

Annex B (Informative) Site Survey Worksheet

Note: This Annex is not a mandatory part of this Standard.

Customer _____ Date _____
 Address _____ Phone _____
 Legal Description _____
 Performed by _____ (Name) Phone _____
 Company Name _____ Signature _____
 New Construction Retrofit Construction Permit and Number _____
 Heat Loss and Energy Analysis by _____
 Soil/Rock Types and Conditions _____
 Drill Regulations _____
 Special Requirements _____

SERVICE LOCATE CHECKLIST

- POWER LINES
Overhead
Underground
 - NATURAL GAS
 - PROPANE
 - PUBLIC WATER
 - WATER WELL
_____ Depth, m (ft)
 - PUBLIC SEWER
 - ON-SITE SEWER
 - TELEPHONE LINE
Overhead
Underground
 - TV CABLE
 - FUEL LINES
 - EASEMENTS
 - SPRINKLER
 - TILE DRAIN
 - BUILDING ENTRANCE
 - UNIT LOCATION
 - POND
Size _____
Avg. Depth _____
Min. Depth _____
 - OTHER _____
 - ELEVATION
POND/HOUSE
 - FUTURE BUILDING
(Buildings, pools, etc)
- Acknowledged By: _____
 Owner/Agent _____
 (Date) _____
 Installation Date _____
 Scale _____ = _____

SITE PLAN COMPANY HEADING

Locate property lines, existing structures or obstructions, future consideration sites, utilities and services, heat pump unit, circulating pump kit where it enters structure, slopes (% and direction), and equipment access routes.

Annex A (Informative) Installation Checklist for Open- and Closed-Loop Earth Energy Heat Pump Systems

Note: This Annex is not a mandatory part of this Standard.

(Two Copies Are to Be Provided to the Owner)

Owner's Name _____ Date _____
 Address _____
 Province _____ Postal Code _____ Phone _____
 Contractor's Name _____ Date _____
 Address _____
 Province _____ Postal Code _____ Phone _____
 System Type: Open-Loop Closed-Loop House Size _____
 Design Heat Load (Building) _____ Design Method _____
 Design Cooling Load _____ Method _____
 Domestic Hot Water Load (Met By System) _____
 Total Heating Load _____
 Type Of Distribution System: Forced-Air Hydronic
 Heat Pump Make _____ Model/Serial No. _____
 Heating Capacity _____ Cooling Capacity _____
 Check off appropriate entering water temperatures Heating EWT: 0°C (32°F) 10°C (50°F)
 (EWT). (Refer to CSA Standard CAN/CSA-C13256-1) Cooling EWT: 25°C (77°F) 10°C (50°F)

If A Closed-Loop System:

Heat Exchanger Length, if Horizontal _____
 Heat Exchanger Type, if Horizontal Single-Pipe Two-Pipe
 Four-Pipe Other
 Borehole Depth and Number, if Vertical _____
 Heat Exchanger Sized According to: Manufacturer

If Software, Program Used:

Backfill Materials, Horizontal Trenches _____
 Borehole Fill Material, if Vertical _____
 Type Of Antifreeze/Inhibitors _____ Quantity _____
 Antifreeze Protection Level _____ Loop Test Pressure _____
 System Static Pressure _____

If An Open-Loop System:

Attach copy of water well record or well pump test and include the number and specifications of wells, intake, and pumps.

Marking/Instructions Checklist

If A Closed-Loop System:

Supply and Return Valves Marked Accordingly
 Submerged Heat Exchanger Position Marked at Shoreline
 Label at Loop Charging Valve Showing Antifreeze Type, Concentration, Contractor Information
 Owner Given Manufacturer Documentation and Warranty on System
 Owner Given Site Survey Worksheet of Installed System (Including Dimensions/Locations of all Piping,
 Diameter, Depths and Lengths of Loops, Septic Systems, Water Inlet Lines, Lot Lines, etc.)

If An Open-Loop System:

Supply and Return Lines to be Identified by Marker at Point of Entry to Water Wells
 Inform Owner of Possible Effects on Supply Water Well of Open-Loop System — Water Quality, Quantity, etc.
 Ensure Water Supply Well is Sealed in Accordance with Approved Well Construction Practices
 Ensure Water Well Yields Water to Supply Both Domestic and Heat Pump Requirements at Time of Installation

This installation was done in accordance with CSA Standard C448.2, *Design and Installation of Earth Energy Systems for Residential and Other Small Buildings*, and currently applicable regulations.

Name: (Please Print or Type) _____ Signature _____
 Date _____