

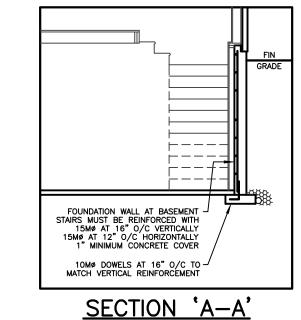
PLACED BELOW WINDOW SILL

NO. 6 (20mm) STEEL BARS, WITH MIN 50mm CONCRETE COVER

CONCRETE REINFORCING

FOR ALL FOUNDATIONS

ON ENGINEERED FILL



BEARING CAPACITY OF SOIL SHALL BE

FOR ENGINEERED TRUSS JOISTS, REFER TO ATTACHED MANUFACTURER'S FLOOR

MINIMUM FOOTING WIDTH OR AREA SHALL MINIMUM FOOTING WIDTH OR AREA SHALL CONFORM TO TABLE 9.15.3.4.

STEEL COLUMNS SHALL CONFORM TO OBC 9.17.3. WOOD COLUMNS SHALL CONFORM TO OBC 9.17.4. MAXIMUM SPANS OF STEEL BEAMS SUPPORTING FLOORS SHALL CONFORM TO TABLE 9.23.4.3 MAXIMUM SPANS OF STEEL BEAMS SUPPORTING A ROOF AND ONE FLOOR SHALL CONFORM TO TABLES A-20 TO A-29 WOOD FLOOR JOISTS SHALL CONFORM TO OBC 9.23.9. OBC 9.23.9. MAXIMUM SPANS FOR WOOD FLOOR JOISTS SHALL CONFORM TO TABLES A1 AND A-2 OR WITH MANUFACTURER'S SPAN TABLES. MAXIMUM SPANS FOR BUILT-UP WOOD FLOOR

BEAMS SHALL CONFORM TO TABLES A-8
THROUGH A-10.
MAXIMUM SPANS FOR LINTELS SHALL
CONFORM TO TABLES A-13 THROUGH A-19. FLOORS-ON-GROUND SHALL CONFORM TO CONCRETE SHALL CONFORM TO OBC 9.3.1.

(B.9.15.4.2) CONCRETE FOUNDATION WALLS SHALL HAVE A MINIMUM THICKNESS OF 200 mm (7-7/8") UNLESS OTHERWISE SPECIFIED. THE MAXIMUM HEIGHT OF THE FINISHED GRADE ABOVE THE BASEMENT FLOOR, FOR LATERALLY BASEMENI FLOOR, FOR LAIERALLI SUPPORTED WALLS, SHALL BE AS FOLLOWS: 200 mm (7-7/8") SOLID CONCRETE 240 mm (9-1/2") CONCRETE BLOCK 290 mm (11-3/8") CONCRETE BLOCK

A SUBSURFACE INVESTIGATION, INCLUDING GROUNDWATER CONDITIONS, SHALL BE CARRIED OUT, BY OR UNDER THE DIRECTION OF A PERSON HAVING KNOWLEDGE AND EXPERIENCE IN PLANNING AND EXECUTING SUCH
INVESTIGATIONS TO A DEGREE APPROPRIATE
FOR THE BUILDING AND ITS USE, THE GROUND AND THE SURROUNDING SITE CONDITIONS IN CONFORMANCE WITH OBC 4.2.2.1. TERMITE AND DECAY PROTECTION FOR LUMBER AND WOOD PRODUCTS SHALL CONFORM TO OBC 9.3.2.9.(6)

STRUCTURAL MEMBERS AND THEIR CONNECTIONS SHALL CONFORM TO OBC 9.4.1. THE CLEAR HEIGHT OVER STAIRS MEASURED THE CLEAN MEASURED VERTICALLY FROM A LINE DRAWN THROUGH THE LEADING EDGES OF THE TREADS SHALL BE NOT LESS THAN 1,950 mm, WITHIN DWELLING UNITS [OBC 9.8.2.2]

DIMENSIONS FOR RECTANGULAR TREADS RISE MAX. 200 mm, MIN. 125 mm RUN MAX. 355 mm, MIN. 255 mm [OBC TABLE 9.8.4.1]

A HANDRAIL SHALL BE PROVIDED ...

(A) ON AT LEAST ONE SIDE OF STAIRS OR RAMPS LESS THAN 1,100 mm IN WIDTH,

(B) ON 2 SIDES OF CURVED STAIRS OR RAMPS OF ANY WIDTH, EXCEPT CURVED STAIRS WITHIN DWELLING UNITS, AND

(C) ON 2 SIDES OF STAIRS OR RAMPS

1.100 mm IN WIDTH OR GREATER. HANDRAILS ARE NOT REQUIRED FOR ...

(A) INTERIOR STAIRS HAVING NOT MORE
THAN 2 RISERS AND SERVING A SINGLE (B) EXTERIOR STAIRS HAVING NOT MORE THAN 3 RISERS AND SERVING A SINGLE DWELLING UNIT. [OBC 9.8.7.1]

THE HEIGHT OF HANDRAILS ON STAIRS AND RAMPS SHALL BE NOT LESS THAN 865 mm AND NOT MORE THAN 965 mm. [B 9.8.7.4]

EXTERIOR CONCRETE STAIRS WITH MORE THAN 2 RISERS AND 2 TREADS SHALL BE SUPPORTED ON UNIT MASONRY OR CONCRETE WALLS OR PIERS NOT LESS THAN 150 mm

GRANULAR MATERIAL USED TO DRAIN THE BOTTOM OF A FOUNDATION SHALL CONFORM TO OBC 9.14.4.1. WHERE A FOUNDATION IS ERECTED ON FILLED GROUND, PEAT OR SENSITIVE CLAY, THE FOOTING SIZES SHALL CONFORM TO TO OBC SECTION 4.2. [OBC 9.15.1.1.(3)]

THE LENGTH OF END BEARING OF BEAMS THAT ARE SUPPORTED ON MASONRY SHALL BE NOT LESS THAN 90 mm. THE LENGTH OF END BEARING OF FLOOR, ROOF OR CEILING JOISTS THAT ARE SUPPORTED ON MASONRY SHALL BE NOT LESS THAN 40 mm.

WOOD BEAMS SHALL HAVE AN EVEN AND LEVEL BEARING AND SHALL HAVE NOT LESS THAN 89 mm LENGTH OF BEARING AT END SUPPORTS. [OBC 9.23.8.1]

A FLOOR DRAIN SHALL BE INSTALLED IN A BASEMENT FORMING PART OF A DWELLING UNIT. [OBC 9.31.4.4]

CAPACITY AND SOUND RATINGS FOR REQUIRED FANS SHALL CONFORM TO OBC 9.32.3.9. 3-WAY WALL SWITCHES LOCATED AT THE HEAD AND FOOT OF EVERY STAIRWAY SHALL BE PROVIDED TO CONTROL AT LEAST ONE LIGHTING OUTLET WITH FIXTURE FOR STAIRWAY'S WITH 4 OR MORE RISERS IN DWELLING UNITS. [OBC 9.34.2.3(2)]

A LIGHTING OUTLET WITH FIXTURE SHALL BE PROVIDED FOR EACH 30  $\mathrm{m}^2$  OF FLOOR AREA OR FRACTION OF IT IN UNFINISHED BASEMENTS. [OBC 9.34.2.4]

A LIGHTING OUTLET WITH FIXTURE SHALL BE PROVIDED IN STORAGE ROOMS. [OBC 9.34.2.5]

EXCEPT FOR DOORS ON ENCLOSED UNHEATED VESTIBULES AND COLD CELLARS, AND EXCEPT FOR THE GLAZED PORTIONS OF DOORS, ALL DOORS THAT SEPARATE HEATED SPACE FROM UNHEATED SPACE SHALL HAVE A THERMAL RESISTANCE OF NOT LESS THAN RSI 0.7 WILEPE A STORM DOOP IS NOT PROVIDED. WHERE A STORM DOOR IS NOT PROVIDED. [OBC B 12.3.2.7]

THE MAXIMUM DEFLECTION OF STRUCTURAL MEMBERS SHALL CONFORM TO TABLE 9.4.3.1.

WINDOWS DOORS AND SKYLIGHTS SHALL CONFORM TO OBC SECTION 9.7

AND TREADS SHALL CONFORM TO OBC 9.8.4.4.

THE DEPTH OF A RECTANGULAR TREAD SHALL BE IN COMPLIANCE WITH OBC 9.8.4.1.

LANDINGS SHALL BE PROVIDED IN CONFORMANCE WITH OBC 9.8.6.2.

DIMENSIONS OF REQUIRED LANDINGS SHALL CONFORM TO OBC 9.8.6.3.

THE CLEARANCE BETWEEN A HANDRAIL AND ANY SURFACE BEHIND IT SHALL BE NOT LESS THAN 50 mm. ALL HANDRAILS SHALL BE CONSTRUCTED SO AS TO BE CONTINUALLY GRASPABLE ALONG THEIR ENTIRE LENGTH WITH NO OBSTRUCTION ON OR ABOVE THEM TO BREAK A HANDHOLD, EXCEPT WHERE THE HANDRAIL IS INTERPRIENTED BY NEWELS AT HANDRAIL IS INTERRUPTED BY NEWELS AT CHANGES IN DIRECTION. [OBC 9.8.7.5]

THE DESIGN AND ATTACHMENT OF HANDRAILS AND ANY BUILDING ELEMENT THAT COULD BE USED AS A HANDRAIL SHALL CONFORM TO OBC 9.8.7.7.

BE NOT LESS THAN 900 mm HIGH. [OBC 9.8.8.3]

LOADS ON STAIRS AND RAMPS SHALL CONFORM TO OBC 9.8.9.1.

THE FINISH FOR TREADS, LANDINGS AND RAMPS SHALL CONFORM TO OBC 9.8.9.6.

FIRE BLOCKS MATERIALS SHALL CONFORM TO OBC 9.10.16.3.

SMOKE ALARMS CONFORMING TO CAN/ULC-S331, "SMOKE ALARMS", SHALL BE INSTALLED IN EACH DWELLING UNIT IN CONFORMANCE WITH OBC 9.10.19.

FIREPLACE INSERTS AND HEARTH-MOUNTED STOVES SHALL CONFORM TO OBC 9.22.10.

ANCHORAGE OF COLUMNS AND POSTS SHALL CONFORM TO OBC 9.23.6.2.

WALL STUD SIZE AND SPACING SHALL CONFORM TO OBC 9.23.10.1.

STUD POSTS BUILT INTO WALLS SHALL CONFORM TO OBC 9.23.10.7.

VAPOUR BARRIER MATERIALS SHALL CONFORM TO OBC 9.25.4.2. VAPOUR BARRIER INSTALLATION SHALL CONFORM TO OBC 9.25.4.3.

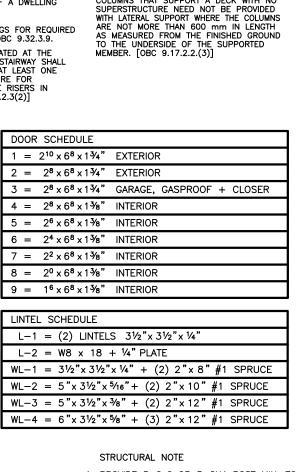
ALL PLUMBING FACILITIES AND SYSTEMS SHALL COMPLY WITH OBC SECTION 9.31

ALL NATURAL VENTILATION OF ROOMS AND SPACES, AND SELF-CONTAINED MECHANICAL VENTILATION SYSTEMS SHALL COMPLY WITH

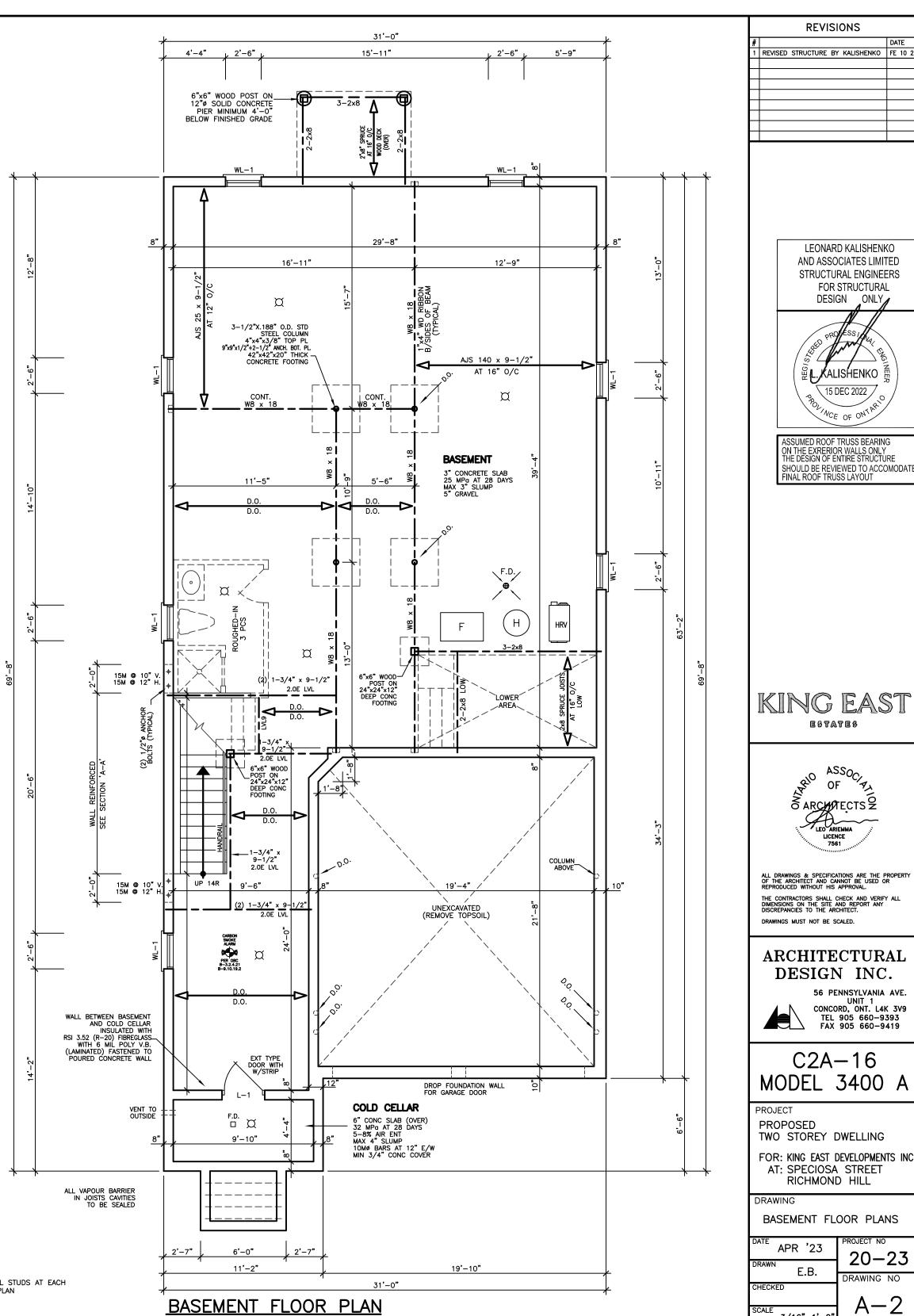
ALL AIR—CONDITIONING SYSTEMS AND CENTRAL HEATING SYSTEMS INCLUDING REQUIREMENTS FOR COMBUSTION AIR SHALL COMPLY WITH OBC SECTION 9.33.

