



### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

		Primary Space Heating (MJ)	5549
		Secondary Space Heating (MJ)	455
SI.		Primary DHW Heating (MJ)	17,505
RESUI	PTION	HRV or ERV and Fans (MJ)	2439
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	1125
ODELI	r col	TOTAL ENERGY CONSUMPTION (GJ)	52.7
Ž	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,127
	AL EN	Est. Natural Gas Consumpton (m3)	-
	ANNU	Est. Electricity Consumption (kWh)	14,638
	ATED /	Ceiling Without Attic Space	Effective R28.5
	STIM	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
	11	Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI		Ventilation	60% SRE
MO	HVAC	Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	DHW	Water Heater	0.84 EF (electric)

- ci = continuous insulation.
- o.c. = on-centre.
- Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

		Primary Space Heating (MJ)	5977
		Secondary Space Heating (MJ)	3173
SI.		Primary DHW Heating (MJ)	17,499
RESUI	PTION	HRV or ERV and Fans (MJ)	3501
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	2000
ODELI	r col	TOTAL ENERGY CONSUMPTION (GJ)	57.8
Ž	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,236
	AL EN	Est. Natural Gas Consumpton (m3)	-
	ANNU	Est. Electricity Consumption (kWh)	16,048
	ATED /	Ceiling Without Attic Space	Effective R28.5
	STIM	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
	11	Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI		Ventilation	60% SRE
MO	HVAC	Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	DHW	Water Heater	0.84 EF (electric)

- ci = continuous insulation.
- 2. o.c. = on-centre
- 3. Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

		Primary Space Heating (MJ)	17,222
		Secondary Space Heating (MJ)	3979
SI.		Primary DHW Heating (MJ)	17,505
RESUL	PTION	HRV or ERV and Fans (MJ)	4222
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	983
ODELI	r con	TOTAL ENERGY CONSUMPTION (GJ)	69.5
Ž	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,487
	AL EN	Est. Natural Gas Consumpton (m3)	-
	ANNU	Est. Electricity Consumption (kWh)	19,315
	VTED /	Ceiling Without Attic Space	Effective R28.5
	STIMA	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
	ŭ	Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI		Ventilation	60% SRE
МО	HVAC	Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	DHW	Water Heater	0.84 EF (electric)

- ci = continuous insulation.
- 2. o.c. = on-centre.
- Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

) ICF)"
quired)"
5)
35 COOL COP)

- 1. ci = continuous insulation.
- o.c. = on-centre.
- Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.5. Imperial U-values and R-values have been noted
- in this table.

  Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

		Primary Space Heating (MJ)	21,268
		Secondary Space Heating (MJ)	5365
SE.	_	Primary DHW Heating (MJ)	17,505
RESUL	PTION	HRV or ERV and Fans (MJ)	4994
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	1262
ODEL	V C01	TOTAL ENERGY CONSUMPTION (GJ)	76.0
Ž	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,626
	AL EN	Est. Natural Gas Consumpton (m3)	-
	ANNU	Est. Electricity Consumption (kWh)	21,116
	ATED ,	Ceiling Without Attic Space	Effective R28.5
	STIM	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
	ш	Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI		Ventilation	60% SRE
<b>S</b>	HVAC	Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	DHW	Water Heater	0.84 EF (electric)

- 1. ci = continuous insulation.
- 2. o.c. = on-centre.
- Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

		Primary Space Heating (MJ)	8331
		Secondary Space Heating (MJ)	2541
SI.		Primary DHW Heating (MJ)	17,505
RESUI	PTION	HRV or ERV and Fans (MJ)	3415
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	937
ODELI	r col	TOTAL ENERGY CONSUMPTION (GJ)	58.4
Ž	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,248
	AL EN	Est. Natural Gas Consumpton (m3)	-
	ANNU	Est. Electricity Consumption (kWh)	16,209
	TED /	Ceiling Below Attic	Effective R59.22
	STIMA	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
	M ·	Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI		Ventilation	60% SRE
<b>№</b>	HVAC	Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	DHW	Water Heater	0.84 EF (electric)

- ci = continuous insulation.
- 2. o.c. = on-centre.
- Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

