Below is a list of some of the more Frequently Asked Questions relating to our bricks products, together with our responses, supported by the more detailed information contained in our Technical Manual, Brick Technical Bulletins and Brick Technical Data Sheets. Please note the information and guidance only relates to Edenhall bricks and should not be read as generic advice for any other concrete brick.

1. **What is a concrete brick?**
   A Concrete Brick is a masonry unit produced by compacting a semi-dry concrete mix using a combination of selected aggregates, cement and various admixtures along with synthetic pigments to produce a brick with low water absorption and minimal efflorescence. The resultant product is a dense unit with proven durability and frost resistance. This manufacturing process is easily and accurately repeated ensuring each unit has the same properties and appearance.

2. **What are the main benefits of concrete bricks?**
   - Concrete Bricks will gain strength with age.
   - Concrete Bricks are extremely durable and frost resistant with minimal efflorescence. *Ref. Edenhall BTB 6: Durability.*
   - Concrete Bricks are dimensionally accurate.
   - Concrete Facing Bricks are through coloured.
   - The superior strength and performance of a Concrete Brick means that Facing Bricks to 35N/mm² strength are suitable for use in free standing and earth retaining boundary walls, in foundations and below dpc.
   - The manufacturing process requires minimal energy input, resulting in a very low environmental impact. *Ref. Edenhall BTB 3: Environmental Characteristics.*

3. **How are concrete bricks environmentally friendly?**
   - Concrete Bricks are an inherent CO₂ absorber
   - Concrete Bricks are 100% recyclable and are suitable for use as crushed aggregates
   - The aggregates used utilise materials that in some instances are classed as a waste product of quarrying
   - Most aggregates used are from sources local to our plants and our delivery points are typically within 100 miles therefore reducing our impact and associated carbon footprint
   - Edenhall Bricks are manufactured in the UK and have no adverse environmental impacts associated with imported products
   - The high energy firing of kilns in clay production processes is not required for the curing of our Concrete Bricks. We simply use the natural exothermic reaction of the cement with no additional energy input. This means no additional natural resources are consumed and emissions are reduced.
   - Concrete Brick has a BRE A+ Rating for brickwork.

4. **What is the difference between Edenhall concrete bricks and clay bricks?**
   Fundamentally they are both small element masonry units designed to fulfil the same purpose, although they are made by different processes and have slightly different properties. The appropriate product standards specify the characteristics and performance requirements but give no detail as to where or in what conditions they can be used. These are covered by other standards such as BS 5628 and the superseded version PD 6697. Generally speaking both clay and concrete bricks may be used for the same purposes and in the same areas of construction. *Ref. Edenhall BTB 2: Product Comparison.*

5. **What is the difference between Edenhall concrete bricks and other concrete bricks?**
   Edenhall has over 60 years’ experience of manufacturing and developing concrete bricks. This wealth of knowledge ensures that Edenhall bricks are produced and tested to exacting standards giving users the confidence that the product will comfortably last the lifetime of the building. Edenhall bricks have been tested for frost resistance over 100 cycles and are classed as fully frost resistant (similar to the ‘F’ classification for clay). Edenhall bricks are manufactured from carefully selected and sourced raw materials that are precisely blended for maximum performance.

Many other concrete brick producers manufacture bricks as a secondary product line to their main field of knowledge and experience, eg. blocks and pavers. It is important to recognise that bricks are not the same as other concrete products, particularly in relation to their performance characteristics and requirements. Users should satisfy themselves that the product meets all the standards, practical application and performance requirements before selecting alternative brick suppliers. Particular areas to focus on are: durability; strength; movement characteristics and susceptibility to shrinkage cracks; and colour integrity including efflorescence control. *Ref. Edenhall Technical Manual.*
6. What is the lifespan of Edenhall bricks and how long are they guaranteed for?
Concrete is a building material that has been used since the days of the Romans and in the form of precast masonry units since the beginning of the last century. Edenhall bricks in the UK have been produced since the 1950s and indeed were used in the construction of the original Calder Hall nuclear complex now Sellafield, which was opened in 1956. Since then the product has evolved and developed to a stage where it is now the preferred medium for a large number of developers and contractors. One of the prime benefits is their inherent frost resistance and durability derived from their increased strength as they age. Consequently, provided they have been used in the appropriate manner and location they should be suitable for use in excess of 60 years.