CARBON MONOXIDE ALARMS SHALL BE INSTALLED IN CONFORMANCE WITH OBC 9.33.4.

ALL ELECTRICAL FACILITIES AND OUTLETS SHALL CONFORM TO OBC SECTION 9.34. COLUMNS THAT SUPPORT A DECK WITH NO



1. PROVIDE 3-2x6 OR 3-2X4 POST MIN. TO MATCH WALL STUDS AT EACH LINTEL OR BEAM BEARING (TYP.) UNLESS NOTED ON PLAN STRUCTURAL LEGEND LVL9 DENOTES 1-1 3/4" X 9 1/2"LVL2.0E



**REVISIONS** 

LEONARD KALISHENKO

AND ASSOCIATES LIMITED

STRUCTURAL ENGINEERS

FOR STRUCTURAL

DESIGN ONLY

**K**ALISHENKO

15 DEC 2022

NCE OF ONT

ASSUMED ROOF TRUSS BEARING

FINAL ROOF TRUSS LAYOUT

**ESTATES** 

LICENCE

DESIGN INC.

C2A-16

RICHMOND HILL

20 - 23

DRAWING NO

APR '23

E.B.

3/16"=1'-0

56 PENNSYLVANIA AVE. UNIT 1
CONCORD, ONT. L4K 3V9

TEL 905 660-9393 FAX 905 660-9419

ASSOC,

ON THE EXRERIOR WALLS ONLY THE DESIGN OF ENTIRE STRUCTURE

SHOULD BE REVIEWED TO ACCOMODATE

EXHAUST DUCTS CONNECTED TO LAUNDRY DRYING EQUIPMENT SHALL BE ...

(A) INDEPENDENT OF OTHER EXHAUST DUCTS,

(B) DESIGNED AND INSTALLED SO THAT THE
ENTIRE DUCT CAN BE CLEANED, AND

(C) CONSTRUCTED OF MATERIAL THAT IS
SMOOTH AND CORROSION—RESISTANT.

THE COMPRESSIVE STRENGTH OF UNREINFORCED CONCRETE AFTER 28 DAYS UNREINFORCED CONCRETE AFTER 28 DAYS
SHALL BE NOT LESS THAN ...

(A) 32 MPa FOR GARAGE FLOORS, CARPORT
FLOORS AND ALL EXTERIOR FLATWORK,
(B) 20 MPa FOR INTERIOR FLOORS, AND
(C) 15 MPa FOR ALL OTHER APPLICATIONS.
CONCRETE USED FOR GARAGE AND CARPORT
FLOORS AND EXTERIOR STEPS SHALL HAVE
AIR ENTRAINMENT OF 5 TO 8%. [OBC 9.3.1.6]

IF WOOD OR SHEET STEEL WALL STUDS ENCLOSE THE MAIN BATHROOM IN A DWELLING UNIT, REINFORCEMENT SHALL BE INSTALLED TO PERMIT THE FUTURE INSTALLATION OF A GRAB BAR IN

WINDOWS, DOORS AND SKYLIGHTS SHALL CONFORM TO OBC B.9.7

A DOOR BETWEEN AN ATTACHED OR BUILT-IN GARAGE AND A DWELLING UNIT SHALL BE TIGHT FITTING AND WEATHERSTRIPPED TO PROVIDE AN EFFECTIVE BARRIER AGAINST THE PASSAGE OF GASSES AND EXHAUST FUMES AND SHALL BE FITTED WITH A SELF-CLOSING DEVICE OBC 9.10.15.13.

A HANDRAIL SHALL BE PROVIDED ...

(A) ON AT LEAST ONE SIDE OF STAIRS OR RAMPS LESS THAN 1,100 mm IN WIDTH,

(B) ON 2 SIDES OF CURVED STAIRS OR RAMPS OF ANY WIDTH, EXCEPT CURVED STAIRS WITHIN DWELLING UNITS, AND

(C) ON 2 SIDES OF STAIRS OR RAMPS

1 100 mm IN WIDTH OR CREATER 1.100 mm IN WIDTH OR GREATER. HANDRAILS ARE NOT REQUIRED FOR ...

(A) INTERIOR STAIRS HAVING NOT MORE
THAN 2 RISERS AND SERVING A SINGLE

DWELLING UNIT, OR
(B) EXTERIOR STAIRS HAVING NOT MORE THAN 3 RISERS AND SERVING A SINGLE DWELLING UNIT. [OBC 9.8.7.1]

THE HEIGHT OF HANDRAILS ON STAIRS AND RAMPS SHALL BE NOT LESS THAN 865 mm AND NOT MORE THAN 965 mm. [B.9.8.7.4.] GUARDS SHALL CONFORM TO OBC 9.8.8.1 AND SHALL RESIST LOADS IN CONFORMANCE WITH TABLE 9.8.8.2.

WHERE A GARAGE IS ATTACHED TO OR BUILT INTO A BUILDING OF RESIDENTIAL OCCUPANCY, (A) AN AIR BARRIER SYSTEM IN CONFORMANCE OBC 9.25.3, SHALL BE INSTALLED BETWEEN THE GARAGE AND THE REMAINDER OF THE BUILDING TO PROVIDE AN EFFECTIVE BARRIER TO GAS AND EXHAUST FUMES, AND (B) EVERY DOOR BETWEEN THE GARAGE AND THE REMAINDER OF THE BUILDING SHALL CONFORM TO OBC 9.10.13.15.

A DOOR BETWEEN AN ATTACHED OR BUILT-IN GARAGE AND A DWELLING UNIT SHALL BE TIGHT-FITTING AND WEATHERSTRIPPED TO PROVIDE AN EFFECTIVE BARRIER AGAINST THE PASSAGE OF GASES AND EXHAUST FUMES AND SHALL BE ETTED WITTH A SELE CLOSING AND SHALL BE FITTED WITH A SELF-CLOSING DEVICE. [OBC 9.10.13.15]

FACTORY-BUILT FIREPLACES AND THEIR INSTALLATION SHALL CONFORM TO CAN/ULC-S610-M, "FACTORY-BUILT FIREPLACES". [OBC 9.22.8.1]

LAUNDRY FACILITIES OR A SPACE FOR LAUNDRY FACILITIES ON A SPACE FOR LAUNDRY FACILITIES SHALL BE PROVIDED IN EVERY DWELLING UNIT OR GROUPED ELSEWHERE IN THE BUILDING IN A LOCATION CONVENIENTLY ACCESSIBLE TO OCCUPANTS OF EVERY DWELLING UNIT. [9.31.4.2]

A CLOTHES DRYER EXHAUST DUCT SYSTEM SHALL CONFORM TO PART 6. [OBC 9.32.1.1]

AN EXHAUST AIR INTAKE SHALL BE INSTALLED IN EACH KITCHEN, BATHROOM AND WATER CLOSET ROOM. [OBC 9.32.3.5(2)]

EXCEPT FOR CLOTHES DRYERS, EXHAUST OUTLETS SHALL BE FITTED WITH SCREENS OF MESH NOT LARGER THAN 15 mm, EXCEPT WHERE CLIMATIC CONDITIONS MAY REQUIRE LARGER OPENINGS. [OBC 9.32.3.12.(10)]

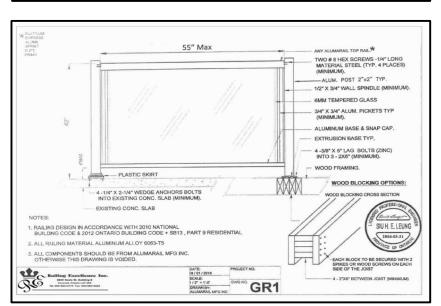
THE DESIGN, CONSTRUCTION AND INSTALLATION, INCLUDING THE PROVISION OF COMBUSTION AIR, OF SOLID—FUEL BURNING APPLIANCES AND EQUIPMENT, INCLUDING STOVES, COOK TOPS AND SPACE HEATERS, SHALL CONFORM TO CAN/CSA—B365—M, "INSTALLATION CODE FOR COLUBE THE BURNEY APPLIANCES AND

A LIGHTING OUTLET WITH FIXTURE CONTROLLED BY A WALL SWITCH SHALL BE PROVIDED IN KITCHENS, UTILITY ROOMS, LAUNDRY ROOMS, NICHENS, CUILITY ROUMS, LAUNDRY ROUMS, DINING ROOMS, BATHROOMS, WATER-CLOSET ROOMS, VESTIBULES AND HALLWAYS, AS WELL AS IN BEDROOMS AND LIVING ROOMS THAT ARE NOT PROVIDED WITH A RECEPTACLE THAT IS CONTROLLED BY A WALL SWITCH. [OBC 9.34.2.2]

3-WAY WALL SWITCHES LOCATED AT THE HEAD AND FOOT OF EVERY STAIRWAY SHALL BE PROVIDED TO CONTROL AT LEAST ONE LIGHTING OUTLET WITH FIXTURE FOR STAIRWAYS WITH 4 OR MORE RISERS IN DWELLING UNITS. [OBC 9.34.2.3(2)]

A LIGHTING OUTLET WITH FIXTURE SHALL BE PROVIDED FOR AN ATTACHED, BUILT—IN OR DETACHED GARAGE OR CARPORT. [OBC 9.34.2.6]

	70" MAX	_	ANY ALUMARAIL TOP RAIL*
4'M			TWO #8 HEX SCREWS -1/4" LONG MATERIAL STEEL (TYP, 4 PLACES) (MINIMUM).
			ALUM. POST 2" X 2" TYP.
			1/2" X 3/4" WALL SPINDLE (MINIMUM).
#22#			3/4" X 3/4" ALUM. PICKETS TYP (MINIMUM).
4			ALUMINUM BASE & SNAP CAP.
			EXTRUSION BASE TYP.
-MAX			4 -3/8" X 5" LAG BOLTS (ZINC) INTO 3 - 2X6" (MINIMUM).
PLASTIC	CVIDT	.,	WOOD FRAMING.
FLASIC	SKIK!	MMM	WOOD BLOCKING OPTIONS:
	DGE ANCHORS BOLTS	WW	WOOD BLOCKING CROSS SECTION
- EXISTING CONC.	ONC. SLAB (MINIMUM):	1	// //
NOTES:		/	1/ / 2/ 1
1. RAILING DESIGN IN ACCORD	ANCE WITH 2010 NATIONAL	-//	SIU H. E. LEUNG
2 ALL RAILING MATERIAL ALUI	ARIO BUILDING CODE + SB13 , PART 9 RESIDENT	The state of the s	2016-03-31
	BE FROM ALUMARAIL MFG INC.		ON THE OF ORTHER
OTHERWISE THIS DRAWING			EACH BLOCK TO BE SECURED WITH 2



EXTERIOR TYPE LIGHTING

DOOR SCHEDULE	
$1 = 2^{10} \times 6^8 \times 1^{3/4}$	EXTERIOR
$2 = 2^8 \times 6^8 \times 1^{3/4}$ "	EXTERIOR
$3 = 2^8 \times 6^8 \times 1^{3/4}$ "	GARAGE, GASPROOF + CLOSER
$4 = 2^8 \times 6^8 \times 1^{\frac{3}{8}}$	INTERIOR
$5 = 2^6 \times 6^8 \times 1\frac{3}{8}$ "	INTERIOR
$6 = 2^4 \times 6^8 \times 1^{3/8}$	INTERIOR
$7 = 2^2 \times 6^8 \times 1^{3/8}$	INTERIOR
$8 = 2^{0} \times 6^{8} \times 1^{3/8}$	INTERIOR
$9 = 1^6 \times 6^8 \times 1^{3/8}$	INTERIOR

LINTEL SCHEDULE
$L-1 = (2) \text{ LINTELS } 3\frac{1}{2}^{n} \times 3\frac{1}{2}^{n} \times \frac{1}{4}^{n}$
$L-2 = W8 \times 18 + \frac{1}{4}$ " PLATE
$WL-1 = 3\frac{1}{2}$ " x $3\frac{1}{2}$ " x $\frac{1}{4}$ " + (2) 2" x 8" #1 SPRUCE
$WL-2 = 5" \times 3\frac{1}{2}" \times \frac{5}{16}" + (2) 2" \times 10" #1 SPRUCE$
$WL-3 = 5" \times 3\frac{1}{2}" \times \frac{3}{8}" + (2) 2" \times 12" #1 SPRUCE$
$WL-4 = 6" \times 3\frac{1}{2}" \times \frac{5}{8}" + (3) 2" \times 12" \#1 SPRUCE$

#### STRUCTURAL NOTE

1. PROVIDE 3-2x6 OR 3-2X4 POST MIN. TO MATCH WALL STUDS AT EACH LINTEL OR BEAM BEARING (TYP.) UNLESS NOTED ON PLAN

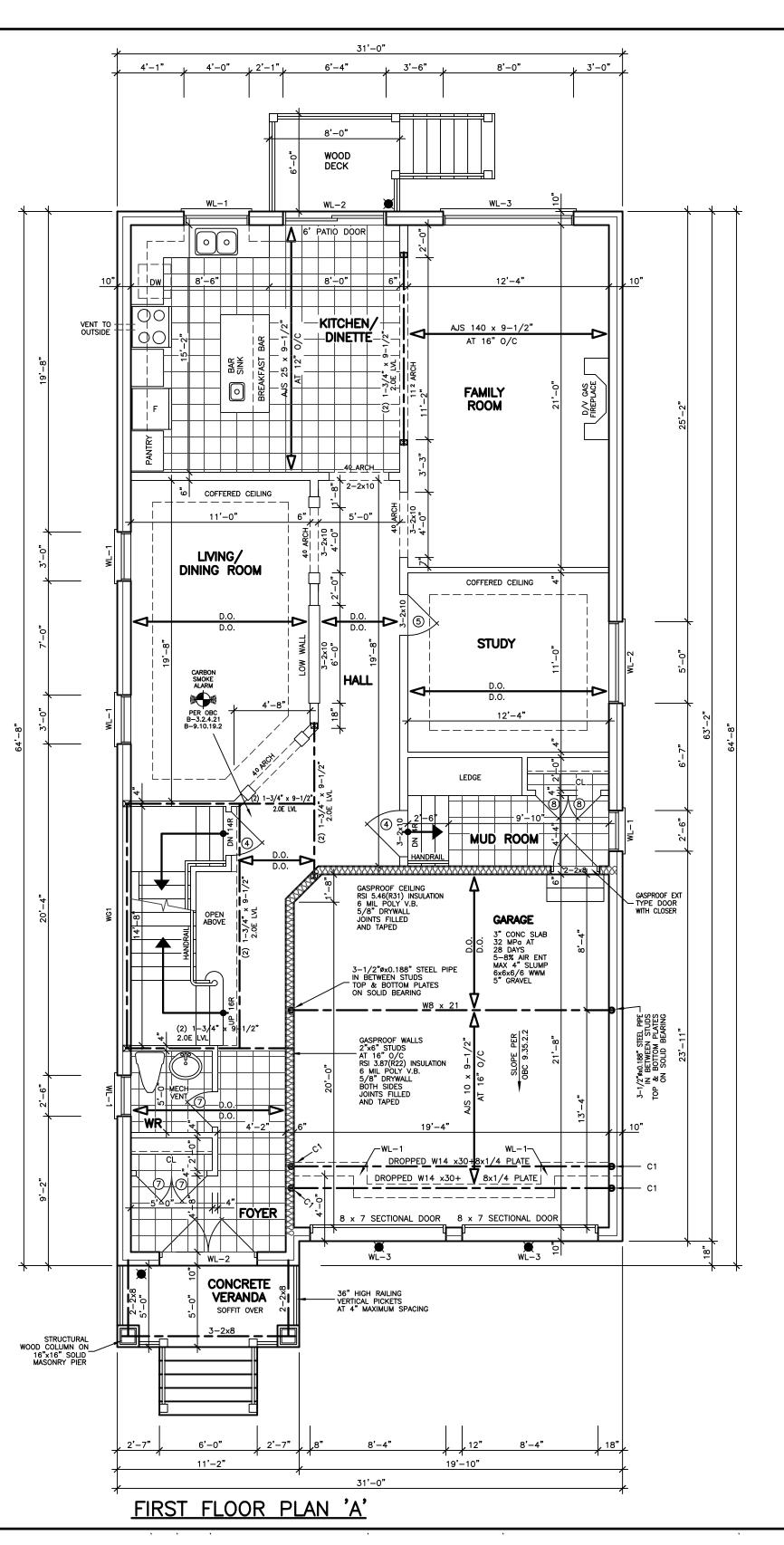
#### STRUCTURAL LEGEND

WG1 DENOTES 3-1 3/4"X11 7/8"LVL2.0E FLUSH AT THE SECOND FLOOR LEVEL GLUED AND SCREWED BY MEAN OF TWO 1/4" SCREWS WITH FULL PENETRATION @6" O/C STAGGERED AT EACH HORIZONTAL ROW, WITH 2 1/2" EDGE DISTANCIES FROM TOP AND BOTTOM AND 5" END DISTANCIES FROM EACH END.

