

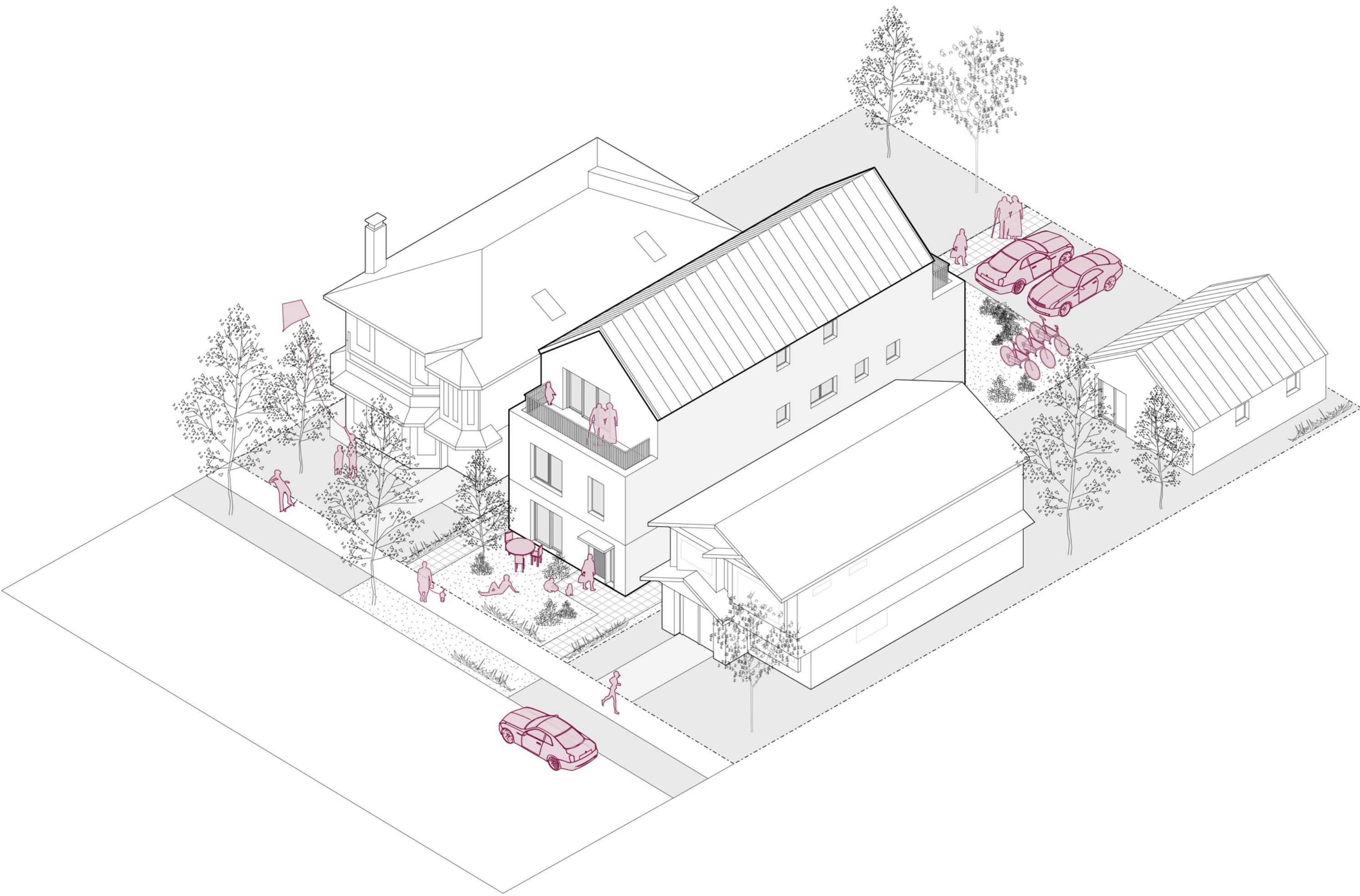


HOUSING DESIGN CATALOGUE BC - FOURPLEX 01

CMHC HOUSING DESIGN CATALOGUE

BC FOURPLEX 01

ARCHITECTURAL DRAWINGS



BUILDING DATA	
BUILDING FOOTPRINT	134.1 m² / 1444 R²
BUILDING HEIGHT	10.97 m /36' - 0"
STOREYS	3 STOREY
NUMBER OF UNITS	4
UNIT SUMMARY	
UNIT 1	1 BEDROOM, 1 BATHROOM, ADAPTABLE*
UNIT 2	1 BEDROOM, 1 BATHROOM, ADAPTABLE*
UNIT 3	3 BEDROOM, 2 BATHROOM
UNIT 4	3 BEDROOM, 2 BATHROOM
ADAPTABLE*: THIS UNIT CAN BE ADAPTED TO AN BCBC ACCESSIBLE UNIT WITH MODERATE EFFORT, MEANING WITHOUT SIGNIFICANT STRUCTURAL OR MECHANICAL MODIFICATIONS, AS DEFINED IN THE BRITISH COLUMBIA BUILDING CODE (BCBC) 2024. PLANS TITLED FLOOR PLAN - BCBC ADAPTABLE SHOW COMPLIANCE TO ADAPTABILITY REQUIREMENTS IN BCBC 2024 SECTION 3.8.5	

ARCHITECTURAL SHEET LIST	
A001	COVER SHEET
A002	EXTERIOR ASSEMBLIES SCHEDULE
A003	INTERIOR ASSEMBLIES SCHEDULE
A004	DOOR AND WINDOW SCHEDULE
A005	FIRE RATING DETAILS
A006	TYPICAL DETAILS
A007	TYPICAL DETAILS 2
A010	SITE PLAN & CODE MATRIX
A011	CODE - OPENINGS
A101	MAIN FLOOR PLAN
A101a	MAIN FLOOR PLAN - BCBC ADAPTABLE
A102	SECOND FLOOR PLAN
A103	THIRD FLOOR PLAN
A104	ROOF PLAN
A200	ELEVATIONS
A201	ELEVATIONS
A300	SECTIONS



DISCLAIMER

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ABBREVIATIONS	
ABBREVIATIONS MAY OR MAY NOT INCLUDE PERIOD PUNCTUATION. ABBREVIATIONS APPLY TO ARCHITECTURAL DOCUMENTS ONLY.	
ARCH	ARCHITECTURAL
ASHP	AIR SOURCE HEAT PUMP
BCBC	BRITISH COLUMBIA BUILDING CODE
BF	BARRIER FREE
C/C	CENTRE TO CENTRE
CL	CENTER LINE
CIV	CIVIL
DIA	DIAMETER
DIM	DIMENSION
DWG	DRAWING
ELEC	ELECTRICAL
ELEV	ELEVATION
EO	EQUAL
GEOTECH	GEOTECHNICAL
GWB	GYPSUM WALL BOARD
FFE	FINISH FLOOR ELEVATION
FRR	FIRE RESISTANCE RATING
FD	FLOOR DRAIN
HR	HOUR
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
N/A	NOT APPLICABLE
NTS	NOT TO SCALE
O/C	ON CENTRE
RM	ROOM
R/O	ROUGH OPENING
RWL	RAIN WATER LEADER
SBS	STYRENE BUTADIENE STYRENE
SCH	SCHEDULE
SF	SQUARE FEET
SIM	SIMILAR
SM	SQUARE METER
SPEC	SPECIFICATION
STC	SOUND TRANSMISSION CLASS
STRUC	STRUCTURAL
TBD	TO BE DETERMINED
T/O	TOP OF
T&G	TONGUE & GROOVE
TYP	TYPICAL
U/S	UNDERSIDE
WIC	WASHROOM

GENERAL NOTES	
1.	ALL STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS TO BE TAKEN OFF THE RESPECTIVE DISCIPLINE'S DOCUMENTS. NO STRUCTURAL, MECHANICAL AND/OR ELECTRICAL DESIGN INFORMATION SHALL BE INFERRED FROM THE ARCHITECTURAL DRAWINGS.
2.	ALL UNDERGROUND SERVICES ARE TO BE IDENTIFIED PRIOR TO THE COMMENCEMENT OF WORK AND EXCAVATIONS.
3.	ALL GRADES AND SURFACES ADJACENT THE BUILDING EXTERIOR SHALL SLOPE A MINIMUM OF 2% AWAY FROM THE BUILDING, UNLESS OTHERWISE NOTED.

ANNOTATION LEGEND	
ASSEMBLY TAGS	
	EXTERIOR WALL TAG
	INTERIOR PARTITION TAG
	ROOF TAG
	FLOOR TAG
(REFER TO ASSEMBLIES SCHEDULES)	
TAGS	
	DOOR TAG REFER TO DOOR SCHEDULE
	WINDOW TAG REFER TO WINDOW SCHEDULE
	MATERIAL TAG
	KEYNOTES REFER TO SHEET SPECIFIC KEYNOTE SCHEDULE
DRAWING TAGS	
	DETAIL NUMBER DRAWING SHEET NUMBER
	BUILDING SECTION NUMBER DRAWING SHEET NUMBER
	EXTERIOR ELEVATION NUMBER DRAWING SHEET NUMBER
	GRID BUBBLE
	SPOT ELEVATION (ABOVE FINISH FLOOR)
	ROOM TAG
	CENTRELINE

1	2025-02-14	ISSUED AS PROTOTYPICAL DRAWING
NO.	DATE	DESCRIPTION

PROJECT:

CMHC HOUSING DESIGN CATALOGUE

BRITISH COLUMBIA, CANADA

NOT FOR PERMIT OR CONSTRUCTION

SHEET TITLE:

COVER SHEET

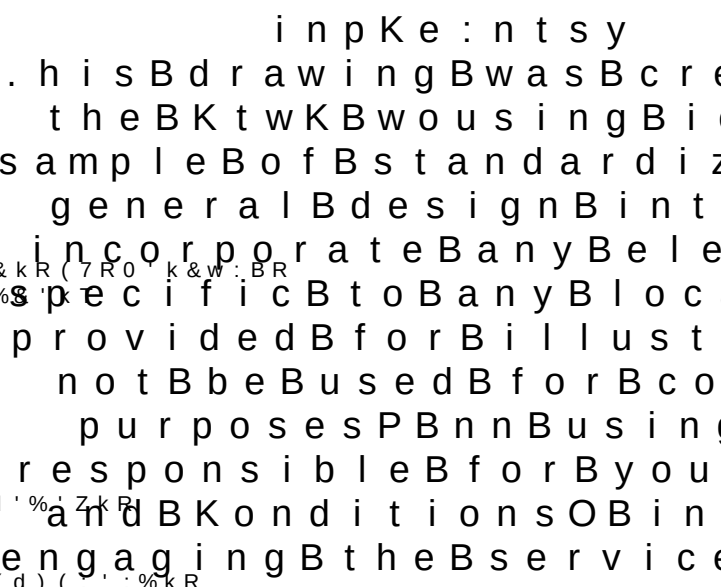
BC Fourplex 01

PROJECT NO: 241058

SCALE: As indicated

SHEET NO:

A001

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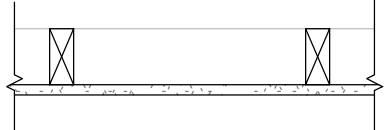
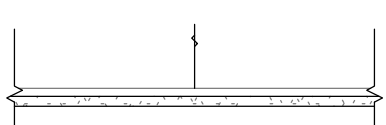
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OCCOM

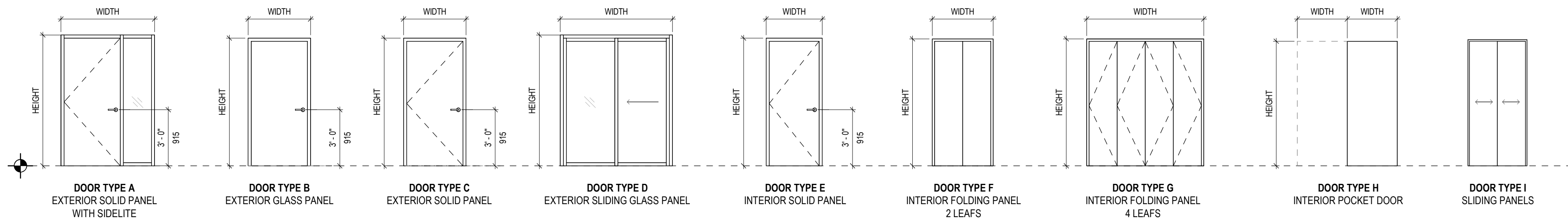
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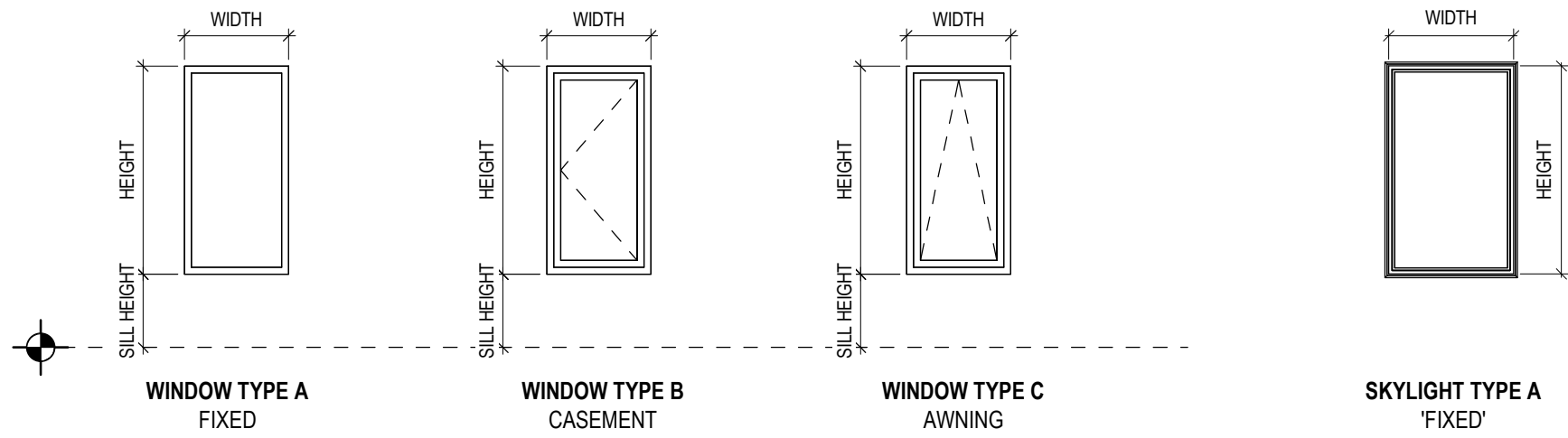
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HT		i y o u s i B K s n e : / : y o B a j / B o Y F 5 B F H 1 m m w n) k e d R s 9 . . R @ (9 Z 0	Z Z 7 0 B y : 5 9 i k % X : F 9

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DOOR TYPES



WINDOW TYPES



DOOR, WINDOW & SKYLIGHT GENERAL NOTES

1. WINDOWS AND DOORS TO CONFORM TO REQUIREMENTS OF CBC 9.7.3 AND 9.7.4
2. MAXIMUM U-VALUE FOR WINDOWS TO CONFORM TO CBC TABLE 9.36.2.7 AND EESR PART 3. WHERE THE U-VALUES DIFFER, THE MOST RESTRICTIVE U-VALUE SHALL APPLY.
3. ALL OPERABLE WINDOWS WITH A SILL HEIGHT OR OPERABLE SECTION LESS THAN 900mm ABOVE FINISHED FLOOR AND 1800mm ABOVE THE FLOOR OR GROUND ON THE OTHER SIDE OF THE WINDOW SHALL BE PROTECTED BY A SWING LIMITER RESTRICTING THE SWING TO NOT MORE THAN 100mm EITHER VERTICALLY OR HORIZONTALLY PER CBC 9.8.1.
4. ALL ENTRY DOORS AND ALL EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF KEYS OR SPECIALIZED KNOWLEDGE.
5. ALL SLIDING DOORS SHALL RESIST FORCED ENTRY ACCORDING TO 9.7.5.1.
6. ALL WINDOWS AND GLAZED DOORS WITHIN 2M OF GRADE TO MEET CBC 9.7.5.3
7. SIDELIGHTS NEEDING TO CONFORM TO CBC 9.6.1.4 SHALL HAVE SAFETY GLAZING OR OTHER ACCEPTABLE SOLUTION.
8. PROVIDE DOOR STOPS AT ALL LOCATIONS WHERE THE DOOR MAY DAMAGE THE INTEGRITY OF A FIRE-RATED WALL.
9. MAIN ENTRY DOORS TO DWELLING UNITS SHALL HAVE DOOR VIEWER, TRANSPARENT GLAZING, OR A SIDELIGHT PER CBC 9.7.2.1.(2)

DOOR SCHEDULE

TAG	TYPE	DIMENSIONS		FIRE RATING	NOTES
		WIDTH	HEIGHT		
DA01	DOOR TYPE A	3' - 0"	6' - 10"	N/A	
DC01	DOOR TYPE C	3' - 0"	6' - 10"	N/A	
DD01	DOOR TYPE D	6' - 0"	7' - 0"	N/A	
DE01	DOOR TYPE E	3' - 0"	6' - 8"	N/A	
DE02	DOOR TYPE E	2' - 8"	6' - 8"	N/A	
DF01	DOOR TYPE F	2' - 8"	6' - 8"	N/A	
DF02	DOOR TYPE F	3' - 0"	6' - 8"	N/A	
DF03	DOOR TYPE F	3' - 6"	6' - 8"	N/A	
DF04	DOOR TYPE F	4' - 0"	6' - 8"	N/A	
DF05	DOOR TYPE F	4' - 6"	6' - 8"	N/A	
DF06	DOOR TYPE F	5' - 0"	6' - 8"	N/A	
DF07	DOOR TYPE F	2' - 0"	6' - 8"	N/A	
DF09	DOOR TYPE F	2' - 4"	6' - 8"	N/A	
DH01	DOOR TYPE H	2' - 8"	6' - 8"	N/A	

WINDOW SCHEDULE

TAG	TYPE	OPERATION	DIMENSIONS	
			WIDTH	HEIGHT
WA02	WINDOW TYPE A	Fixed	2' - 6"	3' - 0"
WA04	WINDOW TYPE A	Fixed	3' - 0"	6' - 0"
WA08	WINDOW TYPE A	Fixed	3' - 0"	7' - 0"
WB03	WINDOW TYPE B	Casement	3' - 0"	6' - 0"
WB07	WINDOW TYPE B	Casement	2' - 6"	3' - 0"



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NO.	DATE	DESCRIPTION
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PROJECT:
CMHC HOUSING DESIGN
CATALOGUE

BRITISH COLUMBIA, CANADA

NOT FOR PERMIT
OR CONSTRUCTION

SHEET TITLE:

