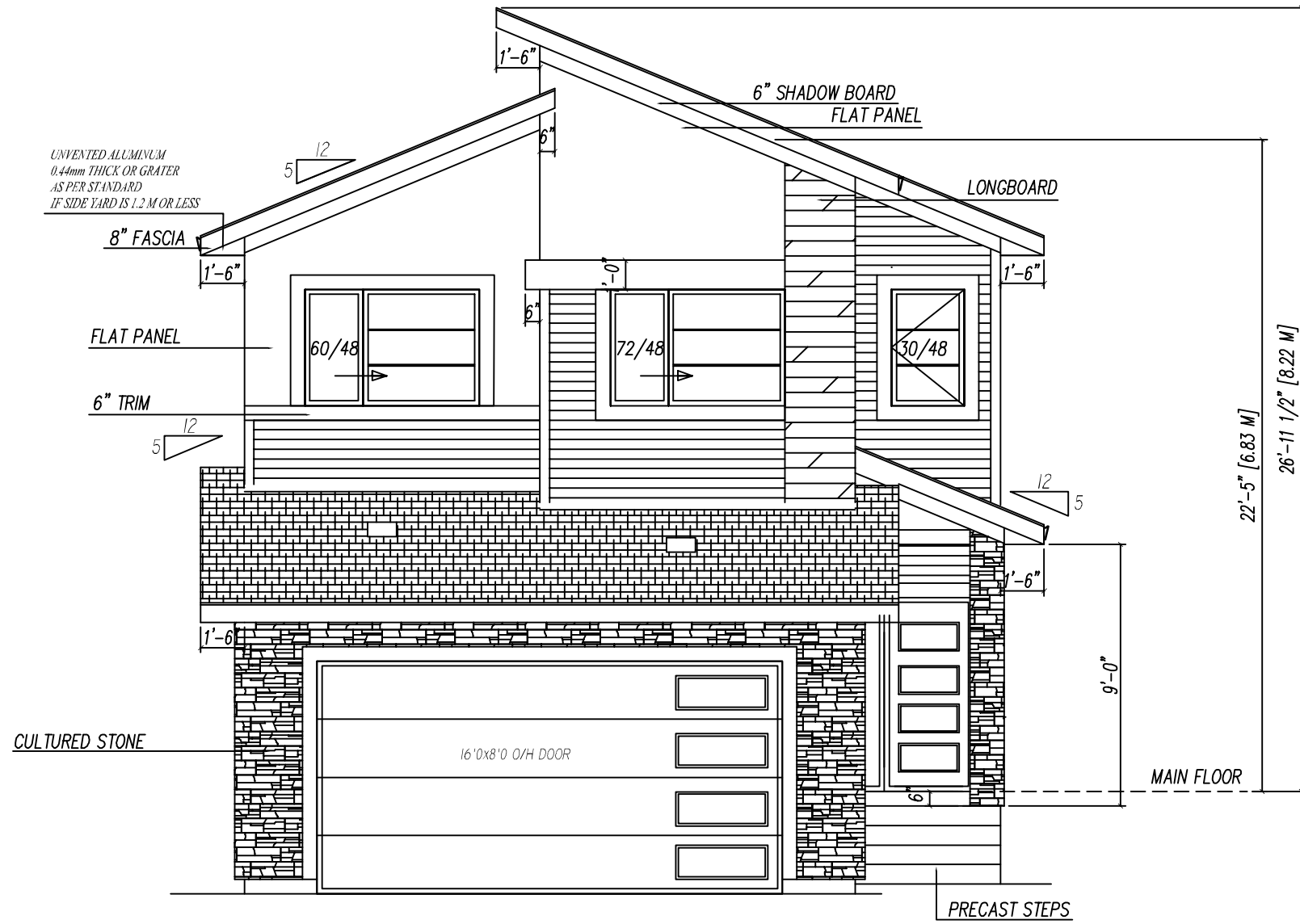
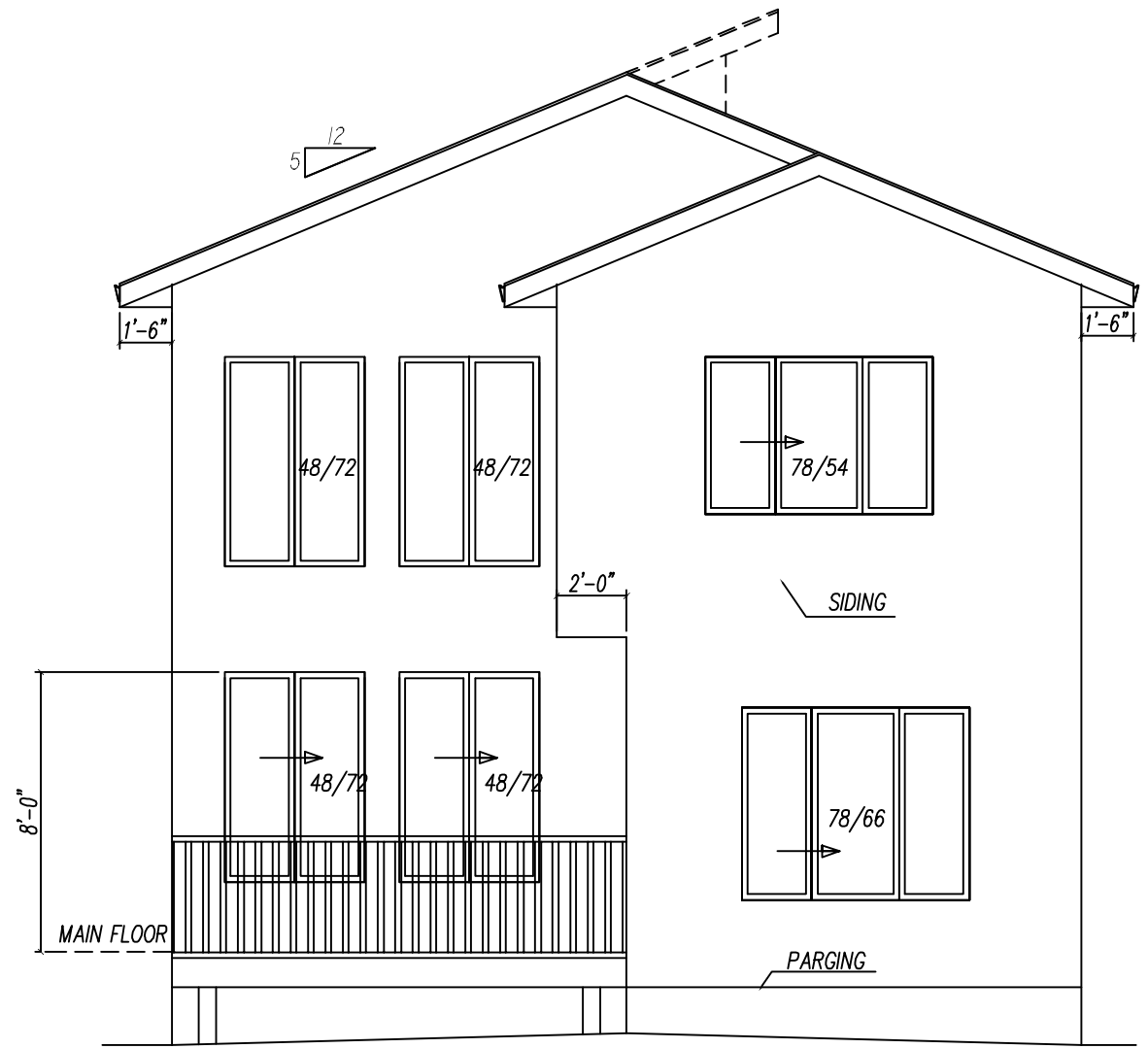


