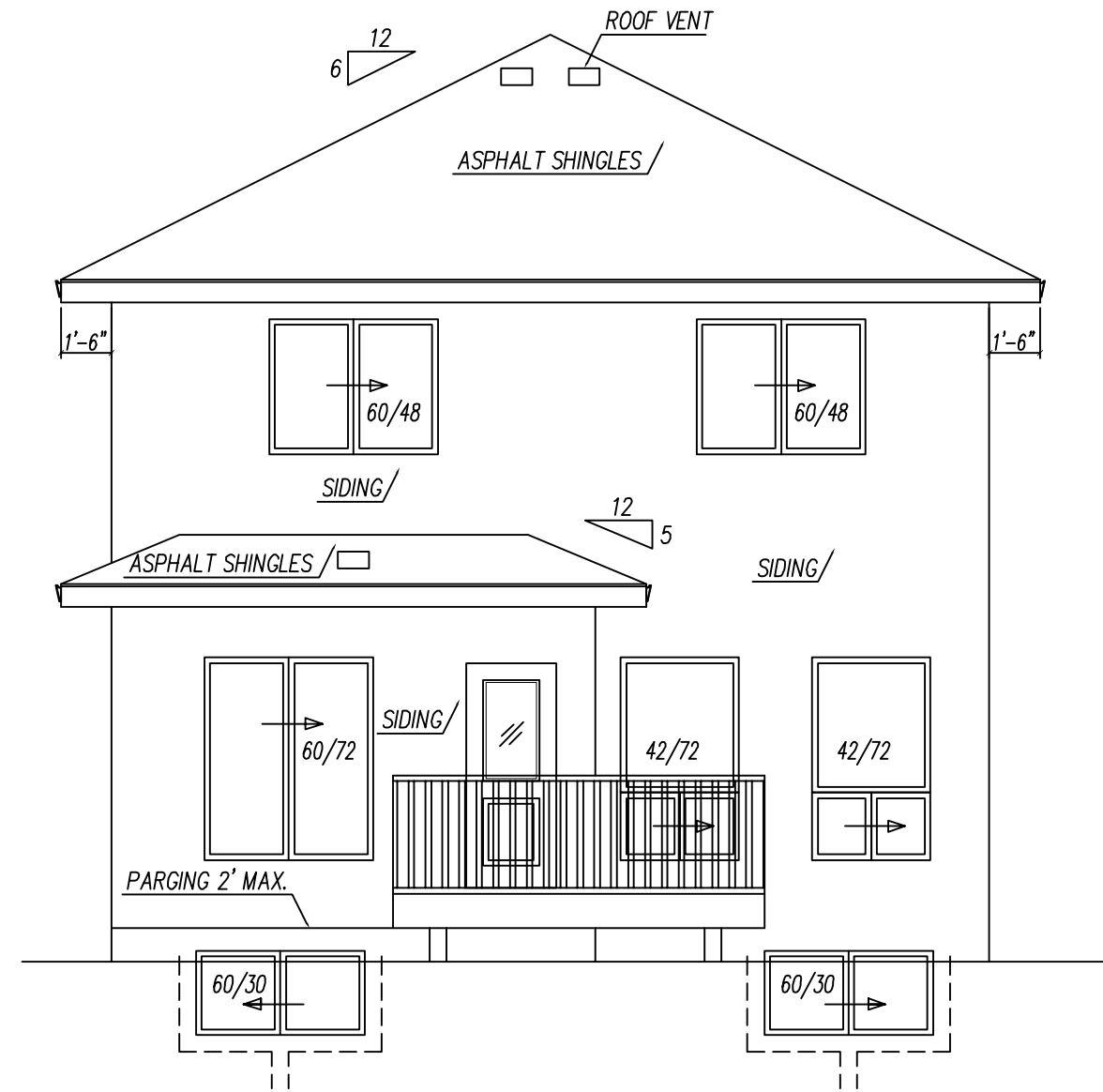


FRONT ELEVATION



REAR ELEVATION

**HI-TECH DESIGNS**  
CANADA LTD.  
9345 63 AVE  
EDMONTON, AB, T6E 0E2  
PHONE: (780) 450-4512  
FAX: 1888-872-6593

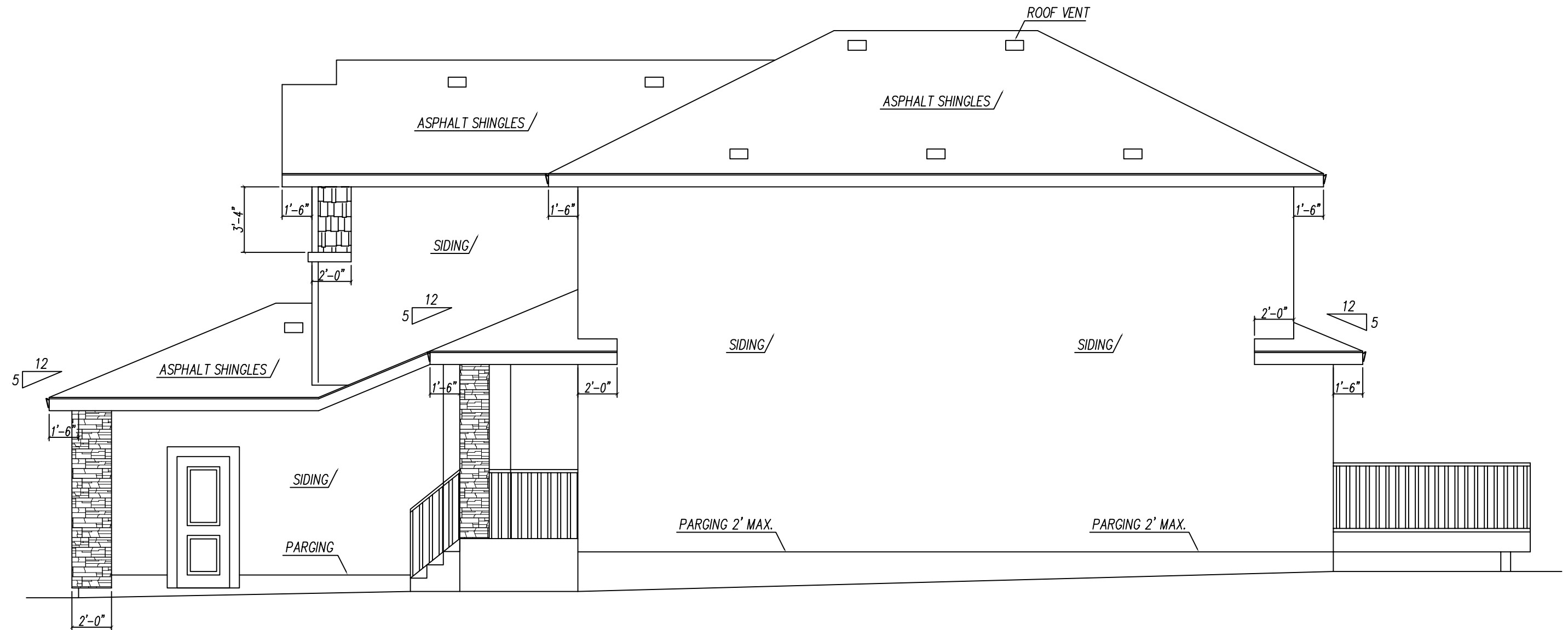
ALL RIGHTS RESERVED, INCLUDING THE RIGHT OF REPRODUCTION IN WHOLE OR IN PART, IN ANY FORM. CONTRACTOR / BUILDER SHALL VERIFY ALL SPECIFICATIONS AND DIMENSIONS BEFORE COMMENCING CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO THIS OFFICE. ALL DIMENSIONS SHALL BE READ NOT SCALED.

**LOT-44, BLOCK-7, PLAN-232 0809**  
**IRVINE CREEK**  
**5930- 18 STREET, NE, LEDUC**

AREA  
**2036 SQ.FT.**

PROPOSED DESIGN FOR: --  
**MILESTONE CUSTOM HOMES**

DESIGNED	SCALE 3/16"=1'-0
DRAWN	DRAWING NO
DATE DEC-21-2023	1/7



RIGHT ELEVATION

**HI-TECH DESIGNS**  
CANADA LTD.  
9345 63 AVE  
EDMONTON, AB, T6E 0E2  
PHONE: (780) 450-4512  
FAX: 1888-872-6593

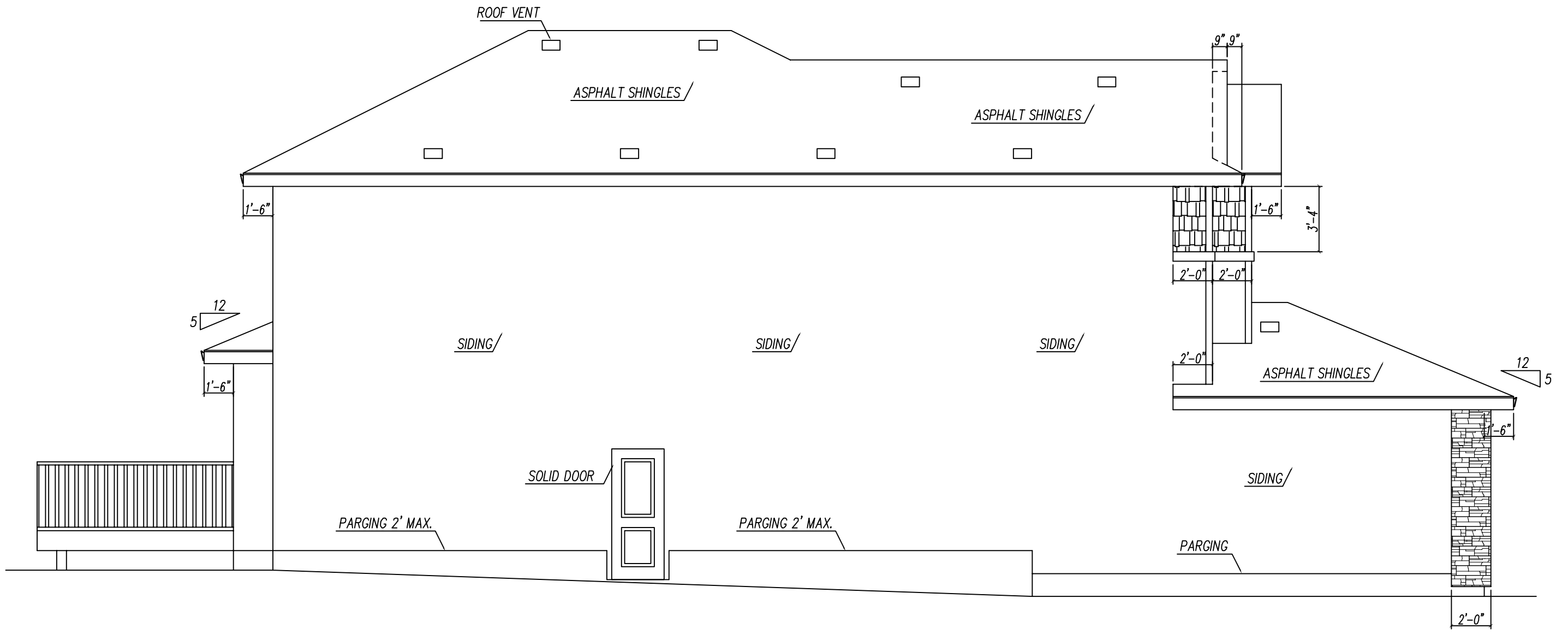
NON HARDENING CAULKING COMPOUND TO BE USED OVER AND AROUND ALL EXTERIOR OPENINGS  
PLUMBING ACCESS OF 16"X20" TO BE PROVIDED FOR TUBS AND SHOWERS  
PROVIDE FRESH AIR INTAKES FOR FURNACES AND FIREPLACES

