Ministry of Housing, Communities & Local Government

English Housing Survey

Floor Space in English Homes - technical report

50th Anniversary ENGLISH HOUSING SURVEY 1967 - 2017

Contents

Acknowledgements and further queries

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2. This report was produced by Helen Garrett of BRE in collaboration with MHCLG.

3. If you have any queries about this report, would like any further information or have suggestions for analyses you would like to see included in future EHS reports, please contact ehs@communities.gsi.gov.uk.

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Chapter 1
Introduction

1.1 The report *Floor Space in English Homes – main report*[1], commissioned by the Ministry of Housing, Communities and Local Government (MHCLG), used English Housing Survey (EHS) data to inform discussions on whether our newer built homes are providing less internal space for households. Modelled EHS data produces a consistent measurement of usable internal space, and this was examined by different dwelling types broken down by dwelling age.

1.2 As noted in the main report, there are currently a range of definitions and methodologies in England (and the UK) to establish internal floor area in our homes. These include Gross Internal Floor Area (GIFA) and International Property Measurement Standards (IPMS). Since the inception of the above report, a review of the EHS modelling to estimate usable internal floor area has been undertaken. This new modelling approach uses assumptions aligned with the nationally described space standard which was published as part of the recent Housing Standards Review. As a result, the EHS survey data has been modelled to provide two estimates of usable internal floor area.

1.3 This work, which supplements the *Floor Space in English Homes - main report*, was commissioned by MHCLG and has been undertaken to determine whether the key findings for the main report differ in any notable way when the newer method of estimating floor area is used for the analysis.

1.4 For ease of presentation, this report uses the terms ‘floor area’ and ‘floor space’ interchangeably to refer to usable internal floor area. It will:

- Explain the differences between the two EHS definitions of floor area and examine how the findings into whether floor space has fallen over time could potentially change using the newer definition.
- Analyse the floor area of different dwelling types (end and mid terraced houses, semi-detached and detached houses, and purpose built flats) by dwelling age using the newer measure of internal floor area. Compare findings with those found using the original EHS definition of floor space.

[1] The report is available from https://www.gov.uk/government/publications/floor-space-in-english-homes

- Analyse the floor area of different dwelling sizes by dwelling age using the newer measure of internal floor area. Compare findings with those found using the original EHS definition of floor space.
- Provide a summary of the results.

1.5 Results for this report are based on the 2012 EHS data, as with the Floor Space in English Homes – main report. The sample comprised 12,763 occupied or vacant dwellings which were inspected by a qualified surveyor between April 2011 and March 2013 (a mid-point of April 2012).

Chapter 2
Findings

Definitions of internal floor area

2.1 This section looks at the two methods for estimating internal floor area, using the EHS.

Original EHS definition (variable name= 'floorx')

2.2 This represents the area within the footprint of the dwelling, minus the three following areas;

- The area under the external walls
- The area under internal partition walls
- The area occupied by staircases.

2.3 The area remaining represents the total of all room areas, hallways and circulation space (other than stairs) including cupboards, integral balconies and integral garages. Loft space is not included unless the loft is habitable, with a fixed stair in place to access it.

Newer definition aligned with nationally described space standards (variable name= 'floory')

2.4 This also represents the area within the footprint of the dwelling, minus the three following areas;

- The area under the external walls
- The area of integral balconies
- The area of integral garages.

2.5 The area remaining represents the total of all room areas, hallways and circulation space including cupboards and stairs. The area under internal partition walls is also included. Loft space is not included unless the loft is habitable, with a fixed stair in place to access it.

2.6 A summary of the two approaches is provided below in Table 2.1.

Table 2.1: Floorx and floory: components of floor area excluded/included in the derivation of the total area

	floorx	floory
area under external walls	excluded	excluded
area under internal partition walls	excluded	included
area occupied by staircases	excluded	included
area of integral balconies	included	excluded
area of integral garages	included	excluded

2.7 Using floory rather than floorx, we would expect:

- The average floor area to increase in all dwelling types due to the inclusion of the area under internal partition walls and the area occupied by staircases
- The increase in average floor area for some larger houses to be counter-balanced by the exclusion of integral garage area
- The increase in average floor area for some flats to be counter-balanced by the exclusion of integral balconies

2.8 As both definitions provide a consistent measure of floor space for all homes of all ages, we would not anticipate any significant differences in the pattern and variation in floor space over time for the whole stock or for individual types of dwellings when the two definitions are compared. Any variation, however, would be dependent on the relative distribution of the types and designs of homes built in each age band, including the proportion of homes with integral garages and balconies. Some main findings for these two features are provided below.