DOOR AND WINDOW SCHEDULE

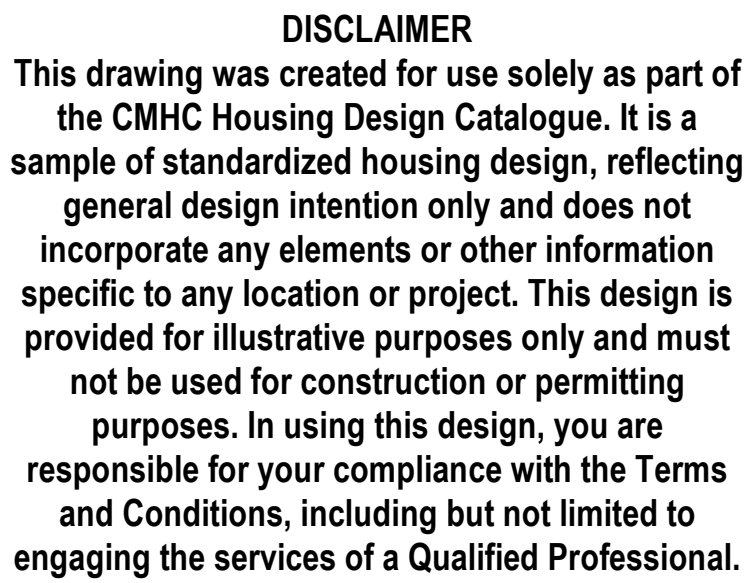
BC Fourplex 01

PROJECT NO: 241051
SCALE: 1 : 50

SHEET NO:

A004

1. REQUIRED FIRE-RESISTANCE AND FIRE-PROTECTION RATINGS SHALL BE DETERMINED BY AND IN CONFORMANCE TO METHODS LISTED IN CBCB CLAUSE 9.10.3.1(f)
2. OPENINGS IN WALL AND CEILING MEMBRANES IN ASSEMBLIES REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL FOLLOW REQUIREMENTS IN CBCB SUBSECTION 9.10.5
3. THE CONTINUITY OF A FIRE SEPARATION SHALL BE MAINTAINED WHEN IT ABUTTS ANOTHER FIRE SEPARATION, A FLOOR, A CEILING, A ROOF, OR AN EXTERNAL WALL ASSEMBLY PER CBCB SUBSECTION 9.10.2
4. PENETRATIONS OF FIRE SEPARATIONS SHALL CONFORM TO PROVISIONS OF CBCB SUBSECTION 9.10.5.6
5. FIRE BLOCKS SHALL BE PROVIDED AT THE TOP AND BOTTOM OF EACH RUN OF STAIRS WHERE APPLICABLE PER CBCB CLAUSE 9.10.16.1.(4)

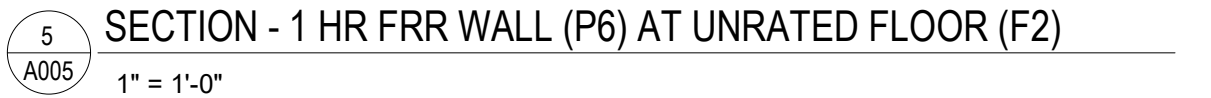
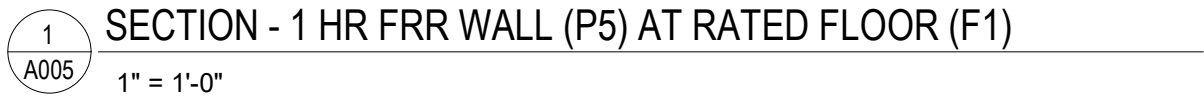
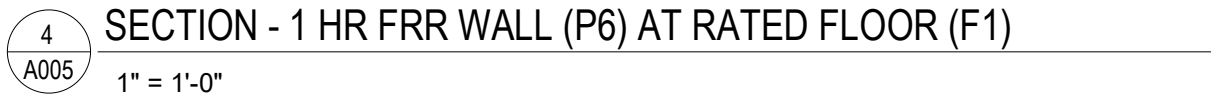


- AIR BARRIER, VAPOUR PERMEABLE
- AIR BARRIER, NON-VAPOUR PERMEABLE
- UV STABLE FILTER FABRIC
- THROUGH-WALL FLASHING
- VAPOUR CONTROL BARRIER
- FOUNDATION DAMP PROOFING
- PRE-FIN METAL FLASHING
- SBS ROOFING MEMBRANE
- IMPERMEABLE ROOFING UNDERLAY

	SEMI-RIGID INSULATION
	RIGID INSULATION 1
	RIGID INSULATION 2, HIGH DENSITY
	SPRAY FOAM
	STUD CAVITY IN-FILL INSULATION

NO.	DATE	DESCRIPTION
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A005



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MEMBRANE LEGEND	
	AIR BARRIER, VAPOUR PERMEABLE
	AIR BARRIER, NON-VAPOUR PERMEABLE
	UV STABLE FILTER FABRIC
	THROUGH-WALL FLASHING
	VAPOUR CONTROL BARRIER
	FOUNDATION DAMP PROOFING
	PRE-FIN METAL FLASHING
	SBS ROOFING MEMBRANE
	IMPERMEABLE ROOFING UNDERLAY
INSULATION LEGEND	
	SEMI-RIGID INSULATION
	RIGID INSULATION 1
	RIGID INSULATION 2, HIGH DENSITY
	SPRAY FOAM
	STUD CAVITY IN-FILL INSULATION

1	2025-02-14	ISSUED AS PROTOTYPICAL DRAWING
NO.	DATE	DESCRIPTION

PROJECT:
CMHC HOUSING DESIGN CATALOGUE

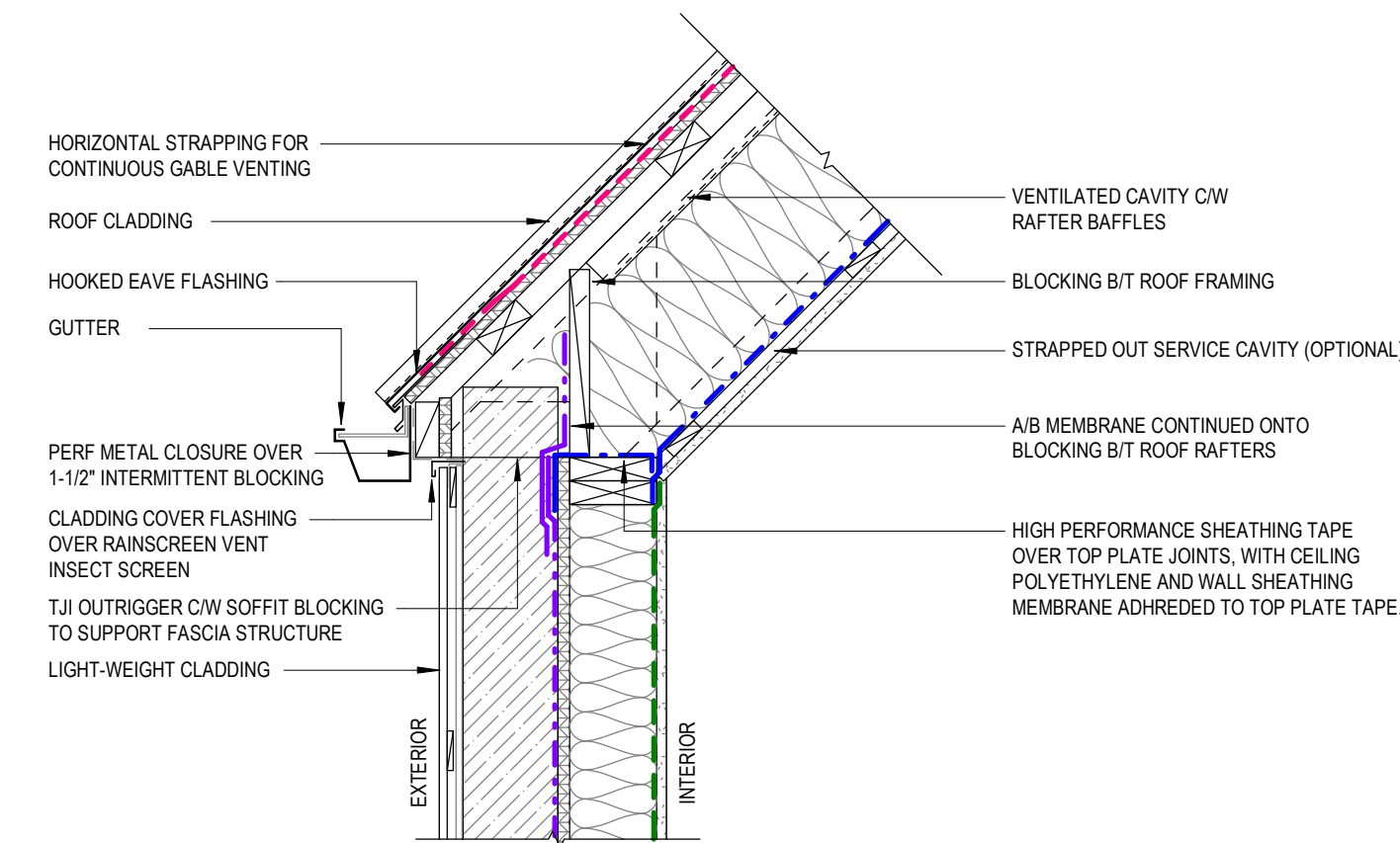
BRITISH COLUMBIA, CANADA
NOT FOR PERMIT OR CONSTRUCTION

SHEET TITLE:
TYPICAL DETAILS

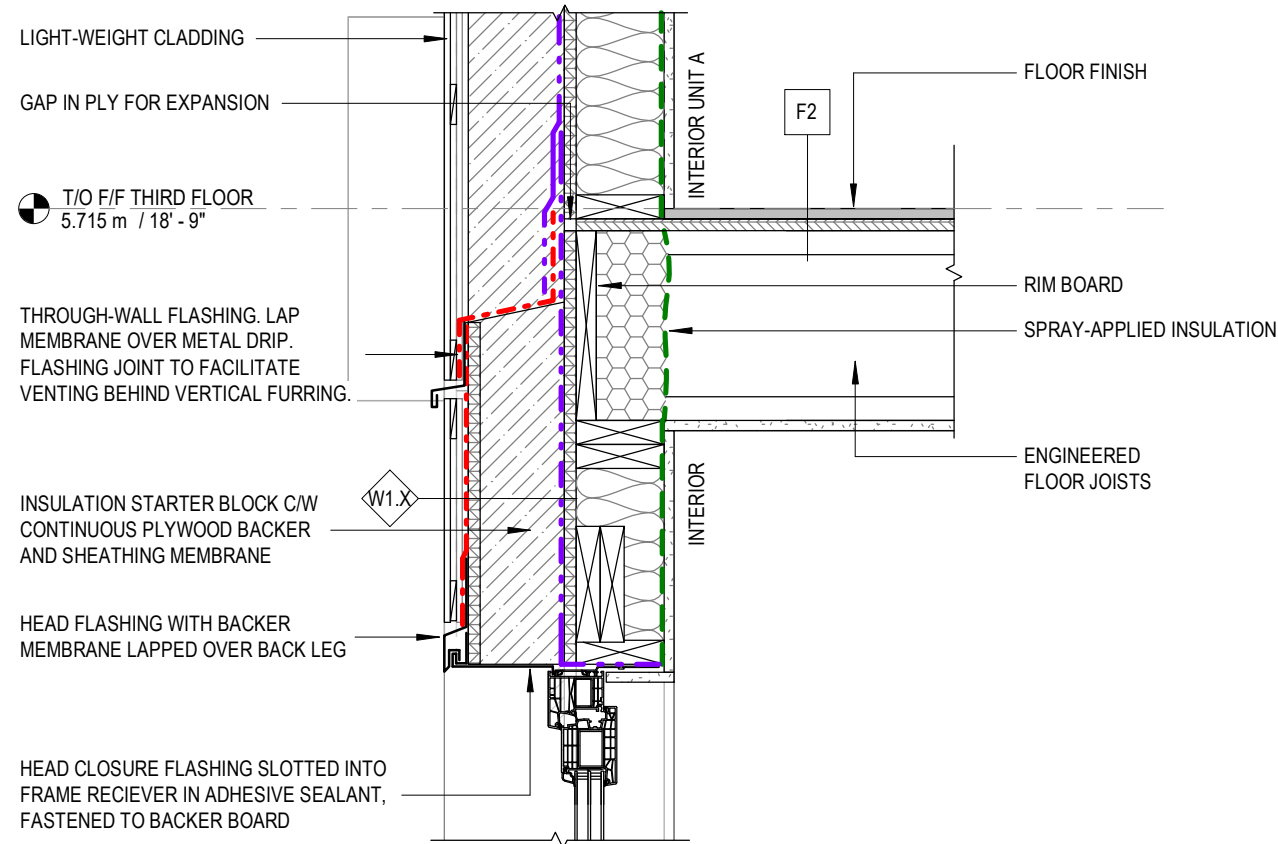
BC Fourplex 01

PROJECT NO: 241058
SCALE: As indicated

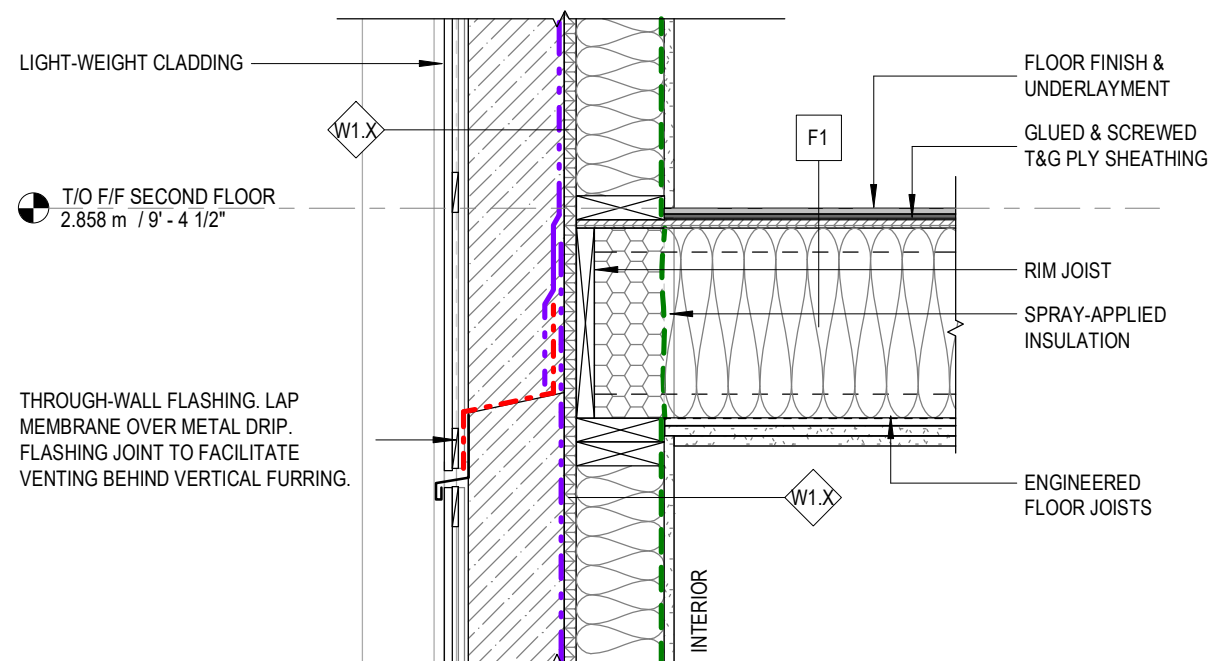
SHEET NO:
A006



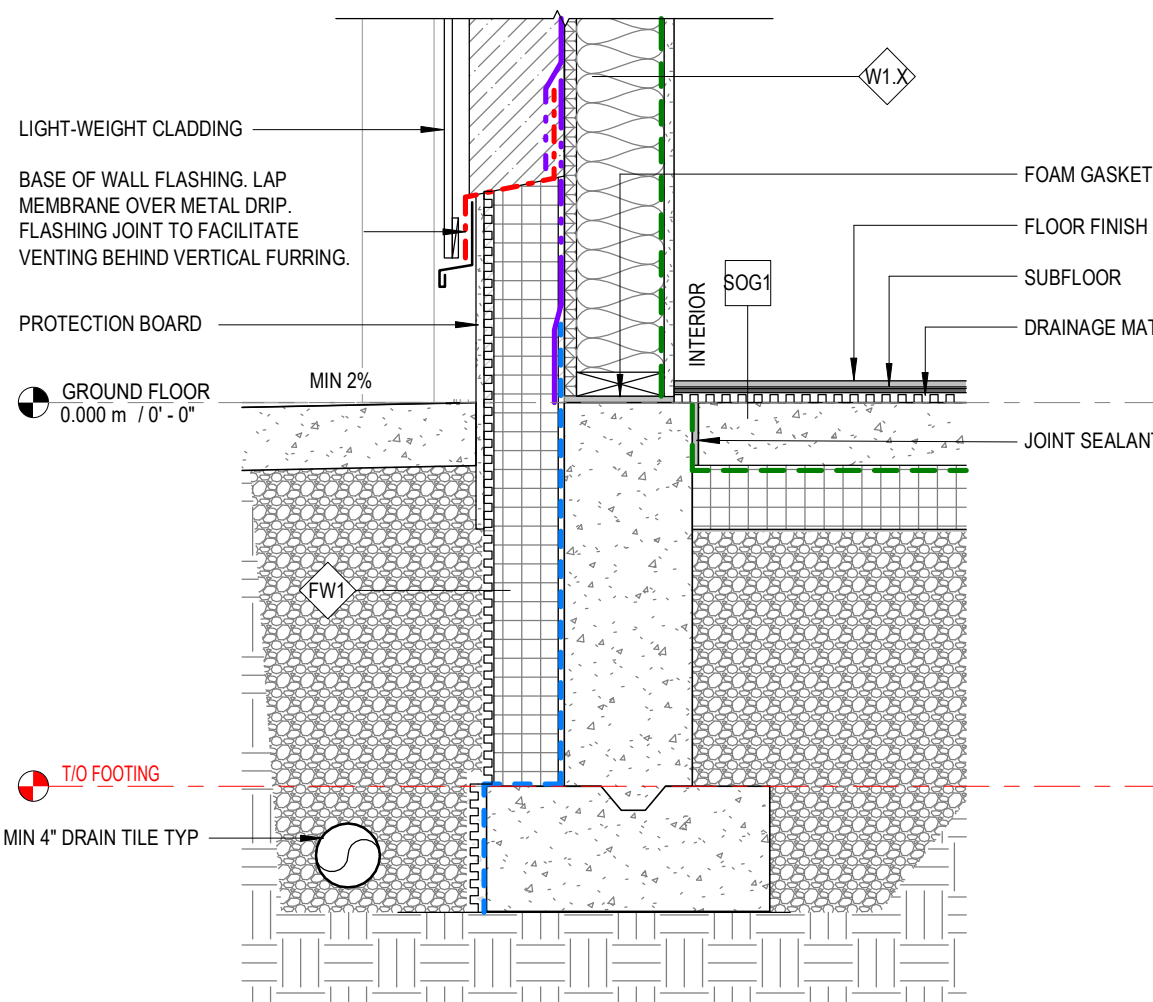
1
A006
TYP. WALL TO ROOF - EAVE
1" = 1'-0"



