

Building Control Solutions

Homeowner Guide 18

Garden Walls



Garden Walls

Building Regulations - Your Garden Walls

Better To Be Safe.....

The Building Regulations do not apply to the construction of free-standing garden walls. You may however need to contact the Council's Planning Department to clarify if planning permission is required. A Street Works Licence will also be required from the Council's Streetworks Team for any excavations onto the public highway ie. for foundations, disturbing pavement surfaces etc. The structural design of the wall and its foundations will also need to be considered. Advice may need to be sought from a structural engineer.

Garden walls will eventually collapse if they are not properly maintained. Garden and boundary walls should be inspected from time to time to see if any repairs are necessary or whether a wall needs rebuilding.

Such walls are amongst the most common forms of masonry to suffer collapse and they are unfortunately one of the commonest causes of deaths by falling masonry. Your household insurance may not cover you if the wall has been neglected. Beside the general deterioration and ageing of a masonry wall over the years, walls may be affected by:-

- An increase wind load or driving rain if a nearby building is taken down or a protective tree screen removed.
- Felling of nearby mature trees or planting the new trees close to the wall.
- Changes leading to a greater risk of damage from traffic.
- Alterations and additions to the wall or removal of part of the wall e.g. for a new gateway.

Things to check

1. **Is the surface of the brickwork crumbling away?** If restricted to a few bricks this may not be serious but walls can be weakened by general crumbling across either face.
2. **Is the mortar pointing in good condition?** If the hard surface layer can be picked out from the joint or if the mortar can easily be scraped out with, say, a door key, then this is a good indication that the wall may need re-pointing.
3. **Is there a tree near the wall?** Clay (shrinkable) soils change volume as their water content changes. Soil has less volume change at greater depth. Garden walls usually have shallow foundations. Trees tend to increase the changes in water content of the ground. If a wall is cracked and trees are nearby, it may be prudent to trim them. As trees mature there is a risk of the wall being damaged by the roots and from windblown branches. Damaged sections may have to be re-built, perhaps with 'bridges' incorporated to carry the wall over the roots.

The removal of large trees can also lead to problems because the soil accumulates more moisture and expands. Even with no trees nearby, clay soils can damage a wall. If the damage warrants it, the wall may need to be rebuilt with deeper foundations, or repaired by adding vertical movement joints so that it can accommodate the movement without being damaged.

Even in non-shrinkable soils, walls can be damaged by the presence of tree roots, which expand as the tree matures. Seek professional advice before cutting back roots, you may make the tree liable to collapse, or kill it. An alternative is to partly rebuild the wall so that it bridges the roots being supported on a lintel at that point. Cracking can also be caused by leakage from an adjacent drain.

4. **Is the wall upright?** Walls lean for a variety of reasons, due for example to failure below ground caused by tree roots, a cracked drain, frost damage to the foundations or inadequate foundations in the first place.

If your wall leans to an extent that could present danger e.g. more than 30mm for a half brick wall, 70mm for a single brick wall, or 100mm for a brick and-a-half wall, it is recommended that expert advice is sought. This may involve checking the wall foundations, rebuilding the wall in a more suitable form or adding structure at the side of the wall below the higher ground level to reinforce its strength. Any weep holes in the wall to allow water through should be cleared if blocked. If the ground is higher one side of the wall than the other, the wall will have to retain the higher ground. It may have not been designed to do this, or may simply be inadequate.

5. **Is the wall thick enough for its height?** The table below gives guidance on how high walls should be relative to their thickness. You should seek expert advice if your wall exceeds the recommended height or in circumstances whereby this guidance is inapplicable e.g. walls incorporating piers, or walls supporting heavy gates or retaining soil.

Wall Thickness	Maximum Height
Half Brick	525mm
One Brick	1450mm
One & a Half Brick	2400mm
100mm Block	450mm
200mm Block	1050mm
300mm Block	2000mm

*Half brick = 100MM / One brick = 215MM / One & a Half brick = 325MM

6. **Some climbing plants, like ivy, can damage walls if growth is unchecked.** Consider cutting them back and supporting re-growth clear of the wall.
7. **Is the top of the wall firmly attached?** If the top of the wall is weather resistant the life of the wall will be enhanced.

Any water in a wall can freeze causing cracking and loosening of masonry that further reduces the life of the wall, and loose masonry may then fall. Signs of damage here may indicate the need for rebuilding the top of the wall. Capping stones work best if they have overhangs and drips. Bricks work best if they are hard engineering bricks. Brick cappings or concrete copings may be loose or there may be horizontal cracks (frost damage) in the brickwork a few courses down. Loose or damaged masonry near the top of the wall will need to be rebuilt and should include a damp-proof course.

8. **Has the wall been damaged by traffic?** Minor scratch marks or scoring of the surface may obscure more significant cracks. Piers at vehicular entrances may have been dislodged by impact and be unsafe. In such cases we recommend expert advice should be sought and they should be re-built. If you think vibration may be the cause of damage, we suggest you also seek expert advice.

9. **Are there any cracks in the wall?** Hairline cracks 0-2mm across are common in walls and may not indicate serious problems, for wider cracks seek expert advice; some may indicate a need for partial or complete rebuilding. Seek advice on any horizontal cracks that pass right through a wall or any cracks close to piers or gates. Re-pointing of cracks can lead to problems. Do not re-point without establishing the cause of the cracking

What action can the Council take?

The Council under the Building Act 1984 has the power to deal with walls that are in a dangerous condition, so if you are concerned about a wall near where you live, please do not hesitate to contact Building Control Solutions.

Further guidance on this process can be sought from our Dangerous Structures web page and Homeowner Guide 6. We will aim to inspect the wall within 1-24hrs, depending on its urgency. Better To Be Safe Than Sorry.....

Good Practice Guidance

Guidance is available on wall design, construction and maintenance at:

www.planningportal.gov.uk/permission/commonprojects/fenceswallsgates/

Advice is also available from the following documents:

BRE Good Building Guide GBG 13 – Surveying brick or blockwork freestanding walls, April 1992, Building Research Establishment, ISBN GG13. Published by IHS-BRE.

BRE Good Building Guide GBG 14 – Building simple plan brick or blockwork freestanding walls, May 1994, Building Research Establishment, ISBN GG14, Published by IHS-BRE.

BRE Good Building Guide GBG 19 – Building reinforced, diaphragm and wide plan freestanding walls, March 1994, Building Research Establishment, ISBN GG19, Published by IHS-BRE.

BRE Good Building Guide GBG 27 – Building brickwork or blockwork retaining walls, November 1996, Building Research Establishment, ISBN 1-86081-105-1, Published by IHS-BRE.

BDA Design of Free Standing Walls (Design Guide 12), February 1984 with August 1995 updating insert, Brick Development Association, ISBN CI/SfB(21)F, Published by The Brick Development Association and available as download:

www.brick.org.uk/2011/03/design-of-free-standing-walls/

The Party Wall etc. Act 1996: Explanatory Booklet, Department for Communities and Local Government.

Published by DCLG and available as a download:

www.gov.uk/party-wall-etc-act-1996-guidance.

Other Approvals

In addition to Building Regulation approval, you may also require Planning Permission in certain circumstances. Please contact the relevant authority's Development Control team.



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