7. What coloured mortars can be used to match Edenhall facing bricks?
Most of the major pre-mixed mortar suppliers can supply colour swatches or samples of different coloured mortars. These are a better option than trying to select off a printed page. Site batching using pigments rarely gives satisfactory results unless it is for small quantities where one batch of mix will suffice. Reproduction of consistent coloured mixes on site is difficult due to changes in moisture content, mix time or dosage rates. Typically the advice is to choose between a complimentary or contrasting mortar, the latter tending to give a more dramatic impact but is less forgiving on the quality of the brickwork. Ref. Edenhall BTB 4: Mortars for Concrete Masonry Products.

8. What are the preferred mortar joint profiles for Edenhall bricks?
Choice of mortar and its finished profile can have a profound effect on the final appearance and performance of a finished wall. The choice of joint should be considered in respect not only of the finished appearance but also the brick type and level of exposure. For example, a heavily recessed or stripped joint may give the desired aesthetic effect but it is not recommended in areas of high exposure or where full cavity fill is used. By comparison a flush joint is hard to compact fully and should only be used in sheltered or internal locations. In all cases full bedding of the mortar bed and complete filling of the perpends is essential due to the low-medium absorption of the bricks which tends to throw water towards the joints. Ref. Edenhall BTB 4: Mortars for Concrete Masonry Products.

9. What are the differences between using silo batched or pre-mixed mortars compared with site batching and mixing?
Silo based and pre-mixed factory produced “tub” mixes offer consistency and convenience of mix. The silo based mixes can have their workability adjusted on site to suit the suction of the masonry whilst the retarded tub mixes may require additional time to stiffen before final tooling of the joint can be carried out.
Site batching and mixing on site can be suitable for smaller works but can also be variable in consistency, especially if coloured mixes are required.
In all cases it is important that the correct specification of mortar is used. Under the latest standards the old volumetric method of specifying mortars, eg. 1:1:6, has been superseded by a nominated mortar grade, eg. M4 (4N/mm² strength). Due to the safety factors in manufacturing the mortar suppliers may offer a mortar with a strength of 5-6N/mm². Strong mortars can contribute to potential cracking risk and it may be prudent for the customer to confirm the likely actual strengths whilst specifying the mortar. Ref. Edenhall BTB 4: Mortars for Concrete Masonry Products.

10. How can I best achieve a clean, even joint in the brickwork?
The key to achieving good quality brickwork is to ensure that the mortar consistency is adjusted to reflect the characteristics of the brick. As Edenhall’s bricks tend to have low-medium absorption characteristics they are suited by a “stiffer” mortar similar to that required for Clay Engineering Bricks. If the mortar is too wet there is a tendency for the excess to be squeezed out and this could lead to “smearing” when striking off with a trowel. To assist in all areas of jointwork the main areas to focus on are to ensure that the bricks and brickwork are kept dry and protected and that the workability of the mortar is correctly adjusted. Ref. Edenhall BTB 4: Mortars for Concrete Masonry Products.

11. How important is mortar quality within a wall?
The grade and quality of mortar has a crucial part in the performance of a brick wall particularly in relation to its durability, weather fastness and resistance to any potential cracking. Mortar consists of over 17% of the wall area and the correct choice is crucial.
Under the old Standards, mortar was specified by volume eg. 1:1:6, that is one part of cement, one part of lime and six parts of sand. This traditionally gave a mortar strength of around 4N/mm². Mortars now are designated by strength category, eg. M4, which in theory is equivalent to 4N/mm². In practice, because that is a minimum strength requirement, pre-mixed mortar suppliers have to take account of strength variations and hence average strengths maybe 6N/mm² so that there are no results less than 4N/mm². The same analogy applies to Edenhall bricks. In order to claim a minimum strength of 22.5N/mm² the actual brick average strength may run at 28-32N/mm². The strength of mortar therefore is particularly important in relation to a risk of cracking within a wall.
As well as constituting 17% of the overall area, mortar differs from bricks in three ways:
- Mortar has a higher mix water content than bricks
- Mortar has a higher cement content than bricks
- Mortar is made with finer aggregate than bricks
Consequently mortar has a higher shrinkage and moisture movement value than Edenhall bricks. The stronger the mortar the greater the risk of cracking.
Lime based mortars are more flexible and accommodate movement better than pure sand:cement mixes. In addition they have the capacity for autogenous healing whereby any micro cracks self seal themselves over a period of time.

