

**CERTIFIED MODEL**  
**PRE-APPROVED**  
FOR PERMIT APPLICATION AS PER THE  
ONTARIO BUILDING CODE  
TOWN OF CALEDON BUILDING DIVISION  
REVIEWED BY A. Walencykiewicz  
DATE Jul 22, 2025  
FILE # CM25-047 HAF Studio Model

A BUILDING PERMIT IS REQUIRED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

ALL DRAWINGS ARE INTENDED TO FACILITATE IN ACHIEVING GENERAL COMPLIANCE WITH THE 2024 ONTARIO BUILDING CODE AS AMENDED

THESE DRAWINGS ILLUSTRATE SOME OF THE MINIMUM ONTARIO BUILDING CODE REQUIREMENTS WHICH APPLY TO TYPICAL RESIDENTIAL CONSTRUCTION. THEY DO NOT NECESSARILY REPRESENT EVERY DETAIL OF BUILDING CONSTRUCTION, OR ALL MINIMUM STANDARDS WHICH APPLY. FOR MORE DETAILED INFORMATION ABOUT CONSTRUCTION REGULATIONS REFER TO THE ONTARIO BUILDING CODE

ALTERATIONS TO ALL DRAWINGS, NOTES, AND DETAILS ARE NOT PERMITTED, ANY ALTERATIONS TO THIS MODEL MAY BE SUBJECT TO A BUILDING PERMIT REVISION

INSPECTION REQUIREMENTS ARE NOTED ON YOUR PERMIT AND MUST BE ARRANGED BY CONTACTING THE INSPECTIONS OFFICE PRIOR TO COVERING THE WORK. IF CHANGES TO THE APPROVED WORK ARE ANTICIPATED, SPEAK WITH THE INSPECTOR TO DETERMINE IF A REVISION TO YOUR PERMIT IS REQUIRED

**TOWN OF CALEDON AND CITY OF MISSISSAUGA ARE**

~~THE CITY IS~~ NOT LIABLE FOR ANY COST INCURRED FOR RE-WORK, ALTERATION, DISCREPANCIES OR ANY KIND OF CONSTRUCTION RELATED WORK

SITE CONDITIONS SUCH AS, BUT NOT LIMITED TO; HYDROSTATIC PRESSURE, SOIL AND SURFACE/SUBSURFACE DRAINAGE, ARE TO BE VERIFIED ON SITE. DAMPPROOFING, WATERPROOFING, SOIL GAS CONTROL, AND/OR SUBSURFACE DRAINAGE MAY BE REQUIRED TO CONTROL THE INGRESS OF WATER, MOISTURE AND SOIL GAS

SITE SPECIFIC CONDITIONS WILL BE VERIFIED BY THE BUILDING DIVISION PRIOR TO PERMIT ISSUANCE. THIS INCLUDES; SPATIAL SEPARATIONS (WINDOW/DOOR SIZES AND LOCATIONS), ZONING SETBACKS, SITE SERVICES (WATER AND SANITARY), GRADING AND FIRE EMERGENCY ACCESS

LOCAL UTILITIES SUCH AS HYDRO, ELECTRICAL, GAS, TELEPHONE SHOULD BE CONTACTED REGARDING THEIR SPECIFIC APPROVAL AND INSPECTION REQUIREMENTS. ALL UTILITIES MUST BE CONTACTED PRIOR TO COMMENCING ANY EXCAVATION TO DETERMINE THE LOCATION OF ANY NEARBY UNDERGROUND SERVICES

~~BUILDING, PLUMBING, HVAC AND SIGN~~ INSPECTIONS CAN BE SCHEDULED ~~ANYTIME ONLINE AT WWW.MISSISSAUGA.CA/INSPECTIONS USING THE PERMIT NUMBER AND WEB ACCESS ID NOTED. FIRE INSPECTIONS CAN BE BOOKED DURING BUISNESS HOURS AT 905 896 5908~~ BY PHONE AT 905-584-2272, EXTENSION 4174 OR BY EMAILING [building.inspections@caledon.ca](mailto:building.inspections@caledon.ca) BY COMMENCING CONSTRUCTION OF A BUILDING FROM THESE DRAWINGS, THE OWNER AND/OR CONTRACTOR ACKNOWLEDGES THAT THE GENERAL NOTES HAVE BEEN READ AND UNDERSTOOD

### DRAWING LIST

- C1.01 - COVER PAGE AND GENERAL NOTES
- A1.01 - FOUNDATION PLAN
- A1.02 - FLOOR PLAN
- A1.03 - ROOF FRAMING PLAN
- A1.04 - FRAME WALL DETAILS
- A1.05 - CROSS SECTION
- A2.01 - FRONT ELEVATION
- A2.02 - RIGHT ELEVATION
- A2.03 - REAR ELEVATION
- A2.04 - LEFT ELEVATION
- M1.01 - MECHANICAL LAYOUT
- M1.02 - RADON SUBFLOOR DEPRESSURIZATION ROUGH-IN
- GN1.01 - NOTES AND SCHEDULES

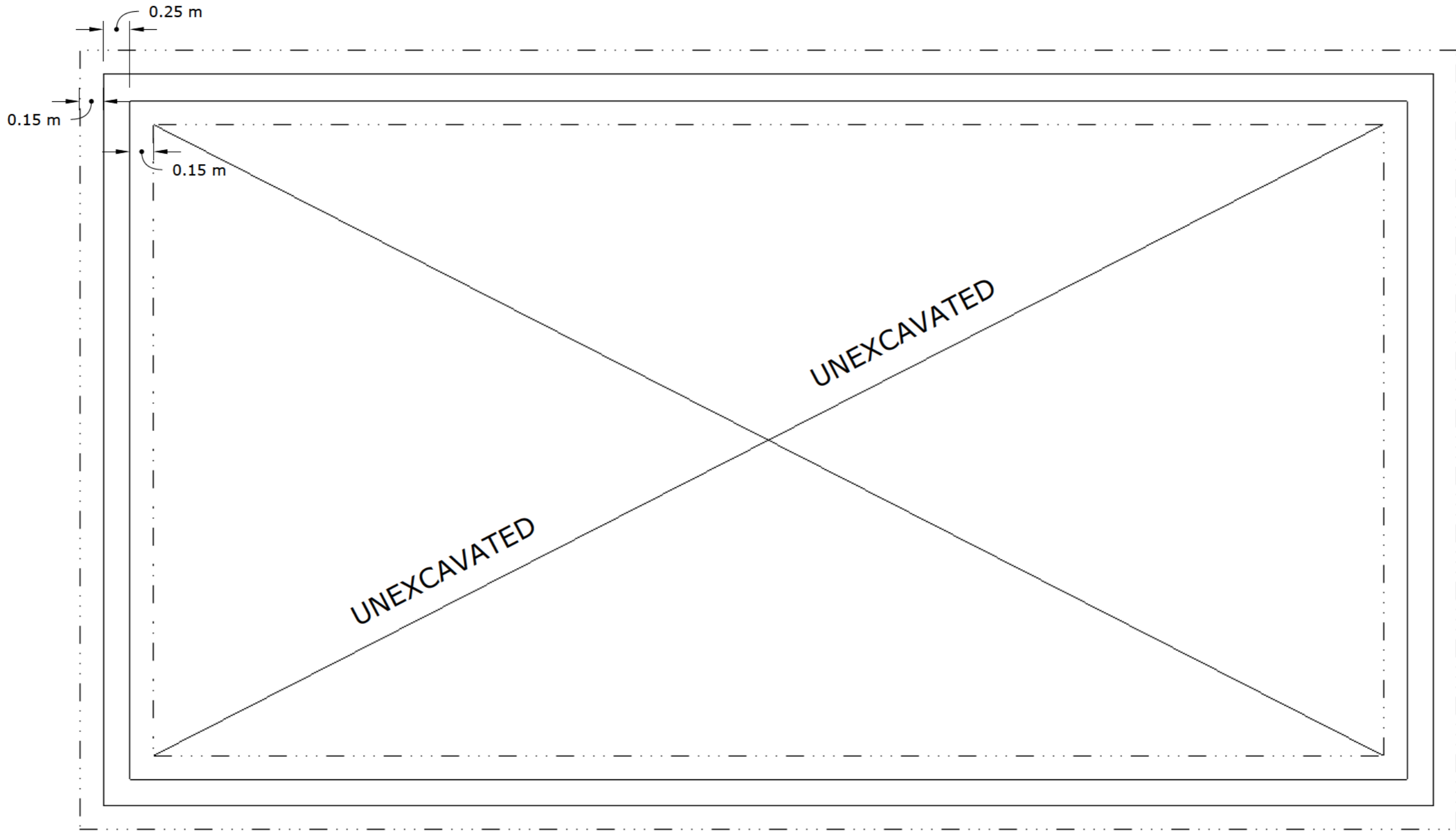
**PLEASE NOTE THAT A COMPLETED DESIGNER SCHEDULE 1: DESIGNER INFORMATION FORM IS REQUIRED AT THE TIME OF SUBMITTING A REPEAT BUILDING APPLICATION.**

HOMEOWNERS WHO CHOOSE TO COMPLETE SECTION D OF THE SCHEDULE 1 FORM—CLAIMING AN EXEMPTION FROM DESIGNER QUALIFICATION REQUIREMENTS UNDER DIVISION C, ARTICLE 3.2.4.1(3) OF THE 2024 ONTARIO BUILDING CODE (OBC)—ACKNOWLEDGE THAT THEY ARE ASSUMING THE ROLE OF DESIGNER FOR THEIR OWN ADDITIONAL RESIDENTIAL UNIT (ARU) DESIGN.

WHILE THIS EXEMPTION APPLIES ONLY WHEN THE DESIGN IS FOR A BUILDING OWNED BY THE APPLICANT, IT DOES NOT EXEMPT THE HOMEOWNER FROM ENSURING FULL COMPLIANCE WITH ALL APPLICABLE TECHNICAL AND REGULATORY REQUIREMENTS OF THE OBC. BY ACTING AS DESIGNER, THE HOMEOWNER ACCEPTS RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, AND CODE COMPLIANCE OF THEIR SUBMISSION, INCLUDING ANY DEFICIENCIES THAT MAY ARISE FROM THE DESIGN.

## CERTIFIED MODEL PROGRAM

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**FOUNDATION AND FOOTING DETAILS - 9.15.4.**  
250MM POURED CONCRETE FOUNDATION WALL  
AT 20 MPa ON A 22" X 8" CONCRETE FOOTING  
RESTING ON UNDISTURBED SOIL.

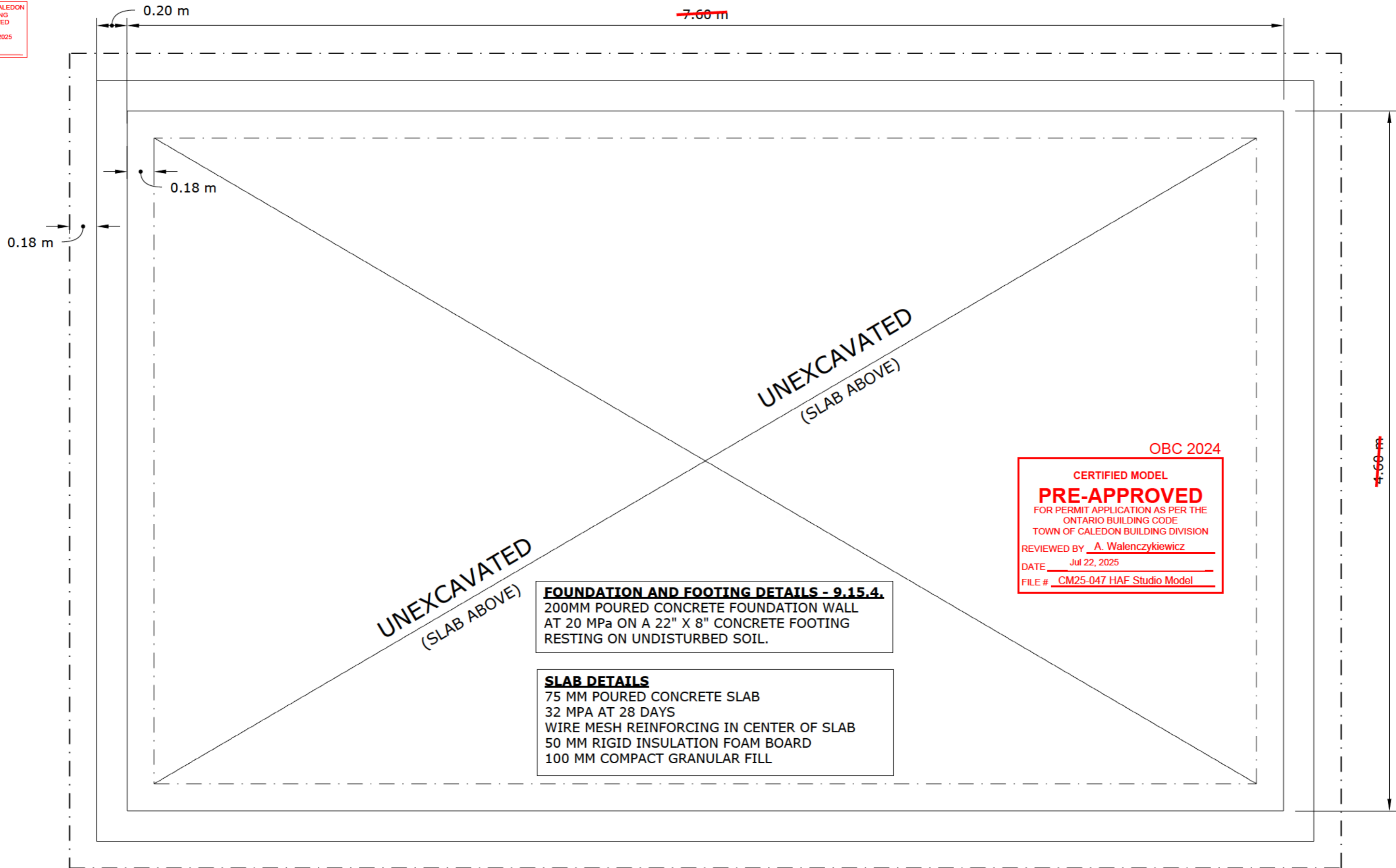
**SLAB DETAILS**  
75 MM POURED CONCRETE SLAB  
32 MPa AT 28 DAYS  
WIRE MESH REINFORCING IN CENTER OF SLAB  
50 MM RIGID FOAM INSULATION  
100 MM COMPACT GRANULAR FILL

