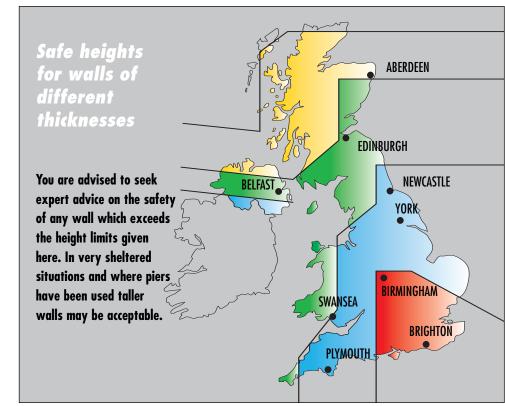
#### YOUR GARDEN WALLS

# ...than SORRY!





### ZONE 1

## WALL THICKNESS MAXIMUM HEIGHT Half brick 525mm One brick 1450mm One & a Half Brick 2400mm 100mm Block 450mm 200mm Block 1050mm 300mm Block 2000mm

#### ZONE 2

450m
.5011
1300m
2175m
400m
925m
1825m

#### ZONE 3

400m
1175m
2000m
350m
850m
1650m

#### ZONE 4

* WALL THICKNESS	MAXIMUM HEIGHT
Half brick	375mm
One brick	1075mm
One & a Half Brick	1825mm
100mm Block	325mm
200mm Block	775mm
300mm Block	1525mm

This leaflet is based on the guidance given in *Good Building Guides 13* & 14 available from the BRE Bookshop, Building Research Establishment, Garston, Watford. WD25 9XX Tel 01923 664262 or online at www.brebookshop.com Published by ODPM. © Crown Copyright. Reprinted October 2004 on paper containing 75% post-consumer waste and 25% ECF pulp. Product code 91HCN 0227.



YOUR GARDEN WALLS

# Better to be SAFE...



<sup>\*</sup> HALF BRICK = 100mm ONE BRICK = 215mm ONE & A HALF BRICK = 325mm

#### YOUR GARDEN WALLS

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 insurances may not cover you if the wall has been neglected.

#### Besides the general deterioration and ageing of a masonry wall over the years, walls may be affected by:

- An increase in wind load or driving rain if a nearby building is taken down.
- Felling of nearby mature trees or planting of new trees close to the wall.
- Changes leading to greater risk of damage from traffic.
- Alterations, such as additions to the wall or removal of parts of the wall eg. For a new gateway.



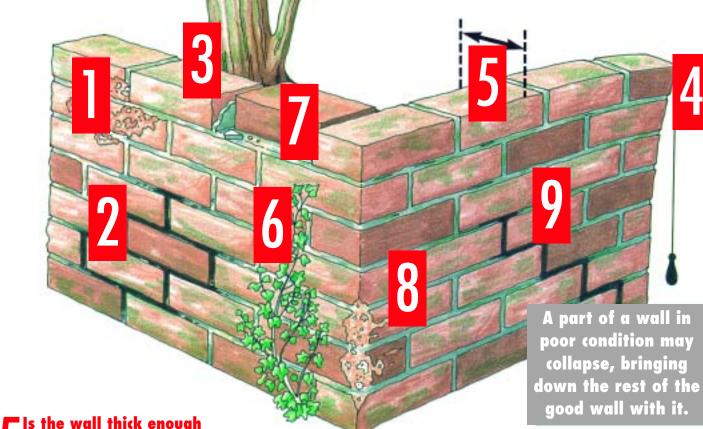
### Things to check

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.

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 repointing.

Is there a tree near the wall? As trees mature, there is a risk of the wall being damaged by the roots, and from wind-blown branches. Damaged sections may have to be rebuilt, perhaps with 'bridges' incorporated to carry the wall over the roots. Removal of large trees can also lead to problems because the soil accumulates more moisture and expands.

lean for a variety of causes, due for example to failure below ground caused by tree roots, a cracked drain, frost damage to the foundations or inadequate foundations. If your wall leans to an extent that could present a danger eg. more than 30mm (half brick wall), 70mm (single brick wall) or 100mm (brick and a half wall) it is recommended that expert advice is sought. This may involve checking of the wall foundations.



for its height? The map and tables on the back page give guidance on how high walls should be in different parts of the UK relative to their thickness. Seek expert advice if your wall exceeds the recommended height, or in circumstances whereby this guidance is inapplicable eg. walls incorporating piers, or walls supporting heavy gates or retaining soil.

Some climbing plants, like ivy, can damage walls if growth is unchecked. Consider cutting them back and supporting regrowth clear of the wall.

firmly attached? 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.

Has the wall been damaged by traffic? Minor scratch marks or scoring of the surface may obscure more significant cracks. Piers at vehicular entrance may have been dislodged by impact and be unsafe; in such cases they should be rebuilt.

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 which pass right through a wall or any cracks close to piers or gates. Repointing of cracks can lead to problems. Do not repoint without establishing the cause of the cracking.