Experience from sites has shown therefore that if properties are built with no facility for accommodating movement in the form of joints or bed joint reinforcement in the appropriate locations and strong mortars are used then there is a risk of cracking around the openings.

12. Do I have to use any special techniques or make any allowances when building with Edenhall bricks?

Building with concrete bricks should pose no more problems than using any other masonry products. If anything the dimensions and consistency of a concrete brick can help with the laying out and maintenance of brick courses.

The product should be dealt with in the same way as if building with dense concrete blocks or reconstructed split wailing stone.

The number of courses achievable per day should be between 15-20. Bricks should be kept dry and in accordance with BS 8000-3. The height of lifts should not exceed 1.5 metres or 20 courses each day.

13. How should movement be accommodated within the structure?

As with all other building materials Concrete Bricks can and will move when subjected to thermal, moisture or structural effects.

In practical terms the shape and height:length ratio of the masonry panels is the major factor in accommodating movement. From experience we find that vertical movement control measures in the range of 7.5 – 9m in length will be adequate. Ref. Edenhall BTB 5: Movement Control.

14. I know that I may have to install vertical movement joints into my elevations but do I also need to incorporate horizontal joints?

The degree of horizontal movement can be classed as the same as vertical movement, although due to panels being more heavily loaded “horizontally” the requirement is likely to be less than for vertical movement control which Edenhall recommends at 7.5 – 9m. Generally speaking horizontal joints are not required on two storey buildings, but in buildings that exceed 4 storeys or 12 metres in height they should be installed at every second storey. Particular attention should be given to low level parapet walls at the top of a building which may be relatively lightly loaded and are long and slender. Should “horizontal support” be under consideration then Edenhall would suggest reference to a suitably qualified engineer or specialist fixing company. Ref. Edenhall BTB 5: Movement Control.

15. How cost effective is bed joint reinforcement and is it really necessary?

Bed joint reinforcement (BJR) can be used to control movement and supplement any movement joints. It is not intended to fully replace movement joints but the manufacturers claim that it allows joint spacing to be increased by up to 50%. It should be of the lattice or ladder type which consists of two parallel flat stainless steel bars cross-linked at intervals by wires. In essence it looks like a model railway track. The wire is generally oval in shape, compressed down to 3mm, and 60 mm wide. It is inserted into the mortar bed and is therefore hidden. It should not be confused with lightweight mesh which is sometimes used to bond internal walls together.

The purpose of BJR is to increase the tensile strength of a wall and dissipate any internal stresses over a wider area, thus reducing the risk of cracking. It is mainly used above and below openings and should extend some 600mm either side of the opening. Generally speaking we recommend it for openings greater than 1.5 metres. Normally two courses are installed at the first and third course above the opening. The use of BJR is not restricted to concrete bricks or blocks - the Brick Development Association also recommends its use with clay bricks.

The cost of BJR varies between £1.20 and £1.50 per linear metre depending on manufacturer. This equates for example to under £10 to install it above a large patio door. It is particularly effective in examples such as front elevations where installation of a movement joint would be neither practical nor visually attractive. The cost overall for a full house can be set off against the savings in forming movement joints and the cost of remedying or replacing any cracked bricks and should be viewed within the context of the whole build cost.

16. What key characteristics change dependent on the form (solid, frogged, perforated) of Edenhall bricks?

The main differences that the form makes relate to weight and density of the brick and brickwork. Ref. Edenhall BTDS 1: Facing Bricks and BTDS 4: Dense Common Bricks.

