4. materials

Joe Redfern, apprentice stonemason at R.M.H. Eaton taking a chamfer off a cill
4.1 New buildings should ideally be constructed from the same palette of materials used traditionally in the area. This means for the most part natural stone for walling and slate or tile for roofs.

4.2 Traditionally, materials have been selected and used in a way that promotes their durability in a harsh climate and ensures that buildings meet the purpose for which they were intended in the most economical way possible. Consequently, walling stone is laid horizontally, retaining the orientation it had in the quarry, with through-stones bonding the inner and outer skins of the wall and corners are strengthened by the use of large quoin stones. Roofs are laid at pitches sufficient to shed the rain using the size of slate or tile available.

Stone

4.3 The two predominant types of building stone in the Peak District are gritstone (a buff or pink, large-grained sandstone) and carboniferous limestone (a grey, hard, fossil-rich stone). A glance at the field walls locally will tell you which of these two stones forms the underlying geology of the area you are in.

4.4 Gritstone is more easily worked but is less durable. Limestone is harder to dress and is usually found in walls as rubble stone. It is generally not used for quoins or dressings. It is important that the correct type, colour and finish of stone is chosen for each locality, especially when adding to, or altering, an existing building.

4.5 Finely-tooled, gritstone ashlar work is a feature of many of the more formal or grander buildings. Most traditional buildings however tend to use coursed rubble stonework with gritstone quoins and dressings to openings. The humblest outbuildings are often built entirely of rubble and are without quoins.

4.6 Pointing to stonework should be similar in colour to the stone and be an appropriate lime mortar mix. The wider the joint, the coarser the aggregate should be to give the mortar a rougher texture. The Authority’s leaflet ‘Repointing Your Building’ gives more details.

Render

4.7 Lime render was used over porous or inferior rubble stonework to give added protection to the wall. From the 18th century onwards however, it was sometimes used for aesthetic reasons – to give a building more presence and a smarter appearance closer to the fashionable look of stucco. The use of render has maintenance implications. Nowadays it has a limited role and where it is used it should be in a traditional wet dash form.
Brick

4.8 There is hardly a Peak District village that does not have some brick, often in replacement chimney stacks or outbuildings and usually dating from the 19th century. Where earlier brick buildings do occur – as with the Halls at Parwich and Great Longstone – they are the exception rather than the rule. Importing a material from outside the area rather than using the locally available stone, was a way of making a statement about the owner as much as about the building.

Roofing Materials

4.9 Roofs display a similar variety of materials. Many of the older, steeply pitched roofs in the area would most likely have been thatch although only a handful of thatch buildings remain in the Park.

4.10 The predominant roof material for the area is stone slates produced when thin beds of gritstone are split apart. They are laid in diminishing courses with large slates near the eaves rising to small slates near the ridge to make best use of the material available. They are also laid from thick to thin along each course. The usual pitch is a relatively low 30 degrees.

4.11 The advent of efficient transport systems in the late 18th century allowed the importation of blue slate from North Wales and handmade Staffordshire blue clay tiles from the Potteries. Both these are more regular in size (though the slightly earlier Burlington and Westmorland slates are sometimes found in the area laid in diminishing courses). These slates and tiles are laid at a steeper pitch of 35 and 40 degrees respectively.
New Materials

4.12 New materials need to respect the building and its setting. They must also demonstrate that they will always meet statutory National Park purposes. Occasionally, high quality modern materials may be used as substitutes or replacements for traditional materials in exceptional circumstances where appropriate to the design or setting, provided they harmonise well. An example would be terne-coated steel instead of lead for flat roofs. More commonly, modern substitute materials are less appropriate and often less durable. Reconstituted stone weathers poorly and is not recommended. Upvc should not be used on environmental and aesthetic grounds whether in the form of windows, doors, barge boards or conservatories.

4.13 There is no tradition of external timber boarding in the Peak District. It was used as horizontal cladding on some early (14th and 15th century) cruck barns but by the 17th century such walls had been overclad with stone. Vertical boarding has been used more recently on large agricultural sheds as an alternative to metal sheeting but such buildings are regarded as temporary. There is therefore only a limited place for external timber on Peak District buildings, particularly when the development is seen in the context of traditional buildings or open landscape.

Craftsmanship

4.14 The Peak District has a long tradition of craftsmanship in building. The skills and knowledge of generations of local builders are evident throughout the National Park. Such skills need to be nurtured and passed on at the local level. Without them, our architectural heritage will suffer.

4.15 Building materials, particularly stone, should be used in the traditional manner. With stonework, the bedding, width and height of courses, colour and finish all need the mason’s careful attention. Other specialist skills include stone slate roofing, the use of lime mortars and plasters, the repair and renewal of traditional sash windows and the construction of dry-stone walls.

4.16 These skills are needed not just for the repair and alteration of historic buildings but also for new buildings. Otherwise, new development will not take the local tradition into the future as seamlessly as it should.

Detailed Design Guidance Note: Materials, provides further information.