ALL WORKMANSHIP TO BE A STANDARD EQUAL IN ALL RESPECTS TO GOOD BUILDING PRACTICE  
SIDING/ STUCCO TO BE 6" ABOVE FINISH GRADE  
ALL LINTLES TO BE 3-2"X12"  
FINISH WOOD RAILINGS, PICKETS MAXIMUM 4" O.C.  
PRECAST CONCRETE STEPS. CAPED DRYER VENT

INSULATED ATTIC ACCESS HATCH-20"X28"  
LINEN CLOSET -4 SHELVES MIN, 1'-2" DEEP  
WASHROOMS TO BE MECHANICALLY VENTED TO STAIR SUPPORT TO BE 4"X4" KILN DRIED SPRUCE POST ON 24"X 24"X 8" CONCRETE FOOTING  
PROVIDE @AT LEAST ONE AIR EXCHANGE PER HOUR

**LOT-44, BLOCK-7, PLAN-232 0809**  
**IRVINE CREEK**  
**5930- 18 STREET, NE, LEDUC**

DESIGNED	SCALE NTS/ 3/16"=1'-0"
DRAWN	DRAWING NO
DATE	2/7



LEFT ELEVATION

**HI-TECH DESIGNS**  
CANADA LTD.  
9345 63 AVE  
EDMONTON, AB, T6E 0E2  
PHONE: (780) 450-4512  
FAX: 1888-872-6593

NON HARDENING CAULKING COMPOUND TO BE USED OVER AND AROUND ALL EXTERIOR OPENINGS  
PLUMBING ACCESS OF 16"X20" TO BE PROVIDED FOR TUBS AND SHOWERS  
PROVIDE FRESH AIR INTAKES FOR FURNACES AND FIREPLACES

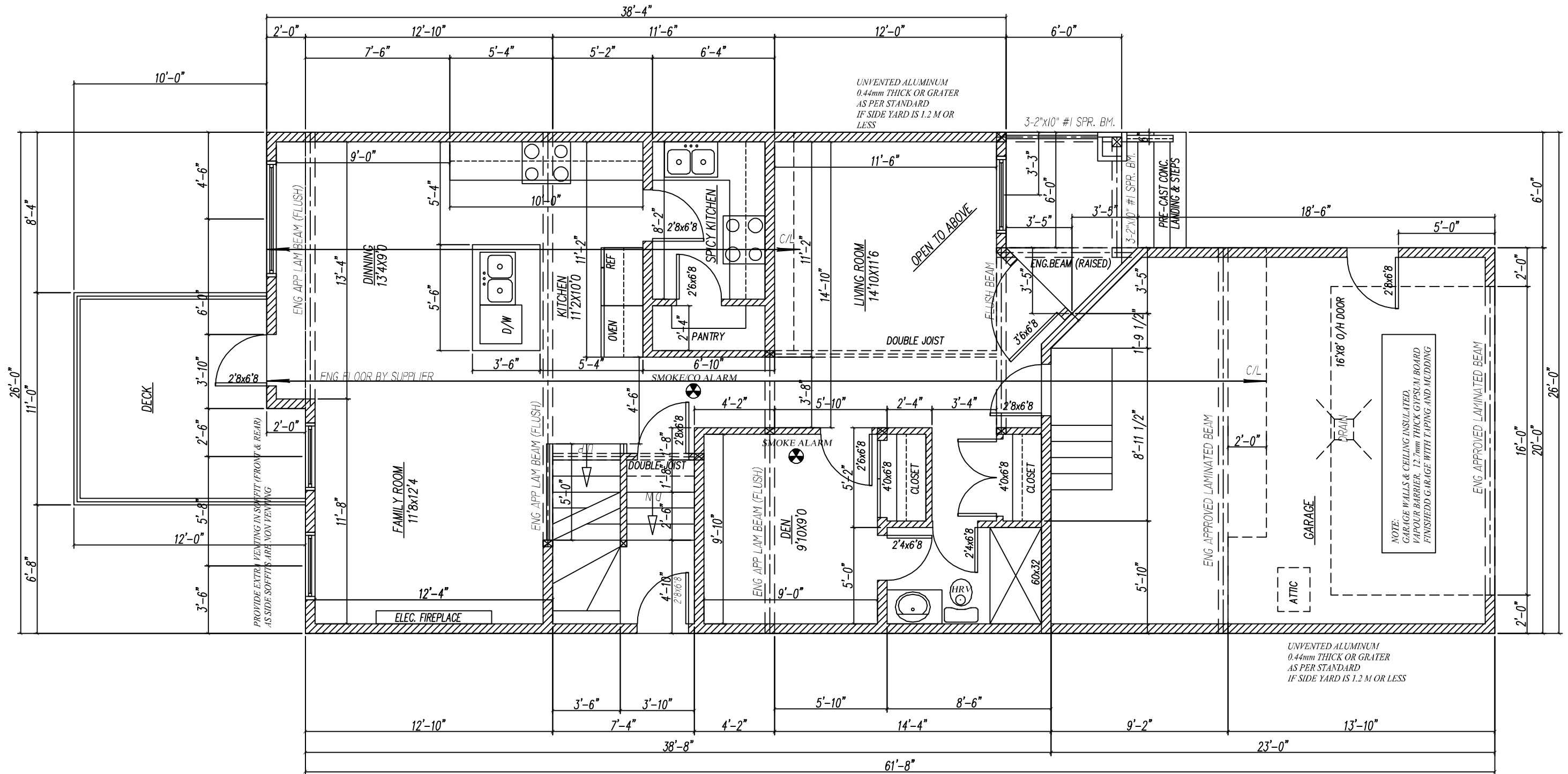
ALL WORKMANSHIP TO BE A STANDARD EQUAL IN ALL RESPECTS TO GOOD BUILDING PRACTICE  
SIDING/ STUCCO TO BE 6" ABOVE FINISH GRADE  
ALL LINTLES TO BE 3-2"X12"  
FINISH WOOD RAILINGS, PICKETS MAXIMUM 4" O.C.  
PRECAST CONCRETE STEPS. CAPED DRYER VENT

INSULATED ATTIC ACCESS HATCH-20"X28"  
LINEN CLOSET -4 SHELVES MIN, 1'-2" DEEP  
WASHROOMS TO BE MECHANICALLY VENTED TO STAIR SUPPORT TO BE 4"X4" KILN DRIED SPRUCE POST ON 24"X 24"X 8" CONCRETE FOOTING  
PROVIDE @AT LEAST ONE AIR EXCHANGE PER HOUR

**LOT-44, BLOCK-7, PLAN-232 0809**  
**IRVINE CREEK**  
**5930- 18 STREET, NE, LEDUC**

DESIGNED	SCALE NTS/ 3/16"=1'-0"
DRAWN	DRAWING NO
DATE	3/7

MAIN FLOOR PLAN 1019 SQ.FT.  
GARAGE 458 SQ.FT.



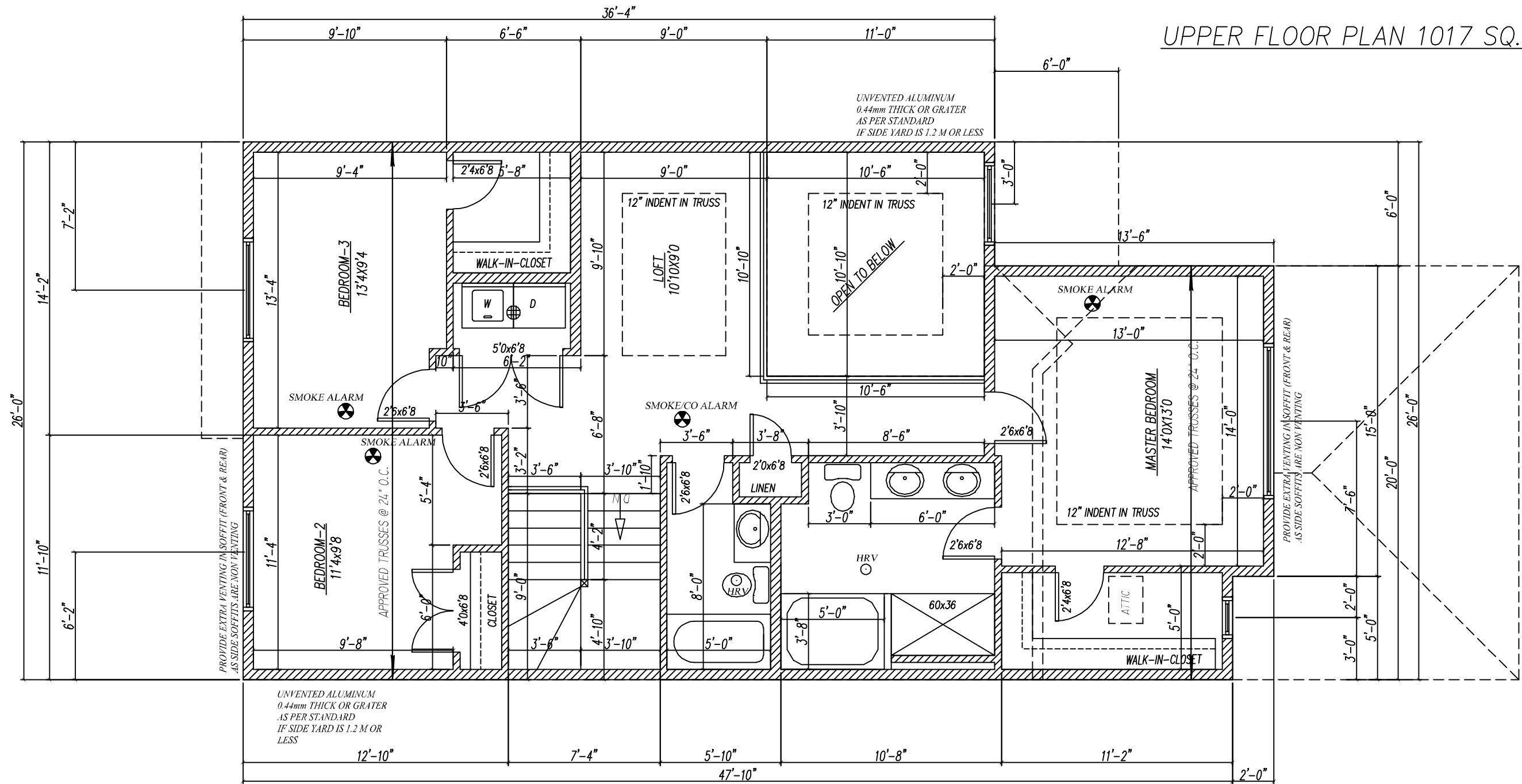
**HI-TECH DESIGNS**  
CANADA LTD.  
6734 75 ST NW # 2  
EDMONTON, AB, T6E 6T9  
PHONE: (780) 450-4512  
FAX: 1-888-872-6593

ALL RIGHTS RESERVED, INCLUDING THE RIGHT OF REPRODUCTION IN WHOLE OR IN PART, IN ANY FORM.  
CONTRACTOR / BUILDER SHALL VERIFY ALL SPECIFICATIONS AND DIMENSIONS BEFORE COMMENCING CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO THIS OFFICE.  
ALL DIMENSIONS SHALL BE READ NOT SCALED.

