

# The impact of the ageing population

on the construction industry



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# Executive summary

For the first time in Britain, there are more people of a pensionable age than children under sixteen<sup>1</sup>: a changing demographic that the Government describes in its Lifetime Homes, Lifetime Neighbourhood Strategy as the biggest challenge of the 21st century.

Approached from the perspective of senior level construction workers, this research examines how the ageing population will impact the industry and reveals a serious challenge. The state of the existing building stock needs sober consideration, as many homes and buildings are unsuitable for – and inaccessible to – older people. In addition, new buildings need to be designed to accommodate all age groups, including the older members of society.

However, the ageing population doesn't only affect building design and structure; it's also having a serious impact on the construction workforce and the industry itself. The survey exposes two important trends in terms of labour-force numbers within certain age groups:

- 1) In the construction industry, the total of workers over 60 has increased more than any other age group.
- 2) the biggest reduction is in the total of workers under 30.

The likely impact is as clear as it is worrying: a great deal of knowledge and many vital skills are about to be lost and fewer professionals are in line to replace either.

This survey also shows that the majority of respondents (76%) are aware of the challenges facing the construction industry, but less than one quarter (24%) are aware of these issues being taken into consideration on projects.

While the Government appears to have recognised the urgency of this matter and considered it at some length, 60% of respondents feel that the political leaders of the United Kingdom (UK) aren't doing enough to deal with this challenge. Despite this view, a sense of urgency has not filtered down to the construction industry – even though making important changes now could greatly improve the environment for the elderly. More needs to be done to raise awareness across the professions, and to assess the importance of developing standards that help improve public and commercial buildings.

# Introduction

The Chartered Institute of Building (CIOB) is the leading professional body for managers in the global construction industry. Established in 1834, the CIOB continues to lead the way in establishing, promoting and maintaining standards of excellence in the sector.

The CIOB draws its members from a wide range of professional disciplines, from across the building and construction supply chains. These include clients, consultants and contractors, as well as specialists in regulation, research and education.

The purpose of this research is to investigate the effect of the ageing population upon the construction industry. Through the perception of construction professionals, it examines the industry's awareness of the issue – and its response to it, in terms of the best way to approach the challenge.

This research will attempt to raise awareness of the issue in general, as well as promote best practice and age awareness within the construction industry itself.

# Background information

## What is an ageing population?

An ageing population means that there's a higher number of people living for longer than there are people giving birth. This has led to today's unique situation in the UK: there are now more people of a pensionable age than children under sixteen.

A recent study shows that the 100+ age group is the fastest growing in many developed countries. In the United States, the number of people over 100 is expected to quadruple by 2030. The number of British centenarians is currently rising at 5% a year<sup>2</sup>, while those over 80 comprise the fastest growing age group in the United Kingdom.

## Why do we have an ageing population?

Several factors have contributed to the increase in the number of people of a pensionable age.

One of the main reasons is the improvement in mortality at older ages. Health care and health awareness both continue to improve, with new breakthroughs and knowledge that allow people to live longer and remain healthy.

There have been improvements in housing and living standards too. It's become increasingly possible for the elderly to heat their homes (because of increased energy efficiency) and to continue living independently for longer thanks to the improved layout of houses.

Another contributory factor relates to the number of babies born after World War Two, in the 'baby boom' period. These people are now reaching retirement age, causing a great surge in the numbers.

## What are the challenges?

This change in the demographics of the population leads to a number of challenges, affecting many aspects of society.

One of the biggest issues is the strain on the economy. The decline in the ratio of workers to pensioners will cause a great burden on those who are still working. There are currently 3.3 people of working age to each person above state pension age, but this figure is expected to drop to 2.9 in 2032<sup>3</sup>. One way to meet this challenge would be to extend the retirement age and keep more people in work. This is already being done, by equalising the retirement age of men and women at 65. There is also a plan to increase the state pension age to 68 by 2050<sup>4</sup>.

<sup>2</sup> Office of National Statistics

<sup>3</sup> Office of National Statistics

<sup>4</sup> Department for Work and Pensions

# Methodology

An ageing population will also increase the pressure felt by the health care system, as the demand for services rises. This is one of the reasons why it's important to adapt the built environment, to make homes safer and the community more easily accessible. If these improvements are made, elderly people will be able to stay in their own homes and keep their independence for longer.

It is crucial for housing to be improved since a third of elderly people live in unsuitable homes<sup>5</sup> and many new houses are unsuited to the changing needs of the population. In response, the Government has developed the Lifetime Homes Standard. This addresses the changes that should be made in homes to ensure their suitability for all age groups, and identifies ways that the wider community can be adapted to make it accessible and suited to the needs of everyone.

## Impact on the construction industry

### Construction projects

The construction industry must start to take into account the changing needs of the population in its projects. It's not just homes that need to be adapted to ensure a safe and inclusive environment, but also the wider surroundings.

Local shops and town centres have to be accessible and to accommodate the needs of the elderly. This survey indicates that the biggest improvements could be made to public transportation (70%), better access (63%) and better pavements and roads (49%).

With the extension of the retirement age, it's also important that commercial buildings are properly adapted, to ensure a safe environment for an older workforce.

### Construction workforce

The construction industry has what is considered an ageing workforce: the number of employees above 60 is increasing more than any other age group. This has been acknowledged by this survey, with 39% of respondents stating that the number of workers above 60 was increasing.

This will have a serious affect on the industry, as essential skills will be lost when employees retire. This is exacerbated by the fact that the number of new recruits is declining and there will be nobody available to replace those retiring.

Extending the retirement age may not offer the solution the industry needs. Many construction jobs are very physically demanding and so it's not always possible to safely extend the retirement age for all sectors of the industry.

The survey was conducted using a web based questionnaire, which respondents could access through the CIOB website ([www.ciob.org.uk](http://www.ciob.org.uk)).

Respondents were asked general demographic questions regarding their age, gender, job level and sector and the number of employees in their organisation.

An email was sent out to 26,945 CIOB members, informing them that the survey was online. The survey was also available to the wider industry through the CIOB website.

There were both quantitative and qualitative questions in the survey, to allow respondents the opportunity to openly express their opinions on the topic.

## The sample

The sample consisted of 2096 construction industry professionals, the majority of whom described themselves as management: director and senior level 34% and middle and junior level 31%.

