



2022 Footprint Engineering Inc.

FeBTUCell RSS QA and Details



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Section 1.0: FeBTUCell™ (M.H. Rating: 9/10 - Winner)

This invention relates to a geothermal system of heat exchange and more particularly to a geothermal pile that is disposed in the ground inside a contained source of water. Through this method we can harness the heat energy present between rocks and metallic alloys that lie underneath the surface of the earth. It is said to be one of the most abundant sources of heat on earth and through proper utilization of this heat energy we aim to reduce energy consumption through conventional means. The FeBTUCell™ is currently being tested at Martin's farm, with an expected co-efficient of efficiency (COE) of 10, which when demonstrated in testing, will be the highest COE observed in dry-ground. Furthermore, the FeBTUCell™ will be incredibly useful in any desert with well water at 200 feet as we can, with this Feng System water furnace, create local water tables.

Section 1.1: FeBTUCell™ RSS

This RSS System provides a geothermal system with a high COP and conductivity.

1-SURVEY SITE CONDITIONS

Prior to any work being initiated, the owner must survey the site conditions, looking for any abnormalities or additional problems that may exist on site.

2-DRILL DIRT/ROCK AND INSTALL LINER

Drill holes open to water table. Drill liners into water table to seal into bottom at 30-100 ft. No rock or glacial till. Sizing combinations are to be 8 in a 36 inch diameter tube, 12 in a 48 inch diameter tube, and 18 in a 72 inch diameter tube. Add end cap.

3-PILE

Drive pile into the ground.

4-INSERT FEBTUCELL

Insert ID Pipe (Plated) into pile.

5-CONCRETE FILL

Fill the area surrounding the pile with 5 MPa concrete.

6-GRAVEL AND WATER FILL

Brace the remaining annular space around the ID pile with clean gravel. Finally, fill the gravel pit with water.

Section 1.2: FeBTUCell™ CAD Illustration

A sketch depicting a typical FeBTUCell™ unit can be seen below.

