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| 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>M22001255</u> BUILDING PERMIT # <u>B01004412</u> |
|--|--|--|

| | |
|--|---|
| SITE BUILDING ADDRESS: <u>7429 Cherry Tree Dr.</u> SUITE/APT: _____ SUBDIVISION: _____ TYPE OF IMPROVEMENTS: <u>Geothermal installation</u> USE: _____ | OWNERS NAME: <u>Norman & Elena Adams</u> ADDRESS: <u>7429 Cherry Tree Dr.</u> CITY: <u>Fulton</u> STATE: <u>MD</u> ZIP CODE: <u>20759</u> HOME PHONE: _____ <u>norm.h.adams@gmail.com</u> CELL PHONE: _____ |
|--|---|

| <u>CHECK ONE</u> | <u>HOW MANY</u> | COMPANY NAME: |
|--|-----------------|---|
| SINGLE FAMILY DWELLING <input checked="" type="checkbox"/> | <u>2</u> ZONES | <u>Total Comfort Heating & A/C</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 type="checkbox"/> Heating and Air Conditioning <u>Installation of a (3) ton geothermal system to serve existing house. Installation of a (2) ton geothermal system to serve an addition.</u> **Make and Model of Equipment is required** ****Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required**** | | |

| <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.

James E. Aaron 12/19/22
 SIGNATURE OF LICENSEE DATE
James E. Aaron
 PRINT NAME OF LICENSEE
Jim@tchvac.net
 Email Address

| | |
|-------------------------------|---------------------|
| Validation | |
| Check Number: <u>10670</u> | Money Order#: _____ |
| Invoice Number: <u>730726</u> | Date: _____ |

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

Approved Septic System Plan
 Howard County Health Department
Signature 12/19/22
 Date

B 1 SEQUENCE NO. (MDE USE ONLY) **STATE OF MARYLAND** STATE PERMIT NUMBER
APPLICATION FOR PERMIT TO DRILL WELL **40-20-0189**
 please type **fill in this form completely**

OWNER INFORMATION
 Date Received (APA) 8 MM DD YY 13
 15 Last Name Adams Owner Norman K Leng
 36 Street or RFD 7429 Cherry Tree Dr
 57 Town Fulton 70 State MD 72 Zip 20759

B 3 LOCATION OF WELL
 8 COUNTY Howard 21
 23 SUBDIVISION Mooresfield 42
 SECTION 44 46 LOT 13 48 50
 52 NEAREST TOWN Fulton 71

DRILLER INFORMATION
 Driller's Name Michael Kohler M SD 028 76 License No. 81
 Firm Name Michael Well Drilling
 Address 125 Brimwood Ln Fulton MD 20759
 Signature Michael Kohler Date 05/11/12

B 4 SOURCES OF DRILLING WATER
 1. Public
 2.
 3.
 11 STREET ADDRESS 7429 Cherry Tree Dr 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH N WEST W EAST E SOUTH S
 34 37 DISTANCE FROM ROAD
 ENTER FT OR MI 38 39
 TAX MAP: 0041 BLK: PARCEL 0318

B 2 WELL INFORMATION
 1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 8 12
 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
 COUNTY NAME Howard COUNTY NO. 13
 STATE SIGNATURE INSERT S → 41
 DATE ISSUED 05/22/12 43 MM DD YY 48
 CO SIGNATURE EXP. DATE

USE FOR WATER (CIRCLE APPROPRIATE BOX)
 D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 I INDUSTRIAL, COMMERCIAL, DEWATERING
 P PUBLIC WATER SUPPLY WELL
 T TEST, OBSERVATION, MONITORING
 O OPEN LOOP GEOTHERMAL
 C CLOSED LOOP GEOTHERMAL
 22 2 Loop

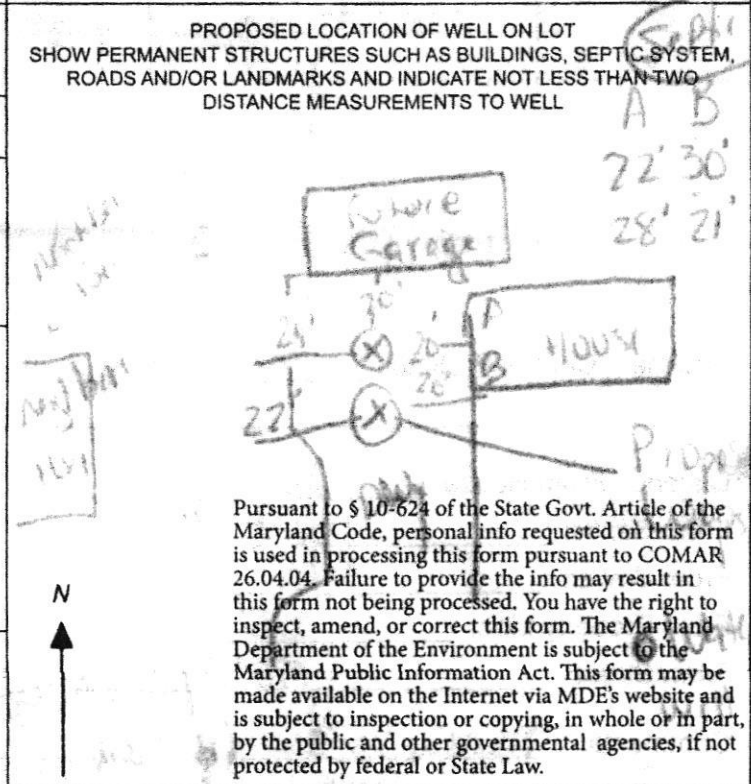
PROPOSED LOCATION OF WELL ON LOT
 SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL
 A B
 22' 30"
 28' 21"

APPROXIMATE DEPTH OF WELL 400 24 28 FEET
 APPROXIMATE DIAMETER OF WELL 6 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)
 N THIS WELL WILL NOT REPLACE AN EXISTING WELL
 Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 D THIS WELL WILL DEEPEM AN EXISTING WELL
 39 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. 40-20-0189 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.