2.9 Homes with an integral balcony:

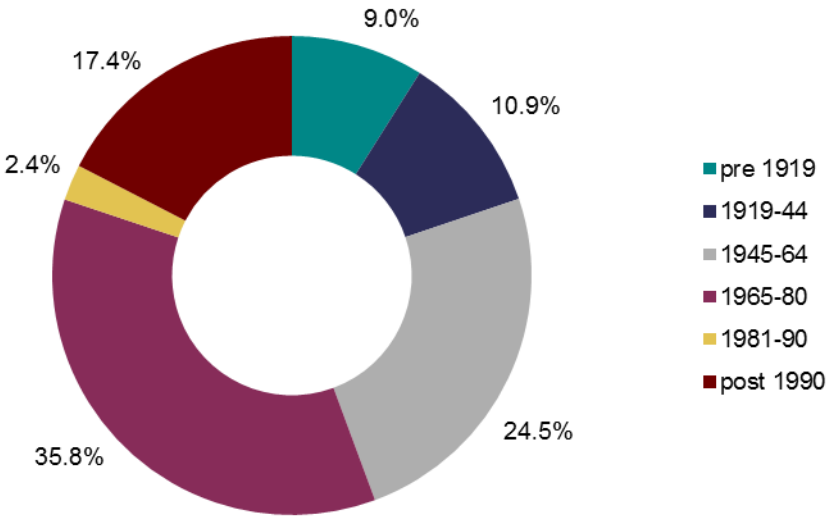
- Around 380,000 (2%) homes had an integral balcony. The vast majority of these (75%) were in purpose built flats. Just over half of all these homes were two bedroom flats (52%).
- Whilst over half of homes (houses and flats) with integral balconies were two bedroom (54%), the rest were evenly distributed within other sized homes; around 15-16% each for 1 bedroom, 3 bedroom or 4 or more bedroom homes.
- Some 36% of these homes were built from 1965 to 1980 and a further 25% were built from 1945 to 1964, Figure 2.1.

2.10 Homes with an integral garage:

- Around 1.7million (7%) homes had an integral garage. Over half of these (56%) were detached homes and a further 23% were semi-detached homes.

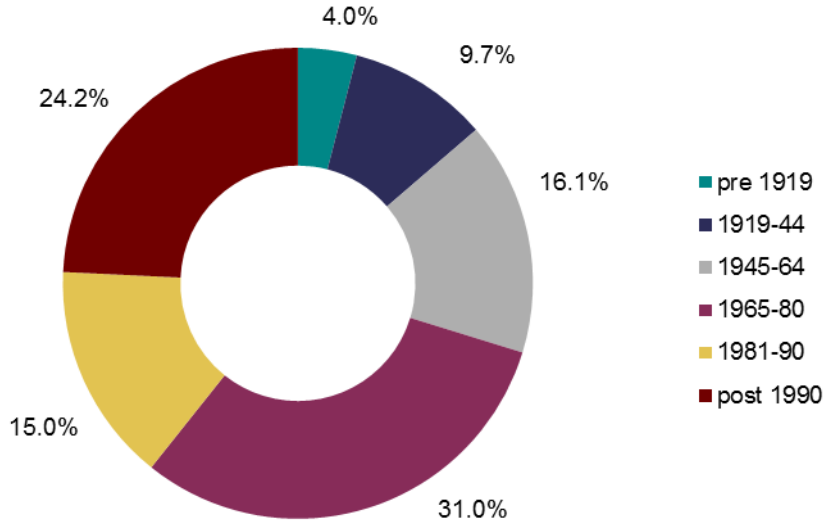
- Some 94% of these homes had at least 3 bedrooms. Just under half of all these homes were (45%) detached houses with four or more bedrooms.
- Roughly a third (31%) of these homes were built from 1965 to 1980 and a further 24% were built after 1990, Figure 2.2.

Figure 2.1: Distribution of homes with integral balconies by dwelling age, 2012



Base: all dwellings
Source: English Housing Survey, dwelling sample

Figure 2.2: Distribution of homes with integral garage by dwelling age, 2012



Base: dwellings with integral garage
Source: English Housing Survey, dwelling sample

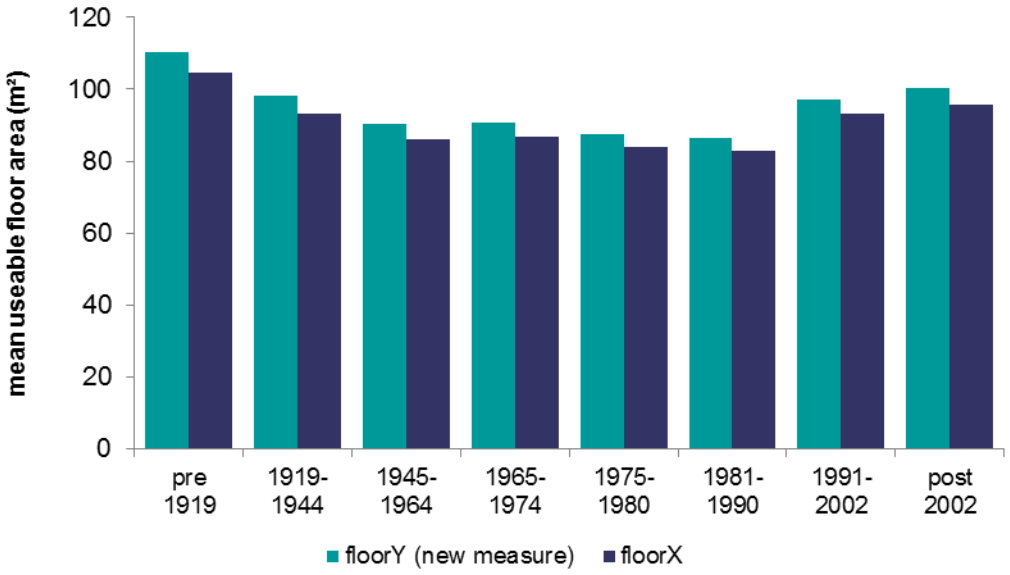
2.11 Looking at the whole housing stock, the difference in the average floor area for each type of dwelling is illustrated in Figure 2.3.