MODERN



FRONT ELEVATION



REAR ELEVATION

HI-TECH DESIGNS
CANADA LTD.
6734 75 ST NW # 2
EDMONTON, AB, T6E 6T9
PHONE: (780) 450-4512
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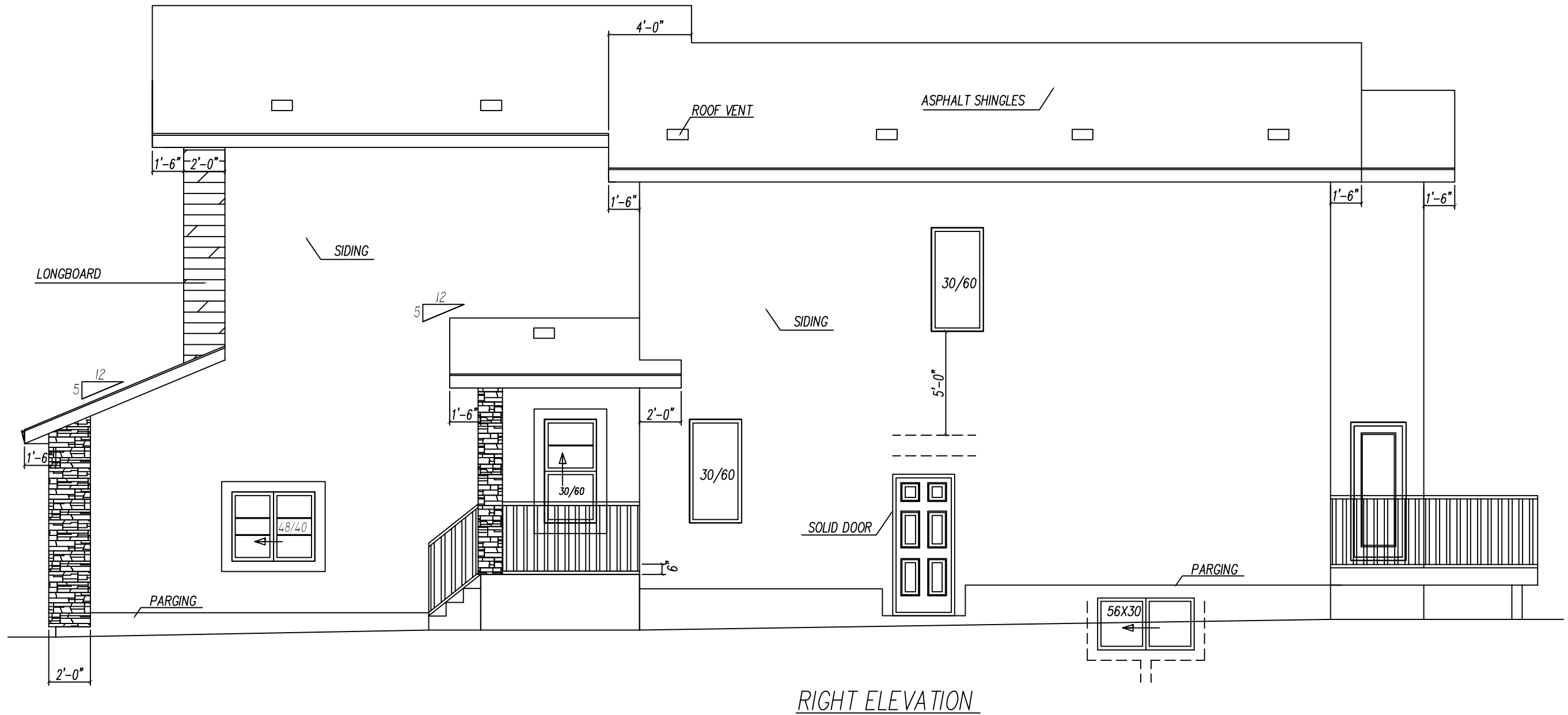
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LOT-16, BLOCK-17, PLAN-UNREG
CY BECKER
EDMONTON

AREA
2150 SQ.FT

PROPOSED DESIGN FOR:--
CHACHA HOMES

| | |
|---------------------|----------------------|
| DESIGNED | SCALE 3/16"=1'-0" |
| DRAWN | DRAWING NO |
| DATE SEP-22-2021 | 1/7 |



RIGHT ELEVATION

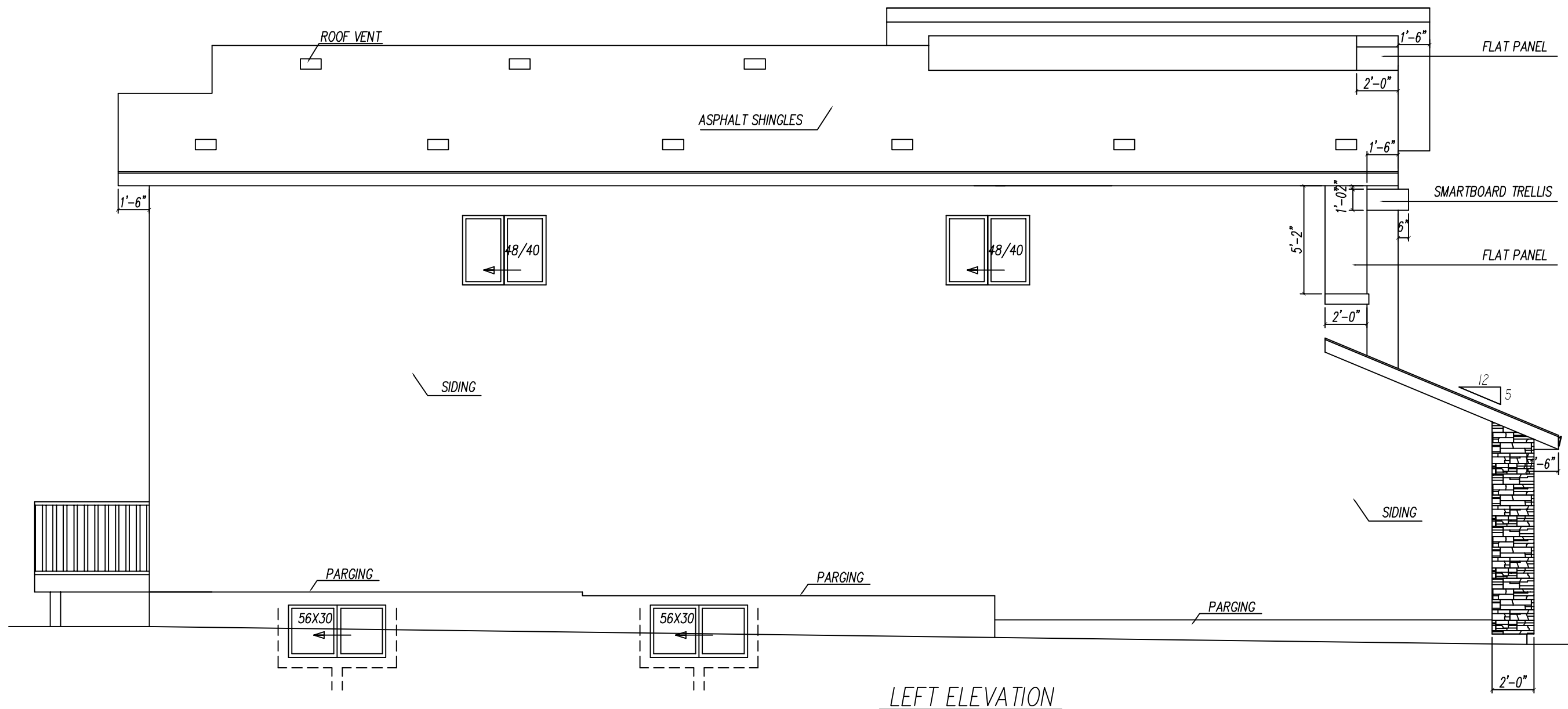
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 ANY ERRORS OR OMISSIONS TO THIS OFFICE.
 ALL DIMENSIONS SHALL BE READ NOT SCALED.

| | | | |
|------|------------------------|----------|----------------------|
| AREA | PROPOSED DESIGN FOR: - | DESIGNED | SCALE 3/16"=1'-0" |
| | | DRAWN | DRAWING NO |
| | | DATE | 2/7 |



