



**FRONT ELEVATION**



**REAR ELEVATION**

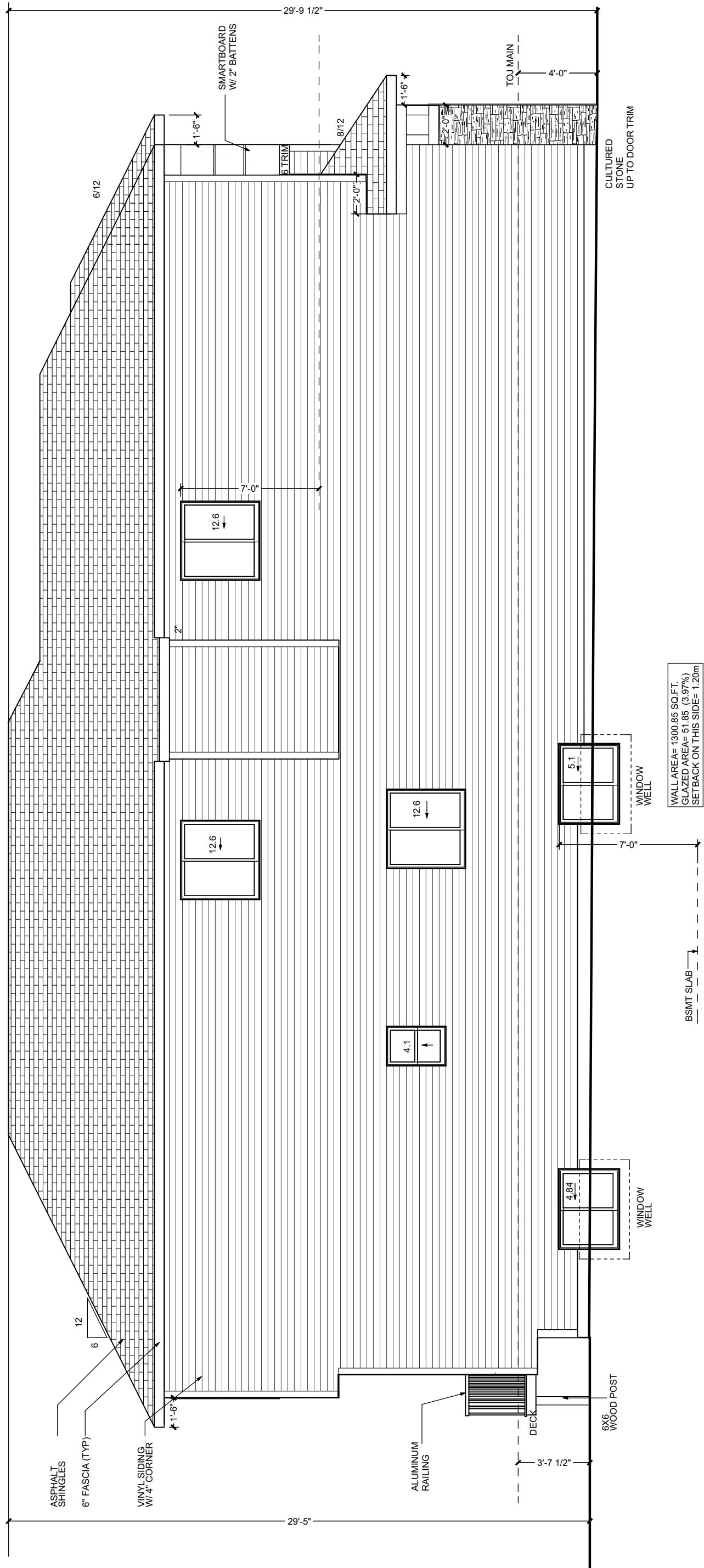
BUILDER/CONTRACTOR MUST CHECK & VERIFY ALL DIMENSIONS & DETAILS BEFORE STARTING ANY CONSTRUCTION AND REPORT ANY ERROR IN ADVANCE TO DESIGNER. DESIGNERS LIABILITY LIMITED TO CORRECTION OF PLANS ONLY.

PROJECT.  
**SINGLE DWELLING**

MAIN FLOOR = 1200 SQ.FT  
 SECOND FLOOR = 1500 SQ.FT  
 TOTAL SQ.FT. = 2700 SQ.FT.  
 GARAGE = 422 SQ.FT  
 BASEMENT = 790 SQ.FT.  
 PORCH = 31 SQ.FT  
 PATIO = 15 SQ.FT

FOR: **TMT Homes**

FILE NO. **21066**  
 SCALE : 3/16"=1'- 0"  
 PAGE NO.  
**1 / 12**



# LEFT ELEVATION

WALL AREA= 1300.85 SQ.FT.  
GLAZED AREA= 51.85 (3.97%)  
SETBACK ON THIS SIDE= 1.20m

BUILDER/CONTRACTOR MUST CHECK & VERIFY ALL DIMENSIONS & DETAILS BEFORE STARTING ANY CONSTRUCTION AND REPORT ANY ERROR IN ADVANCE TO DESIGNER. DESIGNERS LIABILITY LIMITED TO CORRECTION OF PLANS ONLY.

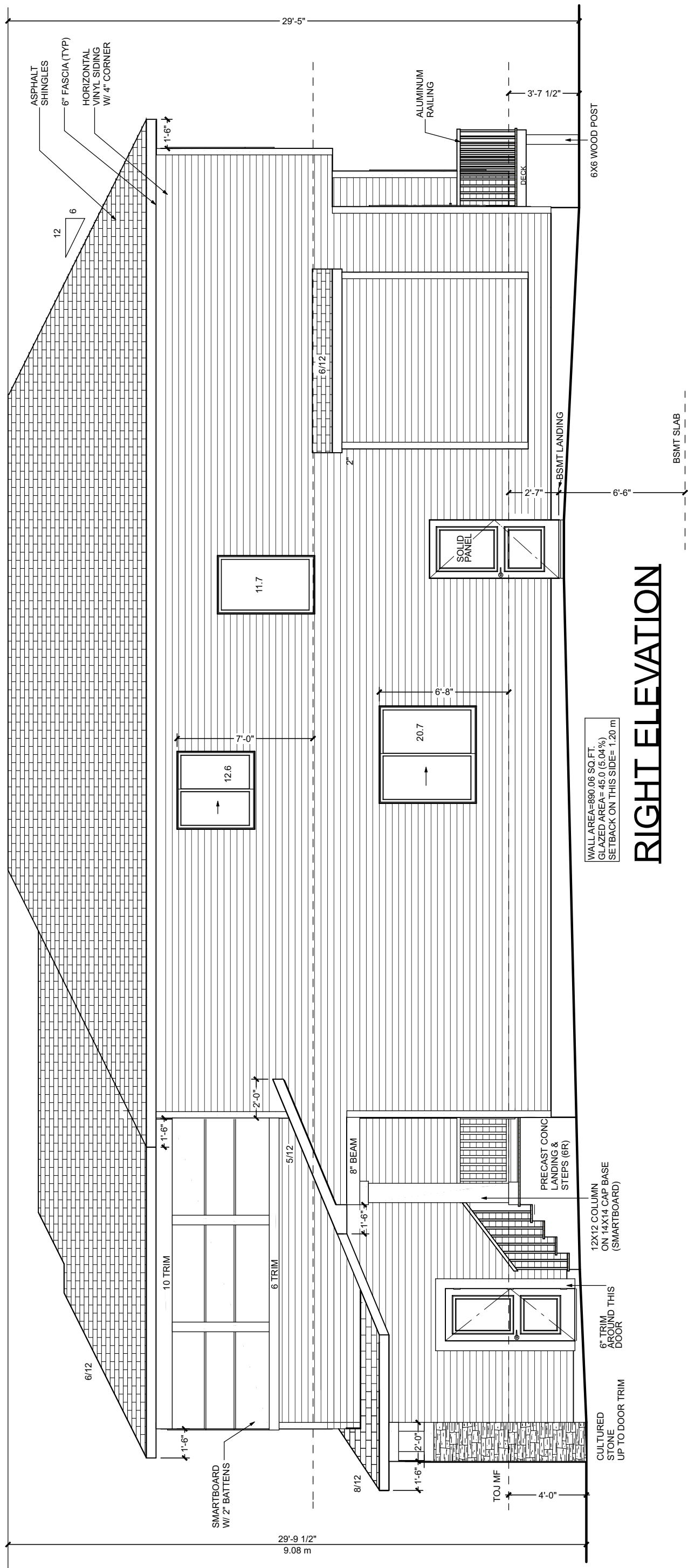
**GD** Global Design  
 DESIGN DRAFT PERMIT  
 Phone : 403.472.4322  
 E-mail : info@globaldesignz.ca

PROJECT:  
**SINGLE DWELLING**

MAIN FLOOR	=	1200 SQ.FT
SECOND FLOOR	=	1500 SQ.FT
TOTAL SQ.FT.	=	2700 SQ.FT.
GARAGE	=	422 SQ.FT
BASEMENT	=	790 SQ.FT.
PORCH	=	31 SQ.FT
PATIO	=	15 SQ.FT

FOR: **TMT Homes**  
 LEGAL ADDRESS:  
**LOT 02 BLK 19**  
 CIVIC ADDRESS :  
**15 SADDLECREST LINK NE**

FILE NO.	<b>21066</b>
SCALE :	3/16"=1'- 0"
PAGE NO.	<b>2 / 12</b>
DATE	2021-12-01



WALL AREA=880.06 SQ.FT.  
 GLAZED AREA= 45.0 (5.04%)  
 SETBACK ON THIS SIDE= 1.20 m

# RIGHT ELEVATION

BUILDER/CONTRACTOR MUST CHECK & VERIFY ALL DIMENSIONS & DETAILS BEFORE STARTING ANY CONSTRUCTION AND REPORT ANY ERROR IN ADVANCE TO DESIGNER. DESIGNERS LIABILITY LIMITED TO CORRECTION OF PLANS ONLY.

