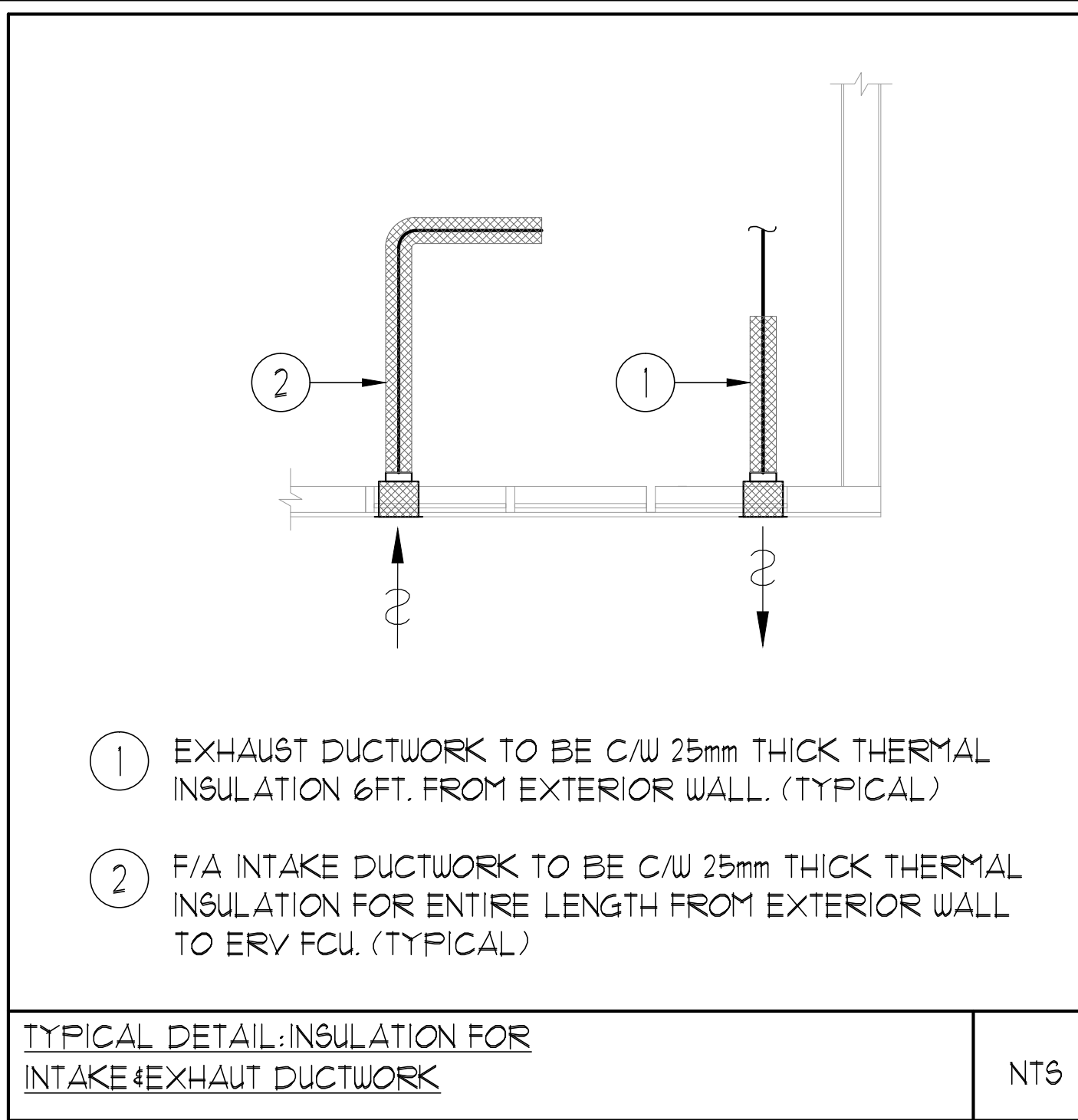




UNIT	NAME	AREA (SQ. FT.)	* OF WR	* OF POWDER	SIZE (T)	FIXTURE UNITS	BR	SQ. FT./T
T14	IC-D	590	2	0	1	16	1	590
T15	IC-DC	590	2	0	1	16	1	590
T16	IC-DF	480	2	0	1	16	1	480
T17	ID2	610	1	0	1	10	1	610
T19	2E	690	2	0	1.5	16	2	460
T21	2C	650	2	0	1.5	16	2	433
T23	IC-DD3	620	2	0	1	16	1	620
T24	IC-DG	620	2	0	1	16	1	620
T26	IC-D	590	2	0	1	16	1	590
T27	2K	730	2	0	1.5	16	2	481