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**CERTIFIED MODEL PROGRAM - ~~ONE BEDROOM MODEL~~  
BRICK/STONE VENEER CLADDING**

FOUNDATION PLAN  
SCALE: 1:32 (3/8" = 1'-0")

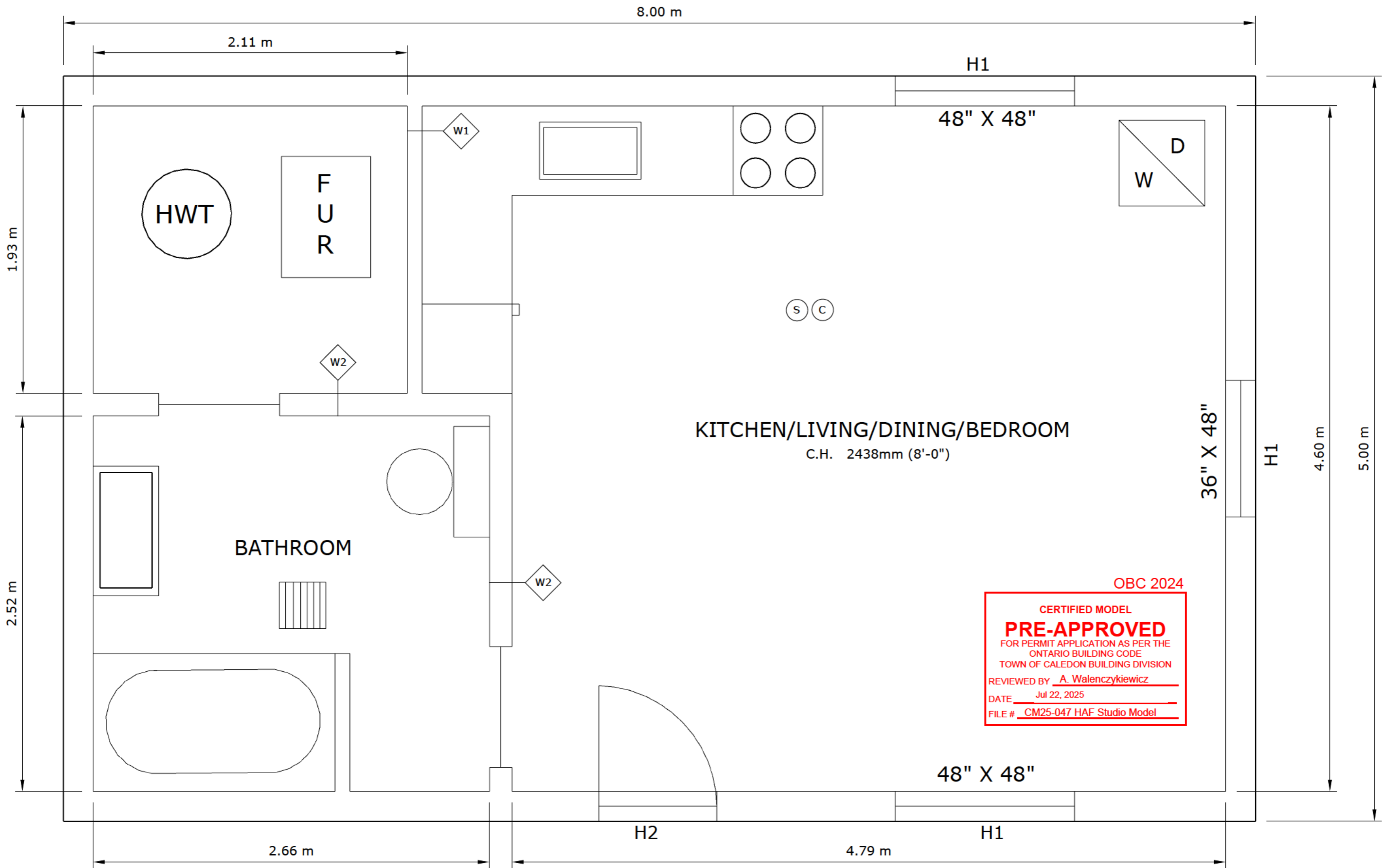


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**CERTIFIED MODEL PROGRAM - ~~STUDIO MODEL~~  
SIDING CLADDING**

**FOUNDATION PLAN - FRAME WALL MODEL**

SCALE: 1:24 (1/2" = 1'-0")



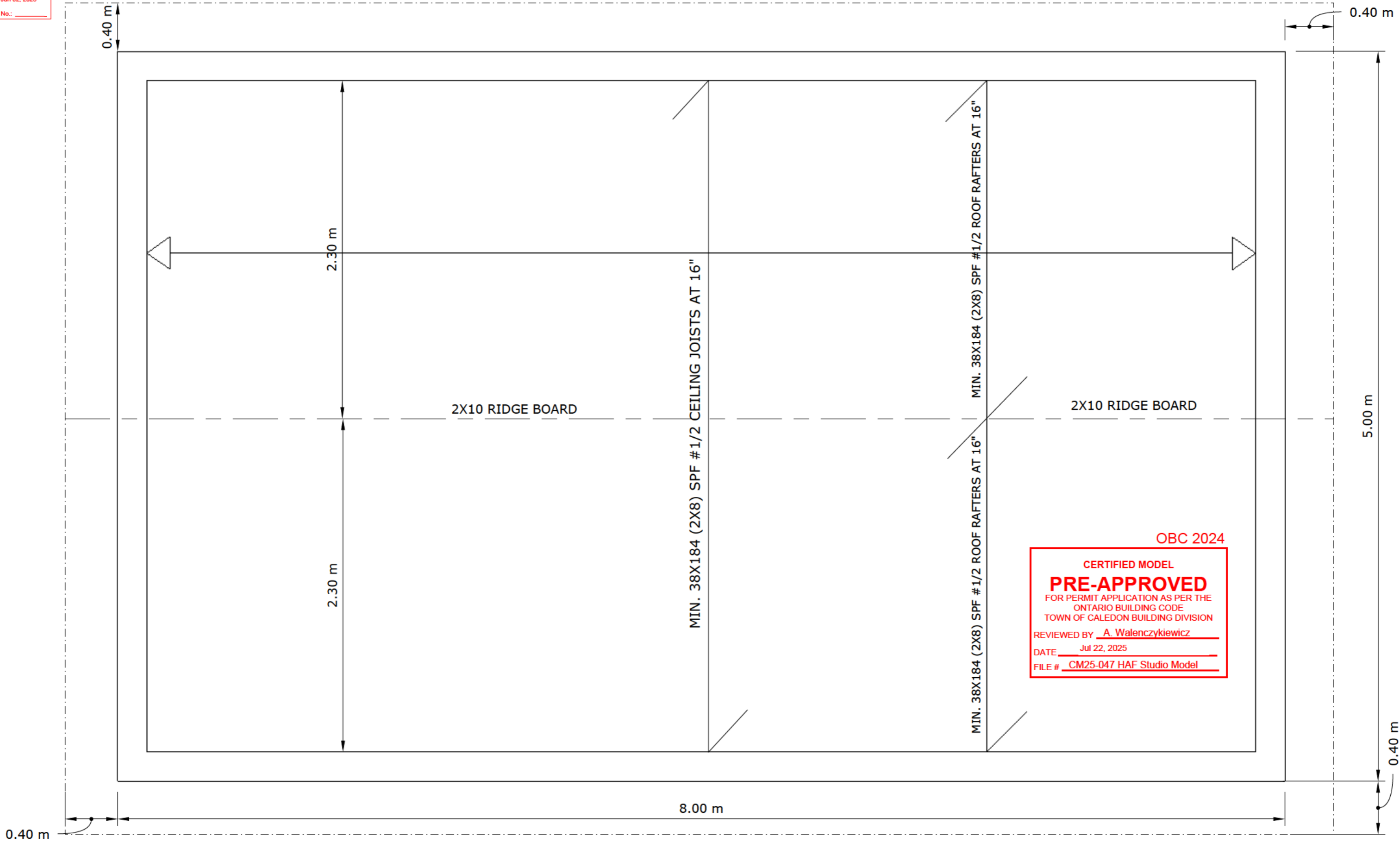
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**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

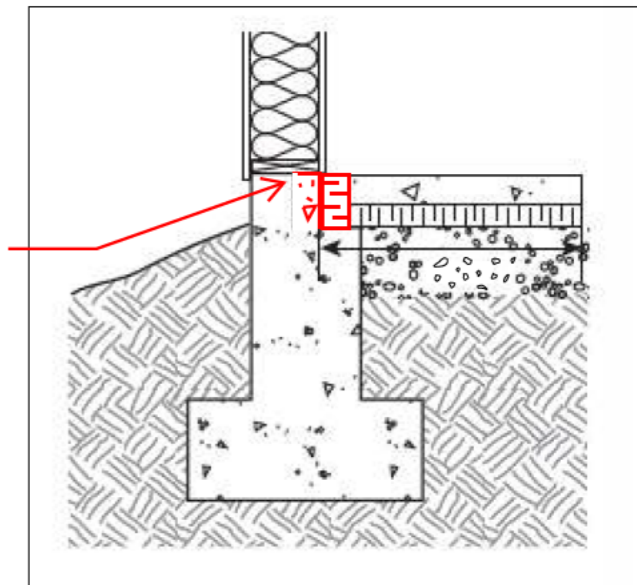
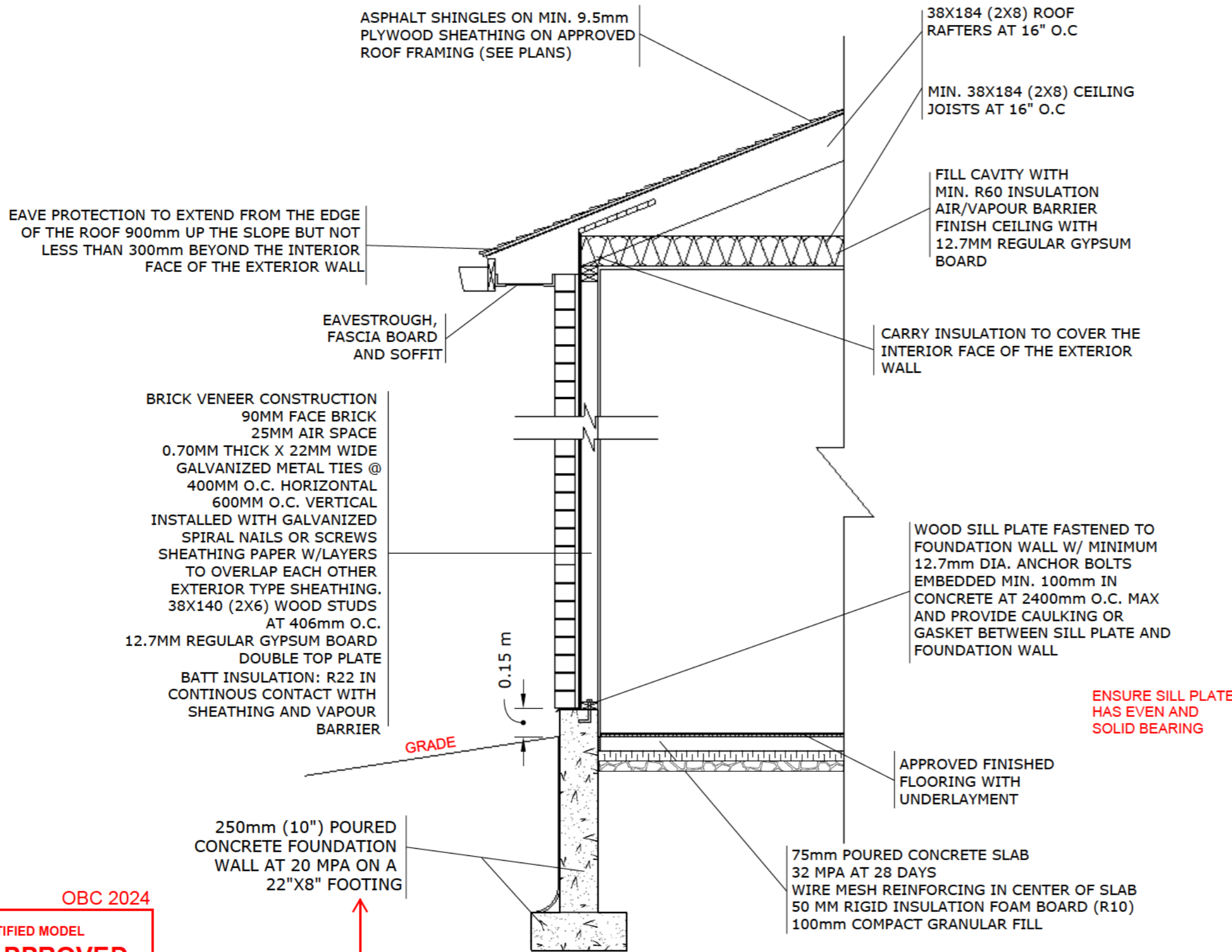
FLOOR PLAN - FRAME WALL MODEL  
SCALE: 1:24 (1/2" = 1'-0")

PLEASE NOTE THAT A COMPLETED DESIGNER SCHEDULE 1: DESIGNER INFORMATION FORM IS REQUIRED AT THE TIME OF SUBMITTING A REPEAT BUILDING APPLICATION.