A 13
22 30
28 21



7429 Cherry Tree Drive
Fulton Md

DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

HO-20-0189

INFORMATION - GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE MARYLAND 21230

2 wells @ 400'
Closed loop geo

Approved 6/9/22 (ST)
Staked by driller

Septic

Neighbors well

Neighbors house

Future Garage

Entry of Kristina House

Driveway

Water well

Sediment Control Protocol: SILT Fence & Straw bales

Distance From House: 20'
From Septic: 100'+
From Sewer: N/A
From Property Line: 22'
From Street: 50'+

Trees Nearby: Yes Being trimmed
Utility Issues: Need Marked
Mats Needed: NO
Access For H/U: Yes
Neighboring Tags: _____

Comments: Drilling in Asphalt, Saw cut, Haul Spoils.
Enter in Crawl Space

Person Completing Form: Wes Wolfe

M22001255



**Load Short Form
GEO PACKAGE
TOTAL COMFORT HTG. & A/C, INC.**

Job:
Date: 2016
By:

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

Project Information

For: ADAMS RESIDENCE

Design Information

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

HEATING EQUIPMENT

| | |
|------------------|----------------|
| Make | |
| Trade | |
| Model | |
| AHRI ref | |
| Efficiency | 80 AFUE |
| Heating input | 0 Btuh |
| Heating output | 0 Btuh |
| Temperature rise | 0 °F |
| Actual air flow | 1201 cfm |
| Air flow factor | 0.035 cfm/Btuh |
| Static pressure | 0 in H2O |
| Space thermostat | |

COOLING EQUIPMENT

| | |
|--------------------------|----------------|
| Make | |
| Trade | |
| Cond | |
| Coil | |
| AHRI ref | |
| Efficiency | 0 SEER |
| Sensible cooling | 0 Btuh |
| Latent cooling | 0 Btuh |
| Total cooling | 0 Btuh |
| Actual air flow | 1201 cfm |
| Air flow factor | 0.047 cfm/Btuh |
| Static pressure | 0 in H2O |
| Load sensible heat ratio | 0.90 |

| ROOM NAME | Area (ft²) | Htg load (Btuh) | Clg load (Btuh) | Htg AVF (cfm) | Clg AVF (cfm) |
|-------------------|-------------|-----------------|-----------------|---------------|---------------|
| BLOCK FIRST | 1534 | 22668 | 17429 | 785 | 813 |
| SECOND FLOOR | 812 | 12036 | 8334 | 417 | 389 |
| GEO PACKAGE | 2346 | 34704 | 25763 | 1201 | 1201 |
| Other equip loads | | 0 | 0 | | |
| Equip. @ 0.96 RSM | | | 24836 | | |
| Latent cooling | | | 2851 | | |
| TOTALS | 2346 | 34704 | 27687 | 1201 | 1201 |

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



Load Short Form

AHU 2

TOTAL COMFORT HTG. & A/C, INC.

Job:
Date: 2016
By:

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

Project Information

For: ADAMS RESIDENCE

Design Information

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

HEATING EQUIPMENT

| | |
|------------------|----------------|
| Make | |
| Trade | |
| Model | |
| AHRI ref | |
| Efficiency | 80 AFUE |
| Heating input | 0 Btuh |
| Heating output | 0 Btuh |
| Temperature rise | 0 °F |
| Actual air flow | 625 cfm |
| Air flow factor | 0.032 cfm/Btuh |
| Static pressure | 0 in H2O |
| Space thermostat | |

COOLING EQUIPMENT

| | |
|--------------------------|----------------|
| Make | |
| Trade | |
| Cond | |
| Coil | |
| AHRI ref | |
| Efficiency | 0 SEER |
| Sensible cooling | 0 Btuh |
| Latent cooling | 0 Btuh |
| Total cooling | 0 Btuh |
| Actual air flow | 625 cfm |
| Air flow factor | 0.045 cfm/Btuh |
| Static pressure | 0 in H2O |
| Load sensible heat ratio | 0.93 |

| ROOM NAME | Area (ft²) | Htg load (Btuh) | Clg load (Btuh) | Htg AVF (cfm) | Clg AVF (cfm) |
|-------------------|------------|-----------------|-----------------|---------------|---------------|
| NEW MBR | 792 | 17249 | 13154 | 550 | 587 |
| BRIDGE | 84 | 2331 | 837 | 74 | 37 |
| AHU 2 | 876 | 19580 | 13991 | 625 | 625 |
| Other equip loads | | 0 | 0 | | |
| Equip. @ 0.96 RSM | | | 13487 | | |
| Latent cooling | | | 1024 | | |
| TOTALS | 876 | 19580 | 14512 | 625 | 625 |

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



wrightsoft®
A Midea® / Denkschaub-Hauswag Company

Right-Suite® Universal 2021 21.0.03 RSU02149

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