

# ALBION STONE

# portland stone - naturally

## Welcome to Portland

We hope you are looking forward to your visit to Albion Stone’s factory and mines on Portland. This short guide explains some of the history and processes that you can expect to see and what you need to be looking for in order to select the correct stone for your project.

### History

The Island's stones are known to have been worked for nearly 1,000 years, originally on local projects: Rufus Castle 11th century, Exeter Cathedral 14th century and Portland Castle 1540s. From the early 1600s it started to become London's dominant stone, with Inigo Jones using it on Banqueting Hall, the stone having previously been used with success on elements of Westminster Abbey and the old gothic St Paul's Cathedral.

Vast quantities of the stone went into London after the Great Fire of 1666 and up until this point the stone had come from the Landslips on the east coast of the Island. As demand continued into the eighteenth century, quarries opened up along the northern coast and during the nineteenth and twentieth centuries in the centre of the Island.

Despite these historically large volumes of stone leaving the Island for the construction of buildings in London and other major cities across Britain and the World, large reserves remain on the Island. At the current rate of extraction there are many hundreds of years of stone to be won, albeit sometimes from more challenging locations.

### HEALTH AND SAFETY

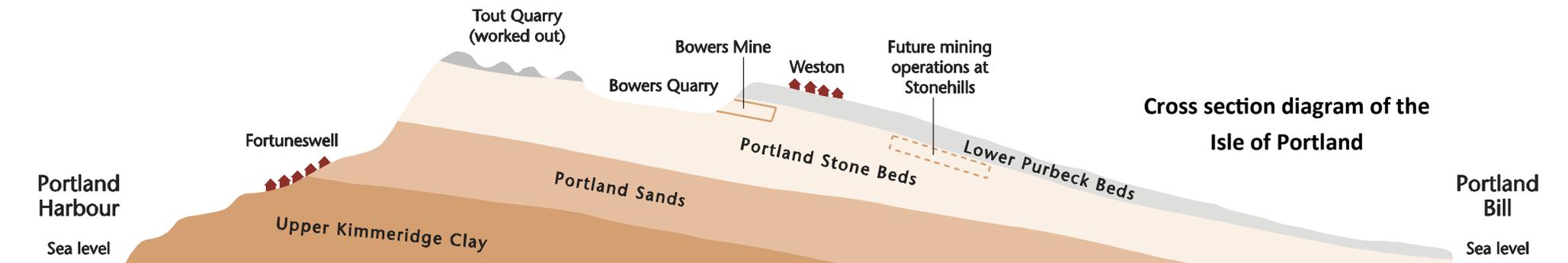
At certain times during the visit you will be required to wear safety equipment, any items required will be supplied to you.

- Safety helmets
- Safety footwear
- Hi visibility jackets
- Ear defenders
- Albion Stone visitors safety rules
- Self rescuer



### Coronavirus

Albion Stone PLC are still welcoming visitors but ask that only key decision makers attend to discuss your project in further details. We will be following Government advice throughout the pandemic