GRILLE SIZING TABLE		
DESIGNATION	SIZE	L/S (VALVES SPECIFIED ELSEWHERE)
SG-A	300x100	41-10
SG-B	300x150	71-93
SG-C	400x150	94-140
SG-D	450x150	141-188
EG-A	150x150	35
W-1	225x200	210mm (L)
W-2	425x200	INSULATED
W-3	625x200	WALL BOX

VERTICAL FAN COIL SIZE		
DESIGNATION	MODEL	W x D
FCU-1T	450	508x660
FCU-15T	600	508x660
FCU-2T	800	508x660
FCU-25T	1000	553x660
FCU-3T	1200	553x660

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

DUCT SIZING TABLE (4.06 m/s, 800 FPM)		
DESIGNATION	L/s	DUCT SIZE
A	41	100x150
B	71	150x150
C	94	200x150
D	118	200x150
E	141	250x150
F	165	300x150

DESIGNATION	L/s	DUCT SIZE
G	189	350x150
H	236	450x150
J	283	500x150
K	330	600x150
L	371	500x200

- GENERAL NOTES:
- CONTRACTOR SHALL CO-ORDINATE ARCHITECTURAL, STRUCTURAL, LIGHTING, HVAC, SPRINKLER DRAWINGS TO AVOID AREAS OF CONFLICT AND TO MAINTAIN CEILING HEIGHTS.
 - CONTRACTOR SHALL REPORT ALL DISCREPANCIES AND AREA OF CONFLICTS TO THE ENGINEER PRIOR TO WORK BEGINS.
 - PROVIDE EXPANSION CHAMBERS FOR ALL KITCHEN SINKS.
 - SEE INSTALLATION DETAILS DRAWING FOR WASHER DRYER WATER, SANITARY CONNECTION DETAILS.
 - 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.
 - ALL VENT PIPE INSTALLATION TO COMPLY WITH PLUMBING CODES.
 - FOR DRYER, W. RISER SIZES, REFER TO RISER DIAGRAM.
 - FIRE DAMPERS ARE REQUIRED TO BE LISTED AND ARE TO HAVE FIRE PROTECTION RATING OF THE PENETRATED FIRE SEPARATION.
 - THE PIPING PENETRATING THE VARIOUS FIRE SEPARATION IS REQUIRED TO BE FIRESTOPPED WITH A LISTED FIRESTOPPING MATERIAL IN ACCORDANCE WITH CBC ARTICLE 3.13.1.
 - 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.
 - NO FLEXIBLE DUCT SHALL BE USED FOR ANY IN-SUITE DUCTWORK.
 - PROVIDE 25MM EXTERNAL INSULATION TO ENTIRE FRESH AIR DUCT FROM EXTERIOR WALL TO ERV FAN COIL UNIT.
 - DRYER EXHAUST DUCT SHALL BE SMOOTH AND CORROSION-RESISTANT MATERIAL (FLEXIBLE CONNECTION IS NOT ACCEPTABLE).

- ACOUSTIC NOTES:
- 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.
 - ALL PIPES SMALLER THAN 50MM DIA. SHALL BE ISOLATED WITH 5MM THICK RIBBED OR WAFFLED RUBBER PADS IN HANGER SADDLES.

CLEAR FLOOR TO UNDERSLAB = 2150mm
CLEAR PRODUCT = 2100mm

- NOTES:
- SOUTH F/A SHAFT FROM G/F TO B/F. DUCT SERVING CORRIDOR FROM G/F TO B/F. SEE PRESSURIZATION / VENTILATION RISER DIAGRAM FOR DETAILS.
 - 100' R/W FROM ABOVE AND DOWN.
 - 150' R/W FROM ABOVE AND DOWN.