Floor area of dwellings within age bands

2.12 Under the new definition of floor space, the average floor area for the whole stock was 96m², almost 5m² higher than under the original definition, Figure 2.4. This average floor area varied little by dwelling age, with the exception of the oldest dwellings built before 1919; the average for these aged homes was significantly higher compared with other aged homes.

2.13 Average floor area for the newest homes built after 2002 was significantly higher than all other aged homes bar those built before 1945 and those built from 1991 to 2002. These findings mirror those obtained using the former definition of floor area. Overall, any statistically significant difference in the average floor area between homes in each age band varied very little when the two definitions of floor area were compared.

Figure 2.3: Comparison of average floor area by dwelling age, 2012

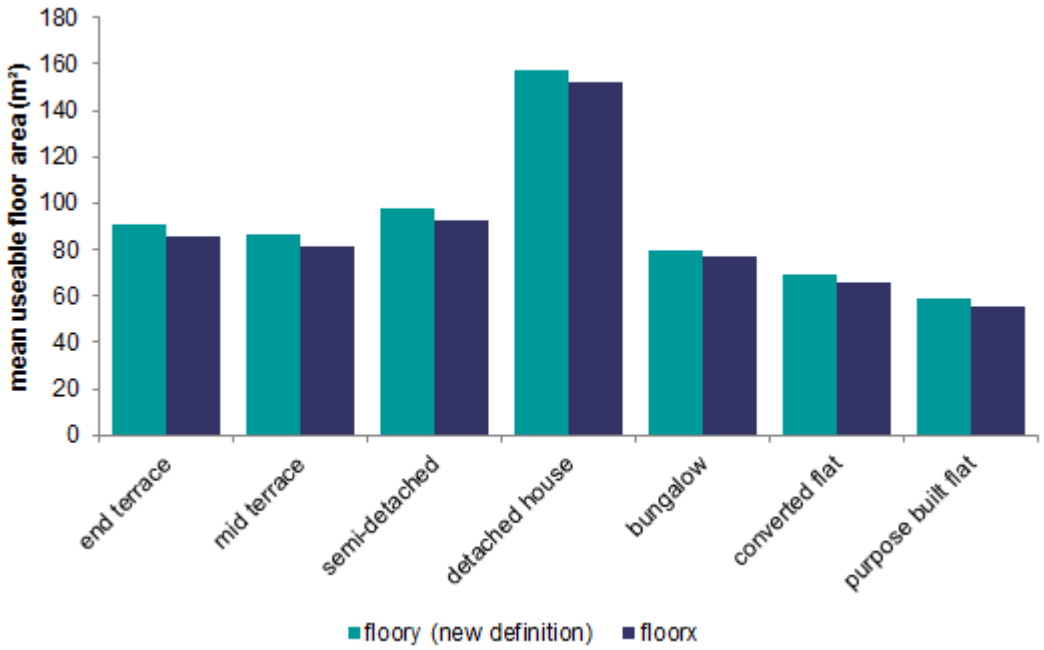


Base: all dwellings
Source: English Housing Survey, dwelling sample

2.14 For the whole stock, using the new definition, the range in floor area rose for most aged homes bar those built from 1919 to 1944, and those built from 1975 to 1980. The following section now examines at each type of dwelling.

Floor area of dwellings by type

Figure 2.4: Comparison of average floor area by dwelling type, 2012



Base: all dwellings
Source: English Housing Survey, dwelling sample

End terraced homes

2.15 Only a small proportion of end terraced homes had integral garages (4%) and a far smaller proportion had integral balconies. Consequently we would expect any differences between the two definitions of floor area to largely reflect the addition of the floor area under the internal partition walls and the area occupied by staircases.

2.16 Average floor area was 91m² using the newer definition of floor space and the range in floor area increased by 7-11m² in homes built before 1945, but either increased more modestly or fell for other aged homes. Excluding homes built before 1919, the average floor areas remained fairly consistent within dwellings of different ages (84-89m²) with the apparent exception of homes built in the 1980s (70m²). However, this difference was not found to be statistically significant. These findings mirror those obtained using the previous definition of floor space.