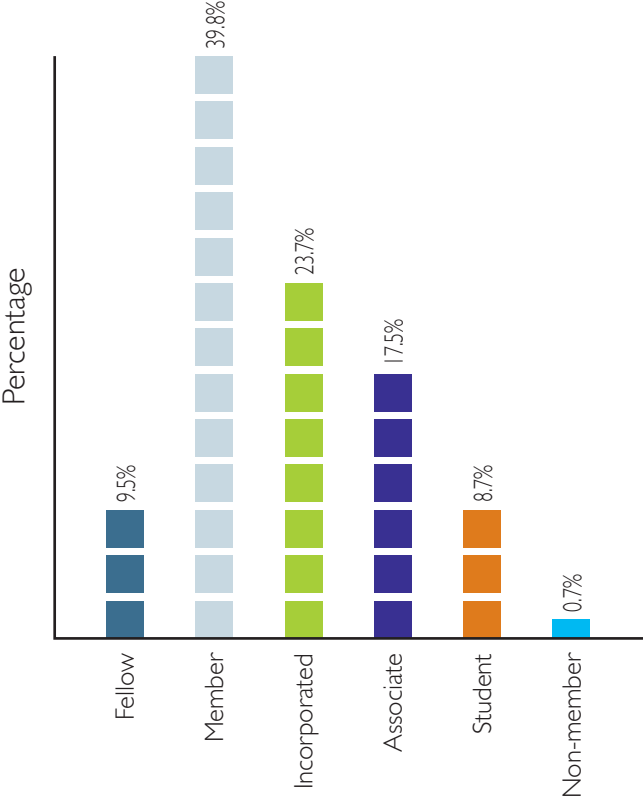
95% of respondents were male and 5% were women.

88% of respondents were located in the United Kingdom and 12% in the rest of the world.

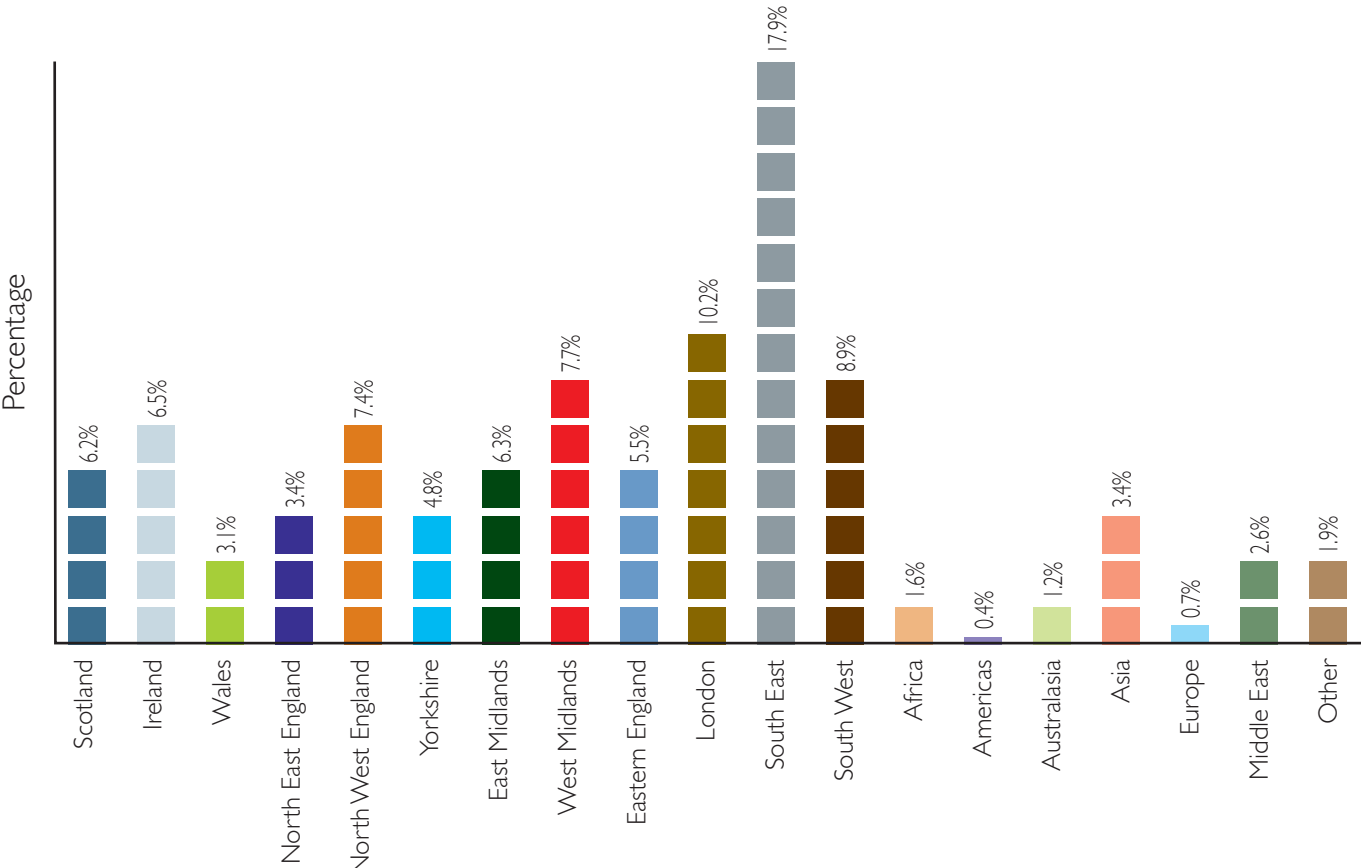
42% of respondents worked for an organisation employing more than 500 people.