**LOT-44, BLOCK-7, PLAN-232 0809**  
**IRVINE CREEK**  
**5930- 18 STREET, NE, LEDUC**

AREA	PROPOSED DESIGN FOR: -	DESIGNED	SCALE NTS/ 3/16"=1'-0"
		DRAWN	DRAWING NO
		DATE	4/7

UPPER FLOOR PLAN 1017 SQ.FT.



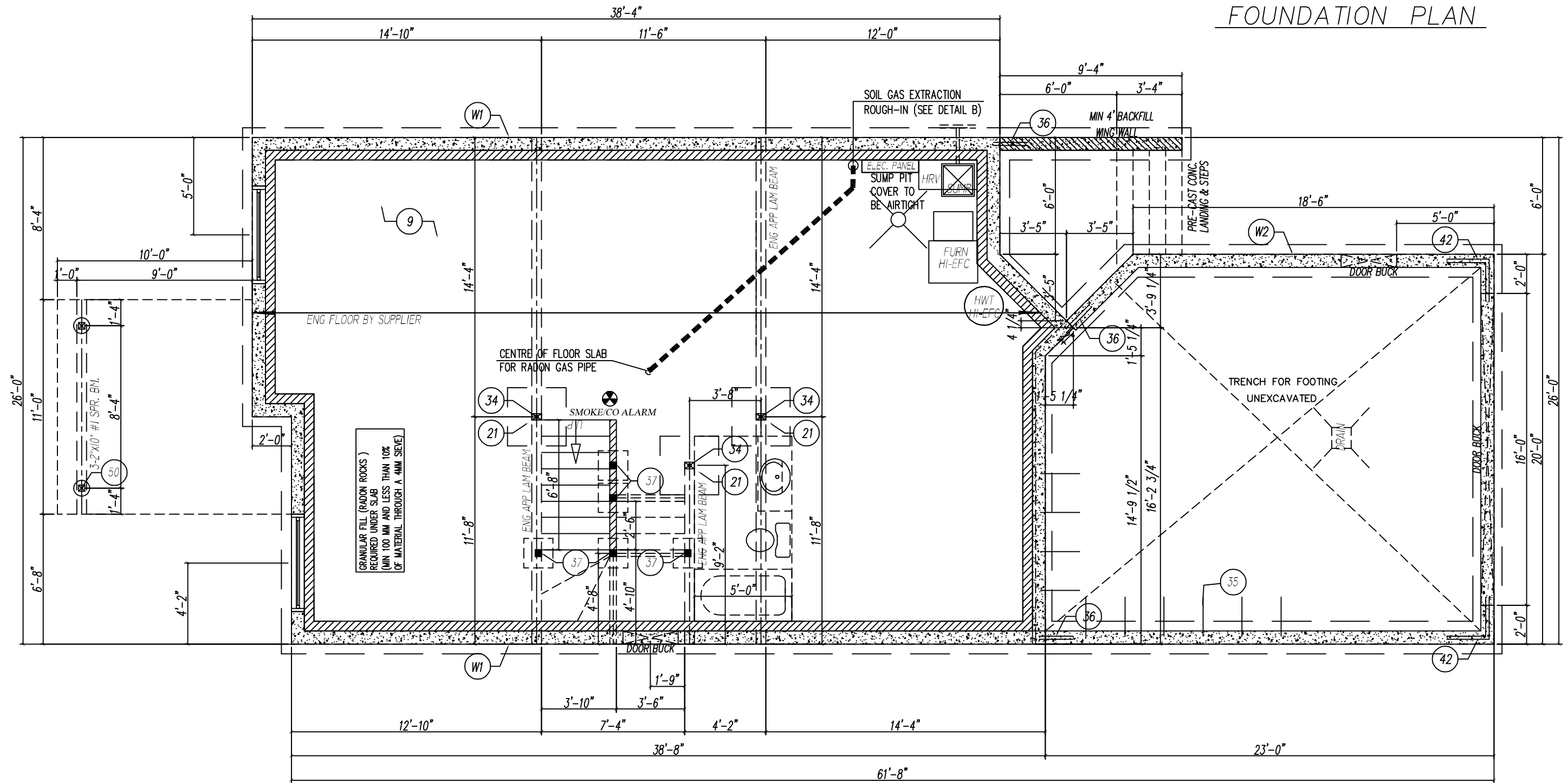
**HI-TECH DESIGNS**  
CANADA LTD.  
6734 75 ST NW # 2  
EDMONTON, AB, T6E 6T9  
PHONE: (780) 450-4512  
FAX: 1-888-872-6593

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ALL DIMENSIONS SHALL BE READ NOT SCALED.

**LOT-44, BLOCK-7, PLAN-232 0809**  
**IRVINE CREEK**  
**5930- 18 STREET, NE, LEDUC**

AREA	PROPOSED DESIGN FOR: -	DESIGNED	SCALE NTS/ 3/16"=1'-0
		DRAWN	DRAWING NO
		DATE	5/7

# FOUNDATION PLAN



**HI-TECH DESIGNS**  
CANADA LTD.  
6734 75 ST NW # 2  
EDMONTON, AB, T6E 6T9  
PHONE: (780) 450-4512  
FAX: 1-888-872-6593

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CONTRACTOR / BUILDER SHALL VERIFY ALL SPECIFICATIONS AND DIMENSIONS BEFORE COMMENCING CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO THIS OFFICE.  
ALL DIMENSIONS SHALL BE READ NOT SCALED.

**LOT-44, BLOCK-7, PLAN-232 0809**  
**IRVINE CREEK**  
**5930- 18 STREET, NE, LEDUC**

AREA

PROPOSED DESIGN FOR: -

DESIGNED

DRAWN

DATE

SCALE NTS/  
3/16"=1'-0"

DRAWING NO

6/7



# SPECIFICATIONS

THE FOLLOWING LIST OF SPECIFICATIONS MAY NOT APPLY TO THE ATTACHED SET OF PLANS IN ITS ENTIRETY.

- W1** FOUNDATION WALL W/FOOTING (HOUSE)-SEE DETAIL W1  
 8" 32.5 MPA (min) CONCRETE WALL  
 PARGING ABOVE GRADE  
 DAMP-PROOFING BELOW GRADE  
 ON 20"x8" 32.5 MPA(min) CONT. CONCRETE FOOTING  
 R/F WITH 2-15M CONT.
- W2** FOUNDATION WALL W/FOOTING (GARAGE)  
 8" 32.5 MPA (min) CONCRETE WALL  
 PARGING ABOVE GRADE  
 DAMP-PROOFING BELOW GRADE  
 ON 20"x8" 32.5 MPA(min) CONT. CONCRETE FOOTING  
 R/F WITH 2-15M CONT.
- W3** EXTERIOR WALL (HOUSE & GARAGE)-SEE DETAIL W3  
 SEE DETAIL W3 ON APNDX-2
- W4** WALL (TO GARAGE) SEE DETAIL W4  
 SEE DETAIL W4 ON APNDX-2
- W5** WALL (PARTITION)  
 1/2" GYPSUM BOARD  
 2"x4" OR 2"x6" STUDS @ 24" O.C.  
 1/2" GYPSUM BOARD
- W6** WALL (BEARING)  
 1/2" GYPSUM BOARD  
 2"x6" OR 2"x8" STUDS @ 16" O.C.  
 1/2" GYPSUM BOARD
- W7** WALL (BEARING) W/FOOTING  
 1/2" GYPSUM BOARD  
 2"x6" STUDS @ 16" O.C.  
 1/2" GYPSUM BOARD  
 ON 18"x8" 32.5MPA(min) CONT.CONCRETE FOOTING  
 R/F WITH 2-15M CONT.
- W8** TALL WALL-SEE DETAIL W8
- W9** RIM BOARD ASSEMBLY SEE DETAIL W9
- W10** WALKOUT FOUNDATION AND  
 UNHEATED FLOOR ABOVE FROST LINE
- W11** FOUNDATION WALKOUT EXTERIOR WALL-SEE DETAIL W11
- 9** FLOOR (BASEMENT)  
 4" 20MPA (min) CONCRETE SLAB  
 6mil POLY  
 NOT LESS THAN 100mm OF COARSE CLEAN  
 GRANULAR MATERIAL(RADON ROCKS) CONTAINING NOT  
 MORE THAN 10% OF MATERIAL THAT WILL PASS A 4 mm SIEVE  
 SHALL BE PLACED BENEATH FLOOR-ON-GROUND.
- 11** FLOOR (GARAGE)  
 4" 27.5 MPA (min) CONCRETE SLAB  
 R/F WITH 6"x8" 8gaww  
 6mil POLY  
 6" (min) WELL COMPACTED PIT RUN SAND  
 SLOPED TO FRONT 3"(min)
- 12** FLOOR (UPPER LEVEL)  
 FINISHING FLOOR MATERIALS  
 5/16" PLYWOOD UNDERLAY  
 5/8" T.&G. PLYWOOD OR 3/4" OSB SUBFLOOR  
 DOUGLAS FIR #1&2 OR 1 JOISTS  
 AS PER FLOOR PLANS  
 2"x2" X-BRIDGING @ 7'-0" O.C.(max)  
 1/2" GYPSUM BOARD
- 13** FLOOR (MAIN LEVEL)  
 FINISHING FLOOR MATERIALS  
 5/16" PLYWOOD UNDERLAY  
 5/8" T.&G. PLYWOOD OR 3/4" OSB SUBFLOOR  
 DOUGLAS FIR #1&2 OR 1 JOISTS  
 AS PER FLOOR PLANS  
 2"x2" X-BRIDGING @ 7'-0" O.C. (max)
- R1** ROOF (TRUSS)  
 ROOFING AS PER ELEVATION  
 BUILDING PAPER  
 APPROVED TRUSSES @ 24" OR 16" O.C.  
 AS PER FLOOR PLANS  
 CELLULOSE FIBER INSULATION R52  
 6mil POLY  
 1/2" CEILING BOARD  
 C/W 1" FASCIA BOARD  
 G.I. EAVESTROUGH & R.W.L. TO STORM LINE  
 SOFFIT VENTED
- 15** ROOF (FOR DETACHED GARAGE AND COVERED DECK ONLY)  
 ROOFING AS PER ELEVATION  
 BUILDING PAPER  
 APPROVED TRUSSES @ 24" OR 16" O.C.  
 AS PER FLOOR PLANS  
 LOOSE FILL R-40 INSULATION  
 6mil POLY  
 1/2" CEILING BOARD  
 C/W 1" FASCIA BOARD  
 G.I. EAVESTROUGH & R.W.L. TO STORM LINE  
 SOFFIT VENTED
- 16** ROOF (RAFTER)  
 ROOFING AS PER ELEVATION  
 BUILDING PAPER  
 DOUGLAS FIR #1&2 RAFTERS OR 1 JOISTS  
 AS PER FLOOR PLANS  
 2"x4" STRAPPING @ 24" O.C.  
 PERPENDICULAR TO AND ON TOP OF RAFTERS  
 FRICTION FIT R-52 CELLULOSEFIBER INSULATION  
 6mil POLY  
 1/2" GYPSUM BOARD
- 17** GRADE BEAM  
 R/F WITH 2-15M CONT. TOP & BOTTOM  
 10M TIES @ 24" O.C.  
 C/W 4" VOID FORM
- 21** FOOTING  
 SIZING VARIES AS PER ENGINEERED COLUMN SPECIFICATION

