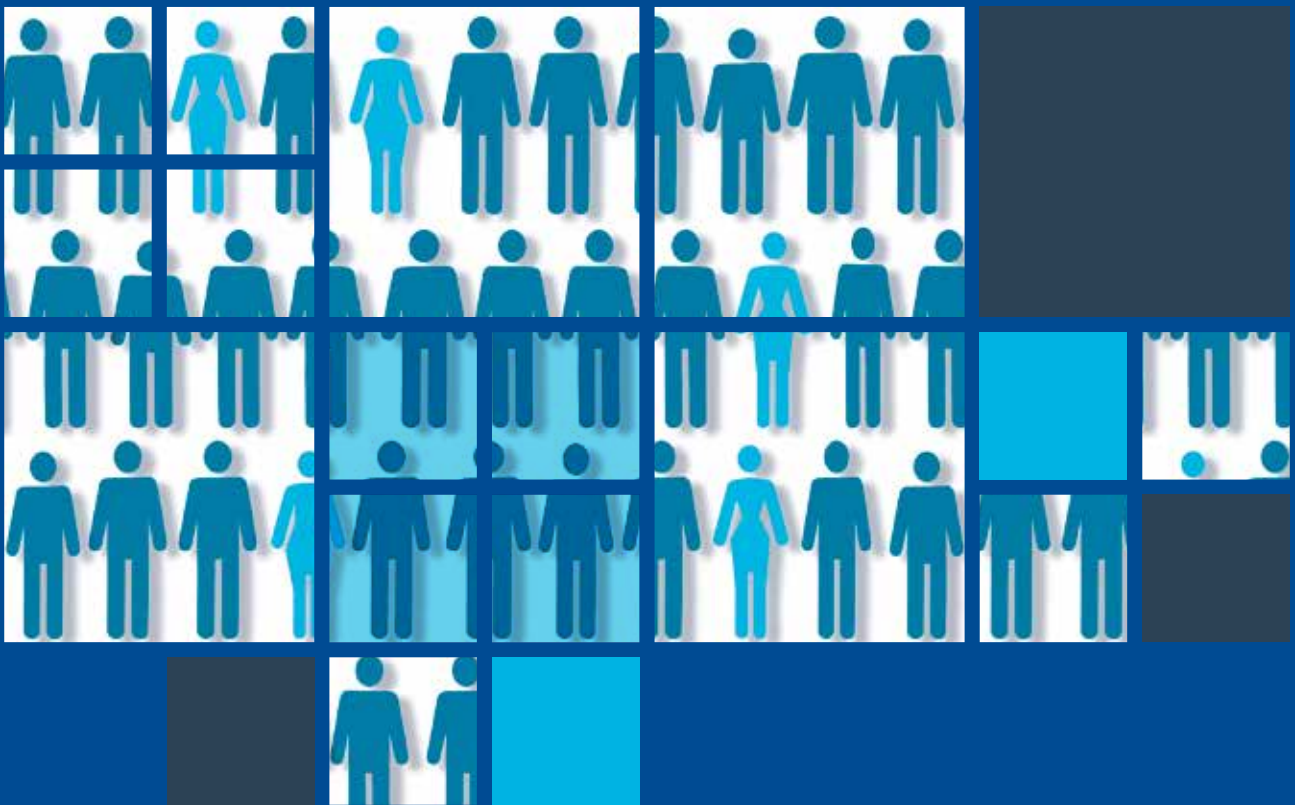


# The gender and age profile of the house-building sector



Primary research

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## Acknowledgments

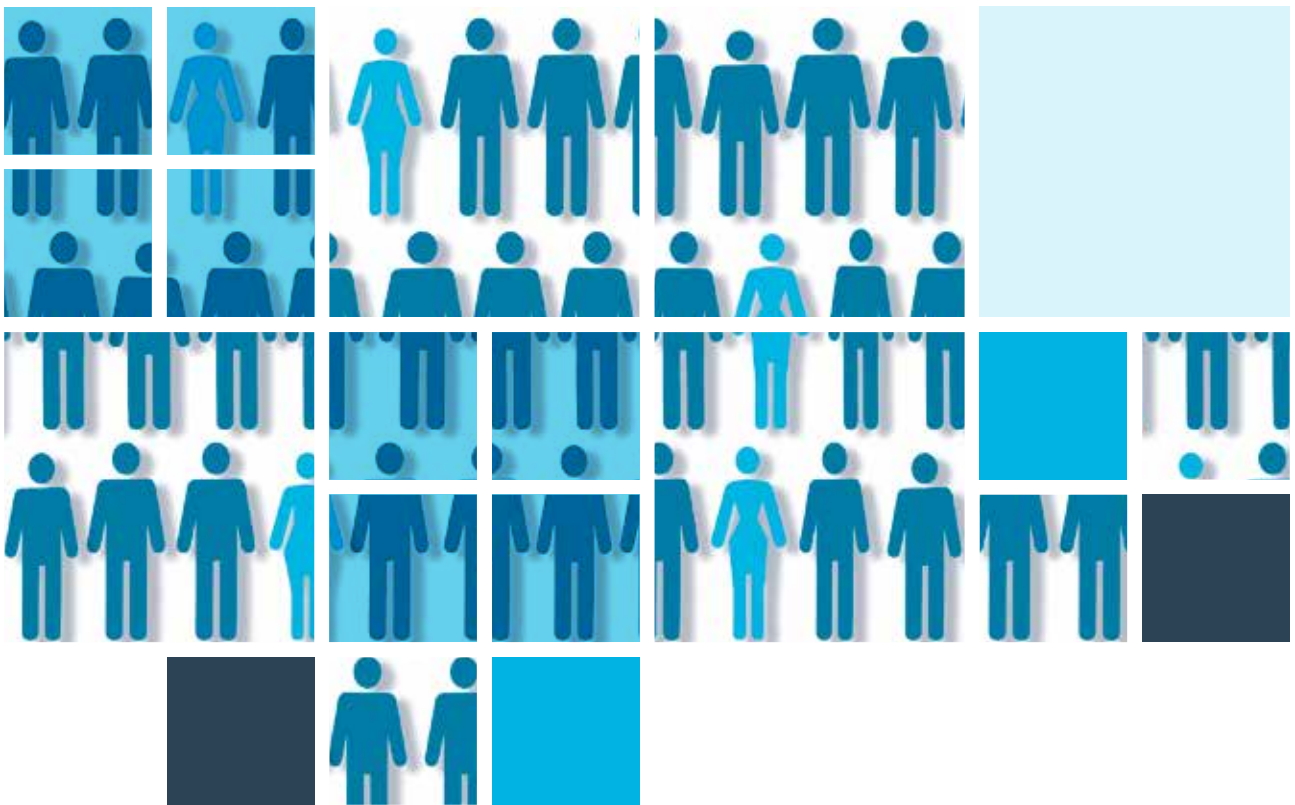
This research was carried out by Dr Claire Shepherd of the International Centre for Guidance Studies (iCeGS), University of Derby.

The NHBC Foundation is grateful to all the research participants, including the house-builders' representatives – Hill Group and Bovis Homes, Liz Male Consulting Ltd and Jobs for the Girls, for their input into this report.

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# The gender and age profile of the house-building sector



Primary research

February 2017

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# The NHBC Foundation

The NHBC Foundation, established in 2006, provides high-quality research and practical guidance to support the house-building industry as it addresses the challenges of delivering 21st-century new homes. To date, it has published more than 70 reports on a wide variety of topics, including the sustainability agenda, homeowner issues and risk management.

The NHBC Foundation is also involved in a programme of positive engagement with the government, academics and other key stakeholders, focusing on the current and pressing issues relevant to house building.

