

DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS 3430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043 PERMITS (410) 313-2455 INSPECTIONS (410) 313-1850	HOWARD COUNTY RESIDENTIAL HEATING-VENTILATION-AIR CONDITIONING AND REFRIGERATION PERMIT APPLICATION	HVACR PERMIT # <u>M18000450</u> BUILDING PERMIT #
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BUILDING ADDRESS: _____ SUITE/APT: _____ SUBDIVISION: _____ CENSUS TRACT: _____ SECTION: _____ AREA: _____ LOT: _____ TAX MAP: _____ PARCEL: _____ BLOCK: _____ ZONE: _____ PROPERTY ID: _____ MAP COORDINATES: _____ TYPE OF IMPROVEMENTS: _____ USE: _____	OWNERS NAME: <u>Amy Studdard</u> ADDRESS: <u>14138 HOWARD ROAD</u> CITY: <u>DAYTON</u> STATE: <u>MD</u> ZIP CODE: <u>21036</u> HOME PHONE: <u>443-285-2047</u> WORK PHONE: _____
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CHECK ONE	HOW MANY	COMPANY NAME: Ground Loop Heating & Air Cond., Inc.
SINGLE FAMILY DWELLING <input checked="" type="checkbox"/>	<u>1</u> ZONES	LICENSEE NAME: <u>Michael E. Cullum</u>
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	_____ ZONES	ADDRESS: <u>1701 Whiteford Road</u>
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	_____ ROOMS	CITY: <u>Darlington</u>
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	_____ ROOMS	STATE: <u>MD</u> ZIP CODE: <u>21034</u> PHONE: <u>410-836-1706</u> HVACR LICENSE NO: <u>6539</u>

"ALL WORK INSIDE HOME"

New <input type="checkbox"/> Heating and Air Conditioning <input checked="" type="checkbox"/> Geo Thermal System	<input type="checkbox"/> Heating System Only <input type="checkbox"/> Ductless Mini Splits	<input type="checkbox"/> Other Work (Describe): <input type="checkbox"/> Thru The Wall Systems
Replacement <input type="checkbox"/> Heating <input type="checkbox"/> Air Conditioning <input checked="" type="checkbox"/> Heating and Air Conditioning	EQUIPMENTS: <u>CLIMATE MASTER 5 TON UNIT REPLACED UNIT ONLY</u>	Additions and Alterations <input type="checkbox"/> Heating <input type="checkbox"/> Air Conditioning <input checked="" type="checkbox"/> Heating and Air Conditioning

****Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required****

Zones Permit Fee = # of Zones x \$40 = <u>40.00</u> Technology Fee (10% of Permit Fee) = <u>4.00</u> Plus Application Fee <u>\$50.00</u> Total Fees Due = <u>94.00</u>	REUSED EXISTING LOOP Rooms Permit Fee = # of Rooms x \$80 = _____ Technology Fee (10% of Permit Fee) = _____ Plus Application Fee \$50 <u>\$50.00</u> Total Fees Due = _____
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I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVACR LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

Michael Cullum 5-23-18
 SIGNATURE OF LICENSEE DATE

MICHAEL CULLUM
 PRINT NAME OF LICENSEE

linda @ ground loop . com
 Email Address

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 Word doc: T:\Updated Forms\hvac application
 Rev:10.2009

Validation

 Check Number: 24914
 Cash: _____
 Receipt Number: 535477

CITY WATER & SEWER
WELLS

HD: Sh Cull 6/19/18

STUDDARD

M18000450

WaterFurnace Energy Analysis				
ASHRAE Single Zone Load Calculation Ver. 8.3				
Dealer-	Ground Loop Heating & Air Cond		Client-	studdard
	1701 Whiteford Rd Darlington Md 21034			
Design Conditions-	Winter	Summer	Daily	
Outside Temp:	12 ° F	92 ° F	Range:	
Inside Temp:	70 ° F	72 ° F	23	
Difference:	58 ° F	20 ° F	° F	
General Information-				
Glass Type:	0 Clear	Exposed Ducts:	100%	
Roof Color:	0 Dark	Duct Loss Factor:	0.15	
Occupancy:	4 People	Duct Gain Factor:	0.15	
Light/Appliance:	2000 btuh			
Infiltration Evaluation:		Qty	Code	
Fireplace:		1	1	Std-Damper
Fans/Vents:		2	1	W/ Damper
Attic Access:		0	1	
Window AC:		0	0	
Fossil Furnace:		0	0	
Fossil DHW Heater:		0	0	
Exposed Duct System:			0	Poorly Sealed
Building # Stories:			1	
Wind Shielding:			2	Moderate
BUILDING LOAD SUMMARY - WHOLE HOUSE		AREA	LOSS	GAIN
WALLS/PARTITIONS-				
EXT. WALL- R19		1701	9774	2966
CONCR-4' BEL GRD-R11				
WINDOWS/DOORS-				
D.H./SLDG-WOOD-DOUBLE		240	12805	6485
D.H./SLDG-WOOD-DOUBLE				
DOOR-WOOD-STRM		21	700	212
SLDG DR-WOOD-DOUBLE				
CEILINGS/FLOORS-				
FRAME CEILING-R38		2730	6200	3508
FRAME FLOOR-R11		2730	14751	3824
PEOPLE				1200
LIGHT/APPLIANCE				2000
EXPOSED DUCT SYSTEM		100%	6635	3029
MOISTURE REMOVAL				6967
OTHER LOSS/GAIN-			0	0
TOTAL LOAD (BTU/HR)			50865	30192

EAST			SOUTH			WEST			
HEIGHT	LENGTH	EXPOSE	HEIGHT	LENGTH	EXPOSE	HEIGHT	LENGTH	EXPOSE	
9	39	0	9	70	0	9	39	0	
HEIGHT	WIDTH	DIRECT	SHADE	WALL	HEIGHT	WIDTH	DIRECT	SHADE	WALL
2	5	3	1	1	2	45	5	1	1
LENGTH	WIDTH	EXPOSE	LENGTH	WIDTH	EXPOSE	LENGTH	WIDTH	EXPOSE	