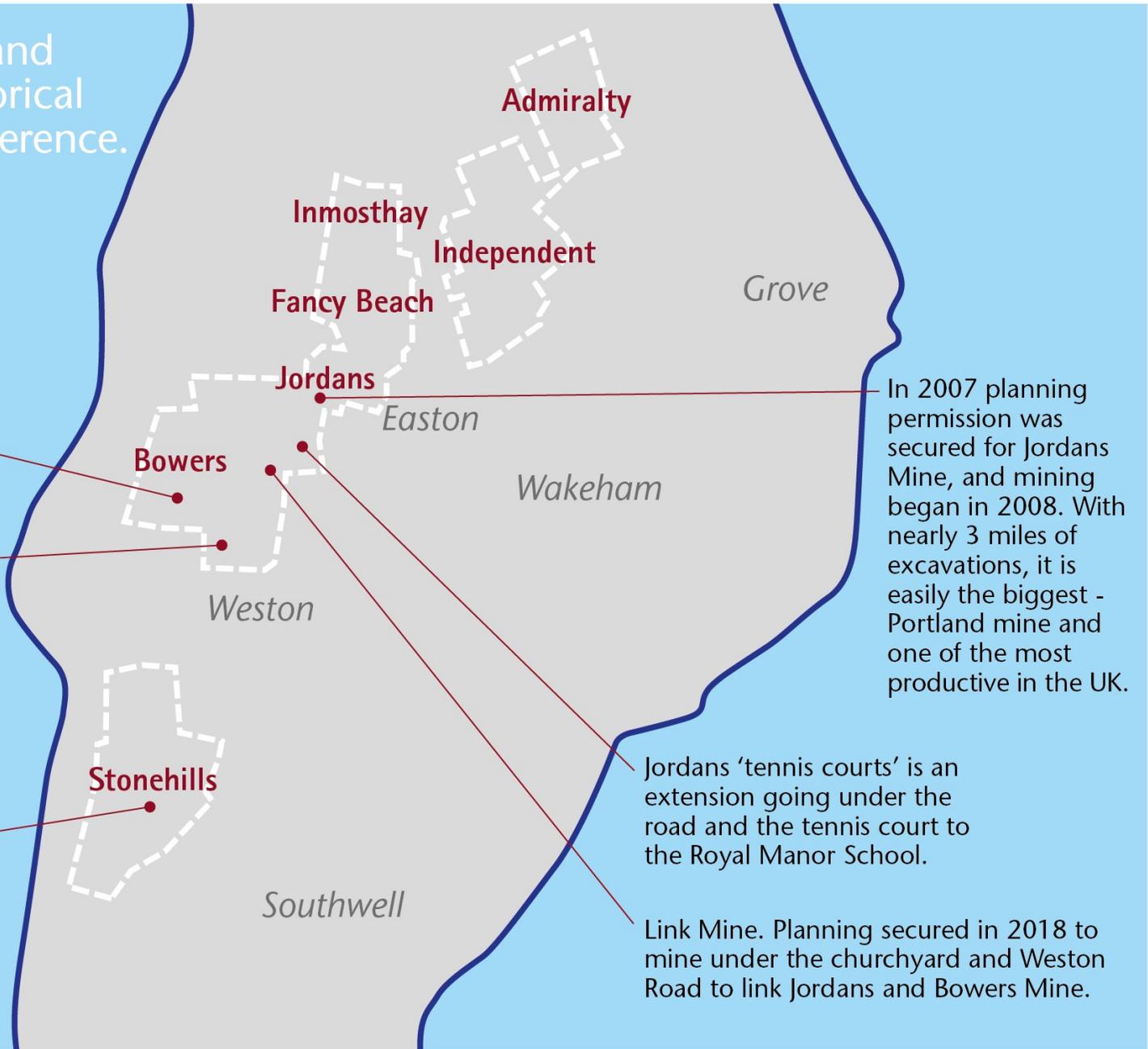


## Albion Stone's Portland sites with some historical quarring areas for reference.

Planning for the first mine on Portland was permitted in 1998. This trial mine was started in 2002 and the trial was successfully completed in 2005.

Bowers 'playing fields' is an extension to the original Bowers Mine to the south of the old Bowers Quarry site.

Once fully opened, Stonehills Mine will be the largest mine on Portland. The only mine in a 'greenfield site' and will be a blue print for future mining on Portland.



In 2007 planning permission was secured for Jordans Mine, and mining began in 2008. With nearly 3 miles of excavations, it is easily the biggest - Portland mine and one of the most productive in the UK.

Jordans 'tennis courts' is an extension going under the road and the tennis court to the Royal Manor School.

Link Mine. Planning secured in 2018 to mine under the churchyard and Weston Road to link Jordans and Bowers Mine.

## Factory

Albion Stone's factory at Portland is one of the largest and most technically advanced in the UK. It produces a wide range of Portland stone products from slabs, cladding panels, pavers and tiles to the most intricate hand carved stones. The factory processes are:

### 1. Primary Sawing

The Primary sawing is the first cutting process to the block. The block is cut into a series of slabs.

### 2. Secondary Sawing

The Secondary sawing process cuts the slabs from the Primary saws into the stone for ashlar cladding, pavers or 'sawn six side' cubes ready for further processing through the masonry operation.

### 3. Masonry

The masonry operation involves the shaping of the stones utilizing profiling saws, planers or the handwork of a skilled mason. The profiling saws and the planers are typically used to work a moulding onto a long run of stones such as a string course, coping or cornice

### 4. Finishing

All stones go through the final finishing process which involves putting a rubbed finish on all seen sides (typically 50 grit) to remove all saw cutting and tool marks. Each Stone is individually checked for tolerances and stacked onto a pre-determined pallet ready for dispatch.

***We are certified in ISO 14001 the Environmental Management standard and have BES 6001 the Environmental and Sustainability standard, achieving the 'Excellent' rating.***



## What are the Range Panels for?

These panels show the natural geological variations in the different beds on stone, and therefore give the designer a visual indication of the final façade colour, texture and shell content. There has already been a selection and rejection process therefore these stones are representative of the range manufactured at our factory.

The geology represented by the panels will be present in varying degrees in the finished stone. These panels should give the designer confidence about the features in the stone.



## Frequently Asked Questions

### Why not select the stone from a sample, why visit the Mine?

Albion Stone and the Stone Federation strongly recommend visiting the source of the stone. The designer should always visit the extraction site; a few samples or some slabs at a stockists yard can give a very misleading or distorted view of the stone as they may be from one block or one part of the mine. It is vitally important for the designer to fully understand the geology of the stone before it is selected and certainly before it has been cut and is ready for installation on the building.

### What to look at in any Quarry or Mine?

Stone Faces/Geology - take the opportunity to closely examine the geological features that are present in the stones. Look at the different beds and note the differing characteristics. Also look at the geology of the stones in stock and the blocks being cut in the factory.

Block Sizes - the production of the blocks is normally controlled by geological features such as bed height, natural jointing or faults. It is important to remember that if the project's typical stones are larger than the average size block, it is likely to impact on the production programme.

Quantity in Stock/Production Rate - extracted blocks are measured and marked in cubic metres. Depending on the stone and the finished panel sizes, wastage from the raw block to the finished stone is typically around 50%.

## Environment

A unique range of habitats have been created by the stone quarrying industry on Portland and have been recognised with SSSI and World Heritage classifications. Rare flora and fauna originally located on the cliffs have colonized the bare rock habitats and calcareous grassland in the quarries.

Adonis blue, small blue and chalkhill blue butterflies have an important population in the quarries along with a unique form of the silver-studded blue butterfly.

Albion Stone have a series of Management Projects agreed with Natural England and the company fund a variety of improvements.

## Geology

Portland stone originated in the Jurassic period over 145 million years ago, when dissolved carbon dioxide in the shallow tropical seas reacted with the calcium and bicarbonate ions to form thick layers of calcium carbonate (calcite).