- 22** STAIRS  
 7 7/7"(max) RISE 10"(min) RUN  
 11"(min) THREAD 1" NOSING  
 6'-6"(min) HEAD ROOM  
 3'-0" RAIL AT LANDING & STAIR  
 4" (MAX) VERTICAL SPACING  
 1/2" GYPSUM BOARD FOR  
 INSULATED STAIRWELLS ONLY
- 23** PILE  
 12"Ø 14'-0" DEEP 32.5 MPA (min) CONCRETE PILE  
 R/F WITH 3-15M VERTICAL
- 25** PILE  
 16"Ø 16'-0" DEEP 25MPA (min) CONCRETE PILE  
 R/F WITH 4-15M VERTICAL  
 10M TIES @ 16" O.C.
- 26** RAILING  
 3'-6"(min) HAND RAIL  
 4"max VERTICAL SPACING
- 27** WASHER / DRYER  
 PROVIDE HOT & COLD WATER TAPS  
 AND STAND PIPE FOR WASHER  
 VENT DRYER TO EXTERIOR
- 28** WEEPING TILE  
 4"Ø WEEPING TILE TO STORM LINE OR SUMP PUMP  
 COVERED WITH 6"(min) OF CLEAN GRAVEL
- 29** FLUE  
 8"Ø METAL FLUE  
 2"(min) CLEARANCE TO ALL WOOD
- 30** DOOR  
 2'-8" x 6'-8"(min) DOOR  
 C/W SELF-CLOSER AND WEATHER STRIPPING
- 32** INSULATION  
 2" RIGID INSULATION
- 33** POST  
 3"Ø ADJUSTABLE STEEL POST
- 34** POST  
 ENGINEERED COLUMN SIZED TO SUIT LOAD
- 35** DOWEL  
 2"x6" SOLID BLOCKING @ 48" O.C. AND @ TIER POINTS  
 15M DOWELS @ 24" O.C. ALL AROUND
- 36** DOWEL  
 2-20M DOWELS TOP & BOTTOM
- 37** FOOTING  
 18"x 18"x10" 25 MPA (min) CONCRETE FOOTING  
 R/F WITH 2-15M EACH WAY
- 41** PILE  
 8"Ø 8'-0" DEEP 25MPA (min) CONCRETE PILE  
 R/F WITH 1-10M VERTICAL
- 42** DOWEL  
 2-15M 24" x 24" CORNER BARS TOB @ BOTTOM
- 48** GRADE BEAM  
 8"x20 1/2" 25MPA (min) CONT. CONCRETE GRADE BEAM  
 R/F WITH 2-15M CONT. TOP & BOTTOM  
 10M TIES @ 24" O.C.  
 C/W 4" VOID FORM
- 49** PILE  
 12"Ø 12'-0" DEEP 25MPA (min) CONCRETE PILE  
 R/F WITH 3-10M VERTICAL
- 50** METAL SCREW PILE  
 SEE MANUFACTURER DETAIL

## GENERAL NOTES:

ALL WORK AND MATERIALS TO COMPLY WITH THE REQUIREMENTS OF THE BUILDING CODE

ALL SIZES & DIMENSIONS TO BE CONFIRMED BY THE GENERAL CONTRACTOR ANY DISCREPANCIES TO BE REPORTED TO THIS OFFICE  
 OFFICE CLARIFICATION AGREED UPON BEFORE PROCEEDING

FOUNDATION WALLS OF POURED CONCRETE TO BE 8" THICK AND EXTEND A MINIMUM OF 6" ABOVE FINISHED GRADE REINFORCED WITH 2 ROWS OF 2-10M.  
 WALLS SHALL BE DAMPROOFED WITH HEAVY COAT OF BITUMINOUS OR OTHER DAMPPROOFING MATERIAL.

BASEMENT WINDOWS SHALL BE REINFORCED AS PER ENGINEERED DETAIL

CONCRETE STRENGTH SHALL NOT BE LESS THAN 20 MPa (2900 psi.) AFTER 28 DAYS WITH AIR ENTRAINMENT OF 5 TO 8 PERCENT.

ATTIC ACCESS TO BE AT LEAST 20"x28" C/W WEATHER STRIPPING AND INSULATION  
 TH BUILDING SITE SHALL BE GRADED SO THAT SURFACE WATER SHALL NOT ACCUMULATE AT OR NEAR THE BUILDING

END BEARING OF JOISTS AND RAFTERS SHALL NOT BE LESS THAN 1 1/2"  
 FLOOR & CEILING JOIST BRIDGING AS PER ENGINEERED DETAIL

EXHAUST FROM KITCHEN ARE WASHROOM FANS IS TO BE DUCTED DIRECTLY TO THE OUTSIDE & DUCT IS TO BE INSULATED THROUGH UNHEATED SPACE  
 COMBUSTION AIR IS REQUIRED FOR ALL FUEL FIRED HEATING APPLIANCES INCLUDING FIRE PLACES INTRODUCED BY INTAKES OTHER THAN A DOOR OR WINDOW

ALL COMMON HOUSE/ GARAGE WALLS, CEILING AND FLOORS SHALL BE ONE HOUR FIRERATED.

FOR ATTACHED GARAGES, ANY COMMON WALL IS TO PROVIDE AN EFFECTIVE BARRIER AGAINST THE PASSAGE OF GAS AND EXHAUST FUMES. ANY DOOR IS TO BE TIGHT FITTING, WEATHER STRIPPED ,AND FITTED WITH SELF CLOSING DIVICE.

AVOID PACKING CANTILEVERS FULL OF INSULATION LEAVE AN AIR SPACE BETWEEN SUBFLOOR AND INSULATION FOR WARM AIR CIRCULATION

INSULATION AND THE BOTTOM OF THE ROOF SHEATHING FOR ADEQUATE ROOF VENTILATION

AT THE INTERSECTION OF ROOFS PROVIDE SHEET METAL FLASHING OF ATLEAST 0.013" THICK GALVANIZED STEEL OR OTHER ACCEPTABLE MATERIAL

USE 1/2" CD DRYWALL OR 5/8" DRYWALL WHERE TRUSSES ARE GREATER THAN 16" O.C.  
 A SMOKE ALARM INSTALLED BY PERMANENT CONNECTIONS TO A ELECTRICAL CIRCUIT IS TO BE PROVIDED BETWEEN ALL SLEEPING AREAAS AND THE REMAINDER OF THE HOUSE

CONTINUOUS WOOD STRAPPING AND IS TO CONSISTS OF CROSS BRIDGING,SOLID BLOCKING OR DOUBLE FRAMING UNDER ALL PARALLEL PARTITIONS AND AROND ALL OPENINGS

BUILT-UP BEAMS SHALL ONLY HAVE SPLICES IN ALTERNATE POINT PAST A POST, EXCEPT AT BEAM ENDS.

FIRE STOPS ARE TO BE PROVIDED AT ALL CONCEALED SPACES @ FLOOR,CEILING & ROOF LEVELS INCLUDING THE SPACE BETWEEN THE CHIMNEY FLUE AND SHAFT WHERE IT PASSES THROUGH FLOOR OR CEILING.

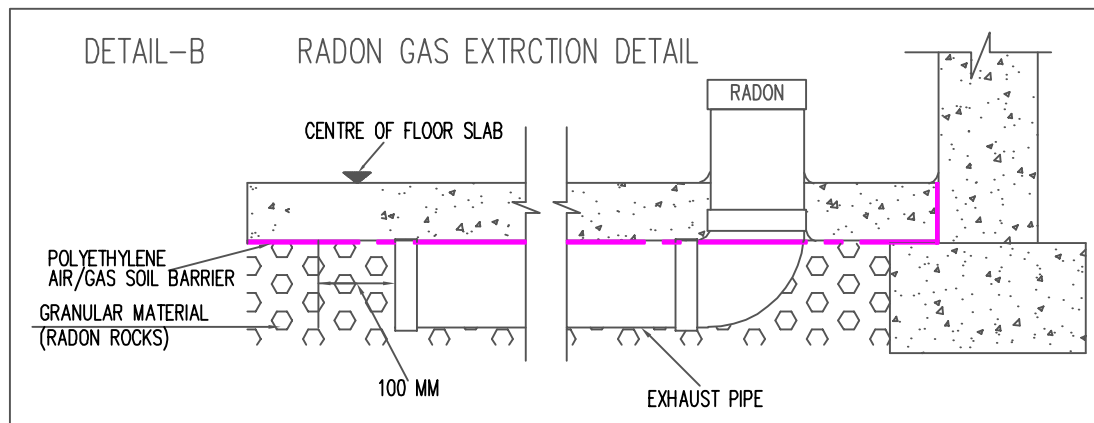
PROVIDE BUILT-UP POSTS OF A WIDTH EQUAL TO THE WIDTH OF BEAM, WHERE FRAMED INTO INTERIOR OR EXTERIOR WALLS.

ROOF OR ATTIC SPACES IS TO BE PROVIDED WITH AN UNOBSTRUCTED VENT AREA OF NOT LESS THAN OF THE INSULATED CEILING AREA,DISTRIBUTED TO PROVIDE GOOD CROSS VENTILATION.

NON HARDENING CAULKING COMPOUND TO BE USED OVER AND AROUND ALL EXTERIOR OPENINGS  
 PLUMBING ACCESS OF 16"x20" TO BE PROVIDED FOR TUBS AND SHOWERS  
 PROVIDE FRESH AIR INTAKES FOR FUR NACES AND FIREPLACES

ALL WORKMANSHIP TO BE A STANDARD EQUAL IN ALL RESPECTS TO GOOD BUILDING PRACTICE  
 SIDING/ STUCCO TO BE 6" ABOVE FINISH GRADE  
 ALL LINTLES TO BE 3-2"x12"  
 FINISH WOOD RAILINGS, PICKETS MAXIMUM 4" O.C.  
 PRECAST CONCRETE STEPS.

