

Restoring the Tiled Finishes to the Piazza Fountain

The majority of respondents to Engage's questionnaire were in favour of exactly restoring the wall finishes of the Piazza Fountain using glossy black ceramic mosaic tiles. However, this option was ahead by under 1% or 1 single vote and, consequently, there was an argument for greater weight being given to those most affected, i.e. the residents of Beetham Plaza, many of whom have apartments overlooking the fountain. These tend to favour the use of slightly lighter and more colourful natural slate mosaic tiles which, although not as close to Richard Huws' original scheme, are arguably more in keeping with the current piazza as relandscaped between 1997 and 2000. It was therefore resolved that natural slate mosaic tiles should be used for the fountain.

Given the background of the Welsh designer, Richard Huws, it is proposed that these mosaic tiles should be manufactured from Welsh slate. Depending on the quarry or part of the quarry where it is mined, Welsh slate comes in a variety of colours, but there is also quite a lot of tonal variation within the main colours depending on the particular seam. One of the main current providers, Welsh Slate, provides slate in 3 main colours, Penrhyn Heather Blue or Bangor Blue, Penrhyn Heather Red or Welsh Red Slate and Cwt-y-Bugail Blue Grey (Fig 1-3).



Fig 1: Penrhyn Heather Blue

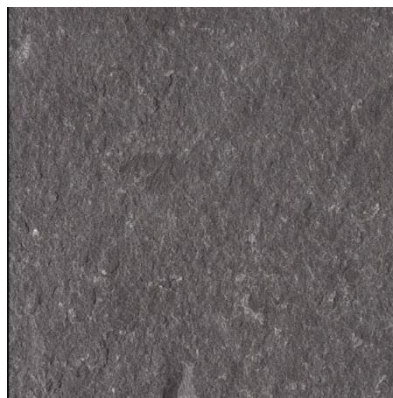


Fig 2: Penrhyn Heather Red



Fig 3: Cwt-y-Bugail Blue/Grey

The different colours of natural Welsh slate are exploited to questionable architectural effect in the extensive slate clad walls of the Wales Millennium Centre in Cardiff, opened in 2004 (Fig. 4). Here, the purple and red slate comes from Welsh Slate's Penrhyn Quarry, near Bethesda and the blue from the company's Cwt-y-Bugail quarry, near Blaenau Ffestiniog. The grey slate comes from Llechwedd, also near Blaenau Ffestiniog, the green from Nantle near Talysarn and the black from Corris near Machynlleth. All these working quarries are located in Gwynedd, with the vast majority from the areas recently designated as a combined World Heritage Site.

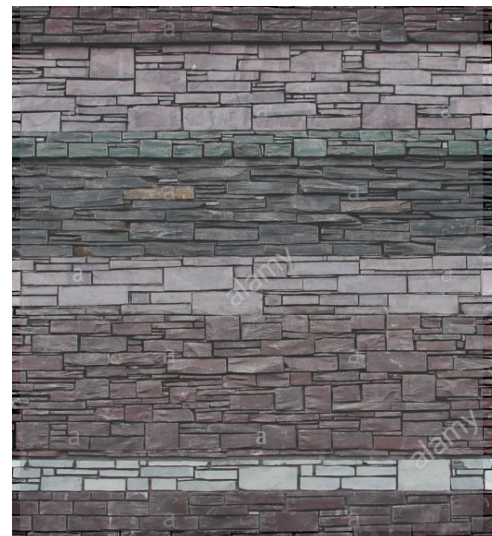
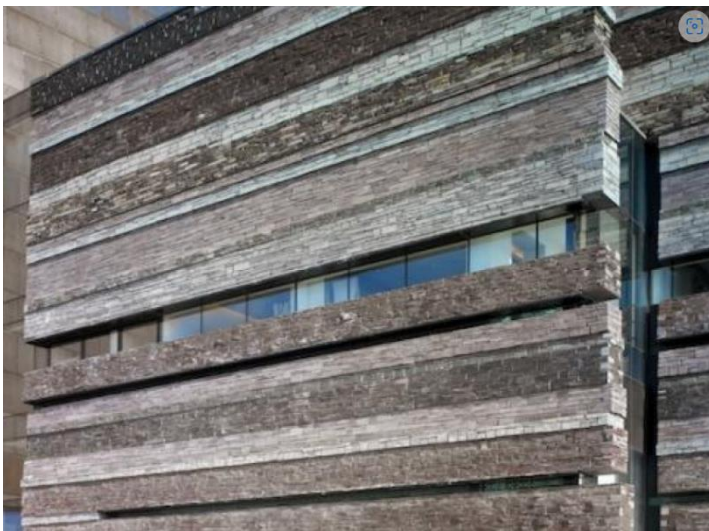