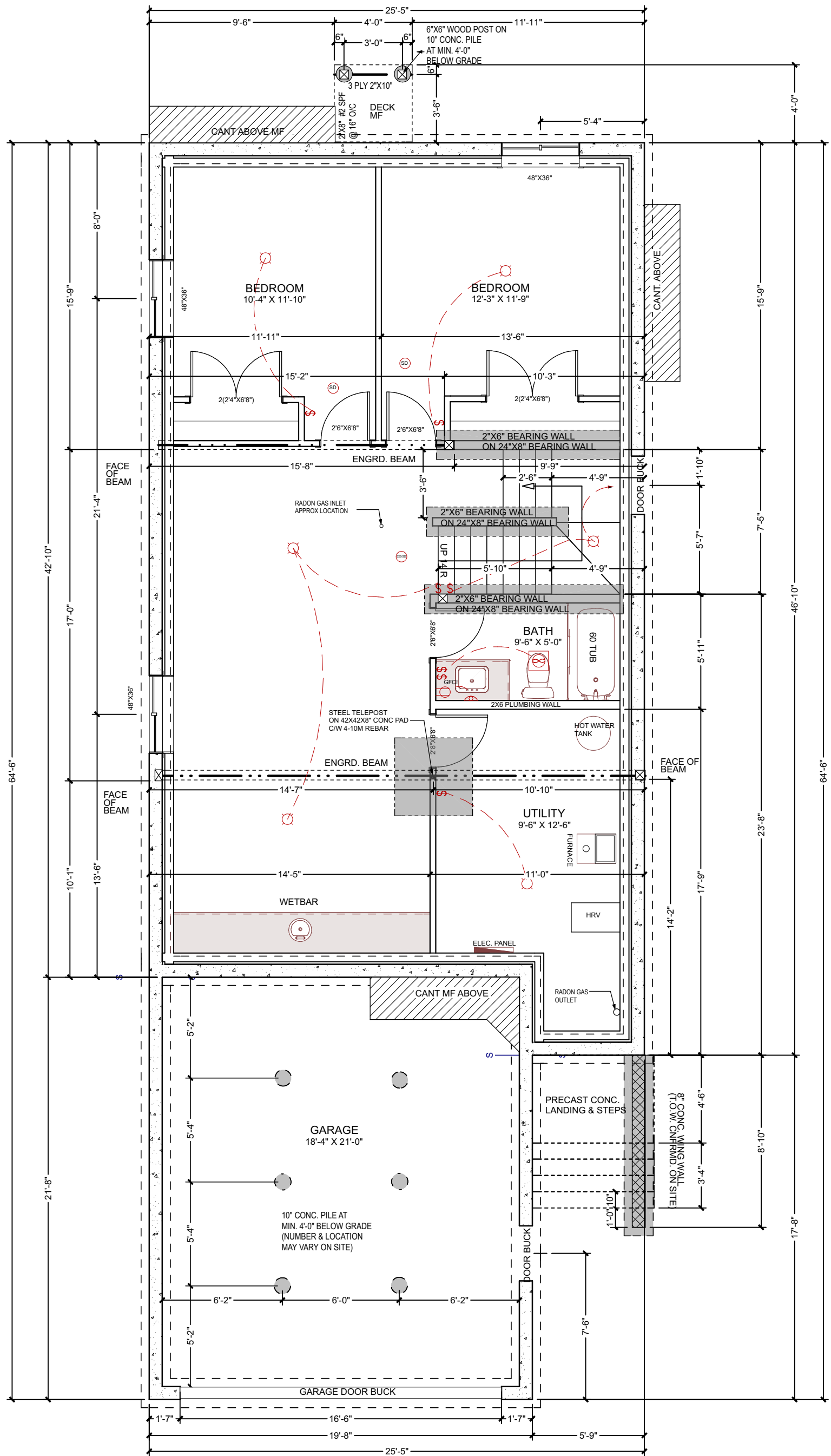
**GD** Global Design  
 DESIGN DRAFT PERMIT  
 Phone : 403.472.4322  
 E-mail : info@globaldesignz.ca

PROJECT:  
**SINGLE DWELLING**

MAIN FLOOR	=	1200 SQ.FT
SECOND FLOOR	=	1500 SQ.FT
TOTAL SQ.FT.	=	2700 SQ.FT.
GARAGE	=	422 SQ.FT
BASEMENT	=	790 SQ.FT.
PORCH	=	31 SQ.FT
PATIO	=	15 SQ.FT

FOR: **TMT Homes**  
 LEGAL ADDRESS:  
**LOT 02 BLK 19**  
 CIVIC ADDRESS :  
**15 SADDLECREST LINK NE**

FILE NO.	<b>21066</b>
SCALE :	3/16"=1'- 0"
PAGE NO.	<b>3 / 12</b>
DATE	2021-12-01



# FOUNDATION PLAN CEILING HEIGHT = 8'-1"

FLOOR AREA = 790 SQ.FT

BUILDER/CONTRACTOR MUST CHECK & VERIFY ALL DIMENSIONS & DETAILS BEFORE STARTING ANY CONSTRUCTION AND REPORT ANY ERROR IN ADVANCE TO DESIGNER. DESIGNERS LIABILITY LIMITED TO CORRECTION OF PLANS ONLY.

**GD** Global Design  
 DESIGN DRAFT PERMIT  
 Phone : 403.472.4322  
 E-mail : info@globaldesignz.ca

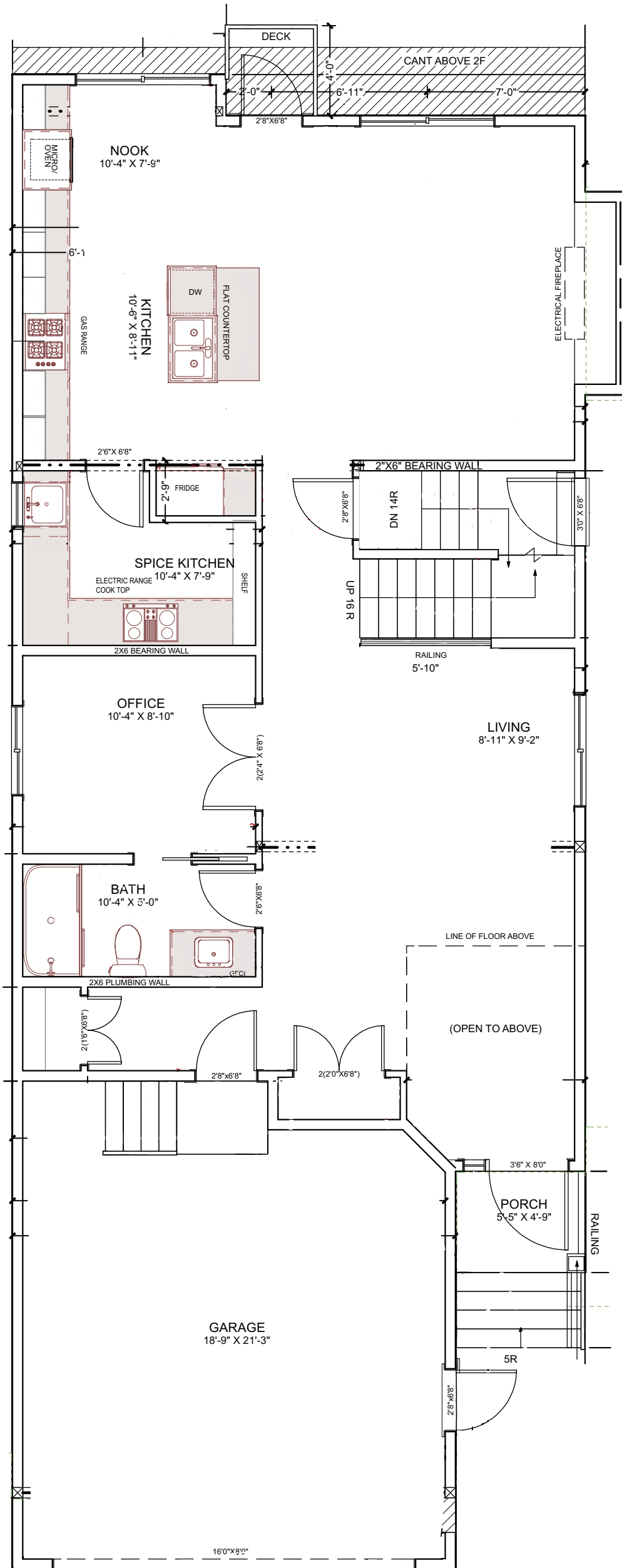
PROJECT:  
**SINGLE DWELLING**

MAIN FLOOR	=	1200 SQ.FT
SECOND FLOOR	=	1500 SQ.FT
TOTAL SQ.FT.	=	2700 SQ.FT.
GARAGE	=	422 SQ.FT
BASEMENT	=	790 SQ.FT.
PORCH	=	31 SQ.FT
PATIO	=	15 SQ.FT

FOR: **TMT Homes**  
 LEGAL ADDRESS:  
**LOT 02 BLK 19**  
 CIVIC ADDRESS :  
**15 SADDLECREST LINK NE**

FILE NO.	<b>21066</b>
SCALE :	3/16"=1'-0"
PAGE NO.	<b>4 / 12</b>
DATE	<b>2021-12-01</b>





