

# SOLAS BHRIDE

## Award Winning Project

Glenergy worked with the Engineer to come up with the most economical system from both a capital and running cost point perspective.

In particular Glenergy suggested an open system with underfloor heating, which would allow passive redistribution of heat between the north and south sides of the building. This also provides passive cooling in the summer by transfer of heat from the floor in the south facing rooms to the cooler north facing rooms.

The AirGo Ice Stick heat pumps were suggested for a number of reasons.

- Its unique hybrid heat source from geothermal and air, means that the highest efficiency is always achieved even at -20°C. When there isn't enough energy in the air the Airgo collects from the ground loop. This happens passively with no additional pumps. There is no electric backup needed with this system.
- The Airgo only provides the heat that the building needs, and there is no need for storage therefore no additional losses.
- The long life (50+ Years) of the Airgo Ice Sticks and compressor (10-20 years) will mean little or no maintenance requirement over and above annual checks.
- For hot water demand, EcoTanks Hot Water Heat Pump Technology combined with solar Technology, provide the lowest possible running costs.

Solas Bhride is an education and retreat centre dedicated to the teachings and memory of St. Brigid, Ireland's only female saint. It comprises exhibition and hospitality areas, teaching and workshop spaces, hermitages for pilgrims and some residential facilities - delightful and reflective places for immersion in the life and teachings of Saint Brigid.

The design emanates from a St. Brigid's cross shape, oriented to link views from St. Brigid's cathedral in Kildare town to the nearby Brigid's well. The arms of the cross cradle two circular rooms which are themselves both symbolic and functional. The project includes energy efficient design approaches and places a high priority on the creation of a healthful and restful environment for its users and visitors.

The landscape, comprised of artistic features and contemplative gardens, using native species wildflower meadows and Irish woodland planting, will add an additional layer of delight to the user experience.

Solas Bhride has achieved an A rating for energy, quite a success given the dispersed nature of the design, which is laid out to maximise connections to views, sun and the various gardens and outdoor spaces. It is made of natural materials and employs natural ventilation and daylighting in its servicing.



### AWARDS

2015 Best Green Construction project in 21015 Green Awards  
2014 Best Sustainable Initiative (Manley Construction)- Irish Construction Awards 2014  
2014 Fit Out Sustainability Achievement (Manley Construction) Fit Out Awards

**CLIENT:** SOLAS BHRIDE

**ARCHITECT:** SOLEARTH ARCHITECTURE

**CONTRACT VALUE:** € 3 MILLION

**COMPLETION DATE:** 2014