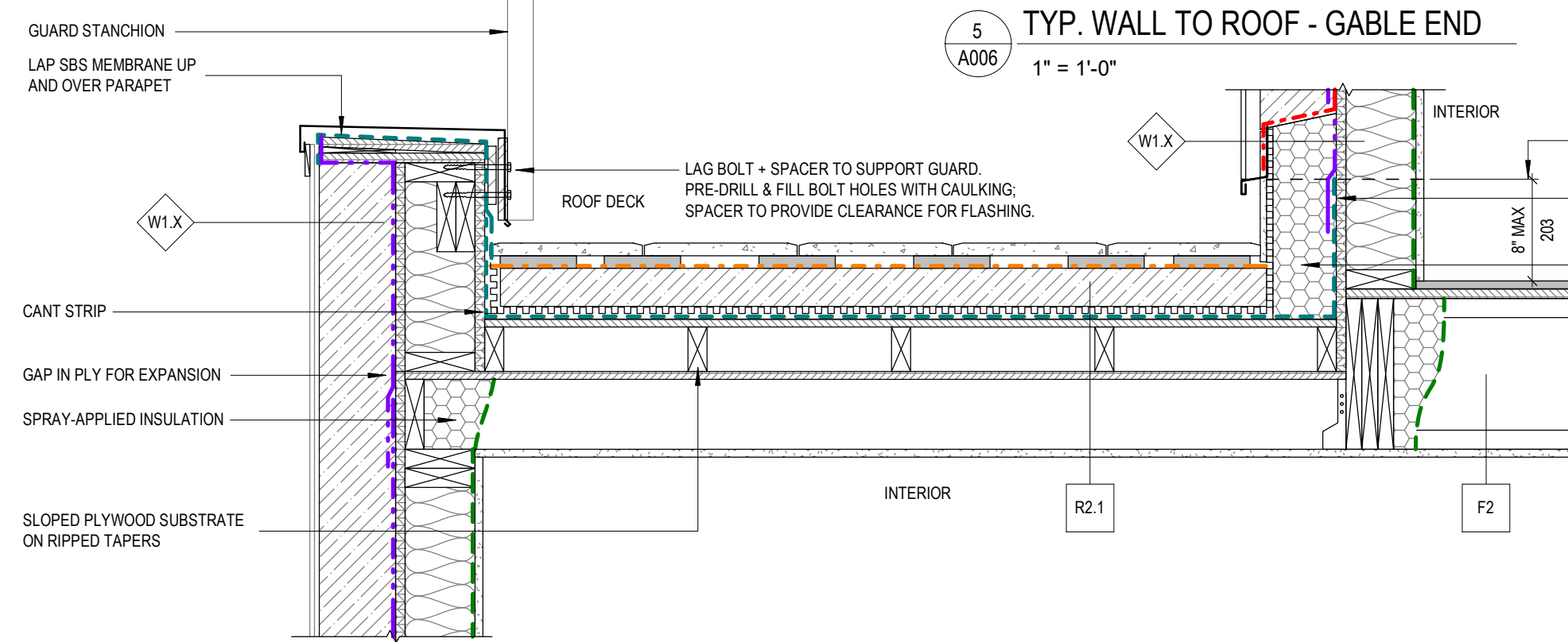
2
A006
TYP. FLOOR TO FLOOR - SAME UNIT
1" = 1'-0"



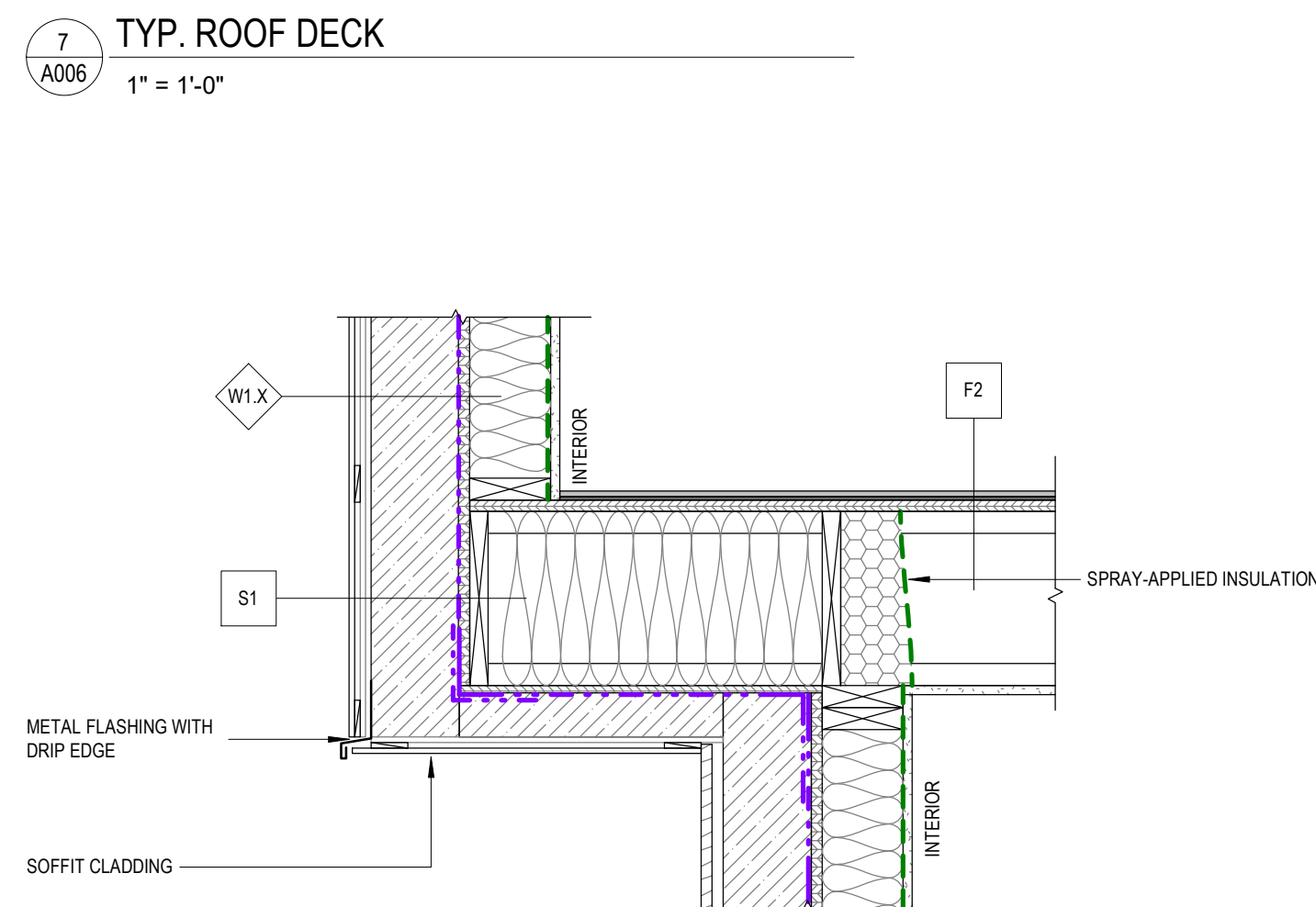
3
A006
TYP. FLOOR TO FLOOR - FRR
1" = 1'-0"



4
A006
TYP. FOOTING TO WALL
1" = 1'-0"

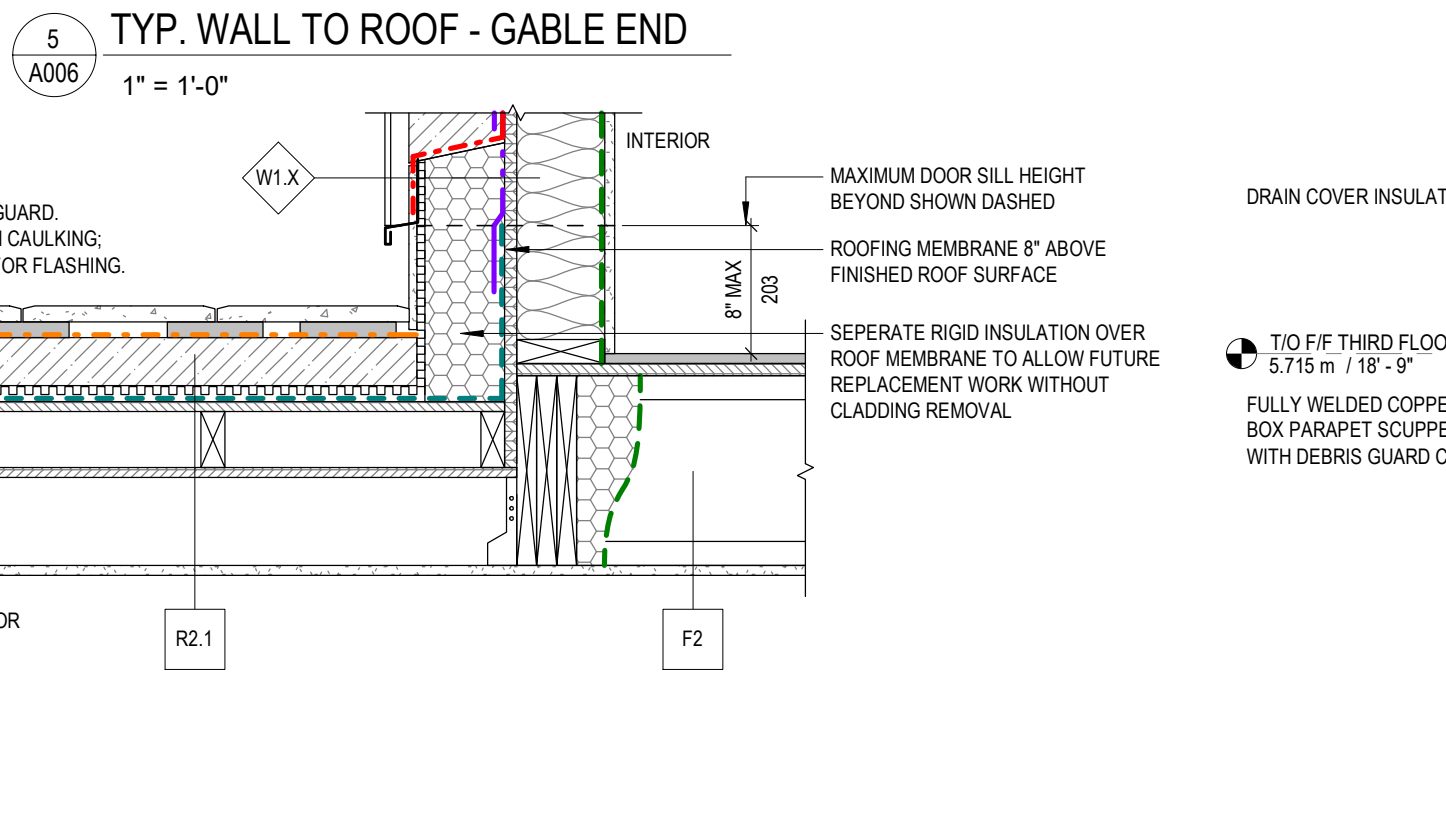


5
A006
TYP. WALL TO ROOF - GABLE END
1" = 1'-0"

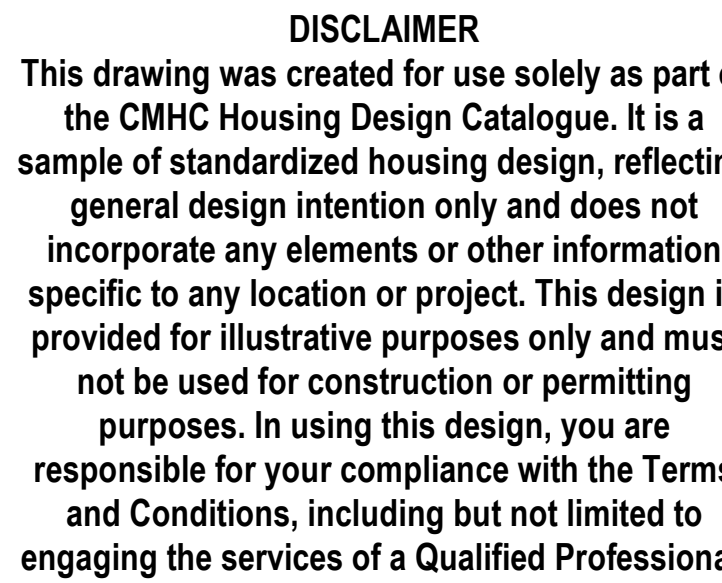


7
A006
TYP. ROOF DECK
1" = 1'-0"

6
A006
TYP. OVERHANG WITH CANOPY
1" = 1'-0"



10
A006
TYP. BALCONY DRAINAGE
1" = 1'-0"



INSULATION STARTER BLOCK C/W CONTINUOUS PLYWOOD BACKER AND SHEATHING MEMBRANE

W1 X

LIGHT-WEIGHT CLADDING

HEAD FLASHING WITH BACKER MEMBRANE LAPPED OVER BACK LEG

DOOR HEADER C/W SPRAY-APPLIED INSULATION

WALL MEMBRANE PRE-STRIP AT DOOR ROUGH OPENINGS

DRIP EDGE INTEGRATED INTO METAL FLASHING C/W PRE-DRILLED WEEP HOLES

HEAD CLOSURE FLASHING SLOTTED INTO FRAME RECEIVER IN ADHESIVE SEALANT, FASTENED TO BACKER BOARD

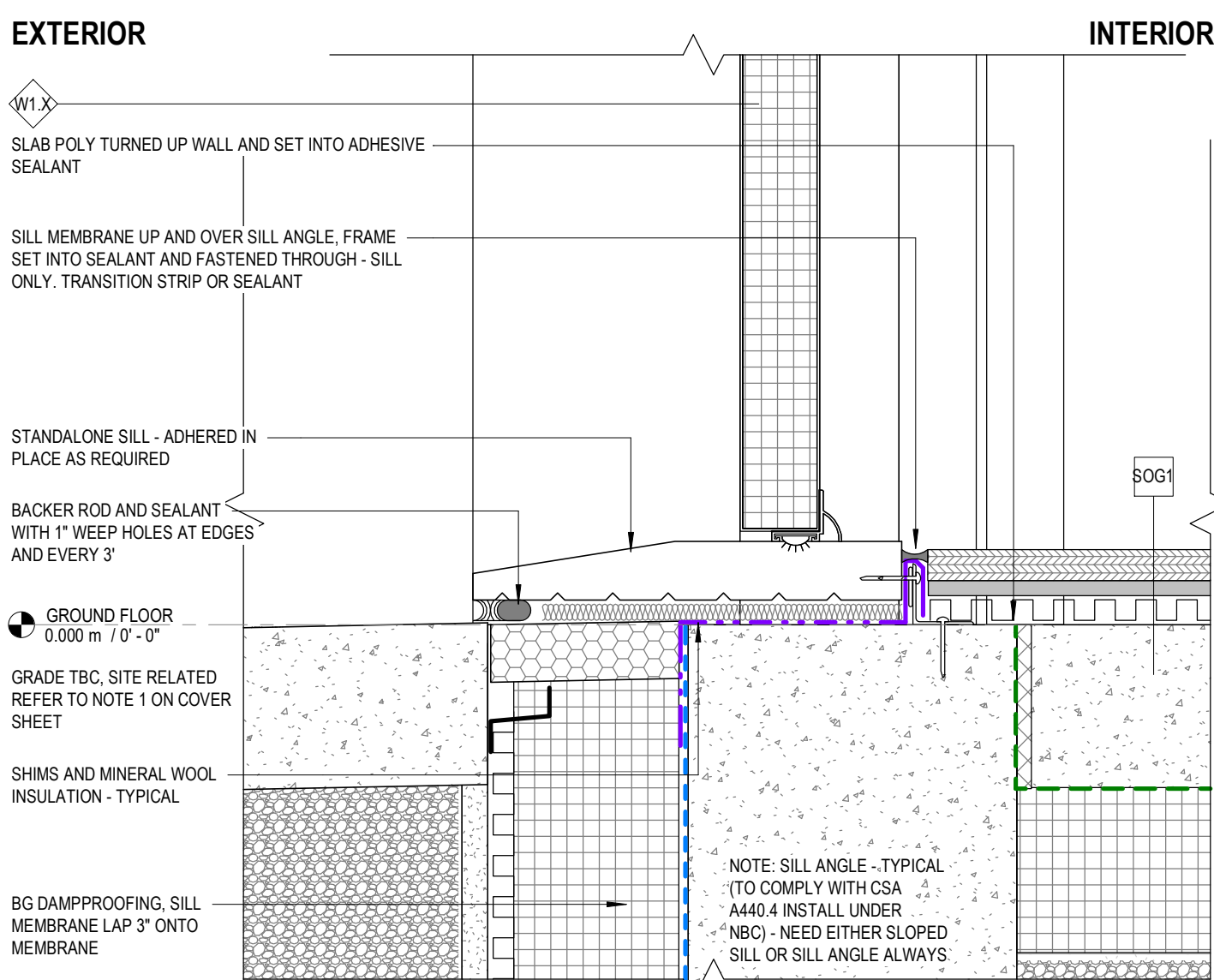
WALL EDGE BEYOND

INSULATED WOOD, METAL OR VINYL DOOR

7
A007

TYP EXTERIOR DOOR - HEAD

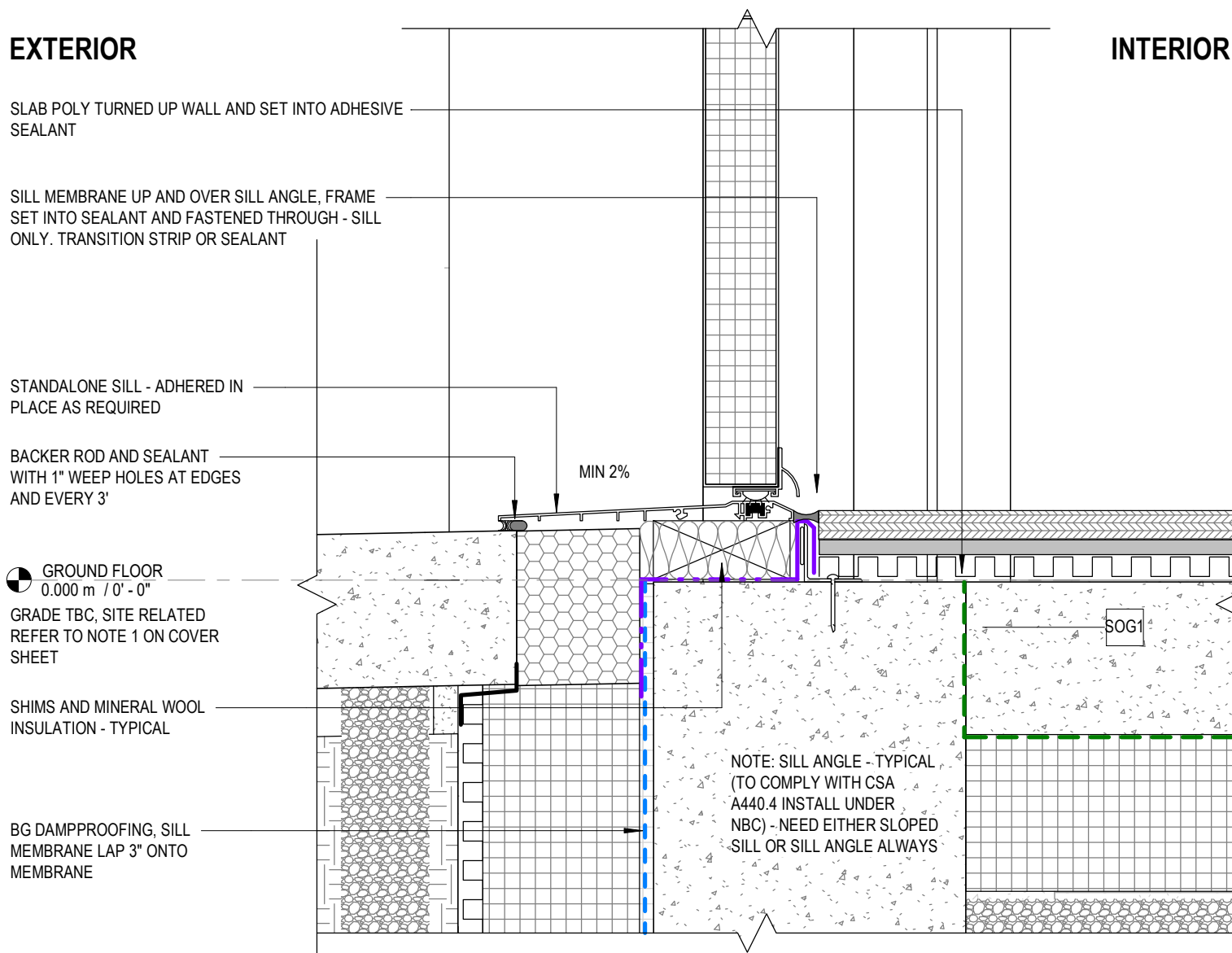
3" = 1'-0"