Table 2.2: Comparison of floor areas for end terraces (m²), 2012

end terrace homes

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	109	104	36	32	535	519	499	487
1919-1944	89	83	44	40	176	165	132	125
1945-1964	84	79	47	44	133	136	86	92
1965-1974	89	85	37	34	153	155	116	121
1975-1980	85	80	42	38	146	139	104	101
1981-1990	70	66	39	34	194	194	156	160
1991-2002	86	81	43	40	165	159	122	119
post 2002	89	83	54	50	179	173	125	123
all dwellings	91	86	36	32	535	519	499	487

Source: English Housing Survey, dwelling sample

Mid terraced homes

2.17 Only a small proportion of mid terraced homes had integral garages (4%) and a far smaller proportion had integral balconies. Consequently, as with end terraced homes, we would expect any differences between the two definitions of floor area to largely reflect the addition of the floor area under the internal partition walls and the area occupied by staircases.

2.18 The main findings for mid terraced homes were very similar irrespective of the floor area definition used. Using the newer method, mid terraces had, on average, around 5m² less internal floor space compared with end terraced homes, although this difference was not statistically significant. Mid terraced houses built after 2002 had a similar average floor area compared with those built before 1919. Average floor area was smaller for mid terraced homes built in the 1980s and 1990s when compared with the oldest homes (pre 1919), the newest homes (post 2002) and those built from 1965 to 1974.

2.19 Using the new definition of floor space resulted in a notably broader range of floor area in homes built before 1945 but a reduced range for the newest homes built after 2002.

Table 2.3: Comparison of floor areas for mid terraces, 2012

mid-terrace homes

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	93	87	30	27	365	352	335	325
1919-1944	83	78	43	38	256	243	213	204
1945-1964	83	78	50	46	128	121	77	75
1965-1974	85	80	41	38	158	154	117	117
1975-1980	81	77	37	33	138	131	101	98
1981-1990	71	68	34	30	180	174	146	144
1991-2002	72	68	40	37	148	147	108	110
post 2002	92	86	50	45	293	295	243	250
all dwellings	86	81	30	27	365	352	335	325

Source: English Housing Survey, dwelling sample

Semi-detached homes

2.20 Overall 7% of semi-detached homes had an integral garage although this proportion rose to 17% for semi-detached homes with 4 or more bedrooms. It is likely, therefore, that the overall increase in floor area as a result of including the area under partition walls and area occupied by staircases would be counter-balanced by the exclusion of the integral garage floor space.

2.21 Average floor area was 98m² using the new definition of floor space. The main findings for these homes were the same irrespective of the floor space definition, namely that average floor areas appeared notably lower among those homes built from 1981 to 2002. These differences were statistically significant except when compared with homes built from 1975-80 and those built after 2002. Using the new definition of floor area, the range in floor area rose for most aged homes bar those built from 1975 to 1980 and those built from 1991 to 2002.

Table 2.4: Comparison of floor areas for semi-detached homes, 2012

semi-detached homes

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	133	126	49	45	519	510	470	464
1919-1944	99	94	49	45	282	270	233	225
1945-1964	93	88	39	34	275	263	236	229
1965-1974	94	89	50	46	165	157	115	111
1975-1980	86	82	45	41	146	148	101	107
1981-1990	77	74	38	34	147	142	109	108
1991-2002	79	74	43	39	197	199	155	159
post 2002	90	85	58	54	141	132	84	78
all dwellings	98	93	38	34	519	510	481	476

Source: English Housing Survey, dwelling sample

Detached homes

2.22 Around a quarter of detached homes (24%) had an integral garage. As with semi-detached homes, we would expect the overall increase in floor area resulting from the inclusion of area under partition walls and the area occupied by staircases to be counter-balanced by the exclusion of the integral garage floor space.

2.23 The average floor area for these homes was 157m² using the new definition and the range of floor area increased by 10m² among all detached homes. The range in floor area increased in all aged homes bar those built from 1975 to 1980.

2.24 The oldest homes built before 1919 and the newest homes built since 2002 had similar average floor areas which were significantly higher than all other aged homes. Excluding these oldest and newest homes, no other homes were found to have an average floor area significantly different from homes in different age bands. These findings mirror those obtained using the previous definition of floor space.

Table 2.5: Comparison of floor areas for detached homes, 2012

detached homes

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	205	197	46	42	990	975	944	933
1919-1944	158	153	58	62	583	581	525	520
1945-1964	153	149	62	57	454	445	392	388
1965-1974	143	139	59	54	324	313	265	259
1975-1980	135	131	68	64	270	270	201	207
1981-1990	138	134	58	54	481	468	423	414
1991-2002	144	140	56	52	415	404	359	353
post 2002	199	192	75	70	1031	1017	956	946
all dwellings	157	152	46	42	1031	1017	984	974

Source: English Housing Survey, dwelling sample

Purpose built flats

2.25 Some 8% of purpose built flats had an integral balcony, whilst only a very small proportion had an integral garage. We would therefore expect the overall increase in floor area resulting from the inclusion of area under partition walls to be counter-balanced to some degree by the exclusion of the integral balcony floor space.

