Common Housing Quality Standard Forum
Topic Paper 1: Essential fabric elements of a common standard

Purpose

1. This paper has been prepared to facilitate discussion by members of the Common Housing Quality Standard Forum on an issue relating to the development of a new cross-tenure housing standard for Scotland. This paper focusses on physical condition, fabric and structural elements of a standard. We have intentionally not covered any elements that cover matters such as energy efficiency or safety. These will be taken up in separate papers and we will also look later at how other kinds of elements are interrelated.

Common Housing Quality Standard

2. The sustainable Housing Strategy includes a commitment to publish proposals for a common cross-tenure housing standard beyond the existing tolerable standard for housing. Currently, there are different standards which apply to houses in different tenures (owner-occupied, private rented, social rented). These differences can be an obstacle to organising repair and maintenance work in buildings where there are a mixture of tenure types.

3. The aim of the Common Housing Quality Standard Forum is to enable discussion with and between stakeholders on key issues affecting house condition to inform recommendations by the Scottish Government for a new common housing standard. Scottish Ministers will take account of the recommendations in considering whether to take forward a formal public consultation on a proposed common standard.

4. The Scottish Government recognises that a single cross-tenure standard may be difficult to achieve in practice but considers that there is a benefit in seeking views on this issue and that there may be alternative approaches which could reduce differences between existing standards.

Topic Papers

This paper on essential fabric elements of a common standard is the first in a planned series that will also cover the following topics –

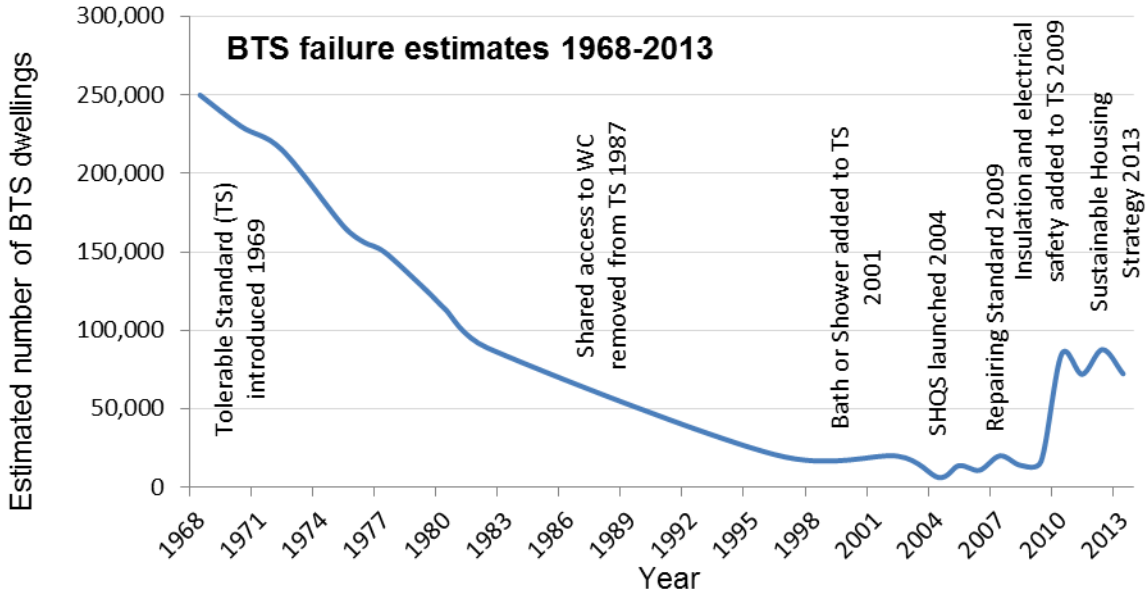
- Safety elements of a common standard
- Other core elements of a standard, such as amenity, access, energy efficiency and disrepair more generally
- Prioritising repairs
- Application of a common standard to different tenures/scope of housing covered
- How a new standard could be enforced or incentivised
- Paying for work
- Timescales for meeting a common standard