		Primary Space Heating (MJ)	7141
		Secondary Space Heating (MJ)	4195
SE.		Primary DHW Heating (MJ)	17,499
RESUL	PTION	HRV or ERV and Fans (MJ)	3696
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	1618
ODELI	Y CON	TOTAL ENERGY CONSUMPTION (GJ)	59.8
Ž	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,278
	AL EN	Est. Natural Gas Consumpton (m3)	-
	ANNU	Est. Electricity Consumption (kWh)	16,603
	NTED /	Ceiling Below Attic	Effective R59.22
	STIMA	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
		Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI		Ventilation	60% SRE
Θ <b>E</b>	HVAC	Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	DHW	Water Heater	0.84 EF (electric)

- 1. ci = continuous insulation.
- 2. o.c. = on-centre.
- Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







		Primary Space Heating (MJ)	16,102
		Secondary Space Heating (MJ)	5078
TS		Primary DHW Heating (MJ)	17,505
RESUL	PTION	HRV or ERV and Fans (MJ)	4964
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	1522
ODELI	r con	TOTAL ENERGY CONSUMPTION (GJ)	70.8
¥	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,514
	AL EN	Est. Natural Gas Consumpton (m3)	-
	DNNA	Est. Electricity Consumption (kWh)	19,665
	ATED /	Ceiling Below Attic	Effective R59.22
	STIMA	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
	Ш	Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI		Ventilation	60% SRE
MO	HVAC	Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	DHW	Water Heater	0.84 EF (electric)

- ci = continuous insulation.
- 2. o.c. = on-centre
- 8. Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

		Primary Space Heating (MJ)	21,706
		Secondary Space Heating (MJ)	4583
TS		Primary DHW Heating (MJ)	17,505
RESUL	PTION	HRV or ERV and Fans (MJ)	4006
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	997
ODELI	Y CON	TOTAL ENERGY CONSUMPTION (GJ)	74.4
¥	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,592
	AL EN	Est. Natural Gas Consumpton (m3)	-
	ANNU	Est. Electricity Consumption (kWh)	20,672
	ATED /	Ceiling Below Attic	Effective R59.22
	STIMA	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
	ŭi -	Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI	HVAC	Ventilation	60% SRE
M		Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	рнм	Water Heater	0.84 EF (electric)

- ci = continuous insulation.
- 2. o.c. = on-centre.
- 3. Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.







### **ESTIMATED ANNUAL ENERGY CONSUMPTION**

		Primary Space Heating (MJ)	27,490
		Secondary Space Heating (MJ)	5484
SI.	_	Primary DHW Heating (MJ)	17,505
RESUI	PTION	HRV or ERV and Fans (MJ)	5766
MODELLING RESULTS	ESTIMATED ANNUAL ENERGY CONSUMPTION	Air Conditioner (MJ)	1074
ODELI	r con	TOTAL ENERGY CONSUMPTION (GJ)	82.9
Ž	IERG	ESTIMATED ANNUAL ENERGY COST	\$1,774
	AL EN	Est. Natural Gas Consumpton (m3)	-
	ANNU	Est. Electricity Consumption (kWh)	23,039
	TED /	Ceiling Below Attic	Effective R59.22
	STIMA	Walls Above Grade (exterior)	"Effective R24.15 (Logix Pro ICF)"
	m ·	Slab-on-grade with an Integral Footing	Effective R21.12
PUTS		Windows & Sliding Glass Doors (W/m2•K)	U-Value: 0.63
MODELLING INPUTS		Airtightness	"< 1.56 ACH @ Pa (Assumed - No Air Test Required)"
DELLI		Ventilation	60% SRE
MO	HVAC	Secondary Space Heating Equipment	Electric Resistance (backup)
		Primary Space Heating & Space Cooling Equipment	ASHP ( 3.31 HEAT COP/ 3.85 COOL COP)
	DHW	Water Heater	0.84 EF (electric)

- ci = continuous insulation.
- 2. o.c. = on-centre.
- Modelling is based on C1 prescriptive package from SB-12 in the 2012 Ontario Building Code.
- 4. Modelling was completed utilizing HOT2000 v11.9.
- Imperial U-values and R-values have been noted in this table.
- Estimated operating cost is based on an average of the Ontario off-peak, mid-peak, and on-peak electricity rates.
- This is a model only and is provided for illustration purposes only. Actual energy consumption will vary depending on lifestyle, location, orientation, air tightness detailing, and any number of factors.