8
A007

TYP EXTERIOR DOOR - SILL

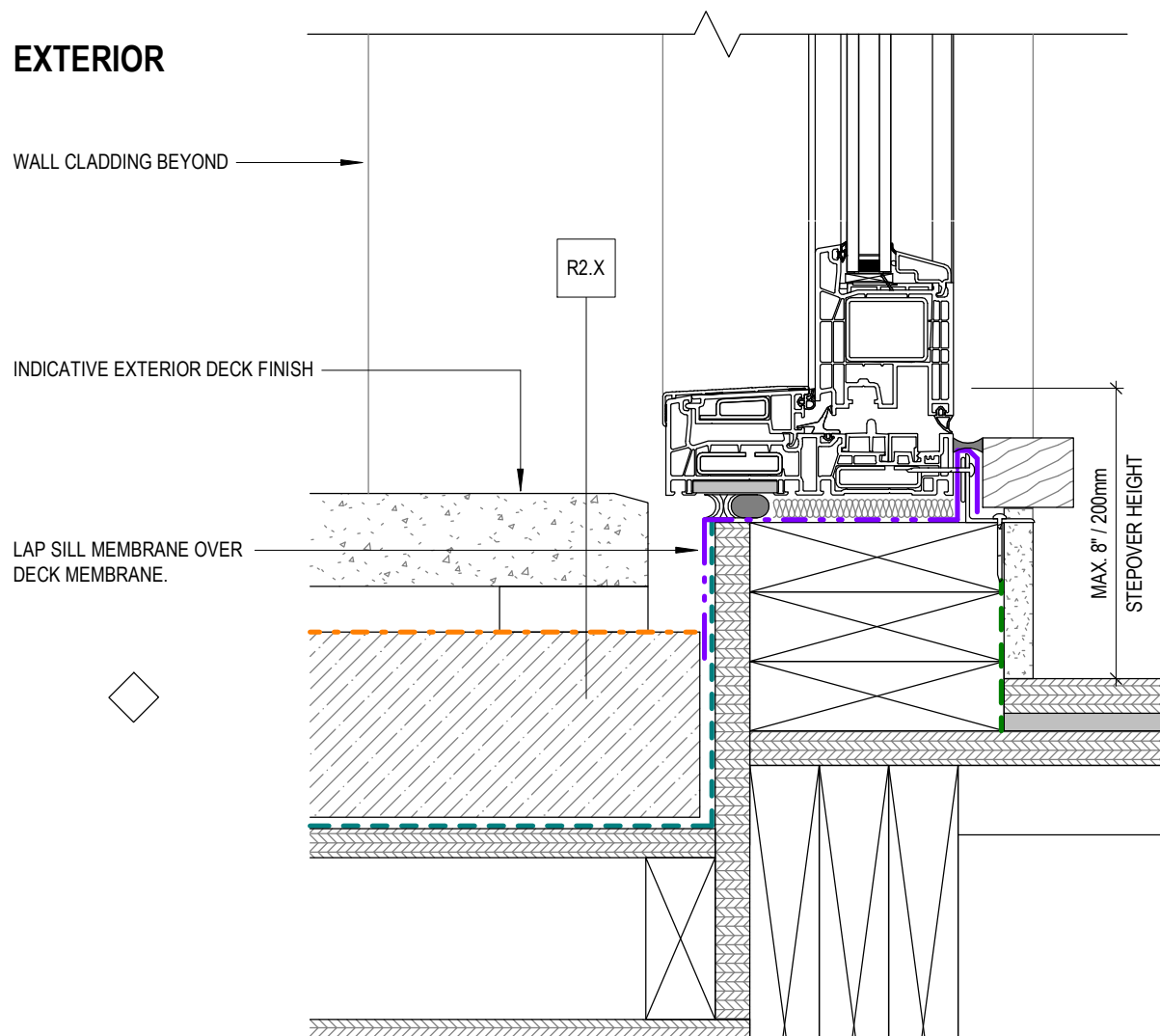
3" = 1'-0"



1
A007

TYP EXTERIOR DOOR - ADAPTABLE SILL

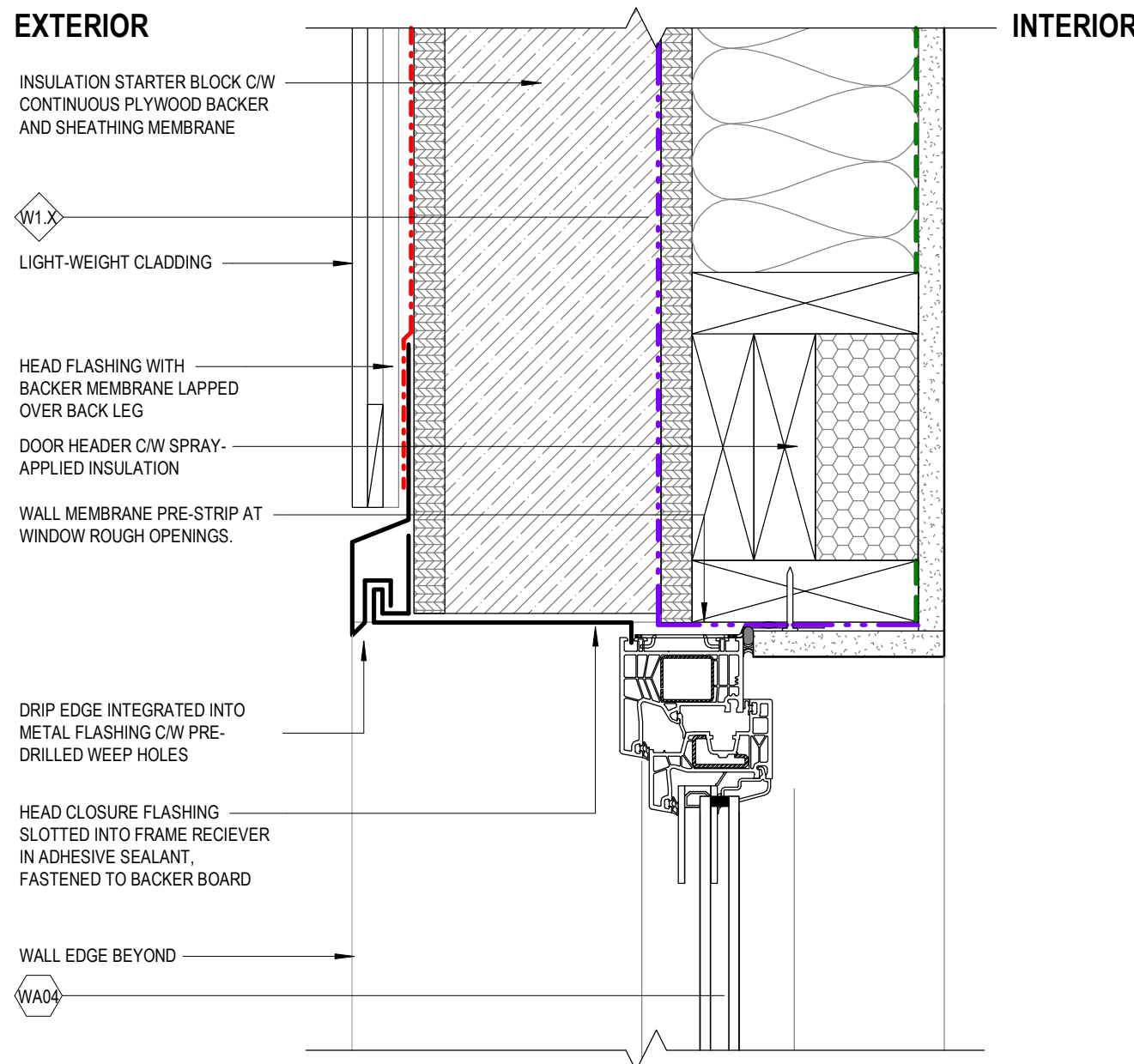
3" = 1'-0"



9
A007

TYP SLIDING DOOR @ ROOF DECK

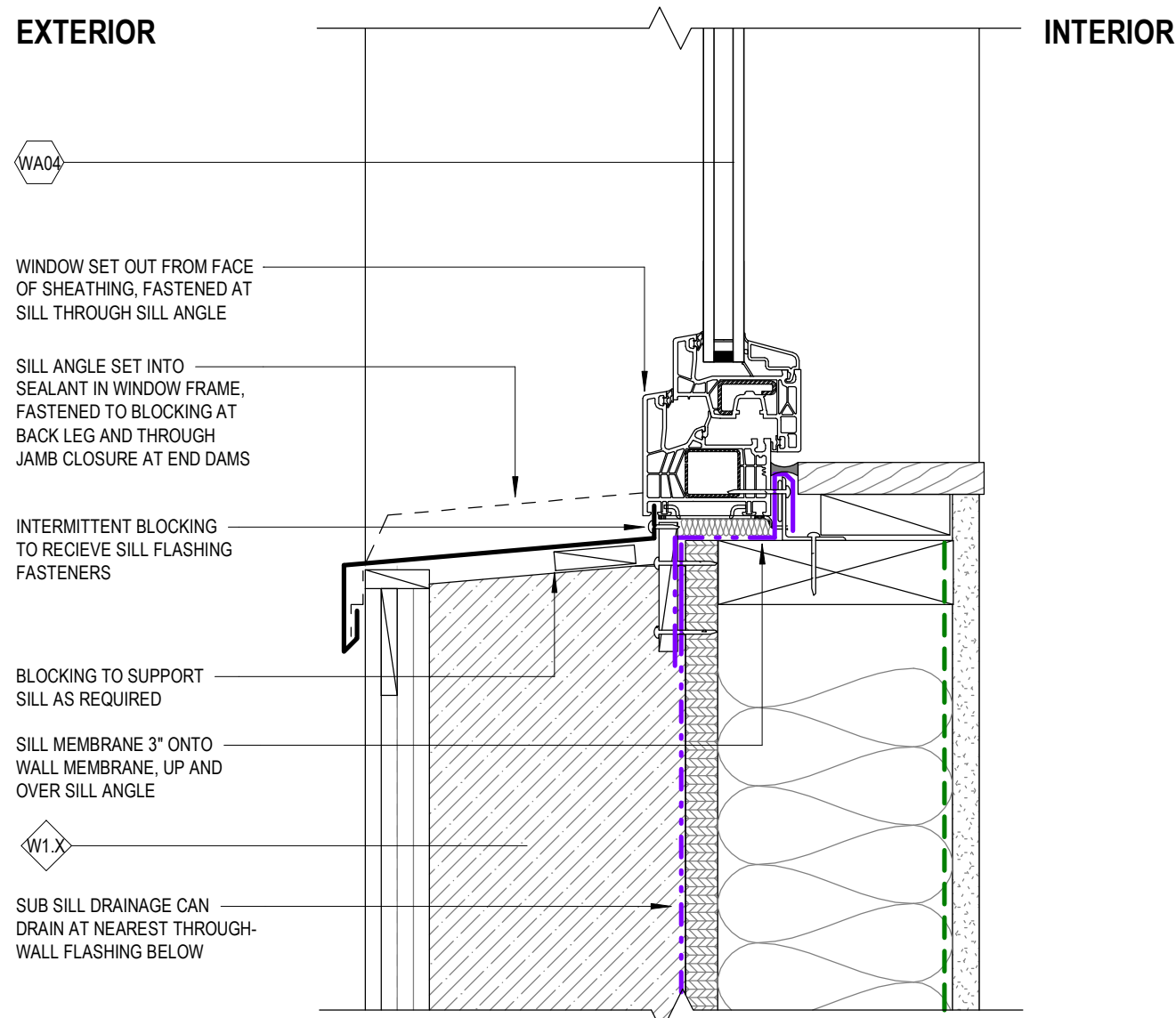
3" = 1'-0"



3
A007

TYP WINDOW - HEAD

3" = 1'-0"

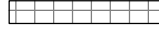
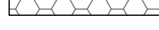


2
A007

TYP WINDOW - SILL

3" = 1'-0"

MEMBRANE LEGEND	
	AIR BARRIER, VAPOUR PERMEABLE
	AIR BARRIER, NON-VAPOUR PERMEABLE
	UV STABLE FILTER FABRIC
	THROUGH-WALL FLASHING
	VAPOUR CONTROL BARRIER
	FOUNDATION DAMP PROOFING
	PRE-FIN METAL FLASHING
	SBS ROOFING MEMBRANE
	IMPERMEABLE ROOFING UNDERLAY

INSULATION LEGEND	
	SEMI-RIGID INSULATION
	RIGID INSULATION 1
	RIGID INSULATION 2, HIGH DENSITY
	SPRAY FOAM
	STUD CAVITY IN-FILL INSULATION

[illegible]

PROJECT:
CMHC HOUSING DESIGN
CATALOGUE

BRITISH COLUMBIA, CANADA

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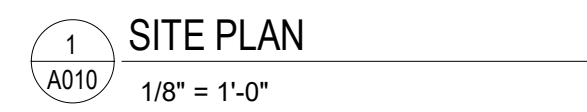
SHEET TITLE:
TYPICAL DETAILS 2

BC Fourplex 01

PROJECT NO: 241058
SCALE: As indicated

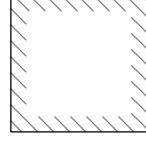
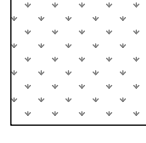
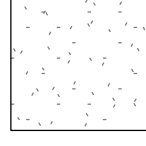
SHEET NO.

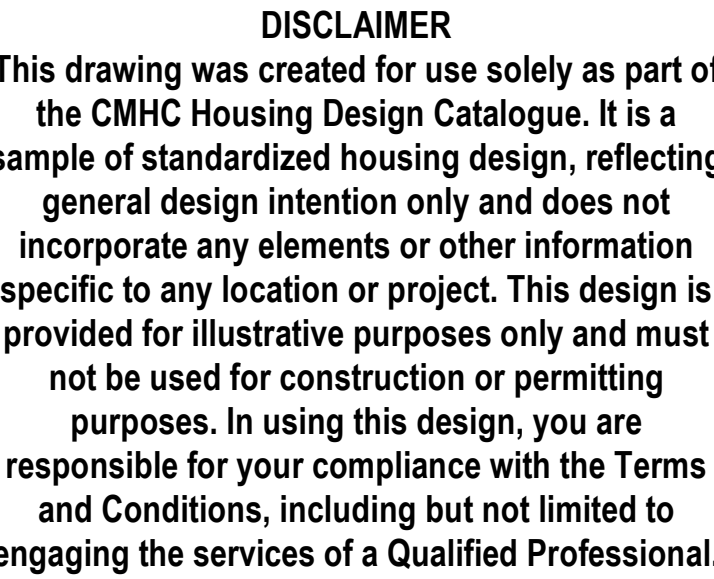
A007



SITE PLAN GENERAL NOTES	
1.	SITE DESIGN TO CONFORM TO FIREFIGHTING ACCESS REQUIREMENTS AS PER BCBC 9.10.20.3.
2.	SITE GRADE TO BE SLOPED AWAY FROM BUILDING AS PER BCBC 9.14.6.1
3.	WHERE UNCONNECTED DOWNSPOUTS ARE PROVIDED, EXTENSIONS SHALL BE PROVIDED TO CARRY RAINWATER AWAY FROM THE BUILDING IN A MANNER CONFORMING TO BCBC 9.26.18.2
4.	SITE DESIGN TO CONFORM TO ACCESSIBILITY REQUIREMENTS PER BCBC 33.8.2.3, BCBC 33.8.2.5, BCBC 33.8.2.10
5.	ENTRANCES TO BARRIER FREE UNIT TO CONFORM TO BCBC 3.8.2.2.
6.	EXTERIOR AND INTERIOR PATHS THAT FORM PART OF AN ACCESSIBLE PATH OF TRAVEL TO CONFORM FOR BCBC 3.8.3.2. EXTERIOR WALKS TO BE DESIGNED IN CONFORMANCE TO BCBC 3.8.3.3.
7.	BUILDING SPRINKLER REQUIREMENTS SHALL BE DETERMINED BASED ON FINAL SITE DESIGN, SPATIAL SEPARATION, AND CONSTRUCTION TYPE, IN ACCORDANCE WITH THE BCBC 2024.

