

## **Building Stones of National Museum Cardiff**

The area around the city centre contains a variety of building stone, some local, some from further afield. Building stones are a way to study geology in the urban environment. See if you can find all the stone mentioned here.



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Find more nature guides or get in touch with our museum scientists for help with identification: museum.wales/collections/on-your-doorstep



# What is building stone?

Rocks are everywhere just beneath our feet, but they may be covered in soil, vegetation, or man-made structures. Not all rocks are suitable for use in construction. A good building stone is chosen for its strength, resistance to weathering (durability), attractiveness, and the cost of extraction and transport.



### Main building

The Museum. like the rest of the Civic Centre, is built from Portland Stone, a white limestone from Dorset. This sedimentary rock was formed in the sea 145 million years ago. Look closely and you will see the darker coloured fossil remains of oyster shells, that lived on the seabed at the time. This rock is a 'freestone', meaning it can be cut and used equally well in any orientation. You will see other layered rocks which can only be used in a specific orientation.



#### Steps

The front steps of the museum are made of granite from Bodmin Moor, Cornwall, a 300 million year old igneous rock, crystallised from magma (molten rock) deep below the surface. A closer look shows it contains four types of minerals, locked in a mosaic; white rectangular feldspar, these grew first so are largest; smaller white feldspar; grey, glassy quartz; black biotite mica and shiny muscovite mica.



#### Main hall

The floor is made from **Comblanchien Marble**, a polished beige limestone from France.

Abundant fossils include gastropods, bivalves, corals and sponges. Vertical stones on the 1st floor balcony are a good place to spot fossils.

The pillars are **Mazzano** (Botticino) Marble, a limestone from Lombardy, Italy.

The dark marble is **Belgian Black**, a limestone with high organic content which is derived from mines active since Roman times.



#### **Gorsedd Circle**

The Gorsedd Circle opposite the front of the Museum was built for the 1899 Eisteddfod, The upright stones are red Radyr Stone, a conglomerate sandstone containing a variety of rounded and more angular fragments of rock. These are pieces of older limestones and sandstones, ripped up and deposited by flash floods, under a desert environment over 200 million years ago. This type of stone was guarried locally around Radyr and St Fagans.