CONNECT WG1 TO LVL BEAMS AT EACH END BY MEAN OF JA9 BY MITEK JA9 - DETAIL BY MITEK C1 DENOTES  $3-1/2"\emptyset \times 0.188$  HSS IN BETWEEN STUDS WITH 3/8" TOP PLATE AND  $6"x5/8"X10" + 2-1/2"\emptyset$  ANCH BOTTOM PLATE ON SOLID BEARING



ASSUMED ROOF TRUSS BEARING ON THE EXRERIOR WALLS ONLY THE DESIGN OF ENTIRE STRUCTURE SHOULD BE REVIEWED TO ACCOMODATE FINAL ROOF TRUSS LAYOUT



REVISIONS REVISED STRUCTURE BY KALISHENKO FE 10 23

> ABOVE-GRADE MASONRY SHALL BE IN ACCORDANCE WITH O.B.C. SECTION 9.20

WOOD FRAME CONSTRUCTION SHALL BE IN ACCORDANCE WITH O.B.C. SECTION 9.23

#### FLOOR AREAS AND COVERAGE

1st FLOOR = 1522.90 SF = 141.48 SM= 1911.81 SF 2nd FLOOR = 177.61 SM (-OPENINGS) = -19.45 SF= -1.81 SM = 3415.26 SF TOTAL = 317.28 SM COVERAGE = 2030.75 SF = 188.66 SM

KING EAST ESTATES



THE CONTRACTORS SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT. DRAWINGS MUST NOT BE SCALED.

#### **ARCHITECTURAL** DESIGN INC.



56 PENNSYLVANIA AVE. UNIT 1

CONCORD, ONT. L4K 3V9

TEL 905 660-9393

FAX 905 660-9419

C2A-16 MODEL 3400 A

**PROJECT** 

**PROPOSED** TWO STOREY DWELLING

FOR: KING EAST DEVELOPMENTS INC AT: SPECIOSA STREET RICHMOND HILL

DRAWING

FIRST FLOOR PLANS

APR '23 20 - 23E.B. DRAWING NO CHECKED SCALE

3/16"=1'-0

A-3

SPECIFIED DESIGN SNOW LOADS SHALL CONFORM TO OBC 9.4.2.2.

ATTICS AND ROOF SPACES SHALL CONFORM TO OBC 9.4.2.4.

IF WOOD OR SHEET STEEL WALL STUDS ENCLOSE THE MAIN BATHROOM IN A DWELLING UNIT, REINFORCEMENT SHALL BE INSTALLED TO PERMIT THE FUTURE INSTALLATION OF A GRAB BAR IN CONFORMANCE WITH OBC 9.5.2.3.

GLASS OTHER THAN SAFETY GLASS SHALL NOT BE USED FOR A SHOWER OR BATHTUB ENCLOSURE. [OBC B 9.6.1.4.(6)]

THE MINIMUM WINDOW GLASS AREA FOR ROOMS IN BUILDINGS OF RESIDENTIAL OCCUPANCY OR ROOM THAT ARE USED FOR SLEEPING SHALL CONFORM TO TABLE B 9.7.2.3.

WINDOWS, DOORS AND SKYLIGHTS SHALL CONFORM TO OBC B.9.7

DIMENSIONS FOR RECTANGULAR TREADS RISE MAX. 200 mm, MIN. 125 mm RUN MAX. 355 mm, MIN. 255 mm [OBC TABLE 9.8.4.1]

EVERY ATTIC OR ROOF SPACE SHALL BE PROVIDED WITH AN ACCESS HATCH WITH A MINIMUM AREA OF 0.32 sm AND WITH NO DIMENSION LESS THAN 545 mm. ACCESS HATCHES SHALL BE FITTED WITH DOORS OR COVERS. [OBC 9.19.2.1]

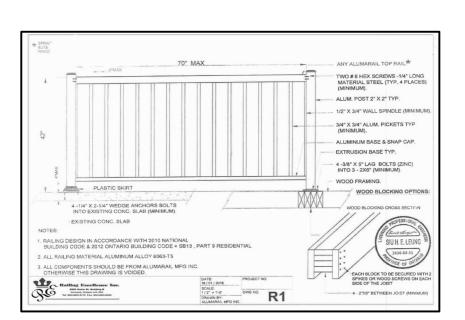
WOOD ROOF TRUSSES SHALL CONFORM TO OBC 9.23.13.11.

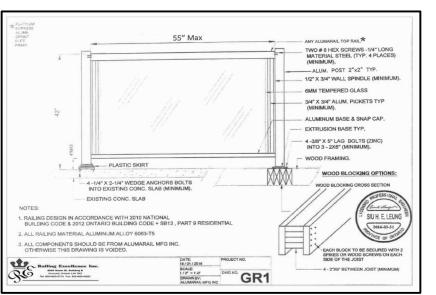
ROOFS AND OTHER PLATFORMS THAT EFFECTIVELY SERVE AS ROOFS WITH RESPECT TO ACCUMULATION OR DRAINAGE OF PRECIPITATION, SHALL BE PROTECTED WITH ROOFING, INCLUDING FLASHING, INSTALLED TO SHED RAIN EFFECTIVELY AND TO PREVENT WATER, DUE TO ICE DAMMING, FROM ENTERING THE ROOF. [OBC 9.26.1.1]

DOOR	SCHEDULE	
1 =	$2^{10} \times 6^8 \times 1^{3/4}$ "	EXTERIOR
2 =	2 <sup>8</sup> x 6 <sup>8</sup> x 1 <sup>3</sup> ⁄ <sub>4</sub> "	EXTERIOR
3 =	$2^8 \times 6^8 \times 1^{3/4}$ "	GARAGE, GASPROOF + CLOSER
4 =	28 x 68 x 13/8"	INTERIOR
5 =	2 <sup>6</sup> x 6 <sup>8</sup> x 1 <sup>3</sup> /8"	INTERIOR
6 =	2 <sup>4</sup> x 6 <sup>8</sup> x 1 <sup>3</sup> / <sub>8</sub> "	INTERIOR
7 =	2 <sup>2</sup> x 6 <sup>8</sup> x 1 <sup>3</sup> /8"	INTERIOR
8 =	2° x 68 x 13/8"	INTERIOR
9 =	16 x 68 x 13/8"	INTERIOR

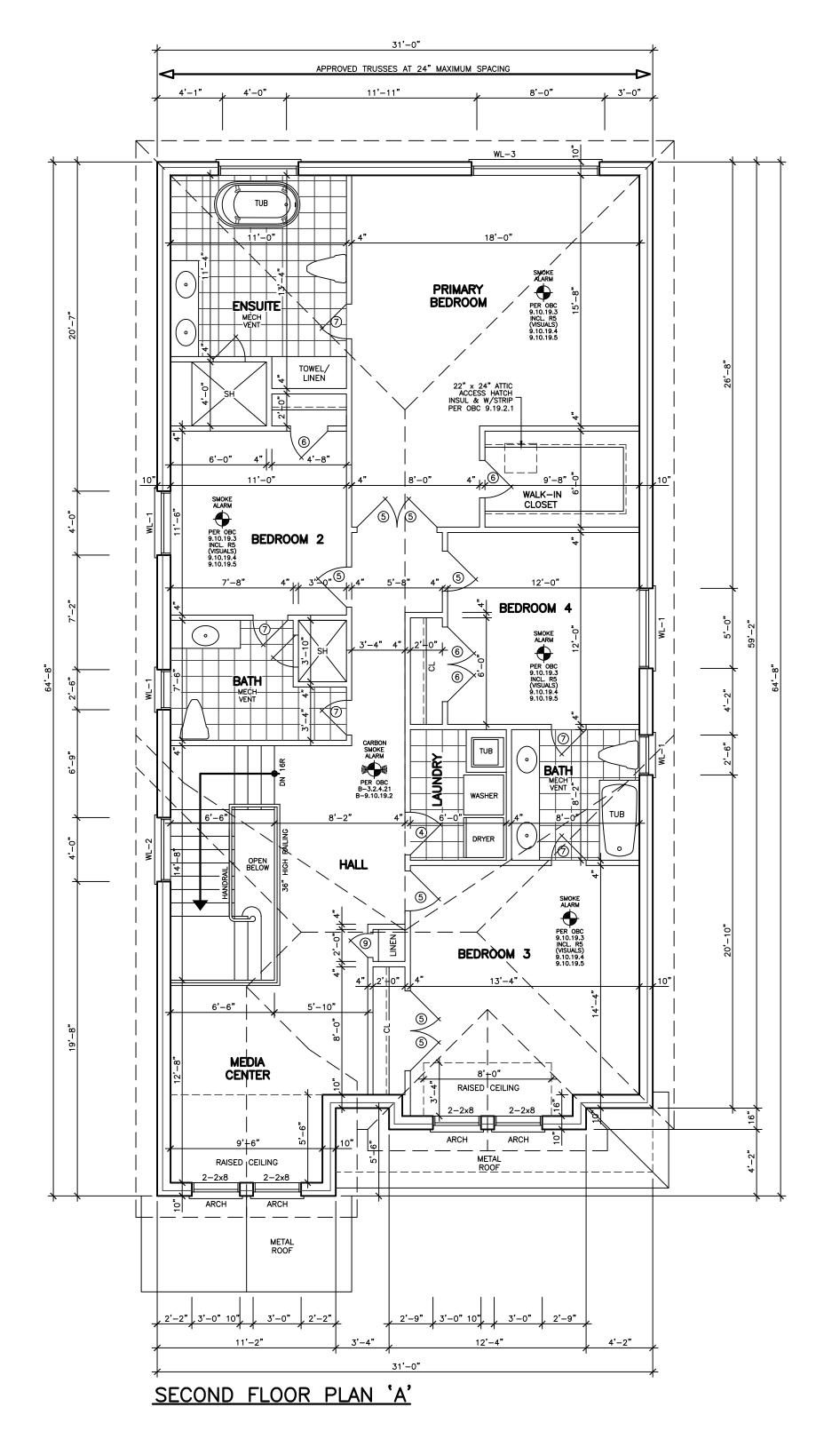
LINTEL SCHEDULE
$L-1 = (2) \text{ LINTELS } 3\frac{1}{2}\text{"} \times 3\frac{1}{2}\text{"} \times \frac{1}{4}\text{"}$
$L-2 = W8 \times 18 + \frac{1}{4}$ " PLATE
$WL-1 = 3\frac{1}{2}$ " x $3\frac{1}{2}$ " x $\frac{1}{4}$ " + (2) 2" x 8" #1 SPRUCE
$WL-2 = 5$ " x $3\frac{1}{2}$ " x $\frac{5}{16}$ " + (2) 2" x 10" #1 SPRUCE
$WL-3 = 5" \times 3\frac{1}{2}" \times \frac{3}{8}" + (2) 2" \times 12" #1 SPRUCE$

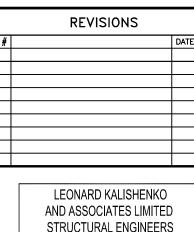
 $WL-4 = 6" \times 3\frac{1}{2}" \times \frac{5}{8}" + (3) 2" \times 12" \#1 SPRUCE$ 





STRUCTURAL NOTE 1. PROVIDE 3-2x6 OR 4-2X4 POST EXTENDED DOWN TO FOOTING AT EACH GIRDER TRUSS AND ROOF BEAM BERING (TYP.) UNLESS NOTED ON PLAN.







ASSUMED ROOF TRUSS BEARING ON THE EXRERIOR WALLS ONLY THE DESIGN OF ENTIRE STRUCTURE SHOULD BE REVIEWED TO ACCOMODATE FINAL ROOF TRUSS LAYOUT

KING EAST **ESTATES** 



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C2A-16 MODEL 3400 A

PROJECT

PROPOSED TWO STOREY DWELLING

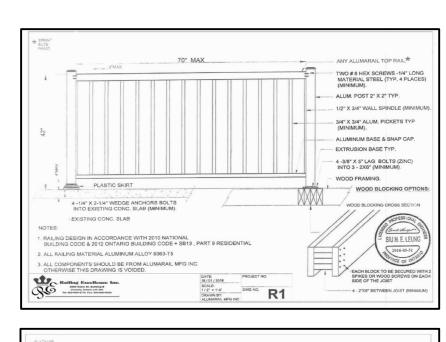
FOR: KING EAST DEVELOPMENTS INC. AT: SPECIOSA STREET RICHMOND HILL

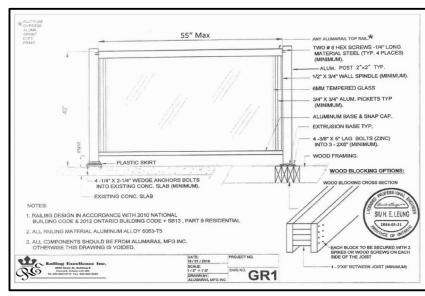
DRAWING

SECOND FLOOR PLANS

APR '23 20-23 E.B. DRAWING NO CHECKED

A-4SCALE 3/16"=1'-0'





EXTERIOR TYPE LIGHTING

FINISHED GRADE'S PROFILE LINE IS GENERIC AND DOES NOT REFLECT EXACT ELEVATION. TYPES OF GLASS AND PROTECTION OF GLASS SHALL BE IN ACCORDANCE WITH OBC 9.6.1.4.