SITE LEGEND

	ASSUMED PROPERTY LINE
	SETBACK
	BUILDING
	SOFTSCAPE
	HARDSCAPE

[illegible]

BRITISH COLUMBIA, CANADA

NOT FOR PERMIT
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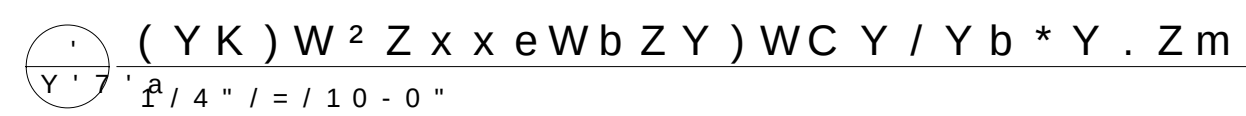
SHEET TITLE:
SITE PLAN & CODE
MATRIX

BC Fourplex 01

PROJECT NO: 241058
SCALE: As indicated

SHEET NO:

A010



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NOT FOR PERMIT
OR CONSTRUCTION

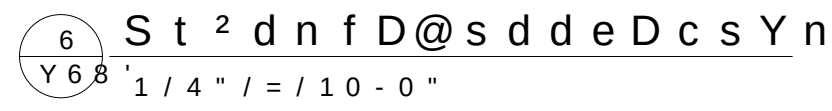
v f c c b l b o b y c -
(Y K) W ² Z x x e W b Z
Y / Y b * Y . Z m

wnleourplexIDK

z j m u c n b l H m - " ' 7 6 l
v n a y c - Y s W i n d i c a t e d

v f c c b l H m -

Y ' 7 ' a



ST
n²

CMHC SCHL

UeKZYTKdnnDcteDm²m²D
SDTD²tnttdd@DIYVDSsyM
D@dUnifYTKdnndwCzAmB
WfngSG3 d r D
CMHC H d r d
r d d r r
r . l r
r C d ,
r

[illegible]

PRO ECT

2 i V 2 DV d U S K n G D

2 Y T Y s d G U t

meKTKSVD²dsUimKYBD²YnYfY

NOT FOR PERMIT
OR CONSTRUCTION

SHEET TITLE

S t ² d n f D @ s d d e D

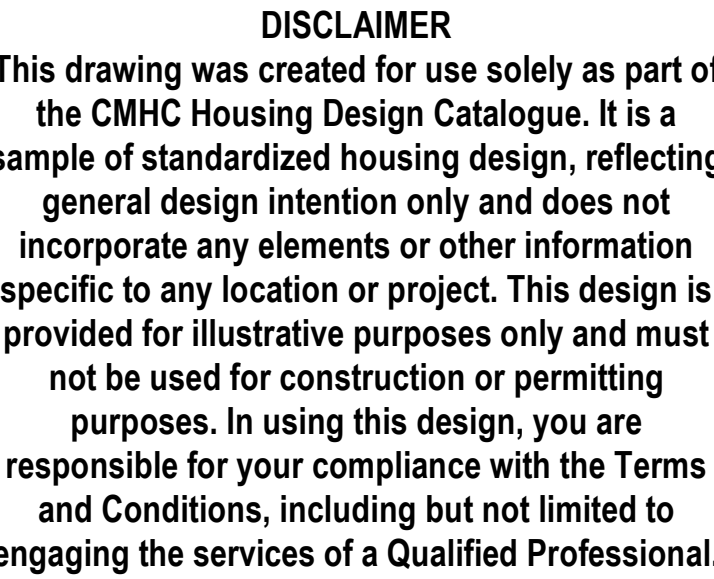
BC F	r	01
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PRO ECT NO ' - 68 " H
SCALE Y s D i n d i c a t e d

SHEET NO
Y 6 8 '



ROOF VENTING CALCULATIONS	
AREA OF ROOF [A]:	1577.5sf
AREA OF VENTILATION REQUIRED (A/300):	5.26sf (757.2 sq in [B])
LENGTH OF ROOF EDGE AT EAVES:	105'-2" (1261.9 in [C])
AVG FREE AREA DEPTH REQUIRED ALONG EAVES (B/C)(2): (EQUAL AMOUNT OF VENTILATION REQUIRED AT RIDGE)	.30 in



PROJECT:

CMHC HOUSING DESIGN CATALOGUE

BRITISH COLUMBIA, CANADA

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BC Fourplex 01

SHEET NO:

A104



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BC Fourplex 01

SHEET NO:

A200





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PROJECT:
CMHC HOUSING DESIGN
CATALOGUE

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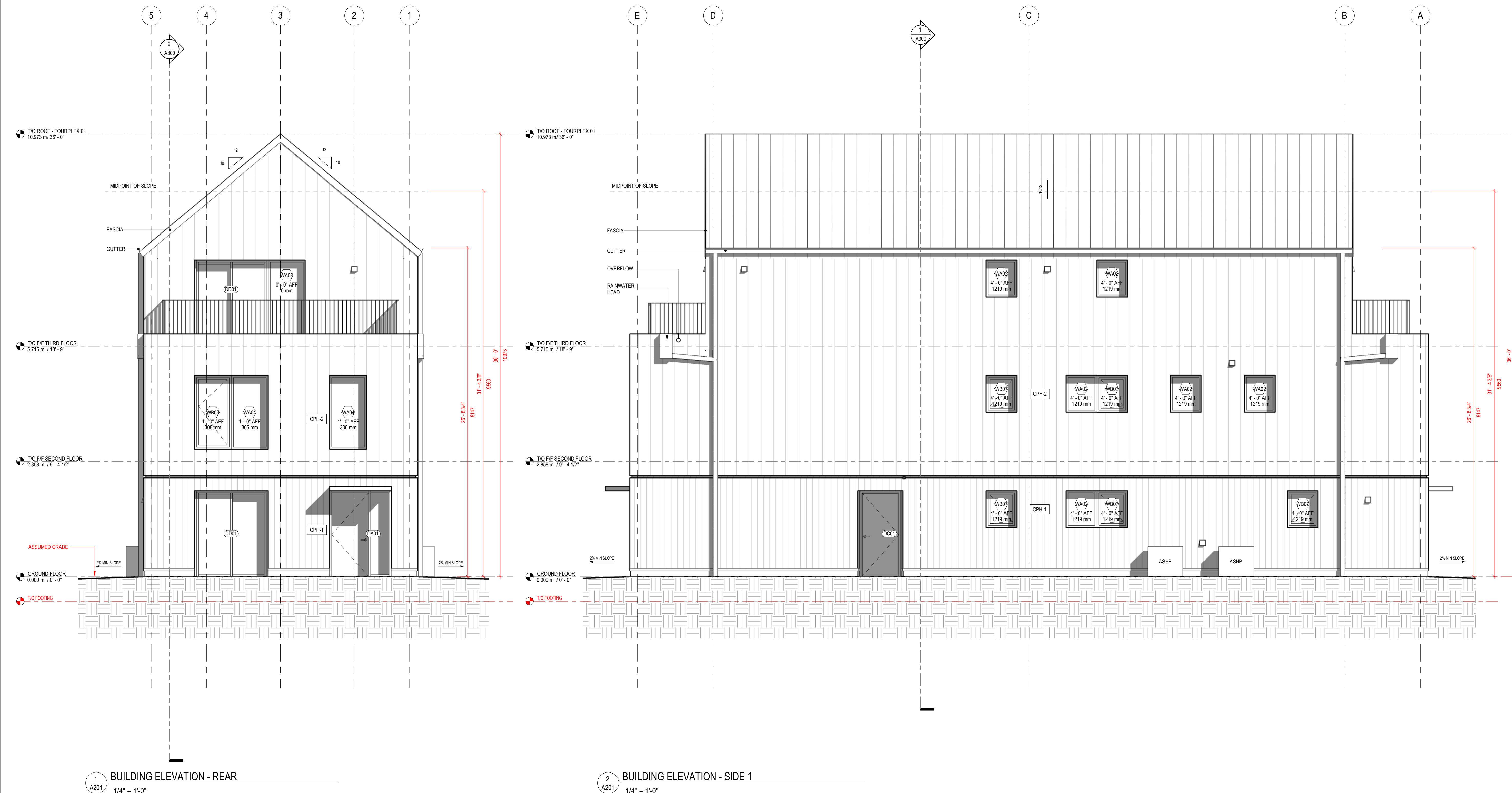
SHEET TITLE:
ELEVATIONS

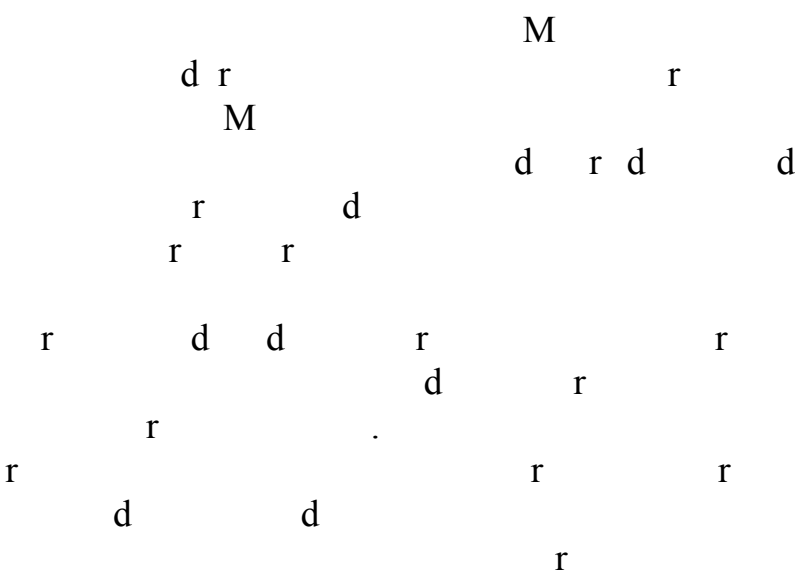
BC Fourplex 01

PROJECT NO: 241058
SCALE: 1/4" = 1'-0"

SHEET NO:

A201





- 01 FOUNDATIONS: ASSUMED; REFER TO STRUCTURAL
- 02 STAIRS AND TREADS TO CONFORM TO APPLICABLE SUBSECTIONS IN BCBC 9.8
- 03 HANDRAILS AND GUARDS TO BE DESIGNED IN CONFORMANCE TO BCBC 9.8.7 AND 9.8.8
- 04 ASSUMED FINISHED GRADE IS FLUSH WITH FINISHED FLOOR LEVEL TO FACILITATE ERO STEP ENTR

1HR FIRE RESISTANCE RATING



NO.	DATE	DESCRIPTION
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BRITISH COLUMBIA, CANADA

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SECTIONS

241058
As indicated

A300



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WOOD STUD WALL LEGEND

NOTE:
SEE SECTIONS, DETAILS AND STRUCTURAL NOTES FOR ADDITIONAL INFORMATION INCLUDING BASE OF WALL ANCHORAGE.

W - LOAD BEARING STUD WALL - SEE SCHEDULE FOR STUD SIZE

SW - SHEAR WALL SHEATHING ONE SIDE - SEE PLAN AND SHEAR WALL SCHEDULE.

SW - SHEATHING TO BE INSTALLED ON THE SIDE OF THE WALL MARKED WITH THE "SW-" TAG

J JACK STUDS INDICATED ON PLAN

K KING STUDS, NOT DRAWN ON PLAN
SEE GENERAL NOTES

HD HOLDOWN - SEE PLAN AND SCHEDULE

SHEAR WALL SCHEDULE

MARK	ON	SHEATHING	PANEL EDGE NAILING	ANCHORAGE TO CONCRETE
SW 1	SPACING	1/2" [12.5mm] @ 4" [100mm] OC	8 D @ 2' [600mm] COMMON	1/2" [12.5mm] @ 4" [100mm] OC
SW 2	A	1/2" [12.5mm] @ 4" [100mm] OC	8 D @ 2' [600mm] COMMON	1/2" [12.5mm] @ 4" [100mm] OC
SW 2	B	1/2" [12.5mm] @ 4" [100mm] OC	8 D @ 2' [600mm] COMMON	1/2" [12.5mm] @ 4" [100mm] OC

NOTES:

- NAIL PLYWOOD PANEL @12" [300mm] OC IN THE FIELD FOR ALL SHEAR WALL TYPES.
- BLOCK ALL PLY EDGES.
- WHERE NAIL SPACING IS @2" [50mm] OC, DOUBLE UP ALL FRAMING MEMBERS AT PANEL EDGES.
- ENSURE BASE ANCHORAGE TO CONCRETE.
- HOLDOWNS TO BE PROVIDED AT THE END OF EACH SEGMENT OF SHEAR WALL (REFER TO SCHEDULE).
- ALLOW FOR HOLDOWNS AT EACH END OF ORTHOGONAL INTERSECTIONS OF WALL IN BOTH DIRECTIONS.
- ENSURE 2 VERTICAL FOUNDATION WALL REINFORCEMENT BARS ARE PLACED WITHIN 2' [500mm] OF EACH CAST-IN HOLDOWN ANCHOR, TYP.
- ENGINEER TO DESIGN AND CONFIRM NAILING PATTERN, TOP PLATE AND BOTTOM PLATE CONNECTION AND ANCHORAGE TO CONCRETE.
- OPENINGS AND PENETRATIONS IN SHEAR WALLS ARE NOT PERMITTED, UNLESS SPECIFIED ON THE DRAWINGS.

FINAL DESIGN OF ELEMENTS TO BE COMPLETED TO PART 9 PRESCRIPTIVE CLIMATIC CONDITIONS APPROPRIATE TO INDIVIDUAL SITES.

WHEREAS THE LATERAL SYSTEM (SHEAR WALLS, DIAPHRAGMS AND ASSOCIATED HOLDOWN AND FOUNDATIONS) FALL OUTSIDE THE PRESCRIPTIVE REQUIREMENTS IN SECTION 9.23, DESIGN TO PART 4 IN ACCORDANCE WITH CLAUSE 9.23.1.1.2.

WOOD STUD WALL SCHEDULE

MARK	STUD SIZE AND SPACING	TOP PLATE	REMARKS
W1	2x6 [38x140] @16" [400mm]	SP2x6S T [100x124] @12x6 OPT SPF	ALL MARKED ON PLANS
W2	2x4 [38x89] @16" [400mm]	SP2x4S T [100x124] @12x6 OPT SPF	ALL MARKED ON PLANS

NOTES:

- ALL STUDS/PLATES TO BE No. 2 OR BETTER UNO.
- SEE GENERAL NOTES FOR SHEATHING AND ANCHORAGE.
- SEE SHEAR WALL SCHEDULE FOR WALL SHEATHING AND ANCHORAGE FOR WALLS MARKED SW- ON PLAN.
- SPRUE ALL TOP PLATES.
- WHERE BUILT-UP AND STEEL BEAMS ARE SUPPORTED ON STUD WALLS BELOW, STUD PACK TO BE ALLOWED FOR TO MATCH BEAM WIDTH.

BASE PLATE SCHEDULE

MARK	BP SIZE & ANCHORS	DETAIL
BP 1	2x6 [38x140] @16" [400mm]	50x250 [2x38] C/W 1/2" [19] @ 12" [300] TYP. 1/2" [19] @ 12" [300] TYP.

NOTES:

- REFER TO ARCHITECTURAL DRAWINGS FOR SETTING OUT DETAILS.
- DO NOT SCALE FROM DRAWINGS.
- TRIAL PITS TO CONFIRM SOIL TYPE PRIOR TO CONSTRUCTION.
- ALL EXTERIOR STEELWORK TO BE GALVANISED AND PAINTED AS PER ARCH SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS INCLUDING SHORING.
- CONTRACTOR TO PROVIDE ADEQUATE SHORING AS REQUIRED DURING ALL PHASES OF CONSTRUCTION.
- ANY CONNECTIONS NOT SHOWN TO BE AS PER PART 9.

DEFLECTIONS:

- DEFLECTION LIMITS AS SPECIFIED IN TABLE 9.4.3.1.
- WHERE ELEMENTS ARE CANTILEVERED, A MAX ALLOWABLE LIMIT OF 1/180 IS PERMITTED.
- WHERE ELEMENTS ARE TRANSFERRING, A MAX ALLOWABLE LIMIT OF 1/500 IS PERMITTED.
- WHERE ELEMENTS ARE SUPPORTING BRITTLE ELEMENT (I.E. GLASS), A MAX ALLOWABLE LIMIT OF 1/500 IS PERMITTED.

OPENING IN WALLS:

- JACK AND KING STUDS:
 - INSTALL DOUBLE JACK STUDS UNDER LINTELS, UNO.
 - INSTALL 2 KING STUDS AT POST FOR EXTERIOR WALLS, UNO.
 - INSTALL 1 KING STUD POST AT INTERIOR WALLS, UNO.
- MINIMUM LINTEL 2x10 [38x235] LUMBER, UNO.

FOOTING SCHEDULE

MARK	TYPE	SIZE	REINFORCEMENT	REMARKS
SF 1	STRIP	2'-0" [600] WD x 18" [450] D	SP2x6S T [100x124] @12x6 OPT SPF	ALL MARKED ON PLANS
SF 2	STRIP	2'-0" [600] WD x 10" [250] D	SP2x4S T [100x124] @12x6 OPT SPF	ALL MARKED ON PLANS
SF 3	STRIP	3'-0" [900] WD x 18" [450] D	SP2x6S T [100x124] @12x6 OPT SPF	ALL MARKED ON PLANS
PF 1	PAD	4'-0" [1200] x 4'-0" [1200]	SP2x6S T [100x124] @12x6 OPT SPF	ALL MARKED ON PLANS

NOTES:

- PROVIDE HOOKED DOWELS FROM BOTTOM OF FOOTING TO MATCH AND LAP WITH VERTICALS.
- FOOTINGS TO BE DESIGNED IN ACCORDANCE WITH CL. 9.4.1 AND 9.4.3, AND AT THE REQUIRED DEPTH FOR FROST PROTECTION APPROPRIATE TO THE SITE CONDITIONS.

FOUNDATION WALL SCHEDULE

MARK	SIZE	REINFORCEMENT	REMARKS
FW 1	8" [200mm]	10 - 150 kg / m	FOR STRIP FOOTINGS UNO
FW 2	10" [250mm]	10 - 150 kg / m	SF 3, AS MARKED ON PLANS
FW 3	14" [350mm]	10 - 150 kg / m	SF 3, AS MARKED ON PLANS

LINTEL / HEADER SCHEDULE

MARK	SIZE	REMARKS
L 1	(2) 2x10 [38x235]	TYP FOR LOAD BEARING WALLS UNO

NOTES:

- SIZES PROVIDED FOR INITIAL COSTING, DESIGNER TO SIZE LINTELS AND FLOOR BEAMS BASED ON SPAN AND LOAD WIDTHS IN ACCORDANCE WITH PART 9 REQUIREMENTS AND SITE-SPECIFIC SNOW LOADS AS APPROPRIATE.

JOIST SCHEDULE

MARK	SIZE AND SPACING	REMARKS
J 1	5/8" [16mm] T&G PLY ON 2x12 [38x286] SPF JOIST @16" [400] OC	TYP FOR FLOOR UNO
J 2	5/8" [16mm] T&G PLY ON 2x12 [38x286] SPF JOIST @16" [400] OC	TYP FOR ROOF UNO

NOTES:

- TIMBER BEAMS TO BE SIZED IN ACCORDANCE WITH TABLE 9.23.4.2.H.
- ALL JOISTS TO BE SPF GRADE No. 1 No. 2 OR BETTER, ALTERNATIVELY USE TJFS TO MANUFACTURER'S SPAN-TO-LOAD TABLES.
- ALL FLOOR JOISTS W/ STRAPPING @16" [400] OC.

