

## FEATURES

## HISTORY AND DEVELOPMENT

The development of concrete bricks commenced just after the Second World War when production was generally in the hands of quarrying companies who utilised waste aggregate dust and manufactured in fairly low volumes. Demand increased due to clay brick shortages, but generally speaking production concentrated on common bricks.

The introduction of specialist machinery led to the manufacture of plain coloured facing bricks which frequently used cheap aggregates and pigments. Some of these pigments were water-soluble and consequently leached out after weathering.

Brick production increased throughout the UK, although the main business was geographically biased in the west, north and where there were local sources of hard limestone. In the 1970s, production moved towards dedicated concrete product manufacturers, who introduced both technical and aesthetic improvements to the products.

These specialised manufacturers, such as PD Edenhall, continued to develop and improve the product with a rapid acceleration in expertise from the mid 1980s. The main result of this development was the introduction of multi colours and an anti-efflorescence polymer finish to the brick face.

Since then progress has continued to be made in research and development with colours, patterns and alternative faces, to a stage where the modern cast stone or reconstituted stone facing brick is far superior to that previously manufactured.

There are, however, legacies of poor bricks from years ago, and this has still, in some instances, tended to influence attitudes towards the product. However, modern bricks are now comparable to the most superior masonry materials and can be viewed alongside their alternatives as an aesthetically attractive, durable walling product.

## NON-TRADITIONAL

The majority of facing bricks in the UK are clay, approximately 95%, hence familiarity with clay is more common. However, in areas where concrete bricks have been more prevalent, e.g. Wales, the North West parts of West Scotland, then the market share of concrete is significantly higher and, in some areas, exceeds that of clay.

## COMPOSITION

Concrete bricks are produced using a semi-dry mix consisting of quality graded aggregates, synthetic pigments and either Ordinary Portland or Sulphate Resisting cement, which is compacted to maximum density to yield a low absorption, dense, durable unit.

## FORM

The majority of PD Edenhall facing bricks are solid. Particular care should be taken to keep the product dry and control the mortar consistency to avoid 'floating'. Provided good practice is maintained and site protection is adequate then bricks can be walling as normal.

As an advantage, solid PD Edenhall bricks will use approximately 35% less mortar than a frogged brick whilst still maintaining the integrity of the wall.

## APPEARANCE

The incorporation of modern faces and colours into the bricks ensures that the final appearance is suitable for all environments.

## CONTINUITY OF SUPPLY

Bricks are manufactured in a number of identical works to standard recipes, therefore ensuring that continuity of any particular brick can be guaranteed.

## COST EFFECTIVENESS AND STABILITY

The inherent manufacturing process provides for a relatively stable cost base and pricing structure which enables PD Edenhall to offer a full range of bricks to suit all projects in terms of budget, location and application.



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## REGIONAL SALES OFFICES

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NORTHERN	Blencowe Works, Blencowe, Nr Newbiggin, Stainton, Penrith CA11 0DE	Tel: 01768 483374	Fax: 01768 483127

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<b>AVAILABILITY</b>	Although each works has its own particular range, it is relatively easy to reproduce any brick from any works. Hence a brick chosen from the Southern range may be produced in the North without the cost of long-distance haulage being incurred.
<b>BRICK MATCHING</b>	Generally speaking, PD Edenhall will have a brick in their extensive range which could suit any environment. Should this not be available, then bespoke bricks can be made on an individual basis.
<b>EQUIVALENT PERFORMANCE</b>	Although manufactured to a specific concrete masonry standard, PD Edenhall bricks can be classed as equivalent to a clay brick F.L. grade, i.e. frost resistant with low efflorescence.
<b>COMPARABLE PRODUCTS</b>	PD Edenhall facing bricks are made by a similar method to that used in the manufacture of other masonry products such as reconstructed stone and semi-dry architectural Cast Stone. i.e. an earth dry mix compacted under high pressure to produce a dense durable unit. Anywhere that such products are used is therefore technically acceptable for facing brick.
<b>MOVEMENT CONTROL</b>	Like all building materials, PD Edenhall bricks exhibit some movement, but at their maximum, i.e. from absolute saturation to oven dry, the movement is normally less than 0.04%. This is considerably less than aerated block or lightweight aggregate block. Under normal practice for detached housing, no movement joints would normally be required. However, in long runs of terraced housing, or in semi-detached properties, consideration should be given to the incorporation of movement joints. More comprehensive details on design for movement can be obtained from our Technical Department.
<b>EFFLORESCENCE</b>	The unique application of specialist polymer finishes to the faces of PD Edenhall bricks allows the product to maintain colour integrity and tone throughout its life with particular regard to a virtual efflorescence-free finish.
<b>REGULARITY OF SIZE</b>	Because bricks are machine made in precise steel moulds the resultant shape of the units is regular and consistent thus making the setting out and gauging of brickwork more simple and economic.
<b>ASSOCIATED PRODUCTS</b>	Bricks from PD Edenhall form only a part of an extensive product portfolio which enables the Company to offer customers a complete package of building products.  These complementary products include: <ul style="list-style-type: none"> <li>• <i>Common, Engineering Quality, Dense and Lightweight coursing bricks</i></li> <li>• <i>Architectural Cast Stone dressings</i></li> <li>• <i>Wet Cast bespoke and standard structural components</i></li> <li>• <i>Concrete blocks</i></li> <li>• <i>Concrete drainage units</i></li> </ul>
<b>TECHNICAL SUPPORT</b>	As the UK's largest concrete brick producer, PD Edenhall can offer technical advice and support to specifiers and contractors in all aspects of the use of concrete masonry materials.



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