To find out more about the NHBC Foundation, please visit [www.nhbcfoundation.org](http://www.nhbcfoundation.org). If you have feedback or suggestions for new areas of research, please contact [info@nhbcfoundation.org](mailto:info@nhbcfoundation.org).

NHBC is the standard-setting body and leading warranty and insurance provider for new homes in the UK, providing risk management services to the house-building and wider construction industry. All profits are reinvested in research and work to improve the construction standard of new homes for the benefit of homeowners. NHBC is independent of the government and house builders. To find out more about the NHBC, please visit [www.nhbc.co.uk](http://www.nhbc.co.uk).

## The NHBC Foundation Expert Panel

The NHBC Foundation's research programme is guided by the following panel of senior representatives from government and industry:

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# Foreword

Recruiting and retaining a skilled and stable workforce of appropriate size and capability is one of the biggest challenges facing house building and indeed the wider construction industry. The challenge was thrown into sharp relief by the recent Farmer Review of the UK Construction Labour Model<sup>[10]</sup>, with its cryptic sub-title 'Modernise or Die'. Farmer highlighted the "need to recruit another 700,000 people to replace those retiring/natural leakage to other industries...in addition to the extra workforce needed of 120,000 to deliver capacity growth". The latter is of course vital if the government's aspiration to see 1 million new homes built in the life of the current Parliament is to be achieved. Farmer also highlights the looming challenge, which will be particularly acute in some regions of England, following the Brexit vote, with likely consequent restrictions on migrant labour.

Against this background, this latest report from the NHBC Foundation is a timely contribution based on an analysis of official government statistics. Not surprisingly, it confirms the picture of an ageing workforce in which about half are over the age of 45, and a sector in which women remain clearly in the minority (except in administrative and secretarial roles). However at least in terms of gender the picture is not entirely bleak. There are encouraging signs of a more balanced distribution in some occupations – women dominate in sales and service roles, and represent a quarter of professional and technical occupations.

Experience suggests the cyclical nature of house building is one of the key problems that we face in recruitment and retention of a talented workforce as was noted in the *Home Building Skills Research Report 2013*. Who can blame those who leave the industry in the depths of a recession in search of something more stable? And why should they return? It is clear to me that more must be done to even out the peaks and troughs in the demand for new housing and government has a crucial role to play in this.

It is also clear that house building struggles with its image, which limits its appeal to some potential younger recruits and young women in particular. *A career of choice*, published by the Foundation in 2015 makes recommendations as to how recruitment of young people could be improved. And in 2016, our first video, using Lego characters, presented via social media the variety of careers that exist in house building. To date the audience reached is estimated at over 425,000.

So there is clearly much to be done, if we are to achieve the far-reaching reforms advocated in the Farmer Review, and increase the stability and capacity of the house-building workforce. This is a time which presents real opportunities for change, not least with the review of the Construction Industry Training Board, and I hope that this latest report from the NHBC Foundation offers helpful insights and evidence into the sector's needs.

We are very grateful to the industry representatives who gave up their time to be interviewed for this important project.

**Rt. Hon. Nick Raynsford**  
Chairman, NHBC Foundation





# 1 Executive summary

The purpose of this report is to establish the diversity of the house-building industry in terms of the age and gender profiles of those who work in it. It responds to the growing recognition that the current increase in housing output necessitates an expanding workforce to meet labour demands. In exploring this issue, this report brings together an analysis of the Labour Force Survey and interviews with a range of stakeholders from the sector. The research identifies the current challenges to improving diversity that are facing the sector, spotlights effective practice and campaigning that is already being implemented, and provides recommendations for tackling diversity within house building and the construction industry.

## 1.1 Challenges

- Women are seriously under-represented in skilled, technical and managerial roles within house building and across the construction industry.
- Over-reliance on an ageing male workforce is pervasive in house building, particularly in site-based and management roles.
- Women in house building are concentrated in office-based administrative, payroll and personal assistance roles. However, there is anecdotal evidence that the numbers of women in technical and professional roles are increasing.
- The most prevalent occupations for men are site-based construction trades, elementary construction work (such as labouring) and managerial positions.
- Skills shortages due to a limited talent pool and resultant spiralling costs of salaries are key challenges for all companies.

## 1.2 Ways forward/possible solutions

- The need to tackle diversity issues is acknowledged by companies of all sizes. Limited progress is being made, with a focus on apprenticeships and graduate schemes, although this is often on a relatively small scale so greater investment in these schemes is needed.
- Targeted recruitment of candidates from specific demographic groups, i.e. women and young people, should be routinely undertaken.
- Although community outreach is carried out by most companies in collaboration with their local schools and colleges, this is usually on a small scale and approached in an almost ad hoc manner. More systematic approaches to outreach with schools and the wider community are needed to highlight careers in the sector and inspire the house builders of the future.
- The perception of stereotyping within the industry and the lack of positive promotional activities are the reasons most frequently cited by human resources personnel for the lack of women entering the industry, while a 'failure' of careers advice and parents' misconceptions are commonly blamed for young people's lack of interest. Awareness raising needs to be a key focus for house builders, to promote the good work being done and highlight the diversity of opportunities available across the sector.
- There are some interesting and engaging campaigns under way that aim to tackle stereotypes, inspire young people and encourage women into STEM (science, technology, engineering and mathematics) careers. These campaigns are providing supportive networks, training resources for companies and funding provision for apprenticeships. However, there remains a definite lack of collaboration with and between companies to extend the reach and impact of such programmes.

## 2 Introduction

The research informing this report explores diversity within the house-building sector, with a particular focus on gender and age. Its purpose is to determine the prevalence of women in the sector; to explore the age distribution of the workforce; to identify barriers that are preventing greater diversity within the sector and the broader construction industry; and to provide recommendations for improving diversity in the future.

A mixed methods approach was used to explore these issues. An analysis of data from the Labour Force Survey (LFS) – a nationally representative survey that is carried out quarterly – was combined with findings from interviews conducted with house-building companies of different sizes, senior female industry commentators and a third sector organisation.

The current picture of house building in the UK is one of consolidation, building on the growth seen in recent years. Housing output has expanded post-recession, with the number of newbuild housing starts at its highest level since 2008. In 2014/15, the UK saw 171,850 new homes started – a rise of 44% on the 119,160 new homes started in 2008/09 and 6% more than the 162,100 new homes started the previous year, in 2013/14<sup>[1]</sup>. Government policies to promote new housing supply and ownership include the Help to Buy: equity loan schemes in England, Scotland and Wales. In England alone, the scheme has supported over 90,000 new homes since its introduction in 2013<sup>[2]</sup>. Further steps to promote housing supply across the UK include new measures and legislation to streamline planning and promote delivery, an ambition to deliver 1 million new homes in England, and targets to deliver 50,000 affordable new homes in Scotland, 20,000 affordable new homes in Wales<sup>[3]</sup> and over 8,000 social and affordable new homes in Northern Ireland<sup>[4]</sup>.

There is concern that this expansion will lead to increasing skills shortages across the sector. Inadequate supply of skilled labour has been identified repeatedly as a long-term problem facing house building and construction, due in part to the cyclical nature of the industry. For example, the *Home building skills research report 2013*<sup>[5]</sup> found that the problem of retaining skilled people in the already ageing workforce was exacerbated by the 2008 recession. The report found that one-fifth of employers surveyed were struggling with shortages: 87% believed that the industry will have a skills and knowledge problem in the future and, of those, 45% believed that the problem will become a major one as the sector returns to growth.