RESISTANCE TO FORCED ENTRY SHALL BE PROVIDED FOR DOORS IN ACCORDANCE WITH OBC 9.7.5.2 AND FOR WINDOWS IN

GUARDS SHALL CONFORM TO OBC 9.8.8.1 AND SHALL RESIST LOADS IN CONFORMANCE WITH TABLE 9.8.8.2.

GLASS IN GUARDS CONFORM TO OBC SECTION 9.8.8.1.

THE MAXIMUM AGGREGATE AREA OF UNPROTECTED OPENINGS IN AN EXPOSING BUILDING FACE SHALL CONFORM TO

FOR BUILDINGS CONTAINING ONLY DWELLING UNITS, CONSTRUCTION OF EXPOSING BUILDING FACES SHALL CONFORM TO OBC 9.10.15.5. EVERY WINDOW WELL SHALL BE DRAINED TO THE FOOTING LEVEL OR OTHER SUITABLE

LOCATION. [OBC 9.14.6.3] WHERE STEP FOOTINGS ARE USED, THE VERTICAL RISE BETWEEN THE HORIZONTAL PORTIONS SHALL NOT EXCEED 600 mm, AND THE HORIZONTAL DISTANCE BETWEEN RISERS SHALL BE NOT LESS THAN 600 mm. [OBC B 9.15.3.9]

THE THICKNESS AND HEIGHT OF FOUNDATION WALLS MADE OF UNREINFORCED CONCRETE BLOCKS OR SOLID CONCRETE AND SUBJECT TO LATERAL EARTH PRESSURE SHALL CONFORM TO TABLE 9.15.4.2.A. FOR WALLS NOT EXCEEDING 2.5 m IN UNSUPPORTED HEIGHT. [OBC 9.15.4.2]

EXTERIOR FOUNDATION WALLS SHALL EXTEND NOT LESS THAN 150 mm ABOVE FINISHED GROUND LEVEL. [OBC 9.15.4.6]

VENTING FOR ROOF SPACES SHALL CONFORM TO OBC 9.19.1.2.

THE UNOBSTRUCTED ROOF VENT AREA SHALL BE NOT LESS THAN 1/300 OF THE INSULATED CEILING AREA. WHERE THE ROOF SLOPE IS LESS THAN 1 IN 6, OR IN ROOFS THAT ARE CONSTRUCTED WITH ROOF JOISTS, THE UNOBSTRUCTED VENT AREA SHALL BE NOT LESS THAN 1/150 OF THE INSULATED CEILING AREA. [OBC 9.19.1.2]

FLASHING SHALL BE INSTALLED IN MASONRY AND MASONRY VENEER WALLS IN CONFORMANCE WITH OBC 9.20.13.3.(1).

THROUGHWALL FLASHING SHALL BE PROVIDED IN A MASONRY VENEER WALL SUCH THAT ANY MOISTURE WHICH ACCUMULATES IN THE AIR SPACE WILL BE DIRECTED TO THE EXTERIOR OF THE BUILDING. [OBC 9.20.13.3.(2)]

WEEP HOLES THAT ARE SPACED NOT MORE THAN 800 mm APART SHALL BE PROVIDED AT THE BOTTOM OF CAVITIES OR AIR SPACES IN MASONRY VENEER WALLS AND ABOVE LINTELS OVER WINDOW AND DOOR OPENINGS.

A CHIMNEY FLUE SHALL EXTEND NOT LESS THAN 900 mm ABOVE THE HIGHEST POINT AT WHICH THE CHIMNEY COMES IN CONTACT WITH THE ROOF, AND SHALL EXTEND NOT LESS THAN 600 mm ABOVE THE HIGHEST ROOF SURFACE OR STRUCTURE WITHIN 3 m OF THE CHIMNEY. [OBC 9.21.4.4]

THE SLOPE OF ROOF SURFACES, ON WHICH ROOF COVERINGS MAY BE APPLIED, SHALL CONFORM TO OBC 9.26.3.1.

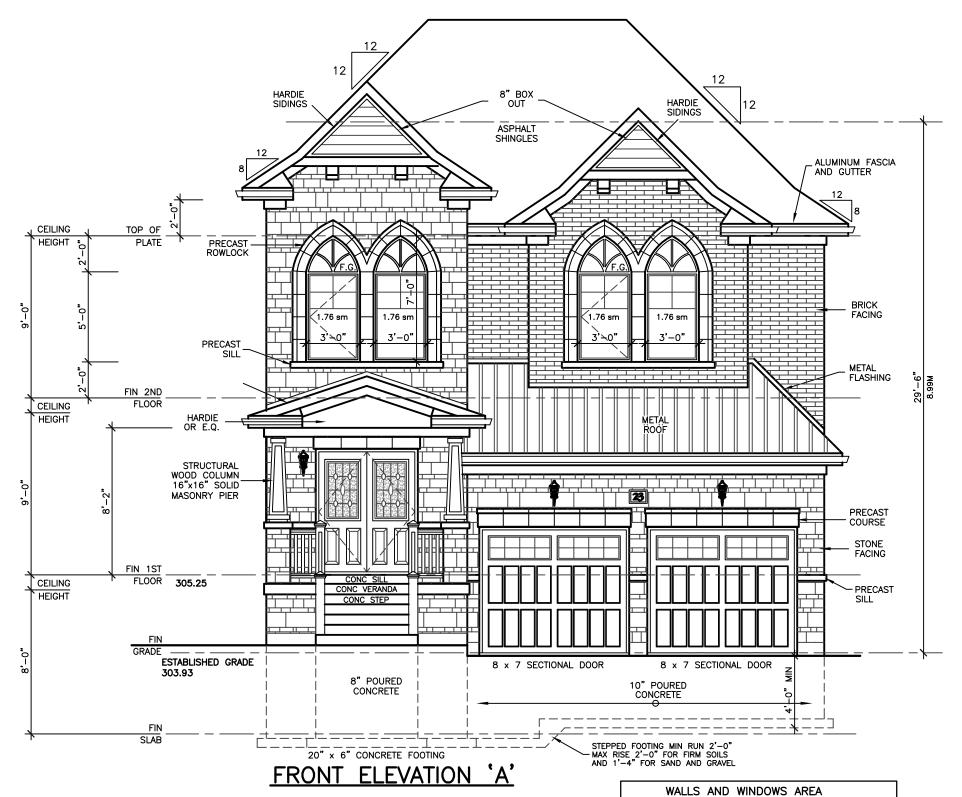
FLASHING SHALL BE INSTALLED AT ALL INTERSECTIONS LISTED OBC 9.26.4 WHERE SLOPING SURFACES OF SHINGLED ROOFS INTERSECT TO FORM A VALLEY, THE VALLEY SHALL BE FLASHED IN CONFORMANCE WITH OBC 9.26.4.3.

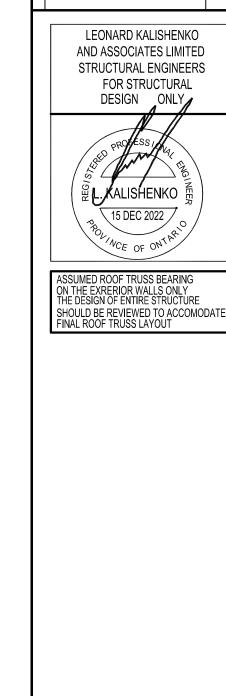
AN EXTERIOR LIGHTING OUTLET WITH FIXTURE AN EXTERIOR LIGHTING OUTLET WITH FIXTUP
CONTROLLED BY A WALL SWITCH LOCATED
WITHIN THE BUILDING SHALL BE PROVIDED
AT EVERY ENTRANCE TO BUILDINGS OF
RESIDENTIAL OCCUPANCY. [OBC 9.34.2.1]

REFER TO LOT GRADING / SITE PLAN FOR REQUIRED NUMBER OF EXTERIOR STEPS, DOOR BETWEEN GARAGE AND DWELLING, DECK OR BASEMENT WALKOUT CONDITION.

EVERY SURFACE TO WHICH ACCESS IS PROVIDED, FOR OTHER THAN MAINTENANCE PURPOSES, SHALL BE PROTECTED BY A GUARD, IN CONFORMANCE WITH OBC 9.8.8, ON EACH SIDE THAT IS NOT PROTECTED BY A WALL FOR THE LENGTH WHERE, (A) THERE IS A DIFFERENCE IN ELEVATION OF MORE THAN 600 mm, OR (B) THE ADJACENT SURFACE WITHIN 1.2 m OF THE WALKING SURFACE HAS A SLOPE OF MORE THAN 1 IN 2. [OBC 9.8.8.1.(1)]

FOR BUILDINGS CONTAINING ONLY DWELLING UNITS, EACH EXPOSING BUILDING FACE AND ANY EXTERIOR WALL LOCATED ABOVE AN EXPOSING BUILDING FACE THALL (A) HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 MIN. WHERE THE LIMITING DISTANCE IS LESS THAN 1.2 m, BUT NOT LESS THAN 0.6 m, OR (B) HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 MIN. AND ALSO BE CLAD WITH NONCOMBUSTIBLE MATERIAL WHERE THE LIMITING DISTANCE IS LESS THAN 0.6 m. [OBC 9.10.15.5.(2)]

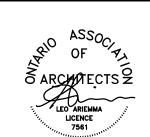




REVISIONS

REVISED STRUCTURE BY KALISHENKO FE 10 23

KING EAST ESTATES



**ARCHITECTURAL** DESIGN INC.



56 PENNSYLVANIA AVE. UNIT 1 CONCORD, ONT. L4K 3V9 TEL 905 660-9393 FAX 905 660-9419

C2A-16 MODEL 3400 A

**PROJECT PROPOSED** 

TWO STOREY DWELLING

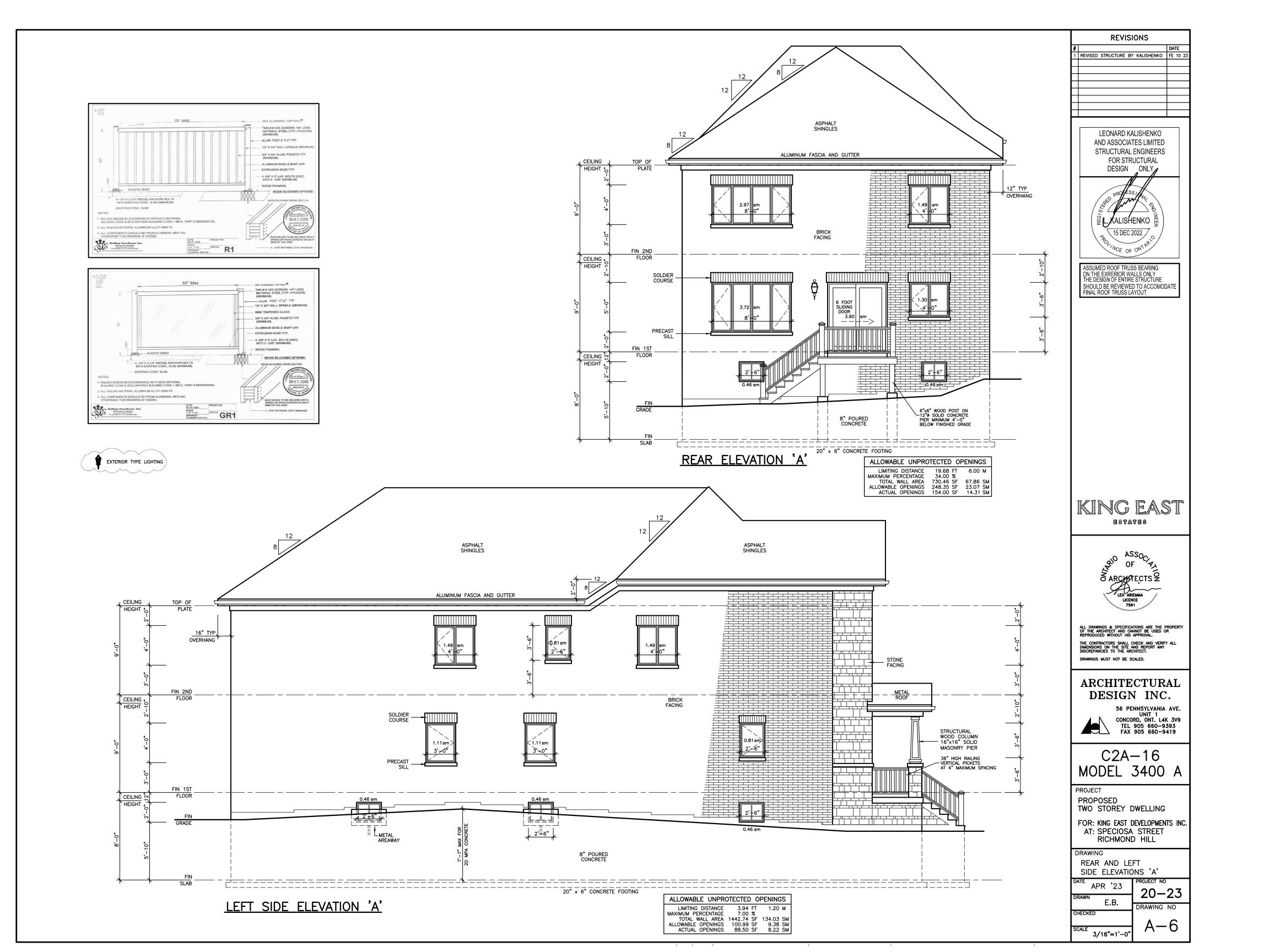
FOR: KING EAST DEVELOPMENTS INC AT: SPECIOSA STREET RICHMOND HILL

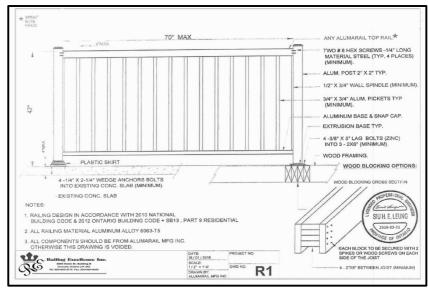
FRONT AND RIGHT SIDE ELEVATIONS 'A'

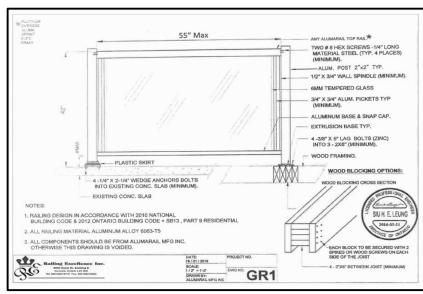
APR '23 E.B. CHECKED

20-23 DRAWING NO A-53/16"=1'-0









DOOR SCHEDULE	
$1 = 2^{10} \times 6^8 \times 1^{3/4}$	EXTERIOR
$2 = 2^8 \times 6^8 \times 1^{3/4}$	EXTERIOR
$3 = 2^8 \times 6^8 \times 1^{3/4}$ "	GARAGE, GASPROOF + CLOSER
$4 = 2^8 \times 6^8 \times 1^{3/8}$ "	INTERIOR
$5 = 2^6 \times 6^8 \times 1\frac{3}{8}$	INTERIOR
$6 = 2^4 \times 6^8 \times 1^{3/8}$	INTERIOR
$7 = 2^2 \times 6^8 \times 1\frac{3}{8}$ "	INTERIOR
$8 = 2^{0} \times 6^{8} \times 1^{3/8}$	INTERIOR
$9 = 1^6 \times 6^8 \times 1\frac{3}{8}$	INTERIOR