**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

ROOF FRAMING PLAN - GABLE ROOF  
SCALE: 1:24 (1/2" = 1'-0")



**THERMAL BRIDGE DETAIL**

OBC 2024

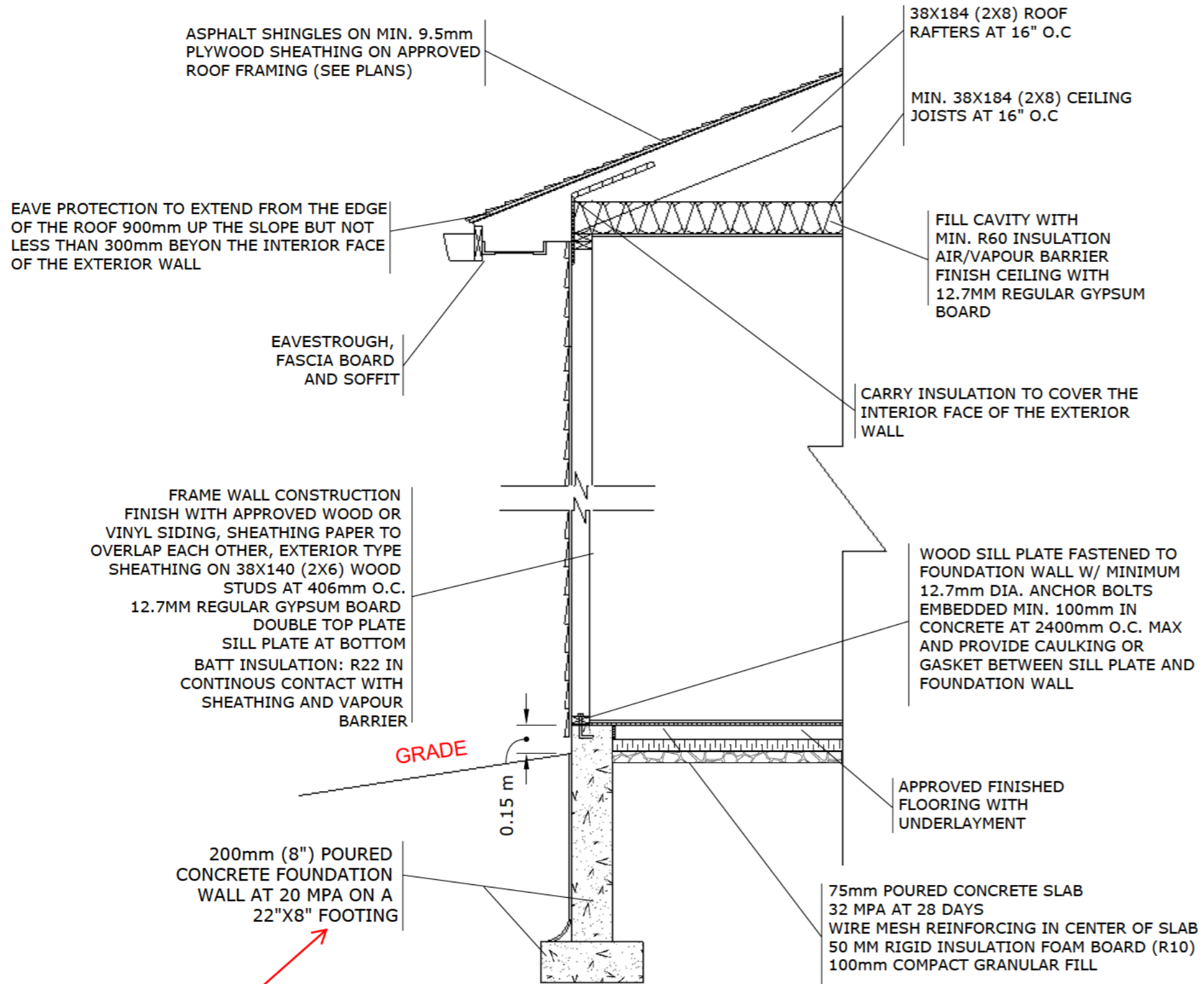
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FOOTINGS SHALL BE MIN. 1.2 METERS BELOW GRADE

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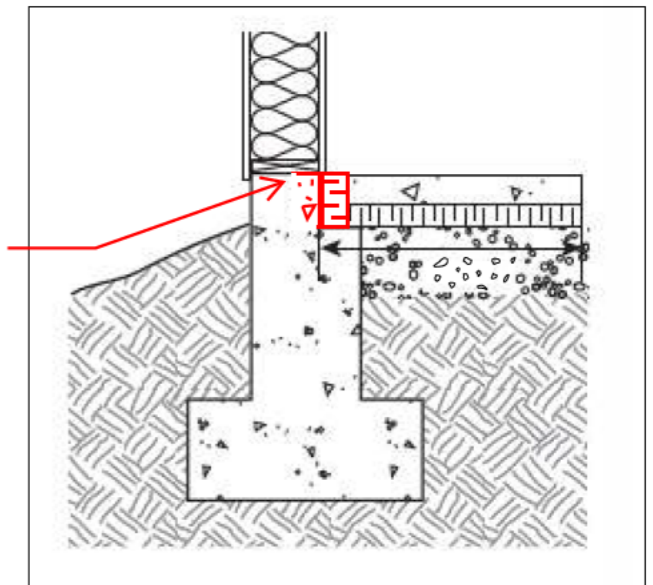
**CERTIFIED MODEL PROGRAM - ~~ONE BEDROOM MODEL~~  
BRICK/STONE VENEER CLADDING**

**BRICK VENEER WALL DETAIL**  
SCALE: 1:24 (1/4" = 1'-0")



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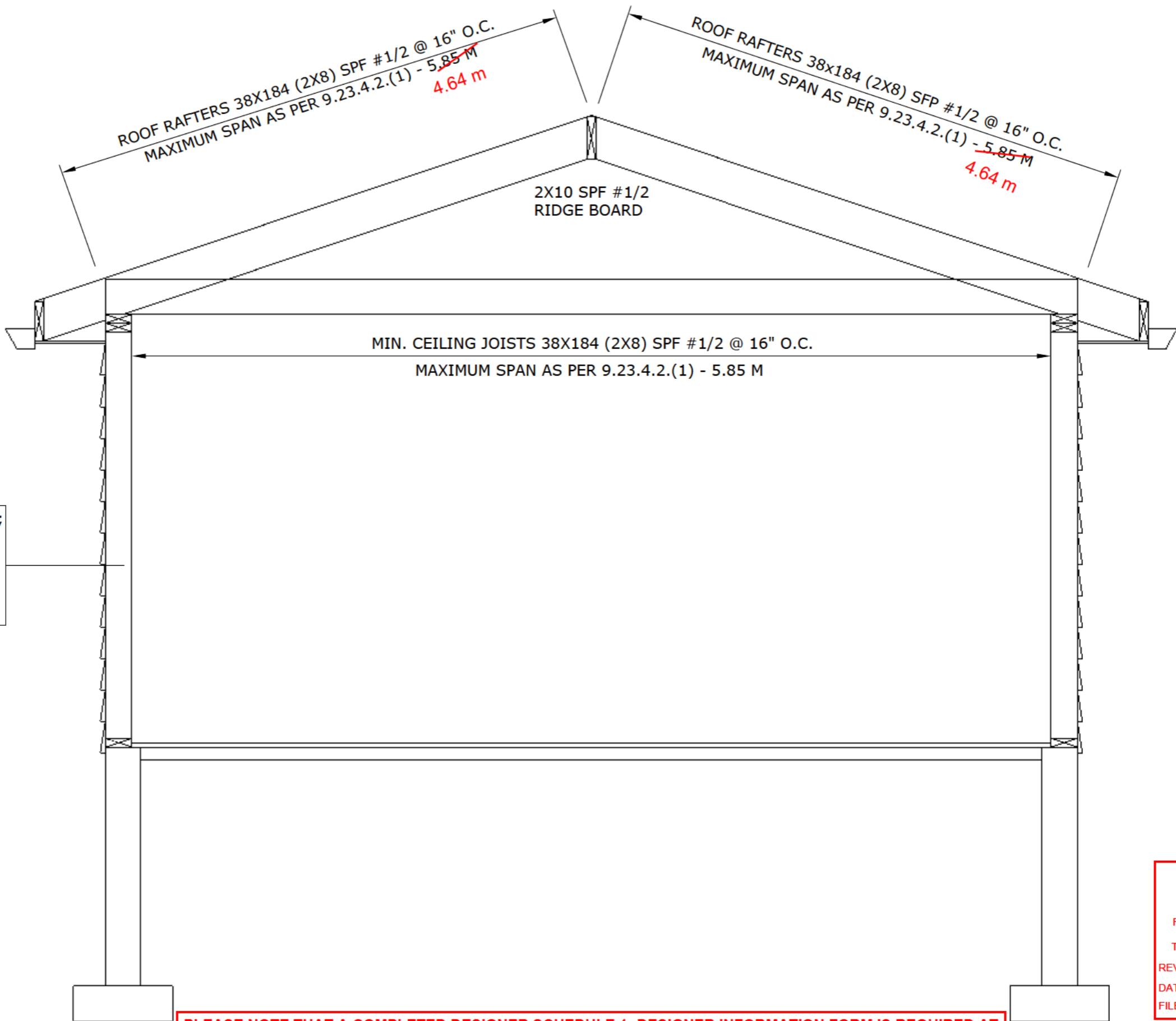
**THERMAL BRIDGE DETAIL**

FOOTINGS SHALL BE MIN. 1.2 METERS BELOW GRADE

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**CERTIFIED MODEL PROGRAM - ~~STUDIO MODEL~~  
SIDING CLADDING**

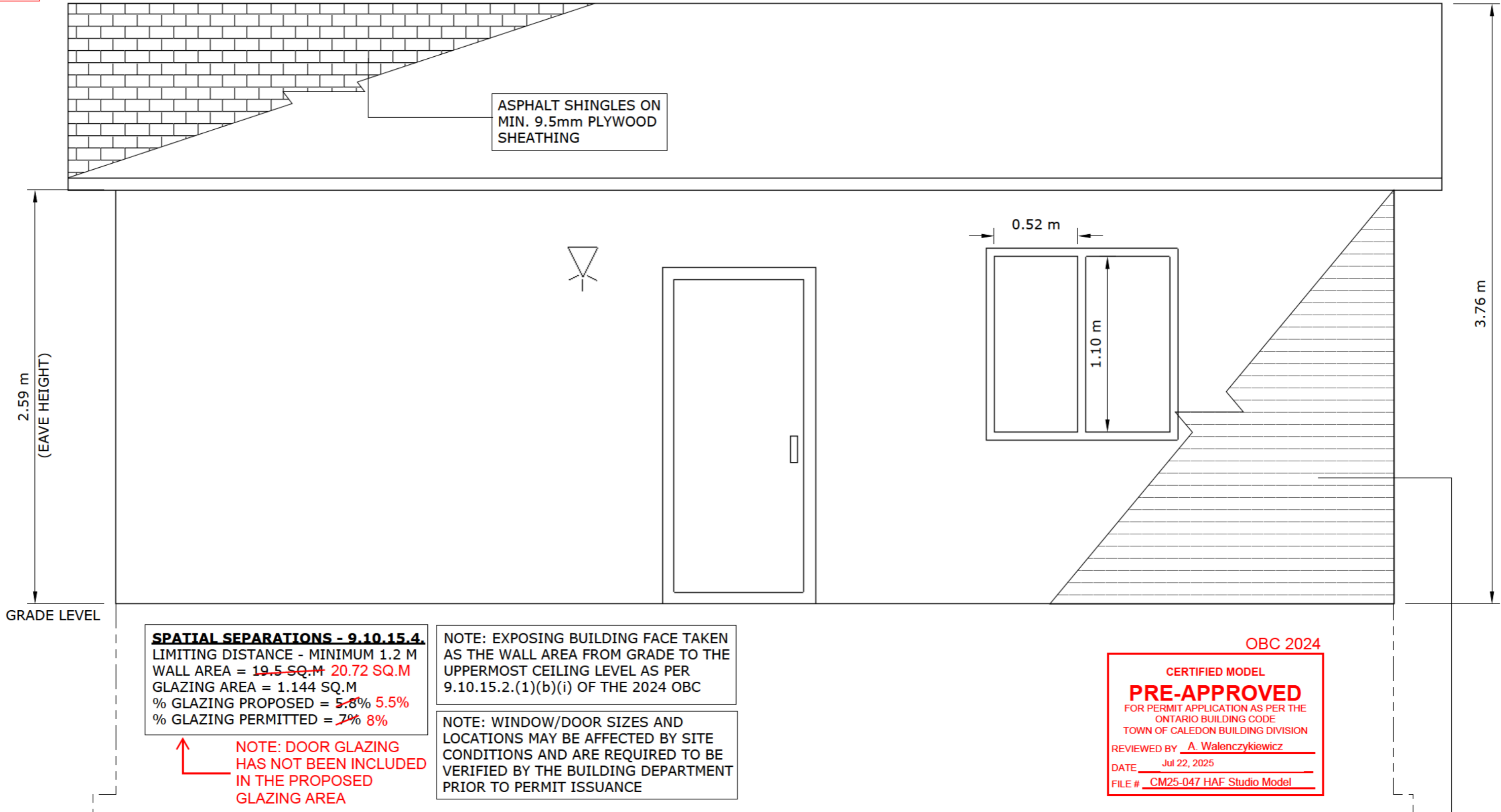
**FRAME WALL SIDING DETAIL**  
SCALE: 1:24 (1/4" = 1'-0")



**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

CROSS SECTION - FRAME WALL  
SCALE: 1:24 (1/2" = 1'-0")