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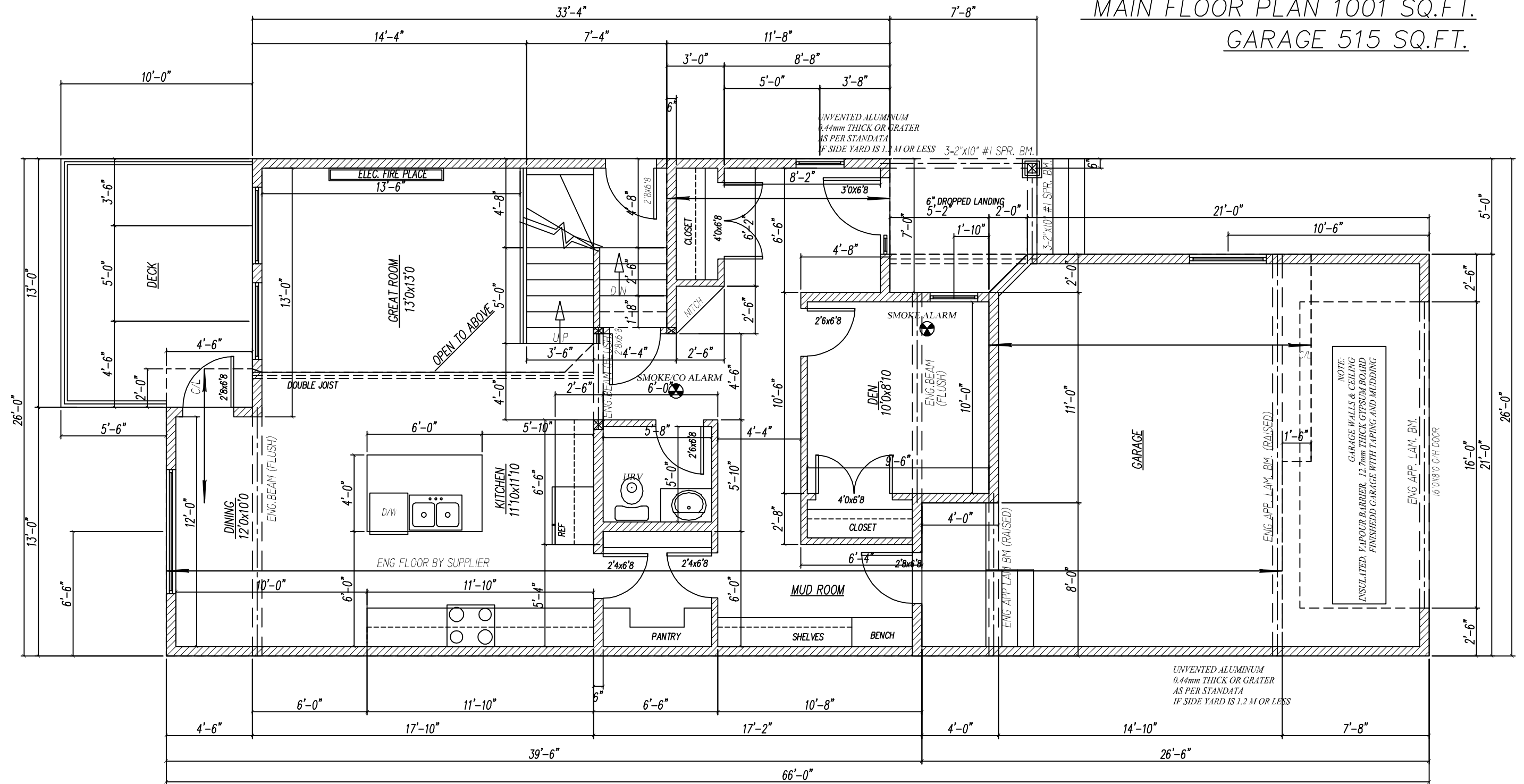
AREA

PROPOSED DESIGN FOR: -

DESIGNED
DRAWN
DATE

SCALE
3/16"=1'-0"
DRAWING NO
3/7

MAIN FLOOR PLAN 1001 SQ.FT.
GARAGE 515 SQ.FT.

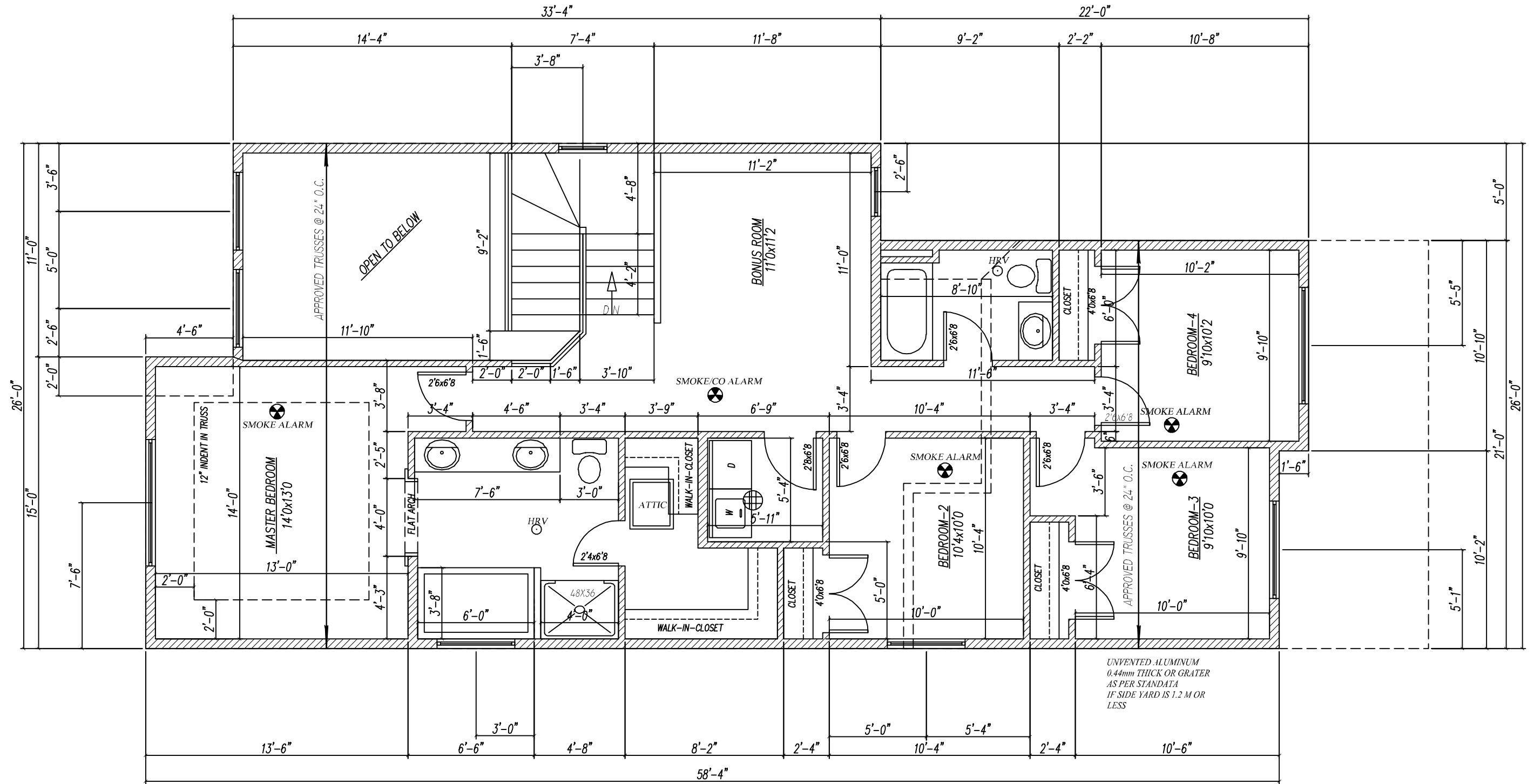


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| | | | |
|------|------------------------|----------|----------------------|
| AREA | PROPOSED DESIGN FOR: - | DESIGNED | SCALE 3/16"=1'-0" |
| | | DRAWN | DRAWING NO |
| | | DATE | 4/7 |

UPPER FLOOR PLAN 1149 SQ.FT.



UNVENTED ALUMINUM
0.44mm THICK OR GRATER
AS PER STANDATA
IF SIDE YARD IS 1.2 M OR
LESS

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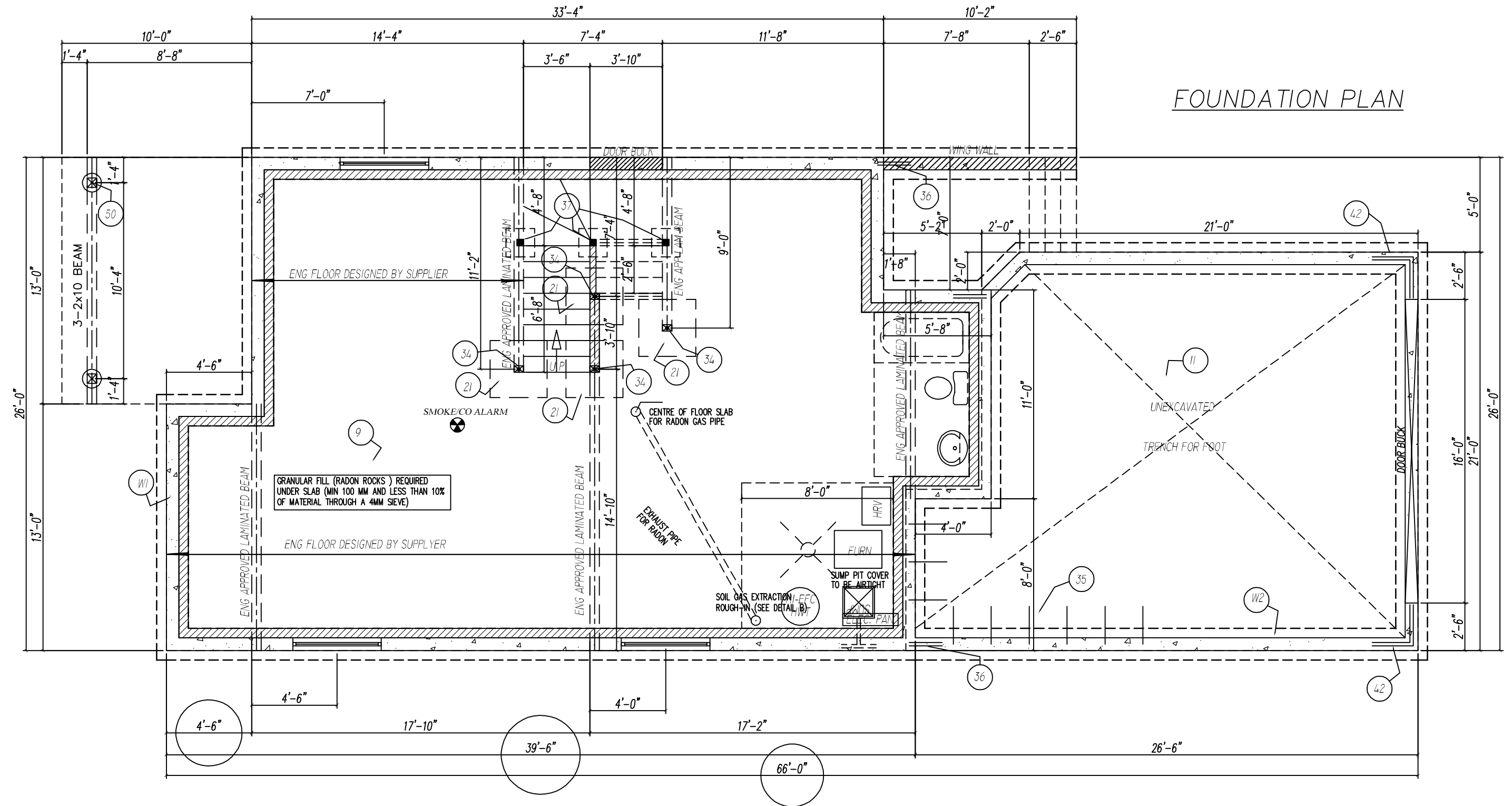
NON HARDENING CAULKING COMPOUND TO BE USED OVER AND AROUND ALL EXTERIOR OPENINGS
PLUMBING ACCESS OF 16"X20" TO BE PROVIDED FOR TUBS AND SHOWERS
PROVIDE FRESH AIR INTAKES FOR FURNACES AND FIREPLACES

