

Kielder Water & Forest Park, Northumberland

Completed: 2008

Cladding: European Larch

(All timber structure Fire Retardant treated)

Designed by: Charles Barclay Architects (CBA)

Photos courtesy: CBA

Brief description:

The remoteness and lack of light pollution at Kielder Water and Forest Park, Northumberland makes it an ideal location to observe the night sky. In 2005, Charles Barclay Architects won an open RIBA completion to create this innovative observatory which was completed in 2008. Designed in the form of a timber pier, the observatory houses two permanent telescopes in rotating turrets and includes an observation deck which provides panoramic views over Kielder Forest by day and space amateur astronomers to use at night.

The observatory is an all timber raised structure to reflect its forest setting with pedestrian access at one end. The support columns, frame and decking are in Douglas Fir. The upper structure is made from plywood clad spruce framing covered with Siberian Larch cladding. Leach resistant and humidity resistant flame retardant treatments were used for every timber component in the structure.

The observatory is a low environmental impact, self-sufficient operation. A 2.5kW wind turbine and solar roof panels generate power and the toilet is of a composting design. The observatory's turrets are rotated manually by a rack and pinion system and the doors are hydraulically assisted.

