

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>M21000283</u> BUILDING PERMIT #
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SITE BUILDING ADDRESS: <u>7538 Cherry Tree Dr.</u> SUITE/APT: SUBDIVISION: TYPE OF IMPROVEMENTS: USE:	OWNERS NAME: <u>Doug + Sarah Kirkley</u> ADDRESS: <u>7538 Cherry Tree Dr.</u> CITY: <u>Fulton</u> STATE: <u>MD</u> ZIP CODE: <u>20759</u> HOME PHONE: <u>443-900-4297</u> CELL PHONE:
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<u>CHECK ONE</u>	<u>HOW MANY</u>	COMPANY NAME:
SINGLE FAMILY DWELLING <input type="checkbox"/>	<u>1</u> ZONES	<u>Total Comfort Heating & AC</u>
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	___ ZONES	LICENSEE NAME: <u>James E. Aaron</u>
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	___ ROOMS	ADDRESS: <u>12009 Margaret Dr.</u>
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	___ ROOMS	CITY: <u>Hagerstown</u> 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="font-size: 1.2em;">Remove existing HVAC equipment. Install a Water-Furnace geothermal split system. Vertical loop by Chesapeake Geo.</p> <p style="text-align: center;">**Make and Model of Equipment is required**</p> <p>****Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required****</p>	

<u>Zones</u> 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>	<u>Rooms</u> 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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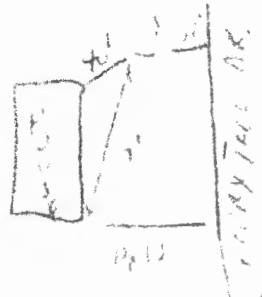
I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVAC LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

SIGNATURE OF LICENSEE: James E. Aaron DATE: 3/19/2021
 PRINT NAME OF LICENSEE: James E. Aaron
 Email Address: Jim@tchvac.net

Validation	
Check Number:	<u>9850</u>
Money Order#:	_____
Invoice Number:	<u>654298</u>

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

4/12/21
Approved: (Signature)

B 1	SEQUENCE NO. (MDE USE ONLY) 48289	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER HO-20-0077 <small>fill in this form completely</small>
OWNER INFORMATION Date Received (APA) <u>11/13</u> 8 MM DD YY 13 15 <u>Kutler</u> Last Name <u>Dennis</u> Owner First Name 34 36 <u>1538 Cherry Tree Dr</u> Street or RFD 55 57 <u>Frederick</u> Town 70 <u>MD</u> State 72 <u>21754</u> Zip 76		LOCATION OF WELL B 3 <u>Howard</u> COUNTY 21 <u>Mountsfield</u> SUBDIVISION 42 SECTION <u>44</u> LOT <u>5</u> 52 NEAREST TOWN 71	
DRILLER INFORMATION <u>Wesley Wolfe</u> Driller's Name 76 <u>MWD 598</u> License No. 81 <u>Chesapeake Geosystems Inc</u> Firm Name <u>1000 F Smallwood Rd Baltimore Md 21228</u> Address <u>Wesley A Wolfe</u> Signature <u>02-08-21</u> Date		SOURCES OF DRILLING WATER B 4 <u>7538 Cherry Tree Dr</u> STREET ADDRESS 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> NORTH <input type="checkbox"/> WEST <input type="checkbox"/> EAST <input type="checkbox"/> SOUTH 34 <u>32</u> DISTANCE FROM ROAD 37 ENTER FT OR MI 38 <u>FT</u> 39 TAX MAP: <u>0041</u> BLK: PARCEL <u>0279</u>	
WELL INFORMATION B 2 APPROX. PUMPING RATE (GAL. PER MIN.) <u>N/A</u> 8 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) <u>N/A</u> 14 20		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL <u>Howard</u> COUNTY NAME 13 COUNTY NO. STATE SIGNATURE INSERT S 41 DATE ISSUED <u>02/02/21</u> <u>Dennis Thomas</u> CO SIGNATURE <u>02/02/22</u> EXP. DATE 43 MM DD YY 48	
USE FOR WATER (CIRCLE APPROPRIATE BOX) <input type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> PUBLIC WATER SUPPLY WELL <input type="checkbox"/> TEST, OBSERVATION, MONITORING <input type="checkbox"/> OPEN LOOP GEOTHERMAL <input checked="" type="checkbox"/> CLOSED LOOP GEOTHERMAL		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 	
APPROXIMATE DEPTH OF WELL <u>240</u> FEET 24 28 APPROXIMATE DIAMETER OF WELL <u>6</u> INCH NEAREST INCH		METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTary DRIVE-POINT other _____	
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> THIS WELL WILL DEEPEM AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52		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.	
Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER _____ G PERMIT No. <u>HO-20-0077</u> 70 71 72 73 74 75 76 77 78 79			
SPECIAL CONDITIONS <small>NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.</small>			

M21000283



Load Short Form
Entire House
TOTAL COMFORT HTG. & A/C, INC.

Job:
 Date: 2016
 By:

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

Project Information

For: KIRKLEY RESIDENCE

Design Information

	Htg	Clg	Method	Infiltration	Simplified Average
Outside db (°F)	12	91			
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

COOLING EQUIPMENT

Make WaterFurnace
 Trade ENVISION2 SERIES
 Model NBV/NBH042**5*0
 AHRI ref 5296223

Make WaterFurnace
 Trade ENVISION2 SERIES
 Cond NBV/NBH042**5*0
 Coil
 AHRI ref 5296223

Efficiency 3.59 COP
 Heating input 8.9 kW
 Heating output 30329 Btuh
 Temperature rise 32 °F
 Actual air flow 894 cfm
 Air flow factor 0.022 cfm/Btuh
 Static pressure 0.50 in H2O
 Space thermostat
 Capacity balance point = 31 °F

Efficiency 18.73 EER
 Sensible cooling 28350 Btuh
 Latent cooling 12150 Btuh
 Total cooling 40500 Btuh
 Actual air flow 894 cfm
 Air flow factor 0.047 cfm/Btuh
 Static pressure 0.50 in H2O
 Load sensible heat ratio 0.95

Backup:
 Input = 12 kW, Output = 40303 Btuh, 100 AFUE

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
SLAB	375	7760	2785	172	130
FIRST FLOOR	1125	15343	11100	340	518
BASEMENT	1125	17201	5283	381	246
Entire House	2625	40303	19167	894	894
Other equip loads		0	0		
Equip. @ 0.96 RSM			18477		
Latent cooling			944		
TOTALS	2625	40303	19421	894	894

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