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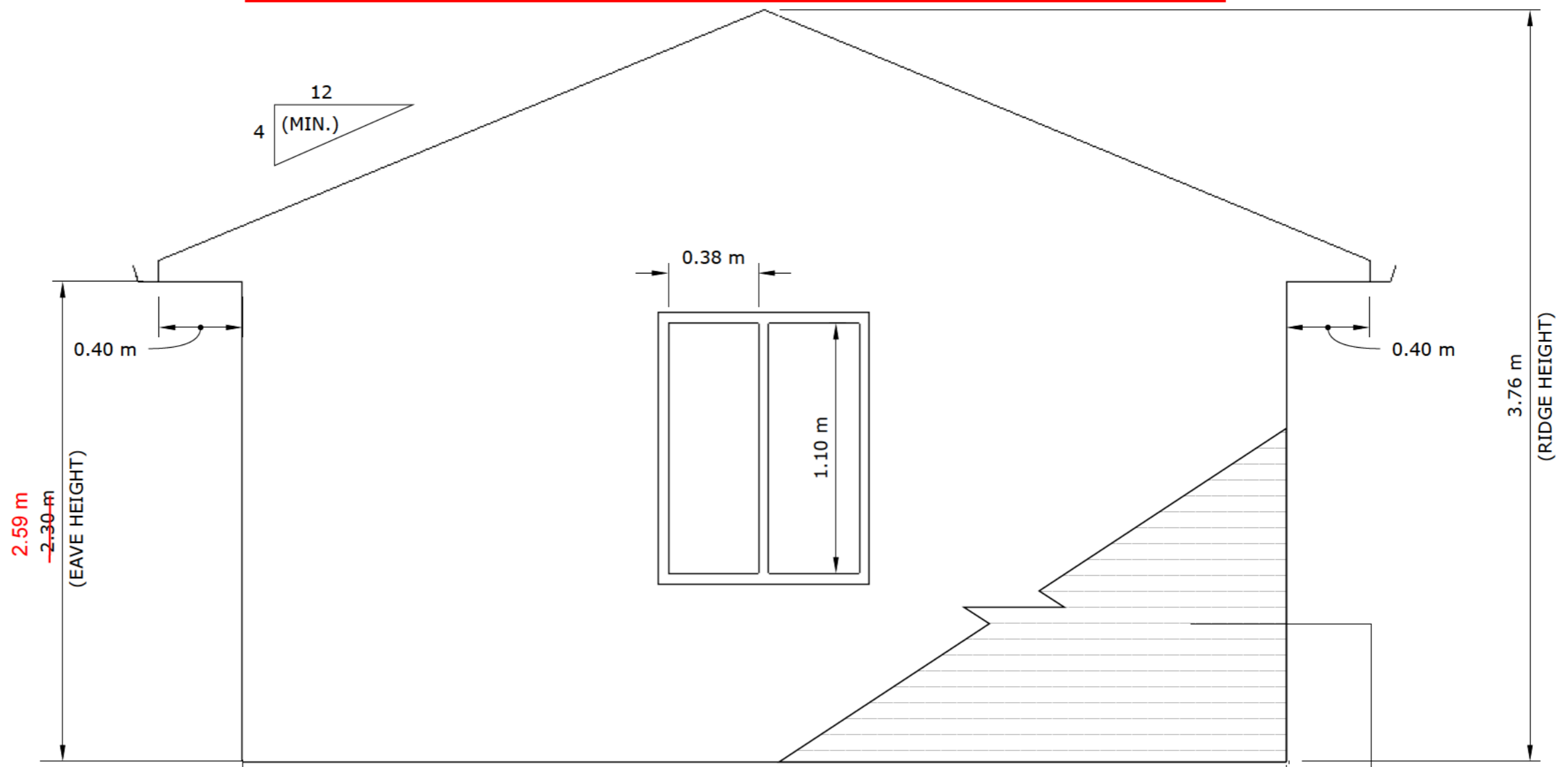
EXTERIOR WALL CONSTRUCTION  
FRAME WALL - REFER TO DETAIL A1.04

**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

FRONT ELEVATION - FRAME WALL / GABLE ROOF

SCALE: 1:24 (1/2" = 1'-0")

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**SPATIAL SEPARATIONS - 9.10.15.4.**  
LIMITING DISTANCE: 1.2 M  
WALL AREA: ~~12.19 SQ.M~~ 12.95 SQ.M  
GLAZED AREA: 0.836 SQ.M  
% PROPOSED: ~~6.8%~~ 6.5%  
% PERMITTED: ~~7%~~ 8%

NOTE: EXPOSING BUILDING FACE TAKEN AS THE WALL AREA FROM GRADE TO THE UPPERMOST CEILING LEVEL AS PER 9.10.15.2.(1)(b)(i) OF THE 2024 OBC

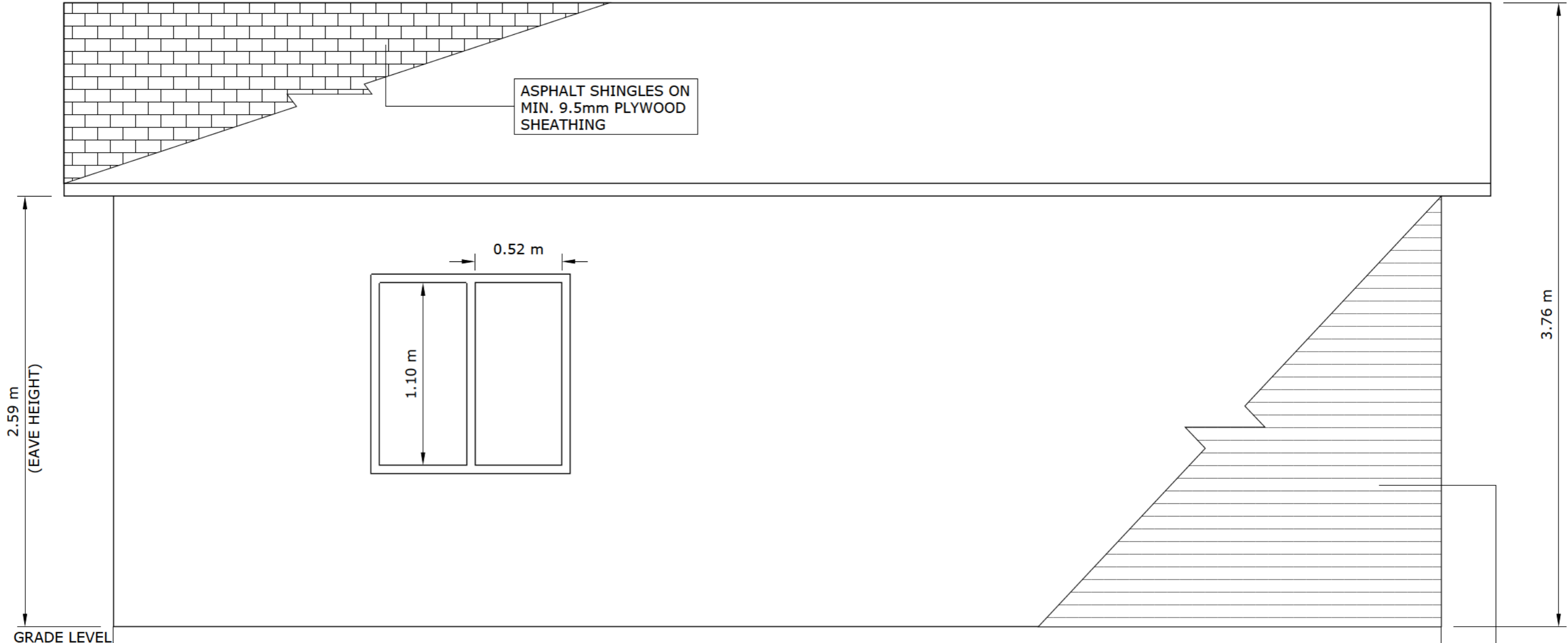
NOTE: WINDOW/DOOR SIZES AND LOCATIONS MAY BE AFFECTED BY SITE CONDITIONS AND ARE REQUIRED TO BE VERIFIED BY THE BUILDING DEPARTMENT PRIOR TO PERMIT ISSUANCE

EXTERIOR WALL CONSTRUCTION  
FRAME WALL - REFER TO DETAIL A1.04

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**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

RIGHT ELEVATION - FRAME WALL / GABLE ROOF  
SCALE: 1:24 (1/2" = 1'-0")



2.59 m  
(EAVE HEIGHT)

3.76 m

GRADE LEVEL

**SPATIAL SEPARATIONS - 9.10.15.4.**  
 LIMITING DISTANCE - MINIMUM 1.2 M  
 WALL AREA = ~~19.5 SQ.M~~ **20.72 SQ.M**  
 GLAZING AREA = 1.144 SQ.M  
 % GLAZING PROPOSED = ~~5.8%~~ **5.5%**  
 % GLAZING PERMITTED = ~~7%~~ **8%**

NOTE: EXPOSING BUILDING FACE TAKEN AS THE WALL AREA FROM GRADE TO THE UPPERMOST CEILING LEVEL AS PER 9.10.15.2.(1)(b)(i) OF THE 2024 OBC

NOTE: WINDOW/DOOR SIZES AND LOCATIONS MAY BE AFFECTED BY SITE CONDITIONS AND ARE REQUIRED TO BE VERIFIED BY THE BUILDING DEPARTMENT PRIOR TO PERMIT ISSUANCE

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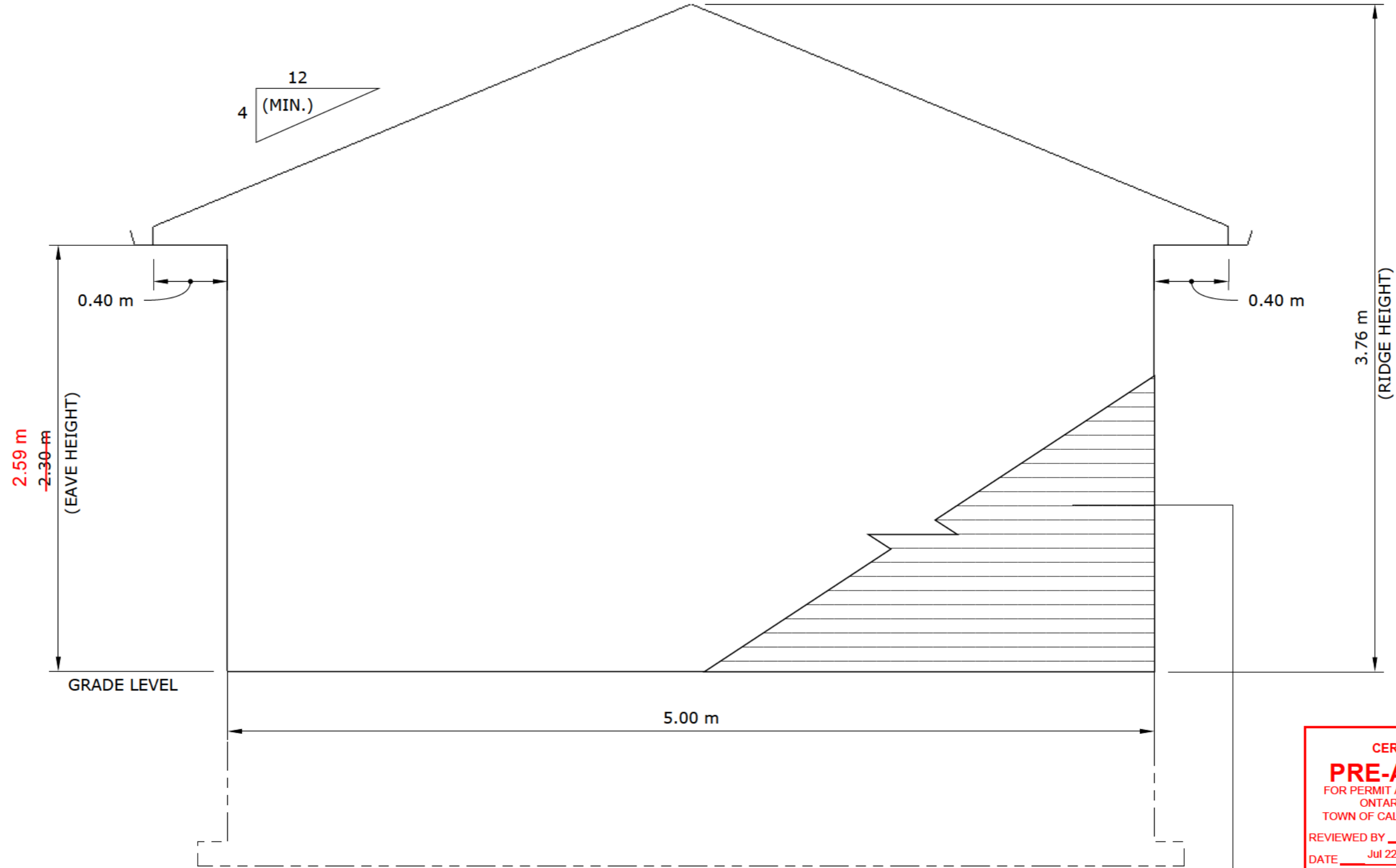
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EXTERIOR WALL CONSTRUCTION  
 FRAME WALL - REFER TO DETAIL A1.04

**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

REAR ELEVATION - FRAME WALL / GABLE ROOF  
 SCALE: 1:24 (1/2" = 1'-0")



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EXTERIOR WALL CONSTRUCTION  
FRAME WALL - REFER TO DETAIL A1.04

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**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