# Results

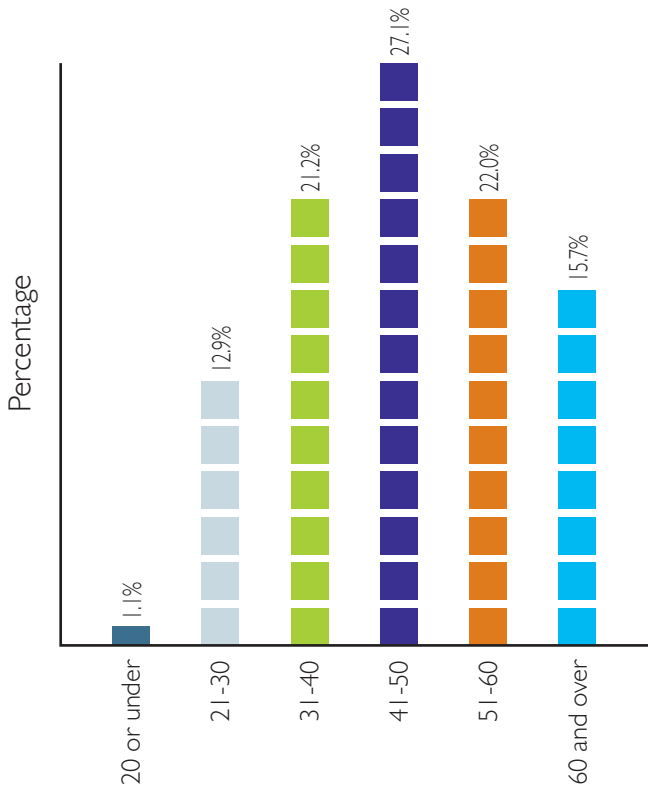
## I. Membership Level



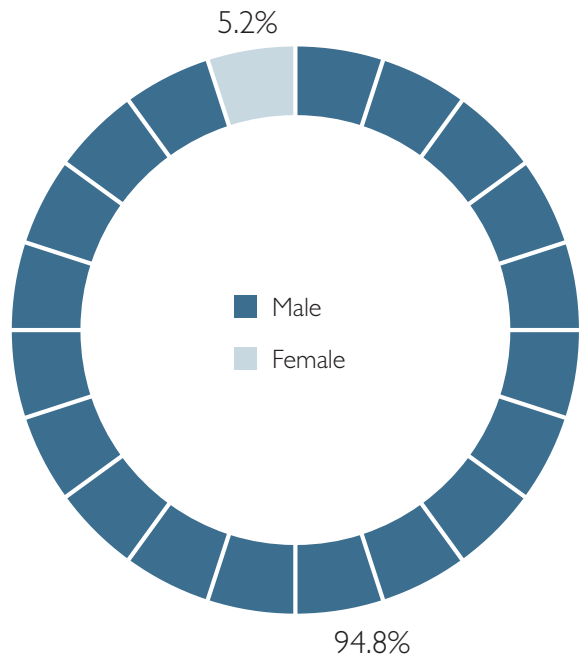
## 2. Location



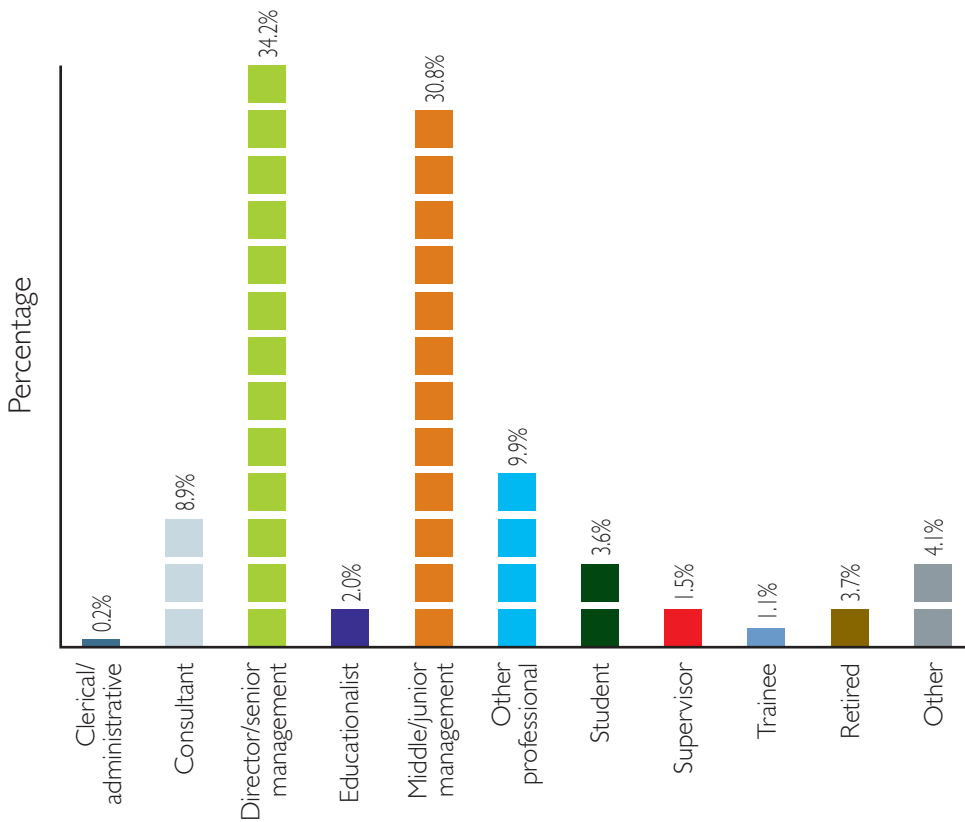
### 3. Age



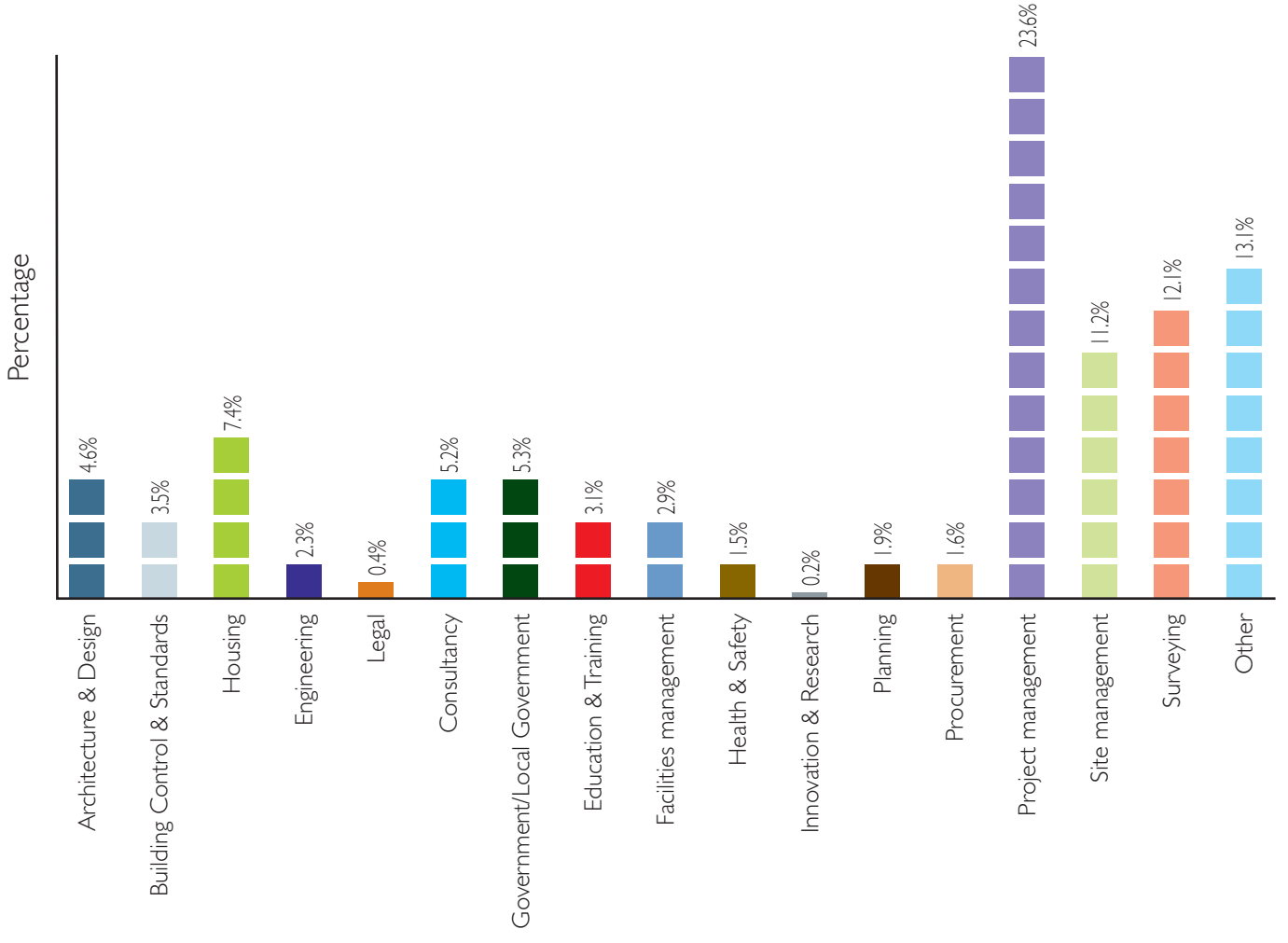
### 4. Gender



### 5. Job level

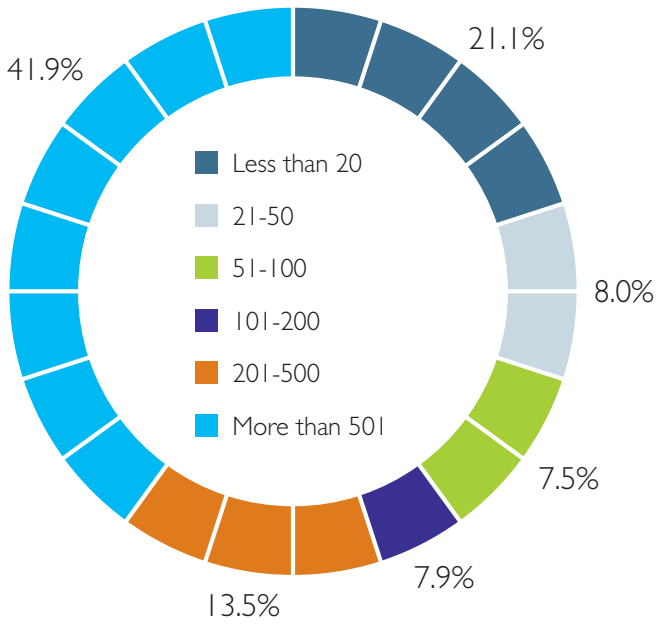