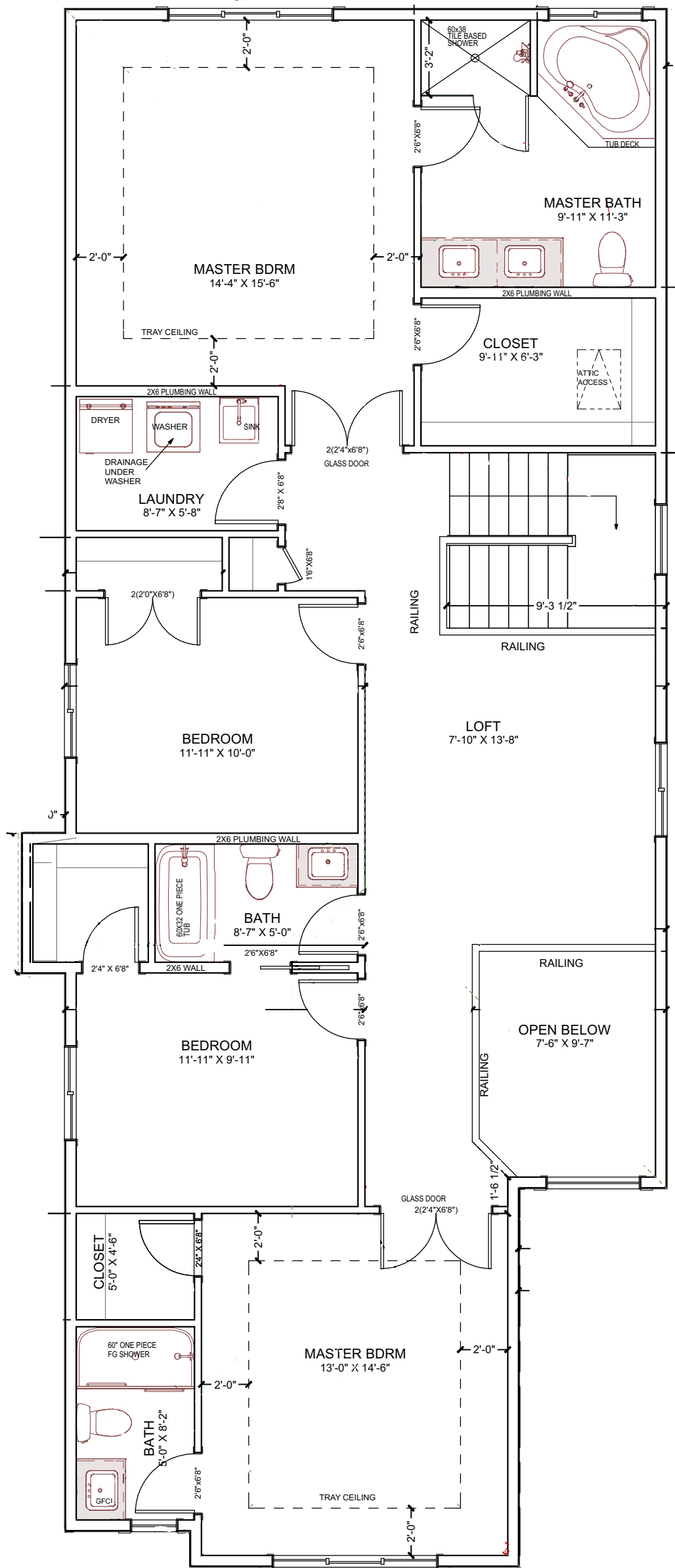
# MAIN FLOOR PLAN

CEILING HEIGHT = 9'-1"

FLOOR AREA = 1200 SQ.FT.

BUILDER/CONTRACTOR MUST CHECK & VERIFY ALL DIMENSIONS & DETAILS BEFORE STARTING ANY CONSTRUCTION AND REPORT ANY ERROR IN ADVANCE TO DESIGNER. DESIGNERS LIABILITY LIMITED TO CORRECTION OF PLANS ONLY.

PROJECT: <b>SINGLE DWELLING</b>	MAIN FLOOR = 1200 SQ.FT	FOR: <b>TMT Homes</b>	FILE NO. <b>21066</b>
	SECOND FLOOR = 1500 SQ.FT		SCALE: 3/16"=1'-0"
	TOTAL SQ.FT. = 2700 SQ.FT.		PAGE NO. <b>5 / 12</b>
	GARAGE = 422 SQ.FT		
	BASEMENT = 790 SQ.FT.		
	PORCH = 31 SQ.FT		
	PATIO = 15 SQ.FT		



## SECOND FLOOR PLAN

FLOOR AREA = 1500 SQ.FT. CEILING HEIGHT = 8'-1"

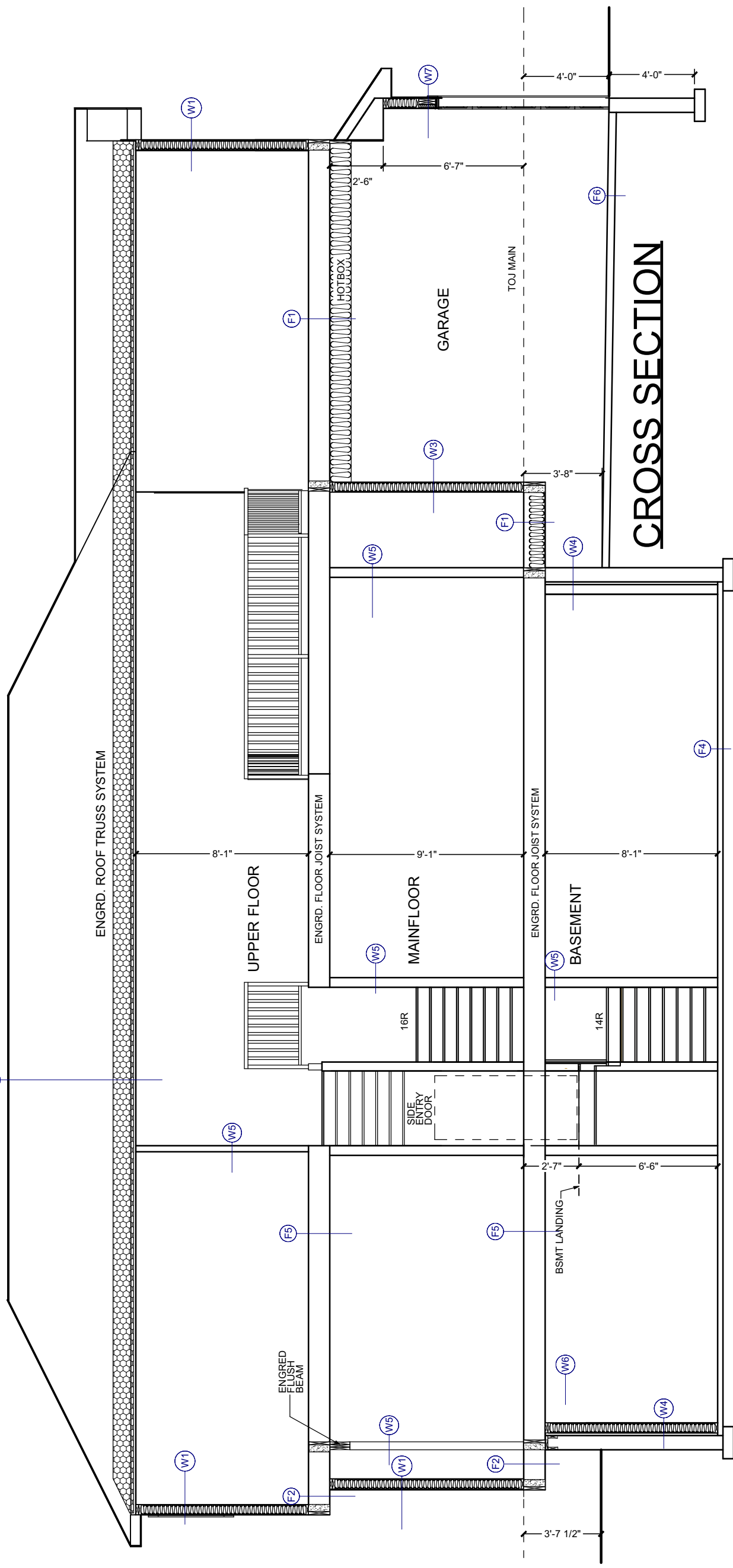
BUILDER/CONTRACTOR MUST CHECK & VERIFY ALL DIMENSIONS & DETAILS BEFORE STARTING ANY CONSTRUCTION AND REPORT ANY ERROR IN ADVANCE TO DESIGNER. DESIGNERS LIABILITY LIMITED TO CORRECTION OF PLANS ONLY.