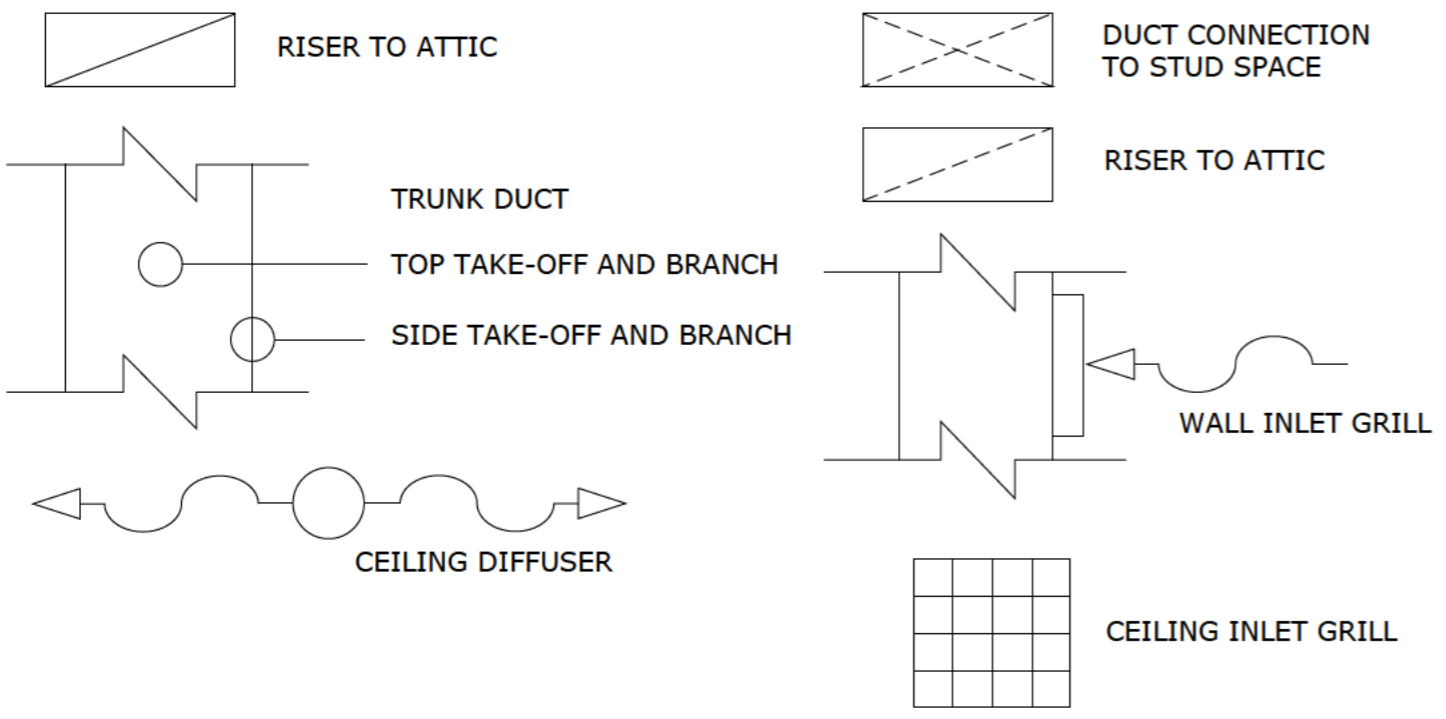
LEFT ELEVATION - FRAME WALL / GABLE ROOF  
SCALE: 1:24 (1/2" = 1'-0")

TOWN OF CALEDON  
BUILDING  
RECEIVED  
Jun 02, 2025  
File No.:

### LAYOUT SYMBOLS

#### SUPPLY

#### RETURN



### MECHANICAL NOTES

INSTALL ALL MATERIAL AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AND REQUIREMENTS

INSULATE SUPPLY AND RETURN DUCTS IN THE ATTIC SPACE WITH MINIMUM R12

INSULATE EXHAUST DUCTS IN THE ATTIC SPACE WITH MINIMUM R2.8

SEAL DUCT JOINTS IN THE ATTIC SPACE WITH CLASS A SEAL LEVEL

SEAL DUCT JOINTS IN CONDITIONED SPACES WITH CLASS C SEAL LEVEL

UNDERCUT DOORS FOR RETURN AIR

ALL DUCTS SHALL BE OF GALVANIZED STEEL

BRANCH SUPPLY DUCTS SHALL BE EQUIPPED WITH VOLUME CONTROL DAMPERS OR DEVICES

ALLOW FOR COMBUSTION AIR IF APPLICABLE

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### EQUIPMENT SPECIFICATIONS

**FURNACE** MINIMUM 96% AFUE HIGH EFFICIENCY GAS FURNACE  
MINIMUM 20,000 BTUH HEATING CAPACITY  
**MAXIMUM 30,000 BTU/H HEATING CAPACITY**

**HRV** MINIMUM 75% SRE HEAT RECOVERY VENTILATOR  
CAPABLE TO CONTROL FLOW TO WITHIN +/- 10%  
MINIMUM CAPACITY REQUIRED **60 CFM EXHAUST**  
COUPLED TO FORCED AIR HEATING SYSTEM

**H.W.T.** MINIMUM 0.8 EF DOMESTIC WATER HEATER

**EF** MINIMUM 100 CFM EXHAUST FAN

#### ABBREVIATIONS

L.W. LOW WALL      Th. THERMOSTAT      S.A. SUPPLY AIR

R.A. RETURN AIR      CFM CUBIC FEET PER MINUTE

Ⓢ SMOKE ALARM      Ⓒ CARBON MONOXIDE DETECTOR

#### WALL DETAILS

<p>W1 1/2" REGULAR GYPSUM BOARD 2" X 4" STUD WALL AT 16" O.C. 1/2" REGULAR GYPSUM BOARD 2" X 4" SINGLE TOP PLATE 2" X 4" SINGLE BOTTOM PLATE</p>	<p>W2 1/2" REGULAR GYPSUM BOARD 2" X 6" STUD WALL AT 16" O.C. 1/2" REGULAR GYPSUM BOARD 2" X 6" SINGLE TOP PLATE 2" X 6" SINGLE BOTTOM PLATE</p>
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#### HEADERS/LINTEL

<p>H1 WOOD HEADER MINIMUM 2 PLY 2X8 SPF GRADE NUMBER 1 OR 2 MINIMUM 38MM END BEARING</p>	<p>H2 WOOD HEADER MINIMUM 2 PLY 2X6 SPF GRADE NUMBER 1 OR 2 MINIMUM 38MM END BEARING</p>
<p>L1 STEEL LINTEL (MASONRY VENEER SUPPORT) MINIMUM 89MM X 89MM X 6.4MM MINIMUM 150MM END BEARING EVEN AND LEVEL BEARING ON BOTH SIDES SHALL BEAR ON MASONRY, CONCRETE OR STEEL</p>	

**ENTRANCE** 810mm      **DOORS** ALL DOORS MIN. HEIGHT IS 1980mm

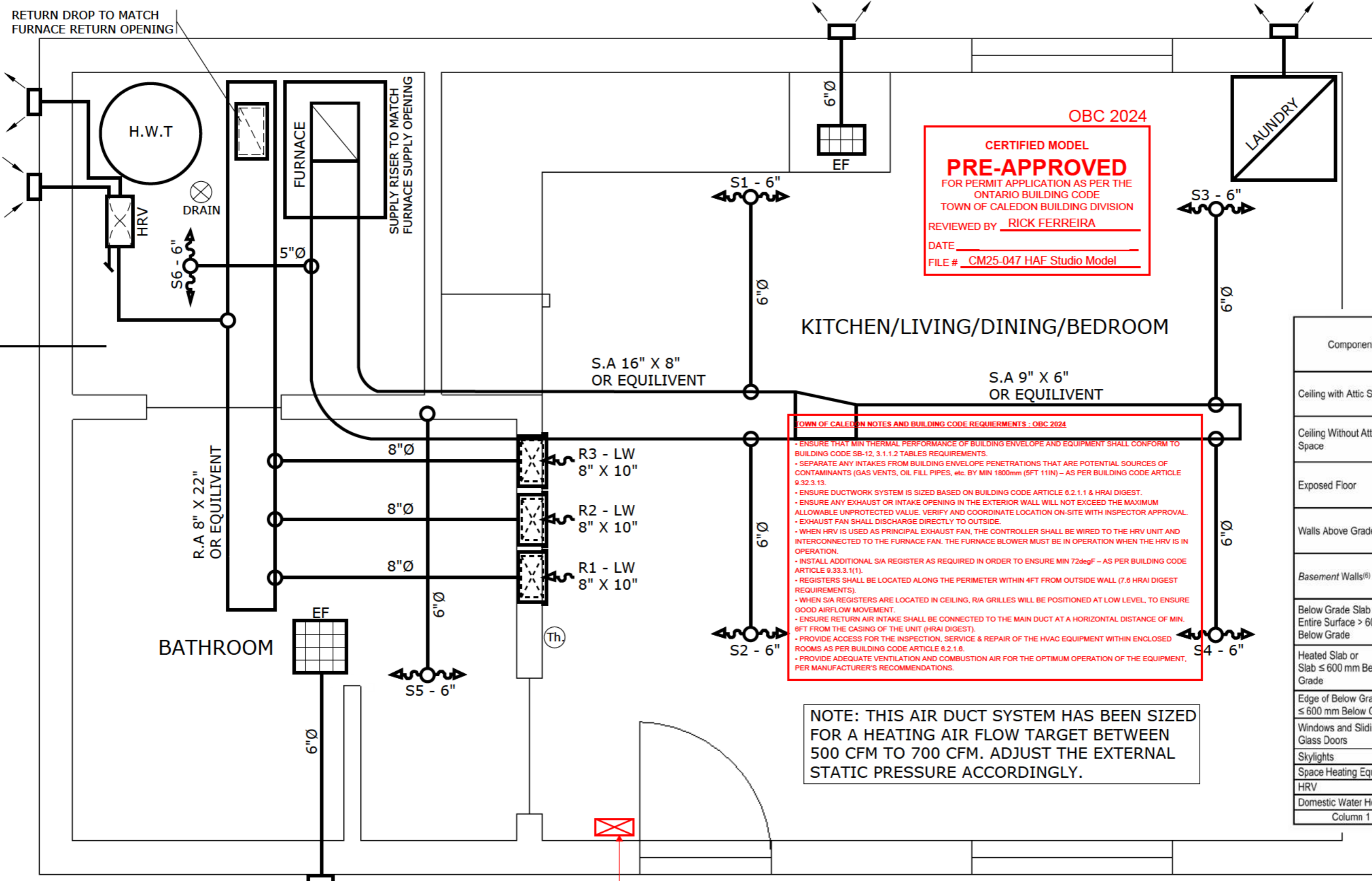
UTILITY ROOM	810mm	BEDROOMS	810mm
STORAGE/CLOSET	610mm	BATHROOM	610mm

NOTE: ALL DOORS TO SWING ON VERTICAL AXIS AS REQUIRED BY THE 2024 OBC.

### CERTIFIED MODEL PROGRAM

#### NOTES AND SCHEDULES

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**TOWN OF CALEDON NOTES AND BUILDING CODE REQUIREMENTS - OBC 2024**

- ENSURE THAT MIN THERMAL PERFORMANCE OF BUILDING ENVELOPE AND EQUIPMENT SHALL CONFORM TO BUILDING CODE SB-12, 3.1.1.2 TABLES REQUIREMENTS.
- SEPARATE ANY INTAKES FROM BUILDING ENVELOPE PENETRATIONS THAT ARE POTENTIAL SOURCES OF CONTAMINANTS (GAS VENTS, OIL FILL PIPES, etc. BY MIN 1800mm (5FT 11IN) - AS PER BUILDING CODE ARTICLE 9.32.3.13.
- ENSURE DUCTWORK SYSTEM IS SIZED BASED ON BUILDING CODE ARTICLE 6.2.1.1 & HRAI DIGEST.
- ENSURE ANY EXHAUST OR INTAKE OPENING IN THE EXTERIOR WALL WILL NOT EXCEED THE MAXIMUM ALLOWABLE UNPROTECTED VALUE. VERIFY AND COORDINATE LOCATION ON-SITE WITH INSPECTOR APPROVAL.
- EXHAUST FAN SHALL DISCHARGE DIRECTLY TO OUTSIDE.
- WHEN HRV IS USED AS PRINCIPAL EXHAUST FAN, THE CONTROLLER SHALL BE WIRED TO THE HRV UNIT AND INTERCONNECTED TO THE FURNACE FAN. THE FURNACE BLOWER MUST BE IN OPERATION WHEN THE HRV IS IN OPERATION.
- INSTALL ADDITIONAL S/A REGISTER AS REQUIRED IN ORDER TO ENSURE MIN 72degF - AS PER BUILDING CODE ARTICLE 9.33.3.1(1).
- REGISTERS SHALL BE LOCATED ALONG THE PERIMETER WITHIN 4FT FROM OUTSIDE WALL (7.8 HRAI DIGEST REQUIREMENTS).
- WHEN S/A REGISTERS ARE LOCATED IN CEILING, R/A GRILLES WILL BE POSITIONED AT LOW LEVEL, TO ENSURE GOOD AIRFLOW MOVEMENT.
- ENSURE RETURN AIR INTAKE SHALL BE CONNECTED TO THE MAIN DUCT AT A HORIZONTAL DISTANCE OF MIN. 8FT FROM THE CASING OF THE UNIT (HRAI DIGEST).
- PROVIDE ACCESS FOR THE INSPECTION, SERVICE & REPAIR OF THE HVAC EQUIPMENT WITHIN ENCLOSED ROOMS AS PER BUILDING CODE ARTICLE 6.2.1.8.
- PROVIDE ADEQUATE VENTILATION AND COMBUSTION AIR FOR THE OPTIMUM OPERATION OF THE EQUIPMENT, PER MANUFACTURER'S RECOMMENDATIONS.