## 6. Job sector

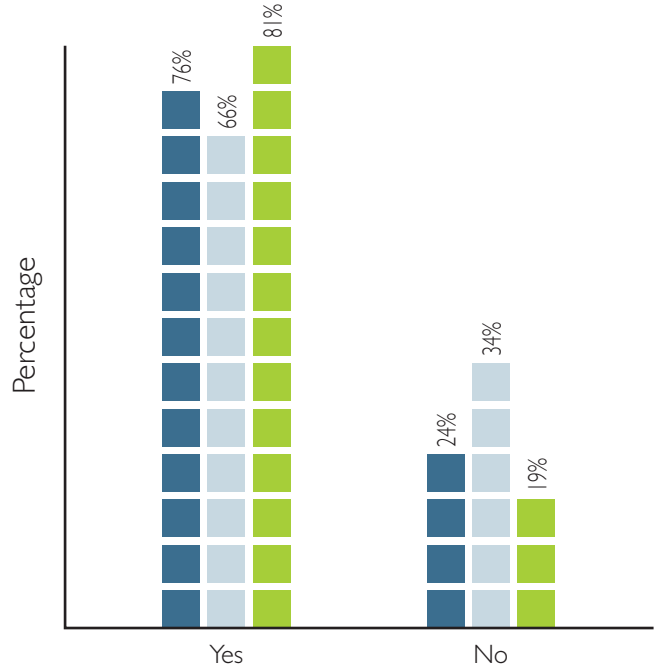




**7. How many people are employed in your organisation?**



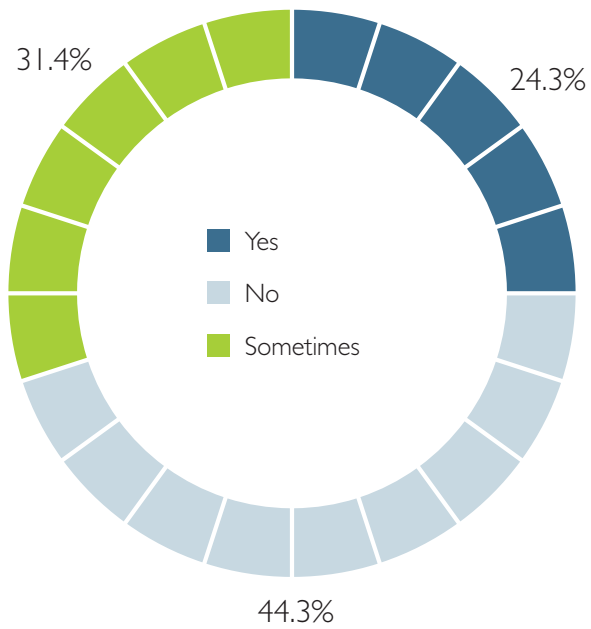
**8. Are you aware of the challenges facing the construction industry as a result of an ageing population?**