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

| | |
|----------|---------------------------|
| DESIGNED | SCALE NTS/ 3/16"=1'-0" |
| DRAWN | DRAWING NO |
| DATE | 5/7 |

FOUNDATION PLAN



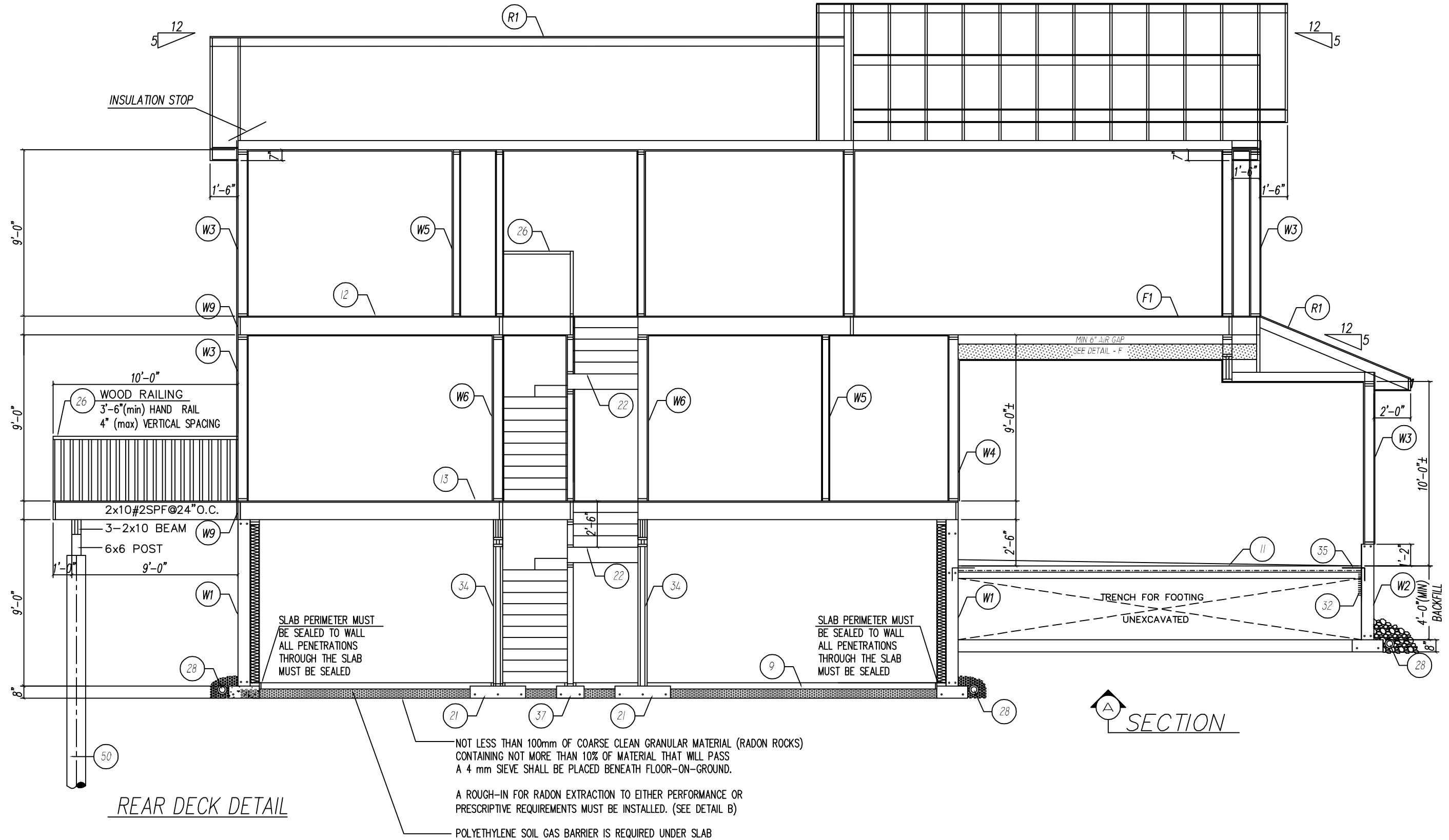
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| | | | |
|------|-------------------------|----------|----------------------|
| AREA | PROPOSED DESIGN FOR: -- | DESIGNED | SCALE 3/16"=1'-0" |
| | | DRAWN | DRAWING NO |
| | | DATE | 6/7 |



REAR DECK DETAIL

SECTION

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

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"x6" 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 CELLULOSE FIBER 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.

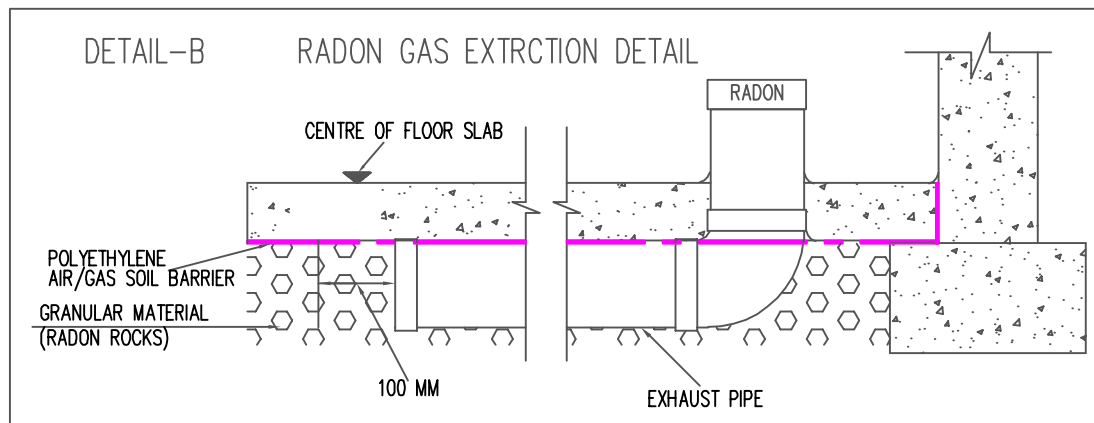
PROVIDE BUILT-UP POSTS OF A WIDTH EQUAL TO THE WIDTH OF BEAM, WHERE FRAMED INTO INTERIOR OR EXTERIOR WALLS.

