

# COLUMN & WALL SCHEDULE (BELOW GROUND FLOOR)

TORONTO STANDARD  
CONDOMINIUM PLAN NO.  
PART 4 OF 4 PARTS  
SHEET 24 OF 38 SHEETS

COL. No.	Ax.Pa-Ax.Pb	C.Pa-C.Pb	A.PB-C.Pb	P1 Pb	P2 Pb	P3 Pb	P4 Pb	P5 Pb	P6 Pb	P7 Pb	P8 Pb	P9.Pa-P9.Pb	P11.Pa-P11.Pb	P12.Pa-P12.Pb	P13.Pa-P13.Pb	P.2-Q.2	P9.Pb-Q.Pb	C 6	P1 6	P2 6	P3 6	P4 6	P5 6	H 6	J.7-J.8	J.7-Kx.7	Kx.7-Kx.8	J-8	K-8	Kx-8	COL. No.	DATA	
GROUND FLOOR																															GROUND FLOOR		
P1 LEVEL	300 WALL 10820 HEF 108200 VEF ADD 2-20 ALL AROUND THE OPENINGS ADD 4-25 VEE ▲	200 WALL 10840 HEF 108200 VEF ADD 4-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 2-20 ALL AROUND THE OPENINGS ADD 4-25 VEE ▲	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 4-25 VEE ▲	1000x300 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	P1 LEVEL	
P2 LEVEL	300 WALL 10820 HEF 108200 VEF ADD 4-25 VEE ▲	200 WALL 10840 HEF 108200 VEF ADD 4-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 2-20 ALL AROUND THE OPENINGS ADD 4-25 VEE ▲	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 2-20 ALL AROUND THE OPENINGS ADD 4-25 VEE ▲	1000x300 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	300 WALL 10820 HEF 108200 VEF ADD 8-25 VEE ▲	P2 LEVEL		
DATA	COL. No.	Ax.Pa-Ax.Pb	C.Pa-C.Pb	A.PB-C.Pb	P1 Pb	P2 Pb	P3 Pb	P4 Pb	P5 Pb	P6 Pb	P7 Pb	P8 Pb	P9.Pa-P9.Pb	P11.Pa-P11.Pb	P12.Pa-P12.Pb	P13.Pa-P13.Pb	P.2-Q.2	P9.Pb-Q.Pb	C 6	P1 6	P2 6	P3 6	P4 6	P5 6	H 6	J.7-J.8	J.7-Kx.7	Kx.7-Kx.8	J-8	K-8	Kx-8	COL. No.	DATA

COL. No.	Kx.7-Q.7	P.3x-P.7	C 10	D 10	D.10-Q.10	A/Ax.Pe-C.Pe	A/Ax.13-C.13	C.Pe-C.13	P1 Pe	P2 Pe	P3 Pe	P4 Pe	P5 Pe	P6 Pe	P7 Pe	P8 Pe	P8/P9-Pd X P8/P9-Pe	P8/P9.Pe-L.Pe	LPd-L.Pe	P10 Pe	P11 Pe	P12x Pe	C.15-C.16	COL. No.	DATA							
GROUND FLOOR																										GROUND FLOOR						
P1 LEVEL	300 WALL 10820 HEF 108200 VEF ADD 2-20 ALL AROUND THE OPENINGS ADD 4-25 VEE ▲	250 WALL 10830 HEF 108200 VEF ADD 4-25 VEE ▲	1000x300 12-35	1000x300 14-35	300 WALL 10820 HEF 108200 VEF ADD 2-20 ALL AROUND THE OPENINGS ADD 4-25 VEE ▲	200 WALL 10840 HEF 108200 VEF ADD 2-20 VEE ▲	200 WALL 10840 HEF 108200 VEF ADD 2-20 VEE ▲	200 WALL 10840 HEF 108200 VEF ADD 2-20 VEE ▲	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	250 WALL 10820 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10820 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10820 HEF 108200 VEF ADD 4-25 VEE ▲						300 WALL 10820 HEF 108200 VEF ADD 2-20 VEE ▲	P1 LEVEL						
P2 LEVEL	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300 WALL 10820 HEF 108200 VEF ADD 2-20 ALL AROUND THE OPENINGS ADD 4-25 VEE ▲	200 WALL 10840 HEF 108200 VEF ADD 2-20 VEE ▲	200 WALL 10840 HEF 108200 VEF ADD 2-20 VEE ▲	200 WALL 10840 HEF 108200 VEF ADD 2-20 VEE ▲	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	250 WALL 10820 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10820 HEF 108200 VEF ADD 4-25 VEE ▲	250 WALL 10820 HEF 108200 VEF ADD 4-25 VEE ▲						300 WALL 10820 HEF 108200 VEF ADD 2-20 VEE ▲	P2 LEVEL						
DATA	COL. No.	L 6	M 6	My/N 6	Ny/P 6	Q 6	P.3x-P.7	C 10	D 10	D.10-N.10	P 10	Q 10	A/Ax.Pe-C.Pe	A/Ax.13-C.13	C.Pe-C.13	P1 Pe	P2 Pe	P3 Pe	P4 Pe	P5 Pe	P6 Pe	P7 Pe	P8 Pe	P8/P9-Pd X P8/P9-Pe	P8/P9.Pe-L.Pe	LPd-L.Pe	P10 Pe	P11 Pe	P12x Pe	C.15-C.16	COL. No.	DATA

