

Department of Inspections Licenses and Permits 3430 Court House Drive Ellicott City, MD 21043 Permits (410) 313-2455 Opt. #4 Inspections (410) 313-1840	HOWARD COUNTY RESIDENTIAL HEATING-VENTILATION-AIR CONDITIONING AND REFRIGERATION PERMIT APPLICATION	HVACR PERMIT # <u>M20000957</u> BUILDING PERMIT #
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SITE BUILDING ADDRESS: <u>4090 Old Columbia Pike</u> SUITE/APT: _____ SUBDIVISION: _____ TYPE OF IMPROVEMENTS: <u>Install (2)</u> USE: <u>Water Furnace geothermal systems</u>	OWNERS NAME: <u>Paul Regnault</u> ADDRESS: <u>4090 Old Columbia Pike</u> CITY: <u>Ellicott City</u> STATE: <u>MD</u> ZIP CODE: <u>21043</u> HOME PHONE: <u>410-963-8269</u> CELL PHONE: _____
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<u>CHECK ONE</u>	<u>HOW MANY</u>	COMPANY NAME: <u>Total Comfort Heating & A/C</u>
SINGLE FAMILY DWELLING <input type="checkbox"/>	<u>2</u> ZONES	LICENSEE NAME: <u>James E. Aaron</u>
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	____ ZONES	ADDRESS: <u>12009 Margaret Drive</u>
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	____ ROOMS	CITY: <u>Hagerstown</u>
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	____ ROOMS	STATE: <u>MD</u> ZIP CODE: <u>21742</u> PHONE: <u>301-745-3700</u> HVACR LICENSE NO: <u>5833-01</u>

<u>New Construction</u> <input type="checkbox"/> Heating and Air Conditioning <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Heating	<u>Additions and Alterations</u> <input type="checkbox"/> Heating <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Heating and Air Conditioning	<input checked="" type="checkbox"/> Geo Thermal System <input type="checkbox"/> Gas Conversion (Make and Model of Equipment) <input type="checkbox"/> Ductless Mini Splits <input type="checkbox"/> Thru The Wall Systems <input type="checkbox"/> Other Work (Describe):
<u>Replacement</u> <input type="checkbox"/> Heating <input type="checkbox"/> Air Conditioning <input checked="" type="checkbox"/> Heating and Air Conditioning		
<p style="text-align: center;">**Make and Model of Equipment is required**</p> <p style="text-align: center;">****Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required****</p>		

Remove old HVAC equipment and install (2) Water Furnace geothermal systems.

<u>Zones</u>	<u>Rooms</u>
Permit Fee = # of Zones x \$40 = <u>80.00</u> Technology Fee (10% of Permit Fee) = <u>8.00</u> Plus Application Fee <u>\$50.00</u> Total Fees Due = <u>138.00</u>	Permit Fee = # of Rooms x \$80 = _____ Technology Fee (10% of Permit Fee) = _____ Plus Application Fee \$50 <u>\$50.00</u> Total Fees Due = _____

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 HVAC LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

SIGNATURE OF LICENSEE: <u>James E. Aaron</u> DATE: <u>12/11/2020</u>	Approved Septic System Plan Validation Howard County Health Department <u>697</u>
PRINT NAME OF LICENSEE: <u>James E. Aaron</u>	
Email Address: <u>Jim@tchvac.net</u>	Signature: _____ Date: <u>07/15/2021</u>
Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY	Invoice Number: <u>044387</u>

M20000951

B 1
48278

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
57253 please type

STATE PERMIT NUMBER
110-20-0056
fill in this form completely

OWNER INFORMATION
Date Received (APA) 11/12/20
8 MM DD YY 13
Regnault Paul
15 Last Name Owner First Name 34
4090 Old Columbia Pike
36 Street or RFD 55
Ellicott City Md 21113
57 Town 70 State 72 Zip 76

LOCATION OF WELL
Howard
8 COUNTY 21
1001
23 SUBDIVISION 42
SECTION 44 46 LOT 48 50
Ellicott City
52 NEAREST TOWN 71

DRILLER INFORMATION
Wesley Wolfe MWD 598
76 Driller's Name License No. 81
Chesapeake Geosystems Inc
Firm Name
6720 Ft Smallwood Rd Baltimore Md 21226
Address
Wesley A Wolf 10-26-2024
Signature Date

SOURCES OF DRILLING WATER
1. Public
2.
3.
4090 Old Columbia Pike
11 STREET ADDRESS 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
DISTANCE FROM ROAD
ENTER FT OR MI 38 39
TAX MAP: 0024 BLK: PARCEL 1092

WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.) N/A
8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) N/A
14 20

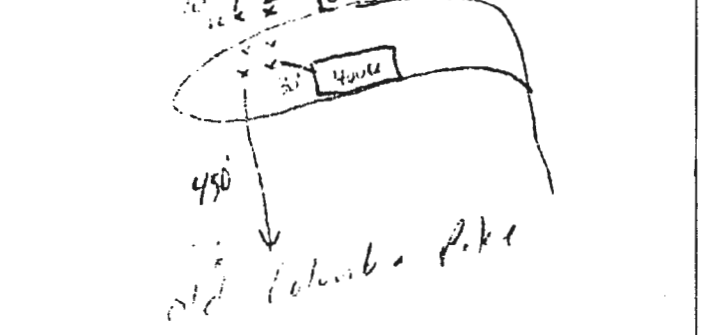
USE FOR WATER (CIRCLE APPROPRIATE BOX)
 DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 OPEN LOOP GEOTHERMAL
 CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
Howard
COUNTY NAME
STATE SIGNATURE INSERT S
DATE ISSUED 11/24/2020
43 MM DD YY 48
CO SIGNATURE EXP. DATE 11/30/21 41

