Extract from The Institution of Structural Engineers "Subsidence of Low-Rise Buildings"

Classification of visible damage to walls with reference to ease of repair

Category of Damage	**Approximate crack width (mm)**	**Description of typical damage** **Ease of repair in italic type**
0	Up to 0.1*	Hairline cracks of less than about 0.1mm width are classed as negligible
1	Up to 1*	Fine cracks which can easily be treated during normal decoration. Perhaps isolated slight fracturing in building. Cracks rarely visible in external brickwork.
2	Up to 5*	Cracks easily filled. Re-decoration probably required. Recurrent cracks can be masked by suitable linings. Cracks not necessarily visible externally, some external repointing may be required to ensure weathertightness. Doors and windows may stick slightly.
3	5 to 15 (or a number of cracks up to 3)	The cracks require some opening up and can be patched by a mason. Repointing of external brickwork and possibly a small amount of brickwork to be replaced. Doors and windows sticking. Weathertightness often impaired.
4	15 to 25* but also depends on number of cracks	Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distorted, floors sloping noticeably (1). Walls leaning (1) or bulging noticeably some loss of bearing in beams. Service pipes disrupted.
5	Usually greater than 25* but depends on number of cracks	This requires a major repair job involving partial or complete re-building. Beams lose bearing, walls lean badly and require shoring. Windows broken with distortion. Danger of instability.

KEY

***** Crack width is one factor in assessing category of damage and should not be used on its own as direct measure of it.

(1) Local deviation of slope, from the horizontal or vertical, of more than 1/100 will normally be clearly visible. Overall deviations in excess of 1/150 are undesirable.