Background

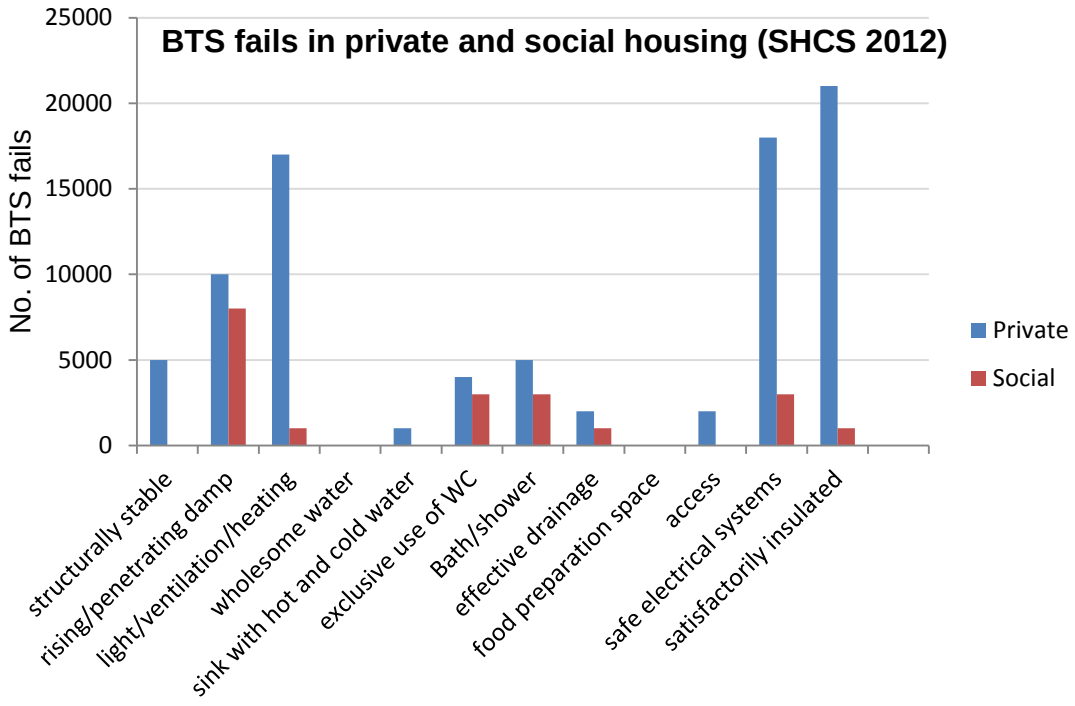
5. Building standards regulations set out the essential standards to be met when building work or a conversion takes place.

6. The tolerable standard is the minimum standard for all housing in Scotland. A house which is below the tolerable standard is unfit for human habitation and the local authority has a duty to ensure that it is closed, demolished or brought up to standard as soon as is reasonably possible. Since 2009 local authorities have been required to have regard to guidance issued by Scottish Ministers on the tolerable standard.

7. The following chart shows estimates of the number of dwellings below tolerable standard (BTS) in Scotland between 1968 and 2013. Improvements and repairs reduced BTS housing to around 1% of homes by 1996. Over this period the tolerable standard was amended and additional elements added. The changes brought in in 2009 to include adequate thermal insulation and safe electrical installations led to a rise in the number of homes failing the standard to around 4% of private housing and 2½% of social housing.



8. The next chart shows recent estimates of failures by tolerable standard element in private and social housing.



9. The Scottish Housing Quality Standard (SHQS) is the minimum standard for social housing. Social landlords should ensure that homes comply with SHQS by April 2015. SHQS has 55 elements covering the tolerable standard, serious disrepair, energy efficiency, modern facilities and safety and security.

