

BGS iGeology data for BB4

Superficial Sediments:

Till, Devensian – Diamicton. Superficial deposits formed up to 2 million years ago in the quaternary Period. Local environment previously dominated by ice age conditions.

Bedrock Geology:

Rossendale Formation – Mudstone and Siltstone. Sedimentary Bedrock formed approximately 316 to 318 million years ago in the Carboniferous Period. Local environment previously dominated by swamps, estuaries and deltas.

Age range:

Yeadonian Sub-age

Lithological Description:

A fine- to very coarse grained and pebbly, feldspathic sandstone, interbedded with grey siltstone and mudstone, and subordinate marine black shales, thin coals and seatearths. Typically, the formation comprises a lower mudstone-dominated succession including two prominent marine shales, the *Cancelloceras cancellatum* and *Cancelloceras cumbriense* marine bands, and an upper sandstone-dominated succession, including the Rough Rock and Rough Flags.

Definition of Lower Boundary:

The sharp conformable base of the dark grey, fissile mudstone of the Subcrenatum Marine Band with eponymous fauna present at the base of the Pennine Coal Measures Group. Typically rests upon coarse- or very coarse-grained and pebbly sandstone of the Rough Rock.

Thickness:

Rochdale (Rossendale) 130 m thick, Bradford and north Derbyshire 75m; Stainmore trough and Askrigg Block 45 m, north Isle of Man 26 m.

Geographical Limits:

Central Pennine Basin from Lancashire and West Yorkshire, between Lancaster (SD 47 61) and Harrogate (SE 30 55), extending southward to north Staffordshire (SK06), the Askrigg Block (SE 10 80) and Stainmore Trough (SD 85 15) and locally on the north of the Isle of Man (NX 46 00).

Parent Unit:

Millstone Grit Group

Previous Name:

Rough Rock Grit Group – 3005