COL. No.	P1 15	P2 15	P3 15	P4 15	P5 15	P6 15	P7 15	P8 15	P9 15	P10 15	P11 15	P12x 15	COL. No.	DATA	
GROUND FLOOR														GROUND FLOOR	
P1 LEVEL	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35		P1 LEVEL	
P2 LEVEL	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35	300x1000 12-35		P2 LEVEL	
DATA	COL. No.	P1 15	P2 15	P3 15	P4 15	P5 15	P6 15	P7 15	P8 15	P9 15	P10 15	P11 15	P12x 15	COL. No.	DATA

### COLUMN AND WALL SCHEDULE NOTES:

- COLUMN SIZE GIVEN FIRST IN THE SCHEDULE IS IN THE NORTH-SOUTH DIRECTION.
- COLUMN LOADS ARE GIVEN IN SPECIFIED KILONEWTONS.
- CONCRETE STRENGTH AT 28 DAYS SHALL BE AS SPECIFIED IN SCHEDULE.
- MINIMUM YIELD STRESS FOR REINFORCING STEEL SHALL BE 400 MPa.
- PROVIDE TENSION LAP SPLICE (CLASS 'B') FOR ALL VERTICAL BARS MARKED THUS "▲" IN SCHEDULE.
- PROVIDE COLUMN TIES IN WALLS THAT HAVE VERTICAL REINFORCING STEEL OF SIZE 20 OR GREATER. FOR ALL THE COLUMNS LOCATED AT THE GROUND FLOOR AND BELOW, PROVIDE 15@200 TIES.
- FOR ALL WALLS GREATER THAN 2000MM IN LENGTH PROVIDE SHEAR WALL REINFORCING AS PER TABLE 2, FOR ALL OTHER WALLS PROVIDE TEMPERATURE REINFORCING AS PER TABLE 1
- H.E.F. - DENOTES HORIZONTAL EACH FACE  
H.T.B.E.F. - DENOTES HORIZONTAL TOP&BOTTOM EACH FACE  
H.T.E.F. - DENOTES HORIZONTAL TOP EACH FACE  
V.EAST E. - DENOTES VERTICAL EAST END  
V.E.F. - DENOTES VERTICAL EACH FACE  
V.E.E. - DENOTES VERTICAL EACH END  
V.N.E. - DENOTES VERTICAL NORTH END  
V.S.E. - DENOTES VERTICAL SOUTH END  
V.W.E. - DENOTES VERTICAL WEST END
- REFER TO MECHANICAL DWGS. FOR MECHANICAL WALL OPENINGS.
- REFER TO ARCHITECTURAL DRAWINGS FOR WALL LENGTHS.
- REFER TO TYPICAL DETAILS ON DRAWINGS S-001 TO S-004.
- REFER TO GENERAL NOTES ON DRAWING S-001.
- UNLESS NOTED OTHERWISE, PROVIDE COLUMN OR WALL DOWELS TO MATCH VERTICAL REINFORCING GIVEN IN SCHEDULE.
- CONCRETE EXPOSED TO VEHICULAR TRAFFIC SHALL HAVE 6% TO 8% ENTRAINED AIR AND SHALL BE PROPORTIONED FOR C-1 EXPOSURE CONDITIONS.

COLUMN, WALL & FOOTING DOWEL SCHEDULE		LAP SPLICE IN WALL OR COLUMN AND DEVELOPMENT LENGTH IN CAP OR FOOTING							
DATA	BAR SIZE	10	15	20	25	30	35		
Fy = 400 < Fc = 25	TENSION	LAP SPLICE DEVELOPMENT LENGTH	490	740	980	1530	1830	2130	
	COMPRESSION	LAP SPLICE DEVELOPMENT LENGTH	380	570	750	1170	1410	1640	
Fy = 400 < Fc = 30	TENSION	LAP SPLICE DEVELOPMENT LENGTH	300	440	590	730	880	1030	
	COMPRESSION	LAP SPLICE DEVELOPMENT LENGTH	220	310	370	480	570	690	
Fy = 400 < Fc = 35	TENSION	LAP SPLICE DEVELOPMENT LENGTH	450	670	890	1390	1670	1950	
	COMPRESSION	LAP SPLICE DEVELOPMENT LENGTH	350	520	690	1070	1290	1500	
Fy = 400 < Fc = 40	TENSION	LAP SPLICE DEVELOPMENT LENGTH	300	440	590	730	880	1030	
	COMPRESSION	LAP SPLICE DEVELOPMENT LENGTH	200	280	340	440	530	630	
Fy = 400 < Fc = 45	TENSION	LAP SPLICE DEVELOPMENT LENGTH	390	580	770	1210	1450	1690	
	COMPRESSION	LAP SPLICE DEVELOPMENT LENGTH	300	450	600	930	1110	1300	
Fy = 400 < Fc = 50	TENSION	LAP SPLICE DEVELOPMENT LENGTH	300	440	590	730	880	1030	
	COMPRESSION	LAP SPLICE DEVELOPMENT LENGTH	200	280	340	440	530	630	