CAPED DRYER VENT  
 INSULATED ATTIC ACCESS HATCH-20"x28"  
 LINEN CLOSET -4 SHELVES MIN, 1'-2" DEEP  
 WASHROOMS TO BE MECHANICALLY VENTED TO STAIR SUPPORT TO BE 4"x4" KILN DRIED SPRUCE  
 POST ON 24"x 24"x 8" CONCRETE FOOTING  
 PROVIDE @AT LEAST ONE AIR EXCHANGE PER HOUR





# PRESCRIPTIVE REQUIREMENTS (SIDING) THERMAL RESISTANCES FOR ZONE 7A WITH HRV

**(W1)** FOUNDATION WALL W/FOOTING (HOUSE)  
RSI 2.98 REQUIRED W/HRV  
TABLE A-9.36.2.8.(1)C, A-9.36.2.4.(1)D

	RSI VALUE
8" CONCRETE WALL	0.08
2"x6"STUDS @ 24"O.C.	2.81
&R-20 BATT INSULATION	--
6mil POLYETHYLENE SHEET	0.12
INTERIOR AIR FILM	0.12
EFFECTIVE VALUE	3.01

**(W3)** EXTERIOR WALL (HOUSE & GARAGE)  
RSI 2.97 REQUIRED W/HRV  
TABLE A-9.36.2.6.(1)B, A-9.36.2.4.(1)D

	RSI VALUE
OUTSIDE AIR FILM	0.03
SIDING	0.11
SHEATHING PAPER	--
3/8" (9.5mm) OSB SHEATHING	0.09
2"x6"STUDS @ 24"O.C.	2.67
&R-22 BATT INSULATION	--
6mil POLYETHYLENE SHEET	--
GYPSTUM BOARD	0.08
INTERIOR AIR FILM	0.12
EFFECTIVE VALUE	3.10

**(W4)** WALL (TO GARAGE)  
RSI 2.81 REQUIRED W/HRV  
TABLE A-9.36.2.6.(1)B

	RSI VALUE
INTERIOR AIR FILM	0.12
GYPSTUM BOARD	0.08
6mil POLYETHYLENE SHEET	--
2"x6"STUDS @ 19.2"O.C. (21.5%)	2.61
&R-22 BATT INSULATION (78.5%)	--
AIR BARRIER	--
5/8" FIRE RATED GYPSTUM BOARD	0.10
EFFECTIVE VALUE	2.91

**(W6)** TALL WALL  
RSI 2.97 REQUIRED W/HRV  
TABLE A-9.36.2.6.(1)B, A-9.36.2.4.(1)D

	RSI VALUE
OUTSIDE AIR FILM	0.03
SIDING	0.11
SHEATHING PAPER	--
3/8" (9.5mm) OSB SHEATHING	0.09
2"x6" @ 8"O.C.&R24	2.54
2"x6" @ 12"O.C.&R24	2.60
2"x6" @ 16"O.C.&R22 (SEE ENGINEER REPORT)	2.55
6mil POLYETHYLENE SHEET	--
1/2" GYPSTUM BOARD	0.08
INTERIOR AIR FILM	0.12
EFFECTIVE VALUE	2.97 3.03 2.98

**(W9)** RIM BOARD ASSEMBLY, BATT INSULATION,  
RSI 2.97 REQUIRED W/HRV  
TABLE 9.36.2.6.B

MAIN FLOOR	
	RSI VALUE
OUTSIDE AIR FILM	0.03
SIDING	0.11
SHEATHING PAPER	--
3/8" (9.5mm) OSB SHEATHING	0.09
1 1/8" PRE-INSULATED RIM BOARD	0.26
11 7/8" ENG. FLOOR JOISTS@ 19.2" O.C.(11.5%) + R20 BATT INSULATION(88.5%)	3.35
6mil POLYETHYLENE SHEET	--
EFFECTIVE VALUE	3.84

**(R1)** CEILING BELOW ATTIC  
RSI 8.67 REQUIRED W/HRV  
TABLE A-9.36.2.4.(1)A, A-9.36.2.4.(1)D

	RSI VALUE	OVERALL R VALUE OF INSULATION R52
OUTSIDE AIR FILM	0.03	
R39 CELLULOSE FIBER INSULATION CONTINUOUS RSI	6.84	
2X4 BOTTOM CHORD @ 24"O.C.(7%) 3.5" CELLULOSE (RSI 2.22, R13)(93%)	1.95	
6mil POLYETHYLENE SHEET	--	
1/2" CEILING BOARD	0.077	
INTERIOR AIR FILM (HEAT FLOW UP)	0.11	
EFFECTIVE VALUE	9.04	

**(F1)** FLOOR OVER UNHEATED SPACE  
RSI 5.02 REQUIRED W/HRV  
TABLE A-9.36.2.4.(1)A, A-9.36.2.4.(1)D

	RSI VALUE
INTERIOR AIR FILM (HEAT FLOW DOWN)	0.16
FLOOR FINISH	--
SUBFLOOR	0.17
6mil POLYETHYLENE SHEET	--
GYPSTUM BOARD	0.08
AIR GAP	0.16
2X10 FRAME @24" O.C.(10%) & R-32 BATT INSULATION(90%)	4.47
GYPSTUM BOARD	0.08
OUTSIDE AIR FILM	0.03
EFFECTIVE VALUE	5.15

**(W1)** FOUNDATION WALKOUT EXTERIOR WALL  
RSI 2.97 REQUIRED W/HRV  
TABLE A-9.36.2.6.(1)B, A-9.36.2.4.(1)D

	RSI VALUE
OUTSIDE AIR FILM	0.03
SIDING	0.11
SHEATHING PAPER	--
3/8" (9.5mm) OSB SHEATHING	0.09
2"x6"STUDS @ 16"O.C. &R-22 BATT INSULATION	2.55
6mil POLYETHYLENE SHEET	--
GYPSTUM BOARD	0.08
INTERIOR AIR FILM	0.12
EFFECTIVE VALUE	2.98

UPPER FLOOR-PERPENDICULAR TO JOISTS

	RSI VALUE
OUTSIDE AIR FILM	0.03
SIDING	0.11
SHEATHING PAPER	--
3/8" (9.5mm) OSB SHEATHING	0.09
3 1/2" INSULATED PONY WALL R-20 BATT INSULATION	3.52
6mil POLYETHYLENE SHEET	--
EFFECTIVE VALUE	3.75

UPPER FLOOR-PARALLEL TO JOISTS

	RSI VALUE
OUTSIDE AIR FILM	0.03
SIDING	0.11
SHEATHING PAPER	--
3/8" (9.5mm) OSB SHEATHING	0.09
2"x6"STUDS @ 24"O.C. &R-22 BATT INSULATION	2.67
6mil POLYETHYLENE SHEET	--
GYPSTUM BOARD	0.08
INTERIOR AIR FILM	0.12
EFFECTIVE VALUE	3.10

NOTES:

ALL WINDOWS MAX USI 1.60, ALTERNATIVE: MIN ER=25  
ALL EXTERIOR DOORS MAX USI 1.60  
SINGLE EXTERIOR DOOR EXCEPTION MAX USI 2.60

MATERIALS INTENDED TO PROVIDE THE PRINCIPAL  
RESISTANCE TO AIR LEAKAGE CONFORM TO  
**CAN/ULC-S741.**

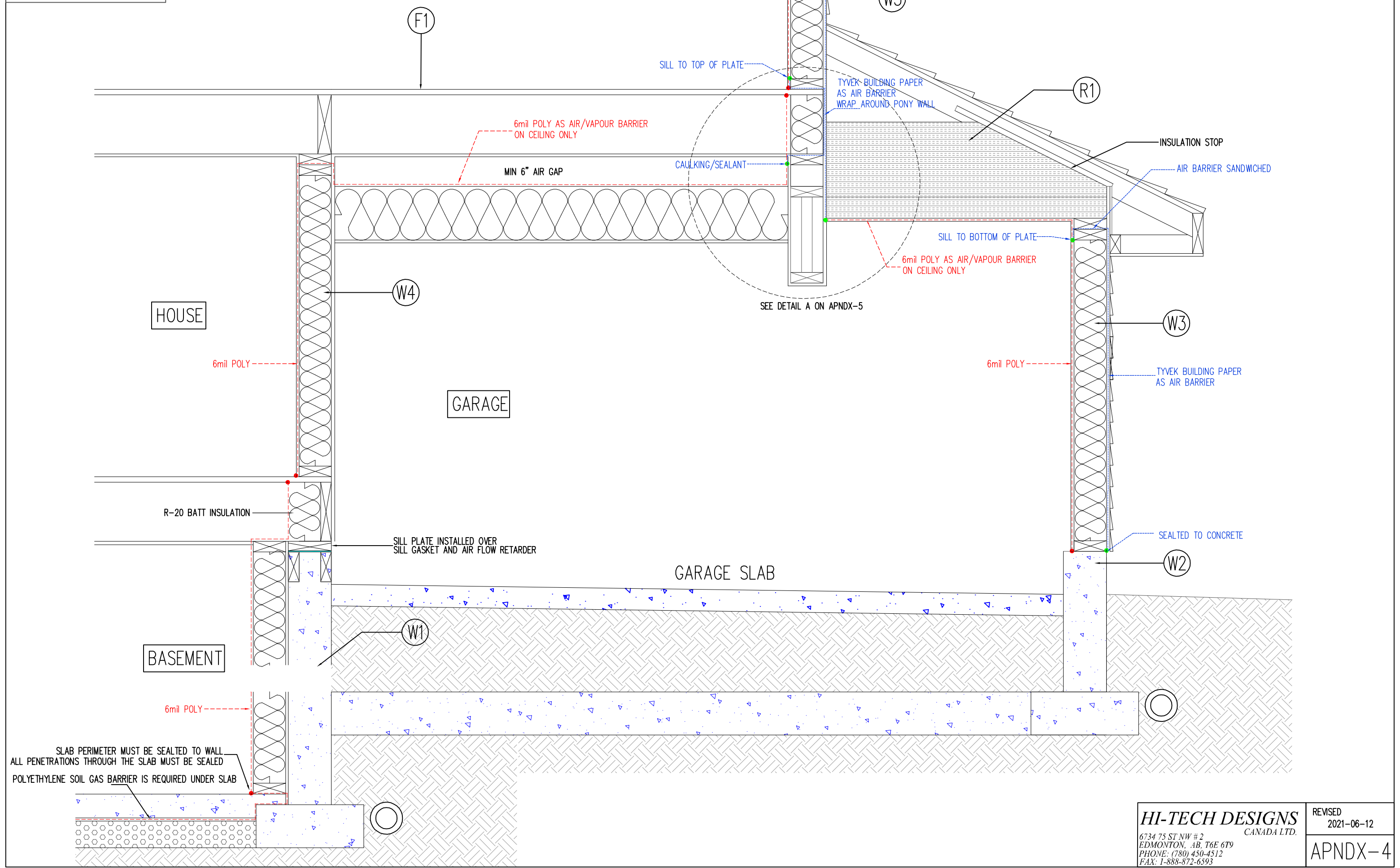
COMPONENT/EQUIPMENT	HEATING/COOLING CAPACITY	STANDARD	MIN PERFORMANCE
GAS-FIRED FORCED AIR FURNACE	<65.9kW[222,000Btu/h]	CAN/CSA-P.2	>=AFUE 92%