LINTEL SCHEDULE
$L-1 = (2) LINTELS 3\frac{1}{2}$ " x $3\frac{1}{2}$ " x $\frac{1}{4}$ "
$L-2 = W8 \times 18 + \frac{1}{4}$ " PLATE
$WL-1 = 3\frac{1}{2}$ " x $3\frac{1}{2}$ " x $\frac{1}{4}$ " + (2) 2" x 8" #1 SPRUCE
$WL-2 = 5" \times 3\frac{1}{2}" \times \frac{5}{16}" + (2) 2" \times 10" #1 SPRUCE$
$WL-3 = 5" \times 3\frac{1}{2}" \times \frac{3}{8}" + (2) 2" \times 12" \#1 SPRUCE$
$WL-4 = 6" \times 3\frac{1}{2}" \times \frac{5}{8}" + (3) 2" \times 12" \#1 SPRUCE$

CEILING HEIGHTS OF ROOMS OR SPACES IN RESIDENTIAL OCCUPANCIES AND LIVE/WORK UNITS SHALL CONFORM TO TABLE 9.5.3.1. AREAS IN ROOMS OR SPACES OVER WHICH CEILING HEIGHT IS NOT LESS THAN THE MINIMUM SPECIFIED IN TABLE 9.5.3.1 SHALL BE CONTIGUOUS WITH THE ENTRY OR ENTRIES TO THOSE ROOMS OR SPACES. [OBC 9.5.3.1]

CEILING TOP OF

CONCEALED SPACES IN INTERIOR WALLS, CEILINGS AND CRAWL SPACES SHALL BE SEPARATED BY FIRE BLOCKS FROM CONCEALED SPACES IN EXTERIOR WALLS AND ATTIC OR ROOF SPACES. [OBC 9.10.16.1.(1)]

SMOKE ALARMS CONFORMING TO CAN/ULC-S351, "SMOKE ALARMS", SHALL BE INSTALLED IN EACH DWELLING UNIT IN

THE MINIMUM DEPTH OF FOUNDATIONS BELOW FINISHED GROUND LEVEL SHALL BE IN ACCORDANCE WITH TABLE 9.12.2.2.

DRAIN TILE AND DRAIN PIPE FOR FOUNDATION DRAINAGE SHALL CONFORM TO THE ENTIRE SUBSECTION OBC B.9.14.3 FOOTINGS SHALL REST ON UNDISTURBED SOIL, ROCK OR COMPACTED GRANULAR FILL. [OBC 9.15.3.2]

WHERE THE TOP OF A FOUNDATION WALL IS REDUCED IN THICKNESS TO PERMIT THE INSTALLATION OF A MASONRY EXTERIOR FACING, THE REDUCED SECTION SHALL BE (A) NOT LESS THAN 90 mm THICK, AND (B) TIED TO THE FACING MATERIAL WITH METAL TIES CONFORMING TO OBC 9.20.9.4.(3) SPACED NOT MORE THAN 200 mm O.C. VERTICALLY, AND 900 mm O.C. HORIZONTALLY. (C) THE SPACE BETWEEN THE WALL AND THE FACING SHALL BE FILLED WITH MORTAR. [OBC 9.15.4.7.(2)(3)]

ALL WALLS, CEILINGS AND FLOORS SEPARATING HEATED SPACE FROM UNHEATED SPACE, THE EXTERIOR AIR OR THE GROUND SHALL BE PROVIDED WITH THERMAL INSULATION CONFORMING TO SUBSECTIONS 9.25.2, AN AIR BARRIER SYSTEM CONFORMING TO SUBSECTION PARKIER STIEM CONFORMING TO SUBSECTION 9.25.3, AND A VAPOUR BARRIER CONFORMING TO SUBSECTION 9.25.4, AND CONSTRUCTED IN SUCH A WAY THAT THE PROPERTIES AND RELATIVE POSITION OF ALL THE MATERIALS CONFORM TO SUBSECTION 9.25.5 STUCCO SHALL BE NOT LESS THAN 200 mm ABOVE FINISHED GROUND LEVEL EXCEPT WHEN IT IS APPLIED OVER CONCRETE OR MASONRY. [OBC 9.28.1.4]

- AND EAVESTROUGHING SOFFIT VENTED HEIGHT WD PLATE RSI 10.56 (R60) INSULATION 6 MIL POLY V.B. 5/8" DRYWALL AIR-VAPOUR BARRIER-TO BE CONTINUOUS ABOVE INTERIOR WALLS WALK-IN CLOSET 3 1/2" BRICK/STONE VENEER
1" AIR SPACE
TYYECK HOUSE WRAP
(JOINTS TAPED AND SEALED)
ON 1" INSULATED (R5) SHEATHING
2X6 @ 16" O.C. STUDS WALLS
WITH (R22) BATH INSULATION **PRIMARY ENSUITE BEDROOM** 2"x4" STUDS AT 16" O/C\_ 1/2" DRYWALL BOTH SIDES FINISHED FLOOR - ON 5/8" T & G ASPENITE SUBFLOOR WITH (K22) BATH INSULATION

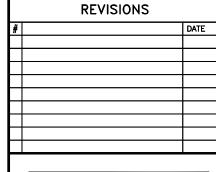
SILL PLATE AT BOTTOM AND

DOUBLE PLATE AT TOP

6 MIL POLY VAPOUR BARRIER
(WARM SIDE) 1/2 GYPSUM BOARD TAPED

FILLED,SANDED READY FOR PAINT.
PROVIDE MASONRY TIES @16"O.C. HORIZONTALLY
AND 32" O.C.VERTICALLY.
PROVIDE WEEP HOLES @30"(800mm) O.C.
AS PER OBC 9.25.3 AT BOTTOM OF BRICK COURSE
AND ABOVE ALL OPPHINES. FIN 2ND FLOOR CEILING FLOOR JOISTS (SEE PLAN) HEIGHT → DOUBLE WOOD PLATE AND ABOVE ALL OPENINGS.
PROVIDE BASE FLASHING BENEATH WEEP HOLES AND
MIN. 6" UP BEHIND WALL SHEATHING **FAMILY** KITCHEN/ **ROOM** 2"x6" STUDS AT 16" O/C 1/2" DRYWALL BOTH SIDES DINETTÉ FINISHED FLOOR
ON 5/8" T & G
ASPENITE SUBFLOOR FIN 1ST FLOOR 3/8" WEEP HOLES AT 2'-6" (800) AS PER OBC 9.25.3 AT BOTTOM OF BRICK COURSE & OVER OPENINGS 6 MIL POLY BASE FLASHING CEILING FLOOR JOISTS (SEE PLAN) HEIGHT BENEATH WEEP HOLES AND 6" UP BEHIND WALL SHEATHING - 2"x4" WOOD PLATE 1"x4" WOOD RIBBON BOTH SIDES OF BEAM ON SILL GASKET 1/2"ø ANC BOLTS AT 6'-8" O/C MIN 4" INTÓ CONC 8" 20MPA POURED CONCRETE TYPICAL 6" MIN 7 WATERPROOFED WITH BASEMENT BITUMINOUS COMPOUND FIN GRADE RSI 3.52 (R20) BLANKET WITH 6 MIL POLY V.B. (LAMINATED) FASTENED TO – POURED CONCRETE WALL 3" CONCRETE SLAB 25 MPa AT 28 DAYS MAX 3" SLUMP 5" GRAVEL - 4"ø WEEPING TILE UNDER 6" STONE BED SLAB BOND BREAK AS PER - 20"x6" 20MPA CONCRETE FOOTING **CROSS SECTION** 

PROVIDE FREE VENT AREA OF NOT LESS THAN 1/300 OF INSULATED CEILING AREA 50/50 SOFFIT & ROOF VENTS AS PER OBC 9.19.1.2





ASSUMED ROOF TRUSS BEARING ON THE EXRERIOR WALLS ONLY THE DESIGN OF ENTIRE STRUCTURE SHOULD BE REVIEWED TO ACCOMODATE FINAL ROOF TRUSS LAYOUT

EAVE PROTECTION FOR SHINGLES AND SHAKES TO CONFORM WITH OBC 9.26.5

EXTERIOR WALL

SELF-SEALING COMPOSITE MEMBRANE
CONSISTING OF MODIFIED BITUMINOUS
COATED MATERIAL
SHALL EXTEND A MINIMUM OF 2'-11" UP
THE ROOF SLOPE TO A LINE NOT LESS
- THAN 11-3/4" INSIDE INNER FACE OF
EXTERIOR WALL

STARTER STRIP OF ROOF SHINGLES REQUIRED ALUMINUM SOFFIT, FASCIA

TYPICAL

ASPHALT SHINGLES (SELF-SEALED) 3/8" PLYWOOD WITH 'H' CLIPS ON APPROVED TRUSSES AT 24" O/C

KING EAST **ESTATES** 



THE CONTRACTORS SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT.

**ARCHITECTURAL** DESIGN INC.



56 PENNSYLVANIA AVE. UNIT 1 CONCORD, ONT. L4K 3V9 TEL 905 660-9393 FAX 905 660-9419

C2A-16 MODEL 3400 A

PROJECT PROPOSED TWO STOREY DWELLING

FOR: KING EAST DEVELOPMENTS INC AT: SPECIOSA STREET RICHMOND HILL

DRAWING

CROSS SECTION

APR '23 20-023 E.B. DRAWING NO CHECKED

A-7SCALE 3/16"=1'-0'

## GENERAL NOTES

BASED ON 2012 ONTARIO BUILDING CODE

#### FOOTINGS AND SLABS

FOOTINGS AND FOUNDATIONS TO COMPLY WITH O.B.C. SECTION 9.15 THE COMPRESSIVE STRENGTH OF UNREINFORCED CONCRETE SLABS SHALL BE NOT LESS THAN 15 MPa (2,200 psi) AFTER 28 DAYS AND THE SLUMF SHALL BE NOT MORE THAN 75 mm (3"), UNLESS OTHERWISE SPECIFIED. CONCRETE SLABS USED FOR GARAGE AND CARPORT FLOORS AND EXTERIOR VERANDAS AND STEPS, SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 32 MPg (4,650 psi) AFTER 28 DAYS, AIR ENTRAINMENT OF 5% TO 8% AND A SLUMP OF NOT MORE THAN 100 mm (4").

THE TOPSOIL AND VEGETABLE MATTER IN ALL UNEXCAVATED AREAS UNDER A BUILDING SHALL BE REMOVED.

SOIL ALLOWABLE BEARING PRESSURE 2500 PSF TO BE CONFIRMED ON SITE BY SOIL ENGINEER PRIOR TO POURING OF FOOTINGS.

SOIL CAPACITY TO BE CONFIRMED ON SITE BY SOIL ENGINEER BEFORE POURING OF FOOTINGS.
MINIMUM DEPTH OF FOOTINGS - 1.2 m (4'-0") BELOW FINISHED GRADE. HABITABLE ROOMS ON CONCRETE SLABS SHALL BE DAMPPROOFED WITH A MEMBRANE OF POLYETHYLENE WITH A THICKNESS OF NOT LESS THAN 0.15 mm (0.006") AND JOINTS SHALL BE LAPPED NOT LESS THAN 300 mm (11-3/4"). IN LIEU OF DAMPPROOFING, SUCH ROOMS SHALL SHALL BE BUILT ON CONCRETE SLABS THAT HAVE COMPRESSIVE STRENGTH OF NOT LESS THAN 25 MPa (3,600 psi) AFTER 28 DAYS.

STEPPED FOOTINGS SHALL HAVE A MINIMUM RUN OF 600 mm (23-5/8") AND SHALL HAVE A MAXIMUM RISE OF 600 mm (23-5/8") FOR FIRM SOILS AND 400 mm (15-3/4") FOR SAND OR GRAVEL.

CONCRETE SLABS RESTING ON EARTH AT GRADE SHALL BE REINFORCED WITH 6x6x6/6 Welded Wire Mesh. Reinforcing for concrete slabs resting on Earth Below Grade is optional.

#### CONCRETE FOUNDATION WALLS

CONCRETE BLOCK FOUNDATION WALLS SHALL BE PARGED BELOW GROUND LEVEL WITH A MINIMUM OF 6 mm (1/4") OF MORTAR AND SHALL BE COVED OVER THE FOOTING WHEN THE FIRST COURSE OF BLOCK IS LAID. BITUMINOUS OR OTHER WATERPROOFING MATERIAL SHALL BE APPLIED OVER THE PARGING OR POURED CONCRETE BELOW GROUND LEVEL. THE THIKNESS OF FOUNDATION WALLS MADE OF UNREINFORCED CONC. BLOCK OR SOLID CONCRETE AND SUBJECT TO LATERAL EARTH PRESSURE SHALL CONFORM TO TABLE 9.15.4.2.A FOR WALLS NOT EXCEEDING 3.0M IN UNSUPPORTED HEIGHT.

CONCRETE FOUNDATION WALLS SHALL HAVE A MINIMUM THICKNESS OF 200 mm (8") UNILESS OTHERWISE SPECIFIED. THE MAXIMUM HEIGHT OF THE FINISHED GRADE ABOVE THE BASEMENT FLOOR, FOR LATERALLY SUPPORTED WALLS, SHALL BE AS FOLLOWS:

200 mm (7-7/8") POURED CONCRETE2.1 m (6'-11")

240 mm (9-1/2") CONCRETE BLOCK 1.8 m (5'-11")

290 mm (11-3/8") CONCRETE BLOCK 2.2 m (7'-3")

WHEN A FOUNDATION WALL CONTAINS AN OPENING MORE THAN 1.2 m (3'-11") IN LENGTH OR CONTAINS OPENINGS IN MORE THAN 25% OF ITS LENGTH, THAT PORTION OF THE WALL BENEATH SUCH OPENINGS SHALL BE CONSIDERED LATERALLY UNSUPPORTED AND SHALL BE REINFORCED.

CONCRETE BLOCK WALLS SHALL BE REINFORCED WITH 15 mm (19/32") DIAMETER BARS AT 400 mm (16") O.C. VERTICALLY AND TRUSS-TYPE REINFORCEMENTS AT 400 mm (16") O.C. HORIZONTALLY. VOIDS AROUND VERTICAL BARS SHALL BE FILLED WITH SOLID MASONRY.

POURED CONCRETE WALLS SHALL BE REINFORCED WITH 10 mm (3/8") DIAMETER BARS EXTENDING 300 mm (12") PAST OPENING ON EACH SIDE. FOUNDATION WALLS SHALL BE ADEQUATELY BRACED PRIOR TO BACKFILLING

#### BASEMENT COLUMNS AND BEARING WALLS

STEEL COLUMNS SHALL BE FITTED WITH STEEL PLATES AT BOTH ENDS THAT ARE NOT LESS THAN 100 mm x 100 mm ( $4^{\prime\prime}x4^{\prime\prime})$  BY 9.5 mm ( $3/8^{\prime\prime})$  THICK, AND WHERE THE COLUMN SUPPORTS A WOOD BEAM, THE TOP PLATE SHALL EXTEND ACROSS THE FULL WIDTH OF THE BEAM.