Fig. 4: Multi-coloured natural slate clad walls of the Wales Millennium Centre, Cardiff

Rather than using the larger cladding pieces used on the extensive facades of the Millennium Centre it is proposed that the much smaller areas forming the curved external walls of the receiving pool and two cylindrical bases of the two viewing platforms of the Piazza Fountain be clad in mosaic 'tiles' as used in Richard Huws' original scheme. Mosaic tiles appear to be produced in two standard nominal sizes, 50mm and 25mm square, and, although not measured, the originals are probably closer to the latter, given that there are the equivalent of nearly 3 full tiles between the two spear shafts of the bronze African plaque (Fig. 5 below).

With the smaller wall areas, we also feel that the wall finish should be limited to one single type of slate as found naturally exposed in the river beds and cliffs of North Wales, where the dark blue grey slates tend to predominate. See, for example, Aber Falls near Bangor, which is the closest large waterfall to Richard Huws family home on Ynys Mon (Fig. 6).



Fig. 5: Area of original black ceramic tiles



Fig. 6: Aber Falls, near Bangor, Gwynedd

Two of the 'Blue' Welsh slates are the Penrhyn Heather Blue mined at Penrhyn quarry near Bethesda and the Cwt-y-Bugail Dark Blue Grey mined at Cwt-y-Bugail near Blaenau Ffestiniog. Penrhyn Heather Blue slates typically combine both dark and lighter blues but also include clear hints of purple. Cwt-y-Bugail Dark Blue Grey slates are more uniformly a dark, slightly turquoise blue colour, but typically also contain shades of purple. The latter slate was used by the late renowned architect, Richard Rogers for the tiled floor of the public areas of the Welsh Government Senedd building, completed in 2006 adjacent to the Wales Millennium Centre (Fig. 7).

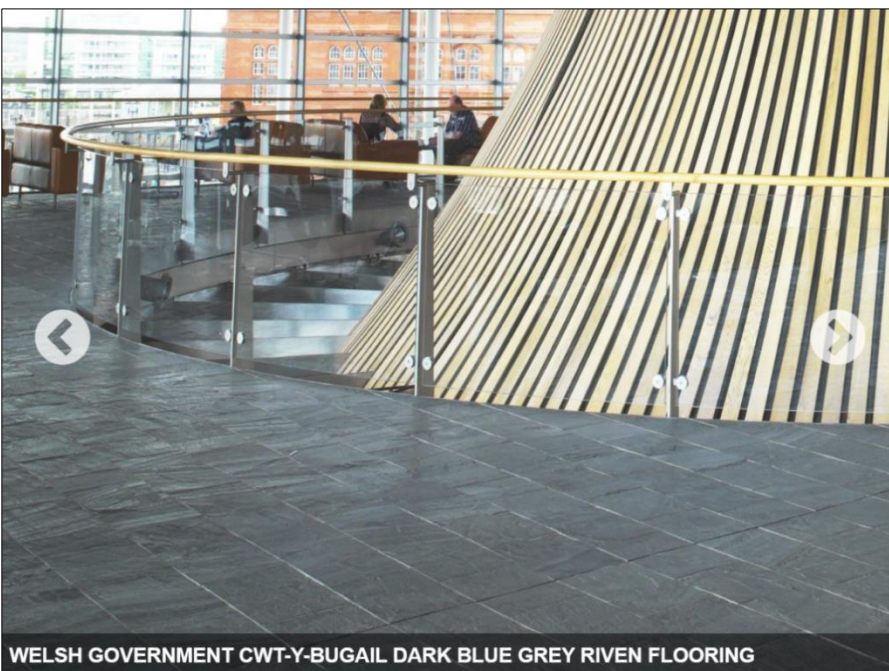


Fig. 7: Upper gallery floor of Welsh Government's Senedd Building, Cardiff, by Richard Rogers, 2006

The leading supplier, Welsh Slate Ltd, provide roofing slates in three different thicknesses Capital grade 5.5mm, County grade 7mm and Celtic Grade 9mm thick and in no less than 15 standard sizes ranging from 300mm x 200mm to 600mm x 350mm. As used in the Welsh Senedd building, they also produce 12mm thick slate floor and wall tiles in three standard sizes, 300mm x 300mm, 450 mm x 300mm and 600mm x 300mm with four finishes, riven, honed, antique and machined. Figures 8 and 9 show a 300mm x 300mm Penrhyn Heather Blue slate slab and the same sized Cwt-y-Bugail Dark Blue Grey slab each divided into 144 polished 23mm square mosaic 'tiles' spaced on a backing mesh to give 2mm joints.