10. The repairing standard requires private rented homes to be wind and watertight and reasonably fit for human habitation, the structure and interior of the house and the utilities and any fixtures and furnishings provided by the landlord should be in reasonable repair and proper working order and safe to use, and there should be smoke detectors.

11. Owners of flats in tenements also have a statutory duty to maintain any part of their building that provides support or shelter to any other part

Essential fabric in existing standards

12. Some form of essential fabric elements are a part of each of the tolerable standard, SHQS, the repairing standard and Scottish Building regulations. These are summarised in Annex A. Essential fabric elements include the following:

- Structural stability
- Wind and watertight
- Dampness
- Ventilation
- Drainage
- Disrepair

Stability

13. The stability of a building is the first element of the tolerable standard. The structural elements of a house should exhibit no signs of recent or fresh movement, evidence of which may indicate to the assessor that the house may be at risk from either partial or total collapse. The main structural elements of a house are:

- roof structures and other roof features
- chimneys
- load-bearing walls including external walls
- lintels, sills and mullions, and wall ties
- floors and stairs
- load-bearing beams and columns
- foundations

14. Scottish Government guidance sets out three types of indicators of potential instability:

- Fresh cracking
- Movement or displacement of structural elements
- Damage, deterioration, rot and timber infestations

15. The Scottish House Condition Survey Key Findings 2012 found 0.25% of homes in the private sector and no homes in the social sector that failed this element of the tolerable standard.

Wind and Watertight

The repairing standard requires that private rented homes are “wind and water tight and in all other respects reasonably fit for human habitation”. Social housing must meet the same standard under Schedule 4 of the Housing (Scotland) Act 2001. Building standards require that the climatic conditions in Scotland including temperature, snow, wind, driving rain and flooding and the impact of climate change should be carefully considered in the structural design of buildings.

The test has been defined as “wind and watertight against what may be called the ordinary attacks of the elements, not against exceptional encroachments of water due to other causes”. This could be expressed as “weathertight”, that a house should be free from draughts and leaks under the climatic conditions of the area where they are built. There is overlap between being watertight and free from penetrating damp (paragraph 17 below). Windtight is not the same as airtight and needs to be compatible with the need for adequate ventilation (paragraph 21 below).

Dampness

16. Modern buildings must be designed to protect occupiers from moisture penetration or precipitation. The Scottish House Condition Survey 2012 found some penetrating damp in 3.6% of homes and rising damp in 0.6% of homes. This can cover anything from a small damp patch on a single wall in one room to prevalence throughout a dwelling, so does not indicate a serious housing quality issue in all cases

17. To comply with the tolerable standard all homes must be substantially free from rising damp or penetrating damp. Rising damp is caused by defects in the damp proof course, or in older homes the lack of a damp proof course. Penetrating damp is caused by defects in the roof, the exterior walls, rainwater gutters and down-pipes, or missing flashings. This element of the tolerable standard does not actually require damp proof courses or structural elements to be present and intact, it is the presence of dampness in the house that matters, though where dampness is identified it will be necessary to identify the defect to remedy it.

18. SHQS element 27 is only failed if more than 20% of a damp proof course is in need of repair *and* there is at least one other failure of a serious disrepair element, and this element would not require a damp proof course to be installed if one was not part of the building's construction. Other structural elements included under serious disrepair include wall and roof structure, chimneys, flashings and rainwater goods that may lead to penetrating damp.

19. The repairing standard for private rented homes requires a home to be watertight and in determining whether it meets this standard, regard is to be had to the extent to which the house falls short of the provisions of any building regulations by reason sanitary defects, including dampness (see sections 13 and 70 of the Housing (Scotland) Act 2006).

20. The emphasis on dampness in these standards is primarily concerned with the impact on the health of occupiers. These health impacts can be serious but do not necessarily mean that the structure of the house is at risk. However, in some cases rising damp could over time affect the structural stability of a house and penetrating damp could lead to rot in wooden structures which could affect the structural stability of a house.