STEEL COLUMN BOTTOM PLATES SHALL BE ANCHORED TO CONCRETE FOOTINGS WITH A MINIMUM OF TWO 13 mm (1/2") DIAMETER ANCHOR BOLTS A MINIMUM DEPTH OF 100 mm (4") INTO FOOTING. STEEL COLUMN TOP PLATES SHALL BE FASTENED WITH A MINIMUM OF TWO 13 mm (1/2") DIAMETER BOLTS (FOR WOOD BEAMS) AND WELDED TO BEAM FLANGES (FOR STEEL BEAMS).

INTERIOR BEARING STUD PARTITIONS SHALL BE 38 mm x 89 mm (2"x4") SPRUCE AT 400 mm OR 38 mm x 140 mm (2"x6") SPRUCE AT 400 mm (16") O.C. UNLESS NOTED OTHERWISE, ON 6 MIL POLYETHYLENE ON 200 mm (8") HIGH POURED CONCRETE OR CONCRETE BLOCK CURB ON 300 mm x 200 mm (14"x8") CONCRETE FOOTINGS WITH DOUBLE TOP PLATE AND SINGLE BOTTOM PLATE ANCHORED TO CONCRETE CURB AT 2030 mm (6'-8") O.C.

EXTERIOR WOOD COLUMNS SHALL BE ANCHORED TO CONCRETE SLABS OR FOOTINGS WITH A STEEL ANCHOR SHOE A MINIMUM OF 175 mm (7") ABOVE FINISHED GRADE AND TO THE BEAM WITH A 19 mm x 89 mm x 286 mm (1"x4"x12") WOOD NAILING STRIP AT THE TOP OF THE COLUMN.

FIRE SEPARATION BEAMS AND JOISTS WHICH ARE FRAMED INTO A MASONRY OR CONCRETE FIRE SEPARATION SHALL NOT REDUCE THE THICKNESS OF THAT FIRE SEPARATION TO LESS THAN 100 mm (4") OF MASONRY OR CONCRETE.

FOAMED PLASTICS WHICH FORM PART OF A WALL OR CEILING ASSEMBLY SHALL BE PROTECTED FROM ADJACENT HABITABLE SPACES BY GYPSUM BOARD OR EQUIVALENT NON-COMBUSTIBLE MATERIAL.

MASONRY VENEER WALLS MASONRY VENEER RESTING ON A BEARING SUPPORT SHALL BE OF SOLID UNITS WITH A MINIMUM THICKNESS OF 70 mm (2-3/4") TO A MAXIMUM HEIGHT OF 11 m (36'-1").

AN AIR SPACE, WITH A MINIMUM THICKNESS OF 25 mm (1"), SHALL BE PROVIDED BETWEEN MASONRY VENEER AND WALL SHEATHING.

MASONRY VENEER SHALL BE TIED TO WOOD FRAMING MEMBERS WITH CORROSION-RESISTANT STRAPS, WITH A MINIMUM THICKNESS OF 0.76 mm (0.030") AND A MINIMUM WIDTH OF 22 mm (7/8"). STRAPS SHALL BE SPACED AT 600 mm (23-5/8") O.C. VERTICALLY AND 400 mm (15-3/4") O.C. HORIZONTALLY AND SHALL BE NAILED TO THE WOOD STUDS THROUGH

MASONRY VENEER RESTING ON A BEARING SUPPORT SHALL NOT PROJECT MORE THAN 25 mm (1") WHERE THE VENEER IS AT LEAST 90 mm (3-1/2") THICK, AND 12 mm (1/2") WHERE THE VENEER IS LESS THAN 90 mm (3-1/2") THICK.

WEEP HOLES SHALL BE PROVIDED ABOVE ALL OPENINGS, AT ROOF/WALL INTERSECTIONS AND AT THE BOTTOM OF MASONRY VENEER WALLS. THESE HOLES SHALL BE 10 mm (3/8") AND SHALL HAVE A MAXIMUM SPACING OF 800 mm (2'-7") 0.C.

WEEP HOLES AT THE BOTTOM OF MASONRY VENEER WALLS SHALL BE PROVIDED WITH FLASHING THAT EXTENDS FROM A POINT A MINIMUM OF 5 mm (3/16") BEYOND THE OUTER FACE OF THE SUPPORTING WALL T A POINT A MINIMUM OF 150 mm (5-7/8") UP BEHIND THE SHEATHING PAPER. IF SUCH FLASHING IS FLEXIBLE, IT SHALL BE PROVIDED WITH CONTINUOUS SUPPORT. ABOVE-GRADE MASONRY TO COMPLY WITH O.B.C. SECTION 9.20

#### WOOD FRAMING

SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WALL WITH ANCHOR BOLTS THAT HAVE A MINIMUM DIAMETER OF 12.7 mm (1/2") AND SPACED A MAXIMUM OF 2.4 m (7"-10") O.C. THESE ANCHOR BOLTS SHALL BE PROVIDED WITH NUTS AND WASHERS AND SHALL BE EMBEDDED A MINIMUM OF 100 mm (4") IN THE FOUNDATION.

ALL FLOOR JOISTS, CEILING JOISTS, ROOF JOISTS AND RAFTERS SHALL HAVE A MINIMUM END BEARING LENGTH OF 38 mm (1-1/2").

WALL PLATES SHALL BE NOT LESS THAN 38 mm (1-1/2") THICK AND SHALL BE THE SAME WIDTH AS THE WALL STUDS. NO FEWER THAN TWO TOP PLATES SHALL BE PROVIDED IN LOADBEARING WALLS. WHERE FLOOR SHEATHING SUPPORTS CERAMIC TILES, IT SHALL BE REINFORCED IN ACCORDANCE WITH O.B.C. SECTION 9.30.6

#### SOLID BLOCKING SHALL BE PROVIDED UNDER ALL CONCENTRATED LOADS. ROOF CONSTRUCTION

EAVESTROUGHS AND DOWNSPOUTS SHALL BE PROVIDED AND CONNECTED TO STORM SEWERS, WHERE AVAILABLE, OR DISCHARGED ONTO CONCRETE PADS AND DIRECTED AWAY FROM ANY BUILDINGS.

#### NATURAL AND MECHANICAL VENTILATION

#### INSULATION, AIR AND VAPOUR BARRIERS

THERMALLY INSULATED WALL, CEILING AND FLOOR ASSEMBLIES SHALL BE PROVIDED WITH A CONTINUOUS BARRIER TO AIR LEAKAGE AND WATER VAPOUR DIFFUSION FROM THE INTERIOR OF THE BUILDING INTO WALL, FOAMED INSULATION MUST BE PROTECTED ON INTERIOR SURFACES BY GYPSUM BOARD OR EQUIVELANT NON-COMBUSTIBLE MATERIAL

#### **BASEMENT**

FOR ENGINEERED TRUSS JOISTS, REFER TO ATTACHED MANUFACTURER'S FLOOR JOIST DRAWINGS.

MINIMUM FOOTING WIDTH OR AREA SHALL
CONFORM TO TABLE 9.15.3.4.
STEEL COLUMNS SHALL CONFORM TO OBC 9.17.3.
WOOD COLUMNS SHALL CONFORM TO OBC 9.17.4.
MAXIMUM SPANS OF STEEL BEAMS SUPPORTING
FLOORS SHALL CONFORM TO TABLE 9.23.4.3
MAXIMUM SPANS OF STEEL BEAMS SUPPORTING
A ROOF AND ONE FLOOR SHALL CONFORM TO
TABLES A-20 TO A-29
WOOD FLOOR JOISTS SHALL CONFORM TO
OBC 9.23.9.
MAXIMUM SPANS FOR WOOD FLOOR JOISTS
SHALL CONFORM TO TABLES A1 AND A-2
OR WITH MANUFACTURER'S SPAN TABLES.
MAXIMUM SPANS FOR BUILT-UP WOOD FLOOR
BEAMS SHALL CONFORM TO TABLES A-8
THROUGH A-10.
MAXIMUM SPANS FOR LINTELS SHALL MAXIMUM SPANS FOR LINTELS SHALL
CONFORM TO TABLES A-13 THROUGH A-19.
FLOORS-ON-GROUND SHALL CONFORM TO

A SUBSURFACE INVESTIGATION, INCLUDING GROUNDWATER CONDITIONS, SHALL BE CARRIED OUT, BY OR UNDER THE DIRECTION OF A PERSON HAVING KNOWLEGG AND EXPERIENCE PERSON HAVING KNOWLEDGE AND EXPERIENCE IN PLANNING AND EXECUTING SUCH INVESTIGATIONS TO A DEGREE APPROPRIATE FOR THE BUILDING AND ITS USE, THE GROUND AND THE SURROUNDING SITE CONDITIONS. IN CONFORMANCE WITH OBC 4.2.2.1.

OBC 9.16. CONCRETE SHALL CONFORM TO OBC 9.3.1.

TERMITE AND DECAY PROTECTION FOR LUMBER AND WOOD PRODUCTS SHALL CONFORM TO OBC 9.3.2.9.

STRUCTURAL MEMBERS AND THEIR CONNECTIONS SHALL CONFORM TO OBC 9.4.1. THE CLEAR HEIGHT OVER STAIRS MEASURED VERTICALLY FROM A LINE DRAWN THROUGH THE LEADING EDGES OF THE TREADS SHALL BE NOT LESS THAN 1,950 mm, WITHIN DWELLING UNITS [OBC 9.8.2.2]

DIMENSIONS FOR RECTANGULAR TREADS AND RUN (1) THE RUN, WHICH IS MEASURED AS THE HORIZONTAL NOSING TO NOSING DISTANCE, AND THE TREAD DEPTH OF RECTANGULAR TREAD SHALL CONFORM TO TABLE 9.8.4.1 (2) THE DEPTH OF A RECTANGULAR TREAD SHALL NOT LESS THAN ITS RUN AND NOT MORE THAN ITS RUN PLUS 25mm [OBC 9.8.4.2]

A HANDRAIL SHALL BE PROVIDED ...

(A) ON AT LEAST ONE SIDE OF STAIRS OR RAMPS LESS THAN 1,100 mm IN WIDTH, (B) ON 2 SIDES OF CURVED STAIRS OR RAMPS OF ANY WIDTH, EXCEPT CURVED STAIRS WITHIN DWELLING UNITS, AND (C) ON 2 SIDES OF STAIRS OR RAMPS 1,100 mm IN WIDTH OR GREATER. HANDRAILS ARE NOT REQUIRED FOR ...

(A) INTERIOR STAIRS HAVING NOT MORE THAN 2 RISERS AND SERVING A SINGLE DWELLING UNIT, OR

(B) EXTERIOR STAIRS HAVING NOT MORE THAN 3 RISERS AND SERVING A SINGLE DWELLING UNIT. [OBC 9.8.7.1]

THE HEIGHT OF HANDRAILS ON STAIRS AND RAMPS SHALL BE NOT LESS THAN 865 mm AND NOT MORE THAN 965 mm. [OBC 9.8.7.4(2)]

EXTERIOR CONCRETE STAIRS WITH MORE THAN 2 RISERS AND 2 TREADS SHALL BE SUPPORTED ON UNIT MASONRY OR CONCRETE WALLS OR PIERS NOT LESS THAN 150 mm IN CROSS SECTION, OR CANTILEVERED FROM THE MAIN FOUNDATION WALL. [OBC 9.8.9.2] GRANULAR MATERIAL USED TO DRAIN THE BOTTOM OF A FOUNDATION SHALL CONFORM TO OBC 9.14.4.1.

WHERE A FOUNDATION IS ERECTED ON FILLED GROUND, PEAT OR SENSITIVE CLAY, THE FOOTING SIZES SHALL CONFORM TO TO OBC SECTION 4.2. [OBC 9.15.1.1.(3)]

LINTELS AND ARCHES THAT SUPPORT MASONRY SHALL CONFORM TO OBC 9.20.5.

THE LENGTH OF END BEARING OF BEAMS THAT ARE SUPPORTED ON MASONRY SHALL BE NOT LESS THAN 90 mm. THE LENGTH OF END BEARING OF FLOOR, ROOF OR CEILING JOISTS THAT ARE SUPPORTED ON MASONRY SHALL BE NOT LESS THAN 40 mm. [OBC 9.20.8.3]

A FLOOR DRAIN SHALL BE INSTALLED IN A BASEMENT FORMING PART OF A DWELLING UNIT. [OBC 9.31.4.4]

CAPACITY AND SOUND RATINGS FOR REQUIRED FANS SHALL CONFORM TO OBC 9.32.3.9.

3-WAY WALL SWITCHES LOCATED AT THE HEAD AND FOOT OF EVERY STAIRWAY SHALL BE PROVIDED TO CONTROL AT LEAST ONE LIGHTING OUTLET WITH FIXTURE FOR STAIRWAYS WITH 4 OR MORE RISERS IN DWELLING UNITS. [OBC 9.34.2.3(2)] A LIGHTING OUTLET WITH FIXTURE SHALL BE PROVIDED FOR EACH 30 m<sup>2</sup> OF FLOOR AREA OR FRACTION OF IT IN UNFINISHED BASEMENTS.

OR FRACTION OF [OBC 9.34.2.4] A LIGHTING OUTLET WITH FIXTURE SHALL BE PROVIDED IN STORAGE ROOMS. [OBC 9.34.2.5]

REINFORCED CONCRETE SLABS SHALL CONFORM TO OBC 9.39. PERFORMANCE OF WINDOWS ,DOORS AND SKYLIGHT TO CONFORM WITH OBC 9.7.3

## FIRST FLOOR

EXHAUST DUCTS CONNECTED TO LAUNDRY DRYING EQUIPMENT SHALL BE ...
(A) INDEPENDENT OF OTHER EXHAUST DUCTS, (B) DESIGNED AND INSTALLED SO THAT THE ENTIRE DUCT CAN BE CLEANED, AND (C) CONSTRUCTED OF MATERIAL THAT IS SMOOTH AND CORROSION—RESISTANT. [OBC 6.2.3.8.(7)]

THE COMPRESSIVE STRENGTH OF UNREINFORCED CONCRETE AFTER 28 DAYS SHALL BE NOT LESS THAIN ... (A) 32 MPg FOR GARAGE FLOORS, CARPORT FLOORS AND ALL EXTERIOR FLATWORK, (B) 20 MPg FOR INTERIOR FLOORS, AND (C) 15 MPg FOR ALL OTHER APPLICATIONS, CONCRETE USED FOR GARAGE AND CARPORT FLOORS AND EXTERIOR STEPS SHALL HAVE AIR ENTRAINMENT OF 5 TO 8%. [OBC 9.3.1.6]

IF WOOD OR SHEET STEEL WALL STUDS ENCLOSE THE MAIN BATHROOM IN A DWELLING UNIT, REINFORCEMENT SHALL BE INSTALLED TO PERMIT THE FUTURE INSTALLATION OF A GRAB BAR IN

WEATHER STRIPPING SHALL BE PROVIDED AROUND ALL EXTERIOR DOORS EXCEPT GARAGE DOORS. [OBC 9.6.5.6]

IF WOOD OR SHEET STEEL WALL STUDS ENCLOSE THE MAIN BATHROOM IN A DWELLING UNIT, REINFORCEMENT SHALL BE INSTALLED TO PERMIT THE FUTURE INSTALLATION OF A GRAB BAR IN CONFORMANCE WITH OBC 9.5.2.3.