LEGEND MECHANICAL	
SYMBOL	DESCRIPTION
[Symbol]	SUPPLY AIR DIFFUSER
[Symbol]	SUPPLY AIR TROOPER
[Symbol]	LINEAR SUPPLY DIFFUSER
[Symbol]	THERMOSTAT
[Symbol]	FAN MOTOR
[Symbol]	RETURN AIR GRILLE
[Symbol]	EXHAUST AIR GRILLE
[Symbol]	SUPPLY DUCT UP
[Symbol]	SUPPLY DUCT DOWN
[Symbol]	RETURN DUCT UP
[Symbol]	RETURN DUCT DOWN
[Symbol]	EXHAUST DUCT UP
[Symbol]	EXHAUST DUCT DOWN
[Symbol]	FIRE DAMPER
[Symbol]	BALANCING DAMPER
[Symbol]	MOTORIZED DAMPER
[Symbol]	MOTORIZED FIRE DAMPER
[Symbol]	BACKDRIFT DAMPER
[Symbol]	OPPOSED BLADE VALVE CONTROL DAMPER
[Symbol]	CALL LOCKING SHUT-OFF
[Symbol]	TUNING VALVES
[Symbol]	FLEXIBLE CONNECTION
[Symbol]	ACOUSTIC INSULATION
[Symbol]	TYPE OF EQUIPMENT
[Symbol]	TYPE OF CONNECTION
[Symbol]	TYPE OF DIFFUSER OR GRILLE
[Symbol]	GRILLE SIZE OR DIFFUSER RACK SIZE
[Symbol]	AMPLITUDE (CM OR IN)
[Symbol]	STARTER / 3 PHASE / PHASE
[Symbol]	IN-SUITE ERV FASTER RATIO
[Symbol]	FAN MOTOR / IN-SUITE ERV OVERRIDE BUTTON
[Symbol]	CO SENSOR
[Symbol]	GAS LINE
[Symbol]	GAS METER
[Symbol]	GAS COCK
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	SANITARY ABOVE GRADE
[Symbol]	SANITARY BELOW GRADE
[Symbol]	STORM ABOVE GRADE
[Symbol]	STORM BELOW GRADE
[Symbol]	DOMESTIC COLD WATER
[Symbol]	DOMESTIC HOT WATER
[Symbol]	DOMESTIC HOT WATER RECIRCULATION
[Symbol]	SANITARY VENT
[Symbol]	WATER PETER
[Symbol]	FLOOR DRAIN
[Symbol]	FLOOR DRAIN
[Symbol]	FLOOR DRAIN
[Symbol]	ROOF DRAIN
[Symbol]	SLAB DRAIN
[Symbol]	AREA DRAIN
[Symbol]	BI-LEVEL AREA DRAIN
[Symbol]	CATCH BASIN
[Symbol]	SANITARY TRAP
[Symbol]	ELBOW UP
[Symbol]	ELBOW DOWN
[Symbol]	WALL CLEANOUT
[Symbol]	FLOOR CLEANOUT
[Symbol]	HOSE BIBB
[Symbol]	NON-FREEZE HOSE BIBB
[Symbol]	GATE VALVE
[Symbol]	BALL VALVE
[Symbol]	BUTTERFLY VALVE
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	CHECK VALVE
[Symbol]	CAP
[Symbol]	COMPRESSED AIR OUTLET
[Symbol]	BACKFLOW PREVENTER
[Symbol]	CIRCUIT BALANCING VALVE
[Symbol]	MULTIPLE PIPES
[Symbol]	IDENTIFIER NO. OF PIPES
[Symbol]	TEMPERATURE SENSOR
[Symbol]	THERMISTOR
[Symbol]	2-WAY MODULATING VALVE
[Symbol]	3-WAY MODULATING VALVE
[Symbol]	C/W 1/2" BUSHING 4 1/2" PLUG
[Symbol]	FLOOR ELEVATION ABOVE LEVEL
[Symbol]	FLOOR ELEVATION BELOW LEVEL
[Symbol]	HEADROOM FLOOR TO CEILING

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	EP
2	RE-BASED FOR PERMIT	EP
3	ISSUED FOR PERMIT	EP
4	DATE	BT

MARK: VOID ALL PRINTS DATED PREVIOUS TO FINAL DATE ABOVE

NOVA ENGINEERING CONSULTANTS

175 West Beaver Creek Road Unit 31
Richmond Hill, Ontario L4B 3M1
Tel: 905.882.5445
Fax: 905.882.5441

DRAWING TITLE:
T/F SOUTH
MECHANICAL LAYOUT

PROJECT TITLE:
60 ALEXANDRA PARK
BLOCK II
38 CAMERON STREET
TORONTO

DRAWN BY:
G.S.

CHECKED BY:
E.P.

SCALE:
1:50

DATE:
FEB. 13

PROJECT NUMBER:
1313

DRAWING NUMBER:
M-22

OF 43