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 | -- |
| GYPHUM 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 |
| GYPHUM 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 GYPHUM 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" GYPHUM 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 | -- |
| GYPHUM BOARD | 0.08 |
| AIR GAP | 0.16 |
| 2X10 FRAME @24" O.C.(10%) & R-32 BATT INSULATION(90%) | 4.47 |
| GYPHUM 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 | -- |
| GYPHUM 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 | -- |
| GYPHUM 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

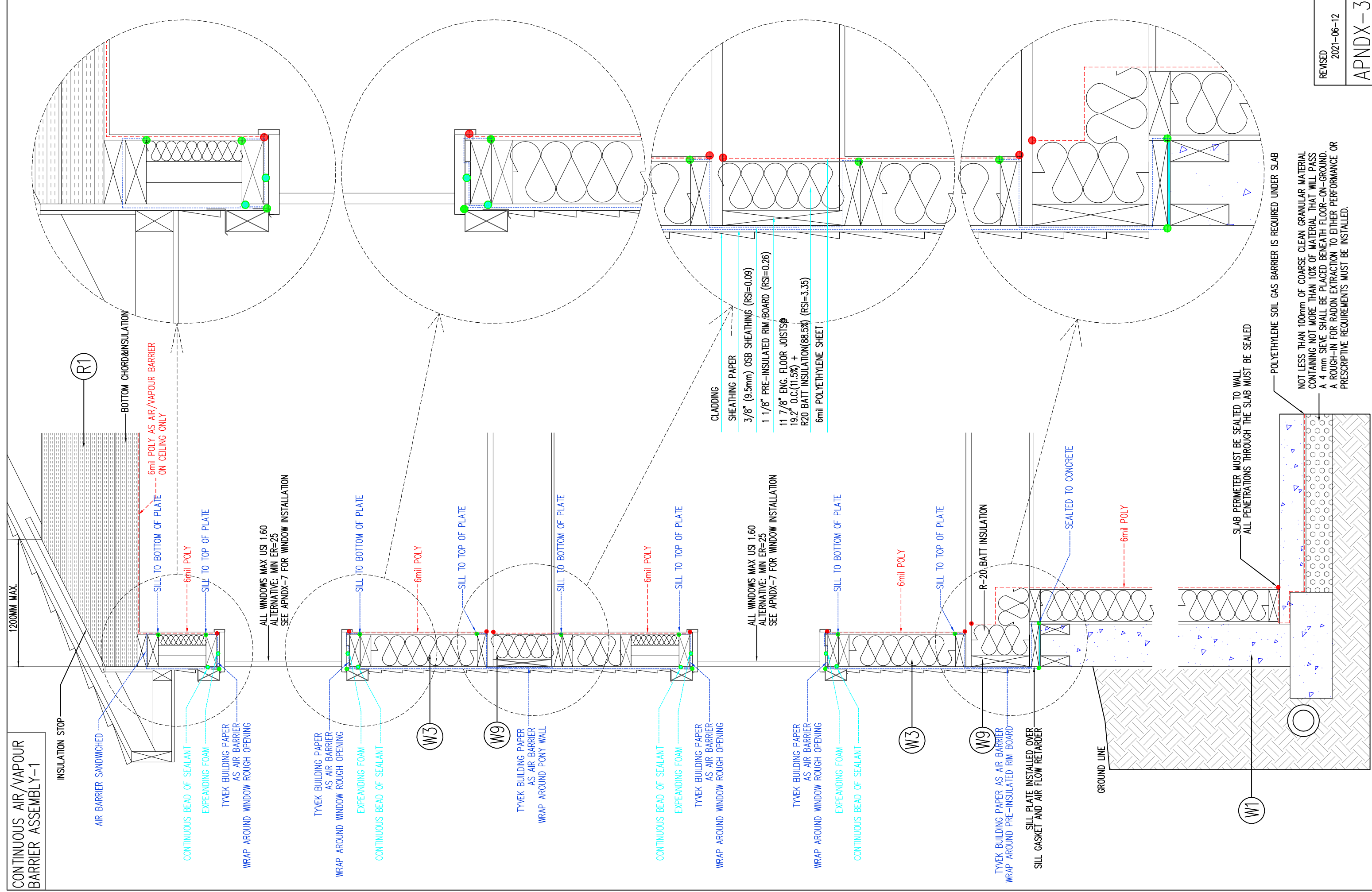
MATERIALS INTENDED TO PROVIDE THE PRINCIPAL
RESISTANCE TO AIR LEAKAGE CONFORM TO
CAN/ULC-S741.

| 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-1



1200MM MAX.

R1

BOTTOM CHORD & INSULATION

6mil POLY AS AIR/VAPOUR BARRIER ON CEILING ONLY

SILL TO BOTTOM OF PLATE

6mil POLY

SILL TO TOP OF PLATE

ALL WINDOWS MAX USI 1.60
ALTERNATIVE: MIN ER=25
SEE APNDX-7 FOR WINDOW INSTALLATION

SILL TO BOTTOM OF PLATE

6mil POLY

SILL TO TOP OF PLATE

W3

SILL TO TOP OF PLATE

W9

SILL TO BOTTOM OF PLATE

SILL TO BOTTOM OF PLATE

6mil POLY

SILL TO TOP OF PLATE

ALL WINDOWS MAX USI 1.60
ALTERNATIVE: MIN ER=25
SEE APNDX-7 FOR WINDOW INSTALLATION

SILL TO BOTTOM OF PLATE

6mil POLY

SILL TO TOP OF PLATE

R-20 BATT INSULATION

SEALED TO CONCRETE

GROUND LINE

6mil POLY

W1

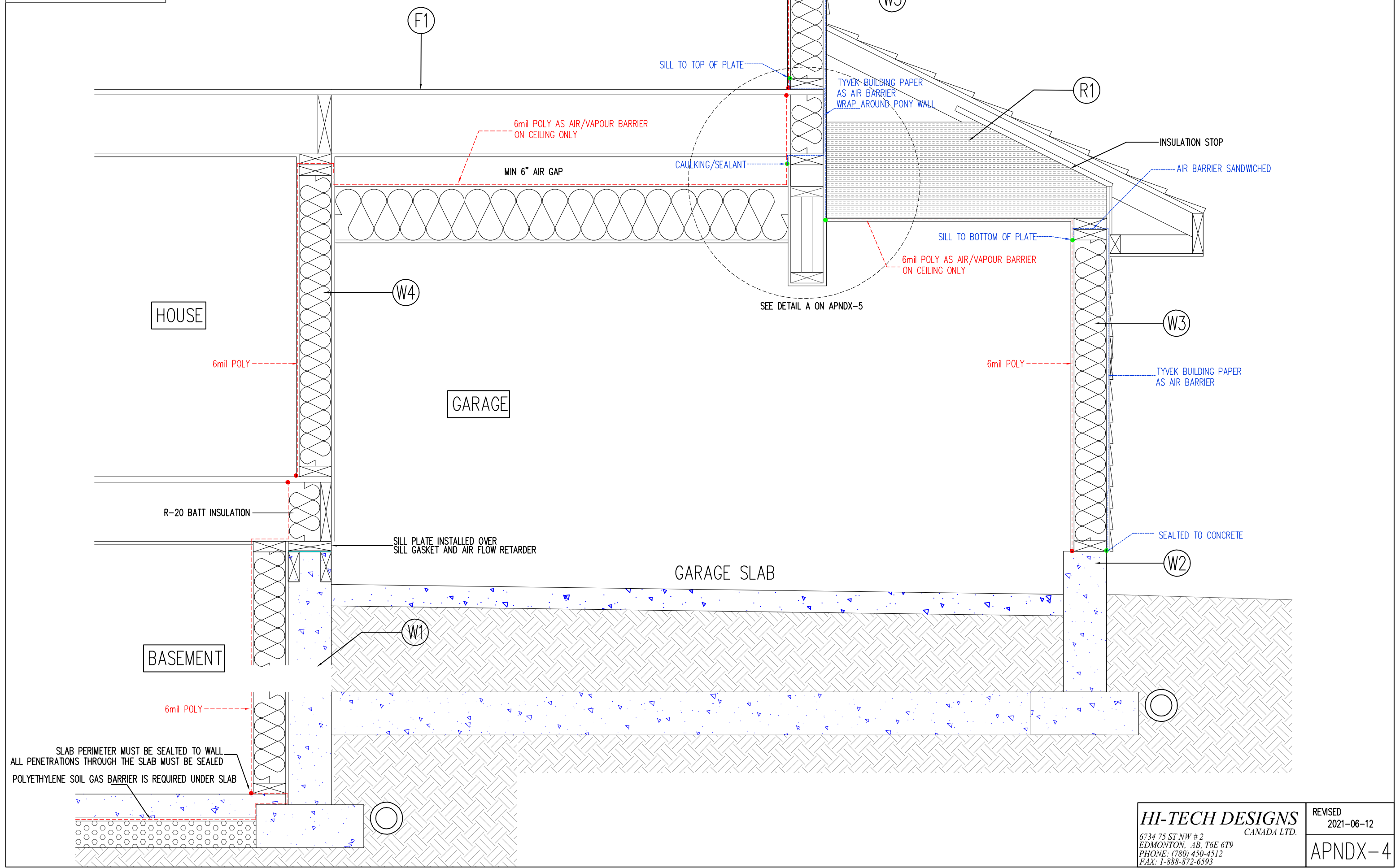
SLAB PERIMETER MUST BE SEALED TO WALL
ALL PENETRATIONS THROUGH THE SLAB MUST BE SEALED

POLYETHYLENE SOIL GAS BARRIER IS REQUIRED UNDER SLAB

NOT LESS THAN 100mm OF COARSE CLEAN GRANULAR MATERIAL CONTAINING NOT MORE THAN 10% OF MATERIAL THAT WILL PASS A 4 mm SIEVE SHALL BE PLACED BENEATH FLOOR-ON-GROUND. A ROUGH-IN FOR RADON EXTRACTION TO EITHER PERFORMANCE OR PRESCRIPTIVE REQUIREMENTS MUST BE INSTALLED.