COMPONENT	INPUT	STANDARD	PERFORMANCE REQ'T
GAS-FIRED HOT WATER TANK	<22kW[75,000Btu/h]	CAN/CSA-P.3	EF>=0.67-0.0005V

NOTE: FOR ZERO-LOT-LINE LOT REPLACE WITH  
3/8" (9.5mm) OSB SHEATHING RSI(0.093) OR  
1/2" GLASS-MAT SHEATHING RSI (0.09)



CONTINUOUS AIR/VAPOUR BARRIER ASSEMBLY-2

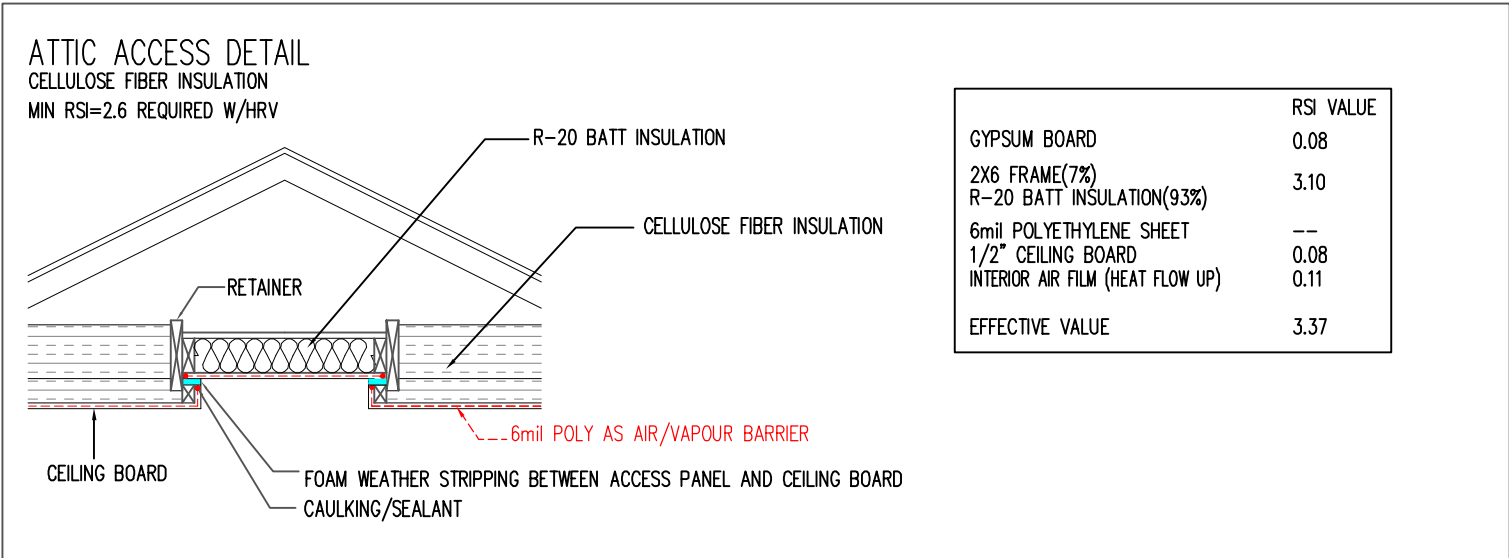
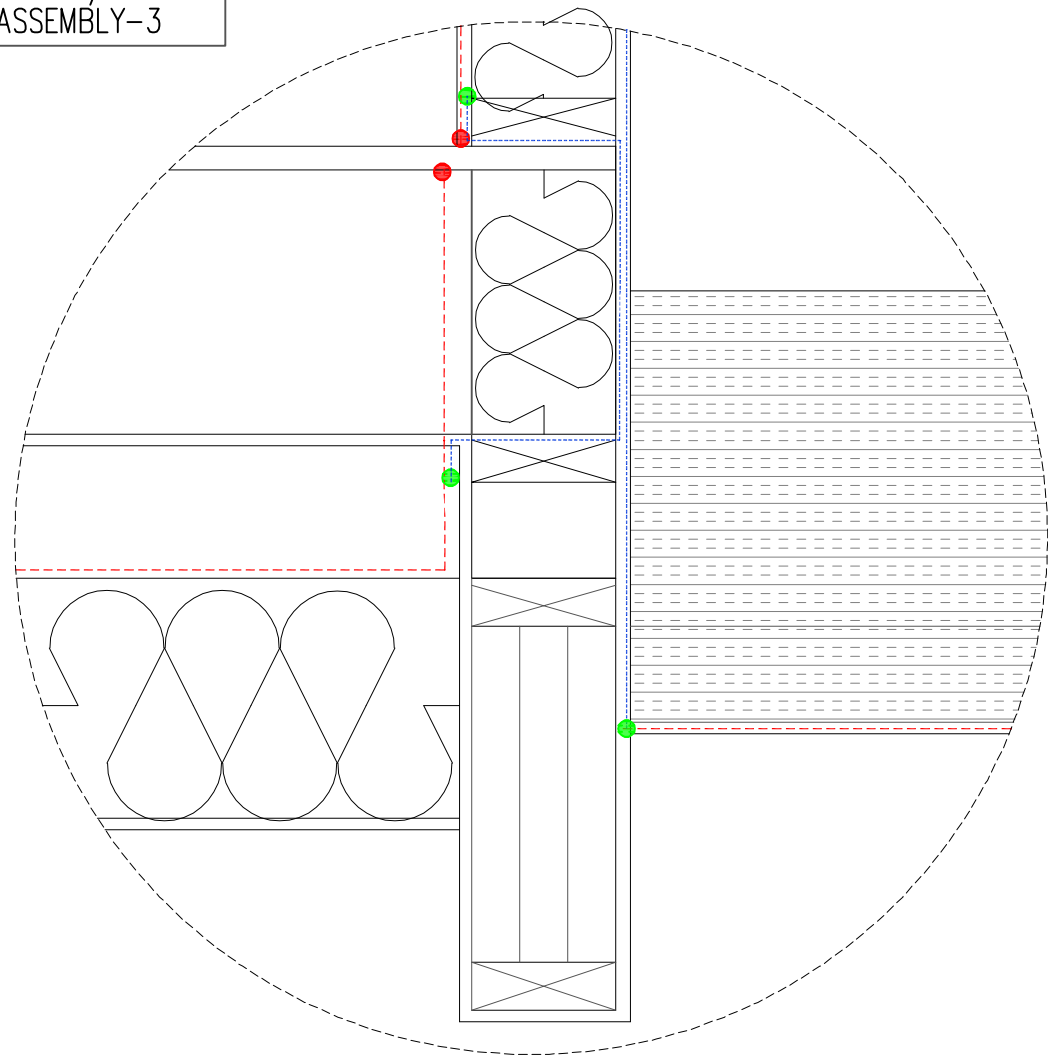


SLAB PERIMETER MUST BE SEALED TO WALL  
 ALL PENETRATIONS THROUGH THE SLAB MUST BE SEALED  
 POLYETHYLENE SOIL GAS BARRIER IS REQUIRED UNDER SLAB

**HI-TECH DESIGNS**  
 CANADA LTD.  
 6734 75 ST NW #2  
 EDMONTON, AB, T6E 6T9  
 PHONE: (780) 450-4512  
 FAX: 1-888-872-6593