17. Can I use Edenhall’s Frogged or Perforated bricks as coursing units?

Coursing bricks are normally used in conjunction with blocks to make up course heights; fill gaps within blockwork and for use in reveals. They may be subject to being cut or drilled and although in theory the bed face mortar will make a frogged or perforated brick “solid”, this mortar typically has an average strength which is less than the blocks or bricks. NHBC requires that infill units have to be compatible with the background block so therefore a solid brick is ideally suited to a solid block of similar performance characteristics. Ref. Edenhall BTB 10: Coursing Brick Applications.
18. Do Edenhall coursing bricks need to have a certain texture?
Bricks with a very smooth, dense face may, in some circumstances, cause adhesion problems if plastered or rendered. NHBC recommendations are that coursing bricks should have properties similar to that of the background block, ie. dense or lightweight aggregate and in terms of density, finish, absorption etc. Block textures tend to vary depending on the particular manufacturer but generally speaking standard Edenhall commons have similar properties to aggregate blocks and are therefore acceptable as a coursing brick with blocks. 
Ref. Edenhall BTB 10: Coursing Brick Applications.

19. What are the sound reduction properties of Edenhall bricks and is the heavier weight of the bricks an advantage or disadvantage?
Dense bricks and blocks both offer high degrees of sound reduction or attenuation where increased mass gives higher degrees of reduction. They can be used in party wall construction to satisfy the current Building Regulations. Dense facing bricks in particular are suitable for use in lightweight constructions such as timber framed housing for reducing external noise and flanking transmission.
Ref. Edenhall BTB 14: Sound Insulation.

20. What is the maximum strength of Edenhall bricks that are available?
This depends on brick types. For example an Engineering Quality brick has a compressive strength of 50N/mm² which is achieved by a significant increase in cement content and compaction which may not be possible in many facing bricks. The minimum suggested strength of 22.5N/mm² covers the majority of applications except for areas of high exposure or areas of high loads. Higher strength brick requirement, for example, for use in lift shafts may require units that have to be specifically made but generally speaking a facing brick would only be available with a maximum strength of 40N/mm². It is usually only special situations/ circumstances that require loading strengths > 22.5N/mm² and this characteristic also ensures the durability of the brick.
Ref. Edenhall BTB 6: Durability.

21. What is the correlation between water absorption and absorption by capillarity?
The traditional method of measuring the water absorption of bricks was to dry the bricks completely, then soak for 24 hours and measure the percentage increase in weight. This gives a value of the total absorption from oven dry to saturation but gives no indication of the rate of absorption. The alternative, current method, involves measuring the increase in weight by partial immersion in water over a ten minute period. As such it measures the rate of absorption per second per square metre. Consequently there is no real correlation between the two sets of results. Both sets of results are therefore quoted in the relevant product Technical Data Sheets.
For concrete bricks the degree of absorption is different to that of clay bricks. Whereas in the latter case high absorption figures may indicate low levels of frost resistance, with Edenhall bricks the low-medium values allow a degree of bond with the mortar but at the same time reduce the risk of dirt absorption on the faces and ensure resistance to frost.

22. What is the difference between Category I and Category II masonry?
The relevant standard allows for two categories of manufacturing control. Category I, which replaced the old Special Category, covers units where the probability of the unit failing to reach its declared compressive strength is less that 5%. This normally involves independent third party assessment of the manufacturing and quality control process.
Category II involves any process not covered by Category I.
In Edenhall’s case, although there is an internal quality system, it is not independently audited. However in practice the actual compressive strength levels achieved tend to be in excess of the minimum standards. All Edenhall bricks are regularly checked and tested.

23. Can Edenhall bricks be used below dpc?
Yes. Edenhall bricks (with the exception of medium density lightweight coursing bricks) are eminently suitable for use above and below dpc, but not as an actual dpc. The relevant standards BS 5628 and PD 6697: 2010 recommend a minimum compressive strength of 22.5N/mm² for the majority of locations. Edenhall Bricks comply in terms of both strength and frost resistance.
Ref. Edenhall BTDS 1: Facing Bricks.