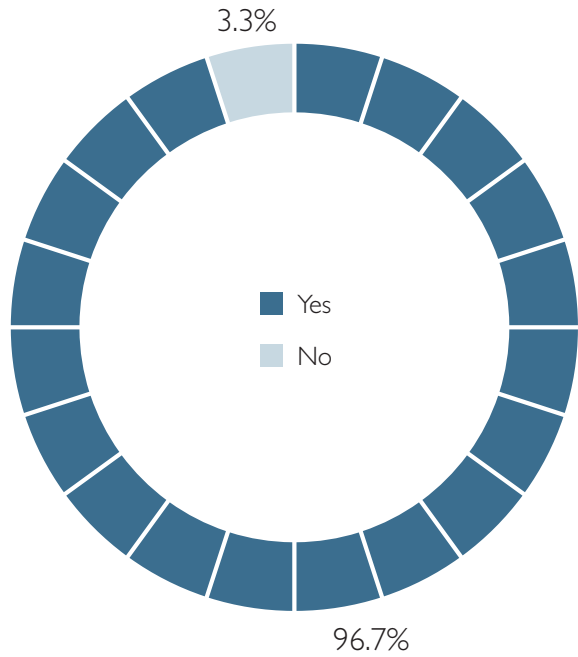
- All
- Below 40 years old
- Above 40 years old

Respondents aged over 60 were the most aware (87%) of the challenges to the industry posed by the ageing population. 63% of respondents aged 21-30 were aware of the challenges; this was the lowest percentage of “Yes” responses.

**9. Are the changing needs of an ageing population reflected in your current construction projects?**



**10. Do you think it is important to adapt the built environment to cater for the needs of older people?**



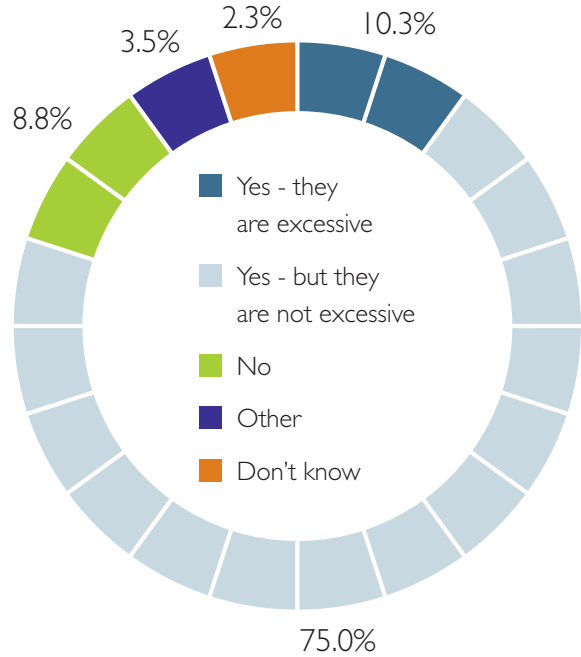
It was mainly respondents working in the housing sector who were reflecting the needs of the ageing population in their projects. 41% said they were reflecting these changing needs, while 29% said they were sometimes reflected.

**11. How would you prioritise the following when improving the built environment for the elderly? (1 – highest priority; 3 – lowest priority)**

In order of priority:	
1	Accessibility
2	Energy efficiency
3	Adaptability

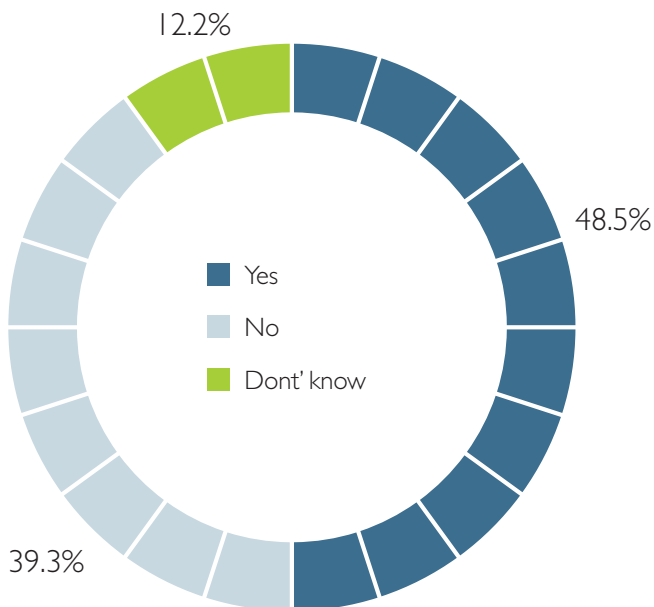
52% of respondents selected "Accessibility" as a first choice for improvement.

**12. Do you believe that there are additional costs to make buildings more appropriate for the elderly?**

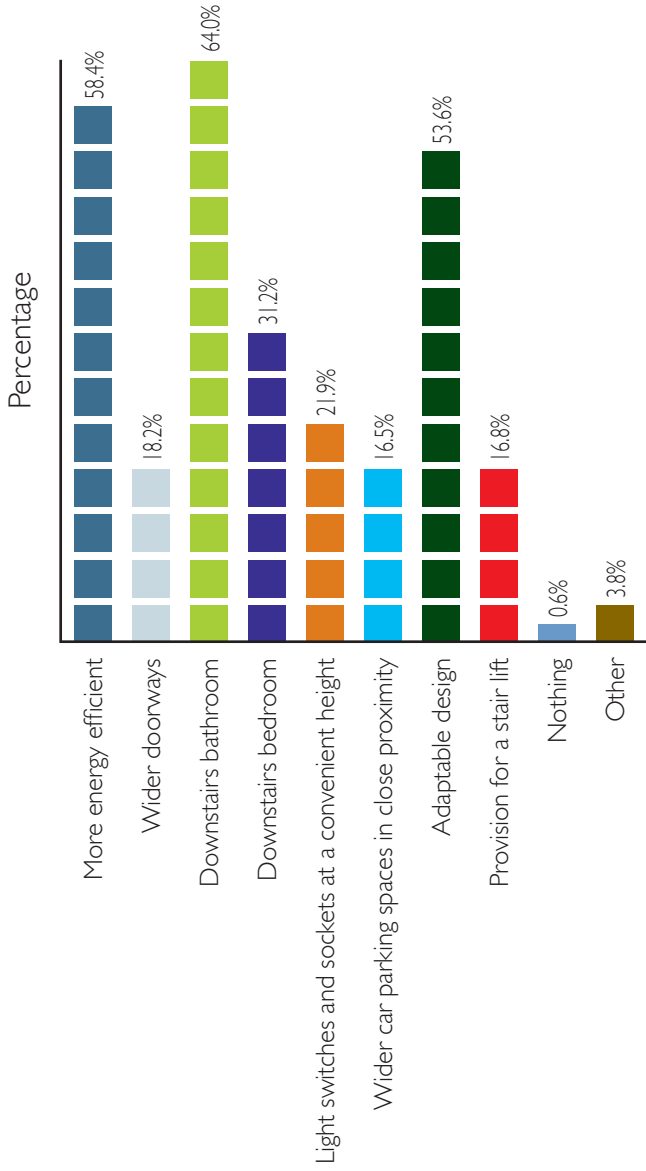


Of those respondents already adapting their projects to improve the built environment, 74% state that any additional costs are not excessive.