In particular, the report found that large and medium sized firms are experiencing shortages as follows<sup>[5]</sup>:

- 57% are having difficulty finding suitably qualified site managers, quantity surveyors and site operatives
- 43% of sub-contractors report current difficulties in hiring good workers
- product manufacturers are having difficulty finding suitable graduate trainees (60%) and technical advisory staff (47%)
- almost half of all building control officers report difficulties recruiting staff
- 53% of construction managers expect to have difficulty finding suitable sub-contract labour
- sub-contractors also think it will be hard to find labour, with 48% stating this as a probable problem area over the next few years.

Furthermore, the under-representation of particular groups – including women, ethnic minorities and people with disabilities – within construction has been identified as a barrier to attracting these groups to the sector. De Graft-Johnson *et al.*<sup>[6]</sup> reported on the diversity policies adopted in the construction industry and found that the under-representation of certain groups was stark; for example, women constitute only 13.5% of the sector’s workforce.

In the recent key publication *#notjustforboys*, collated by the Smith Institute, Clarke and Wall<sup>[7]</sup> list a number of barriers identified in research as discouraging women from working in the construction sector. These include:

- inappropriate and poor working and employment conditions, especially long working hours
- discriminatory recruitment practices, based on word of mouth rather than qualifications
- the persistence of a macho culture
- short-term concerns with output.

However, Clarke and Wall also point out that new developments in construction could pave the way for greater inclusivity for women and other groups that do not traditionally work in construction. These innovations centre on the adoption of low-energy construction methods, which require higher levels of education, broader qualification profiles (to overcome interfaces between the activities of different occupations) and integrated team working and communication (to implement the new ways of working). Clarke and Wall also suggest that developments in recruitment practices – with a gradual shift towards more formal strategies, for example recruitment agencies, and away from the ‘old boys networks’ – are likely to improve opportunities for workers from other groups to enter and progress in the sector.

The issue of diversity and the need to expand the talent pool is being increasingly acknowledged as business critical within the construction industry. For example, the Construction Industry Council (CIC) collaborated with a number of key stakeholders to publish *A blueprint for change*<sup>[8]</sup>, which identifies case study examples of good practice policies. One example is Thames Tideway Tunnel, which, in partnership with a pioneering initiative called ‘Women Returners’,



Returners who have landed roles at the Thames Tideway Tunnel project

became the first organisation outside the financial sector to launch a 'returnship' programme, aimed at helping professionals back into work after a career break. Women Returners helps professional women to relaunch their careers and supports organisations that offer paid assignments to those who have been out of the workforce for two years or more. After the success of its first pilot, Thames Tideway Tunnel's head of human resources, Julie Thornton, said<sup>[8]</sup>:

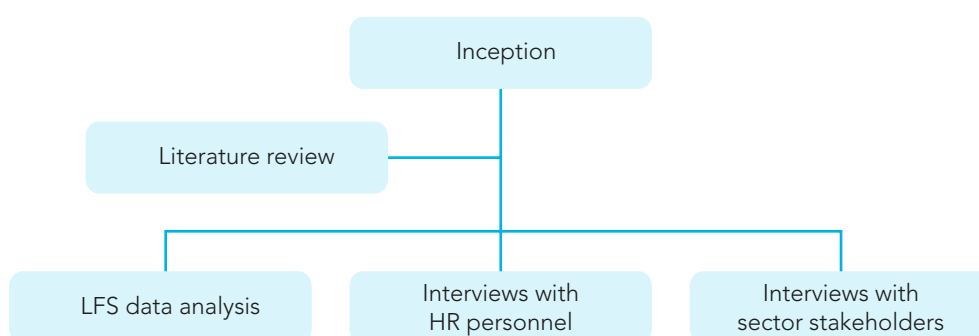
"I hope this encourages other engineering and construction companies to follow suit, and to realise they could be missing out on a hugely valuable pool of talent."

This report builds on previous work examining diversity in the construction industry and house-building sector, such as that carried out by Clarke and Herrmann<sup>[9]</sup>. It draws on up-to-date LFS data and brings together expert perspectives from those working on the ground – in both large organisations and small and medium sized (SME) house builders – to give an accurate picture of how house builders are meeting the diversity challenges and what will be the best strategies for improving diversity moving forward.

### 3 Aims and methodology

The main aims of this project were to identify:

- the age distribution of the workforce within the house-building sector
- the representation of women in various occupations within the house-building sector
- the barriers to recruiting women and young people into house building and construction
- systemic challenges that the sector faces moving forward
- examples of current good practice in tackling diversity issues within the sector, including industry-wide initiatives and strategies adopted by specific companies
- recommendations for tackling current and future diversity issues within house building and the wider construction industry.



**Figure 1** Project plan

The research comprised the activities set out in Figure 1. Following the inception meeting with NHBC, a desk-top review of literature was undertaken, covering academic literature and industry reports from the sector. This was followed by an analysis of LFS data for England, in particular an examination of industry and occupation data by gender and age.

The LFS is a nationally representative survey of the employment circumstances of the UK population. Undertaken quarterly by the Office for National Statistics, it is the largest household study in the UK and provides the official measures of employment (and unemployment). Interviews are conducted face-to-face or over the telephone and computer-assisted questionnaires are used to complete the survey. Each individual is asked to complete the survey five times, every four months over the course of a year.

For this analysis, data from three LFS datasets (for England only) were combined to boost the sample size. Datasets five quarters apart were selected to ensure that no replicated data was included. The three datasets included in the analysis were: July to September 2013, October to December 2014 and January to March 2016. The analysis concentrated on the five-digit standard industry classification (SIC) code 41.202 'Construction of domestic buildings' and occupational classifications within this sector. This analysis was contrasted with analysis of data from the broadest industrial classification (SIC) code division F 'Construction' to

identify variations in the workforce between the house-building sector and the broader construction industry.

A total of 15 focused interviews with senior human resources personnel from large house-building companies and representatives from SME house builders were carried out to garner the perspectives of companies across the sector. A further three interviews were carried out with two senior female industry commentators from the sector and a representative from a third sector organisation to gain an understanding of the most prominent initiatives and campaigns which are seeking to promote greater diversity across the sector.



## 4 Findings

### 4.1 Age distribution of the workforce

The age distribution of workers within the house-building sector, calculated using the five-digit SIC code 41.202 'Construction of domestic buildings', is shown in Table 1. This reveals that the highest proportion of workers in house building, some 27.2%, are aged 45–54 years, while the second largest age group, totalling 22%, comprises those aged 35–44 years. The proportions of workers aged 25–34 years and 55–64 years are similar, at around 19%. Less than 5% of workers in the house-building sector are aged 65 or older.

Age group	House-building workers		All workers (total sample population)	
	Count	%	Count	%
16–24	167	7.8	13,857	10.3
25–34	419	19.6	27,426	20.3
35–44	470	22.0	31,291	23.2
45–54	581	27.2	34,379	25.5
55–64	409	19.1	22,530	16.7
65 and over	92	4.3	5,583	4.1
Total	2,138		135,066	

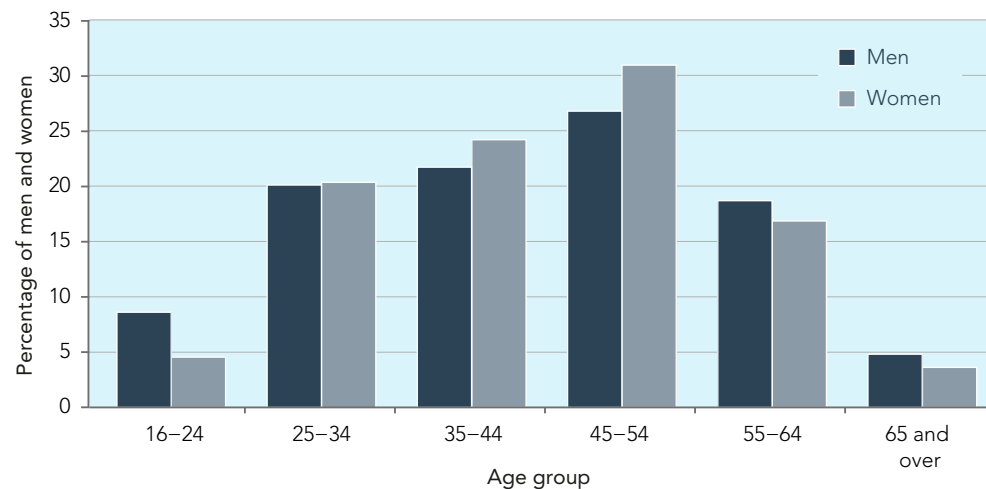
**Table 1** Age group distribution of workers in house building compared with all workers in the sample

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016. Total sample population of all workers derived from the variable 'Basic economic activity (International Labour Organization definition)', includes all workers self-reporting as an employee or self-employed.