TABLE 1 TEMPERATURE WALL REINFORCING				
WALL THICKNESS	DIRECTION	WALL EXPOSED OR ENCLOSED BOTH SIDES	WALL EXPOSED ONE SIDE	
			EXPOSED SIDE	ENCLOSED SIDE
150mm	HORIZ.	10 @ 330 (1 LAYER)	10 @ 330 (1 LAYER)	
	VERT.	10 @ 450 (1 LAYER)	10 @ 450 (1 LAYER)	
200mm	HORIZ.	10 @ 450 EA. FACE	10 @ 420	10 @ 450
	VERT.	10 @ 450 EA. FACE	10 @ 450	10 @ 450
250mm	HORIZ.	10 @ 400 EA. FACE	10 @ 330	10 @ 450
	VERT.	10 @ 450 EA. FACE	10 @ 450	10 @ 450
300mm	HORIZ.	10 @ 330 EA. FACE	10 @ 250	10 @ 450
	VERT.	10 @ 440 EA. FACE	10 @ 400	10 @ 450
350mm	HORIZ.	10 @ 280 EA. FACE	10 @ 210	10 @ 430
	VERT.	10 @ 380 EA. FACE	10 @ 300	10 @ 450
400mm	HORIZ.	10 @ 250 EA. FACE	10 @ 380	10 @ 370
	VERT.	10 @ 330 EA. FACE	10 @ 250	10 @ 450

NOTE: SIZE AND SPACING OF DOWELS TO BE SAME AS VERTICAL REINF. IN WALL

TABLE 2 SHEAR WALL REINFORCING				
WALL THICKNESS	DIRECTION	WALL EXPOSED OR ENCLOSED BOTH SIDES	WALL EXPOSED ONE SIDE	
			EXPOSED SIDE	ENCLOSED SIDE
150mm	HORIZ.	10 @ 270 (1 LAYER)	10 @ 270 (1 LAYER)	
	VERT.	10 @ 270 (1 LAYER)	10 @ 270 (1 LAYER)	
200mm	HORIZ.	10 @ 400 EA. FACE	10 @ 300	10 @ 450
	VERT.	10 @ 400 EA. FACE	10 @ 300	10 @ 450
250mm	HORIZ.	10 @ 320 EA. FACE	10 @ 240	10 @ 450
	VERT.	10 @ 320 EA. FACE	10 @ 240	10 @ 450
300mm	HORIZ.	10 @ 270 EA. FACE	10 @ 200	10 @ 400
	VERT.	10 @ 270 EA. FACE	10 @ 200	10 @ 400
350mm	HORIZ.	15 @ 450 EA. FACE	15 @ 340	15 @ 450
	VERT.	15 @ 450 EA. FACE	15 @ 340	15 @ 450
400mm	HORIZ.	15 @ 400 EA. FACE	15 @ 300	15 @ 450
	VERT.	15 @ 400 EA. FACE	15 @ 300	15 @ 450
450mm	HORIZ.	15 @ 350 EA. FACE	15 @ 260	15 @ 450
	VERT.	15 @ 350 EA. FACE	15 @ 260	15 @ 450

NOTE: SIZE AND SPACING OF DOWELS TO BE SAME AS VERTICAL REINF. IN WALL

Jablonsky, Ast and Partners  
CONSULTING ENGINEERS  
1120 LESLIE STREET  
DOR. MILLS, ON. M3C 2K5  
TEL: 416-447-7400  
FAX: 416-447-2711  
E-mail: jsp@ast.on.ca



NO.	ISSUED / REVISED	DATE
1	ISSUED FOR PERMIT	2014-09-23
2	RE ISSUED FOR PERMIT	2014-07-01
3	ISSUED FOR FORMING TRENCH	2014-08-27
4	CONSTRUCTION REVIEW	2015-03-23
5	RE ISSUED FOR PERMIT	2015-01-07
6	ISSUED FOR CONSTRUCTION	2015-03-11
7	UPDATED - IFC	2015-04-23
8	UPDATED - IFC	2015-05-21
9	ISSUED FOR B-I-P	2015-07-28
11	ISSUED FOR B-I-I	2015-11-04

FIRST FLOOR ELEV. 93.60m

ALEXANDRA PARK - BLOCK 11  
TORONTO, ONTARIO

project no: 13015 AS NOTED  
date: H.W. H.P.  
drawn by: MARCH 2014  
checked by:  
date stamped:

COLUMN AND WALL SCHEDULE (BELOW GRD. FLOOR)