1 2025-02-14 ISSUED AS PROTOT

NO.	DATE	DESCRIPTION
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PROJECT:

CMHC HOUSING CATALOGUE

BRITISH COLUMBIA, CANADA

NOT FOR PERMIT OR CONSTRUCTION

SHEET TITLE:

GENERAL NOTES SCHEDULES

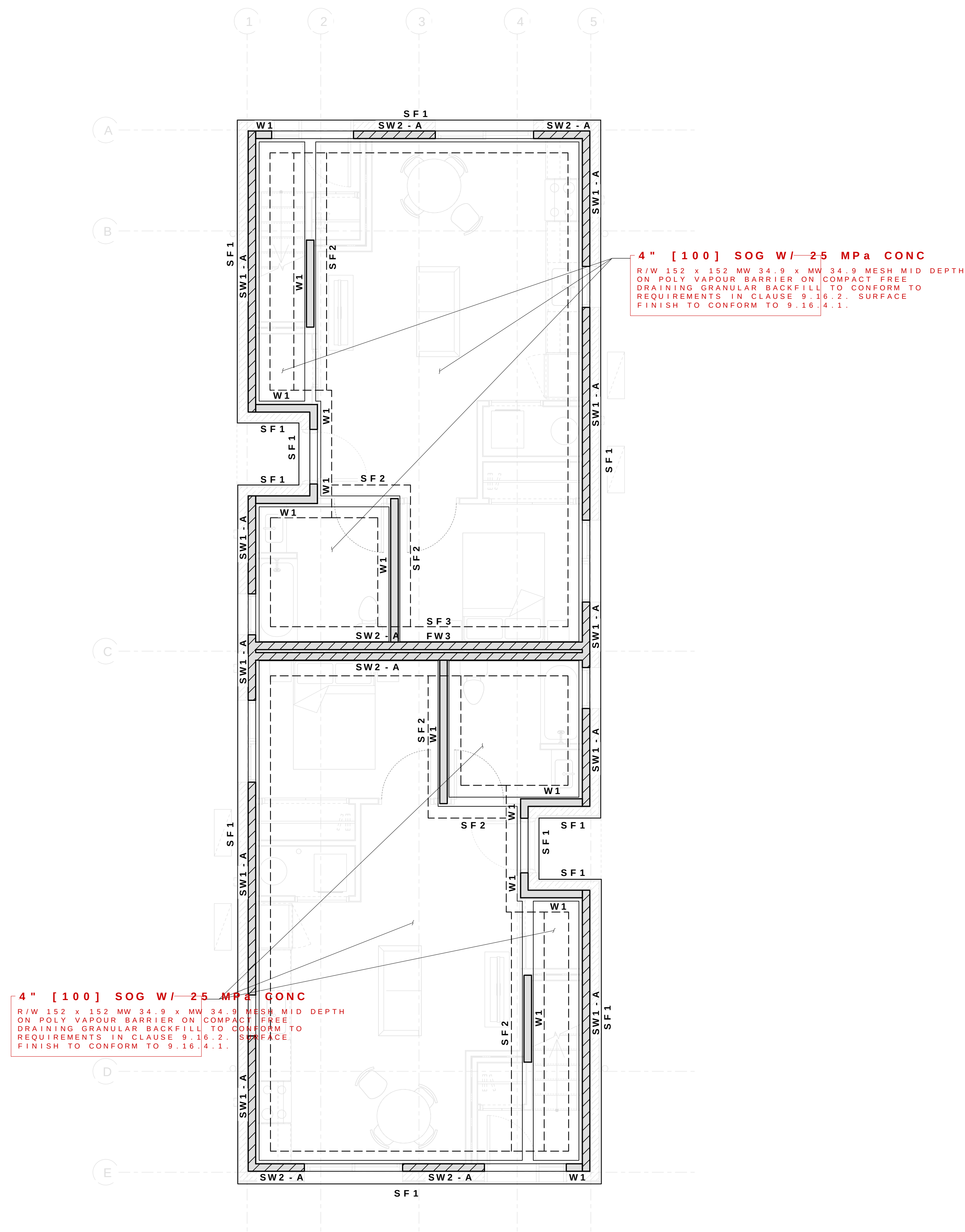
BC FOURPLEX 01

PROJECT NO241058
SCALE: NTS

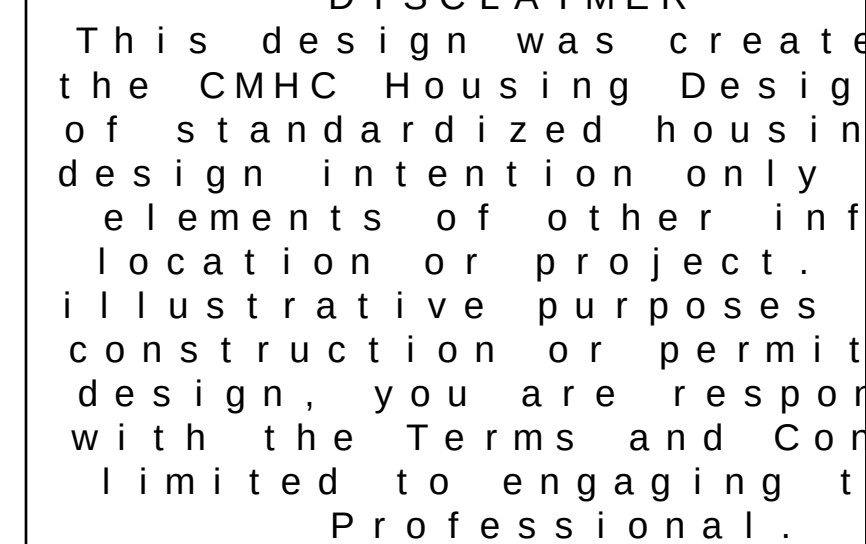
SHEET NO:

S 0 0 1

SHEAR WALLS FALL OUTSIDE THE PRESCRIPTIVE REQ
9.23. AND MUST HENCE BE DESIGNED TO PART 4 IN
CLAUSE 9.23.1.1.2.

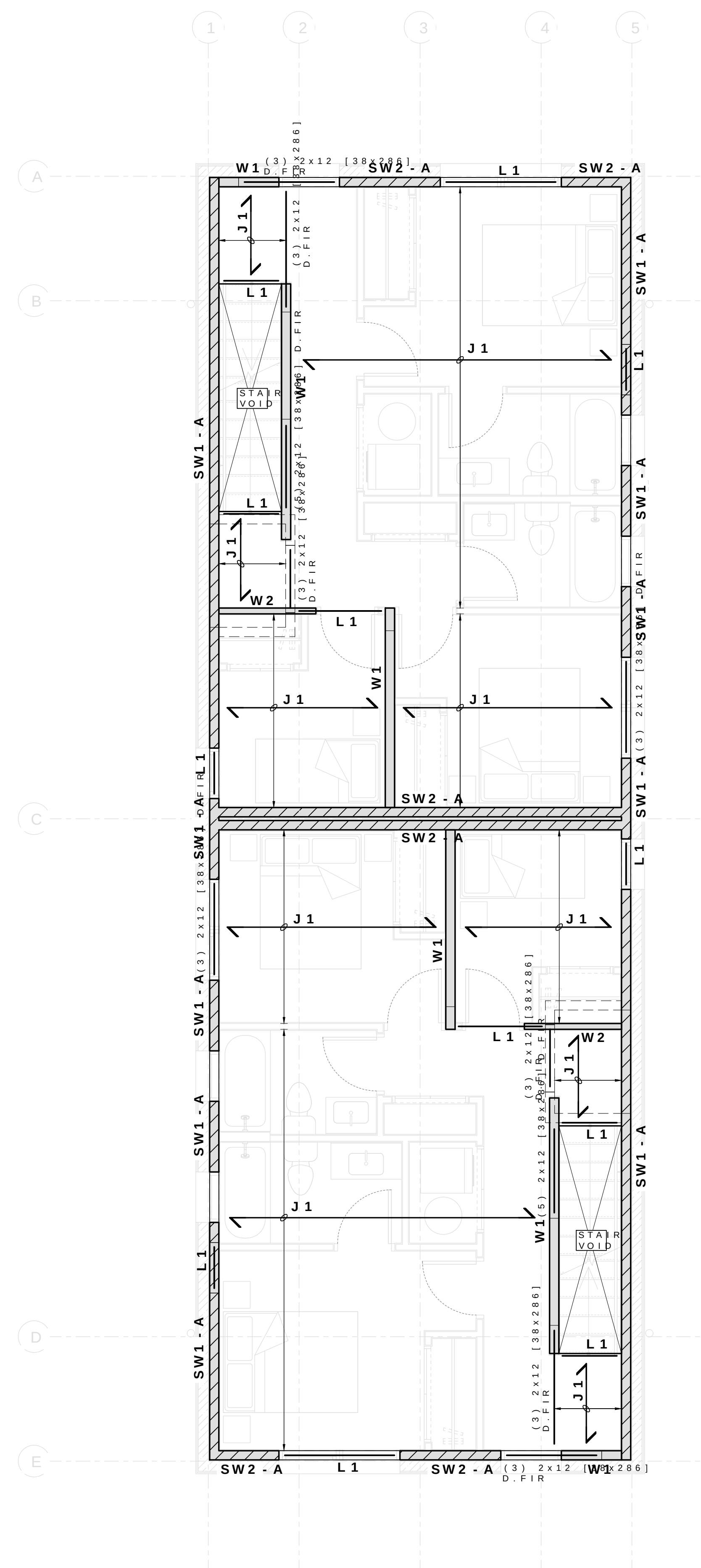


FOUNDATION / MAIN FLOOR PLAN
1/4" = 1' - 0"

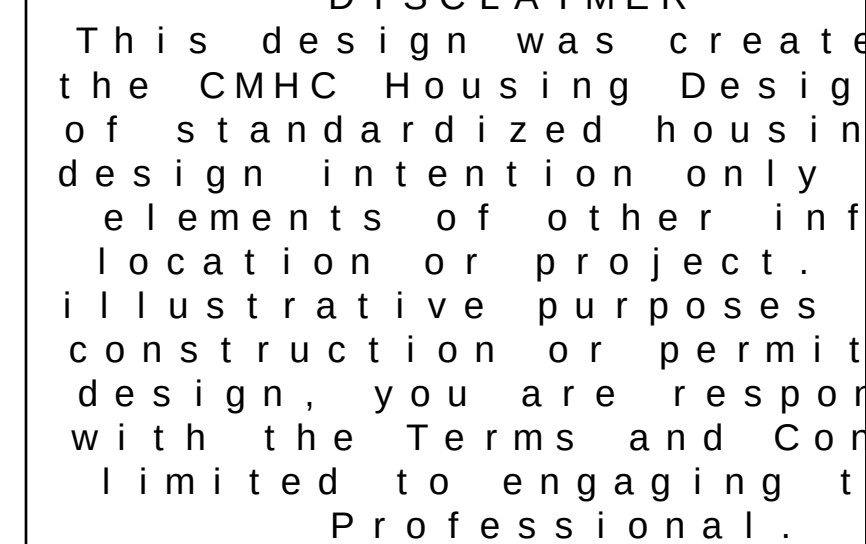


S 1 0 1

SHEAR WALLS FALL OUTSIDE THE PRESCRIPTIVE REQ
9.23. AND MUST HENCE BE DESIGNED TO PART 4 IN
CLAUSE 9.23.1.1.2.



SECOND FLOOR PLAN
1/4" = 1' - 0"



S 1 0 2

SHEAR WALLS FALL OUTSIDE THE PRESCRIPTIVE REQ
9.23. AND MUST HENCE BE DESIGNED TO PART 4 IN
CLAUSE 9.23.1.1.2.

— EXTEND WALLS TO THE UNDERSIDE
OF THE ROOF, FOLLOWING THE
SLOPE OR ALTERNATIVELY ALIGN
TRUSS ON TOP OF WALLS

VAULTED ROOF FORMED WITH
TIMBER TRUSSES SPANNING
BETWEEN EXTERIOR WALLS
BY TRUSS SUPPLIER.
3/8" [16mm] ON ROOF.

ROOF PLAN
1 / 4 " = 1 ' - 0 "



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1	2025-02-14	ISSUED AS PROTOT
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NO.	DATE	DESCRIPTION
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PROJECT:

CMHC HOUSING
CATALOGUE

BRITISH COLUMBIA, CANADA

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SHEET TITLE:

ROOF PLAN

BC FOURPLEX 01

PROJECT NO241058

SCALE: As indicated

SHEET NO:

S 1 0 4

M500:	MECHANICAL COVER PAGE
M501.1	BC FOURPLEX 01 MECHANICAL
M000:	MECHANICAL DETAILS
M000:	MECHANICAL SPECIFICATIONS



MECHANICAL DRAWINGS

MECHANICAL SYSTEMS		
	EQUIPMENT	DESCRIPTION
VENTILATION	ENERGY RECOVERY VENTILATOR (ERV)	DWELLING UNIT TO BE SERVED (MIN. 80% HEAT RECOVERY EFF. CONTINUOUS SUPPLY OF OUTDOOR AIR TO OCCUPIED SPACES AND EXHAUST AIR TO WASHROOM)
HEATING AND COOLING	DUCTLESS SPLIT-SYSTEM HEAT PUMP (HP) - ONE OUTDOOR UNIT SUPPLEMENTARY BASEBOARD HEATER (EBH)	HEATING AND COOLING OF SUITE. DUCTLESS SPLIT SYSTEM WITH ONE OUTDOOR UNIT. EBH REQUIRED FOR CLIMATE ZONES 5 & 6. EBH REQUIRED FOR ALL SPACES WHEN OUTDOOR AMBIENT TEMPERATURE BELOW -15°C, OR DURING POWER OUTAGES.
DOMESTIC HOT WATER	HYBRID HEAT PUMP WATER HEATER (DHW)	DOMESTIC HOT WATER PRODUCTION. STANDALONE HYBRID HEAT PUMP WATER HEATER.
KITCHEN EXHAUST		KITCHEN RANGE EXHAUST TO BE SEPARATE VENTILATION SYSTEM AND NOT TO BE CONNECTED DIRECTLY TO OUTSIDE. (NOTE: THIS IS DESIGNED FOR USE WITH A RANGE APPLIANCE. A MAKE-UP AIR (MUA) SYSTEM IS NOT RECOMMENDED FOR HOMES THAT HAVE GAS-FIRED OR NATURAL-DRAFT FIREPLACES, TO PREVENT DRAFTING AND BACKDRAFT.)
DRYER EXHAUST		DRYER EXHAUST TO BE SEPARATE VENTILATION SYSTEM AND NOT TO BE CONNECTED DIRECTLY TO OUTSIDE. (NOTE: CONVENTIONAL DOMESTIC DRYERS DO NOT REQUIRE DUCTS.)

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1	2025-02-14	ISSUED AS PROTOT
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NO.	DATE	DESCRIPTION
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CMHC HOUSING CATALOGUE

BRITISH COLUMBIA, CANADA

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OR CONSTRUCTION

MECHANICAL C

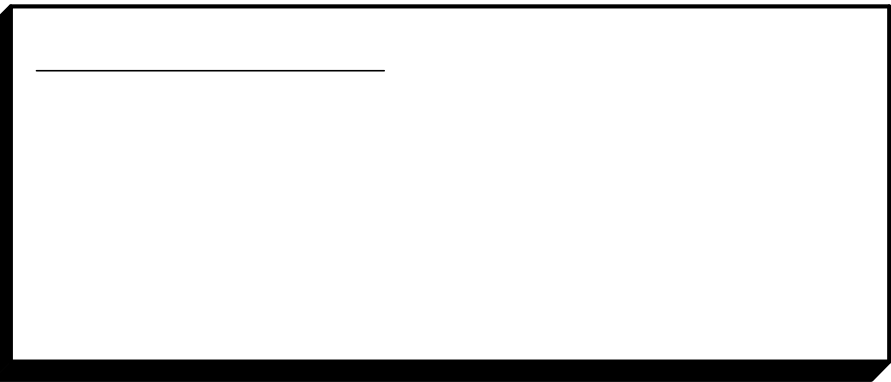
241058
AS NOTED

M 5 0 0

MECHANICAL LEGEND		
LIST OF ABBREVIATIONS		LIST OF SYMBOLS AND NOTATION
C/W	COMPLETE WITH	DUCTWORK
DN	DOWN	ROUND DUCT DROF
F/A, T/A	FROM ABOVE, TO	BALANCING DAMPER
F/B, T/B	FROM BELOW, TO	BELOW
NTS	NOT TO SCALE	SUPPLY DIFFUSER
O/A	OUTSIDE AIR	RETURN GRILLE
R/A	RETURN AIR	EXHAUST GRILLE
E/A	EXHAUST AIR	SUPPLY OUTLET
S/A	SUPPLY AIR	RETURN OR EXHAUST
		EQUIPMENT TAG

PLUMBING ROUGH - IN SCHEDULE						
TYPE	FIXTURE	SAN	DCW	DHW	VENT	REMARKS
SK	SINK	3/8 (1 1/2")	1/2 (1/2")	1/2	3/8 (1 1/4")	-
LAV	LAVATORY	3/8 (1 1/4")	1/2 (1/2")	1/2	3/8 (1 1/4")	-
WC	WATER CLOSET	7/8 (3")	1/2 (1/2")	1/2	3/8 (1 1/2")	FLUSH TANK
SH	SHOWER	5/8 (2")	1/2 (1/2")	1/2	3/8 (1 1/2")	-
BT	BATHTUB	5/8 (2")	1/2 (1/2")	1/2	3/8 (1 1/2")	-
JS	JANITOR SINK	3/8 (1 1/2")	1/2 (1/2")	1/2	3/8 (1 1/4")	-
FD-1	FLOOR DRAIN	100 (4")	-	-	-	C/W TRAP PRIMER
CW	DOMESTIC CLOTHES WASHER	7/8 (3")	20 (3/4")	20	3/8 (1 3/4")	
DW	DOMESTIC DISH WASHER		-	1/2 (1/2")		C/W SHOCK ARRESTOR. DRAIN HOSE TO ADJACENT
* MINIMUM SIZE, REFER TO MANUFACTURER'S RECOMMENDATIONS. MULTIPLE INDEPENDENT PLUMBING CONNECTIONS, SHUT-OFF VALVES, AND SHOCK ARRESTORS TO BE INSTALLED TOGETHER).						