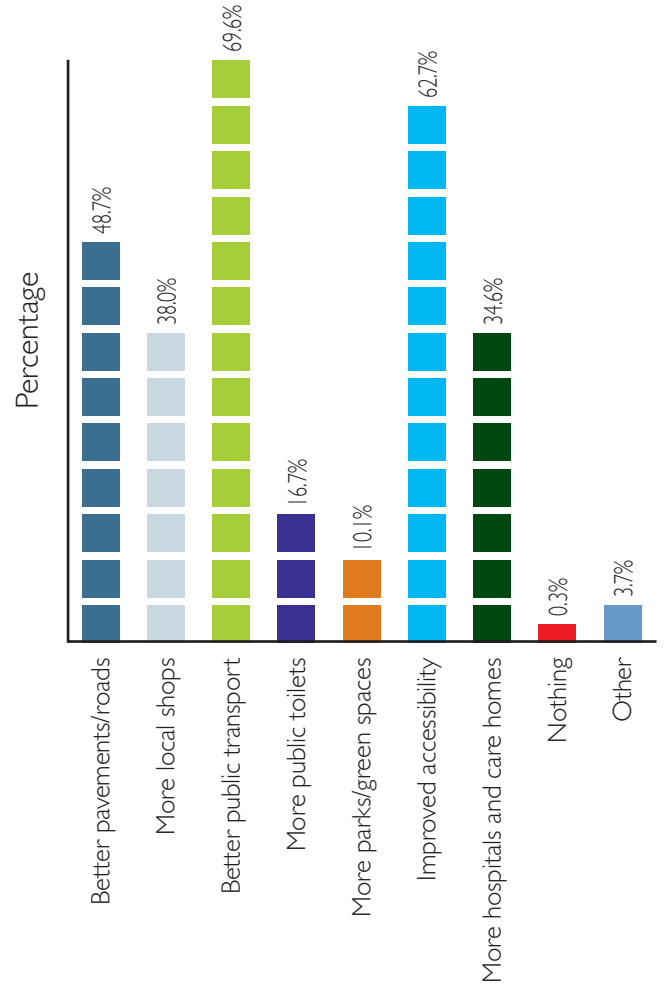
**13. Do you think workspaces need to be adapted to address the changing population due to the possibility of an extension of the retirement age?**



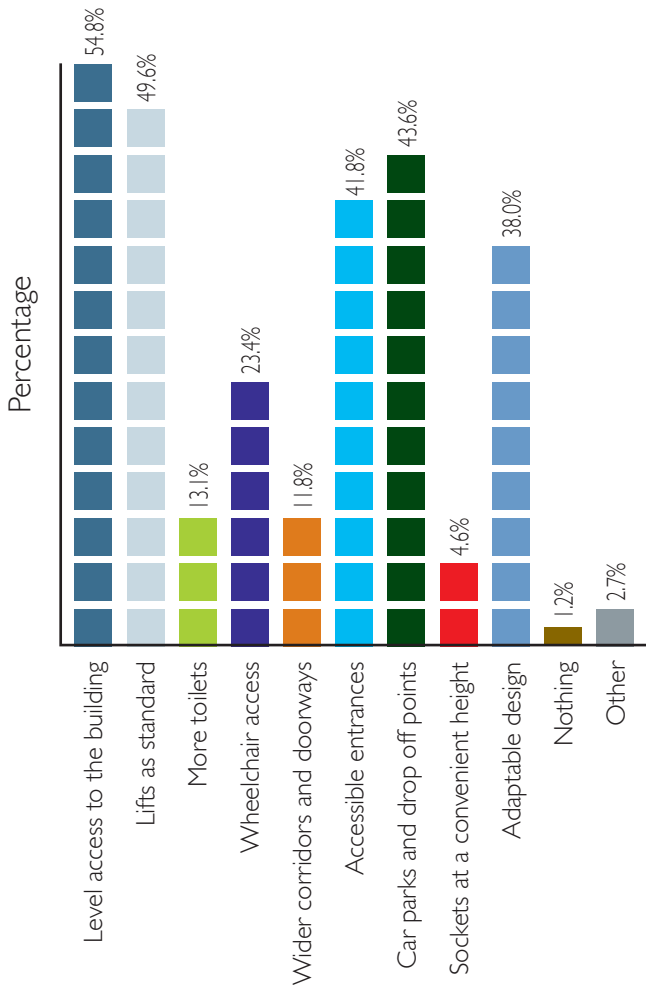
**14. What do you think are the biggest improvements that can be made to housing to help the elderly?**



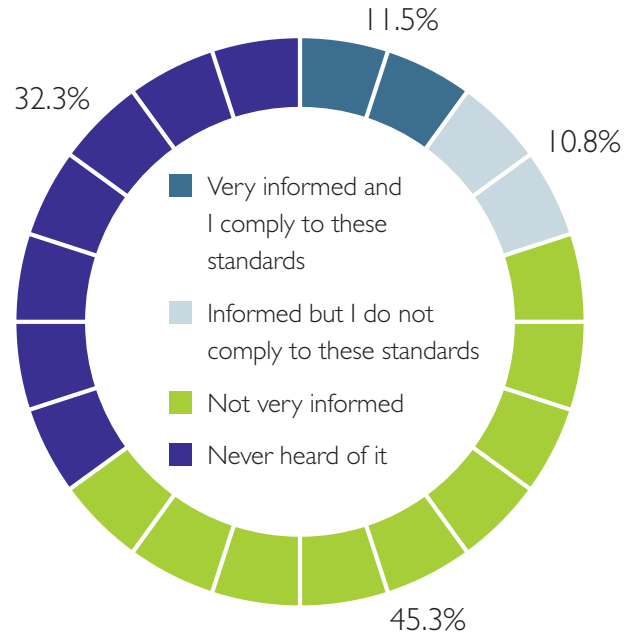
**15. What do you think are the biggest improvements that can be made to the local community to help the elderly?**