GLASS OTHER THAN SAFETY GLASS SHALL NOT BE USED FOR A SHOWER OR BATHTUB ENCLOSURE. [OBC 9.6.1.4(6)] THE MINIMUM WINDOW GLASS AREA FOR ROOMS IN BUILDINGS OF RESIDENTIAL OCCUPANCY OR ROOM THAT ARE USED FOR SLEEPING SHALL CONFORM TO TABLE 9.7.2.3.

EXCEPT WHERE A DOOR ON THE SAME FLOOR LEVEL AS THE BEDROOM PROVIDES DIRECT ACCESS TO THE EXTERIOR, EVERY FLOOR LEVEL CONTAINING A BEDROOM IN A DWELLING UNIT SHALL BE PROVIDED WITH AT LEAST ONE OUTSIDE WINDOW THAT CONFORMS WITH THE REQUIREMENTS IN OBC 9.9.10.1

DIMENSIONS FOR RECTANGULAR TREADS RISE MAX. 200 mm, MIN. 125 mm RUN MAX. 355 mm, MIN. 255 mm [OBC TABLE 9.8.4.1]

EVERY ATTIC OR ROOF SPACE SHALL BE PROVIDED WITH AN ACCESS HATCH WITH A MINIMUM AREA OF 0.32 m² AND WITH NO DIMENSION LESS THAN 545 mm. ACCESS HATCHES SHALL BE FITTED WITH DOORS OR COVERS. [OBC 9.19.2.1(2)(0)]

WOOD ROOF TRUSSES SHALL CONFORM TO OBC 9.23.13.11. ROOFS AND OTHER PLATFORMS THAT EFFECTIVELY SERVE AS ROOFS WITH RESPECT TO ACCUMULATION OR DRAINAGE OF PRECIPITATION, SHALL BE PROTECTED WITH ROOFING, INCLUDING FLASHING, INSTALLED TO SHED RAIN EFFECTIVELY AND TO PREVENT WATER, DUE TO ICE DAMMING, FROM ENTERING THE ROOF. [OBC 9.26.1.1]

## CROSS SECTION

CONCEALED SPACES IN INTERIOR WALLS, CEILINGS AND CRAWL SPACES SHALL BE SEPARATED BY FIRE STOPS FROM CONCEALED SPACES IN EXTERIOR WALLS AND ATTIC OR ROOF SPACES. [OBC 9.10.16.1.(1)] SMOKE ALARMS CONFORMING TO CAN/ULC-S351, "SMOKE ALARMS", SHALL BE INSTALLED IN EACH DWELLING UNIT IN EACH SLEEPING ROOM NOT WITHIN A DWELLING UNIT AND EACH INTERIOR SHARED MEANS OF EORESS AND COMMON AREA IN IN A HOUSE [OBC 9.10.19.1]

FOUNDATION WALL DRAINAGE SHALL CONFORM TO OBC 9.14.2.1. FOOTINGS SHALL REST ON UNDISTURBED SOIL, ROCK OR COMPACTED GRANULAR FILL. [OBC 9.15.3.2]

SWINGING ENTRANCE DOORS TO DWELLING UNITS, BETWEEN DWELLING UNITS AND ATTACHED GARAGES OR OTHER ANCILLARY SPACES, AND DOORS THAT PROVIDE ACCESS DIRECTLY OR INDIRECTLY FROM A GARAGE TO A DWELLING UNIT SHALL BE PROVIDED WITH A DEADBOLT LOCK WITH A CYLINDER HAVING NO FEWER THAN 5 PINS AND A BOLT THROW NOT LESS THAN 25 mm PROTECTED WITH A SOLID OR HARDENED FREE—TURNING RING OR BEVELLED CYLINDER HOUSING.

THE HEIGHT OF HANDRAILS ON STAIRS AND

GUARDS SHALL CONFORM TO OBC 9.8.8 AND SHALL RESIST LOADS IN CONFORMANCE WITH TABLE 9.8.8.2.

WHERE A GARAGE IS ATTACHED TO OR BUILT INTO A BUILDING OF RESIDENTIAL OCCUPANCY, (A) AN AIR BARRIER SYSTEM IN CONFORMANCE OBC 9.25.3, SHALL BE INSTALLED BETWEEN THE GARAGE AND THE REMAINDER OF THE BUILDING TO PROVIDE AN EFFECTIVE BARRIER TO GAS AND EXHAUST FUMES, AND (B) EVERY DOOR BETWEEN THE GARAGE AND THE REMAINDER OF THE BUILDING SHALL CONFORM TO OBC 9.10.13.15. WHERE MEMBRANE MATERIALS ARE USED TO PROVIDE THE REQUIRED AIRTIGHTNESS IN THE AIR BARRIER SYSTEM, ALL JOINTS SHALL BE SEALED AND STRUCTURALLY SUPPORTED. [OBC 9.10.9.16(5)]

A DOOR BETWEEN AN ATTACHED OR BUILT—IN GARAGE AND A DWELLING UNIT SHALL BE TIGHT—FITTING AND WEATHERSTRIPPED TO PROVIDE AN EFFECTIVE BARRIER AGAINST THE PASSAGE OF GASES AND EXHAUST FUMES AND SHALL BE FITTED WITH A SELF—CLOSING DEVICE. [OBC 9.10.13.15]

FACTORY-BUILT FIREPLACES AND THEIR INSTALLATION SHALL CONFORM TO CAN/ULC-S610-M, "FACTORY-BUILT FIREPLACES". [OBC 9.22.8.1]

LAUNDRY FACILITIES OR A SPACE FOR LAUNDRY FACILITIES SHALL BE PROVIDED IN EVERY DWELLING UNIT OR GROUPED ELSEWHERE IN THE BUILDING IN A LOCATION CONVENIENTLY ACCESSIBLE TO OCCUPANTS OF EVERY DWELLING UNIT. [9.31.4.2]

A CLOTHES DRYER EXHAUST DUCT SYSTEM SHALL CONFORM TO PART 6. [OBC 9.32.1.1(5)]

AN EXHAUST AIR INTAKE SHALL BE INSTALLED IN EACH KITCHEN, BATHROOM AND WATER CLOSET ROOM. [OBC 9.32.3.5(2)]

EXCEPT FOR CLOTHES DRYERS, EXHAUST OUTLETS SHALL BE FITTED WITH SCREENS OF MESH NOT LARGER THAN 15 mm, EXCEPT WHERE CLIMATIC CONDITIONS MAY REQUIRE LARGER OPENINGS. [OBC 9.32.3.12.(10)]

THE DESIGN, CONSTRUCTION AND INSTALLATION, INCLUDING THE PROVISION OF COMBUSTION AIR, OF SOLID-FUEL BURNING APPLIANCES AND EQUIPMENT, INCLUDING STOVES, RANGES AND SPACE HEATERS, SHALL CONFORM TO CAN/CSA-B365, "INSTALLATION CODE FOR SOLID-FUEL-BURNING APPLIANCES AND EQUIPMENT". [OBC 9.33.1.2]

A LIGHTING OUTLET WITH FIXTURE CONTROLLED BY A WALL SWITCH SHALL BE PROVIDED IN KITCHENS, UTILITY ROOMS, LAUNDRY ROOMS, DINING ROOMS, BATHROOMS, WATER-CLOSET ROOMS, VESTIBILUES AND HALLWAYS, AS WELL AS IN BEDROOMS AND LIVING ROOMS THAT ARE NOT PROVIDED WITH A RECEPTACLE THAT IS CONTROLLED BY A WALL SWITCH. [OBC 9.34.2.2]

3-WAY WALL SWITCHES LOCATED AT THE HEAD AND FOOT OF EVERY STAIRWAY SHALL BE PROVIDED TO CONTROL AT LEAST ONE LIGHTING OUTLET WITH FIXTURE FOR STAIRWAYS WITH 4 OR MORE RISERS IN A HOUSE OR DWELLING UNITS. [OBC 9.34.2.3(2)]

A LIGHTING OUTLET WITH FIXTURE SHALL BE PROVIDED FOR AN ATTACHED, BUILT—IN OR DETACHED GARAGE OR CARPORT. [OBC 9.34.2.6]

SECOND FLOOR

SPECIFIED DESIGN SNOW LOADS SHALL CONFORM TO OBC 9.4.2.2.

ATTICS AND ROOF SPACES SHALL CONFORM TO OBC 9.4.2.4.

RAMPS SHALL BE NOT LESS THAN 865 mm AND NOT MORE THAN 965 mm. [9.8.7.4.(2)]

WHERE THE TOP OF A FOUNDATION WALL IS REDUCED IN THICKNESS TO PERMIT THE INSTALLATION OF A MASONRY EXTERIOR FACING, THE REDUCED SECTION SHALL BE (A) NOT LESS THAN 90 mm THICK, AND (B) TIED TO THE FACING MATERIAL WITH METAL TIES CONFORMING TO OBC 9.20.9.4.(3) SPACED NOT MORE THAN 200 mm 0.C. VERTICALLY, AND 900 mm 0.C. HORIZONTALLY. (3) THE SPACE BETWEEN THE WALL AND THE FACING SHALL BE FILLED WITH MORTAR. [OBC 9.15.4.7.(1)(2)(3)]

ALL WALLS, CEILINGS AND FLOORS SEPARATING
CONDITIONED SPACE FROM UNCONDITIONED SPACE,
THE EXTERIOR AIR OR THE GROUND SHALL
BE PROVIDED WITH THERMAL INSULATION IN
CONFORMANCE WITH OBC SUBSECTION
[OBC 9.25.2.3.4.5]

STUCCO SHALL BE NOT LESS THAN 200 mm

ABOVE FINISHED GROUND LEVEL EXCEPT WHEN IT IS APPLIED OVER CONCRETE OR MASONRY. [OBC 9.28.1.4]

#### **ELEVATIONS**

FINISHED GRADE'S PROFILE LINE IS GENERIC AND DOES NOT REFLECT EXACT ELEVATION. DOORS IN BUILDINGS OF RESIDENTIAL
OCCUPANCY, WHERE THE FINISHED FLOOR
ON ONE SIDE OF THE DOOR IS MORE THAN
600 mm ABOVE THE FLOOR OR OTHER
SURFACE OR GROUND LEVEL ON THE OTHER
SIDE OF THE DOOR, SHALL BE PROTECTED
BY, (a) A GUARD, IN ACCORDANCE WITH
OBC 9.8.8, OR (b) A MECHANISM CAPABLE
OF CONTROLLING THE FREE SWINGING OR
SLIDING OF THE DOOR SO AS TO LIMIT ANY
CLEAR UNOBSTRUCTED OPENING TO NOT
MORE THAN 100 mm. [OBC 9.8.8.1(4)]

SAFETY GLASS OF THE TEMPERED OR
LAMINATED TYPE CONFORMING TO CAN/CGSB
-12.1-M, "TEMPERED OR LAMINATED SAFETY
GLASS", OR WIRED GLASS CONFORMING TO
CAN/CGSB-12.11-M, "WIRED SAFETY GLASS"
SHALL BE USED FOR ...
(A) SIDELIGHTS GREATER THAN 500 mm WIDE
THAT COULD BE MISTAKEN FOR DOORS,
(B) GLASS IN STORM DOORS,
(C) GLASS IN SLIDING DOORS, AND
(D) GLASS IN ENTRANCE DOORS WHERE THE
GLASS AREA EXCEEDS 0.5 m² AND
EXTENDS TO LESS THAN 900 mm FROM
THE BOTTOM OF THE DOOR. [OBC 9.6.1.4]

IN DWELLING UNITS, WINDOWS OVER STAIRS, RAMPS AND LANDINGS THAT EXTEND TO LESS THAN 900 mm ABOVE THE SURFACE TO THE TREADS, RAMP OR LANDING SHALL BE (A) PROTECTED BY GUARDS, IN ACCORDANCE WITH DBC 9.8.8, OR (B) BE NON-OPENABLE AND DESIGNED TO WITHSTAND THE SPECIFIED LOADS FOR GUARDS AS PROVIDED IN OBC 4.1.5.14 [ OBC 8.8.1(8)(g)(b)

GUARDS SHALL BE DESIGNED SO THAT NO MEMBER, ATTACHMENT OR OPENING LOCATED BETWEEN 140 mm AND 900 mm ABOVE THE FLOR OR WALKING SURFACE PROTECTED BY THE GUARD WILL FACILITADE CLIMBING [OBC 9.8.8.6.(1)]

GLASS IN GUARDS SHALL BE EITHER

(A) SAFETY GLASS OF THE LAMINATED OR TEMPERED TYPE CONFORMING TO CAN/CGSB-12.1-M, "EMPERED OR LAMINATED SAFETY GLASS", OR WIRED GLASS CONFORMING TO CAN/CGSB-12.11-M, "WIRED SAFETY GLASS". [OBC 9.8.8.7]

# THE MAXIMUM AGGREGATE AREA OF UNPROTECTED OPENINGS IN EXTERIOR WALLS SHALL CONFORM TO TABLE 9.10.14.4.

CONSTRUCTION OF EXPOSING BUILDING FACE OF HOUSES SHALL CONFORM TO OBC 9.10.15.5. EVERY WINDOW WELL SHALL BE DRAINED TO THE FOOTING LEVEL OR OTHER SUITABLE LOCATION. [OBC 9.14.6.3]

WHERE STEP FOOTINGS ARE USED, THE VERTICAL RISE BETWEEN THE HORIZONTAL PORTIONS SHALL NOT EXCEED 600 mm, AND THE HORIZONTAL DISTANCE BETWEEN RISERS SHALL BE NOT LESS THAN 600 mm [OBC 9.15.3.9]

THE THICKNESS AND HEIGHT OF FOUNDATION WALLS MADE OF UNREINFORCED CONCRETE BLOCKS OR SOLID CONCRETE AND SUBJECT TO LATERAL EARTH PRESSURE SHALL CONFORM TO TABLE 9.15.4.2.A. FOR WALLS NOT EXCEEDING 3.0 m IN UNSUPPORTED HEIGHT. [OBC 9.15.4.2]

EXTERIOR FOUNDATION WALLS SHALL EXTEND NOT LESS THAN 150 mm ABOVE FINISHED GROUND LEVEL. [OBC 9.15.4.6] VENTING FOR ROOF SPACES SHALL CONFORM TO OBC 9.19.1.2.

THE UNOBSTRUCTED ROOF VENT AREA SHALL BE NOT LESS THAN 1/300 OF THE INSULATED CEILING AREA. WHERE THE ROOF SLOPE IS LESS THAN 1 IN 6, OR IN ROOFS THAT ARE CONSTRUCTED WITH ROOF JOISTS, THE UNOBSTRUCTED VENT AREA SHALL BE NOT LESS THAN 1/150 OF THE INSULATED CEILING AREA. [OBC 9.19.1.2 (1)(2)] FLASHING SHALL BE INSTALLED IN MASONRY AND MASONRY VENEER WALLS IN CONFORMANCE WITH OBC 9.20.13.3.(1).