24. Can I use Edenhall facing bricks in areas of high exposure/sensitivity?
The majority of dense facing and common bricks are suitable for use in most external and internal locations as well as below dpc. However in areas of high exposure such as steps, copings, cappings and in marine environments higher strength units of at least 35N/mm² are recommended. In particular, in footpaths and steps where de-icing salts are present facing bricks may not be fully frost resistant without extra protection measures. Provided the higher strength bricks are specified they are suitable in most situations, for example in areas such as flood protection walls.
Ref. Edenhall BTB 6: Durability.
25. Are Edenhall bricks resistant to sulphate attack?

Sulphates exist in certain ground conditions and can attack both concrete and clay bricks. The amount of sulphates in the ground determines the class of ground sulphate level. Due to their cement content and density Edenhall’s bricks are durable and suitable for use in ground sulphate levels up to and including Class 2. If conditions are Class 3 (higher sulphate levels) then the Edenhall Engineering Quality brick is suitable for use due to its cement content having specialist sulphate resisting properties. Any ground conditions above Class 4, eg. acid, effluent tanks, are severe and Edenhall bricks are not suitable and therefore very specialist bricks and mortar should be used.

26. What is the sulphate/soluble salts content of Edenhall bricks and how does it compare to clay bricks?

Sulphate content is present in clay bricks predominantly in the form of sodium, magnesium and potassium sulphates, all derived from the raw clay content. If they are soluble (which the soluble salts test on clay bricks is derived to establish) then they can migrate to the surface of the brick and form a hard, white deposit known as efflorescence, which can be very difficult to remove. In Edenhall’s concrete bricks there are no soluble salts leaching out of the raw material. The only leaching that can occur is from free calcium ions emanating from the cement content and Edenhall controls the migration (speed and particle size) of such to minimise their impact which tends to be a milky white deposit of calcium carbonate on the surface. This can be easily removed by the careful application of a proprietary mild brick acid. Hence the amount of soluble salts in Edenhall bricks is classed as “minimal”.

27. What is the carbon footprint of Edenhall bricks?

The embodied CO₂ of dense concrete masonry products is estimated as 84Kg CO₂/tonne. With their low cement content, use of cement replacements, natural exothermic curing regime, and ability to be recycled, Edenhall bricks are environmentally friendly. Clay bricks by comparison have an embodied carbon content of 244Kg CO₂/tonne (quarry to site), three times that of concrete. (Data derived from the Concrete Centre and Brick Development Association publications).

28. Are packaging materials recyclable?

All packaging materials, which are mainly in the form of plastic banding, shrink wrapping and timber pallets/skids, are responsibly sourced and suitable for recycling.

29. How consistent is the colour on Edenhall bricks?

Concrete bricks are produced from natural aggregates and Portland cement and incorporate where applicable synthetic iron oxide pigments. The pigments are inert and colour stable. As the aggregates are from natural sources they may vary in colour from time to time, but careful selection and batching during manufacture will minimise these variations and the base colour of aggregates is carefully selected for use with the appropriate brick type. In accordance with good practice it is recommended that when building, bricks are taken from different packs and blended from different deliveries.

30. I’ve seen examples of concrete bricks where the colour has washed out – does that happen now?

Many years ago, at the start of concrete facing brick production, the pigments used were often soluble over a period of time and consequently the colours washed out of the bricks. However, in the last thirty years or so synthetic pigments have been used which are colour stable and hence retain the original colour. At the same time significant progress has been made in the development of integral admixtures and surface coatings which have inhibited the effect of efflorescence or lime bloom which can mask the colour of concrete units. All Edenhall facing bricks are treated to minimise efflorescence and thus maintain the original colours and finishes of the product.

31. We have some bricks that are built in and the colours don’t match. How do we resolve this?

Edenhall bricks can be tinted when on the odd occasion there is colour banding. Initially the risk of banding can be reduced by working from multiple packs and good management of stocks and deliveries. Permanent stains are popular which react with the cement within the matrix resulting in a permanent tint. Edenhall would recommend the use of suitably referenced speciality remedial experts to carry out such work.