Ventilation

21. Ventilation is the exchange of air inside the house with fresh air outside. Ventilation is an essential factor in controlling the moisture content of the air inside the home. Unsatisfactory ventilation is a major contributing factor to the occurrence of condensation in houses, and can also lead to hygiene problems.

22. Modern domestic buildings must be designed and constructed in such a way that they can be ventilated to ensure that the health of the occupants is not threatened. The tolerable standard requires that homes should have "satisfactory provision for natural and artificial lighting, for ventilation and for heating". This element of the tolerable standard is the failed by 0.8% of private housing and 0.17% of social housing, but the data does not separate ventilation from lighting or heating failures. The Scottish Government guidance on this part of the tolerable standard looks for windows that can be opened to the outside equal to at least one fortieth of the floor area in every room, but if the ratio is less than this assessors should also take account of other forms of ventilation such as air vents, open fireplaces and doors which might provide additional air changes in the apartment. In rooms that don't have openable windows there should be an alternative ventilation system, but not necessarily mechanical ventilation.

23. SHQS element 42 may require mechanical ventilation in kitchens or bathrooms in some social housing. Mechanical ventilation is only required where there is evidence of persistent condensation or mould. It is not necessary to install mechanical ventilation to meet SHQS if only one of the rooms is affected by condensation or mould.

24. As with dampness, a lack of ventilation can be a sanitary defect for the repairing standard (see paragraph 19 above).

25. Also like dampness, ventilation is both a health issue and also a structural issue. Poor ventilation can aggravate respiratory diseases and reduce general quality of life of the occupants. It can also restrict the flow of air which allows excess moisture to escape from the building, which can lead to dampness and eventually to structural problems (see paragraph 20 above).

26. Ventilation is particularly important in in older buildings:

> A traditionally built structure is normally made up of a fairly limited range of largely natural materials, that all transfer or disperse water, or water vapour, fairly easily through and around the structure. Maintaining this free movement of moisture in the air is an important aspect of maintaining your home. Failure to manage ventilation can contribute to a build up of damp in walls and joinery elements, often leading to outbreaks of insect attack and other forms of decay. (Historic Scotland, *Ventilation in Older Houses*)

27. There is a potential conflict between ventilation and energy efficiency measures in some buildings. Some efficient low carbon modern heating systems, such as air and ground source heat pumps, need relatively airtight environments to work properly, which may not be appropriate in traditional buildings. Also some types of construction are unsuitable for cavity insulation because cavities are required for ventilation, e.g. timber kit construction houses.

Drainage

28. Modern domestic buildings must have a system for surface water and wastewater drainage. The tolerable standard requires every home to have an effective system for the drainage and disposal of foul and surface water. The system should be able to effectively manage the rainwater falling on the roof, and other surfaces, of the house. A house will normally be below tolerable standard where the system is unable to cope with the volume of water produced during normal rainfall conditions.

29. The disposal of foul water, i.e. waste water from sinks, baths and toilets, is not a structure issue. But defects in the system for disposing of surface water are likely to have an impact on structure over time. Problems as simple as blocked downpipes and broken gutters can undermine the integrity of the building and lead to water penetration and masonry falls. Poor maintenance, such as failure to replace missing and broken roof tiles, will eventually lead to much more extensive disrepair and substantial structural damage.

30. Poor drainage can lead to failure of SHQS element 20 (rainwater goods) for social housing. Failure rates for this element are low (0.67% of social housing) but this element is only failed if more than a fifth of the length of any gutters or downpipes need to be repaired or replaced and even then SHQS is failed only if at least one other serious disrepair element is also failed (see paragraphs 37 to 40 below). For SHQS blocked gutters are not treated as disrepair because they are classed as maintenance.

31. The repairing standard for private rented housing requires drains, gutters and external pipes are in a reasonable state of repair and in proper working order. Also poor drainage of courts, yards or passages may be classed as a sanitary defect for repairing standard in private rented homes.