**NOTE: THIS AIR DUCT SYSTEM HAS BEEN SIZED FOR A HEATING AIR FLOW TARGET BETWEEN 500 CFM TO 700 CFM. ADJUST THE EXTERNAL STATIC PRESSURE ACCORDINGLY.**

Component	Thermal Values <sup>(6)</sup>	
	A1	
Ceiling with Attic Space	Min. Nominal R <sup>(1)</sup>	60
	Max. U <sup>(2)</sup>	0.017
	Min. Effective R <sup>(2)</sup>	59.22
Ceiling Without Attic Space	Min. Nominal R <sup>(1)</sup>	31
	Max. U <sup>(2)</sup>	0.036
	Min. Effective R <sup>(2)</sup>	27.65
Exposed Floor	Min. Nominal R <sup>(1)</sup>	31
	Max. U <sup>(3)</sup>	0.034
	Min. Effective R <sup>(3)</sup>	29.80
Walls Above Grade	Min. Nominal R <sup>(1)</sup>	22
	Max. U <sup>(3)</sup>	0.059
	Min. Effective R <sup>(3)</sup>	17.03
Basement Walls <sup>(6)</sup>	Min. Nominal R <sup>(1)</sup>	20 ci
	Max. U <sup>(4)</sup>	0.047
	Min. Effective R <sup>(4)</sup>	21.12
Below Grade Slab Entire Surface > 600 mm Below Grade	Min. Nominal R <sup>(1)</sup>	—
	Max. U <sup>(4)</sup>	—
	Min. Effective R <sup>(4)</sup>	—
Heated Slab or Slab ≤ 600 mm Below Grade	Min. Nominal R <sup>(1)</sup>	10
	Max. U <sup>(4)</sup>	0.090
	Min. Effective R <sup>(4)</sup>	11.13
Edge of Below Grade Slab ≤ 600 mm Below Grade	Min. Nominal R <sup>(1)</sup>	10
	Max. U <sup>(5)</sup>	0.28
Windows and Sliding Glass Doors	Energy Rating	25
	Max. U <sup>(5)</sup>	0.49
Skylights	Max. U <sup>(5)</sup>	0.49
Space Heating Equipment	Min. AFUE	96%
HRV	Min. SRE	75%
Domestic Water Heater <sup>(7)</sup>	Min. EF	0.80
Column 1	2	3

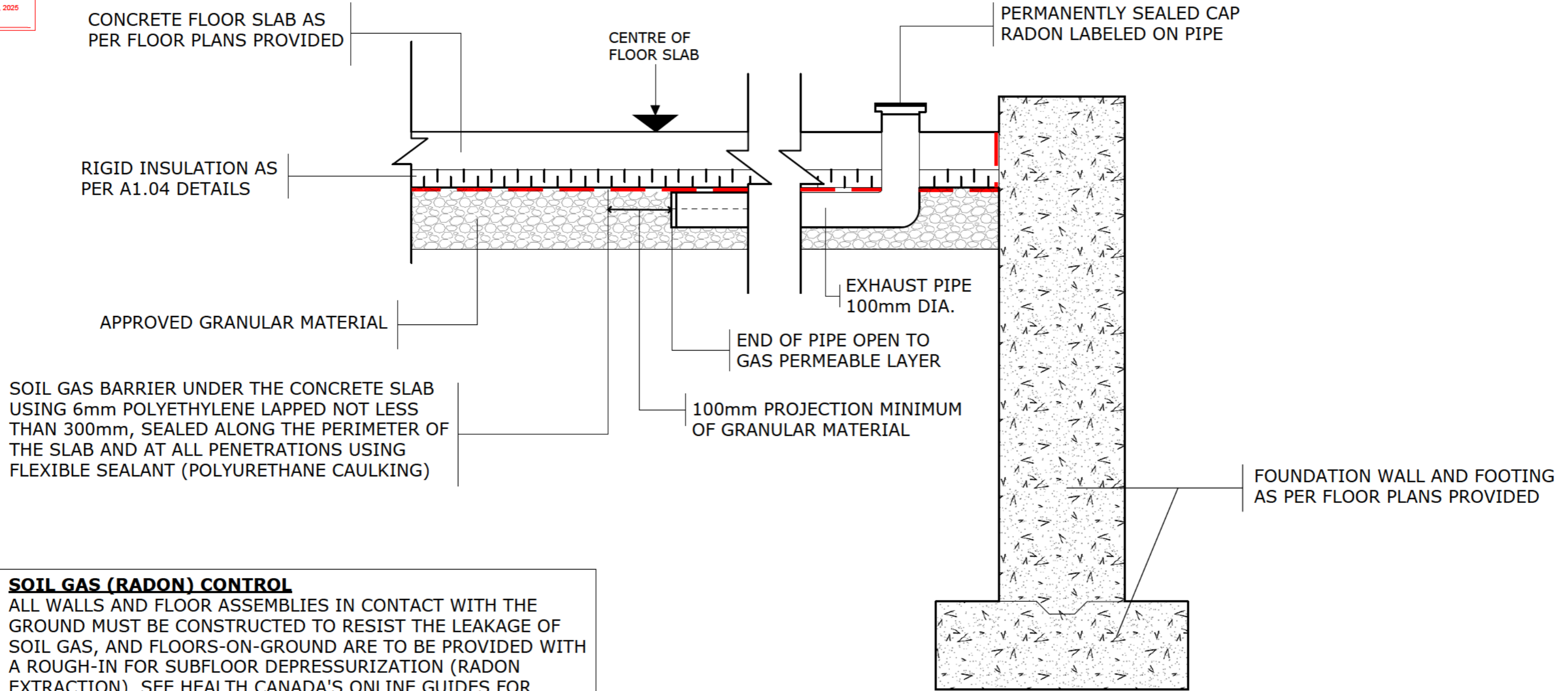
REFER TO DRAWING M1.02 FOR RADON GAS DEPRESSURIZATION ROUGH-IN DETAILS REQUIRED BY 9.13.4.3. OF THE 2024 ONTARIO BUILDING CODE

PROVIDE A LOW WALL SUPPLY REGISTER WHERE THE SLAB EDGE IS BELOW 600mm COORDINATE THE LOCATION ON SITE.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE MECHANICAL NOTES, SYMBOLS AND ABBREVIATIONS PROVIDED ON DRAWING GN1.01

**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

**MECHANICAL LAYOUT**  
SCALE: 1:24 (1/2" = 1'-0")



**SOIL GAS (RADON) CONTROL**  
ALL WALLS AND FLOOR ASSEMBLIES IN CONTACT WITH THE GROUND MUST BE CONSTRUCTED TO RESIST THE LEAKAGE OF SOIL GAS, AND FLOORS-ON-GROUND ARE TO BE PROVIDED WITH A ROUGH-IN FOR SUBFLOOR DEPRESSURIZATION (RADON EXTRACTION). SEE HEALTH CANADA'S ONLINE GUIDES FOR COMPLETION OF THE SUBFLOOR DEPRESSURIZATION SYSTEM.

**2024 OBC - 9.13.4.3. EFFECTIVE DEPRESSURIZATION**  
TO ALLOW EFFECTIVE DEPRESSURIZATION OF THE SPACE BETWEEN THE AIR BARRIER AND THE GROUND, THE EXTRACTION OPENING (PIPE) SHOULD NOT BE BLOCKED AND SHOULD BE ARRANGED SUCH THAT THE AIR CAN BE EXTRACTED FROM THE ENTIRE SPACE BETWEEN THE AIR BARRIER AND THE GROUND. THIS WILL ENSURE THAT THE EXTRACTION SYSTEM CAN MAINTAIN A NEGATIVE PRESSURE UNDERNEATH THE ENTIRE FLOOR.

OBC 2024

CERTIFIED MODEL  
**PRE-APPROVED**  
FOR PERMIT APPLICATION AS PER THE  
ONTARIO BUILDING CODE  
TOWN OF CALEDON BUILDING DIVISION  
REVIEWED BY RICK FERREIRA  
DATE: \_\_\_\_\_  
FILE # CM25-047 HAF Studio Model

PLEASE NOTE THAT A COMPLETED DESIGNER SCHEDULE 1: DESIGNER INFORMATION FORM IS REQUIRED AT THE TIME OF SUBMITTING A REPEAT BUILDING APPLICATION.

**CERTIFIED MODEL PROGRAM - STUDIO MODEL**

RADON SUBFLOOR DEPRESSURIZATION ROUGH-IN  
SCALE: 1:16 (3/4" = 1'-0")

### 1. PLUMBING MATERIALS & EQUIPMENTS:

- A 'T' fitting shall not be used in a drainage system except to connect a vent pipe. [7.2.4.1.]
- A cross fitting shall not be used in a drainage system. [7.2.4.1.]
- No double Y, double TY, double T or double waste fitting shall be installed in a nominally horizontal soil or waste pipe. [7.2.4.4.]

### 2. DRAINAGE SYSTEM:

- Every sanitary drainage system and storm drainage system shall be provided with cleanouts that will permit cleaning of the entire system. [7.4.7.1.(1)]
- A cleanout fitting shall be provided on the upstream side and directly over every running trap, horizontal soil or waste pipe. [7.4.7.1.(2)]
- Every sanitary building drain or storm building drain shall be provided with a cleanout fitting that is located as close as practical to the place where the drain leaves the building. [7.4.7.1.(6)]
- Every soil or waste stack shall be provided with a cleanout fitting at the bottom of the stack. [7.4.7.1.(7)]
- A cleanout shall be installed on a fixture drain serving a kitchen sink. [7.4.7.1.(10)]
- Sanitary units, bathtubs and shower baths shall not be installed adjacent to wall and floor surfaces that are pervious to water. [7.4.3.1.(1)]
- Every fixture shall be protected by a separate trap. [7.4.5.1.]
- Provision shall be made for maintaining the trap seal of a floor drain by the use of a trap seal primer. [7.4.5.5.]
- Every sanitary building drain and every sanitary building sewer shall be not less than NPS 4. [7.4.9.4.(1)]
- There shall be no unused open ends in a drainage system and dead ends shall be so graded that water will not collect in them. [7.4.6.1.(3)]
- Where the sump or tank receives sanitary sewage, it shall be water and air-tight and shall be vented. [7.4.6.3.(2)]
- The discharge pipe from every pumped sanitary sewage pump shall be equipped with a union, a check valve and a shut-off valve installed in that sequence in the direction of discharge. [7.4.6.3.(9)]
- A subsoil drainage pipe that drains into a sanitary drainage system that is subject to surcharge shall be connected in such a manner that sewage cannot back up into the subsoil drainage pipe. [7.4.6.4.(5)]
- The developed length of every fixture outlet pipe shall not exceed 1200mm. [7.4.8.2.(1)]
- Where clothes washers do not drain to a laundry tray, the trap inlet shall be not less than NPS 2 and be fitted with a vertical standpipe that is not less than 600mm long measured from the trap weir and terminates above the flood level rim of the clothes washer. [7.4.9.3.(3)]

### 3. VENTING SYSTEM:

- Every trap shall be vented. [7.5.1.1.]
- Every sanitary building drain shall terminate at its upstream end in a stack of at least NPS 3 in size. [7.5.1.1.]
- A stack shall be a soil stack if one is available and may be a vent stack or waste stack that provides at least NPS 3 stack vent and that goes to open air above the roof, either directly or through a header. [7.5.7.2.(3)]
- Every sump or tank that receives sanitary sewage shall be provided with a vent pipe that is connected to the top of the sump or tank. [7.5.5.1.]

### 4. POTABLE WATER:

- Every pressure vessel that is part of a plumbing system or connected to a plumbing system shall be equipped with a pressure relief valve designed to open when the water pressure in the tank reaches the rated working pressure of the tank, and so located that the pressure in the tank shall not exceed 1100 kPa or one-half the maximum test pressure sustained by the tank, whichever is the lesser. [7.6.1.7.(1)]
- Every fixture supplied with separate hot and cold water controls shall have the hot water control on the left and the cold on the right. [7.6.1.1.(1)]
- A building control valve shall be provided on every water service pipe at the location where the water service pipe enters the building. [7.6.1.3.(1)]
- Every water closet shall be provided with a shut-off valve on its water supply pipe. [7.6.1.3.(4)]
- Every water pipe that supplies a hot water tank, pressure vessel, plumbing appliance or water using device shall be provided with a shut off valve located close to the tank, pressure vessel, plumbing appliance or water using device. [7.6.1.3b.]
- Every pipe that passes through an exterior wall to supply water to the exterior of the building shall be provided with a frost-proof hydrant with a separate shut-off valve or a stop-and-waste cock located inside the building and close to the wall. [7.6.1.4.(1)]
- No water system between the point of connection with the water service pipe or the water meter and the first branch that supplies a water heater shall be less than NPS ¾. [7.6.3.4.(4)]
- Every water service pipe shall not be less than NPS ¾. [7.6.3.4.(1)]
- A check valve shall be installed at the building end of the water service pipe where the pipe is made of plastic that is suitable for cold water use only. [7.6.1.5.(1)]

### 5. HOT WATER TEMPERATURE CONTROL:

- Shower valves shall be pressure balanced or thermostatic mixing valves. a pressure balanced or thermostatic mixing valve shall not be required for showers where the hot water supply for showers, are controlled by a master thermostatic mixing valve. Pressure balanced or thermostatic mixing valves shall be designed such that the outlet temperature does not exceed 49 °c (120 °f). [7.2.10.7b]

## Energy Efficiency Compliance: SB-12: Zone 1 - Package ~~A2~~ A1

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REVISION 01 - APRIL 2025



#### 1. EXCAVATION & BACKFILL:

- Excavation shall be undertaken in such a manner so as to prevent damage to existing structures, adjacent property, and utilities. [9.12.1.4.(1)]
- The topsoil and vegetable matter in unexcavated areas under a building shall be removed. [9.12.1.1.(1)]
- If termites are known to exist, all stumps, roots, and wood debris shall be removed to a minimum depth of 300mm in excavated areas under a building, and the clearance between untreated structural wood elements and the ground shall be no less than 450mm. [9.12.1.1.(2)]
- The bottom of excavations for foundations shall be free of all organic material. [9.12.1.1.(3)]
- Excavations shall be kept free of standing water. [9.12.1.2.]
- The bottom of excavations shall be kept from freezing throughout the entire construction period. [9.12.1.3.]
- Material shall not be placed nor shall equipment be operated or placed in or adjacent to an excavation in a manner that may endanger the integrity of the excavation or its supports. [9.12.1.4.(2)]
- Backfill within 600mm of the foundation walls shall be free of deleterious debris and boulders over 250mm in diameter. [9.12.3.3.(1)]

#### 2. DAMPPROOFING & DRAINAGE:

- In normal soil conditions, the exterior surfaces of foundation walls enclosing basements and crawl spaces shall be dampproofed. Where hydrostatic pressure occurs, a waterproofing system is required. [9.13.1.1.]
- Masonry foundation walls shall be parged with 6mm of mortar covered over the footing prior to dampproofing. [9.13.2.3.]
- 100mm dia. foundation drains shall be laid on level, undisturbed ground adjacent to the footings at or below the top of the basement slab or crawl space floor and shall be covered with 150mm of crushed stone. Foundation drains shall drain to a storm sewer, drainage ditch, dry well, or sump. [9.14.3.2., 9.14.3.3., 9.14.5.1.]
- ~~Window wells shall be drained to the footing level or to a ditch or sump pump. [9.14.6.3.]~~
- Downspouts not directly connected to a storm sewer shall have extensions to carry water away from the building, and provisions shall be made to prevent soil erosion. [9.26.18.2.]
- ~~Concrete slabs in attached garages shall be sloped to drain to the exterior. [9.36.2.2.]~~
- The building site shall be graded so that surface, sump, and roof drainage will not accumulate at or near the building and will not adversely affect adjacent properties. [9.14.6.1.]