The age distribution of all workers within the sample follows the same overall pattern, but suggests that a higher proportion of workers, totalling around 4 percentage points more, may be found spread among the three youngest categories. The proportion of workers in the oldest category, 65 and over, is very similar in both groups of workers.

The recent Farmer Review<sup>[10]</sup> has highlighted that the combination of the ageing of workers within construction and the low numbers of new entrants could threaten the future sustainability of the industry.

Figure 2 shows the gender split of workers within house building by age group. Both sexes show a greater concentration of workers in the two middle age groups, 35–44 years and 45–55 years. Although the number of women in the sample (271) is much lower than the number of men (1,867), there appears to be a slightly higher proportion of women in these two middle age groups and a higher proportion of men in the younger and older age groups.



**Figure 2** Distribution of men and women by age group in house building

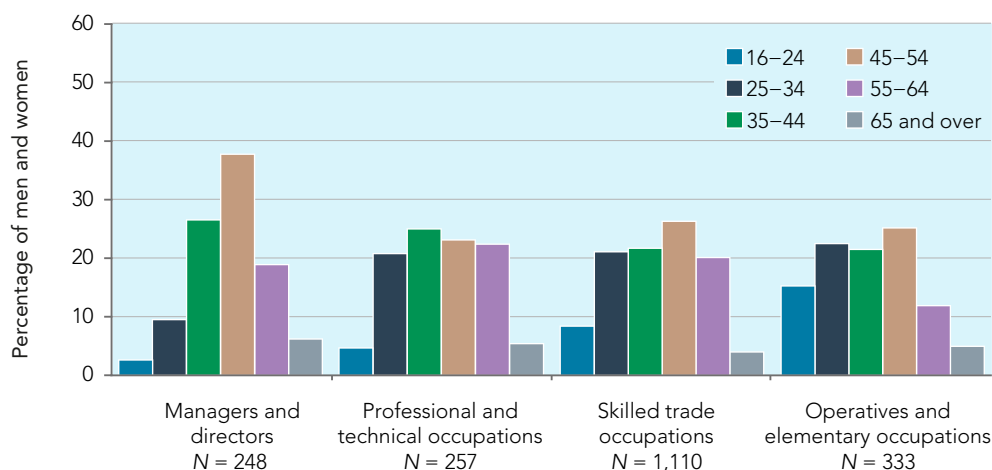
Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016.  $N = 2,138$  (male 1,867; female 271).

The distribution of male and female workers across the most prevalent occupation categories within house building is shown in Figure 3. Figure 4 shows the distribution across occupation categories for women only and Figure 5 shows the distribution for men only. These figures exclude two categories, namely administrative and secretarial workers and sales and service workers, in order to concentrate on roles that are more specific to house building.

Managers and directors are most likely to be aged 45–54, with 37.5% found in this age group. This is also the most prevalent age group for those who work in skilled trade occupations and operatives and elementary occupations\*. There is a more even age distribution of workers in the professional and technical occupations, with similar proportions of workers across the 25–34, 35–44, 45–54 and 55–64 age groups. The skilled trade occupations and operatives and elementary occupations categories have similar distributions for workers aged 25–54, with between 20% and 25% of workers being found in each of the three corresponding age groups. A relatively high percentage of younger workers is found in the operatives and elementary occupations category, with 15% reported in the 16–24 age group, while a higher proportion of workers in skilled trade occupations, just under 20%, are in the 55–64 age group.

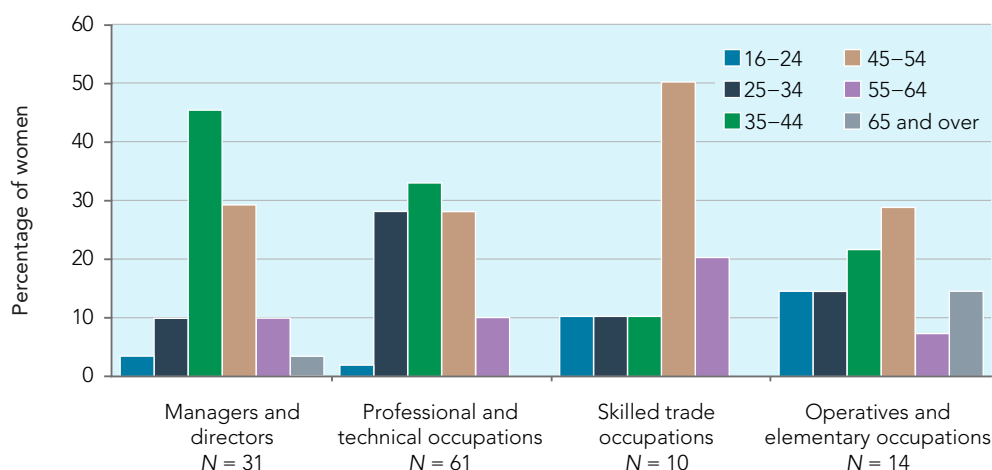
\* Operatives and elementary occupations is a combination of two categories: ‘process, plant and machine operatives’, who operate and monitor industrial and agricultural machinery and equipment on the spot or by remote control, drive and operate trains, motor vehicles and mobile machinery and equipment, or assemble products from component parts according to strict specifications and procedures; and ‘elementary occupations’, which consists of simple and routine tasks that mainly require the use of hand-held tools and often involve some physical effort.





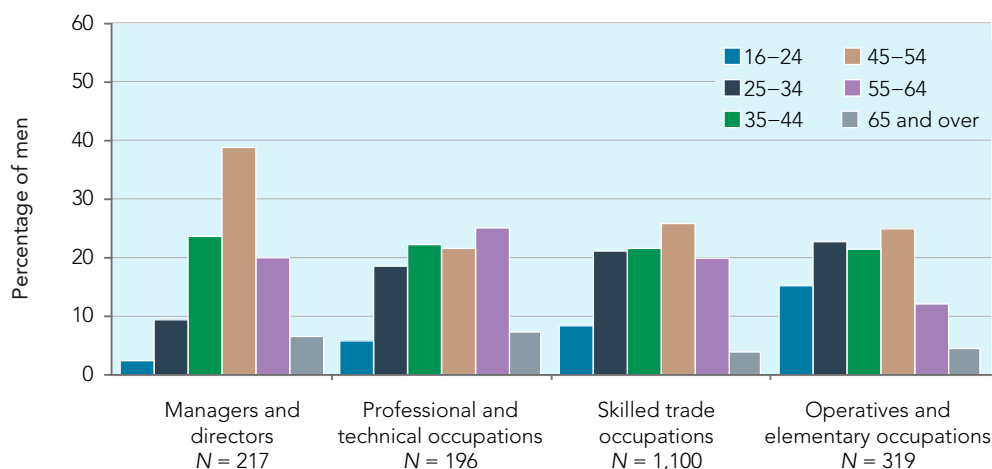
**Figure 3** Distribution of men and women in major occupation categories in house building by age group

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016. N = 1,948.