APPROXIMATE DEPTH OF WELL 280 FEET
24 28
APPROXIMATE DIAMETER OF WELL 6 INCH
NEAREST INCH

PROPOSED LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL

METHOD OF DRILLING (circle one)
BORED (or Augered) JETTED Jettied & DRIVEN
30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
37 CABLE REVerse-ROTary DRive-POINT
other



REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)
 THIS WELL WILL NOT REPLACE AN EXISTING WELL
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 THIS WELL WILL DEEPEAN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROP. PERMIT NUMBER - - - - - G - - - - -
PERMIT No. 110-20-0056
70 71 72 73 74 75 76 77 78 79

Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.



M20000957

Load Short Form

ZONE 1

TOTAL COMFORT HTG. & A/C, INC.

Job:
Date: 2016
By:

12009 MARGARET DRIVE, HAGERSTOWN, MD 21742 Phone: 301-745-3700

Project Information

For: REGNAULT RESIDENCE
4090 OLD COLUMBIA PIKE, ELLICOTT CITY, MD

Design Information

	Htg	Clg	Infiltration	Simplified Average
Outside db (°F)	12	91	Method	
Inside db (°F)	70	75	Construction quality	
Design TD (°F)	58	16	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	25	24		

HEATING EQUIPMENT

Make WaterFumace
Trade ENVISION2 SERIES
Model NBV/NBH038**0*1
AHRI ref 5317193

Efficiency 4.31 COP
Heating input 8.8 kW
Heating output 29909 Btuh
Temperature rise 26 °F
Actual air flow 1058 cfm
Air flow factor 0.028 cfm/Btuh
Static pressure 0.50 in H2O
Space thermostat
Capacity balance point = 0 °F

COOLING EQUIPMENT

Make WaterFumace
Trade ENVISION2 SERIES
Cond NBV/NBH038**0*1
Coil
AHRI ref 5317193

Efficiency 19.14 EER
Sensible cooling 26433 Btuh
Latent cooling 11329 Btuh
Total cooling 37762 Btuh
Actual air flow 1058 cfm
Air flow factor 0.047 cfm/Btuh
Static pressure 0.50 in H2O
Load sensible heat ratio 0.89

Backup:
Input = 11 kW, Output = 37457 Btuh, 100 AFUE

ROOM NAME	Area (ft ²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
SR ALL GLASS	484	13314	10862	376	507
FIRST FLOOR	1380	11987	8743	339	408
BASEMENT	1864	12157	3092	344	144
ZONE 1	3728	37457	22697	1058	1058
Other equip loads		0	0		
Equip. @ 0.96 RSM			21880		
Latent cooling			2816		
TOTALS	3728	37457	24696	1058	1058

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Load Short Form ZONE 2 TOTAL COMFORT HTG. & A/C, INC.

Job:
Date: 2016
By:

12009 MARGARET DRIVE, HAGERSTOWN, MD 21742 Phone: 301-745-3700

Project Information

For: REGNAULT RESIDENCE
4090 OLD COLUMBIA PIKE, ELLICOTT CITY, MD

Design Information

	Htg	Clg	Infiltration	Simplified Average
Outside db (°F)	12	91	Method	
Inside db (°F)	70	75	Construction quality	
Design TD (°F)	58	16	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	25	24		

HEATING EQUIPMENT

Make WaterFurnace
Trade 5 SERIES
Model NDV/NDH049J1*(1,2,4)
AHRI ref 203466716

Efficiency 4.1 COP
Heating input 11.7 kW
Heating output 40089 Btuh
Temperature rise 23 °F
Actual air flow 1600 cfm
Air flow factor 0.034 cfm/Btuh
Static pressure 0 in H2O
Space thermostat
Capacity balance point = 0 °F

COOLING EQUIPMENT

Make WaterFurnace
Trade 5 SERIES
Cond NDV/NDH049J1*(1,2,4)
Coil
AHRI ref 203466716

Efficiency 18.75 EER
Sensible cooling 35152 Btuh
Latent cooling 15065 Btuh
Total cooling 50217 Btuh
Actual air flow 1600 cfm
Air flow factor 0.052 cfm/Btuh
Static pressure 0 in H2O
Load sensible heat ratio 0.88

Backup:
Input = 13 kW, Output = 44570 Btuh, 100 AFUE

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
SECOND FLOOR	1380	28761	21761	984	1121
THIRD FLOOR	858	18002	9295	616	479
ZONE 2	2238	46763	31056	1600	1600
Other equip loads		0	0		
Equip. @ 0.96 RSM			29938		
Latent cooling			4044		
TOTALS	2238	46763	33983	1600	1600

Bold/italic values have been manually overridden

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.