2.26 It is important to bear in mind that very few purpose built flats were built before 1945 and some 43% of all homes built after 2002 were of this type. On average using the newer definition, these homes had 59m² of floor space. The range of floor area increased by 8m² for all purpose built flats using the new definition although this varied according to the age of the dwelling.

2.27 Average floor areas remained constant among purpose built flats built from 1919 to 1974 (59-61m²), and was significantly higher than those built from 1975 to 2002 (52-54m²). The newest purpose built flats built after 2002 had an average floor space of 64m², significantly higher than those built from 1975 to 2002. Findings mirror those obtained using the previous definition of floor space.

Table 2.6: Comparison of floor areas for purpose built flats, 2012

purpose-built flats

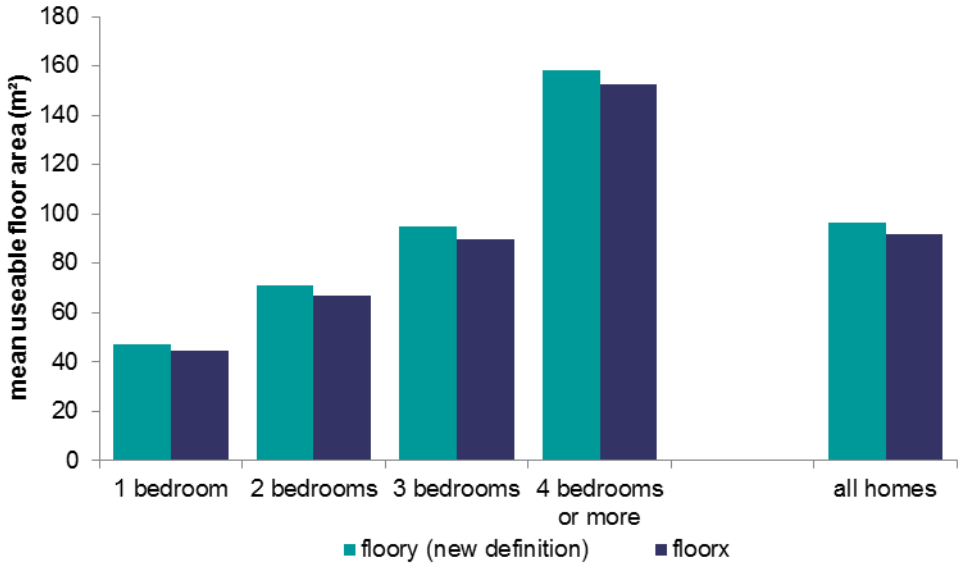
	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	77	72	27	27	177	168	149	141
1919-1944	59	55	26	22	130	122	104	101
1945-1964	59	56	23	20	121	114	98	95
1965-1974	61	57	24	21	346	336	322	315
1975-1980	53	49	17	14	162	155	145	141
1981-1990	52	49	18	14	167	162	149	148
1991-2002	54	51	24	20	127	121	104	101
post 2002	64	60	16	13	163	158	147	145
all dwellings	59	55	16	13	346	336	330	323

Source: English Housing Survey, dwelling sample

Floor area of different types of homes by number of bedrooms and dwelling age

2.28 Figure 2.5 provides details of how the average floor area for each sized dwelling varied by floor area definition.

Figure 2.5: Comparison of average floor area by number of bedrooms, 2012

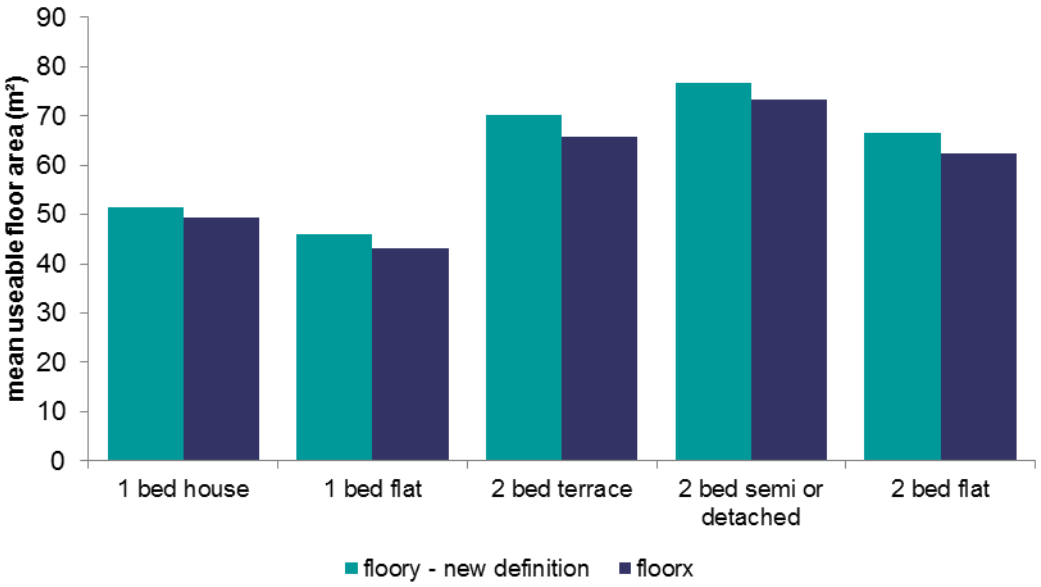


Base: one and two bedroom dwellings
Source: English Housing Survey, dwelling sample