**Figure 4** Distribution of women in major occupation categories in house building by age group

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016. N = 116.



**Figure 5** Distribution of men in major occupation categories in house building by age group

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016. N = 1,832.

When examining the distribution of women working in house building by age groups in major occupations, a much broader spread is found (Figure 4). However, this is based on a small sample of just 116 people, as the majority of women working in construction are found within administrative and secretarial roles (see Figure 9). Of the women working in skilled trade occupations, 50% are in the 45–54 age group and only 10% are found in each of the three younger age groups. This indicates a need for greater incentives to attract and retain younger female workers in these trade occupations.

Unsurprisingly, Figure 5, which details the age distribution of men, is very similar to Figure 3 due to the predominance of men within the more traditional construction-related major occupational categories. The age distributions for skilled trade occupations and managerial positions in particular are very similar. There are, however, certain differences. For example, 25% of workers in professional and technical occupations (the highest proportion in that group) are in the second oldest age group (55–64 years), which is a higher figure than is seen in Figure 3. In addition, only 18.4% of professional and technical workers fall within the younger 25–34 age group, which is lower than for all workers shown in Figure 3. This demonstrates the higher concentration of older male workers within the house-building workforce and highlights the need for investment to encourage younger workers to enter the sector.

## 4.2 Gender distribution of the workforce

The gender distribution within the house-building workforce is summarised in Table 2, which shows that 12.5% of workers are women, with men making up the remaining 87.5%.

**Table 2** Gender distribution of workers in house building compared with all workers in the sample

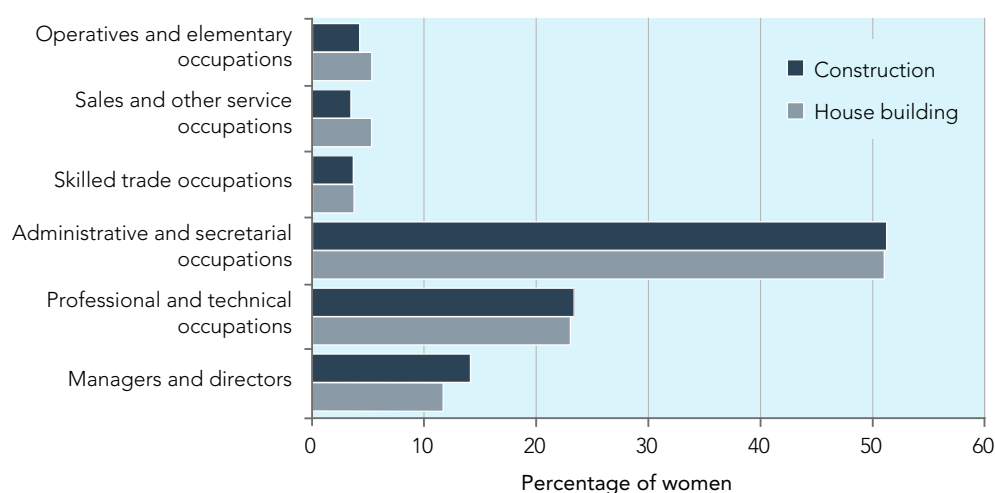
Gender	House-building workers		All workers (total sample population)	
	Count	%	Count	%
Men	1,858	87.5	69,210	51.2
Women	265	12.5	65,856	48.8
Total	2,123		135,066	

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016. Total sample population of all workers derived from the variable 'Basic economic activity (International Labour Organization definition)', includes all workers self-reporting as an employee or self-employed.

Figure 6 shows the distribution of female workers across the major occupational categories within the construction industry generally and in the house-building sector specifically. The figure shows that, in both cases, women are predominantly located in the administrative and secretarial occupations, with just over 50% of female workers within that occupational category. Professional and technical occupations are held by around 23% of women in both construction and house building within this sample. While 14.1% of women working in construction are managers or directors, only 11.7% of women working in house building hold similar positions. In addition, less than 4% of female workers within construction and house building have a skilled trade role. The proportion of female house-

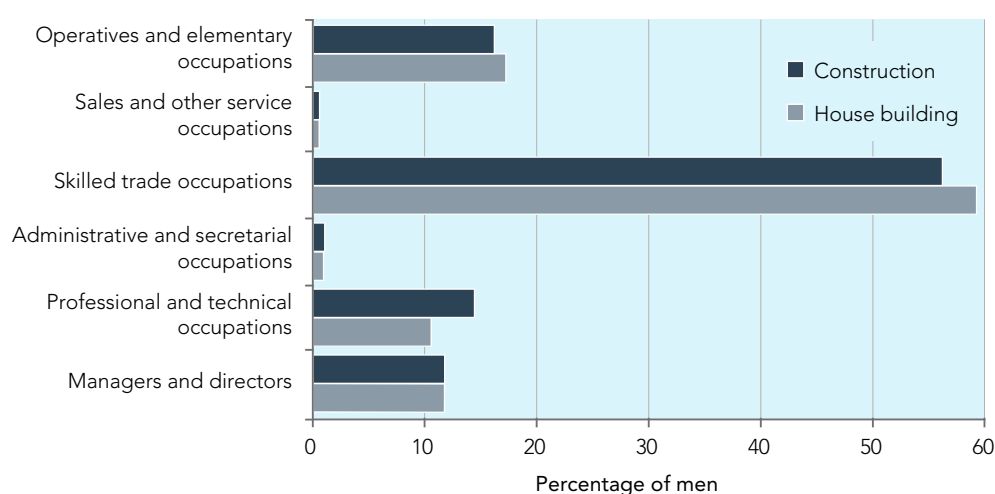
building workers who hold positions in sales is almost 2 percentage points higher than for women in construction. Similarly, the proportion of women who work in the operatives and elementary occupations group, which includes machine operation and routine tasks that mainly require the use of hand-held tools, is almost 1 percentage point higher in house building than in the broader construction industry.

The recent CIC report<sup>[6]</sup> states that 14.1% of the overall professional construction workforce is female (representing 207,564 individuals), a figure which is up from the 13.5% reported in 2009. The report also highlights a notable increase in the proportion of females in the 25 and below age group (1,047 compared with 3,705 for males in the same age group), highlighting that the industry needs to focus on retention as well as attracting applicants initially.



**Figure 6** Distribution of women in major occupation categories in construction and house building

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016. Construction:  $N = 1,257$ ; house building:  $N = 265$ .

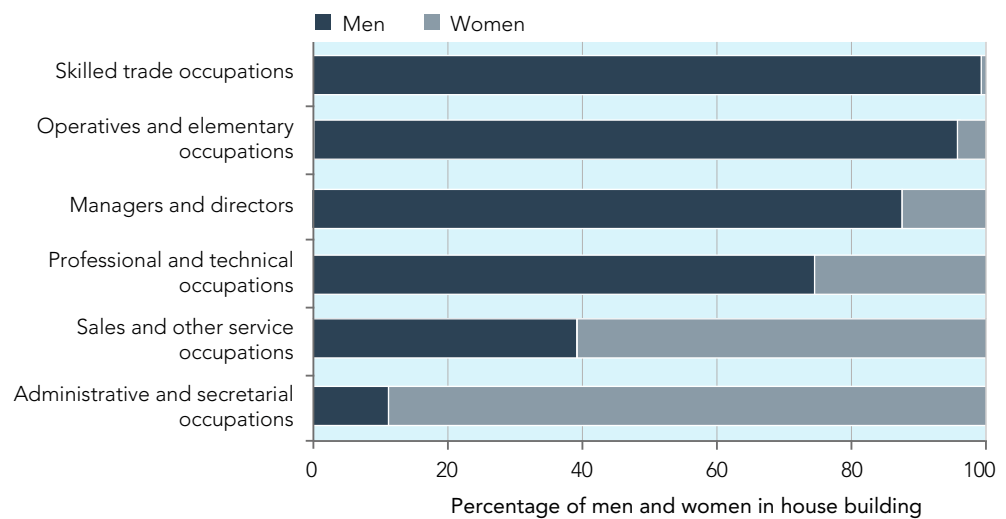


**Figure 7** Distribution of men in major occupation categories in construction and house building

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016. Construction:  $N = 6,153$ , house building:  $N = 1,858$ .