ERV SIZING									
SUITE TYPE	QTY.	QTY.	QTY.	Area	Area	OUTDOOR AIR		EXHAUST	
	BEDROOM	OCCUPANCY	BATHROOM			(sq ft)	(sq ft)	CFM	L / s
FOUR-PLEX 01 -	1 BED	SUITE	1 1			30	14	19	9
1. AIRFLOW RATE PER BCBC2024 PRINCIPAL VENTILATION SYSTEM EXHAUST FAN MINIMUM AIRFLOW RATES (TABLE 9.32.3.6) KITCHEN/BATHROOM EXHAUST FAN MINIMUM AIR-FLOW RATE (TABLE 9.32.3.6) 2.ERV TO OPERATE IN CONSTANT VOLUME TO MEET ABOVE MINIMUM AIRFLOW RATES. OPTIMALLY INTERMITTENDLY IS RECOMMENDED. 3. ERV TO BE MIN. 1" w.c. ESP 4.ERV TO BE C/W MERV 13 SUPPLY FILTER									



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CMHC HOUSING DESIGN CATALOGUE

BC FOURPLEX 01 OPTION 2

MECHANICAL DRAWINGS

MECHANICAL SHEET LIST	
M500	MECHANICAL COVER PAGE
M501.2	BC FOURPLEX 01 MECHANICAL (OPTION 2)
M001	MECHANICAL DETAILS
M002	MECHANICAL SPECIFICATIONS



DISCLAIMER

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MECHANICAL SYSTEMS		
	EQUIPMENT	DESCRIPTION
VENTILATION	ENERGY RECOVERY VENTILATOR (ERV)	DWELLING UNIT TO BE SERVED BY A SINGLE ERV (MIN. 80% HEAT RECOVERY EFFECTIVENESS) FOR CONTINUOUS SUPPLY OF OUTDOOR AIR TO ALL OCCUPIED SPACES AND EXHAUST AIR FROM WASHROOM.
HEATING AND COOLING	DUCTLESS SPLIT-SYSTEM HEAT PUMP(FCU-INDOOR UNIT, CU-OUTDOOR UNIT) SUPPLEMENTARY BASEBOARD HEATER (EBBH)	HEATING AND COOLING OF SUITE IS SERVED BY ELECTRIC SPLIT SYSTEM WITH WALL MOUNTED, DUCTLESS INDOOR UNITS. FOR CLIMATE ZONES 5 & 6, ELECTRIC BASEBOARD IS REQUIRED FOR ALL SPACES AS BACK UP HEAT WHEN OUTDOOR AMBIENT TEMPERATURE IS BELOW -15°C, OR DURING POWER OUTAGE
DOMESTIC HOT WATER	HYBRID HEAT PUMP WATER HEATER (DHWТ)	DOMESTIC HOT WATER PRODUCTION BY STANDALONE HYBRID HEAT PUMP AND ELECTRIC HOT WATER HEATER
KITCHEN EXHAUST	-	KITCHEN RANGE EXHAUST TO BE SEPARATE FROM MAIN VENTILATION SYSTEM AND TO BE DUCTED DIRECTLY TO OUTSIDE. (NOTE: THIS IS DESIGNED FOR ALL ELECTRIC APPLIANCE. A MAKE-UP AIR (MUA) FAN INTERLOCKED WITH KITCHEN RANGE EXHAUST IS RECOMMENDED FOR HOMES THAT INCLUDE ANY GAS-FIRED OR NATURAL-DRAFTING APPLIANCES OR FIREPLACES, TO PREVENT DEPRESSURIZATON AND BACKDRAFT")
DRYER EXHAUST	-	DRYER EXHAUST TO BE SEPARATE FROM MAIN VENTILATION SYSTEM AND TO BE DUCTED DIRECTLY TO OUTSIDE. (NOTE: THIS IS BASED ON CONVENTIONAL DOMESTIC DRYERS. CONDENSING DRYERS DO NOT REQUIRE DUCTED EXHAUST)

MECHANICAL LEGEND		
LIST OF ABBREVIATIONS		LIST OF SYMBOLS AND SERVICES
C/W	COMPLETE WITH	DUCTWORK
DN	DOWN	ROUND DUCT DROP
F/A, T/A	FROM ABOVE, TO ABOVE	BALANCING DAMPER
F/B, T/B	FROM BELOW, TO BELOW	SUPPLY DIFFUSER
NTS	NOT TO SCALE	RETURN GRILLE
O/A	OUTSIDE AIR	EXHAUST GRILLE
R/A	RETURN AIR	SUPPLY OUTLET
E/A	EXHAUST AIR	RETURN OR EXHAUST INLET
S/A	SUPPLY AIR	EQUIPMENT TAG

PLUMBING ROUGH-IN SCHEDULE						
TYP E	FIXTURE	SAN	DCW	DHW	VENT	REMARKS
SK	SINK	38 (1½")	12 (½")	12 (½")	32 (1¼")	-
LAV	LAVATORY	32 (1¼")	12 (½")	12 (½")	32 (1¼")	-
WC	WATER CLOSET	75 (3")	12 (½") / 25 (1")	-	38 (1½")	FLUSH TANK
SH	SHOWER	50 (2")	12 (½")	12 (½")	38 (1½")	-
BT	BATHTUB	50 (2")	12 (½")	12 (½")	38 (1½")	-
JS	JANITOR SINK	38 (1½")	12 (½")	12 (½")	32 (1¼")	-
FD-1	FLOOR DRAIN	100 (4")	-	-	-	C/W TRAP PRIMER
CW	DOMESTIC CLOTHES WASHER	75 (3")	20 (¾")	20 (¾")	38 (1½")	
DW	DOMESTIC DISH WASHER	-	-	12 (½")	-	C/W SHOCK ARRESTOR. CONNECT DRAIN HOSE TO ADJACENT SINK.

* MINIMUM SIZE, REFER TO MANUFACTURER'S RECOMMENDATIONS. MULTIPLE ADJACENT APPLIANCES SHALL USE INDEPENDENT PLUMBING CONNECTIONS, SHUT-OFF VALVES, AND SHOCK ARRESTORS (DO NOT GANG CONNECTIONS TOGETHER).

ERV SIZING									
SUITE TYPE	QTY. BEDROOM	QTY. OCCUPANT	QTY. BATHROOM	Area (sqft)	Area (sqm)	OUTDOOR AIR		EXHAUST AIR	
						CFM	L/s	CFM	L/s
1. AIRFLOW RATE PER BCBC2024 PRINCIPAL VENTILATION SYSTEM EXHAUST FAN MINIMUM AIRFLOW RATES (TABLE 9.32.3.5) KITCHEN/BATHROOM EXHAUST FAN MINIMUM AIR-FLOW RATE (TABLE 9.32.3.6) 2. ERV TO OPERATE IN CONSTANT VOLUME TO MEET ABOVE MINIMUM AIRFLOW RATES. OPTIONAL BOOST MODE TO INCREASE WASHROOM EXHAUST INTERMITTENDLY IS RECOMMENDED. 3. ERV TO BE MIN. 1"w.c. ESP 4. ERV TO BE C/W MERV 13 SUPPLY FILTER									

ISSUE DATE: 2025-02-14

1	2025-02-14	ISSUED AS PROTOTYPICAL DRAWING

NO.	DATE	DESCRIPTION
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PROJECT:
CMHC HOUSING DESIGN CATALOGUE

BRITISH COLUMBIA, CANADA

NOT FOR PERMIT OR CONSTRUCTION

SHEET TITLE:

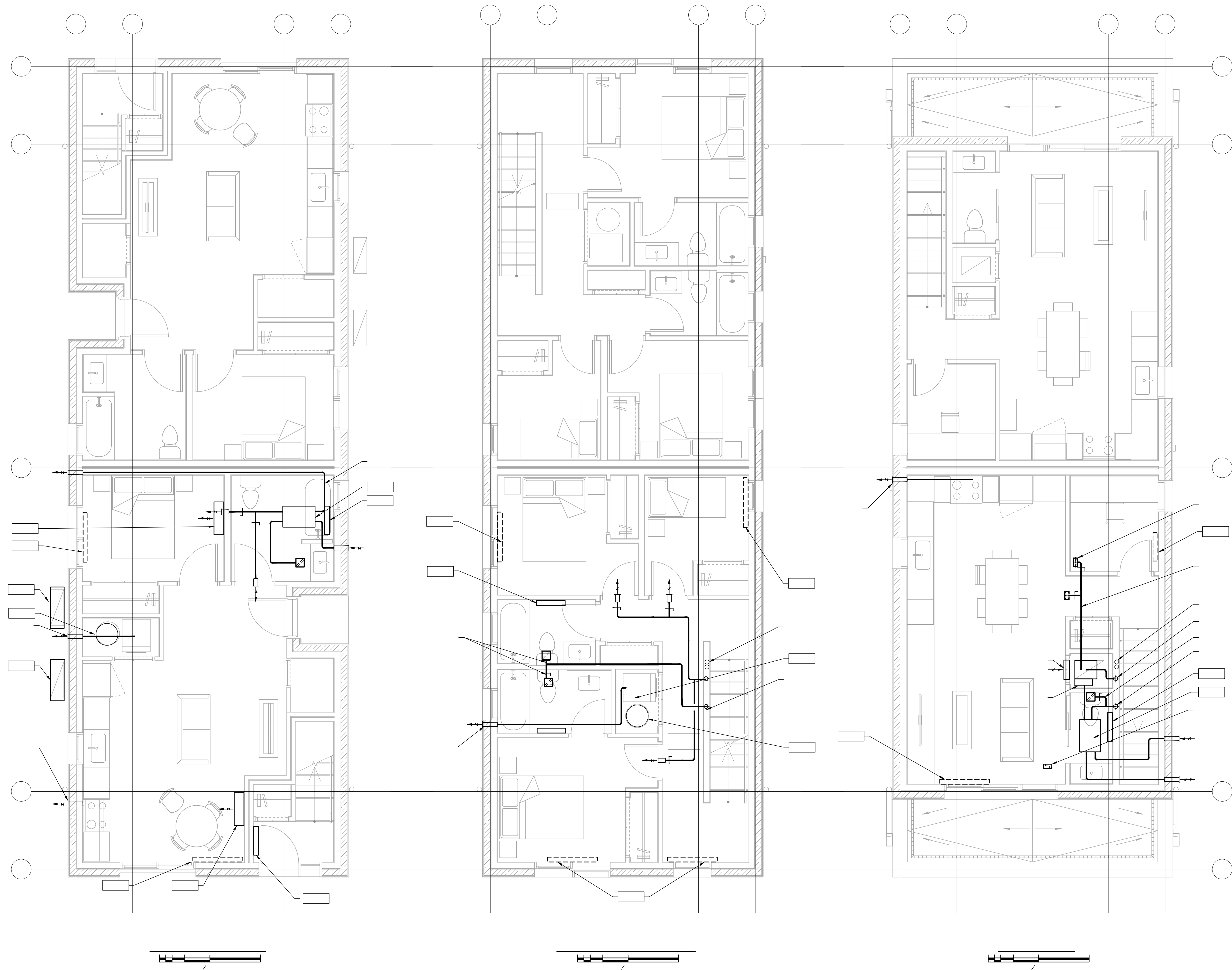
MECHANICAL COVER PAGE

BC FOURPLEX 01 OPTION 2

PROJECT NO: 241058
SCALE: AS NOTED

SHEET NO:

M500



NOT FOR PERMIT
OR CONSTRUCTION

MECHANICAL SPECIFICATIONS

1. GENERAL

- 1.1. INTENT: THIS SPECIFICATION SHALL SERVE TO PROVIDE DIRECTION AND STANDARDS TO ENABLE THE CONTRACTOR TO PROVIDE THE MECHANICAL SYSTEM FOR THE PROJECT, IN COMPLETE ACCORDANCE WITH CURRENT BUILDING CODE AND LOCAL BYLAWS, AND EQUIPMENT NECESSARY TO COMPLETE THE MECHANICAL WORK
- 1.2. LIABILITY: ASSUME RESPONSIBILITY FOR LAYING OUT WORK AND FOR DAMAGE CAUSED TO THE OWNER OR OTHERS BY EMPLOYEES OR SUBCONTRACTORS OF THE CONTRACTOR. TAKE RESPONSIBILITY FOR CONDITION OF MATERIALS AND EQUIPMENT SUPPLIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF MATERIALS AND EQUIPMENT SUPPLIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF MATERIALS AND EQUIPMENT SUPPLIED.
- 1.3. CERTIFICATES: GIVE NOTICES TO OBTAIN PERMITS, AND PAY PERMIT AND INSPECTION FEES SO WORK, SPECIFICATIONS AND SHOWING ABOVE GROUND, SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE BUILDING CODE OF CANADA, AND LOCAL BYLAWS, AND EQUIPMENT NECESSARY TO COMPLETE THE MECHANICAL WORK
- 1.4. CUTTING AND PATCHING: MEASURE OUT AND PROVIDE LOCATIONS FOR HOLES FOR MECHANICAL EQUIPMENT AND PIPING. PROVIDE PATCHES TO MATCH EXISTING FINISHES. PROVIDE PATCHES TO MATCH EXISTING FINISHES. PROVIDE PATCHES TO MATCH EXISTING FINISHES.
- 1.5. TESTING: TEST EQUIPMENT AND MATERIALS WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEST RESULTS TO THE CONSULTANT. PROVIDE TEST RESULTS TO THE CONSULTANT. PROVIDE TEST RESULTS TO THE CONSULTANT.
- 1.6. GUARANTEE: PROVIDE THE OWNER WITH A WRITTEN GUARANTEE FOR LABOUR AND MATERIAL WARRANTING SYSTEM FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER.
- 1.7. STANDARD OF MATERIALS AND WORKMANSHIP: MAKE AND QUALITY OF MATERIALS USED ARE SUBJECT TO ACCEPTANCE BY THE CONSULTANT. MAKE AND QUALITY OF MATERIALS USED ARE SUBJECT TO ACCEPTANCE BY THE CONSULTANT. MAKE AND QUALITY OF MATERIALS USED ARE SUBJECT TO ACCEPTANCE BY THE CONSULTANT.
- 1.8. ACCESS: ENSURE ADEQUATE MAINTENANCE ACCESS IS MAINTAINED TO MANUAL BALANCING DAMPERS, FIRE DAMPERS, VALVES, METERS, EQUIPMENT, INCLUDING THOSE EXISTING IN PLUMBING FIXTURES. PROVIDE ACCESS TO ALL EQUIPMENT AND MATERIALS. PROVIDE ACCESS TO ALL EQUIPMENT AND MATERIALS. PROVIDE ACCESS TO ALL EQUIPMENT AND MATERIALS.
- 1.9. RECORD DRAWINGS: ENSURE ONE SET OF WHITE PRINT PLANS AND SPECIFICATIONS ARE KEPT ON SITE AT ALL TIMES. PROVIDE ONE SET OF WHITE PRINT PLANS AND SPECIFICATIONS ARE KEPT ON SITE AT ALL TIMES. PROVIDE ONE SET OF WHITE PRINT PLANS AND SPECIFICATIONS ARE KEPT ON SITE AT ALL TIMES.
- 1.10. CLOSE-OUT DOCUMENTATION/OPERATION AND MAINTENANCE MANUALS: WITHIN TWO WEEKS OF SUBSTANTIAL COMPLETION, PROVIDE THE OWNER WITH A WRITTEN GUARANTEE FOR LABOUR AND MATERIAL WARRANTING SYSTEM FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER.

1. PROJECT INFORMATION

- 1.1. PROJECT NAME, ADDRESS, AND DATE OF SUBSTANTIAL COMPLETION
- 1.2. CONTACT INFORMATION FOR GENERAL CONTRACTORS AND ALL MECHANICAL CONTRACTORS AND SUBCONTRACTORS
- 1.3. LETTERS OF ASSURANCE AND WARRANTY DOCUMENTS
- 1.4. COPIES OF ALL APPLICABLE WORK PERMITS
- 1.5. COPY OF CONTRACTOR'S (AND MECHANICAL SUB-CONTRACTOR'S IF APPLICABLE) 1-YEAR WARRANTY
- 1.6. WARRANTY FORMS FOR ALL APPLICABLE MECHANICAL EQUIPMENT
- 1.7. PLUMBING FINAL INSPECTION CERTIFICATE
- 1.8. BACKFLOW PREVENTER TEST CERTIFICATES
- 1.9. CHLORINATION REPORT OF DOMESTIC WATER LINES
- 1.10. TESTING, ADJUSTING, AND BALANCING (TAB) DOCUMENTATION
- 1.11. PIPING TEST FORMS
- 1.12. REFRIGERATION STARTUP CHECKLISTS
- 1.13. HVAC SYSTEM
- 1.14. BRIEF DESCRIPTION OF HVAC SYSTEM COMPONENTS AND OPERATION
- 1.15. OPERATING AND MAINTENANCE MANUALS FOR NEW EQUIPMENT
- 1.16. ADDITIONAL DOCUMENTATION: CONTRACTOR SHALL SUPPLY ALL DOCUMENTATION AND INFORMATION WHICH IS NECESSARY FOR THE CONSULTANT TO COMPLETE THE PROJECT.

5. BALANCING

- 5.1. QUALITY ASSURANCE
- 5.2. PROCEDURES SHALL BE IN ACCORDANCE WITH CURRENT EDITION OF ASHRAE'S NATIONAL STANDARDS FOR MECHANICAL SYSTEMS
- 5.3. INSTRUMENTS FOR TESTING AND BALANCING OF AIR SYSTEMS SHALL HAVE BEEN CALIBRATED WITHIN 30 DAYS OF TESTING AND VERIFIED FOR ACCURACY BEFORE START OF WORK
- 5.4. PROCEDURES
- 5.5. BALANCE TO MAXIMUM FLOW DEVIATION FROM SPECIFIED VALUES OF 10% AT TERMINAL DEVICE AND 5% AT FAN OR COMPRESSOR
- 5.6. PERMANENTLY MARK SETTING ON VALVES, SPLITTERS, DAMPERS AND OTHER ADJUSTMENT DEVICES. TAKE PHOTOGRAPHS OF EACH ADJUSTMENT DEVICE AND APPEND TO DRAWINGS
- 5.7. ADJUST MAIN SUPPLY AND RETURN DUCTS TO DESIGN FLOW RATES. ADJUST ZONES TO DESIGN, SUPPLY AND RETURN DUCTS TO DESIGN FLOW RATES. ADJUST ZONES TO DESIGN, SUPPLY AND RETURN DUCTS TO DESIGN FLOW RATES.
- 5.8. REGISTER TO WITHIN 10% OF DESIGN REQUIREMENTS. ADJUST DIFFUSERS, GRILLES AND REGISTERS TO WITHIN 10% OF DESIGN REQUIREMENTS. ADJUST DIFFUSERS, GRILLES AND REGISTERS TO WITHIN 10% OF DESIGN REQUIREMENTS.