**16. What do you think are the biggest improvements that can be made to commercial buildings to help the elderly?**

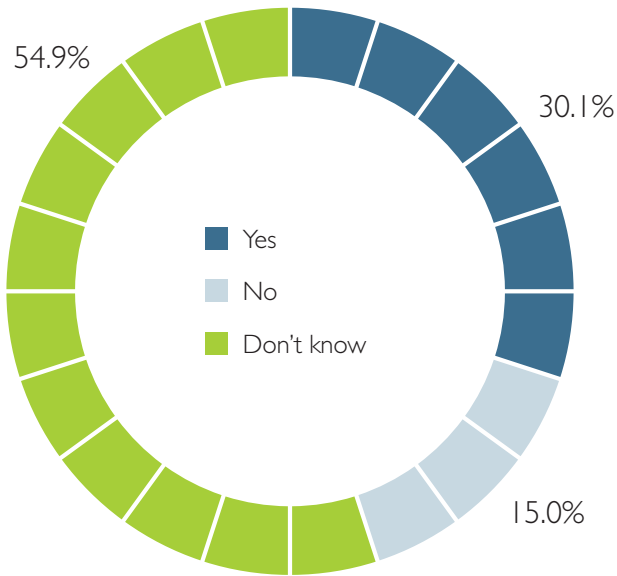


**17. How informed are you about the Lifetime Homes Standard? (The standard sets out design criteria for lifetimes homes, but is not mandatory)**



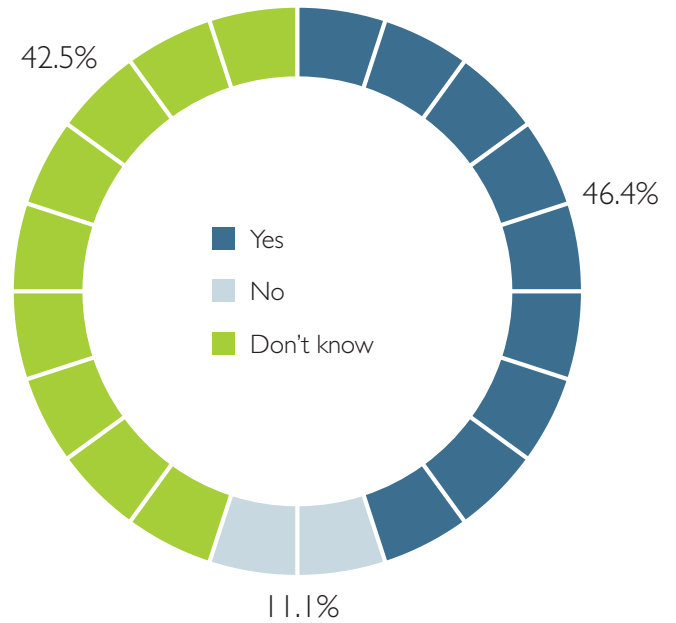
Respondents from the housing sector were the most informed about this standard. 34% comply with the standards, 25% are informed but do not comply, and only 9% had never heard of them.

**18. Do you think the Lifetime Home Standard should be compulsory?**



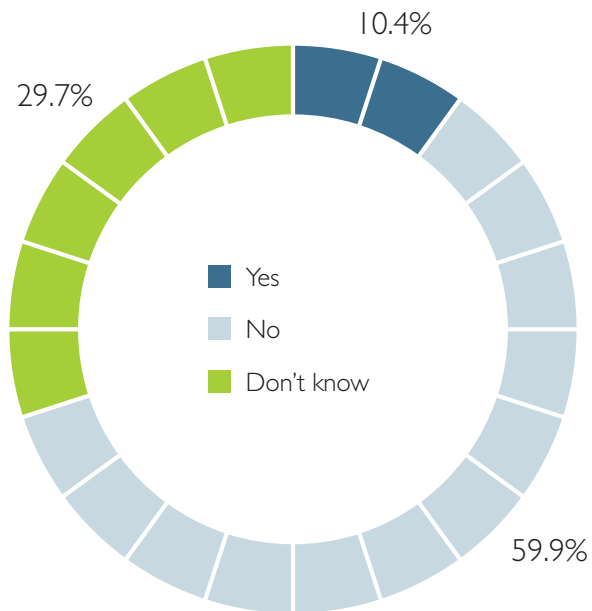
37% of respondents from the housing sector believe that this standard should be compulsory; 38% think it should not be. In the latter camp, many are concerned that the standard doesn't apply to all members of society. Furthermore, these respondents believe that it's hard to incorporate the designs in small houses, which are typically starter homes for new buyers.

**19. Do you think a similar set of standards is needed for commercial and public buildings?**



68% of respondents involved with building control and standards believe that a set of standards is needed for commercial and public buildings.