Figure 7 shows the distribution of men between the major occupational categories in construction and house building. The majority of male workers in both house building and construction work in the skilled trade occupations. The proportion is slightly higher (3 percentage points) in house building, with 59.2% of workers identified in these roles. Operatives and elementary occupations are the second most common, with 17.2% of men in house building and 16.2% of men in construction reported in these roles. Less than 1% of men within both house building and construction work in either sales or administrative and secretarial occupations. Just over 14% of men within construction work in a professional or technical position, a figure which is around 4 percentage points higher than the proportion of men in similar roles within house building. The proportion of male workers that are managers or directors is the same in both house building and construction, at 11.7%.

Figure 8 shows the proportions of men and women within the different major occupational categories. The percentages reported reveal the stark contrasts in the numbers of men and women in certain occupations. Men dominate several categories. Most strikingly, they make up 99.1% of workers in skilled trade occupations, as there were only ten women in skilled trades within the sample, compared with 1,100 men. Similarly, the operatives and elementary occupations category is dominated by men, with 95.8% of roles being held by men, and 87.5% of managers and directors are men. The professional and technical occupations are more balanced in terms of gender distribution, but men are still more prevalent, making up 74.2% of roles, compared with 25.8% that are held by women. The areas in which women dominate tend to include more generic and less construction-focused roles; for example, 88.8% of administrative and secretarial roles are held by women and women make up 60.9% of sales and other service workers.



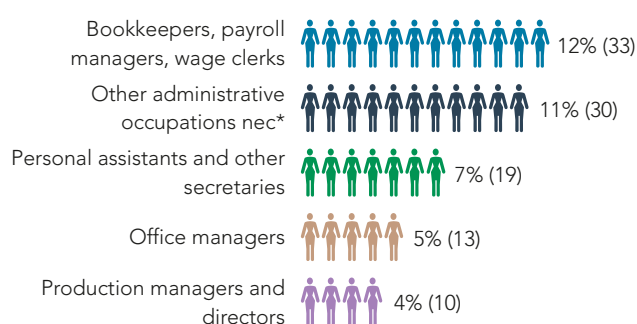
**Figure 8** Proportions of men and women by major occupation categories in house building

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016. *N* = 2,123.

### 4.3 Most common occupations

Figures 9 and 10 show the specific occupations that are the most common across the sample for women and men. For women, the top three occupations in house building are within administrative roles, while for men the top five are in skilled trades, elementary occupations and managerial roles.

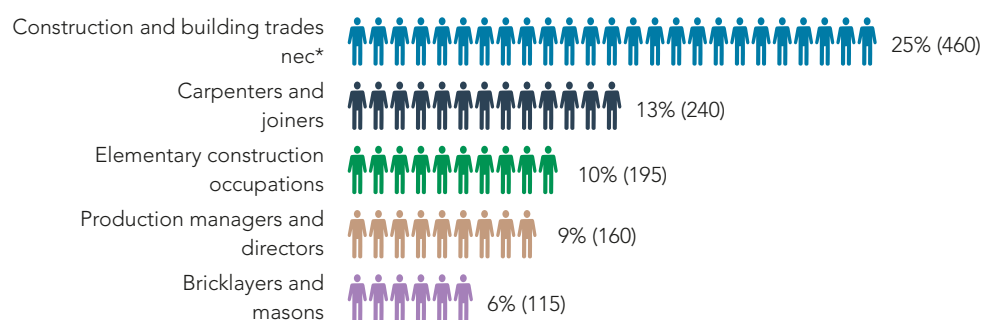
Anecdotal evidence from several of the participants interviewed for this research suggests there are greater numbers of women coming through their businesses within particular technical professions. Although this was not reflected in the LFS figures, taking membership of professional bodies into account may reveal this higher concentration of women. For example, 16% of the membership of the Royal Institute of British Architects (RIBA) are women and, for environmental professionals, BREEAM (an environmental assessment method) has a registered membership of which 40% are female. These figures may well indicate a shift towards greater numbers of women entering and remaining within technical professional occupations in house building and in construction more widely.



**Figure 9** Most prevalent occupations held by women in house building

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016.  $N = 265$ .

\* Not elsewhere categorised



**Figure 10** Most prevalent occupations held by men in house building

Source: Combined LFS datasets for July–September 2013, October–December 2014 and January–March 2016.  $N = 1,858$ .

\* Not elsewhere categorised

## 4.4 Challenges facing the sector: why so few women and young people?

Representatives from ten large house-building firms and five SME house builders were interviewed for this research. Two senior female industry commentators and one representative from a third sector organisation were also interviewed. From the thematic analysis of the interview data, it is clear that there are a number of often significant challenges that need to be overcome in order to encourage greater numbers of both women and young people into the sector. The most challenging areas identified are outlined below.

### Environment and perceptions of workplaces

When asked why there were so few women applying for roles in house-building organisations, the most common response from human resources and company representatives of house builders of all sizes was the negative perception of working conditions. This includes the idea that all construction work takes place on dirty and cold sites in all weathers, with a lack of bathroom facilities, especially for women, and very early starts. Furthermore, there were several references to a perceived sexist environment in terms of the language and behaviour of construction workers on site. Young people were also thought to be less likely to want to work on site as several interview participants cited conversations with young people who are more interested in working with new technology or computers in an office environment rather than on site.

*It is probably quite intimidating for women to go onto site with the stereotypical behaviour you hear about men on construction sites. But we are also finding that young men don't want to do it either, having to be outside in all weathers doing physical work is not preferred by many who would perhaps rather sit in an office and work on the computer instead.*

Company secretary, large firm



### Lack of applications by women

A recurrent theme across the interviews with companies was the severe or complete lack of applications from women to work in site-based roles. All companies did state that if women applied then they would be given the same opportunities to progress as men, but the key message was that they require the equivalent levels of experience. No company that was included in the interviews has considered using a quota to increase the numbers of women across their workforce.

*I've never had any applications from any females for site-based work at all – I can't employ women unless they apply. I only get female applicants for office-based jobs, like office manager.*

Managing director, SME

### Lack of positive promotion

Most of the participants identified negative stereotypes as being a barrier to engaging those groups not traditionally attracted to house building. The idea that the sector offers only site-based jobs and that these are not suitable for women, coupled with the perceived lack of good career opportunities, was a common topic of discussion. Lack of promotion of the excellent careers available and the diversity of roles within house building was seen as a significant weakness for the sector in terms of recruitment.

*There are definitely a lot of roles that people are just not aware of and all of our roles are gender neutral as all our roles are done by both sexes, even labouring and fork-lift driving. We've got one or two women doing these and all roles across the company. I think if you look historically they've always been considered to be men's roles. I think the majority of roles are gender neutral but it is how they are perceived and the stereotypes that people associate with construction.*

Talent manager, large firm

### Narrow recruitment strategies

Recruitment via employee referral schemes and informal networks is a strategy commonly adopted by companies, but it often results in the same workforce being recruited by different companies. For example, teams or individual workers may regularly shift between companies, using their contacts network, to get the best pay rates. They may return to the same companies numerous times. None of the companies interviewed has targeted specific demographic groups within their recruitment activities. The only evidence of this practice was limited to targeting young people for apprenticeships. While some companies did state that they advertise and have a presence on social media, this is an area that most companies need to develop.