32. The brickwork looks different and dries out after rainfall – why?

The manufacture of all concrete masonry involves a balance between producing a unit with a reasonable level of absorption to provide a degree of suction for good mortar bond and adhesion, but also with a degree of weatherproofing to reduce the effect of pollution and ensure durability. Differential drying rates and their visual impact tend to be purely cosmetic and although may appear unsightly will have no detrimental impact on the overall integrity or performance of the outer leaf of brickwork. Full cavity fill, by rendering the outer leaf colder and wetter, can lead to longer periods of time for drying out. Additionally as concrete hardens with age colour variations tend
to reduce over time and more importantly the water absorption (and therefore water retention) on the face also reduces. This has been proven and demonstrated on Edenhall bricks by examining different aged bricks from 2 weeks to 12 months using a reactive indicator solution such as phenolphthalein. This demonstrates the rate of change from unhydrated cement in the matrix to hard, carbonated, recalcified cement over time.

If the aesthetics are deemed unacceptable there are options to tint the affected brickwork using a reputable remedial specialist and/or applying a proprietary waterproof coating in accordance with the manufacturer’s guidelines.

33. I have cracked bricks in the wall of my house – how serious is this?

Although cracked brickwork is unsightly and emotionally disturbing it is normally not a major issue unless the cracks are wide and are replicated through to the inner leaf. In these cases the problem may be structural and the opinion of a qualified structural engineer should be sought.

Most cracks involving brickwork, whether concrete or clay, tend to be caused either by moisture or thermal movement and as such can be classed as micro cracks which either run through the bricks themselves and/or the bricks and mortar. The strength of the mortar is critical in that too strong a mortar will not allow sufficient flexibility within the structure.

Action to remedy cracks can basically fall into three categories:

• If the cracks are very fine, virtually unobtrusive and are limited to a few affected bricks then it may be more practical to leave them alone as a repair may appear to be more obvious that the actual cracked bricks.

• For slightly wider cracks then repairs may be possible in-situ whereby any cracked mortar is raked out and repointed and the cracks within the bricks repaired, filled and tinted if necessary.

• If necessary, bricks and mortar can be cut out and replaced. This should be carried out by trained technician and it should be acknowledged that such repairs can appear unsightly as it is difficult to match colours of mortar.

It should be stressed that ALL building materials move in some form or other. This movement is normally accommodated for by the provision of movement joints or bed joint reinforcement in all brick faced structures. Ref. Edenhall BTB 5: Movement Control.

34. What is the best way to clean down my bricks?

Cleaning techniques depend on the degree and type of dirt or stain that needs to be removed. In all cases a trial area should be tested first and the necessary health and safety measures implemented before commencement. Ref. Edenhall BTB 8: Cleaning, Maintenance and Repair.

35. I have “scratches” on the face of my bricks – how do I get rid of them?

The majority of Edenhall bricks are produced from crushed limestone and other aggregates, the colours of which can vary from dark grey to a light buff/grey. The colours are normally pigmented all the way through and so if the bricks are broken in two or chipped then the basic colour will still show through. Any lighter coloured flecks would stem from broken aggregate. However as the largest stone within the brick is typically < 3mm then the visual impact is generally low, especially if viewed from the recommended 3 metres distance. This is unlike some clay bricks which only have a surface coated finish which when chipped or spalled can expose a totally different sub-base material colour and texture.

Scratches on the face are normally caused where bricks have been dragged across the faces of each other or where a trowel has been used excessively to strike off the mortar extrusions. Although initially unsightly, in practice we find the effect of the scratches tends to diminish as the bricks weather. Should an acceleration of the process be required then the application of an acrylic type clear matt finish may help mask the scratches, however always follow the manufacturer’s guidelines and test a small, less sensitive area first. Ref. Edenhall BTB 8: Cleaning, Maintenance and Repair.