Disrepair

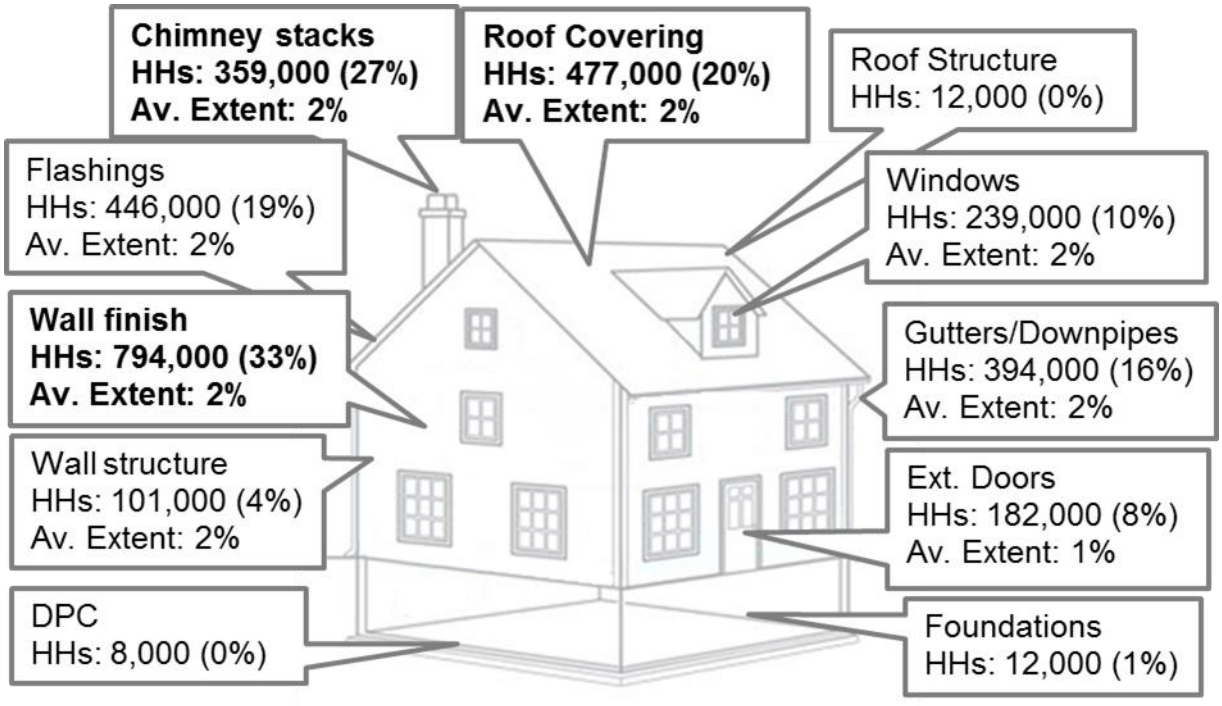
32. The Scottish House Condition Survey 2013 found significant levels of disrepair in Scottish homes.

Category of disrepair	**Percentage of Homes**
Any Disrepair: Any damage where a building element requires some repair beyond routine maintenance.	78%
Critical element disrepair: this refers to disrepair to building elements central to weather-tightness, structural stability and preventing deterioration of the property.	57%
Urgent disrepair: this relates to cases requiring immediate repair to prevent further damage or health and safety risk to occupants.	36%
Extensive disrepair: to be described as extensive, the damage must cover at least 20% or more of the building element area.	7%
Critical element, urgent *and* extensive disrepair	4%

33. Disrepair to critical elements is recorded where there is any disrepair, no matter how small, to the critical elements of the dwelling. Some disrepair to critical elements is fairly common but tends to be at a relatively low level in each property, affecting on average no more than 2% of the relevant area. The critical elements are:

- Roof covering
- Roof structure
- Chimney stacks
- Flashings
- Roof gutters and downpipes
- External walls finish
- External walls structure
- Access decks and balustrades (common areas, flats only)
- Foundations
- Damp-proof course
- External doors and windows (dwelling only)
- Doors, screens, windows and roof lights (common areas, flats only)
- Party walls structure
- Floor structure
- Floor finish
- Dry rot or wet rot

34. The following graphic from the Scottish House Condition Survey 2013 shows number and percentage of households (HHs) and the average area affected by disrepair to critical elements:



35. Disrepair is not part of the tolerable standard. The “general state of repair” of a house was one of the matters which should be regarded in determining whether a house is unfit for human habitation under the Housing (Scotland) Act 1962. The Cullingworth Committee Report (Scotland’s Older Houses, 1967) which recommended the introduction of the tolerable standard, proposed that is should include “satisfactory state of repair”. However, the tolerable standard which was introduced in 1969 did not include this element.

36. The older concept of unfitness due to disrepair is preserved in Environmental Health Acts, where any “premises in such a state as to be prejudicial to health” is classified as a “statutory nuisance”. Although a house in disrepair might not fall short of the tolerable standard it could be classed as substandard under section 68 of the Housing (Scotland) Act 2006 which includes homes in a state of serious disrepair (which is not defined).

37. SHQS has 18 elements relating to serious disrepair. These are divided into two groups. These elements fail if more than 20% of the element requires repair or replacement. SHQS is failed if any primary element fails, of if any two secondary elements fail.

38. The primary elements are:

- Wall structure
- Internal floor structures
- Foundations
- Roof structure

39. The secondary elements are:

- Principal roof covering
- Chimney stacks
- Flashings
- Rainwater goods (gutters and downpipes)
- External wall finish
- Common access decks/galleries/balustrades
- Common access stairs and landings
- Individual dwelling balconies and verandas
- Attached garages of individual dwellings
- Internal stairs of individual dwellings
- Damp proof course
- Windows & doors of individual dwellings
- Common windows and common roof lights
- Underground drainage

40. This part of the standard is not particularly demanding and only 1% of Scottish homes across all tenures fail the SHQS on serious disrepair elements.

41. The repairing standard for private rented housing requires that the structure and exterior of the house should be in a reasonable state of repair and in proper working order, though the age, character, locality and prospective life should be taken into account. In some cases, disrepair and sanitary defects may mean that a house is considered unfit for human habitation.

Suggested questions for discussion

1) Should there be a common standard for essential fabric for all houses?

2) What elements should be part of an essential fabric standard?

3) Can we distinguish the impact of elements like dampness and ventilation on the fabric of a house from their health impacts on the occupiers?

4) Is there a hierarchy of essential fabric elements?

5) How should essential fabric elements be measured?

Scottish Government
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Annex A: Summary of structural elements in existing standards

	Tolerable Standard	**Scottish Housing Quality Standard**	**Repairing Standard**	**Building Regulations**
Stability	Must be structurally stable			Must not collapse or become unsafe
Wind and Watertight		(*Not in SHQS but required under the 2001 Act*)	Must be wind and watertight	Climatic conditions should be carefully considered in assessment of the structural design
Dampness	Must be substantially free from rising or penetrating damp	Damp proof course must be in good repair	Sanitary defects include dampness	Must not be a threat to the building or the health of the occupants as a result of moisture penetration or precipitation
Ventilation	Must have satisfactory provision for ventilation	Mechanical ventilation may be required if the house is damp	Sanitary defects include lack of ventilation	Must be designed and constructed in such a way that it can be ventilated to ensure that the health of the occupants is not threatened
Drainage	Must have an effective system for drainage and disposal of foul and surface water	Rainwater goods and underground drain must be in good repair	Drains, gutters and external pipes must be in a reasonable state of repair and in proper working order	Must have a surface water and wastewater drainage system
Disrepair		Structure must be in a good state of repair and must be free from serious disrepair	The structure and exterior of the house must be in a reasonable state of repair	