

FURTHER INFORMATION:

The Association endeavours to respond to all requests for information regarding dry stone walling. The DSWA offers a mail order service on books, which includes a number of technical manuals that would make useful reading, and produces a register of certificated working wallers which is free of charge.

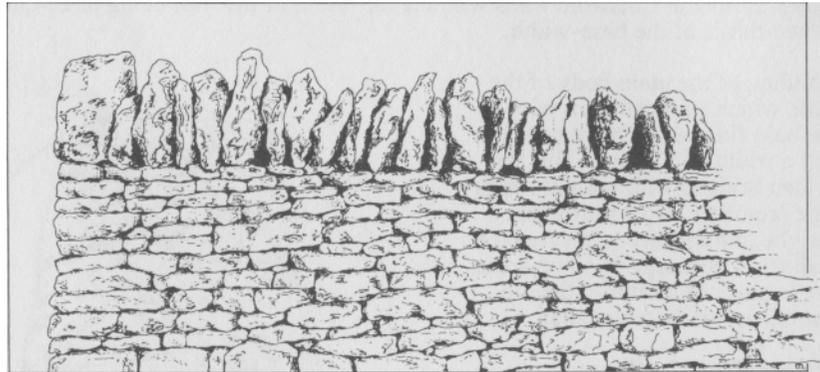
Separate specifications are available for a number of distinctive or regional styles of walling (such as single dykes and Clawdd) as well as for retaining walls. There is also a useful leaflet *Brief Guide to the Inspection of Dry Stone Work*.

Full details available on request (please include a stamped, self-addressed



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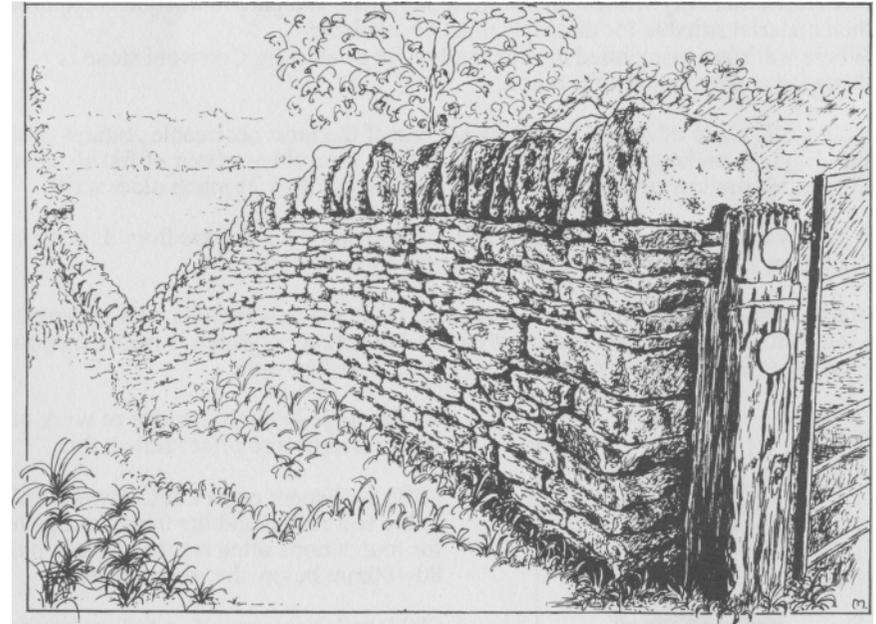
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The Dry Stone Walling Association of Great Britain

SPECIFICATIONS FOR COTSWOLD OOLITIC LIMESTONE WALLS



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PREAMBLE

The following notes are part of a series of technical leaflets designed to give guidance on particular aspects of the craft of dry stone walling. This leaflet should be used in conjunction with *Technical Specifications for Dry Stone Walls*. Before giving detailed guidelines for Cotswold walls, several points should be emphasised.

