

Stonewall Building

Introduction

Stone Walls are one of Ireland's most distinctive landscape features. It is estimated that the Irish countryside is a patchwork of over 250,000 miles of stone wall.

Stone is the indigenous building material of the Irish town and countryside. Each county has its own style varying from rugged dry stone walls, limewashed farm buildings or the smooth rendered walls of streetscapes.

Stone is currently a popular building material and many people are facing their homes with stone, or using it for garden features, gates and walls. The typical stone wall in front of rural homes is a double wall, dry or mortared or the modern wall of concrete block faced with stone.

Single, double, feidin, stone and sod, and wedged dry stone walls are to be seen in Ireland between fields, as traditional livestock fencing. The building of many of these walls was one of many skills within the rural farming tradition. Some dry stone walls were built by specialist dry stone wallers in the 19th century.

Stonemasonry was separate to this tradition and involved craftsmen who built stone in lime mortar. Their work is still very much to be seen in house, church, castle, bridge etc. The stonecutter too, another craft, specialised in the cutting and shaping of stone.

Common stones used in Ireland include limestone, granite and sandstone.

If you think you might enjoy working creatively with your hands, using the solidity of stone as your medium then stone wall building could be an ideal opportunity after training.

The Market

The outlook for stone workers is good and the number of people employed in this occupation is expected to remain stable or increase moderately in the future. Employment opportunities for stone workers varies between counties but a major influence on job numbers is the construction industry. This industry is competitive and subject to a number of factors, including business confidence and investment. Interest rates and disposable income levels effect the building of new houses and the alteration of existing homes, which in turn impacts on the amount of work available for stone workers. A skilled stone wall builder has excellent job prospects.

Production Method

Stone workers build stone walls, excavate foundations, pour concrete and sometimes build concrete block. They work with cement based mortars for new work and lime mortars for the repair and pointing of older buildings. They work with two types of stone: rubble (rough uncut stone) or dimension stone (high quality cut stone). The skill of expert masons comes with experience and time.

In general, stone workers need to know about different types of stone, cutting, mortars, pointing, setting out, building techniques and principles, measurement and safe work practices.



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This is one of a series of fact sheets on potential income generating activities.

All fact sheets are available in the Advisory Section of the Teagasc Website

www.teagasc.ie

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Teagasc Fact Sheets present a brief overview of a topic. Further detailed advice should always be sought from relevant sources.

The most important issue is that stone walls are built to a proper standard following basic principles of working with stone. It is also important to maintain regional styles and use local materials (For example Limestone in east Galway, Granite in west Galway).

Some of the types of Stone wall building include:

- **New Building of a Dry Stone Wall**

There is a great skill involved in building single stone walls. The largest stones should be placed at the base of the wall with stones graduating downwards in size as the wall ascends.

- **New Building of a Double Stone Wall**

These walls are built with two faces, one each side of the wall. The centre is hearted with smaller stones, and the wall is tied together with through stones.

- **Single and double combination walls (*Feidin* Wall)**

These walls have small stones at the base, which is built as a double wall, while the top half of the wall is built as a single wall with large stones used first graduating to small stones at the top.

- **Repair of existing walls**

Repairs to old stone walls should be done using the appropriate materials and skills. The key to carrying out appropriate repairs on old mortared walls is to use lime. Where walls have partly collapsed or where holes occur they should be repaired using similar materials and in a similar style to the original structure.

Equipment

Basic tools include: Walling hammer, pitcher, punch, line, level wheelbarrow, shovel, mattock, sledge hammer, work gloves, steel toe capped boots, safety glasses.

Materials

Limestone, Granite and Sandstone are the materials used in most stone wall building but it depends where you live and work. Quartzite, mica schist and slate are some of the stones common to other areas.

Training

It is essential to learn the basic principles of building with stone in order to build structurally sound walls that reflect the tradition in the local area, look good and will still be standing in 100 years time or more.

For details about training or other work opportunities in stone wall building, contact local stonemasonry firms or FAS. The following courses in stone are offered by FAS:

- A 4 week dry stone walling course (Stonescaping TA927) is held in Dublin
- A 9 month Traditional Stone Walling course at FAS, Gweedore, Co Donegal and FAS, Tralee, Co Kerry covering both dry and mortared walling is available.

Establishment Costs and Profit Margins

The price for building stone walls is so varied and dependent on so many factors that it is difficult to estimate earnings. The price of buying stone varies greatly.

Many stone workers are self-employed or work for contractors, so wages vary widely between businesses and regions.

Earnings for workers can be reduced on occasion because poor weather and downturns in construction activity limit the time they can work.

Reference

'Irish Stone Walls' by Patrick McAfee, The O'Brien Press 1997

Useful Contacts

Local Authority Heritage Officers and Local Authority Conservation Officers

Buildings Lime Forum of Ireland, C/O RIAI, 8 Merrion Square, Dublin 2.

The Irish Georgian Society 74 Merrion Square, Dublin 2, Ireland (01) 676 7053

The Heritage Council, Rothe House, Kilkenny. (056) 777 0777

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