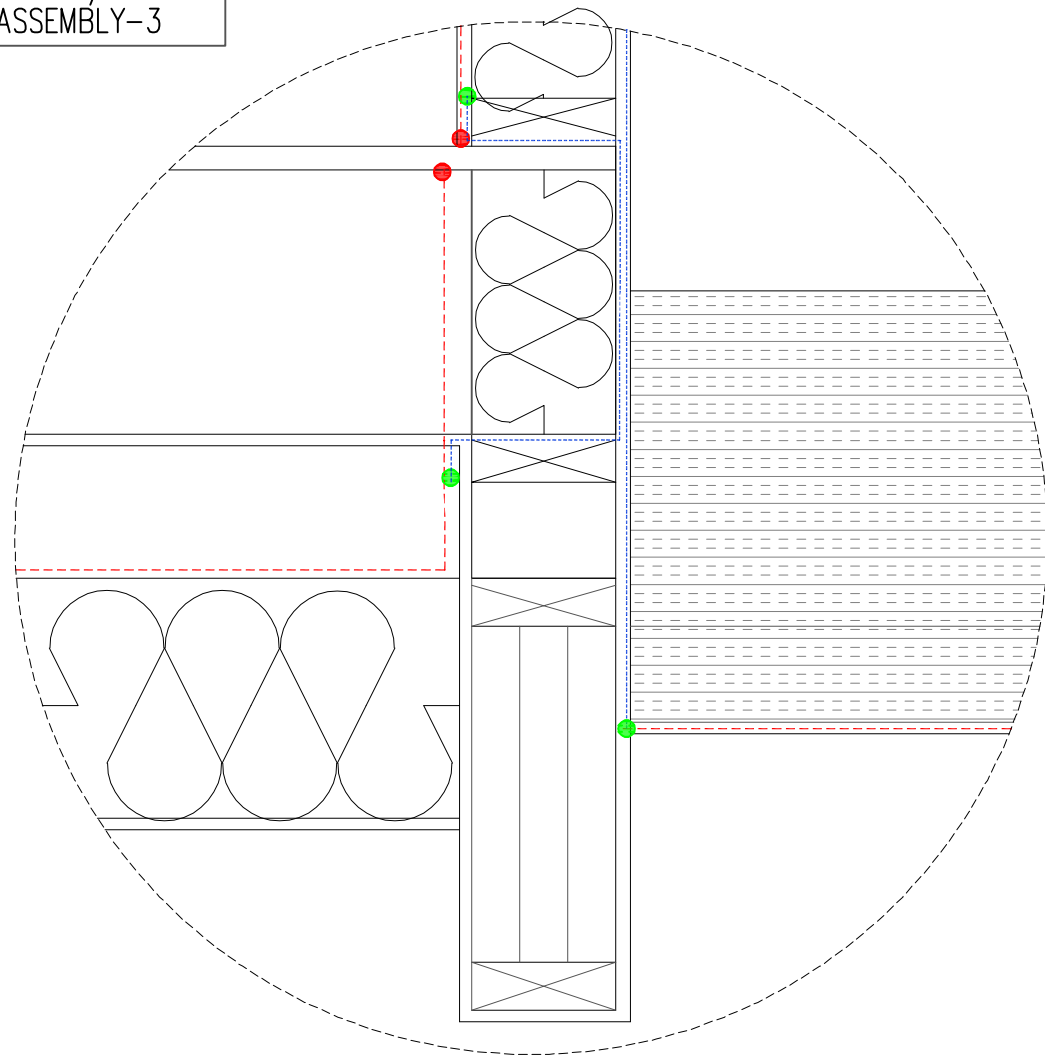
- CLADDING
- SHEATHING PAPER
- 3/8" (9.5mm) OSB SHEATHING (RSI=0.09)
- 1 1/8" PRE-INSULATED RIM BOARD (RSI=0.26)
- 11 7/8" ENG. FLOOR JOISTS @ 19.2" O.C. (11.5%) + R20 BATT INSULATION (88.5%) (RSI=3.35)
- 6mil POLYETHYLENE SHEET

CONTINUOUS AIR/VAPOUR BARRIER ASSEMBLY-2

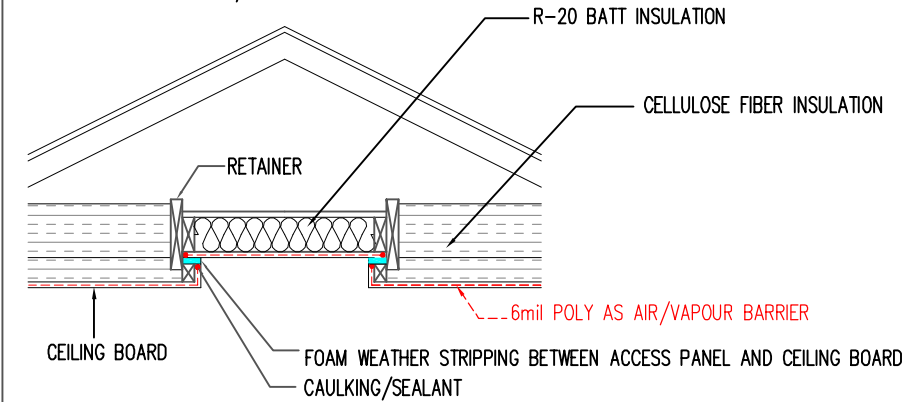


SLAB PERIMETER MUST BE SEALED TO WALL
 ALL PENETRATIONS THROUGH THE SLAB MUST BE SEALED
 POLYETHYLENE SOIL GAS BARRIER IS REQUIRED UNDER SLAB