- The difference between good and bad work is probably greater in dry stone walling than with any other skill. It is essential to retain the services of a qualified waller, particularly with prestigious projects. DSWA operates the only tiered, national practical skills certification scheme.
- Most contracts are tendered, with the cheapest quote usually being accepted. In dry stone walling speed directly affects quality. Special care is needed to assess the skill of the waller and also to monitor the quality of the wall during construction.
- Wherever possible, the type of stone and the style of building should be matched to the tradition of the area.
- The waller can only work with the stone supplied. If a particular style is required, then material suitable for that style must be available.
- Where walls are dismantled mechanically a lot of existing Cotswold stone is damaged and made unfit for reuse.

Cotswold walls made of oolitic limestone are one of the most noticeable features of the southern English landscape with stone varying from the golden colour of freshly quarried stone through a mellow honey to the greyer weathered colour of much older walls.

When freshly quarried, the stone is soft and easily worked but suffers from its small size and a tendency to "blow" or flake when attacked by the weather.

A characteristic of traditional Cotswold walling is the placing of stone with its length along the wall. This ensures a long neat face but the practice, which is frowned upon in most walling areas, is felt to reduce strength in the finished **wall**.



As the stone is small, the rate of work of the waller is slow and prices reflect this.

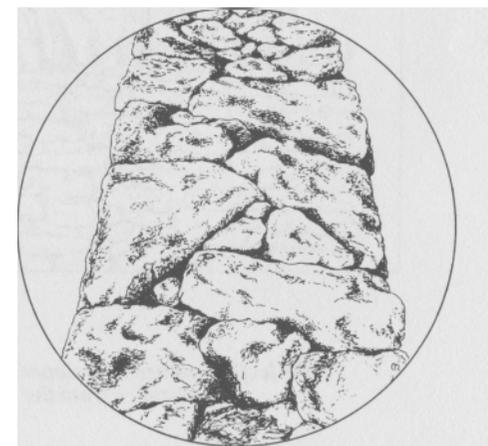
Little settlement occurs in Cotswold walls as the soil is thin and the trench excavated for foundations often reaches to rock only 80-100mm below the soil surface.

Field walls are normally a little more than 1 metre high including the cope, and may be built without throughstones although threequarter-throughs are regularly used to tie the faces together.

Cross section through typical Cotswold wall

GUIDELINES

1. Cotswold walls are built off footings set in a shallow trench which is often no deeper than 100mm and with the footings placed to give a base width of 600mm. The largest suitable stones are chosen to form this foundation course and must be well pinned with rough wedge-shaped pieces from the inside edge to prevent movement and to bear the weight of the wall. Each stone used should touch those next to it and be chosen to project back into the wall as far as possible.
2. The centre of the foundation course should be filled with broken stone which should be carefully placed to ensure that any wedges are not forced out as each new course is added.
3. The main body of the wall is made up of two skins of coursed stones and a centre heart carefully filled with broken stone. The face stones are normally laid length along the wall with their inner faces wedged to be level or slightly above the outer face. This sheds water allowing the stone to dry out, reducing chemical and physical weathering. The Cotswold waller makes greater use of his hammer on new stone, removing lumps and bumps to produce a dressed even face to the wall with stones locked tight together.
4. Where stones large enough to project well into the wall are to be found, they are laid to overlap in the middle of the wall, projecting three-quarters of the way through above the filling. These stones are placed at approx. half-height of the wall.
5. Batter: the amount of step each course is placed in from the one below it is almost imperceptible in Cotswold walls with the top width of the wall being three-quarters to two-thirds of the base-width.
6. Building of the main body of the wall, which starts 600mm wide at the base finishes at 900mm high and a width of 375mm. This top is then bridged with upright rough tops (combers) which provide weight and stability to prevent the wall from opening. In some areas use is made of mortar in the top but this is not recommended.
7. The building of wall heads presents a problem and the usual methods of single cross-ties sitting on two long stones tying into the wall can rarely be used except near the top of the wall. To overcome this a 2-on-3 technique rather than 1-on-2 is used. Where new stone is available this stone is often very carefully dressed by the waller.



Three-quarter throughs viewed from above