4. TESTING

- 4.1. TEST EQUIPMENT AND MATERIAL WHERE SPECIFIED OR REQUIRED BY AUTHORITY HAVING JURISDICTION. NFPA, CSA AND OTHER RECOGNIZED TEST STANDARDS/CODES
- 4.2. PROVIDE NOTICE OF TESTS TO CONSULTANT. ON COMPLETION OF INSTALLATION, PROVIDE CERTIFICATION OF TEST RESULTS TO THE CONSULTANT. PROVIDE CERTIFICATION OF TEST RESULTS TO THE CONSULTANT.
- 4.3. PRESSURE TESTS
- 4.4. PIPING, FIXTURES OR EQUIPMENT SHALL NOT BE CONCEALED UNTIL INSPECTED AND APPROVED BY CONSULTANT. WHERE LEAKAGE OCCURS, REPAIR AND RE-TEST
- 4.5. DOMESTIC WATER PIPING: TEST TO 1-1/2 TIMES MAXIMUM WORKING PRESSURE OR 1034 kPa (150 PSI) WATER AFTER SHUT OFF OF WATER SUPPLY. PROVIDE TEST RESULTS TO THE CONSULTANT.
- 4.6. DRAINAGE SYSTEM: TEST BY FILLING WITH WATER TO PRODUCE WATER PRESSURE OF 1.5 M (5 FEET) WATER COLUMN. BLOW OUT AND RE-TEST. PROVIDE TEST RESULTS TO THE CONSULTANT.
- 4.7. NATURAL GAS PIPING: TEST AS REQUIRED BY AUTHORITY HAVING JURISDICTION
- 4.8. LOW PRESSURE DUCTS: TEST FOR TIGHTNESS SUCH THAT LEAKAGE IS INAUDIBLE AND NOT DETECTABLE BY SOOT TEST
- 4.9. SHOULD TESTS INDICATE DEFECTIVE WORK OR VARIANCE WITH SPECIFIED REQUIREMENTS, CORRECT DEFECTS AND RE-TEST. PROVIDE TEST RESULTS TO THE CONSULTANT.
- 4.10. PERFORMANCE TESTS
- 4.11. LUBRICATE BEARINGS, ADJUST AND/OR REPLACE AND SET DIRECT AND "V"-BELT DRIVES FOR PROPER OPERATION
- 4.12. CALIBRATE AND ADJUST THERMOSTATS, LINKAGES AND DAMPERS. OPERATE AND TEST MOTORS FOR CORRECT OPERATION AND SEQUENCES. CHECK OVERLOAD HEATERS IN MOTOR STARTERS. FASTEN LOOSE AND RATTLING PIECES OF EQUIPMENT TO ENSURE QUIET OPERATION
- 4.13. GAS-FIRED APPLIANCES SHALL BE OPERATIONALLY TESTED TO THE SATISFACTION OF THE GAS SAFETY OFFICIAL

5. VIBRATION ISOLATION AND SEISMIC RESTRAINT

- 5.1. PROVIDE VIBRATION ISOLATORS AND SEISMIC RESTRAINT SYSTEMS MEETING REQUIREMENTS OF AUTHORITY HAVING JURISDICTION AND CURRENT EDITION OF ASHRAE'S NATIONAL STANDARDS FOR MECHANICAL SYSTEMS
- 5.2. SUPPLEMENT TO NATIONAL BUILDING CODE OF CANADA WITH REGARD TO SEISMIC FORCES TRANSMITTED TO BUILDING STRUCTURE FROM MECHANICAL EQUIPMENT. PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 5.3. AT PROJECT LOCATION, PROVIDE SEALED AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 5.4. COMPLETED PRIOR TO SUBSTANTIAL PERFORMANCE, AND COPIED TO THE CONSULTANT
- 5.5. RESILIENTLY FASTEN ALL MECHANICAL EQUIPMENT TO STRUCTURE INCLUDING (BUT NOT LIMITED TO) HEAT EXCHANGERS, CONDENSERS, PUMPS, FANS, AIR HANDLING UNITS, SPLIT SYSTEM OUTDOOR UNITS, DOMESTIC HOT WATER TANKS
- 5.6. STRAPS, ANCHOR BOLTS AND STRAPS SHALL BE CAPABLE OF WITHSTANDING SEISMIC FORCES IN ALL DIRECTIONS. PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 5.7. RESTRAINTS SHALL BE 3 TIMES CALCULATED SEISMIC FORCES TRANSMITTED THROUGH EQUIPMENT OR PIPING RESTRAINTS. PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 5.8. WHERE HORIZONTAL LENGTH OF PIPE OR DUCT EXCEEDS THE MAXIMUM ALLOWABLE TRANSVERSE RESTRAINT, PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 5.9. MINIMUM OF ONE LONGITUDINAL AND ONE TRANSVERSE RESTRAINT SHALL BE PROVIDED
- 5.10. WHERE HORIZONTAL PIPE OR DUCT PASSES THROUGH VERTICAL CONCRETE OR CONCRETE BLOCK WALL WITHIN 300 MM (12") BELOW SUPPORTING STRUCTURE, TRANSVERSE AND LONGITUDINAL BRACING SHALL NOT BE REQUIRED
- 5.11. FOR SUSPENDED EQUIPMENT WHERE SWAY WILL EXCEED 100MM (4"), SLACK CABLE RESTRAINTS SHALL BE PROVIDED AT 45° IN ELEVATION AND AT 90° TO EACH OTHER IN PLAN VIEW
- 5.12. PROVIDE MINIMUM TWO STEEL BAND STRAPS ABOVE CENTRE OF GRAVITY ON VERTICAL TANKS ANCHORED TO STRUCTURE
- 5.13. BRANCH LINES SHALL NOT BE USED TO RESTRAIN MAIN PIPING
- 5.14. WHERE NOMINALLY HORIZONTAL LENGTH OF PIPE OR DUCT EXCEEDS THE MAXIMUM ALLOWABLE TRANSVERSE RESTRAINT, PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 5.15. MINIMUM OF ONE LONGITUDINAL AND ONE TRANSVERSE RESTRAINT SHALL BE PROVIDED
- 5.16. WHERE HORIZONTAL PIPE OR DUCT PASSES THROUGH VERTICAL CONCRETE OR CONCRETE BLOCK WALL WITHIN 300 MM (12") BELOW SUPPORTING STRUCTURE, TRANSVERSE AND LONGITUDINAL BRACING SHALL NOT BE REQUIRED
- 5.17. CABLES SHALL BE TIGHTENED TO REMOVE SLACK (25mm (1") DEFLECTION UNDER THUMB PRESSURE), BUT SHALL NOT SUPPORT ANY WEIGHT UNDER NORMAL OPERATING CONDITIONS
- 5.18. ALLOWANCES SHALL BE MADE FOR NORMAL EXPANSION AND CONTRACTION OF PIPING SYSTEMS WHERE APPLICABLE
- 5.19. PROVIDE TRANSVERSE AND LONGITUDINAL SEISMIC RESTRAINT ON NOMINALLY HORIZONTAL PIPING AS FOLLOWS
- 5.20. NATURAL GAS PIPING
- 5.21. 25mmØ AND LARGER: LONGITUDINAL RESTRAINT 12m O.C., TRANSVERSE RESTRAINT 6m O.C
- 5.22. ALL OTHER PIPE SERVICES
- 5.23. 65mmØ AND LARGER: LONGITUDINAL RESTRAINT 24m O.C., TRANSVERSE RESTRAINT 12m O.C

3. INSULATION

- 3.1. MATERIALS AND APPLICATION TEMPERATURES SHALL BE AS RECOMMENDED BY ADHESIVE, COATING OR SEALER MANUFACTURER. PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 3.2. INSULATION DUE TO THERMAL MOVEMENT OR POOR WORKMANSHIP. COMPOSITE FIRE AND SMOKE HAZARD RATING OF 0 FOR FLAME SPREAD AND 50 FOR SMOKE DEVELOPED OR OTHERWISE AS REQUIRED BY CODE. PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 3.3. EXCEED 25 FOR FLAME SPREAD AND 50 FOR SMOKE DEVELOPED OR OTHERWISE AS REQUIRED BY CODE. PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 3.4. PIPING INSULATION THICKNESS
- 3.5. DOMESTIC COLD WATER, ALL SIZES = 25mm (1") THICK
- 3.6. DOMESTIC HOT WATER AND RECIRC. PIPE SIZE < 38mm (1-1/2")Ø = 12mm (1/2") THICK
- 3.7. DOMESTIC HOT WATER AND RECIRC. PIPE SIZE 38mm (1-1/2")Ø AND UP = 12 mm (1/2") THICK
- 3.8. PIPING INSULATION FINISHES
- 3.9. EXPOSED: BCICA STANDARD "PF2 PREMIUM 2" OR 15 MIL PVC JACKET WITH SOLVENT WELDS (INCLUDES WITHIN INSULATION)
- 3.10. CONCEALED: BCICA STANDARD "PF3 ECONOMY" ALL SERVICE JACKET WITH INTEGRAL VAPOUR BARRIER
- 3.11. DUCTWORK AND PLENUMS INSULATION THICKNESS
- 3.12. SUPPLY AIR DUCTS AND PLENUMS ABOVE FINISHED CEILINGS = 25mm (1") THICK (UP TO FLEXIBLE DUCT CONNECTIONS)
- 3.13. OUTDOOR AIR DUCT IN HEATED SPACE = 50mm (2") THICK
- 3.14. DUCTWORK AND PLENUMS INSULATION FINISHES
- 3.15. FACTORY FINISHED WITH NO FURTHER FINISH REQUIRED. RAW EDGE OF INSULATION SHALL NOT BE ALLOWED TO EXPOSED
- 3.16. FOR ANY SERVICES, TEMPERATURES, OR SIZES NOT REFERENCED ABOVE, INSULATION THICKNESS SHALL BE PROVIDED ACCORDING TO ASHRAE/IES STANDARD 90.1-2010 (TABLE 6.8.2 MINIMUM DUCT INSULATION, TABLE 6.8.3 MINIMUM PIPE INSULATION THICKNESS)
- 3.17. VAPOUR BARRIER SHALL BE CONTINUOUS FOR ALL "COLD" SERVICES INCLUDING DOMESTIC COLD WATER AND HANGERS/SUPPORTS FOR THESE SERVICES. PENETRATIONS THROUGH WALLS SHALL HAVE CONTINUOUS INSULATION
- 3.18. REFRIGERATION PIPING: REFER TO REFRIGERATION SECTION

8. PLUMBING

- 8.1. PROVIDE ALL NECESSARY PIPING MATERIAL AND LABOUR FOR THE SYSTEMS AS SHOWN ON THE DRAWINGS. PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 8.2. APPLICABLE REVISIONS OF APPLICABLE CODES OR GOVERNING REGULATIONS
- 8.3. PIPE AND FITTINGS
- 8.4. SANITARY DRAINAGE WASTE VENT (DWV) BELOW GRADE

- 2.1. ABS OR DWV PVC
- 2.2. SANITARY DRAINAGE WASTE VENT (DWV) ABOVE GRADE
- 2.3. UP TO 65mm (2-1/2")Ø: DWV COPPER WITH WROUGHT OR CAST BRASS FITTINGS AND 50-50 SOLDER
- 2.4. DOMESTIC WATER ABOVE GRADE
- 2.5. DOMESTIC WATER ABOVE GRADE
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- 1.1. PROVIDE NEW FIXTURES OF ONE MANUFACTURER AND OF SAME COLOUR, CSA APPROVED, FREE FROM DEFECTS AND CORROSION. PROVIDE SEISMIC ENGINEER LICENSED IN THE PROVINCE OF BRITISH COLUMBIA, AND SIGNED ENGINEER DETAILS FOR SEISMIC ENGINEER
- 1.2. PLUMBING BRASS WITH METAL WORK HEAVY CHROMIUM PLATED AND PRODUCT OF ONE MANUFACTURER
- 1.3. PROVIDE FLEXIBLE ANGLE TYPE HOT AND COLD WATER SUPPLIES WITH SCREWDRIVER STOP, HEXAGONAL, EXPOSED
- 1.4. PROVIDE MILLWORK DRAWINGS AND ADVISE CONSULTANT OF DISCREPANCIES BEFORE ORDERING FIXTURES
- 1.5. SPECIFICATION PRIOR TO PREPARING SHOP DRAWINGS
- 1.6. INSTALL EACH FIXTURE WITH ITS OWN TRAP, EASILY REMOVABLE FOR SERVICING AND CLEANING. AT COMPLETION, THOROUGHLY CLEAN PLUMBING FIXTURES AND EQUIPMENT
- 1.7. INSTALL WALL MOUNTED FIXTURES WITH APPROVED WALL CARRIERS, MODEL TO SUIT INSTALLATION
- 1.8. JOINT WATER TIGHT WITH WHITE SILICONE BASE NON-HARDENING CAULKING COMPOUND FINISHED IN NEAT WORK
- 1.9. SCREWS, LEAD FLASHING SHALL NOT HOLD CLOSET IN PLACE. PROVIDE FIXED COVER ON HANDICAPPED TOILETS
- 1.10. ON SITE BEFORE ROUGH IN
- 1.11. NO PIPE SHALL BE INSTALLED IN ANY PART OF WALL WHERE TEMPERATURE IS LESS THAN 5°C UNDER WINTER DESIGN CONDITIONS
- 1.12. UPON COMPLETION, WATER PIPING SYSTEMS SHALL BE FLUSHED WITH WATER BEFORE INSTALLATION OF FIXTURES AND EQUIPMENT SHALL BE THOROUGHLY CLEANED AND LEFT IN GOOD OPERATING CONDITION
- 1.13. GRADE DRAINAGE LINES MINIMUM 2% SLOPE, PIPING 100mm (4") AND LARGER MAY BE GRADED AT 1% SLOPE
- 1.14. LAY MATERIAL PROPER IN PROPER CONFORMANCE WITH LOCAL BUILDING CODES
- 1.15. PROVIDE GRADE VENTS SO CONDENSATION WILL NOT FORM IN GRADE VENTS
- 1.16. WHEREVER DISSIMILAR METALS ARE JOINED OR SUPPORTED, PIPING SHALL HAVE NON-CONDUCTING TYPE CONNECTIONS OR HANGERS TO PREVENT GALVANIC CORROSION. BRASS ADAPTERS AND VALVES ARE ACCEPTABLE FOR PIPE CONNECTIONS
- 1.17. DOMESTIC HOT WATER HEATERS: PROVIDE AS SPECIFIED COMPLETE WITH SHEET METAL DRAIN PAN: 600°C ABOVE GRADE
- 1.18. WATER SPECIFICATIONS: PROVIDE BACK FLOW PREVENTERS AS SPECIFIED AND AS REQUIRED BY AUTHORITIES. PROVIDE TRAP PRIMERS TO ALL FLOOR DRAINS
- 1.19. FIELD MEASUREMENT AND INSTRUMENTATION, TOTAL SYSTEM BALANCE
- 1.20. DUCTWORK
- 1.21. DUCTWORK SHALL MEET THE REQUIREMENTS OF ASHRAE DUCT MANUALS AND ASHRAE HANDBOOKS. DUCTWORK SHALL MEET THE REQUIREMENTS
- 1.22. CONNECT DIFFUSERS TO DUCTS WITH 1.5m (5'-0") MAXIMUM LENGTH OF FLEXIBLE DUCT. HOLD IN PLACE WITH CAULKING COMPOUND AND STRAP OR CLAMP. FLEXIBLE DUCTWORK SHALL
- 1.23. PROVIDE RETURN AIR OPENINGS AND/OR INSULATED SOUND TRAPS WHERE INDICATED
- 1.24. AIR OUTLETS: PROVIDE AIR OUTLETS AS SPECIFIED ON THE DRAWINGS
- 1.25. MAINTAIN PRESSURE
- 1.26. ECM BLOWERS RATED FOR CONTINUOUS OPERATION (PSC MOTORS NOT ACCEPTABLE). DRAIN PAN AND CONDENSATE DRAIN CONNECTION, AUTOMATIC FAN CYCLED DEFROST
- 1.27. WATER AFTER SHUT OFF OF WATER SUPPLY. PROVIDE TEST RESULTS TO THE CONSULTANT
- 1.28. WATER COLUMN. BLOW OUT AND RE-TEST. PROVIDE TEST RESULTS TO THE CONSULTANT
- 1.29. THE AIR HVAC SYSTEM SHALL OPERATE FOR A MINIMUM OF 48 CONSECUTIVE HOURS PRIOR TO THE DELIVERY OF THE EQUIPMENT
- 1.30. ON COMPLETION OF CONSTRUCTION, INCLUDE REPLACEMENT OF FILTERS FOR ALL HVAC SERVING THE SPACE, INCLUDING THOSE EXISTING (MATCH EXISTING TYPE AND SIZE)
- 1.31. BY SOOT CLEANING: THE CONTRACTOR SHALL PROTECT ALL PROTECTED AND OPEN ENDED DUCTS THROUGHOUT CONSTRUCTION. UPON COMPLETION, DUCT CLEANLINESS WILL BE
- 1.32. BY SOOT CLEANING: THE CONTRACTOR SHALL PROTECT ALL PROTECTED AND OPEN ENDED DUCTS THROUGHOUT CONSTRUCTION. UPON COMPLETION, DUCT CLEANLINESS WILL BE
- 1.33. A PROFESSIONAL DUCT CLEANING CONTRACTOR (ED IT) TO POWER CLEAN ALL DUCTWORK WITHIN THE SPACE, AT NO ADDITIONAL COST TO THE OWNER

- 1.1. PROVIDE FOR COMPLETE AND OPERATIONAL SPLIT TYPE HEAT PUMP SYSTEMS AS INDICATED ON DRAWINGS AND EQUIPMENT SCHEDULES. COMPLY WITH APPLICABLE CODES, LAWS AND
- 1.2. OPERATION CONTROLS, ELECTRONIC DIGITAL CONTROLS AND COMMUNICATION SYSTEM BY ONE MANUFACTURER. DO NOT MIX MANUFACTURERS OF INDOOR AND OUTDOOR UNITS WITH
- 1.3. PROVIDE PROPER OPERATION OF SAFETY CONTROLS AND AUTOMATIC CONTROLS NOT PROVIDED BY OTHERS
- 1.4. VARRANTY, EXTENDED 5 YEAR, ONLY WARRANTY EFFECTS OF EARTHQUAKES IN
- 1.5. ALL EQUIPMENT SHALL COMPLY WITH THE MINIMUM EFFICIENCY REQUIREMENTS OF ASHRAE 90.1-2010 FOR THE APPLICABLE EQUIPMENT TYPE AND CAPACITY RANGES. PERFORMANCE
- 1.6. FACTORY ASSEMBLED, WIRELESS, WITH REMOVABLE ACCESS PANELS, WITH FACTORY INSTALLED RETURN AIR FILTER ON REAR
- 1.7. INSULATED, WITH REMOVABLE ACCESS PANELS, WITH FACTORY INSTALLED RETURN AIR FILTER ON REAR
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- 1.1. PROVIDE FOR COMPLETE AND OPERATIONAL SPLIT TYPE HEAT PUMP SYSTEMS AS INDICATED ON DRAWINGS AND EQUIPMENT SCHEDULES. COMPLY WITH APPLICABLE CODES, LAWS AND
- 1.2. OPERATION CONTROLS, ELECTRONIC DIGITAL CONTROLS AND COMMUNICATION SYSTEM BY ONE MANUFACTURER. DO NOT MIX MANUFACTURERS OF INDOOR AND OUTDOOR UNITS WITH
- 1.3. PROVIDE PROPER OPERATION OF SAFETY CONTROLS AND AUTOMATIC CONTROLS NOT PROVIDED BY OTHERS
- 1.4. VARRANTY, EXTENDED 5 YEAR, ONLY WARRANTY EFFECTS OF EARTHQUAKES IN
- 1.5. ALL EQUIPMENT SHALL COMPLY WITH THE MINIMUM EFFICIENCY REQUIREMENTS OF ASHRAE 90.1-2010 FOR THE APPLICABLE EQUIPMENT TYPE AND CAPACITY RANGES. PERFORMANCE
- 1.6. FACTORY ASSEMBLED, WIRELESS, WITH REMOVABLE ACCESS PANELS, WITH FACTORY INSTALLED RETURN AIR FILTER ON REAR
- 1.7. INSULATED, WITH REMOVABLE ACCESS PANELS, WITH FACTORY INSTALLED RETURN AIR FILTER ON REAR
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CMHC HOUSING DESIGN CATALOGUE
BC FOURPLEX 01
ELECTRICAL DRAWINGS

ELECTRICAL SHEET LIST		DISCLAIMER This design was created by the CMHC Housing Design Team
E000	COVER PAGE	
E001	SYMBOL LEGEND AND ELECTRICAL SERVICE CALCULATION	
E101	FOUR PLEX 01 ELECTRICAL PLANS	
E200	ELECTRICAL SPECIFICATIONS	

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1	2025-06-30	AS PROTOTYPE

1	2025 -	ISSUED AS PROTOTYPING
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NO.	DATE	DESCRIPTION
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PROJECT:
CMHC HOUSING
CATALOGUE

BRITISH COLUMBIA, CANADA

NOT FOR PERMIT
OR CONSTRUCTION

SHEET TITLE:
COVER SHEET

BC FOURPLEX 01

PROJECT NO241058
SCALE: AS NOTED

SHEET NO:

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1	2025-02-14	ISSUED AS PROTOTYPING

NO.	DATE	DESCRIPTION
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PROJECT:
CMHC HOUSING CATALOGUE

BRITISH COLUMBIA, CANADA
NOT FOR PERMIT OR CONSTRUCTION

SHEET TITLE:
FOUR PLEX 01 ELECTRICAL PLANS

BC FOURPLEX 01

PROJECT NO241058
SCALE: AS NOTED

SHEET NO:
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ISSUE DATE 25 - 02 - 14

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NO.	DATE	DESCRIPTION
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PROJECT:

CMHC HOUSING
CATALOGUE

BRITISH COLUMBIA, CANADA

NOT FOR PERMIT
OR CONSTRUCTION

SHEET TITLE:

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BC FOURPLEX 01

PROJECT NO241058

SCALE: AS NOTED

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