CONTINUOUS AIR/VAPOUR BARRIER ASSEMBLY-3

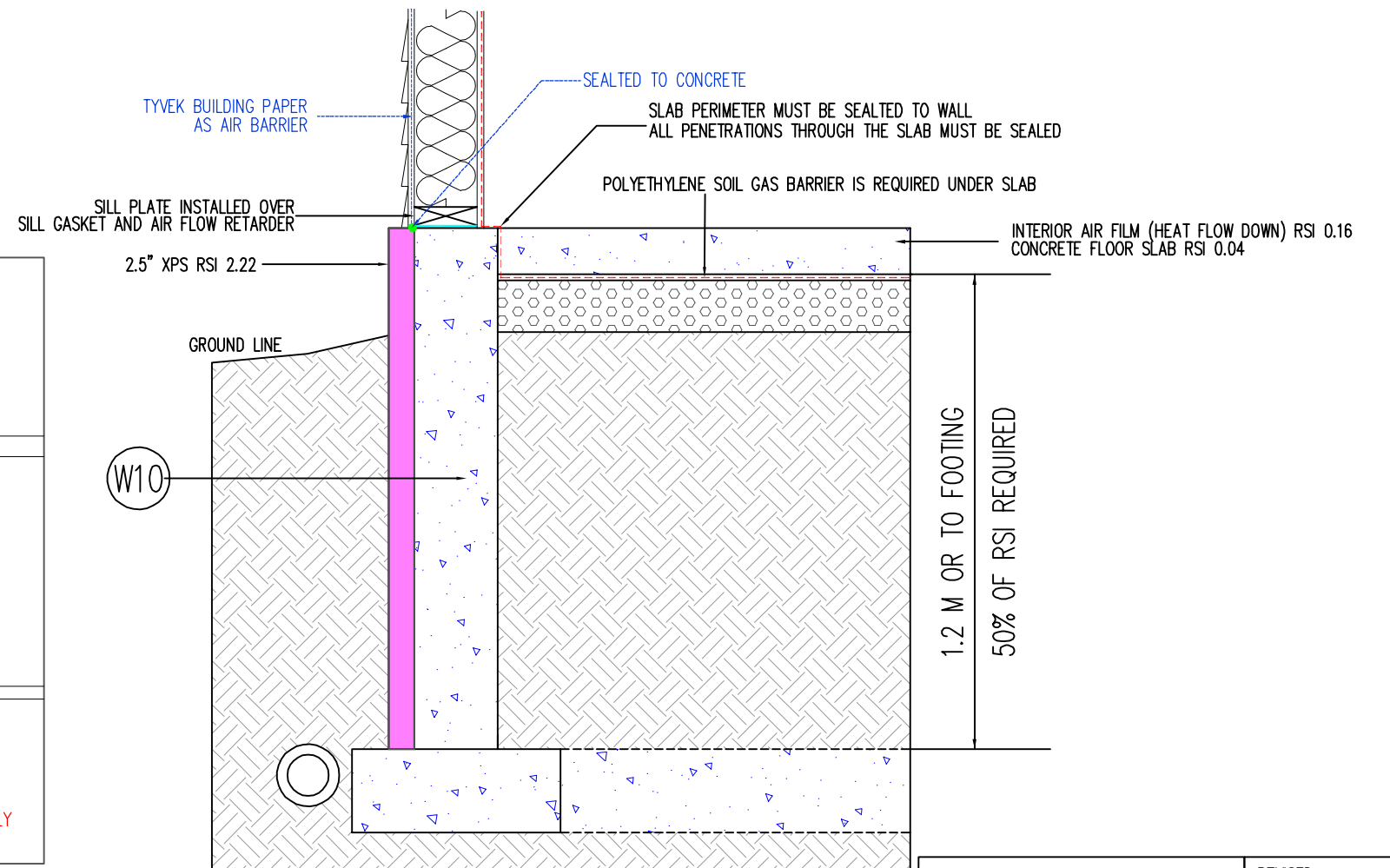


ATTIC ACCESS DETAIL
CELLULOSE FIBER INSULATION
MIN RSI=2.6 REQUIRED W/HRV

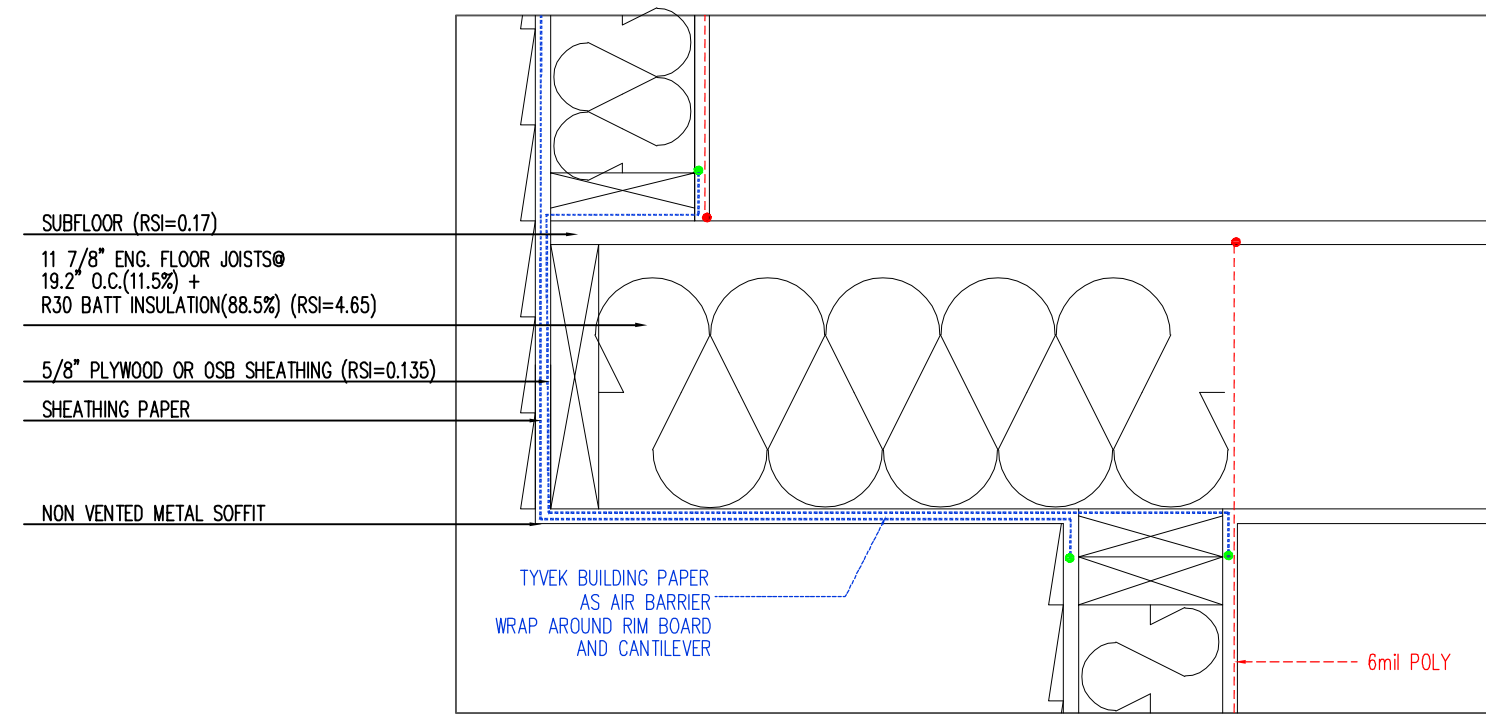


| | RSI VALUE |
|----------------------------------|-----------|
| GYPSUM BOARD | 0.08 |
| 2X6 FRAME(7%) | 3.10 |
| R-20 BATT INSULATION(93%) | --- |
| 6mil POLYETHYLENE SHEET | 0.08 |
| 1/2" CEILING BOARD | 0.11 |
| INTERIOR AIR FILM (HEAT FLOW UP) | 0.11 |
| EFFECTIVE VALUE | 3.37 |

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



DETAIL A



CANTILEVER (MAIN & UPPER FLOOR)