<b>SINGLE DWELLING</b>	PROJECT:	MAIN FLOOR = 1200 SQ.FT	= 1200 SQ.FT	FOR: <b>TMT Homes</b>	FILE NO. <b>21066</b>
		SECOND FLOOR = 1500 SQ.FT	= 1500 SQ.FT		SCALE: 3/16"=1'-0"
		TOTAL SQ.FT. = 2700 SQ.FT.	= 2700 SQ.FT.		PAGE NO. <b>6 / 12</b>
		GARAGE = 422 SQ.FT	= 422 SQ.FT		
		BASEMENT = 790 SQ.FT.	= 790 SQ.FT.		
		PORCH = 31 SQ.FT	= 31 SQ.FT		
		PATIO = 15 SQ.FT	= 15 SQ.FT		

MAIN FLOOR	=	1200 SQ.FT
SECOND FLOOR	=	1500 SQ.FT
TOTAL SQ.FT.	=	2700 SQ.FT.
GARAGE	=	422 SQ.FT
BASEMENT	=	790 SQ.FT.
PORCH	=	31 SQ.FT
PATIO	=	15 SQ.FT

FOR:	<b>TMT Homes</b>
LEGAL ADDRESS:	<b>LOT 02 BLK 19</b>
CIVIC ADDRESS :	<b>15 SADDLECREST LINK NE</b>

FILE NO.	<b>21066</b>
SCALE :	<b>3/16"=1'-0"</b>
PAGE NO.	<b>7 / 12</b>
DATE	<b>2021-12-01</b>



**CROSS SECTION**

NOTES	WALL CONSTRUCTION	FLOOR CONSTRUCTION
<p>FRAMER TO INSTALL MIN. 8" POLYTHENE BETWEEN BOTTOM PLATE AND SHEATHING</p> <p>FRAMER TO INSTALL MIN. 8" POLYTHENE BETWEEN TOP PLATE/SILL PLATE AND FLOOR JOIST/TRUSS</p> <p>FRAMER TO INSTALL MIN. 8" POLYTHENE BETWEEN INTERIOR PARTITIONS AND EXTERIOR WALLS</p>	<p>W1 - EXTERIOR WALL ABOVE GRADE                      EXTERIOR FINISH                      BUILDING PAPER                      3/8" OSB SHEATHING                      2" X 6" STUDS @ 24" O/C                      R22 F.G BATT INSULATION                      6MM POLY VAPOUR BARRIER                      1/2" DRYWALL</p> <p>W2 - EXTERIOR TALL WALL ABOVE GRADE                      EXTERIOR FINISH                      BUILDING PAPER                      3/8" OSB SHEATHING                      2" X 6" STUDS @ 12" O/C                      R24 BATT INSULATION                      FLASHING OVER ALL OPENINGS                      6MM POLY VAPOUR BARRIER                      1/2" DRYWALL</p> <p>W3 - WALL BETWEEN GARAGE AND HOUSE W6 - BASEMENT WALL MORE THAN 24" ABOVE GRADE/WALK OUT WALL                      1/2" DRYWALL                      2" X 6" STUDS @ 24" O/C                      R22 F.G BATT INSULATION                      6MM POLY VAPOUR BARRIER                      1/2" DRYWALL</p> <p>W4 - FOUNDATION WALL                      MIN. 6" PARGING                      DAMPROOFING TO GRADE                      8" CONCRETE WALL TOP &amp; BOTTOM                      1" ROW 10MM REBAR TOP &amp; BOTTOM                      ON 18" X 6" CONT. CONCRETE FOOTING                      1" AIR SPACE                      2" X 6" STUDS @ 24" O/C                      R22 F.G. BATT INSULATION                      6MM POLY VAPOUR BARRIER</p> <p>W5 - INTERIOR WALL                      2" X 4" OR 2" X 6" STUDS @ 24" O/C                      1/2" DRYWALL BOTH SIDES</p> <p>W6 - GARAGE WALL                      EXTERIOR FINISH                      BUILDING PAPER                      3/8" OSB SHEATHING                      2" X 6" STUDS @ 24" O/C                      R22 F.G BATT INSULATION                      FLASHING OVER ALL OPENINGS                      6MM POLY VAPOUR BARRIER                      1/2" DRYWALL</p> <p>W7 - GARAGE WALL                      EXTERIOR FINISH                      BUILDING PAPER                      3/8" OSB SHEATHING                      2" X 6" STUDS @ 24" O/C                      R22 F.G BATT INSULATION                      FLASHING OVER ALL OPENINGS                      6MM POLY VAPOUR BARRIER                      1/2" DRYWALL</p>	<p>F1 - FLOOR OVER UNHEATED SPACE (GARAGE)                      FINISHED FLOORING AS PER SPECIFICATIONS                      3/4" O.S.B. SUBFLOOR                      6 MM POLYTHENE SHEET                      12" HOT BOX                      R 28 BATT INSULATION                      1/2" DRYWALL AS REQUIRED</p> <p>F2 - FLOOR OVER UNHEATED SPACE (CANTILEVER)                      FINISHED FLOORING AS PER SPECIFICATIONS                      3/4" O.S.B. SUBFLOOR                      6 MM POLYTHENE SHEET                      ENGED. FLOOR JOISTS, SIZED @19" O/C                      R31 BATT. INSULATION                      BUILDING PAPER                      NON VENTED ALUMINUM SOFFIT</p> <p>F3 - FLOOR BELOW GRADE &amp; ABOVE FROST LINE                      UNHEATED 3" CONCRETE FLOOR                      POLYTHENE SHEET                      2.5" THICK, 48" DEEP/TO FOOTING EXTRUDED POLYSTYRENE                      CLEAN GRANULAR LAYER</p> <p>F4 - FLOOR BELOW GRADE AND BELOW FROST LINE                      UNHEATED 3" CONCRETE FLOOR                      POLYTHENE SHEET                      CLEAN GRANULAR LAYER</p> <p>F5 - INTERIOR FLOOR                      FINISHED FLOORING AS PER SPECIFICATIONS                      3/4" O.S.B. SUBFLOOR                      ENGED. FLOOR JOISTS, SIZED @19" O/C                      1/2" DRYWALL BOTH SIDES</p> <p>F6 - GARAGE SLAB                      4" CONCRETE SLAB                      SLOPE 4" TO O.H DOOR                      10 MM REBAR @ 24" O/C EACH WAY                      5" COMPACTED GRAVEL</p>

BUILDER/CONTRACTOR MUST CHECK & VERIFY ALL DIMENSIONS & DETAILS BEFORE STARTING ANY CONSTRUCTION AND REPORT ANY ERROR IN ADVANCE TO DESIGNER. DESIGNERS LIABILITY LIMITED TO CORRECTION OF PLANS ONLY.

MAIN FLOOR	1200 SQ.FT
SECOND FLOOR	1500 SQ.FT
TOTAL SQ.FT.	2700 SQ.FT.
GARAGE	422 SQ.FT
BASEMENT	790 SQ.FT.
PORCH	31 SQ.FT
PATIO	15 SQ.FT

FOR:	<b>TMT Homes</b>
LEGAL ADDRESS:	<b>LOT 02 BLK 19</b>
CIVIC ADDRESS :	<b>15 SADDLECREST LINK NE</b>
FILE NO.	<b>21066</b>
SCALE :	<b>N.T.S.</b>
PAGE NO.	<b>8 / 12</b>
DATE	<b>2021-12-01</b>

**HOMEOWNER & CONTRACTOR: TO VERIFY ALL DIMENSIONS, STRUCTURAL DETAILS, AND BUILDING CODES, AND GRADE REQUIREMENTS.**

**GENERAL NOTES**

- ALL STRUCTURAL LUMBER IS TO BE # 2 SPF OR BETTER
- ALL STUDS ARE TO BE CONSTRUCTION GRADE SPF.
- WALLS LESS THAN 1.2 M ( 4' 0") FROM PROPERTY LINE ARE TO HAVE MINIMUM 45 MINUTES FIRE RESISTANCE RATING.
- ENGRD. ROOF TRUSSES AND FLOOR JOISTS SYSTEM DESIGNS, DIMENSIONS, DETAILS, INSTALLATION ETC. SHALL BE ACCORDING TO MANUFACTURES SPECIFICATIONS AND SHALL BE COMPLETE WITH ALL NECESSARY BLOCKING, HANGERS ETC.
- ROOF OVERHANG ARE TO BE 18" UNLESS NOTED OTHERWISE.
- WHERE STEP FOOTING OCCURS THE HORIZONTAL DIMENSION OF EACH STEP SHALL NOT LESS THAN 24" AND THE VERTICAL DIMENSION OF EACH STEP SHALL NOT EXCEED 24".
- ALL FOOTING ARE TO BE MINIMUM 4' BELOW GRADE.
- CONSTRUCTION SHALL CONFORM TO THE ALBERTA BUILDING CODE & LOCAL BUILDING BYLAWS.
- WINDOWS AND DOORS SIZES ARE READ AS : 5040 (5'-0" - 4'-0"). THESE ARE GENERAL SIZES. ACTUAL SIZES AND ROUGH OPENINGS SHALL BE PROVIDED BY THE SUPPLIER.
- ALL PORCHES AND DECKS ARE TO BE 3.5" BELOW T.O.S UNLESS NOTED OTHERWISE.
- FINAL LOT GRADES MAY ALTER EXTERIOR APPEARANCE.
- GENERALLY EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING AND CONCRETE; INTERIOR DIMENSIONS ARE TO FACE OF STUDS AND FACE OF BEAMS , UNLESS NOTED OTHERWISE.
- SMOKE ALARM TO EACH FLOOR LEVEL AS PER DIVISION B 9.10.14.1
- CARBON MONOXIDE ALARM (AT HEIGHT RECOMMENDED BY MANUFACTURER) WITH IN 5M (16'-5") OF BEDROOM DOORS MEASURED ALONG CORRIDORS AS PER DIVISION B 9.32.3.9
- MINIMUM DOOR SIZE DOOR UTILITY ROOM IS 810MM (2'-8") AS PER DIVISION B 9.5.5.1
- A DOOR BETWEEN AN ATTACHED GARAGE AND DWELLING UNIT MUST TIGHT FITTING, WEATHER STRIPPED AND EQUIPPED WITH SELF CLOSING DEVICE AS PER DIVISION B 9.10.13.15
- INSULATED, WEATHER STRIPPED ATTIC ACCESS HATCH WITH MINIMUM AREA 0.32 SQ. M (3.44 SQ. FT.) AND NO DIMENSION LESS THAN (21 ½) AS PER DIVISION B-9.14.2.1
- 5/8" TYPE X DRYWALL TO INTERIOR SIDE OF ASSEMBLY FOR EXTERIOR WALLS FACING AND WITHIN 1.2M (4'-0") OF PROPERTY LINE AS PER DIVISION B 9.10.15.5
- 12" DRYWALL TO UNDERSIDE OF ENCLOSED PROJECTION WITHIN 1.2M(4'-0") OF PROPERTY LINE AND IS GREATER THAN 0.6M (2'-0") ABOVE FINISHED GROUND LEVEL. AS PER DIVISION B 9.10.15.5
- NON - VENTED SOFFITS WHEN EAVES PROJECTING WITHIN 1.2M(4'-0") FROM THE PROPERTY LINE. SOFFIT OTHER THAN ALUMINUM OR GALVANIZED STEEL SHALL BE INSTALLED ON A MINIMUM 1/2" WOOD OR GYPSUM SHEATH BACKING. ROOF SOFFIT ARE NOT PERMITTED WITHIN 0.45M(1'-6") OF THE PROPERTY LINE AS PER DIVISION B 9.10.15.5
- VINYL SIDING ON WALL ASSEMBLIES WITHIN 1.2M(4'-0") OF THE PROPERTY LINE SHALL BE APPLIED OVER 12.MM(1/2") EXTERIOR GRADE GYPSUM BOARD AS PER DIVISION B 9. 10.15.5
- 1070MM(3'-6") HIGH GUARD RAIL WHERE DIFFERENCE IN ELEVATION EXCEEDS 1.8M (6'-0") AS PER DIVISION B. 9.8.8.3
- 2 - 2" X 10" SPRUCE LINTEL FOR OPENING UNDER 6' - 0". ENGRD. LINTEL FOR OPENING 6' - 0" AND GREATER.
- ROUGH-IN FOR A SUBFLOOR DEPRESSURIZATION SYSTEM SHALL BE PROVIDED AS PER ABC SUBSECTION 4.13.4.3