*We don't use agencies, it is a last resort. What we do is, because myself and my colleagues have worked in the industry our whole working life so we know a lot of people, we've got quite a network so word of mouth is the most successful but we do use our website and sometimes put adverts on LinkedIn or in the newspaper.*

Technical manager, SME

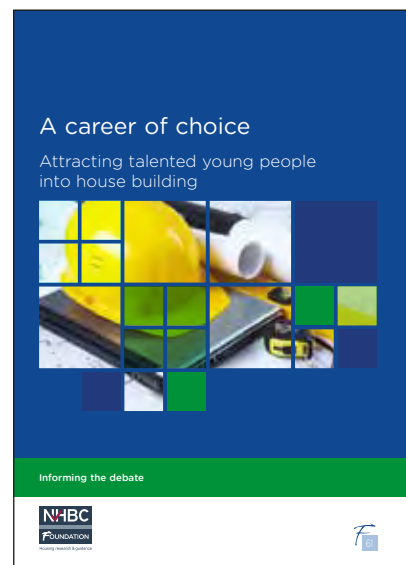
### Gender-biased recruitment literature and advertising

Another weakness identified in recruitment strategies is that the marketing of opportunities, both for employment and for training providers, is often very stereotypical. Several participants reported that this was an issue their company had reflected upon and that they were making changes to ensure they were up to date.

### 'Failure' of careers advice

This was a key point as it was raised by almost all the 18 interview participants. The participants claimed that careers advice is often out of date and that advisers are uninformed. As a result, advisers fail to depict accurately the opportunities in the sector or to highlight construction as an attractive career for all young people. Young people (and young women in particular) considering a career in construction need to be made aware of the variety of occupations and the flexibility offered in many roles, e.g. that many careers in house building can be family friendly and that careers in construction can be well paid and offer international opportunities. Careers education in schools has been identified as a key area that needs to be improved to support young people into education and work (see Hooley et al.<sup>[11]</sup> for more discussion on this issue).

The NHBC Foundation has also addressed the need for improved careers advice and has undertaken research into young people's perceptions of house building as a career choice<sup>[12]</sup>. This research found that there was some interest in a range of house-building jobs and that positive language, in relation to the role and contribution of house building, significantly raised the level of interest in careers in the sector.



*For careers advice there is a lack of understanding of the roles within construction. I get to speak to a lot of parents and most don't know the difference between a quantity surveyor and a building surveyor. The conception is also that it is likely to be poorly paid but that is just not the case. There are some very good roles within construction that are very well paid.*

Talent manager, large firm

### Family influences

Closely linked to the discussions that emerged about careers advice was the influence of older family members. It was suggested that parents often do not understand the diversity of roles and career prospects available or are wary of the sector. On the other hand, it was also suggested that, given the traditional practice of tradesmen following their father's career pathway, the persistent gender divide has restricted this option for daughters.

### Lack of external encouragement to improve diversity

The interviewees identified that due to the lack of demand by external agencies – whether it be government or tendering clients (e.g. local authorities) – for minimum recruitment criteria, such as quotas for women to be employed on projects, change from within has perhaps not been a priority for businesses.

*The push either has to come from an employer or has to come from external demand, for example large procurement clients that have big budgets, such as local authorities. Clients could demand a level of training, accreditation and evidence of skills development that would help drive up skills in the industry and they can use the same force for good, to demand greater diversity for example.*

Senior female industry commentator



## 4.5 Broader challenges for the sector

In addition to the challenges that the sector is facing with regard to the recruitment and retention of women and young workers, and to some extent feeding into those, are broader challenges that are impeding progress towards a more diverse sector.

### Skills shortages

A central contextual issue that was raised by all interview participants is the cyclical nature of house building, which at the time of this research – after a period of post-recession recovery – is experiencing high levels of growth. The cycle of recession and growth means that many skilled workers leave the industry during downturns, which has the knock-on effect of reducing the talent pool. This means that there is competition for many high-skilled workers. This is often most acute in locations that have high levels of investment, as companies are competing directly for workers in a depleted labour market.

*We have a high turnover in a lot of roles due to poaching from other house builders. In some roles people are being substantially overpaid as there are not enough skilled people to do the jobs that we need.*

HR director, large firm

*I think Brexit will take some time to come in but that it will have a further impact on skills shortages.*

Managing director, SME

### Outsourcing of site staff

Another key contextual issue facing the house-building sector is the high level of outsourcing of trades and other site-based workers. The volume and transient nature of sub-contracting mean that many of the on-site trade roles are managed by sub-contractors, and therefore the house-building companies themselves, historically and at present, have little say in who is actually working on site. A related point that emerged from the interviews with SME house builders is that smaller firms tend to have a lower turnover of staff. As a result, small companies often have less diverse workforces, as people tend to stay within a company over the long term and there are fewer opportunities for progression.

### Spiralling salaries

A knock-on effect of the skills shortages and the same site-based workforce moving between companies is the exponential rise in salaries, which is not sustainable. This issue highlights the need to expand the talent pool and increase investment in traineeships and apprenticeships, to 'grow your own' workforce.

*At the moment it is not about keeping skilled people within house building but keeping them in the company that is really challenging ... salaries are spiralling out of control.*

HR manager, large firm

## 4.6 Strategies currently being implemented

There is some evidence of progress being made to improve diversity within the companies that participated in this research. Effective strategies that have been identified include the following:

- **Succession planning** – examining and using demographic data on the workforce to plan ahead, implementing gap analysis to identify areas of work that are likely to require new staff and monitoring turnover and retention rates.
- **Talent scouting** – several companies employ talent scouting schemes to identify talent across the business and guide gifted individuals, particularly women, towards progression routes with more senior career trajectories.
- **Educational outreach** – a number of companies have engaged in semi-formal relationships with schools and colleges and provide site visits, career presentations and free health and safety and work experience placements. The location of the engagement often tends to be close to a company's head office or a high-volume work area, and it was identified that it is more difficult to build relationships in places distant from these locations.
- **Investment in apprentices, trainees and graduate schemes** – there is relatively small-scale progress within this area, but the majority of companies (including the SME house builders interviewed) have a keen awareness of the need to 'grow talent' and are investing in apprentices and graduates. Some are also setting targets for numbers of female recruits, and several want to encourage applications from those with transferable skills, for example ex-forces personnel.

### Investing in traineeships

*We've recruited a cohort of trainees which was targeted predominantly at the ex-forces as they have a lot of the transferable skills that we look for. In addition, because they are older and have more life experience they have been more engaged and looking at how they can progress within the sector.*

Large house builder

Training programmes are not just for young people, we need to exploit talent across all age groups.

### Investing in educational outreach

*We have a good relationship with a local school and have been involved with a number of activities, including giving talks about what we do. We've given tours to groups of kids on site and one that was keen we offered a work placement to, and he has now joined us as an apprentice. We have another one at the school now who is interested so we are offering him a work placement too. So although this is small scale we are hopeful more will follow from that school in the future.*

SME house builder

Building a good relationship with the school has been really valuable.

### Investing in apprenticeships

*We've collaborated with college training providers to develop bespoke programmes. This includes shadowing staff at the company, not just textbook learning but also key learning from the qualification and practical application on site. In addition, we provide CPD for the tutors as some of them have been out of the industry for quite a number of years, so we'll do CPD events for the tutors that teach our apprentices and get involved in mentoring. We'll take them out to site and demonstrate new methods.*

Large house builder

It's very much a partnership so we're learning from them and they're learning from us.