36. I’ve got green staining and mould on my bricks – how do I get rid of it?

This tends to occur where bricks are kept in a particularly damp condition often not exposed to sunshine and therefore not having the chance to dry out completely. It can be removed by using an appropriate mould cleaning material or a domestic chlorine based cleaner (bleach) using all necessary safety precautions following the manufacturer’s guidelines. It is common sense and good practice to test a small, less sensitive area first. Ref. Edenhall BTB 8: Cleaning, Maintenance and Repair.

37. Can I paint Edenhall bricks?

Edenhall bricks of all types are suitable for painting. They do not contain any salts that would have a negative effect on paint finishes. Standard bricks can be painted with emulsion or alkali resistant paints. Plastic emulsions are also suitable. In most cases it is important for the moisture content of the brickwork to be low and consistent before application and it is generally advisable to seek the advice of a paint manufacturer and test a small, less sensitive area first. In all cases the brick background should be free from dust or lime bloom. Ref. Edenhall BTB 1: Good Site Practice Guide.
38. Can I render or plaster on top of Edenhall bricks?

Edenhall bricks are classed as having a low-medium water absorption. This absorption is measured through an immersion of the brick. Occasionally the durable nature of the brick face can have very low absorption levels and in these cases should a wall of facing bricks need to be plastered or rendered then the mortar joints need to be raked out and a PVA bonding agent or cement spatterdash finish applied to the face of the wall before plastering. Reference should be made to the appropriate standard (BS EN 13914-1: 2005) or the Mortar Industry Association Specifications. Ref. Edenhall BTB 1: Good Site Practice Guide.

39. How do I fix pistol bricks to a structure?

Because of potential movement due to moisture or thermal changes, the fixing of pistol bricks or slips needs to be carried out using a flexible adhesive rather than a cement/sand mortar. There are a number of suitable, proprietary materials available and the manufacturer’s advice and guidelines should be sought and followed.

40. Do concrete bricks float?

Building with Concrete Bricks should not differ from using any other building product. However, it is important that the correct grade of mortar is used and its consistency is adjusted to allow for the density and relatively low suction rate of the bricks. If this is done and bricks are kept dry then as Concrete Bricks are solid this can lead to savings of up to 15% on mortar use. Edenhall is also able to offer a range of frogged and perforated bricks that provide a “mechanical key” when laying. Ref. Edenhall BTB 4: Mortars for Concrete Masonry Products.

41. My bricks on site are wet. Can I still use them?

Edenhall bricks should only be laid when dry and it is important to keep them protected prior to use. Wet or soaked bricks will be difficult to lay, may not achieve a good bond with the mortar and may ultimately shrink significantly, potentially leading to cracks in the finished brickwork. Opened packs should be protected as should any stacked out bricks on the scaffold. If bricks are wet then the packs should be opened up and the bricks spaced out to allow air to circulate and the bricks to dry out. Ref. Edenhall BTB 1: Good Site Practice Guide.

42. The inside walls of my garage are damp after heavy rain, why is this happening?

Garages are frequently built using only a single skin of brickwork, 100mm wide. In these cases any masonry material will allow ingress of water, especially during heavy rain accompanied by winds. This is why walls are generally constructed with cavities that prevent the transfer of moisture from the external skin to internal surfaces. To reduce the extent and likelihood of water penetrating single skin brickwork a proprietary heavy duty masonry sealant can be applied to the exterior wall. Ref. Edenhall BTB 9: Resistance to Rain Penetration.

43. Can I use brick on edge coping and if so how effective is it?

Brick on edge coping/capping is frequently used to finish off the top of a wall. When the brick is flush (the same width) with the wall below it will not “throw” water away from the surface, which can lead to unsightly staining and leaching from the mortar joints. Ideally the coping/capping should project from the wall and contain a drip groove to shed water more effectively. Some practical tips to follow include: capping bricks to have a minimum strength of 35N/mm²; install a high bond dpc below the coping/capping; include fixings to prevent the displacement of bricks; and use a higher grade mortar, eg. Class M6, to maximise frost resistance.

For further information please visit our website and reference our Brick Technical Manual.