**HYAC EQUIPMENT & DUCTS**  
 (9.36.3.2)

- HYAC SYSTEMS SHALL BE SIZED ACCORDANCE WITH GOOD PRACTICE AS DESCRIBED IN SECTION 9.32 AND 9.33.
- EXCEPT FOR EXHAUST DUCTS LEADING DIRECTLY TO THE EXTERIOR, DUCTS AND PLENUMS CARRYING CONDITIONED AIR AND LOCATED THE PLANE OF INSULATION SHALL
  - HAVE ALL JOINTS SEALED AGAINST AIR INFILTRATION AND EXFILTRATION WITH
    - SEALANTS OR GASKETS MADE FROM LIQUIDS, MASTICS OR HEAT APPLIED MATERIALS.
    - MASTIC WITH EMBEDDED FABRIC, OR
    - FOIL FACED BUTYL TAPE, AND
  - INSULATED TO SAME LEVEL AS REQUIRED FOR ABOVE GRADE WALLS.
- DUCTS - UNDER INSULATED FLOOR OVER UNHEATED SPACES
 

THE UNDERSIDE OF RECTANGULAR DUCTS INSTALLED UNDER AN INSULATED FLOOR OVER AN UNCONDITIONED SPACE IS PERMITTED TO BE INSULATED NOT LESS THAN 2.11(M : K). PROVIDED BOTH SIDES OF DUCTS ARE INSULATED TO COMPENSATE HIGHER THERMAL RESISTANCE.

**AIR INTAKE AND OUTLET DAMPERS**  
 (9.36.2)

- EXCEPT AS PROVIDED IN SENTENCE (3) AND (4), EVERY DUCT OR OPENING INTENDED TO DISCHARGE AIR TO THE OUTDOORS SHALL BE EQUIPPED WITH
  - A MOTORIZED DAMPER OR
  - A GRAVITY - OR SPRING - OPERATED BACKFLOW DAMPER.
- EXCEPT AS PROVIDED IN SENTENCE (3) AND (4) AND EXCEPT IN LOCATION WITH FEWER THAN 3500 HEATING DEGREE-DAYS AS LISTED IN APPENDIX 'C', EVERY OUTDOOR AIR INTAKE DUCT OR OPENING SHALL BE EQUIPPED WITH MOTORIZED DAMPER THAT REMAINS IN THE "OPEN" POSITION IF THE DAMPER FAILS.
- WHERE OTHER REGULATIONS ARE IN EFFECT THAT DO NOT PERMIT DAMPERS, INTAKES AND OUTLETS NEED NOT COMPLY WITH SENTENCE (1) AND (2).
- AIR INTAKES AND OUTLETS SERVING HVAC SYSTEMS THAT ARE REQUIRED TO OPERATE CONTINUOUSLY (EQUIPPED WITH HRV) NEED NOT COMPLY WITH SENTENCE (1) AND (2).

**THERMAL CHARACTERISTICS OF WINDOWS, DOORS AND SKYLIGHTS (ABC 9.36.2.7.)**

MAXIMUM U-VALUE OR MINIMUM ENERGY RATING (ER) FOR WINDOWS, DOORS AND SKYLIGHTS AS PER ABC TABLE 9.36.2.7 SHALL BE AS FOLLOWS:

COMPONENT	Max. U-value, W/(m <sup>2</sup> .K)	Min. Energy Rating
WINDOWS AND DOORS	1.60	25
SKYLIGHTS	2.7	

U-values for specific products can be determined according to measures referenced in AAMA/NDMA/CSA 1011.5.2/A440, "NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights." Temperature Index (I) is determined according to the physical test procedure given in CAN/CSA-A440.2/A440.3, "Fenestration Energy Performance/User Guide to CSA A440 2-09, Fenestration Energy Performance."

Energy Rating (ER) are based on CAN/CSA-A440.2/A440.3, "Fenestration Energy Performance/User Guide to CSA A440.2-09, Fenestration Energy Performance.

**PERFORMANCE REQUIREMENTS OF WINDOWS, DOORS AND SKYLIGHTS (ABC 9.7.4.3.)**

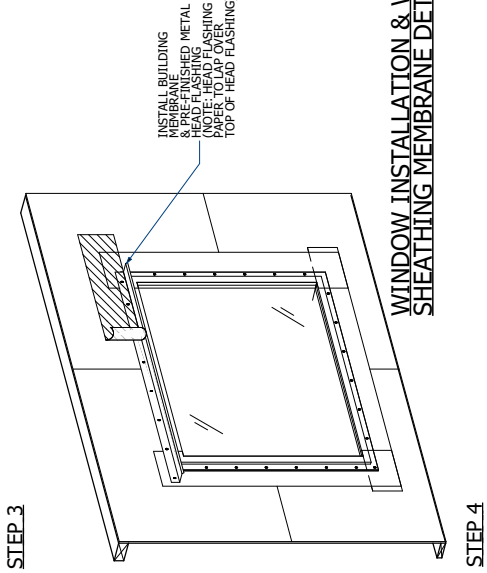
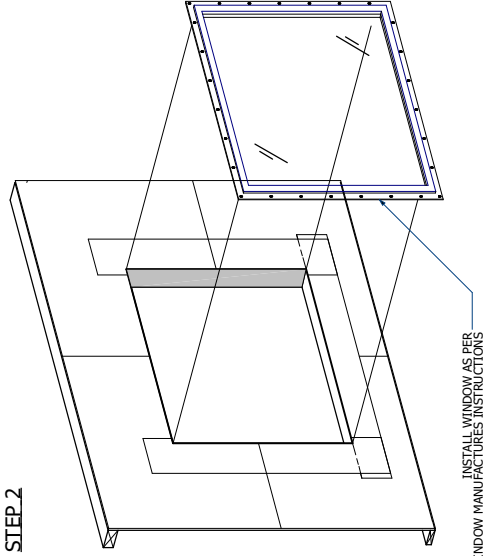
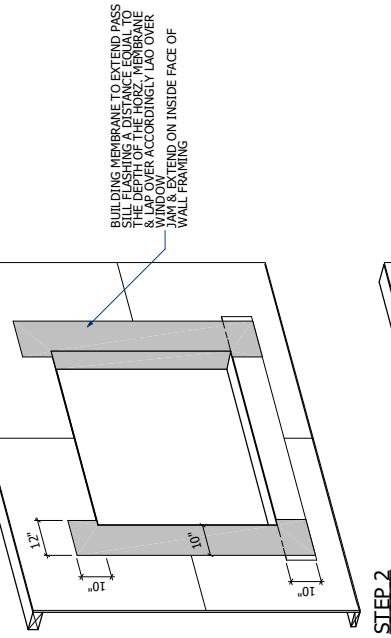
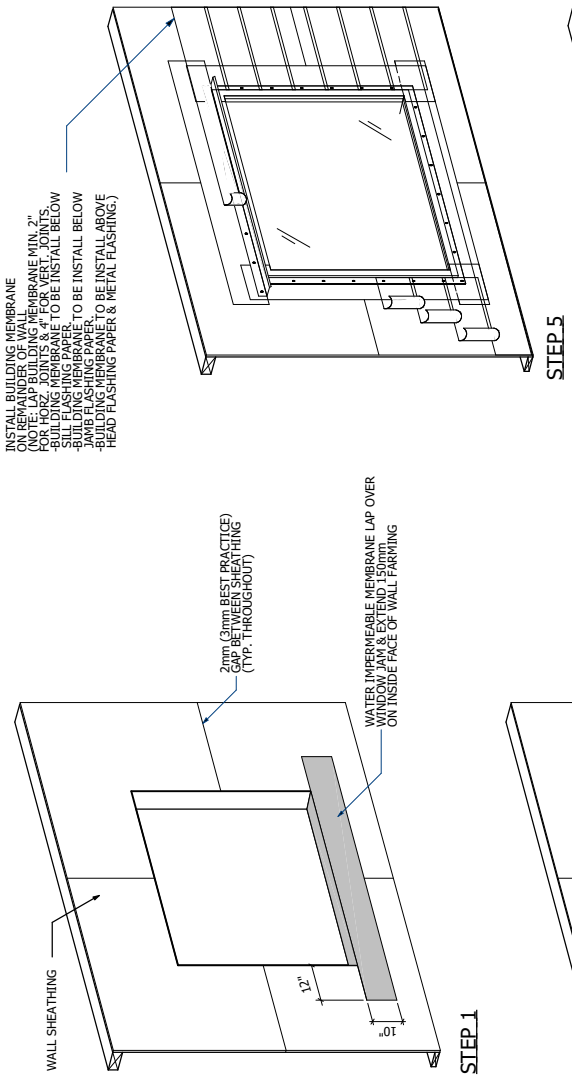
MANUFACTURED AND PRE-ASSEMBLED WINDOWS, DOORS AND SKYLIGHTS AND THEIR INSTALLATION SHALL CONFORM TO:

- AAMA/NDMA/CSA 1011.5.2/A440, "NAFS – NORTH AMERICAN FENESTRATION STANDARD/SPECIFICATION FOR WINDOWS, DOORS, AND SKYLIGHTS" (HARMONIZED STANDARD).
  - CSA A44051, "CANADIAN SUPPLEMENT TO AAMA/NDMA/CSA 1011.5.2/A440, NAFS – NORTH AMERICAN FENESTRATION STANDARD/SPECIFICATION FOR WINDOWS, DOORS, AND SKYLIGHTS,"
- BUILDING CODE FENESTRATION PERFORMANCE CALCULATION**  
 CALCULATIONS BASED ON AAMA/NDMA/CSA 1011.5.2/A440-08 (NAFS-08) AND CSA A44051-09

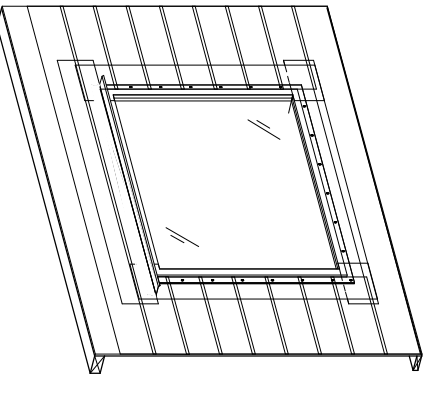
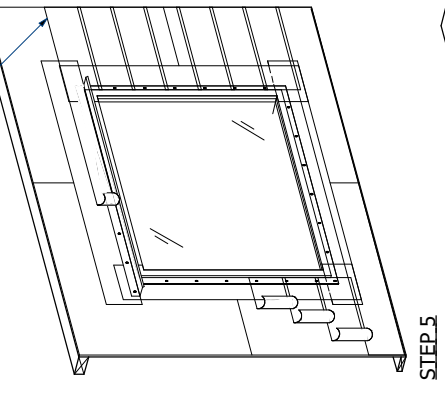
LOCATION	CALGARY, AB
TERRAIN TYPE	ROUGH
PERFORMANCE CLASS	R
PRODUCT HEIGHT	10 M
MINIMUM PERFORMANCE GRADE (FG)	25
MINIMUM POSITIVE DESIGN PRESSURE	1200 PA
MINIMUM NEGATIVE DESIGN PRESSURE	1200 PA
MINIMUM WATER PENETRATION TEST	260 PA
MINIMUM CANADIAN AIR INFILTRATION/ EXFILTRATION	A2

Note: These calculations can be verified at [codecalc.fenestrationcanada.com](http://codecalc.fenestrationcanada.com).

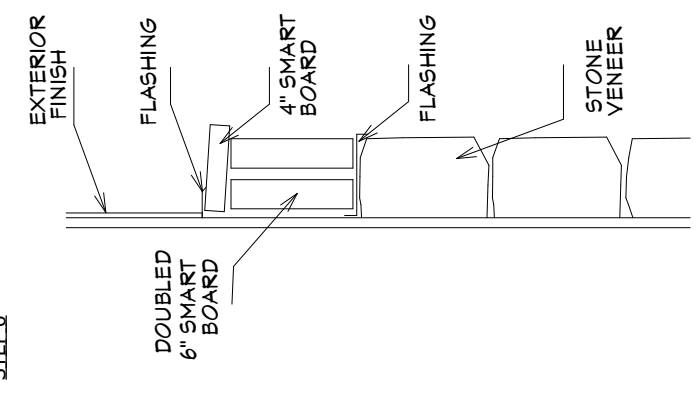




INSTALL BUILDING MEMBRANE ON GENTLE SLOPE.  
 (NOTE: LAP BUILDING MEMBRANE MIN. 2" ON LONG ADJACENT JOINTS & TO BE INSTALLED BELOW SILL FLASHING PAPER.  
 BUILDING MEMBRANE TO BE INSTALLED ABOVE HEAD FLASHING PAPER & METAL FLASHING.)

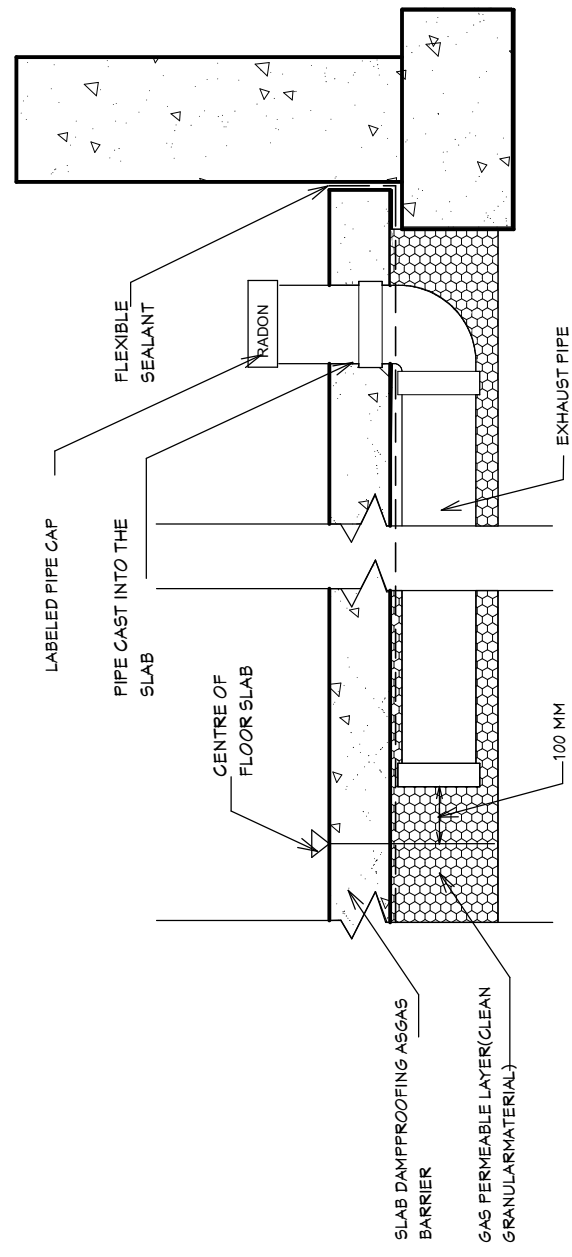


ATTACH BOTTOM EDGE OF SILL FLASHING PAPER

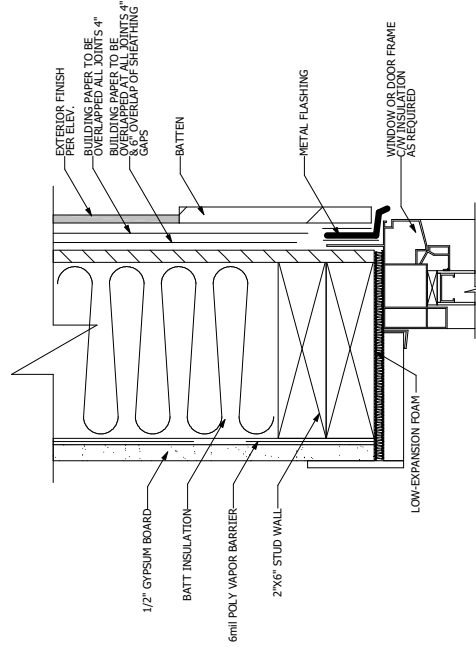
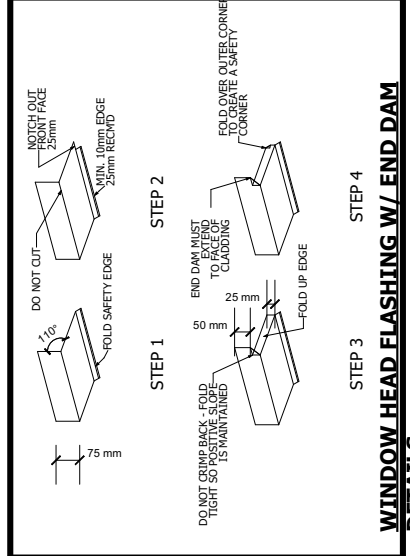