## 4.7 Initiatives and campaigns tackling diversity

There are a number of campaigns, initiatives and programmes developed by third sector organisations that aim to inspire and encourage young people and women to enter the construction industry and related careers and to support them to remain within the sector. The following is a selection of organisations that are doing really positive work to increase diversity and inclusivity across the industry.

- **Construction Youth Trust** ([www.constructionyouth.org.uk](http://www.constructionyouth.org.uk)) – a charity helping young people in England and Wales to build better futures by giving them access to training, education and employment opportunities in the construction industry. Two of its current campaigns are:

**#notjustforboys** – which aims to change the misconception that construction careers are only for men by engaging with young women to demystify the industry. It offers courses to provide hands-on experience and training and supports sustained work placements. The campaign highlights the fact that it is vital for the industry to plan for the future and secure the talent and skills it will need by ensuring that the next generation is empowered to consider and pursue STEM careers – and that this needs to include women.

**#experienceconstruction** – which aims to encourage young people, parents and teachers, and the industry in general, to consider work experience placements in construction to allow the next generation to gain a clearer understanding of the opportunities and careers available to them. This initiative was launched in September 2016 and placements have been pledged by over 50 companies so far.

- **Fairness, Inclusion and Respect (FIR) toolkit** ([www.citb.co.uk/employer-support/fairness-inclusion-and-respect](http://www.citb.co.uk/employer-support/fairness-inclusion-and-respect)) – developed by the Construction Industry Training Board and partners from across the industry, the FIR toolkit intends to promote equality and diversity and help combat discrimination. It comprises e-learning, toolbox talks and a resource library that is freely available to any company that wishes to use it.
- **House Building Careers** (<http://housebuildingcareers.org.uk>) – the Home Builders Federation set up the House Building Careers initiative and website to promote the house-building sector and provide practical information for teachers, parents and young people interested in a career in house building. The website includes a variety of information about pathways into house building, shows the diversity of careers available, with example profiles, and provides a platform that allows teachers to arrange site visits for young people.





- **NHBC Foundation: *Find your career in the house-building industry*** ([housebuildingcareers.org.uk/film](http://housebuildingcareers.org.uk/film)) – as a result of research into young people’s perceptions of careers in construction, this short film was produced (using Lego characters) to inform young people about the different career options available within house building.
- **Chicks with Bricks** ([www.chickswithbricks.com](http://www.chickswithbricks.com)) – is a proactive network for established and emerging women in the construction industry. It hosts networking events to connect and inspire women within architecture and the built environment and across the construction industry.
- **Jobs for the Girls** ([www.jobsforthegirls.com](http://www.jobsforthegirls.com)) – is an initiative that has campaigned on a range of issues, including promoting case studies of female electrical contractors and tackling sexist advertising of construction. It has also funded an Apprentice Academy offering targeted funding support to help women take up apprenticeships.
- **WiCAT – Women in Construction, Arts and Technology** ([www.wicat.org.uk](http://www.wicat.org.uk)) – a not-for-profit organisation that empowers and supports women by offering basic courses to inspire and inform women considering careers in construction. The courses – which are taught at the Women’s Construction Centre in Sheffield by skilled and qualified women with construction industry experience – include plastering, plumbing, bricklaying, Excel bookkeeping and basic electrics. The Centre allows women not only to train in the workshop but, where safety allows, gives them the opportunity to undertake real jobs in the development and maintenance of the Centre.

## 5 Looking ahead: recommendations for the future

This report has established that there continues to be a lack of gender and age diversity within the workforce in the house-building sector, with a large majority of occupations being dominated by an ageing, male workforce. There are a number of challenges that need to be tackled by the sector, and the broader construction industry, that are deep-rooted and endemic, such as ongoing stereotyping and antiquated recruitment practices. There are also new challenges on the horizon for the sector, such as the impact of Brexit. Some progress has been made, as there is a keen awareness within the majority of companies interviewed for this research that diversity needs to be on the agenda, and there is some evidence that steps are being taken to tackle this issue.

Valuable work is also under way in the third sector to inspire and inform other groups that there are excellent career paths to follow within house building and related professions. However, significant work still needs to be done and, as a result of the research outlined within this report, the following recommendations are offered to help foster the further development of diversity and inclusivity within the house-building sector.

### 5.1 Top level/government

- **Recognition and awareness** – the government must acknowledge that the current lack of diversity is a serious issue which results in the house-building industry missing out on talent; action needs to be taken to ensure the future success of the sector.
- **Sustained investment** – the government and housing developers need to commit to continued investment, even during periods of economic decline, in order to sustain the talent pool, encourage new starters into the sector and ensure that demand for skilled workers remains high.
- **Investment in career guidance** – careers education in schools must be prioritised to ensure that young people (and adults throughout their careers) are given impartial, accurate advice to guide them in decision making for the future.

### 5.2 Companies

- **Greater collaboration** – companies have to work together to formulate strategic solutions and develop common programmes and resources to provide a consistent approach to tackling diversity.
- **Reflection and learning** – vital lessons can be learned from other industries and organisations with similar demographic issues which have successfully begun to tackle diversity issues, e.g. the British military.
- **Awareness raising** – companies need to improve the promotion of house building and construction with a focus on the rich variety of roles available, to spotlight examples that illustrate the unique roles, progressive career trajectories, good salaries, diverse working environments and international opportunities that are available.

- **Expansion of initiatives** – there is great work happening, but the profile of campaigns needs to be raised, across companies of all sizes, to facilitate engagement and collaboration.
- **Funding opportunities** – initiatives such as apprenticeship academies need further investment to increase their breadth of reach.
- **Community outreach** – company investment in outreach programmes needs to be expanded, with particular focus on engaging young people in schools and interaction with parents. This goes hand in hand with the need for cross-company collaboration in order to reach the next generation of house builders.
- **Role models** – both cross-sector publications and in-house communications must feature more women and other non-traditional groups in traditionally male roles to counter the endemic stereotyping in the industry.

### 5.3 Human resources

- **Development of social media** – many companies are failing to make the most effective use of social media. It can provide a powerful platform from which to market careers in house building effectively, targeting certain demographic groups – such as young people, young women and older workers with transferable skills.
- **Promotion of women** – companies should be encouraged to promote women into more senior positions and non-executive board roles. This will not only help to ensure greater representation but would also highlight female success and inspire the next generation of female leaders in house building.
- **Encouragement and support for retraining** – companies should consider offering to support current staff, in particular women, to retrain in trade or technical roles, both to capitalise on talent and loyalty within their business and to promote career progression.
- **Mentoring young people already within the sector** – companies should designate workers with a few years' experience as mentors to give young people models that they can more easily relate to and who embody the principle of hard work leading to progression and success in the company.



# Notes and references

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- 11 Professionalism in careers. Hooley, T, Johnson, C and Neary, S. Careers England and the Career Development Institute. 2016.
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## The gender and age profile of the house-building sector

The UK house-building industry is being challenged to deliver an increasing number of new homes. However, it is also facing skills shortages among its workforce, as older workers leave the industry but are not replaced by new entrants.

This report aims to establish the diversity of the house-building industry in terms of the age and gender profile of its workforce. It finds that the industry continues to have a predominantly male workforce and is over-reliant on older workers. Women are engaged in house building, but in relatively small numbers and predominantly in office-based roles.

The industry is taking steps to tackle the growing skills shortages, but more needs to be done. This report summarises the actions that have been taken so far, and identifies opportunities for further progress on increasing the diversity of the workforce in the future.



The NHBC Foundation, established in 2006, provides high quality research and practical guidance to support the house-building industry as it addresses the challenges of delivering 21st century new homes. Visit [www.nhbcfoundation.org](http://www.nhbcfoundation.org) to find out more about the NHBC Foundation research programme.