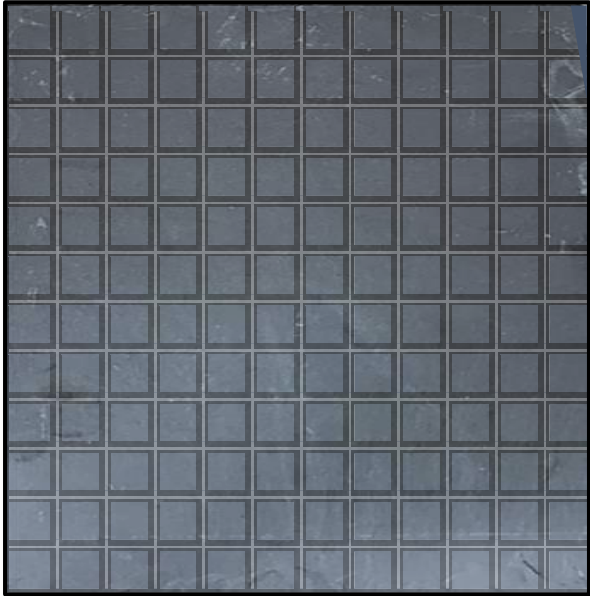


Fig. 8: County grade 7mm thick Penrhyn Heather Blue slate slab, 300mm square, cut into nominal 25mm square mosaic tiles



Fig.9: County grade 7mm thick Cwt-y-Bugail Dark Blue Grey slate slab, 300mm square, cut into nominal 25mm square mosaic 'tiles'.

Being a more uniform colour, the Cwt-y-Bugail Dark Blue Grey slate would probably be closer to Richard Huws original scheme of all glossy black ceramic mosaic tiles. However, being a slightly turquoise blue, this could also be arguably more in keeping with the green glazing of Beetham Plaza than the alternative Penrhyn Heather Blue slate. (Fig. 10).