2.29 The average floor areas for one, two and three bedroom homes were consistent over time, particularly when, for two and three bedroom homes, the oldest homes built before 1919 were excluded. Homes with four or more bedrooms built before 1919 and after 2002 had significantly higher average floor areas than most other aged dwellings. The exception was four bedroom homes built after 2002, where the average floor area was not significantly different from those built from 1991 to 2002. These findings mirror those obtained using the previous definition of floor space.

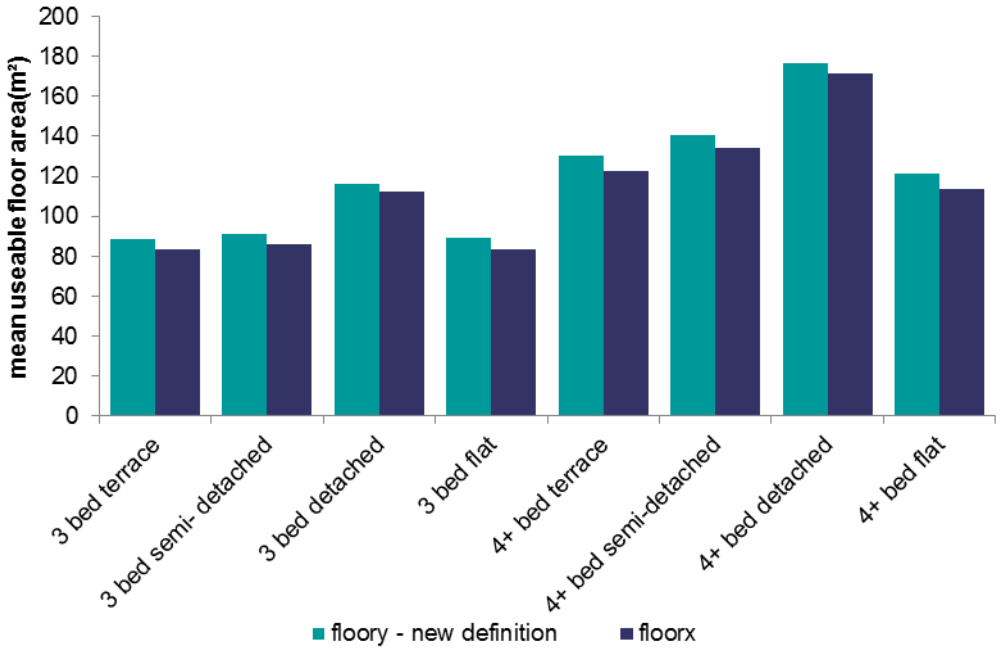
2.30 The following section expands on the above analysis by examining trends in floor space by the number of bedrooms within different house types over time. It compares the findings for each definition of floor area. Firstly, Figure 2.6 and Figure 2.7 show how average floor area for each size and type of home varied for each definition.

Figure 2.6: Comparison of average floor area by one and two bedroom homes, 2012



Base: one and two bedroom dwellings
Source: English Housing Survey, dwelling sample

Figure 2.7: Comparison of average floor area by three and four (or more) bedroom homes, 2012



Base: three and four or more bedroom dwellings
Source: English Housing Survey, dwelling sample

2.31 Analyses for one bedroom houses and three and four bedroom flats have not been undertaken in greater detail given that these types of homes are less common within the housing stock, and sample sizes are small when examined by age band.

One bedroom flats

2.32 Around 3% of these homes had an integral balcony. As with the former definition of floor area, average space remained fairly constant over time among one bedroom flats (42-50m²), and most differences were not statistically significant. The most notable exception relates to one bedroom flats built from 1981-1990, which were significantly smaller than most aged homes built before this time and those built after 2002. There was some minor change in the results of the significance testing when the average floor area for each age band was compared.

Table 2.7: Comparison of floor areas for one bedroom flats, 2012

one bedroom flats

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	50	47	19	15	108	106	89	91
1919-1944	46	43	18	15	83	79	65	64
1945-1964	44	42	23	20	73	71	50	51
1965-1974	47	44	24	21	79	76	54	55
1975-1980	44	41	17	14	62	61	45	48
1981-1990	42	39	18	14	61	60	43	46
1991-2002	45	42	24	20	68	64	45	44
post 2002	46	43	16	13	76	75	60	62
all dwellings	46	43	16	13	108	106	92	94

Source: English Housing Survey, dwelling sample

Two bedroom terraced homes

2.33 As only a small proportion of these homes had an integral garage (2%) changes in the findings on floor area using the newer definition were predominantly due to the addition of the area under the partition walls and the area occupied by staircases.