#### 3. SOIL GAS CONTROL:

- Dwelling units and buildings containing residential occupancies shall be provided with the rough-in for a radon extraction system, unless the space between the air barrier system and the ground is designed to be accessible for the future installation of a subfloor depressurization system. [9.13.4.2.]
- Rough-in for subfloor depressurization shall consist of a gas-permeable layer, an inlet and an outlet in the conditioned space, or clean granular material and a pipe not less than 100mm installed through the floor. [9.13.4.3.]

#### 4. FOOTINGS:

- Minimum 15 MPa poured concrete. [9.15.2.2.]
- Minimum 1200mm below finished grade. [9.12.2.2.]
- Footings shall be founded on natural undisturbed soil, rock, or compacted granular fill with a minimum bearing capacity of 75 kPa ~~and 100 kPa for ICF.~~ [9.15.3.2., 9.15.1.1.]

#### 5. FOOTING SIZES:

Floors Supported	Supporting Ext. Wall	Supporting Int. Wall	Column Area
1	250mm	<del>200mm</del>	<del>0.40m<sup>2</sup></del>
<del>2</del>	<del>350mm</del>	<del>350mm</del>	<del>0.75m<sup>2</sup></del>
<del>3</del>	<del>450mm</del>	<del>500mm</del>	<del>1.00m<sup>2</sup></del>

- Increase exterior footing width by 65mm for each storey of brick veneer supported, ~~by 130mm for each storey of masonry and by 150mm for ICF.~~
- ~~Increase interior footing width by 100mm for each storey of masonry above footing, and by 100mm for each storey of masonry above footing, and by 100mm for each 2700mm of wall height above 5500mm.~~
- The projection of an unreinforced footing beyond the wall supported shall not be greater than its thickness.
- ~~Column area based on max. 3000mm spacing.~~

#### 6. STEP FOOTINGS:

- Step footings must have a maximum of 600mm vertical rise and a minimum of 600mm horizontal run. [9.15.3.9.]

#### 7. FOUNDATION WALLS:

- To be poured concrete, ~~unit masonry, ICF, or preserved wood (see drawings for type and thickness).~~ [9.15.1.1.]
- Dampproofing shall consist of one of the following: a vapour-resistant coating, a cold-fluid-applied or hot-rubberized bituminous dampproofing membrane, a liquid-applied or spray-applied asphalt-based emulsion dampproofing, or a Type iii hot-applied asphalt. [9.4.4.2.]
- A drainage layer is required on the outside of a foundation wall where the interior insulation extends more than 900mm below exterior grade. A drainage layer shall consist of: minimum 19mm mineral fiber insulation with a minimum density of 57 kg/m<sup>3</sup>, minimum 100mm of free-draining granular material, or an approved system that provides equivalent performance. [9.14.2.1.]
- Foundation wall to extend a minimum of 150mm above finished ground level. [9.15.4.6.]

#### 8. CONCRETE FLOOR SLABS:

- ~~Garage, carport, and exterior slabs and steps shall be 32 MPa concrete with 5-8% air entrainment. [9.2.1.6.]~~
- Basement slab: 25 MPa concrete, minimum 75mm thick, placed on a minimum 100mm of coarse, clean granular material. [9.16.4.3., 9.16.2.1.]
- All fill other than coarse clean material placed beneath concrete slabs shall be compacted to provide uniform support. [9.16.2.2.(3)]

#### 9. MASONRY WALLS:

- ~~Where constructed of 90mm brick, wall shall be bonded with a header course every 600mm o/c vertically and horizontally and 900mm o/c for block or tile. [9.20.9.3.]~~
- ~~Provide 50mm solid masonry or concrete-filled top course or continuous 38x89 wood plate under roof and floor framing members. [9.20.8.1.]~~
- ~~Provide 190mm solid masonry under beams and columns. [9.20.8.4.]~~
- ~~Masonry wall to be tied to each tier of joists with 40mm x 4.76mm corrosion-resistant steel straps, keyed a minimum of 100mm into masonry when joists are parallel to the wall, ties are to extend across at least 3 joists @ 2000mm o.c. [9.20.11.]~~
- ~~Inside of wall to be parged and covered with no. 15 breather-type asphalt paper. [9.20.13.9.]~~
- ~~For reduced foundation walls to allow a brick facing while maintaining lateral support, tie minimum 90mm brick to minimum 90mm backup block with corrosion resistant ties at least 17.8mm<sup>2</sup> in cross sectional area spaced 400mm vertically and 900mm horizontally, with joints completely filled with mortar. [9.20.9.4.]~~
- ~~Masonry over openings shall be supported on corrosion resistant or prime painted steel lintels with a minimum of 150mm end bearing. [9.20.5.2.]~~

#### 10. MASONRY VENEER:

- Minimum 70mm thick if joints are not raked and 90mm thick if joints are raked [9.20.6.4.]
- Minimum 25mm air space to sheathing [9.20.6.4.]
- Provide weep holes @ 800mm o.c. at the bottom of the cavity and over doors and windows [9.20.13.8.]
- Direct drainage through weep holes with 0.5mm poly flashing extending a minimum of 150mm up behind the sheathing paper [9.20.13.6.]
- Veneer ties: minimum 0.76mm thick x 22mm wide corrosion-resistant straps spaced @ 500mm vertically and 600mm horizontally [9.20.9.5.]
- Fasten ties with corrosion-resistant 3.18mm diameter screws or spiral nails which penetrate at least 30mm into studs [9.20.9.5.]

### Energy Efficiency Compliance: SB-12: Zone 1 - Package ~~A2~~ A1

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### 11. WOOD FRAME CONSTRUCTION:

- All lumber shall be spruce-pine-fir no. 1 & 2, and shall be identified by a grade stamp.
- Maximum moisture content: 19% at the time of installation. [9.3.2.5.]
- Wood framing members supported on concrete in direct contact with soil shall be separated from the concrete with 0.05mm polyethylene or Type 'S' roll roofing. [9.17.4.3.]

### 12. WALLS:

- Exterior walls shall consist of: cladding, air barrier system lapped 100mm at joints, ~~25mm rigid insulation RSI 0.88 or~~, lumber, plywood, OSB, or gypsum sheathing, 38x140 studs @ 400mm o.c., ~~RSI 3.34 insulation,~~ 38x140 bottom plate, 38x140 double top plate [9.20.6.4.]
- ~~Interior loadbearing walls shall consist of: 38x89 studs @ 400mm o.c., 38x89 bottom plate and double 38x89 top plate, 38x89 mid-girts if not sheathed, 12.7mm gypsum board sheathing [9.20.6.4.]~~

### 13. FLOORS:

- ~~Refer to drawing S01d for floor joist size and spacing requirements [9.23.9.1.]~~
- ~~Joists to have a minimum of 38mm of end bearing [9.23.9.1.]~~
- ~~Joists shall bear on a sill plate fixed to the foundation with 12.7mm anchor bolts @ 2400mm o.c. [9.23.6.1.(2)]~~
- ~~Header joists between 1200mm and 3200mm in length shall be doubled. Header joists exceeding 3200mm shall be sized by calculations [9.23.9.5.]~~
- ~~Trimmer joists shall be doubled when the supported header is between 800mm and 2000mm. Trimmer joists shall be sized by calculations when the supported header exceeds 2000mm [9.23.9.6.]~~
- ~~38x38 cross-bridging required not more than 2400mm from each support and from other rows of bridging [9.23.9.4.]~~
- ~~Joists shall be supported on joist hangers at all flush beams, trimmers, and headers [9.23.9.2.]~~
- ~~Non-loadbearing partitions shall be supported on a joist or on blocking between joists [9.23.9.8.]~~
- ~~Refer to drawing S01d for subflooring requirements [9.23.9.1.]~~

### 14. ROOF & CEILINGS:

- ~~Refer to drawing S01d for rafter, roof joist, and ceiling joist size and spacing requirements [9.23.14.6.]~~
- Hip and valley rafters shall be not less than 50 mm greater in depth than the common rafters and not less than 38 mm thick, actual dimension [9.23.14.6.]
- ~~38x89 collar ties @ rafter spacing with 19x89 continuous brace at mid-span if the collar tie exceeds 2400mm in length [9.23.14.7.]~~
- ~~Refer to drawing S01d for roof sheathing requirements [9.23.14.6.]~~

### 15. NOTCHING & DRILLING OF TRUSSES, JOISTS,

#### RAFTERS:

- Holes in floor, roof, and ceiling members must not exceed 1/4 the actual depth of the member and must be at least 50mm from the edges [9.23.5.1.]
- Notches in floor, roof, and ceiling members must be located on the top of the member within 1/2 the actual depth from the edge of bearing and must not exceed 1/3 the joist depth [9.23.5.2.]
- Wall studs may be notched or drilled provided that no less than 2/3 the depth of the stud remains, if load bearing, and 40mm if non-loadbearing [9.23.5.3.]
- ~~Roof truss members shall not be notched, drilled, or weakened unless accommodated in the design [9.23.5.5.]~~

### 16. ROOFING:

- Fasteners for roofing shall be corrosion-resistant [9.26.2.3.]
- Roofing nails shall penetrate through or at least 12mm into roof sheathing [9.26.2.3.]
- Every asphalt shingle shall be fastened with at least 4 nails for a 1000mm wide shingle (or 6 11mm staples) [9.26.7.4.]
- Eave protection shall extend 900mm up the roof slope from the edge and at least 300mm from the inside face of the exterior wall and shall consist of: Type M or Type S Roll Roofing laid with a minimum 100mm head and end laps cemented together, or glass fiber or polyester fiber coated base sheets, or self-sealing composite membranes consisting of modified bituminous-coated material, or no.15 saturated felt lapped and cemented [9.26.5.1., 9.26.5.2.]
- ~~Eave protection is not required for unheated buildings, for roofs exceeding a slope of 1 in 1.5, or where a low slope asphalt shingle application is provided [9.26.5.1.(2)]~~
- ~~Open valleys shall be flashed with 2 layers of roofing or 1 layer of sheet metal minimum 600mm wide [9.26.4.3.(5)]~~
- ~~Flashing shall be provided at the intersection of shingle roofs with exterior walls and chimneys [9.26.4.1.]~~
- Sheet metal flashing shall consist of not less than 1.73mm sheet lead, 0.33mm galvanized steel, 0.33mm copper, 0.35mm zinc, or, 0.48mm aluminum [9.26.4.2.]

### 17. COLUMNS, BEAMS & LINTELS:

- ~~Steel beams and columns shall be shop primed 350W steel [9.15.5.2.]~~
- Minimum 89mm end bearing for wood and steel beams, with 190mm solid masonry beneath the beam [9.15.5.2.]
- ~~Steel columns to have minimum outside diameter of 73mm and minimum wall thickness of 4.76mm [9.17.3.1.]~~
- ~~Wood columns for carports and garages shall be minimum 89mm x 89mm. In all other cases either 140mm x 140mm or 184mm round, unless calculations based on actual loads show lesser sizes are adequate. All columns shall be not less than the width of the supported member [9.35.4.2., 9.17.4.1.]~~
- ~~Masonry columns shall be a minimum of 290mm x 290mm or 240mm x 380mm [9.17.5.2.(1)]~~
- ~~Provide solid blocking the full width of the supported member under all concentrated loads [9.17.5.2.(1)]~~

### 18. INSULATION & WEATHERPROOFING:

- Ceiling with attic: RSI 10.56 (R60)
- ~~Roof without attic: RSI 5.46~~
- ~~Exposed floor: RSI 5.46~~
- Exterior walls: RSI 3.34 + 0.88 or **RSI 3.87 (R22)**
- ~~Basement walls: RSI 2.11 + 1.76 or (RSI 3.52)~~
- Slab on grade: RSI 1.76 [SB-12 Package A2] (R10)
- Insulation shall be protected with gypsum board or an equivalent interior finish, ~~except for unfinished basements where 0.15mm poly is sufficient for fiberglass type insulations.~~ [9.25.2.3.]
- Ducts passing through unheated space shall be made airtight with tape or sealant. [9.25.3.3.]
- Caulking shall be provided for all exterior doors and windows between the frame and the exterior cladding. [9.20.13.11.]
- Weatherstripping shall be provided on all doors and access hatches to the exterior, ~~except doors from a garage to the exterior.~~ [9.25.3.3.]
- Exterior walls, ceilings and floors shall be constructed so as to provide a continuous barrier to the passage of water vapour from the interior and to the leakage of air from the exterior. [9.25.3.1.]
- ~~Insulation shall be installed over the full height of foundation walls enclosing a basement or heated crawl space. [9.25.2.3.(4)]~~

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#### 19. NATURAL VENTILATION:

- Every roof space above an insulated ceiling shall be ventilated with unobstructed openings equal to not less than 1/300 of the insulated ceiling area. [9.19.1.2.(1)]
- Insulated roof spaces not incorporating an attic shall be ventilated with unobstructed openings equal to not less than 1/150 of the insulated ceiling area. [9.19.1.2.(2)]
- Roof vents shall be uniformly distributed with a minimum of 25% at the top and 25% at the bottom of the space and designed to prevent the entry of rain, snow, or insects. [9.19.1.2.(3)]
- ~~Unheated crawl spaces shall be provided with no less than 0.1m<sup>2</sup> of ventilation for each 50m<sup>2</sup>. [9.18.3.1.]~~
- Minimum natural ventilation areas, where mechanical ventilation is not provided, are: bathrooms 0.09m<sup>2</sup>, other rooms 0.28m<sup>2</sup>, ~~unfinished basement 0.2% of floor area.~~ [Table 9.32.2.2.]