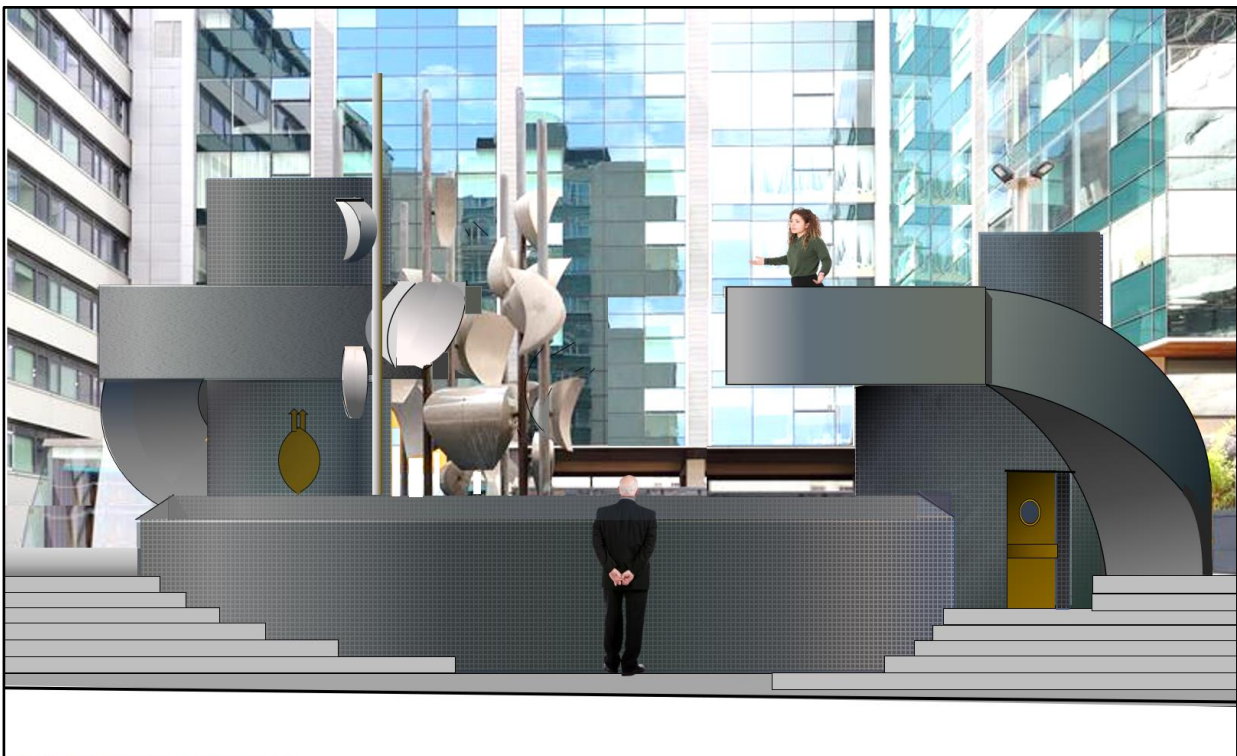


Fig. 10: Cwt-y-Bugail Dark Blue Grey Slate Tiling, Elevation to Drury Lane

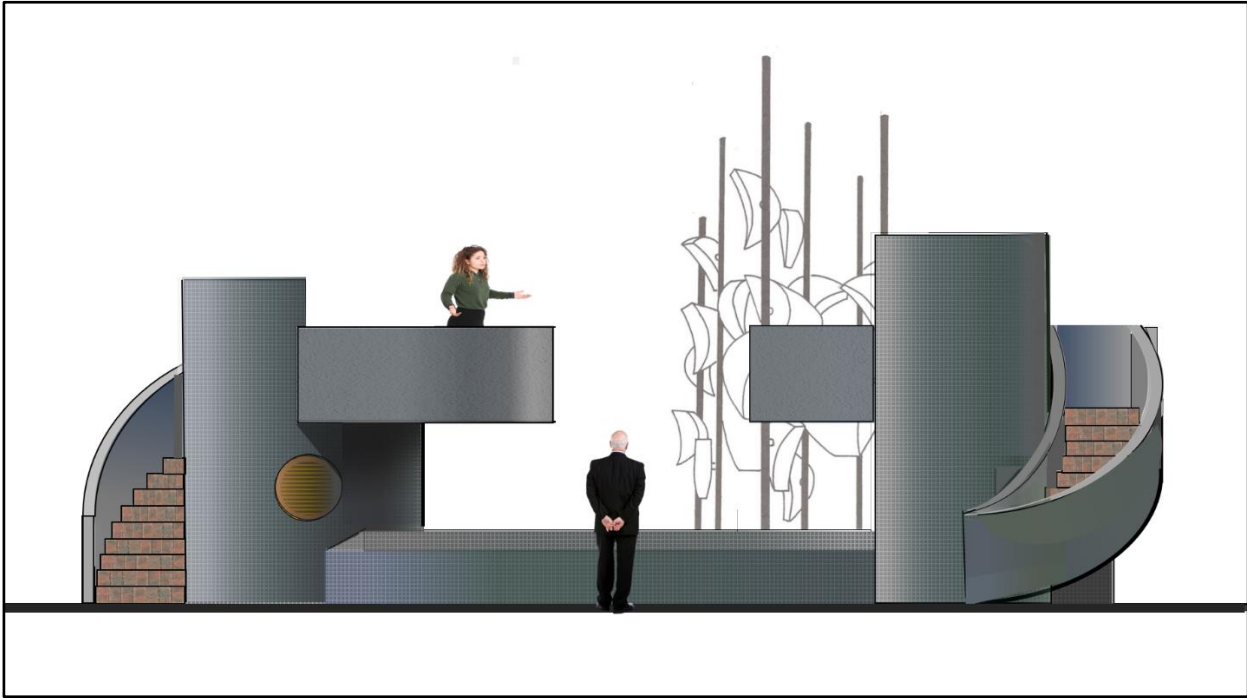


Fig. 11: Cwt-y-Bugail Dark Blue Grey Slate Tiling, Elevation to the Goree Piazza
 (with new bronze restoration plaque in equivalent position to the African plaque)

There are now several companies in North Wales that specialise in providing natural Welsh slate products and that offer to manufacture bespoke items. Welsh Slate Ltd have stated that it should be possible for them to provide such mosaic slate sheets, possibly in association with a local 'craft' firm with more appropriate machinery for cutting smaller slate products than their standard roofing slates and floor tiles.

The alternative to using natural Welsh slate in this way would be to simply purchase ready-made sheets of slate coloured mosaic stone tiles designed for use in bathrooms and wet rooms. These are usually manufactured using Indian sedimentary sliced stone and while probably significantly cheaper than the above proposal, they would clearly be less sustainable and probably have a significantly shorter life than Welsh slate.

By the turn of the Century, the original red brick block paving of the Goree Piazza was found to be lifting and no longer waterproof in places and the then newly laid ceramic mosaic tiled floor of the receiving pool is now also in very serious disrepair. Consequently, it is probable that much of the original black ceramic mosaic tiling on the fountain was also failing by 1997 leading to the decision to also replace it with a new rendered and painted finish. Replacing this tiling with hard wearing natural Welsh slate tiles rather than again with ceramic mosaic tiles is likely to provide a more durable, longer lasting wall finish for the fountain complex (Figs. 11 and 12).