2.34 Two bedroom terraces built in the 1980s and 1990s appear, on average, to be smaller (62-64m²). For the latter aged homes, however, the difference was not significant compared with other aged homes built after 1919 (a similar finding to that obtained using the former definition of floor area). Using the newer definition of floor space, average floor area in homes built in the 1980s was significantly smaller compared with all older homes, but not significantly smaller compared with all younger homes.

Table 2.8: Comparison of floor areas for two bedroom terraced homes, 2012

two bedroom terraced houses

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	73	69	35	31	370	358	335	327
1919-1944	72	67	43	38	182	176	139	138
1945-1964	68	64	48	44	111	106	63	62
1965-1974	72	69	33	32	133	137	100	105
1975-1980	68	64	37	33	120	114	83	81
1981-1990	62	58	36	34	148	150	112	116
1991-2002	64	60	44	40	165	159	121	118
post 2002	66	62	50	45	88	84	38	38
all dwellings	70	66	33	31	370	358	336	327

Source: English Housing Survey, dwelling sample

Two bedroom semi-detached/detached homes

2.35 As only a small proportion of these homes had an integral garage (3%) changes in the findings on floor area using the newer definition are predominantly due to the addition of the area under the partition walls and the area occupied by staircases.

2.36 Although the average floor area in two bedroom semi-detached and detached homes appears to be lower from the 1980s (70-71m²), these differences were not significantly different to other aged homes bar those built before 1945. These findings are very similar to those obtained using the former definition of floor space. The former definition of floor area, however, found no significant difference in the average floor area of the newest homes built from 2002 and the oldest homes built before 1919. Essentially, irrespective of definition, there is no evidence to suggest these types of homes are, on average, getting smaller over time.

Table 2.9: Comparison of floor areas for two bedroom semi-detached homes, 2012

two bedroom semi-detached dwellings

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	89	84	49	45	179	174	130	129
1919-1944	79	75	45	43	242	243	197	200
1945-1964	76	73	38	34	168	163	130	129
1965-1974	78	75	37	36	154	149	118	113
1975-1980	76	72	49	45	127	123	78	78
1981-1990	70	67	42	40	290	280	248	240
1991-2002	71	68	35	34	178	172	143	137
post 2002	71	68	36	35	122	118	86	83
all dwellings	77	73	35	34	290	280	255	246

Source: English Housing Survey, dwelling sample

Two bedroom flats

2.37 Some 9% of these homes had an integral balcony. The average sized two bedroom flat was 67m² using the newer definition of floor area. Although average floor areas appeared lower in homes built from 1975 to 2002, these were not significantly different compared with older homes except those built before 1919. Two bedroom flats built after 2002 were found to be significantly larger, on average, compared with those built in the 1980s and 1990s. The overall findings match those obtained using the former definition of floor area. As with other two bedroom homes, there is no evidence to suggest these types of dwellings are getting smaller over time, irrespective of floor space definition.

Table 2.10: Comparison of floor areas for two bedroom flats, 2012

two bedroom flats

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m2
dwelling age								
pre 1919	77	73	36	31	310	303	274	272
1919-1944	61	57	28	24	109	106	81	82
1945-1964	65	61	35	31	107	104	72	73
1965-1974	66	61	32	27	127	121	96	94
1975-1980	62	58	31	27	99	96	68	69
1981-1990	62	57	39	37	167	162	129	125
1991-2002	60	57	24	23	92	86	68	63
post 2002	69	64	40	35	142	135	102	100
all dwellings	67	62	24	23	310	303	286	280

Source: English Housing Survey, dwelling sample

Three bedroom semi-detached homes

2.38 Some 5% of these types of homes had an integral balcony. Whilst, on average, the oldest homes built before 1919 (110m²) were significantly larger than all younger homes, the average floor areas for homes built from 1919 to 1990 and those built after 2002 were not significantly different. The exception related to homes built in the 1990s; the average was smaller (80m²) than all older homes (average of at least 82m²). Findings are similar to those obtained using the former definition of floor area.

Table 2.11: Comparison of floor areas for three bedroom semi-detached homes, 2012

three bedroom semi-detached homes

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m²
dwelling age								
pre 1919	110	105	61	57	229	221	168	164
1919-1944	91	86	49	45	175	165	126	120
1945-1964	91	86	52	48	165	164	113	117
1965-1974	89	85	50	46	156	151	106	105
1975-1980	83	79	45	41	127	131	82	90
1981-1990	82	78	55	50	147	142	92	92
1991-2002	80	75	56	51	125	118	69	67
post 2002	86	81	61	54	127	122	66	68
all dwellings	91	86	45	41	229	221	184	180

Source: English Housing Survey, dwelling sample

Three bedroom detached homes

2.39 A relatively large proportion of these homes (13%) had integral garages, which counter-balanced the gain in floor area due to inclusion of area under partition walls and staircases under the new definition.