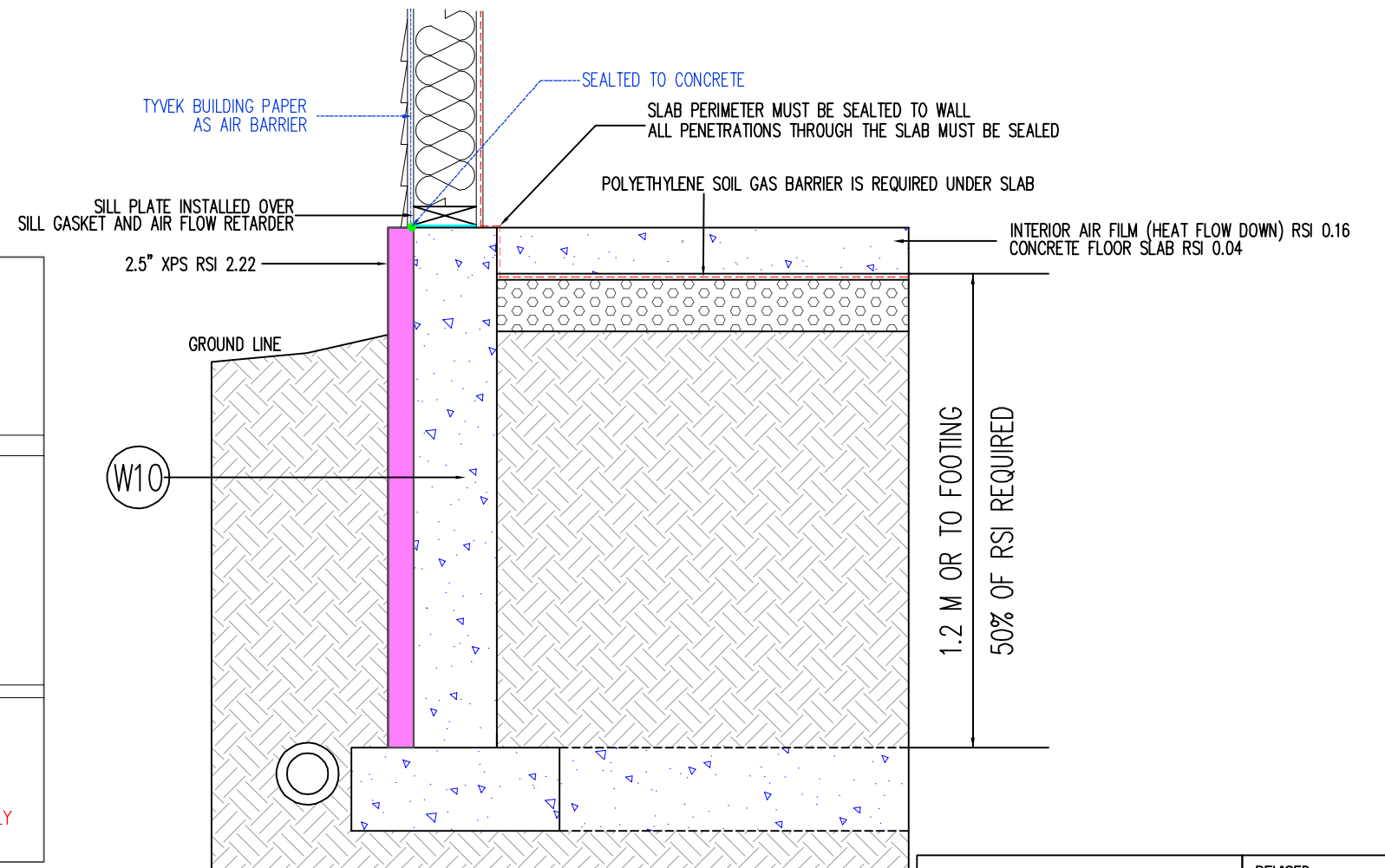
REVISED  
 2021-06-12  
**APNDX-4**

CONTINUOUS AIR/VAPOUR BARRIER ASSEMBLY-3



UNHEATED FLOOR - ABOVE FROST LINE  
RSI 1.96 REQUIRED W/HRV

DETAIL A



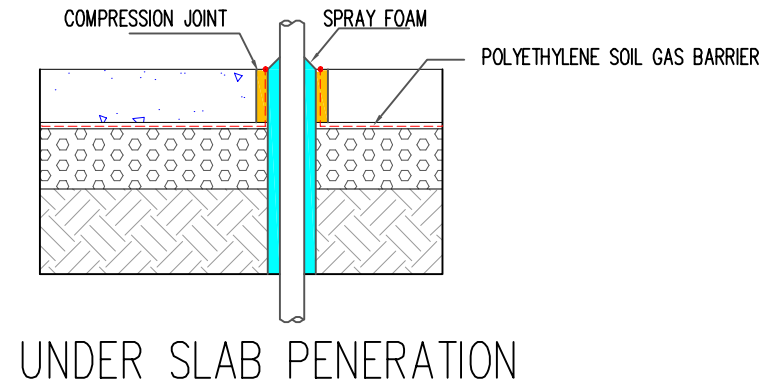
- SUBFLOOR (RSI=0.17)
- 11 7/8" ENG. FLOOR JOISTS@ 19.2" O.C.(11.5%) + R30 BATT INSULATION(88.5%) (RSI=4.65)
- 5/8" PLYWOOD OR OSB SHEATHING (RSI=0.135)
- SHEATHING PAPER
- NON VENTED METAL SOFFIT

TYVEK BUILDING PAPER AS AIR BARRIER WRAP AROUND RIM BOARD AND CANTILEVER

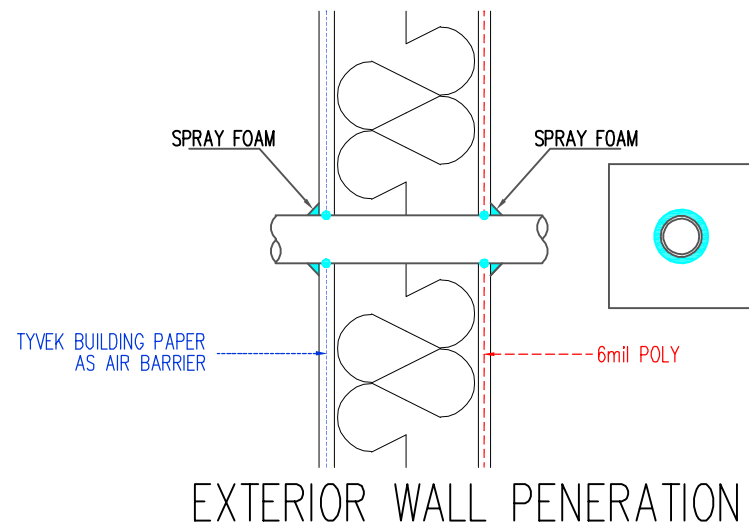
CANTILEVER (MAIN & UPPER FLOOR)

WALKOUT

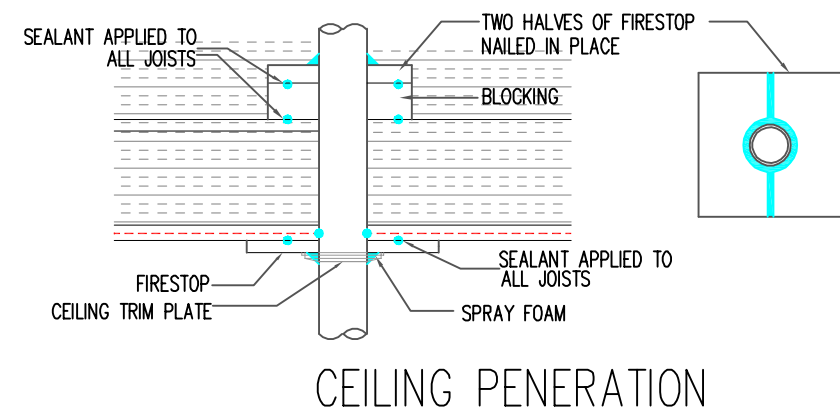
# PENETRATION DETAIL



UNDER SLAB PENERATION

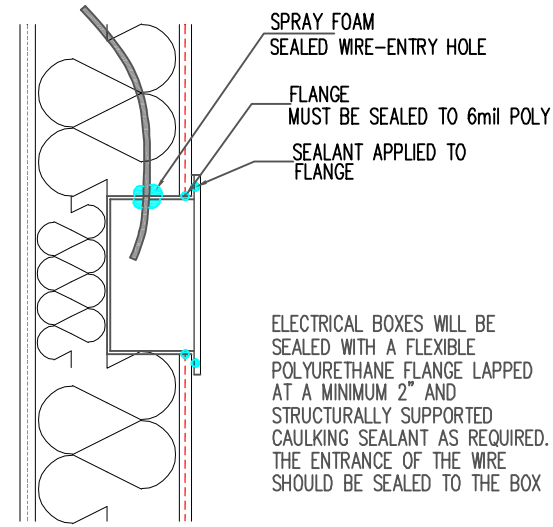


EXTERIOR WALL PENERATION



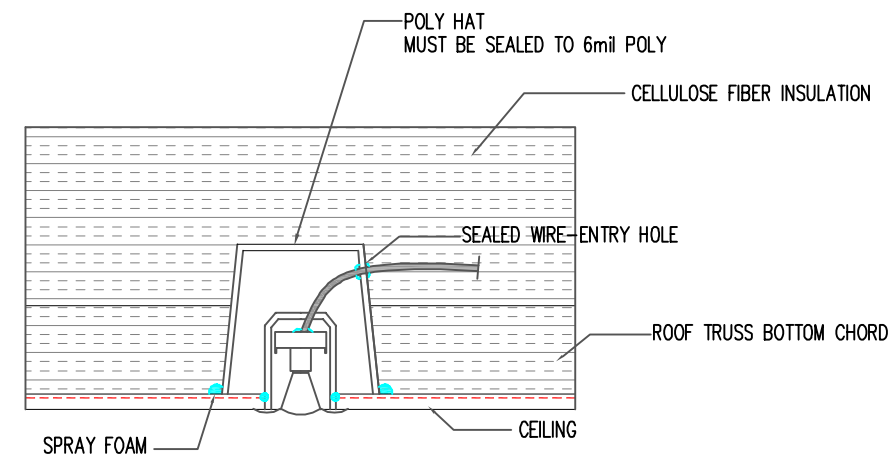
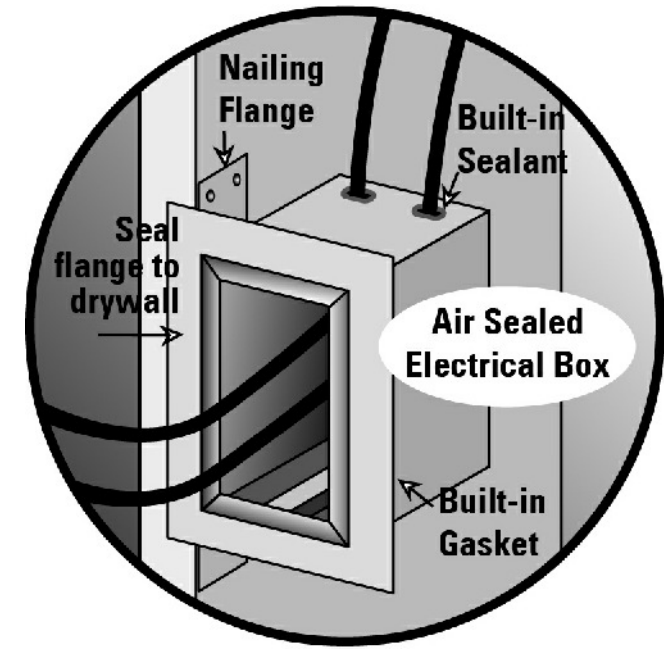
CEILING PENERATION

**NOTE:**  
HEAT DUCT AND COLD AIR RETURNS ARE TO BE PROTECTED WITH A THERMAL BARRIER MINIMUM 1/2 INCH GYPSUM BOARD. METAL IS NOT A RESIDENTIAL TEHERMAL BARRIER.

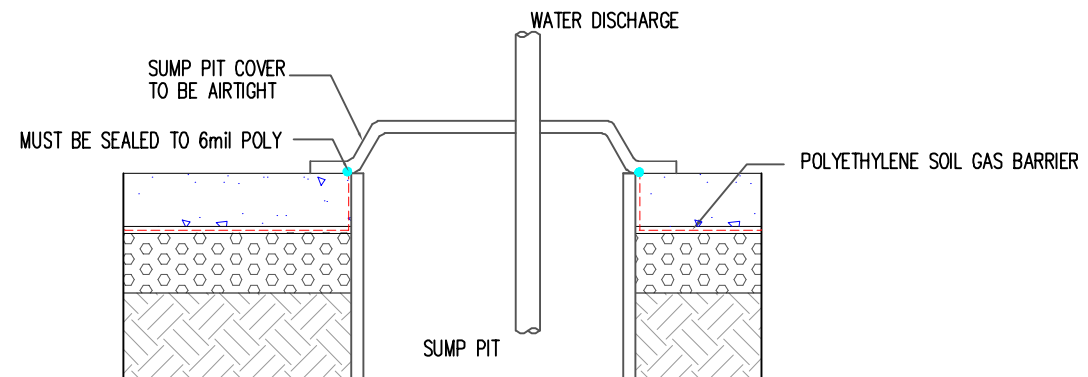


ELECTRICAL BOXES WILL BE SEALED WITH A FLEXIBLE POLYURETHANE FLANGE LAPPED AT A MINIMUM 2" AND STRUCTURALLY SUPPORTED CAULKING SEALANT AS REQUIRED. THE ENTRANCE OF THE WIRE SHOULD BE SEALED TO THE BOX