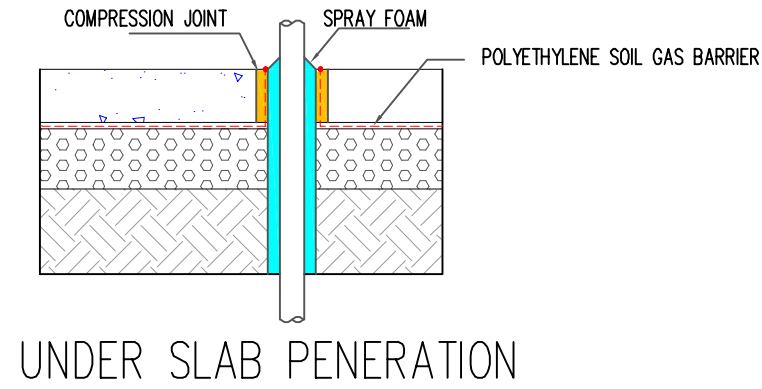
WALKOUT

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

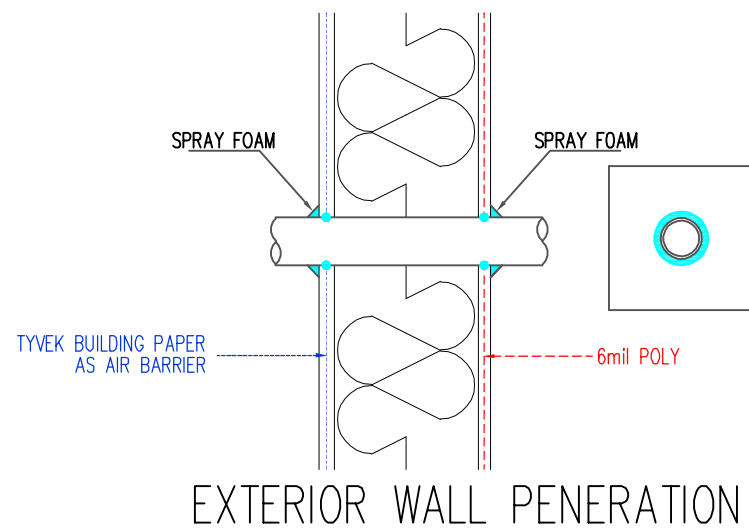
REVISED
2021-06-12

APNDX-5

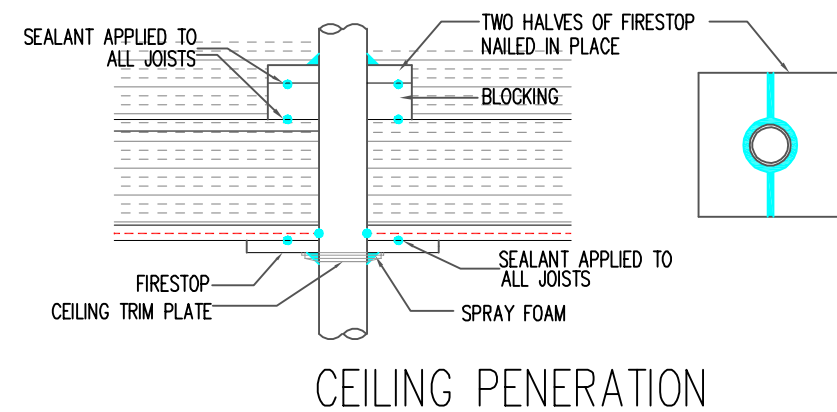
PENETRATION DETAIL



UNDER SLAB PENERATION

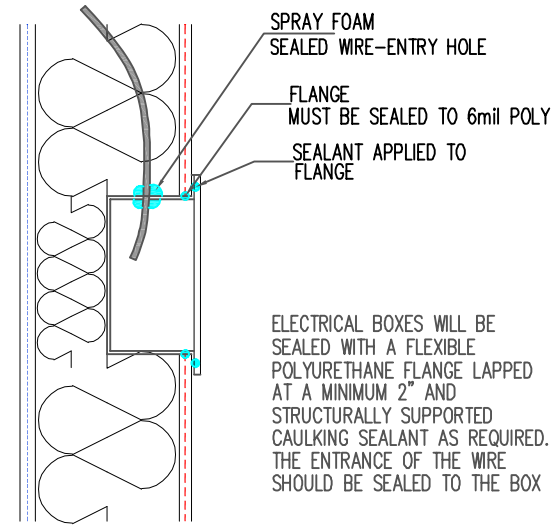


EXTERIOR WALL PENERATION



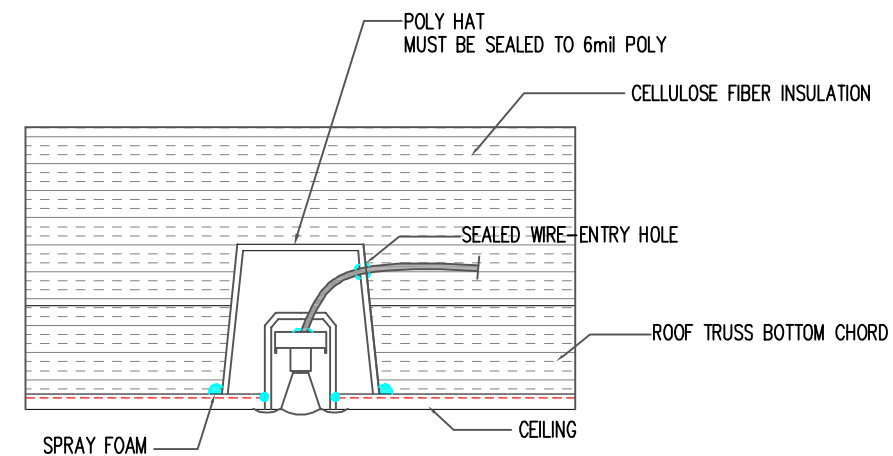
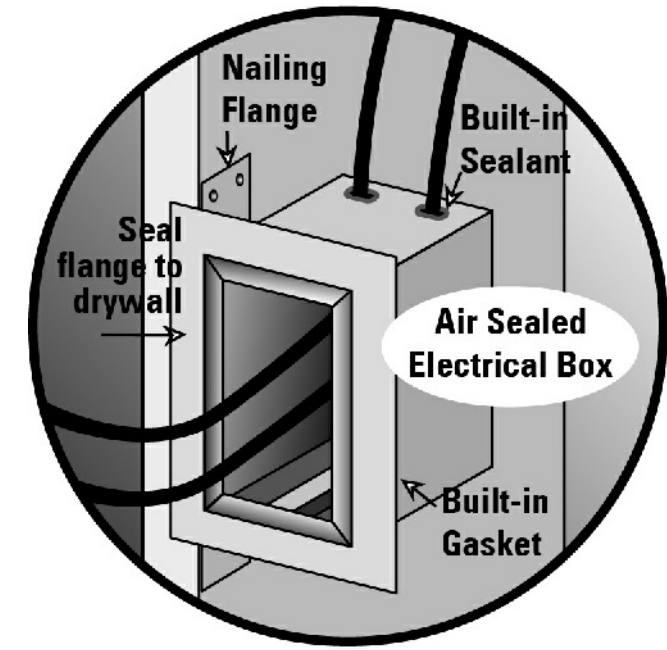
CEILING PENERATION

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 THERMAL BARRIER.

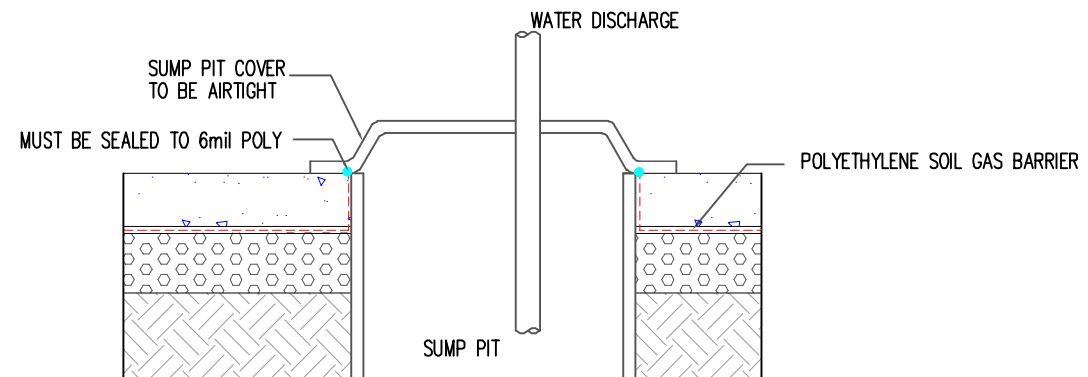


ELECTRICAL BOXES WILL BE SEALED WITH A FLEXIBLE POLYURETHANE FLANGE LAPPED AT A MINIMUM 2" AND STRUCTURALLY SUPPORTED CAULKING SEALANT AS REQUIRED. THE ENTRANCE OF THE WIRE SHOULD BE SEALED TO THE BOX

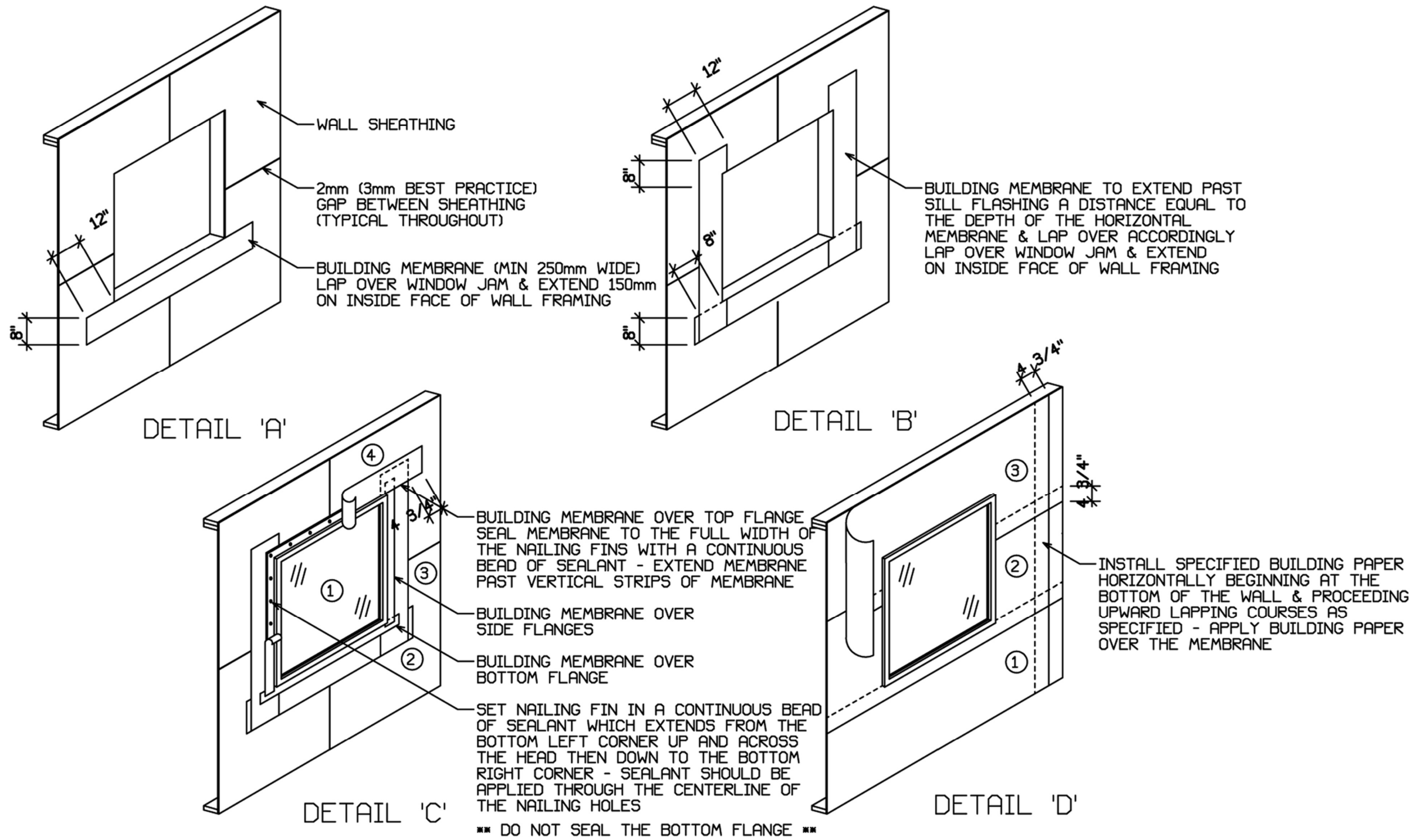
ELECTRICAL BOXES



PLOT LIGHTS



SUMP PIT INSTALLATION



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