#### 20. DOORS & WINDOWS:

- ~~Every floor level containing a bedroom and not served by an exterior door shall contain at least one window having an unobstructed open area of 0.35m<sup>2</sup> and no dimension less than 380mm, which is openable from the inside without tools. Maximum sill height 1000mm for finished floors above grade. [9.9.10.1.]~~
- Exterior house doors and windows within 2000mm of grade must resist forced entry and be fitted with a deadbolt lock. [9.7.5.3.]
- The principal entry doors shall have either a door viewer, transparent glazing, or a sidelight. [9.7.2.1]

#### 21. EXTERIOR WALLS:

- No windows or other unprotected openings are permitted in exterior walls less than 1200mm from property lines ~~[9.10.14.4.]~~ **[9.10.15.4.]**
- ~~15.0mm type X fire rated drywall shall be installed on the inside face of attached garage exterior walls and gable ends of roofs which are less than 1200mm and not less than 600mm from property lines [9.10.14.4.]~~ **[9.10.15.5.]**
- ~~Non-combustible cladding shall be installed on all exterior walls less than 600mm from property lines [9.10.14.4.] and cladding shall conform to 9.10.15.5.(2)~~

#### 22. CERAMIC TILE:

- When ceramic tile is applied to a mortar bed with adhesive, the bed shall be a minimum of 12.5mm thick and reinforced with galvanized diamond mesh lath, applied over polyethylene on subflooring on joists at no more than 400mm o.c. with at least 2 rows cross bridging [9.23.15.5.(3)]

#### 23. ACCESS TO ATTICS & CRAWL SPACES:

- Access hatch minimum 545mm x 588mm to be provided to every roof space which is 10m<sup>2</sup> or more in area and more than 600mm in height [9.19.2.1.]
- ~~Access hatch minimum 500mm x 700mm to be provided to every crawl space serving a house. Other than in a house, access hatch must be the minimum of 550mm by 900mm [9.18.2.1.]~~

#### 24. GARAGE GASPROOFING:

- ~~Walls and ceilings of attached garages shall be constructed and sealed so as to provide an effective barrier to exhaust fumes [9.10.9.10.(4)]~~
- ~~All plumbing and other penetrations through the walls and ceiling shall be caulked [9.10.9.10.(5)]~~
- ~~Doors between the dwelling and attached garage may not open into a bedroom and shall be weatherstripped and have a self-closer [9.10.13.15.]~~

#### 25. ALARMS & DETECTORS:

- At least one smoke alarm shall be installed on each floor, in each bedroom ~~and in the basement level 900mm or more above an adjacent level.~~ [9.10.19.1.]
- Smoke alarms shall be interconnected wirelessly or by hard-wiring and installed on or near the ceiling and provided with a battery backup [9.10.19.5.]
- All smoke alarms to have a visual signaling component conforming to NFPA 72. visual device to be interconnected to smoke alarm [9.10.19.1.(2)]
- Carbon monoxide alarms shall be installed in each residential suite with fuel-burning or forced-air fuel burning appliance, ~~or an attached garage.~~ [9.32.3.9a.]
- Carbon monoxide alarms shall be installed in each sleeping room, adjacent to each sleeping room, and on each storey without a sleeping room [9.32.3.9a.]

#### 26. STAIRS:

- Stair dimensions:
- Maximum rise: 200mm,
- Minimum run: 255mm,
- Minimum tread: 280mm,
- ~~Minimum headroom: 1950mm,~~
- ~~Clear headroom under beams and ducting in secondary suite: 1850mm, minimum width: 860mm [9.8.4.1., 9.8.2.2.]~~
- ~~Curved stairs shall have a minimum run of 150mm at any point and a minimum average run of 300mm [9.8.4.3.]~~
- ~~Winders which converge to a point in stairs must turn through an angle of no more than 90° with no less than 30° or more than 45° per tread. Sets of winders must be separated by 1200mm along the run of the stair [9.8.4.6.]~~
- A landing is required at the top of any stair leading to the principal entrance to a dwelling and other exterior entrances with more than 3 risers [9.8.6.2.]
- Exterior concrete stairs with more than 2 risers require foundations [9.8.9.2.]

#### 27. HANDRAIL & GUARDS:

- A handrail is required for interior stairs containing more than 2 risers and exterior stairs containing more than 3 risers. [9.8.7.1.(3)]
- Guards are required around every accessible surface more than 600mm above an adjacent level and where the adjacent surface has a slope more than 1:2 [9.8.8.1.(1)]
- Interior and exterior guards minimum of 900mm high. [9.8.8.3.]
- ~~Exterior guards must be 1070mm high where the height above the adjacent surface exceeds 1000mm [9.8.8.3.]~~
- Guards must have openings smaller than 100mm and no member between 140mm and 900mm that facilitates climbing. [9.8.8.5., 9.8.8.6.]
- The triangular openings formed by stair risers, stair treads and the bottom element of a required guard shall be of a size that prevents the passage of a 150mm diam sphere. [9.8.8.5.(2)]

#### 28. PLUMBING:

- Every dwelling requires a kitchen sink, lavatory, water closet, bathtub or shower stall, and the installation or availability of laundry facilities. [9.31.4.1., 9.31.4.1a.]

#### 29. ELECTRICAL:

- An exterior light controlled by an interior switch is required at every entrance. [9.34.2.1.]
- A light controlled by a switch is required in every kitchen, bedroom, living room, utility room, ~~laundry room,~~ dining room, bathroom, ~~vestibule,~~ hallway, ~~garage,~~ and ~~carport.~~ A switched receptacle may be provided instead of a light in bedrooms and living rooms. [9.34.2.2.]
- ~~Stairs shall be lighted, and except where serving an unfinished basement shall be controlled by a 3-way switch at the head and foot of the stairs. [9.34.2.3.]~~
- ~~Basements require a light for each 30m<sup>2</sup>, controlled by a switch at the head of the stairs. [9.34.2.4.]~~

#### 30. MECHANICAL VENTILATION:

- A mechanical ventilation system is required with a total capacity at least equal to the sum of: 10.0 L/s for each ~~basement and~~ master bedroom, 5.0 L/s for each additional room. [Table 9.32.2.3.]
- A principal dwelling exhaust fan shall be installed and controlled by a centrally located switch identified as such. [9.32.3.3.]
- A supplemental exhaust fan with a rated capacity not less than 50 L/s shall be installed in the kitchen, and 25 L/s in the bathrooms. [9.32.3.7.]
- A Heat Recovery Ventilator (HRV) may be employed in lieu of exhaust to provide ventilation. An HRV is required if any solid fuel-burning appliances are installed. [9.32.3.3.]
- Supply air intakes must be located to avoid contamination from exhaust outlets. [9.32.3.13.]

### Energy Efficiency Compliance: SB-12: Zone 1 - Package ~~A2~~ A1

**Note:** Under the Building Code Act, the local municipality is the authority having jurisdiction for enforcing the act and its regulations. It is the responsibility of the owner/designer to ensure that all designs submitted for a permit are in accordance with the Building Code Act, Building Code and any other Applicable Law.

REVISION 01 - APRIL 2025

Page 57

<b>For use by Principal Authority</b>				<b>CERTIFIED MODEL</b> <b>PRE-APPROVED</b> FOR PERMIT APPLICATION AS PER THE ONTARIO BUILDING CODE TOWN OF CALEDON BUILDING DIVISION REVIEWED BY: <u>RICK FERREIRA</u> DATE: <u>Jun 27, 2025</u> FILE #: <u>CM25-04 / HAP-Studio Model Suite</u>									
Date received:			Received by:										
Roll number:			Permit number(s):										
<b>A. Applicant</b>													
Name of Applicant													
Property Address			City/Town		Province								
Description of current use or activities													
<b>B. Building Type</b>				<b>C. Building Drains / Sewers</b>									
<b>Residential:</b>		<b>Non-Residential:</b>		<b>Water:</b>	<b>Sewage:</b>								
New / Addition	<input checked="" type="checkbox"/>	New Indust. / Comm.	<input type="checkbox"/>	Municipal	<input type="checkbox"/>								
Alter. / Renovation	<input type="checkbox"/>	Alter. Indust. Comm.	<input type="checkbox"/>	Private (Well)	<input type="checkbox"/>								
Secondary Suite	<input type="checkbox"/>	Institutional / Assembly	<input type="checkbox"/>	Private	<input type="checkbox"/>								
Apartment Building	<input type="checkbox"/>												
<b>Complete Section D or E</b>													
<b>D. Residential/ Part 9 Small Buildings</b>				<b>E. Part 3 Buildings / Part 9 Small Buildings</b>									
<i>Specify number of existing/relocated and new fixtures</i>				<i>Specify size existing / proposed</i>									
Fixture or Device	Fixture Units	Qty.	Total Hydraulic Load	Service Type	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2">Inside</th> <th colspan="2">Outside</th> </tr> <tr> <th>Existing (in/mm)</th> <th>New (in/mm)</th> <th>Existing (in/mm)</th> <th>New (in/mm)</th> </tr> </table>	Inside		Outside		Existing (in/mm)	New (in/mm)	Existing (in/mm)	New (in/mm)
Inside		Outside											
Existing (in/mm)	New (in/mm)	Existing (in/mm)	New (in/mm)										
Bathroom Group (1 water closet, 1 lavatory, 1 bathtub)	3.6	1	3.6	Domestic Water									
Bidet	2	0	0.0	Sanitary Sewers									
Extra Shower (count if there is a bathtub and a separate shower in the bathroom)	1.4	0	0.0	Storm Sewers									
Bathroom Sink (only if more than 1 sink)	0.7	0	0.0	Fire Line									
Powder Room (1 water closet, 1 lavatory)	2.9	0	0.0										
Kitchen sink	1.4	1	1.4	<b>F. Miscellaneous Information</b>									
Kitchen sink (commercial)	4	0	0.0	Fixture Type	Number								
Dishwasher	1.4	1	1.4	Backflow Preventer									
Bar Sink	1	0	0.0	Drinking Fountains									
Laundry Tub	1.4	0	0.0	Water Closets (Flush Valve/Tank)									
Washing Machine	1.4	1	1.4	Urinals (Flush Valve/Tank)									
Hose Bibb 1/2" (residential)	2.5	0	0.0	Interceptors (Grease/Oil)									
Hose Bibb 3/4" (residential)	3	0	0.0	Hot Water Tank	1								
Hose Bibb 3/4" (commercial)	6	0	0.0	Sump Pump									
Water Closet Flush Tank	2.2	0	0.0	Other:									
Water Closet Flush Valve	6	0	0.0	Hydrants									
Urinal Flush Tank	3	0	0.0	Siamese Connections									
Urinal Flush Valve	5	0	0.0	Catch Basins									
Other:		0	0.0	Manholes									
<b>Total Fixture Units</b>		<b>4</b>	<b>7.8</b>	Roof Drains: Conventional (Provide Calculations)									
<b>Size of Existing Water Service (in/mm)</b>				Roof Drain Flow Control (Provide Declaration Form)									

Note:

1. A potable water system shall be designed, constructed and installed to conform to good engineering practice appropriate to the circumstances, such as that described in the ASHRAE Handbooks and ASPE Data Books.
2. No water system between the point of connection with the water service pipe or the water meter and the first branch that supplies a water heater that serves more than one fixture shall be less than 3/4" in size.
3. The minimum water pressure at the entry to the buildings is 200 kPa, and the total maximum length of the water system is 90m.
4. In a hot water distribution system of a developed length of more than 30m from the HWT to the farthest fixture or supplying more than 4 stories', the water temperature shall be maintained by, (a) recirculation, or (b) a self-regulating heat tracing system.
5. Where piping may be exposed to freezing conditions, it shall be protected from the effects of freezing.
6. If the existing water service is 1/2" or 5/8" in size it will be required to be replaced and upgraded in size to match the requirement of this data sheet.
7. The water pipe after the water meter shall be 1" in size and shall run to the branches for the hot water tank and for the water supply to each dwelling unit. (For 2 or 3 dwelling unit house)
8. Where both hot and cold water is supplied to fixtures in a house containing only one dwelling unit, the water service pipe is permitted to be a minimum 3/4" in size provided the total hydraulic load is not more than 26.4 fixture units.

## F. Declaration

\_\_\_\_\_ certify that:

The information contained in this form, attached plans, speciation's and other attached documentation is true to the best of my knowledge.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Applicant

Personal information contained on this form is collected under the authority of the *Municipal Freedom of Information and Protection of Privacy Act*, and will be used for the purpose of responding to your request. Questions about this collection should be directed to the Municipal Freedom of Information Co-ordinator, Town of Caledon, 6311 Old Church Road, Caledon, Ontario, L7C 1J6, 905.584.2272