THROUGHWALL FLASHING SHALL BE PROVIDED IN A MASONRY VENEER WALL SUCH THAT ANY MOISTURE WHICH ACCUMULATES IN THE AIR SPACE WILL BE DIRECTED TO THE EXTERIOR OF THE BUILDING. [OBC 9.20.13.3.(2)]

WEEP HOLES THAT ARE SPACED NOT MORE THAN 800 mm APART SHALL BE PROVIDED AT THE BOTTOM OF CAVITIES OR AIR SPACES IN MASONRY VENEER WALLS AND ABOVE LINTELS OVER WINDOW AND DOOR OPENINGS. [OBC 9.20.13.8] A CHIMNEY FLUE SHALL EXTEND NOT LESS THAN 900 mm ABOVE THE HIGHEST POINT AT WHICH THE CHIMNEY COMES IN CONTACT WITH THE ROOF, AND SHALL EXTEND NOT LESS THAN 600 mm ABOVE THE HIGHEST ROOF SURFACE OR STRUCTURE WITHIN 3 m OF THE CHIMNEY. [OBC 9.21.4.4]

THE SLOPE OF ROOF SURFACES, ON WHICH ROOF COVERINGS MAY BE APPLIED, SHALL CONFORM TO TABLE 9.26.3.1. FLASHING SHALL BE INSTALLED AT ...
(A) ALL ROOF-WALL JUNCTIONS,
(B) ALL JUNCTIONS OF SIMILAR TYPES OF
ELEMENTS, AND
(C) ALL GUARDS THAT ARE CONNECTED TO
THE ROOF BY OTHER THAN PICKETS OR
POSTS. [OBC 9.26.4.1]

WHERE SLOPING SURFACES OF SHINGLED ROOFS INTERSECT TO FORM A VALLEY, THE VALLEY SHALL BE FLASHED IN CONFORMANCE WITH OBC 9.26.4.3.

AN EXTERIOR LIGHTING OUTLET WITH FIXTURE CONTROLLED BY A WALL SWITCH LOCATED WITHIN THE BUILDING SHALL BE PROVIDED AT EVERY ENTRANCE TO BUILDINGS OF RESIDENTIAL OCCUPANCY. [OBC 9.34.2.1]

# BASEMENT/1st/2nd

THE MAXIMUM DEFLECTION OF STRUCTURAL MEMBERS SHALL CONFORM TO TABLE 9.4.3.1. COMBINATION ROOMS SHALL CONFORM TO OBC 9.5.1.4.

WINDOWS SHALL CONFORM TO ...
(A) CAN/CSA-A440, "WINDOWS", AND
(B) THE CAN/CSA-A440.1, "USER SELECTION
GUIDE TO CSA STANDARD CAN/CSA-A440-00
WINDOWS". [OBC 9.7.2]

RISE, RUN AND TREAD DEPTH FOR RECTANGULAR TREADS SHALL CONFORM TO TABLE 9.8.4.1. THE DEPTH OF A RECTANGULAR TREAD SHALL BE NOT LESS THAN ITS RUN AND NOT MORE THAN ITS RUN PLUS 25 mm. [OBC 9.8.4.3.(2)] RISERS SHALL BE OF UNIFORM HEIGHT IN ANY ONE FLIGHT WITH A MAXIMUM TOLLERANCE OF. 5mm BETWEEN ADJACENT TREADS OR LANDINGAND 10mm BETWEEN THE TALLEST AND SHORTEST RISERS IN A FLIGHT, [OBC 9.8.4.4.(1)(a)(b)]

THE CLEARANCE BETWEEN A HANDRAIL AND ANY SURFACE BEHIND IT SHALL BE NOT LESS THAN 50 mm. ALL HANDRAILS SHALL BE CONSTRUCTED SO AS TO BE CONTINUALLY GRASPABLE ALONG THEIR ENTIRE LENGTH WITH NO OBSTRUCTION ON OR ABOVE THEM TO BREAK A HANDHOLD, EXCEPT WHERE THE HANDRAIL IS INTERRUPTED BY NEWELS AT CHANGES IN DIRECTION. [OBC 9.8.7.5]

THE DESIGN AND ATTACHMENT OF HANDRAILS AND ANY BUILDING ELEMENT THAT COULD BE USED AS A HANDRAIL SHALL CONFORM TO OBC 9.8.7.7. ALL GUARDS WITHIN DWELLING UNITS SHALL BE NOT LESS THAN 900 mm HIGH. [OBC 9.8.8.3(2)]

LOADS ON STAIRS AND RAMPS SHALL CONFORM TO OBC 9.8.9.1. FIRE BLOCK MATERIALS SHALL CONFORM TO OBC 9.10.16.3.

SMOKE ALARMS CONFORMING TO CAN/ULC-5351, "SMOKE ALARMS", SHALL BE INSTALLED IN EACH DWELLING UNIT IN CONFORMANCE WITH OBC 9.10.19. FIREPLACE INSERTS AND HEARTH-MOUNTED STOVES SHALL CONFORM TO OBC 9.22.10. ANCHORAGE OF COLUMNS AND POSTS SHALL CONFORM TO OBC 9.23.6.2.

WALL STUD SIZE AND SPACING SHALL CONFORM TO OBC TABLE 9.23.10.1. VAPOUR BARRIER MATERIALS SHALL CONFORM TO OBC 9.25.4.2.

ALL PLUMBING FACILITIES AND SYSTEMS SHALL COMPLY WITH OBC SECTION 9.31.

VENTILATION OF ROOMS AND SPACES IN RESIDENTIAL OCCUPANCIES BY NATURAL VENTILATION AND TO SELF-CONTAINED MECHANICHAL VENTILATION SYSTEMS SERVING A HOUSE OR AN INDIVIDUAL DWELLING UNIT SHALL CONFORM TO OBC SECTION 9.32.1.1 ALL AIR-CONDITIONING SYSTEMS AND CENTRAL HEATING SYSTEMS INCLUDING REQUIREMENTS FOR COMBUSTION AIR SHALL COMPLY WITH OBC SECTION 9.33.

ALL ELECTRICAL FACILITIES AND OUTLETS SHALL CONFORM TO OBC SECTION 9.34.

# **ELEVATION / 1st**

REFER TO LOT GRADING / SITE PLAN FOR REQUIRED NUMBER OF EXTERIOR STEPS, DOOR BETWEEN GRAGE AND DWELLING, DECK OR BASEMENT WALKOUT CONDITION.

EVERY SURFACE TO WHICH ACCESS IS PROVIDED, FOR OTHER THAN MAINTENANCE PURPOSES, SHALL BE PROTECTED BY A GUARD, IN CONFORMANCE WITH OBC 9.8.8, ON EACH SIDE THAT IS NOT PROTECTED BY A WALL FOR THE LENGTH WHERE, (a) THERE IS A DIFFERENCE IN ELEVATION OF MORE THAN 600 mm, OR (b) THE ADJACENT SURFACE WITHIN 1.2 m OF THE WALKING SURFACE HAS A SLOPE OF MORE THAN 1 IN 2. [OBC 9.8.8.1.(1)]

CONSTRUTION OF EXPOSING BUILDING FACE OF HOUSES [OBC 9.10.15.5(1)

(1)
EACH EXPOSING BUILDING FACE AND
ANY EXTERIOR WALL LOCATED ABOVE AN
EXPOSING BUILDING FACE THAT ENCLOSES
AN ATTIC OR ROOF SPACE SHALL BE CONSTRUCTED
IN ACCORDANCE WITH SUBSECTION 9.10.8 (a) FOR THE EXPOSING BUILDING FACE AS A WHOLE, OR (b) FOR ANY NUMBER OF SEPARATE PORTIONS OF

(a) THE LIMITING DISTANCE IS NOT LESS THAN 1.2m

(b) THE LIMITING DISTANCE IS LESS THAN 1.2m BUT NOT LESS THAN 0.6m,PROVIDED
THAT THE EXPOSING BUILDING FACE HAS A
FIRE RESISTING RATE OF NOT LESS THAN 45 min. OR (c) THE LIMITING DISTANCE IS LESS THAN 0.6m, PROVIDED THAT THE EXPOSING BUILDING FACE HAS A FIRE RESISTING RATE OF NOT LESS 45 min. AND IS CLAD WITH NON COMBUSTIBLE MATERIAL

EW1b
38mmX89mm WOOD STUDS SPACED 406mm OR
600mmo.c.
89mm THICK ABSORPTIVE MATERIAL

R**M**SSSSSSS**M**SSSSSS

(4) 3/4"ø BOLTS A325 (TYPICAL) STEEL BEAM

SEE PLAN

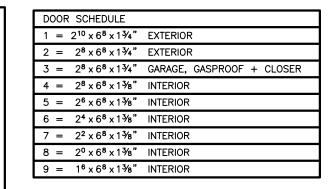
(2) L-4"x4"x7/16"

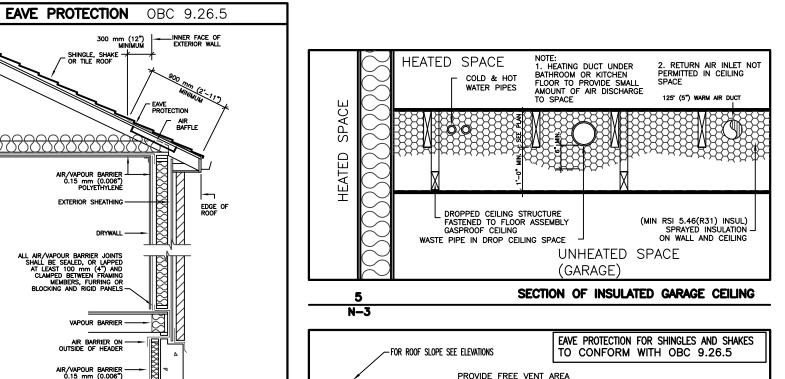
STEEL BEAM

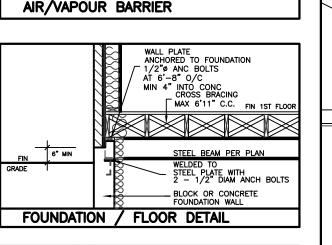
EACH SIDE OF BEAM

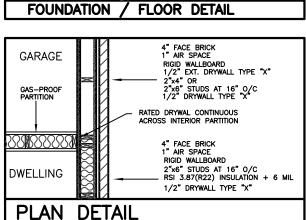
SHOP WELDED TO BEAM

TYPICAL STEEL BEAM TO STEEL BEAM CONNECTION









LINTEL SCHEDULE
$L-1 = (2) \text{ LINTELS } 3\frac{1}{2}^{n} \times 3\frac{1}{2}^{n} \times \frac{1}{4}^{n}$
$L-2 = W8 \times 18 + \frac{1}{4}$ " PLATE
$WL-1 = 3\frac{1}{2}$ " x $3\frac{1}{2}$ " x $\frac{1}{4}$ " + (2) 2" x 8" #1 SPRUCE
$WL-2 = 5" \times 3\frac{1}{2}" \times \frac{5}{16}" + (2) 2" \times 10" #1 SPRUCE$
$WL-3 = 5" \times 3\frac{1}{2}" \times \frac{3}{8}" + (2) 2" \times 12" \#1 SPRUCE$
$WL-4 = 6" \times 3\frac{1}{2}" \times \frac{5}{8}" + (3) 2" \times 12" \#1 SPRUCE$

## LOAD INFORMATION

ROOF LOAD INFORMATION

SPECIFIED SNOW LOAD = 1.8 KPA. SPECIFIED RAIN LOAD = 0.4 KPA. FLOOR LOAD INFORMATION UNFACTORED DEAD LOAD = 15 P.S.F. UNFACTORED LIVE LOAD = 40 P.S.F..

BASEMENT / ELEV COLUMNS THAT SUPPORT A DECK WITH NO SUPERSTRUCTURE NEED NOT BE PROVIDED WITH LATERAL SUPPORT WHERE THE COLUMN

Rise for Rectangular Treads, Tapered Treads and Winders and Run for Rectangular Treads Forming Part of Sentences 9.8.4.1.(1) and 9.8.4.2.(1) es 9.8.4.1.(1) and y.o.r.ex...

Column 2

Column 3

Max. Rise, mm, for All Steps

for All Steps

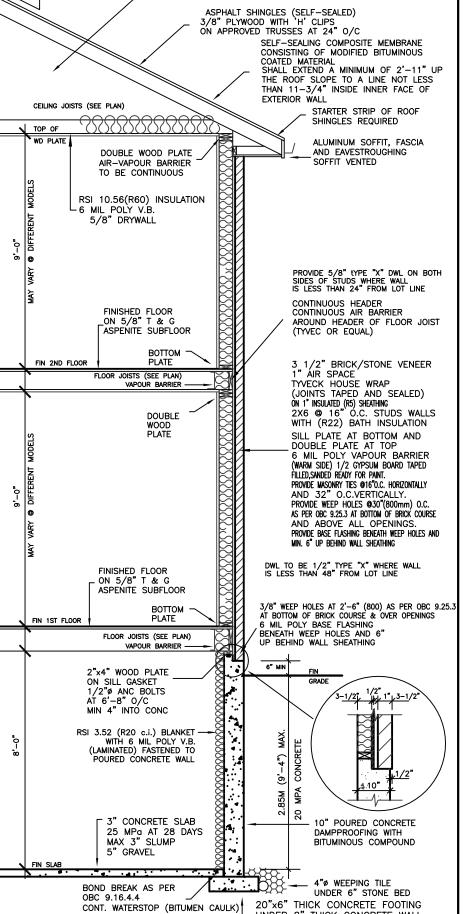
for All Steps

Column 4

Max. Run, mm, for Rectangular Treads

Treads

255 Stair Type Private stairs
Public stairs Service stairs<sup>(3)</sup> no limit
Stairs to unoccupied attic space<sup>(4)</sup> no limit
Stairs to crawl spaces no limit
Stairs that serve mezzanines not exceeding 20 m<sup>2</sup> within
Individuals unit mezzanines not exceeding 20 m<sup>2</sup> within live/work units

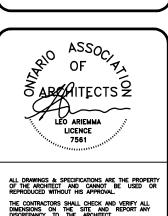


UNDER 8" THICK CONCRETE WALL
OR 22"x6" THICK CONCRETE FOOTING

UNDER 10" THICK CONCRETE WALL

(UNLESS OTHERWISE NOTED)

CROSS SECTION



ARCHITECTURAL

ALL DRAWINGS MUST NOT BE SCALED.

DESIGN INC. 56 PENNSYLVANIA AVE. UNIT 1 CONCORD, ONT. L4K 3V9 CONCORD, ONT. L4K 3V9
TEL 905 660-9393
FAX 905 660-9419

THESE GENERAL NOTES APPLY TO THE ATTACHED PROJECT UNLESS NOTED OTHERWISE ON THE ATTACHED DRAWINGS SPECIFIC TO THE PROJECT

**GENERAL NOTES** JAN '18

DRAWING NO GN-12

STRUCTURAL ENGINEERS FOR STRUCTURAL DESIGN ONLY ₩{ L/KALISHENKO

28 JULY 2020/

NCE OF ONT

LEONARD KALISHENKO

AND ASSOCIATES LIMITED

REVISIONS

REVISED 2022

DATE

JN 12 22