2.40 Whilst, on average, the oldest homes built before 1919 (150m²) were significantly larger than all younger homes bar those built after 2002, average floor areas for homes built from 1919 to 1980 and those built after 1991 were not significantly different from each other. The exception related to homes built in the 1980s; the average floor area was smaller compared with all older homes built before 1965. The trends are similar to those obtained using the former definition of floor area. Irrespective of floor space definition, there is no evidence to suggest these types of homes are getting smaller over time.

Table 2.12: Comparison of floor areas for three bedroom detached homes, 2012

three bedroom detached homes

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	150	144	72	68	335	324	263	256
1919-1944	123	118	57	55	348	338	291	283
1945-1964	121	117	62	57	454	445	392	388
1965-1974	110	107	59	54	225	226	165	171
1975-1980	107	103	68	64	176	180	107	117
1981-1990	104	100	58	55	265	264	207	209
1991-2002	104	101	68	64	248	242	181	177
post 2002	129	125	72	70	410	397	337	327
all dwellings	116	112	57	54	454	445	397	391

Source: English Housing Survey, dwelling sample

Semi-detached homes with four or more bedrooms

2.41 A relatively large proportion of these homes (17%) had integral garages, which counter-balanced the gain in floor area due to inclusion of area under partition walls and staircases under the new definition.

2.42 The average floor area was 140m² (6m² higher than the former definition). Homes built in the 1980s had a significantly lower average floor area (99m²) compared with homes built prior to 1965 (average of at least 126m²). The average floor areas for homes built from the 1990s were not statistically different to other aged homes except those built before 1919. Again, these findings mirror those obtained using the former definition of floor area.

2.43 There was a notable change in the range of floor areas for homes built between 1919 and 1944 and for those built between 1991 and 2002, when the two definitions of floor space were compared.

Table 2.13: Comparison of floor areas for four (or more) bedroom semi-detached homes, 2012

four plus bedroom detached homes

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	174	166	85	81	519	510	434	429
1919-1944	136	130	63	58	282	270	220	212
1945-1964	126	121	59	51	275	263	216	212
1965-1974	122	117	82	78	165	157	83	79
1975-1980	122	116	89	84	146	148	56	64
1981-1990	99	96	78	72	142	135	64	62
1991-2002	127	123	91	86	197	199	106	113
post 2002	118	110	92	84	141	132	49	48
all dwellings	140	134	59	51	519	510	460	459

Source: English Housing Survey, dwelling sample

Detached homes with four or more bedrooms

2.44 A large proportion of these homes (29%) had integral garages, and 2% had an integral balcony counter-balancing the additional gain in floor area (due to inclusion of area under partition walls and staircases) under the new definition.

2.45 The average floor area was 177m² (5m² higher than the average using the former definition). Irrespective of floor area definition, there were no significant differences in the average floor areas of all homes built from 1919 to 2002. However, the average floor area for homes built after 2002 was significantly higher than all older homes except those built before 1919. Using the former definition, these aged homes did not have a significantly higher average than those built between 1919 and 1944. Again, there is no evidence that these sized homes are getting smaller over time, once we exclude the oldest homes.

Table 2.14: Comparison of floor areas for four (or more) bedroom detached homes, 2012

four plus bedroom detached homes

	floory (new def) average	floorx average	floory (new def) min	floorx min	floory (new def) max	floorx max	floory (new def) range	floorx range
								m^2
dwelling age								
pre 1919	242	233	109	100	990	975	881	875
1919-1944	176	171	68	62	583	581	515	520
1945-1964	176	171	81	75	367	367	285	292
1965-1974	159	155	84	87	324	313	240	227
1975-1980	153	149	72	72	270	270	198	198
1981-1990	151	148	80	74	481	468	401	394
1991-2002	158	154	74	68	415	404	341	336
post 2002	213	206	104	98	1031	1017	927	918
all dwellings	177	172	68	62	1031	1017	963	955

Source: English Housing Survey, dwelling sample

Conclusions and recommendations

3.1 This research examined how internal floor area in different aged homes varied according to how English Housing Survey data were modelled; using the original EHS definition of usable floor space or the definition aligned to the Housing Standards Review. Findings on floor space using the newer definition were compared with those obtained from the main BRE report *Floor space in English Homes*, which examined whether the newest English homes were becoming smaller in size (using the original definition of floor space).

3.2 As anticipated, the average floor area for all aged homes (and different types of homes within each age band) increased using the newer definition. This was due to the inclusion of the area under partition walls and the area occupied by staircases. The extent of the increase was, however, dependent on the distribution of the types and designs of homes within each dwelling age band. For a few house types within some age bands, the range in floor area showed some notable variation when compared with the original EHS definition.

3.3 As both definitions provide a constant measure of internal floor area for all aged homes, it is not surprising that the main findings for each definition are the same, namely, that there is no overriding evidence to simply suggest that our newest homes are getting smaller. In a very few cases, however, the average floor areas in some types of homes were found, or no longer found, to be significantly different to similar dwellings of a different age.

3.4 Those types of homes most likely to show variation in floor area under the two definitions were purpose built flats and larger semi-detached or detached homes due to the different application of integral balcony and garage space respectively.

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