**BATTEN OVER STONE DETAIL**

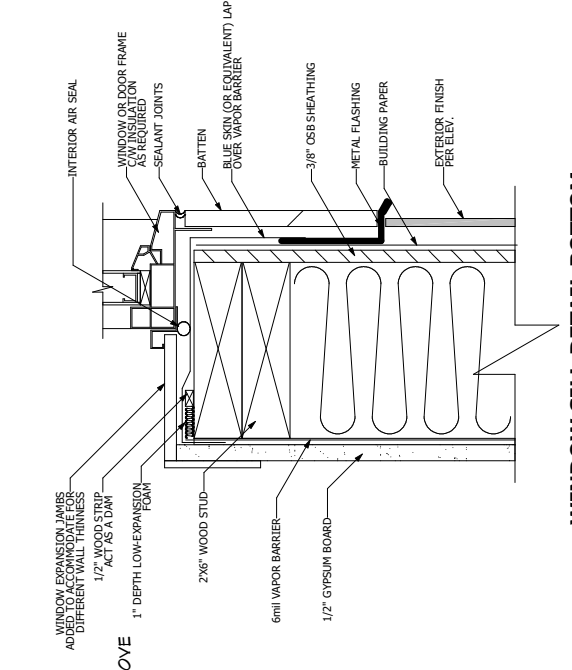
**WINDOW INSTALLATION & WALL SHEATHING MEMBRANE DETAILS**



**SUBFLOOR DEPRESSURIZATION SYSTEM ROUGH-IN**



**WINDOW SILL DETAIL TOP TYP.**



**WINDOW SILL DETAIL BOTTOM TYP.**

**STUCCO APPLICATION DETAIL**

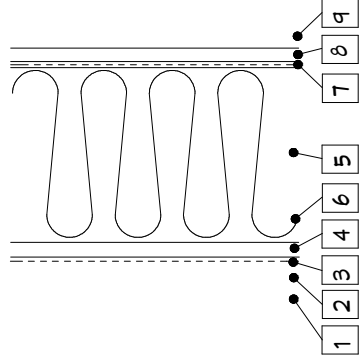
# NATIONAL BUILDING CODE 2019(AE)(9.36)

PRESCRIPTIVE PATH		FOUNDATION INSULATION	2.98
CLIMATE ZONE	TA - 5000 DEGREE DAYS	FLOOR ABOVE UNHEATED SPACE	5.02
WALL INSULATION	2.97	FLOOR ABOVE UNHEATED SPACE-GARAGE	4.86
ATTIC INSULATION	8.67	UNHEATED FLOOR ABOVE FROST LINE	1.96

GAS FIRED FURNACE	92% AFUE	HEATING <65.9 KW	CAN/CSA-P.2
NATURAL GAS TANK	67% EF	INPUT <22 KW	CAN/CSA-P.3
FDR/N		N/A	
HRV EFFICIENCY		70%	

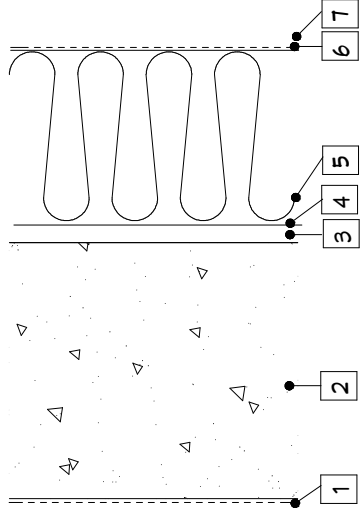
## W1 - EXTERIOR ABOVE GRADE WALL

COMPONENT	FRAME/CAVITY RSI	RSI eff
1 EXTERIOR AIR FILM		0.03
2 VINYL SIDING		0.11
3 SHEATHING PAPER		-
4 3/8" OSB SHEATHING		0.093
5 2X6 FRAMING, 24" OC	100	2.67
6 R22 FIBER GLASS BATT INSULATION (20/1.19)*(80/3.87)		-
7 POLYTHENE SHEET		0.08
8 1/2 GYPSUM BOARD		0.12
9 INTERIOR AIR FILM		3.01
<b>TOTAL EFFECTIVE RSI</b>		<b>3.01</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI</b>		<b>2.97</b>



## W4 - FOUNDATION WALL UP TO MAX. 24" FROM GRADE

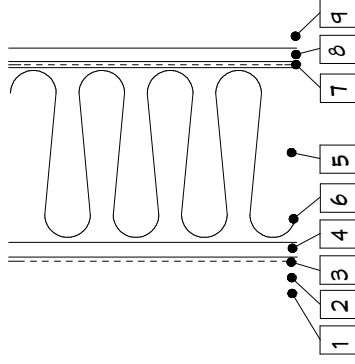
COMPONENT	FRAME/CAVITY RSI	RSI eff
1 DAMPPROOFING		-
2 8" CONCRETE WALL		0.08
3 1" AIR SPACE		0.18
4 2X6 FRAMING, 24" OC	100	2.70
5 R20 FIBER GLASS BATT INSULATION (13/1.19)*(87/3.34)		-
6 POLYTHENE SHEET		0.12
7 INTERIOR AIR FILM		3.08
<b>TOTAL EFFECTIVE RSI</b>		<b>3.08</b>
<b>REQUIRED BY ABC 9.36.2.8B RSI</b>		<b>2.98</b>



## W2 - EXTERIOR ABOVE GRADE TALL WALL

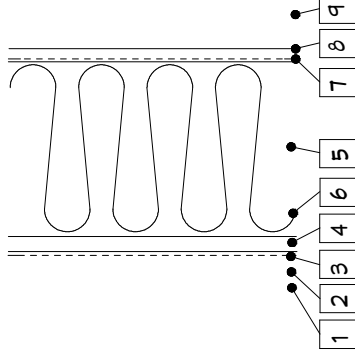
COMPONENT	FRAME/CAVITY RSI	RSI eff
1 EXTERIOR AIR FILM		0.03
2 VINYL SIDING		0.11
3 SHEATHING PAPER		-
4 3/8" OSB SHEATHING		0.093
5 2X6 FRAMING, 12" OC *	100	2.60
6 R24 BATT. INSULATION (24.5/1.19)*(75.5/4.23)		-
7 POLYTHENE SHEET		0.08
8 1/2 GYPSUM BOARD		0.12
9 INTERIOR AIR FILM		3.03
<b>TOTAL EFFECTIVE RSI</b>		<b>3.03</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI</b>		<b>2.97</b>

\* FRAMING @ 8" OC NEED 5" SPRAY FOAM MED. DENSITY IN CAVITY THAT GIVES RSI 2.63 AND TOTAL EFF. RSI COMES TO 3.06



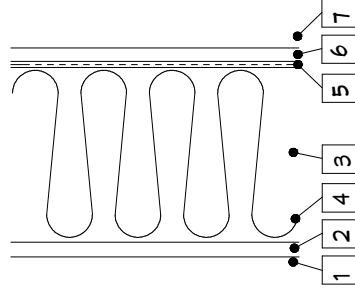
## W6 - BASEMENT WALL MORE THAN 24" ABOVE GRADE/WALK OUT WALL

COMPONENT	FRAME/CAVITY RSI	RSI eff
1 EXTERIOR AIR FILM		0.03
2 VINYL SIDING		0.11
3 SHEATHING PAPER		-
4 3/8" OSB SHEATHING		0.093
5 2X6 FRAMING, 16" OC	100	2.55
6 R22 F.G. BATT INSUL. (23/1.19)*(77/3.87)		-
7 POLYTHENE SHEET		0.08
8 1/2" GYPSUM BOARD		0.12
9 INTERIOR AIR FILM		3.08
<b>TOTAL EFFECTIVE RSI</b>		<b>2.98</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI</b>		<b>2.97</b>



## W3 - WALL BETWEEN ATTACHED GARAGE AND HOUSE

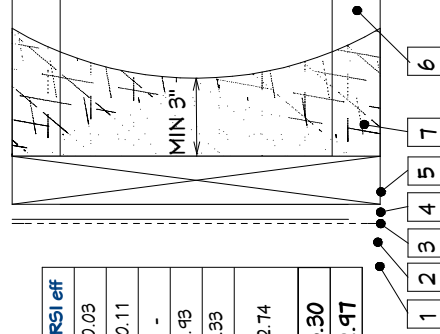
COMPONENT	FRAME/CAVITY RSI	RSI eff
1 EXTERIOR AIR FILM		0.03
2 1/2 GYPSUM BOARD		0.08
3 2X6 FRAMING, 24" OC	100	2.67
4 R22 FIBER GLASS BATT INSULATION (20/1.19)*(80/3.87)		-
5 POLYTHENE SHEET		0.08
6 1/2 GYPSUM BOARD		0.12
7 INTERIOR AIR FILM		2.98
<b>TOTAL EFFECTIVE RSI</b>		<b>2.98</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI AFTER REDUCTION OF 0.16 (ABC 9.36.2.4(4))</b>		<b>2.81</b>



## RM - RIM JOIST SPACE

COMPONENT	FRAME/CAVITY RSI	RSI eff
1 EXTERIOR AIR FILM		0.03
2 VINYL SIDING		0.11
3 SHEATHING PAPER		-
4 3/8" OSB SHEATHING		0.49
4 38MM (1.5IN) RIM BOARD		0.33
6 3" MED. DENSITY SPRAY FOAM		2.74
<b>TOTAL EFFECTIVE RSI</b>		<b>3.30</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI</b>		<b>2.97</b>