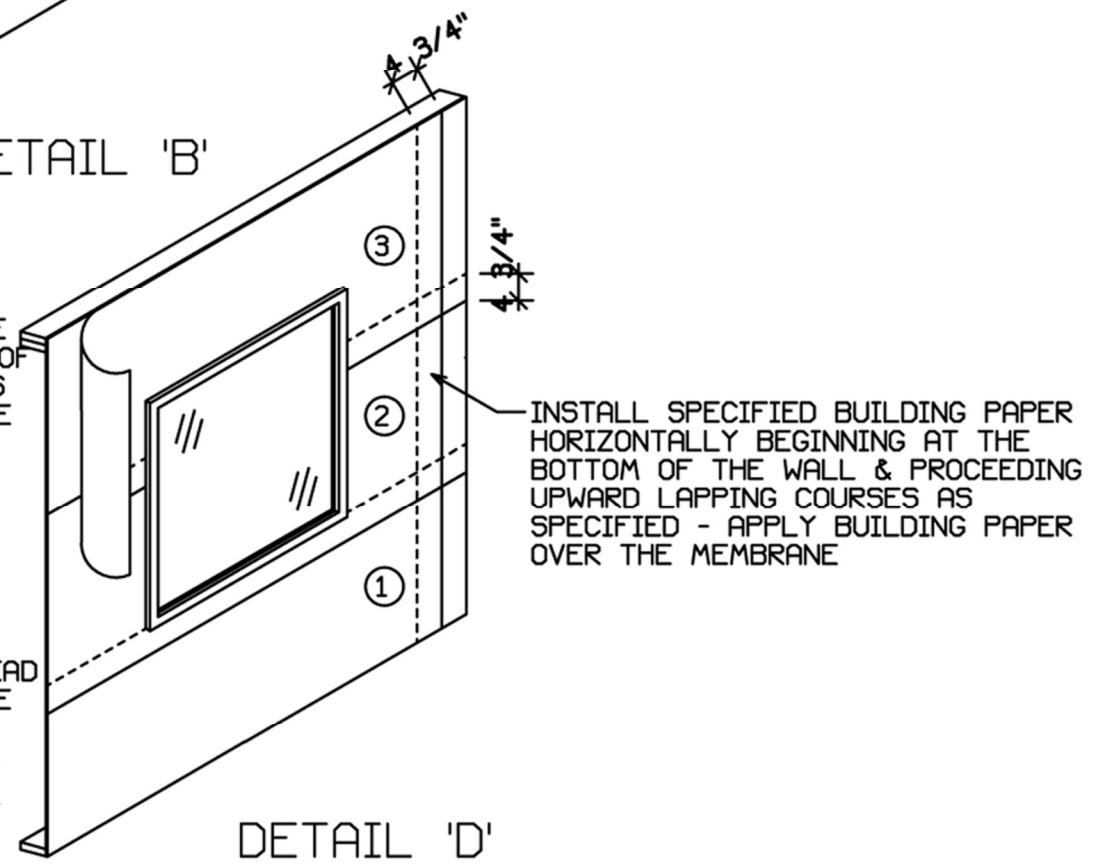
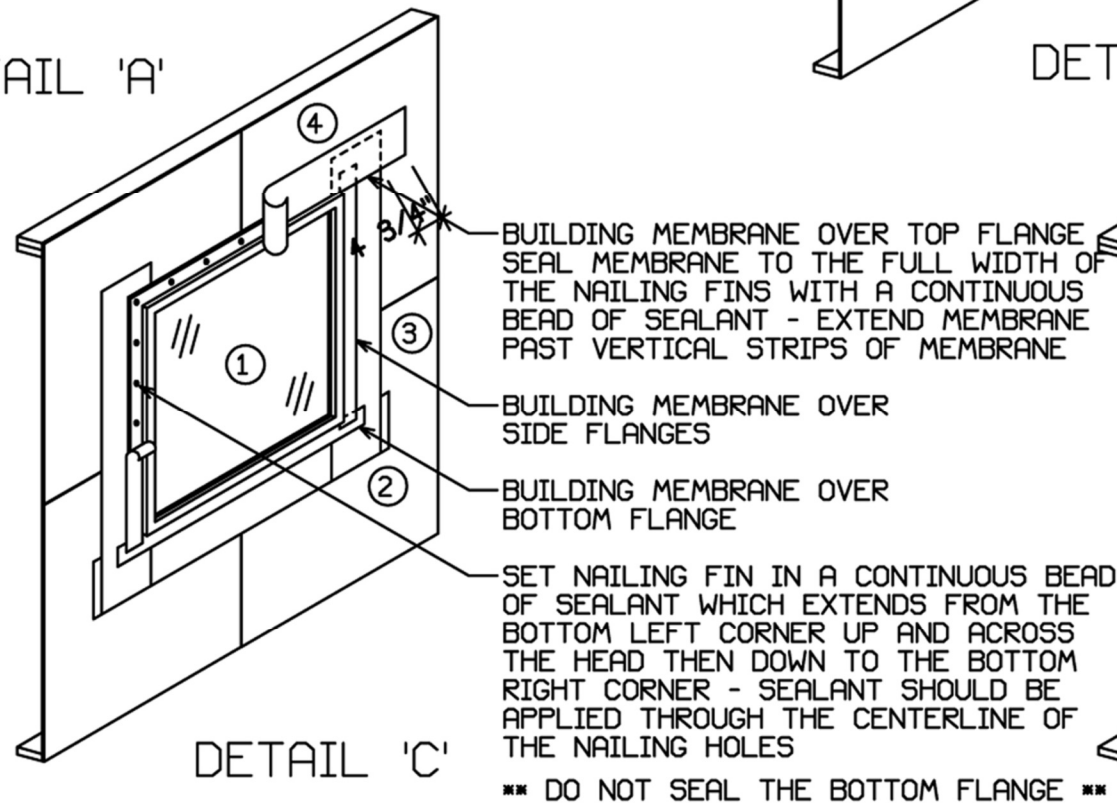
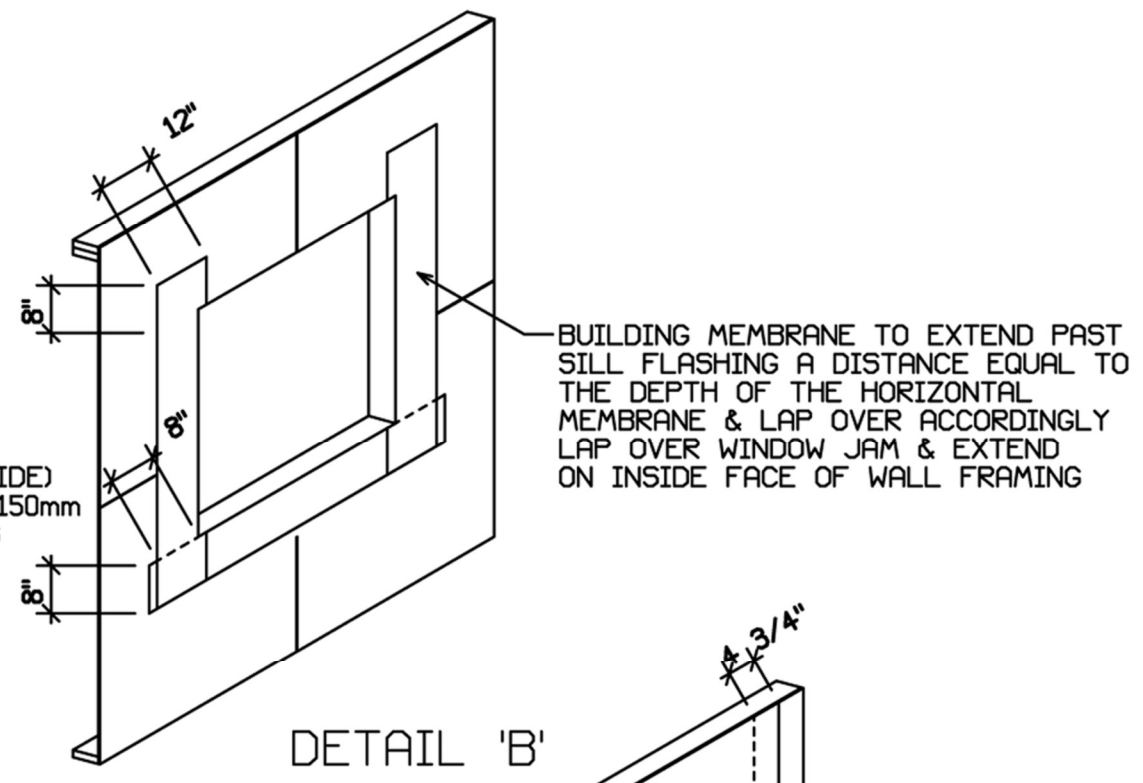
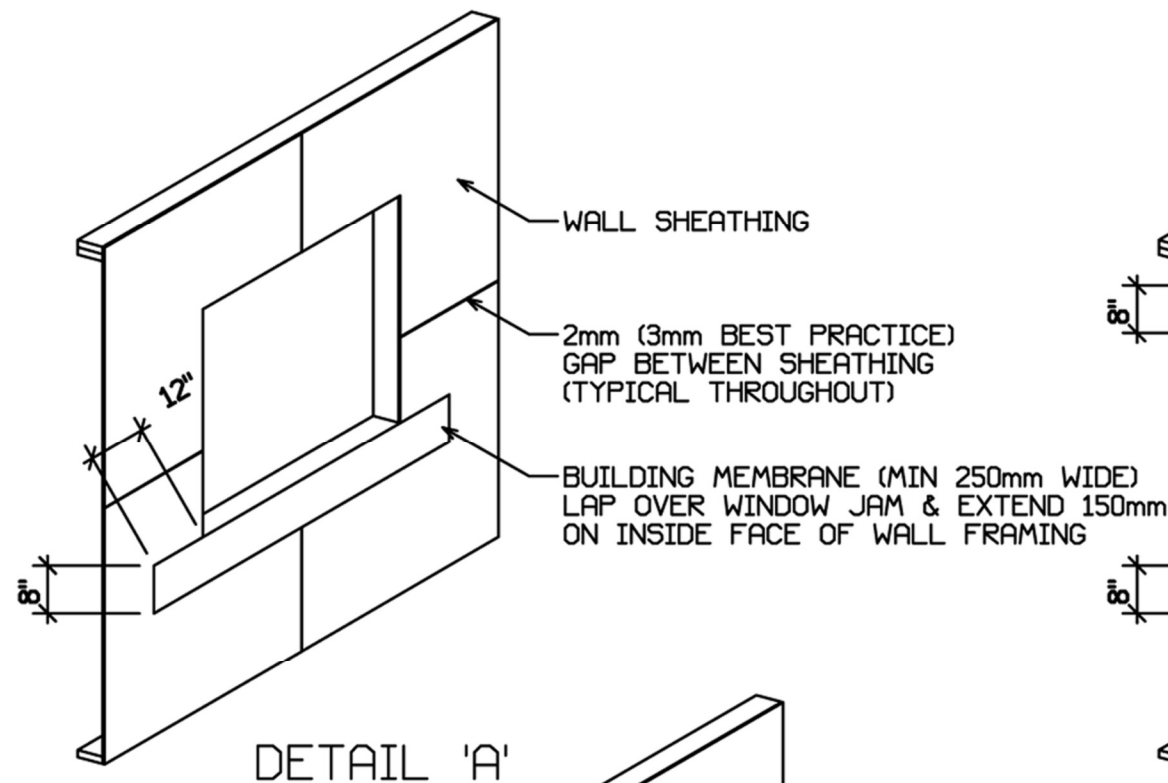
ELECTRICAL BOXES



PLOT LIGHTS



SUMP PIT INSTALLATION



WINDOW INSTALLATION, WALL SHEATHING & WALL SHEATHING MEMBRANE DETAILS  
NOT TO SCALE