

British Gypsum Marblaegis Mine Vent Wall

Concrete Canvas (CC) was specified in the construction of vent walls at Marblaegis Mine, an underground gypsum mine in Loughborough, UK. The mine's owners, British Gypsum, had encountered problems in building vent walls in the past; using concrete blocks was a slow, expensive process requiring specialist labour, brattice cloth could only be used as a temporary measure due to its durability, and their self-produced gypsum boards were quick to install but prone to rotting. They were looking for a durable, flexible, cost-effective alternative.

Using batched rolls of CC5 meant that the 3-man installation team were able to carry the material to site without any plant or specialist equipment. After being cut to length on site using hand tools the CC5 was hung, shaped and fixed to a British Gypsum branded aluminium stud wall system and securely fastened using wooden battens, 200mm steel strips and screws. The whole structure was then hydrated using a portable water supply.

British Gypsum were very impressed with the end result, stating that CC was installed as quickly as gypsum board but without the issues with rotting. They also noted that CC seems far more durable than brattice cloth and cheaper and easier to mobilise and install than concrete block walls.



Concrete block vent walls had proved expensive and difficult to install



Brattice cloth had also been used but only as a temporary measure



Vent walls had also been constructed out of the gypsum board the mine produced, but these were prone to rotting



Frame created using British Gypsum branded aluminium stud wall system



Concrete Canvas cut to size, held in place and screwed to frame



Battens, 200mm steel and screws used to provide strong fixing to rock



CC hydrated using on-site equipment



Completed vent wall closure using Concrete Canvas