\* STUCCO IS ASSUMED TO REPRESENT THE LOWEST RSI VALUE



**F1-FLOOR OVER UNHEATED SPACE(GARAGE)**

COMPONENT	FRAME/CAVITY RSI	RSI eff
1 EXTERIOR AIR FILM		0.03
2 2 LAYERS 5/8" TYPE X' GYPSUM BOARD		0.20
3 1 JOIST, 1 1/4" OC	100	4.53
4 R 28 BATT. INSULATION (IN HOT BOX)	$(10/2.63)+(90/4.93)$	0.186
5 3/4" OSB SHEATHING		-
6 FLOOR FINISH		0.16
7 INTERIOR AIR FILM		4.98
<b>TOTAL EFFECTIVE RSI</b>		<b>4.86</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI AFTER REDUCTION OF 0.16 (9.36.2.4.(4))</b>		<b>4.86</b>

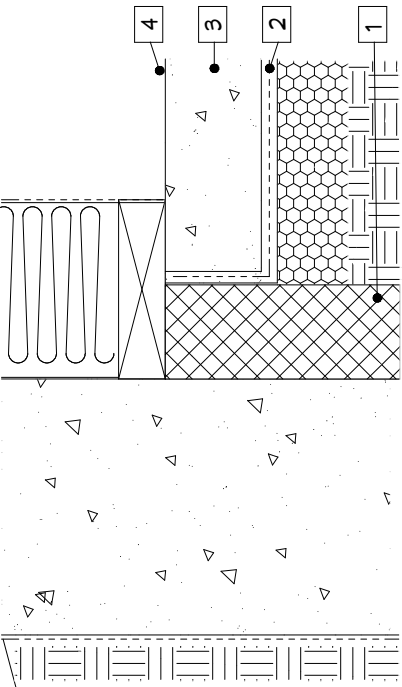
4 R 28 INSULATION CAN BE REPLACED BY 8" LIGHT DEN. SPRAY FOAM( $(7.5/2.56)+(92.5/5.20)$ )=4.83 GIVES TOTAL EFF. RSI 5.23

**F2-FLOOR OVER UNHEATED SPACE(CANTILEVER)**

COMPONENT	FRAME/CAVITY RSI	RSI eff
1 EXTERIOR AIR FILM		0.03
2 NON VENTED ALUMINUM SOFFIT		-
3 SHEATHING PAPER		5.03
4 1 JOIST, 1 1/4" OC	100	0.186
5 R31 BATT. INSULATION	$(7.5/2.56)+(92.5/5.46)$	-
6 3/4" OSB SHEATHING		0.16
7 FLOOR FINISH		5.41
8 INTERIOR AIR FILM		5.02
<b>TOTAL EFFECTIVE RSI</b>		<b>5.02</b>
<b>REQUIRED BY ABC 9.36.2.6B</b>		<b>5.02</b>

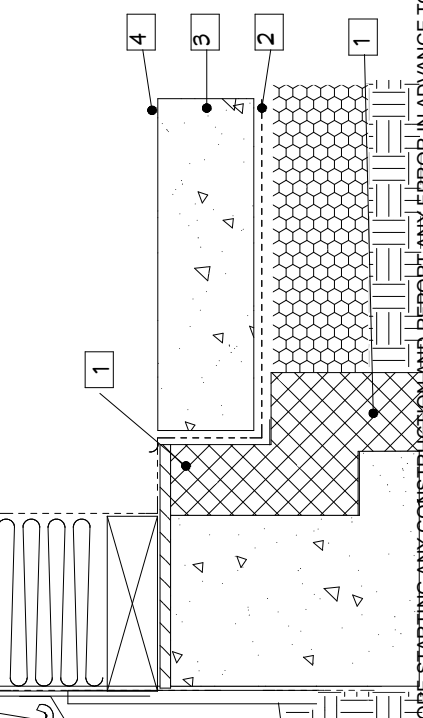
5 R 31 INSULATION CAN BE REPLACED BY 8" LIGHT DENSITY SPRAY FOAM  $100/((7.56/2.56)+(92.5/5.28))=4.89$  GIVES TOTAL EFF. RSI 5.27

**F3-UNHEATED FLOOR BELOW GRADE AND ABOVE FROST LINE**



COMPONENT	RSI eff
1 MIN 2.5" THICK 48" DEEP OR TO FOOTING EXTRUDED POLYSTYRENE (XPS)	2.2
2 POLYTHENE SHEET	-
3 3" CONCRETE FLOOR	-
4 INTERIOR AIR FILM	2.2
<b>TOTAL EFFECTIVE RSI</b>	<b>2.2</b>
<b>REQUIRED BY ABC 9.36.2.8B RSI</b>	<b>1.96</b>

**F3.B -UNHEATED FLOOR ABOVE GRADE AND ABOVE FROST LINE**



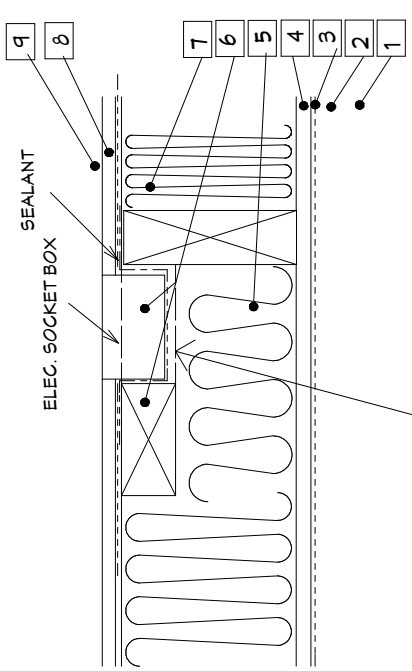
COMPONENT	RSI eff
1 MIN 2.5" THICK 48" DEEP OR TO FOOTING EXTRUDED POLYSTYRENE (XPS)	2.2
2 POLYTHENE SHEET	-
3 3" CONCRETE FLOOR	-
4 INTERIOR AIR FILM	2.2
<b>TOTAL EFFECTIVE RSI</b>	<b>2.2</b>
<b>REQUIRED BY ABC 9.36.2.8B RSI</b>	<b>1.96</b>

**R1-CEILING BELOW ATTIC**

COMPONENT	FRAME/CAVITY RSI
1 ASPHALT SHINGLES	-
2 ROOFING FELT	-
3 3/8" OSB SHEATHING	-
4 OUTSIDE AIR FILM	0.03
5 MIN. R20 BLOW-IN INSULATION FOR MAX.48" FROM EXTERIOR OF WALL	1.14
6 15" BLOW-IN INSULATION (FIBERGLASS) **	1.48
7 2"x4" ENGINEERING TRUSS @24" OC	100
8 3.5" BLOW IN INSULATION (FIBERGLASS)**	$(110/7.6)+(89/1.67)$
9 POLYTHENE SHEET	-
10 1/2" GYPSUM BOARD	0.08
11 INTERIOR AIR FILM	0.11
<b>TOTAL EFFECTIVE RSI</b>	<b>8.84</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI</b>	<b>8.67</b>

\* BLOW IN INSULATION CAN BE REPLACED WITH F.G. BAT INSULATION. R12 FOR CAVITY (BETWEEN TRUSSES) AND R40 ABOVE CAVITY.  
 \*\* F.B BLOW IN INSULATION CAN BE REPLACED WITH CELLULOSE BLOW IN INSULATION 3.5" FOR CAVITY (BETWEEN TRUSSES) AND 10.5" ABOVE CAVITY.

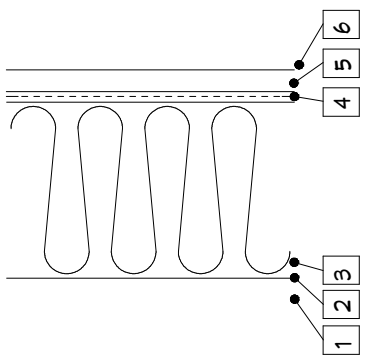
**TYPICAL EXTERIOR ABOVE GRADE WALL OUTLET/SWITCH PLAN VIEW**



COMPONENT	RSI eff
1 EXTERIOR AIR FILM	0.03
2 CLADDING *	0.02
3 SHEATHING PAPER	-
4 3/8" OSB SHEATHING	0.049
5 R14 FIBER GLASS BATT INSULATION	2.46
6 2X4 BLOCKING /ELEC. SOCKET BOX *	0.32
7 POLYTHENE SHEET /AIRVAPOR BARRIER BOOT	-
8 1/2 GYPSUM BOARD	0.08
9 INTERIOR AIR FILM	0.12
<b>TOTAL EFFECTIVE RSI</b>	<b>3.12</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI</b>	<b>2.97</b>

\* 2X4 BLOCKING IS CONSIDERED IN RSI CALCULATIONS TO REPRESENT THE LOWEST RSI VALUE

**SK-SKYLIGHT SHAFT**



COMPONENT	FRAME/CAVITY RSI	RSI eff
1 EXTERIOR AIR FILM		0.03
2 2X6 FRAMING, 24" OC	100	2.8
3 R24 FIBER GLASS BATT INSULATION	$(20/1.14)+(60/4.25)$	-
4 POLYTHENE SHEET		0.08
5 1/2 GYPSUM BOARD		0.12
6 INTERIOR AIR FILM		3.03
<b>TOTAL EFFECTIVE RSI</b>		<b>2.97</b>
<b>REQUIRED BY ABC 9.36.2.6B RSI</b>		<b>2.97</b>