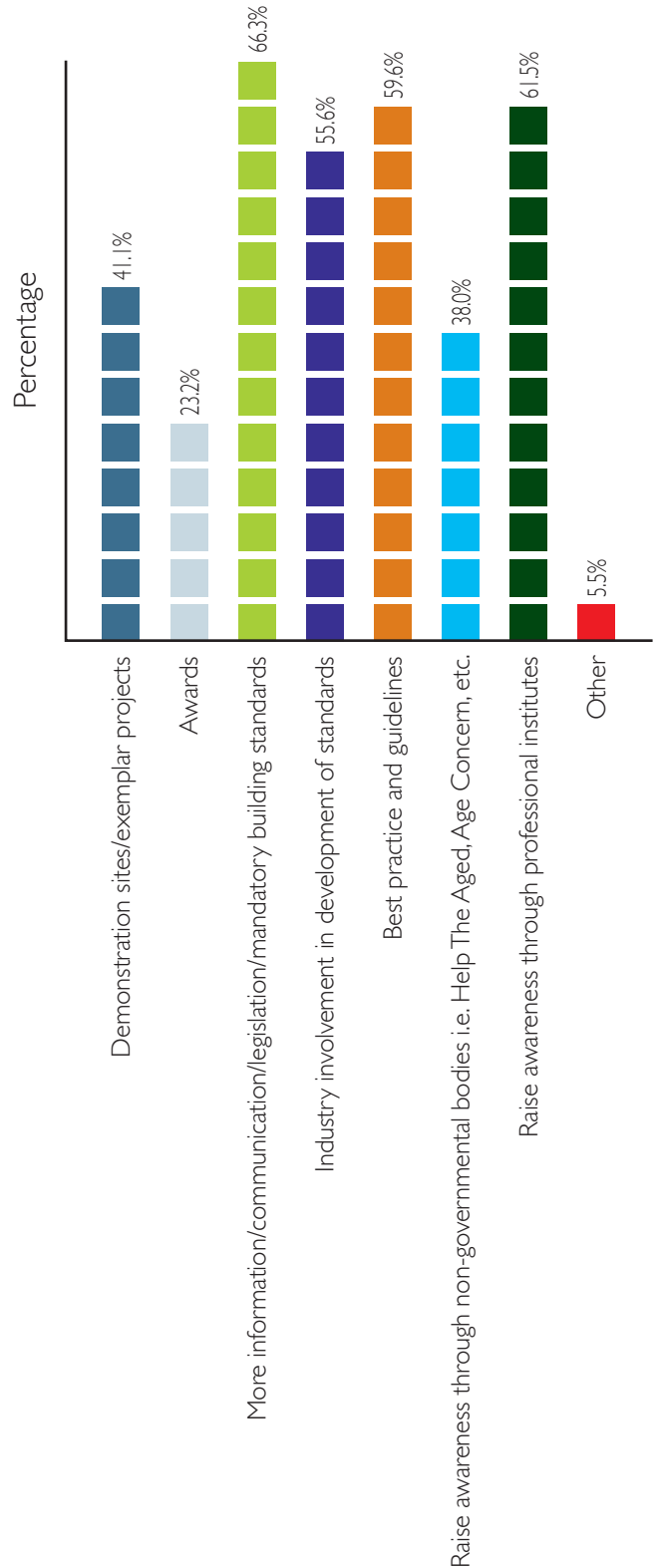
**20. Do you think that the UK Government has dealt with the challenge of an ageing population in an effective way?**



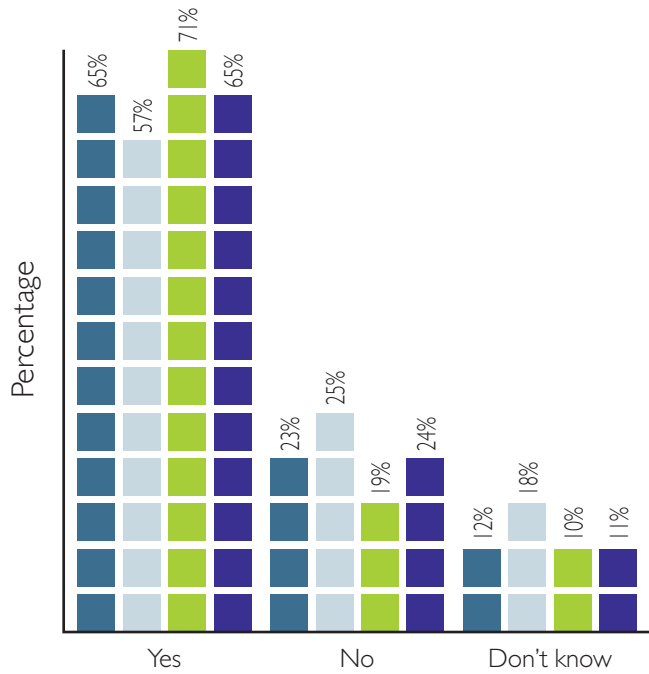
Retired respondents are the most dissatisfied with the Government's response to this challenge; 72% think that it hasn't been dealt with effectively and only 4% believe that it has.

69% of respondents who work for a Government body think that the Government has dealt with this challenge in an effective way.

**21. What is the best way to encourage the industry to incorporate elderly friendly designs in their construction projects?**

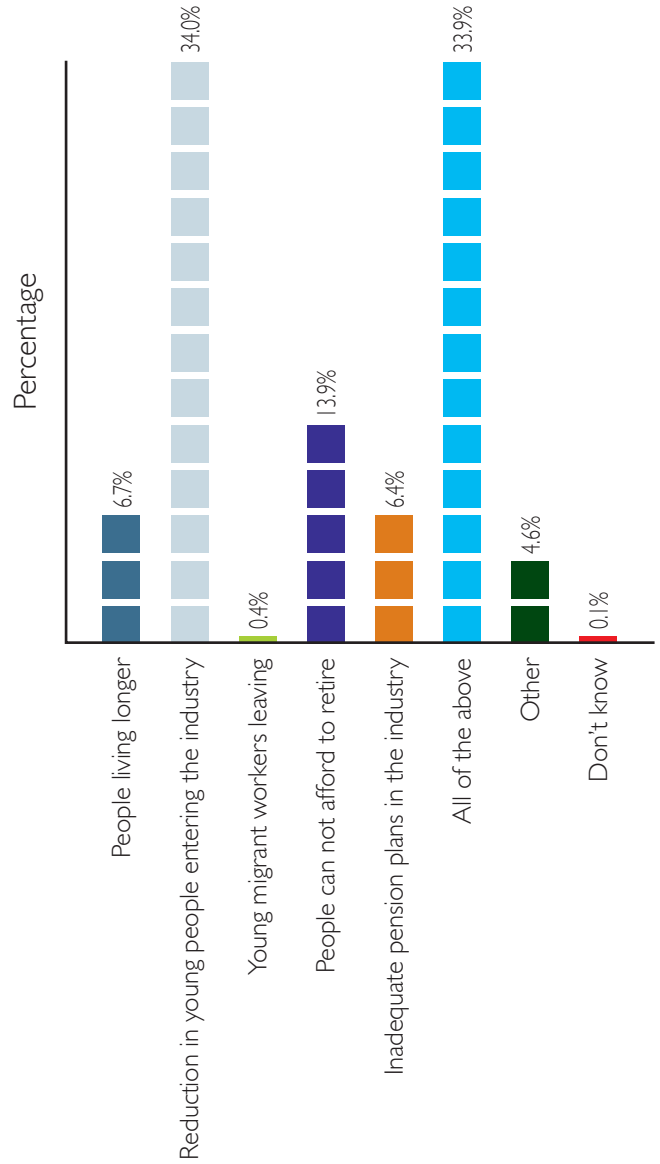


## 22. Do you perceive the UK construction industry to have an ageing workforce?



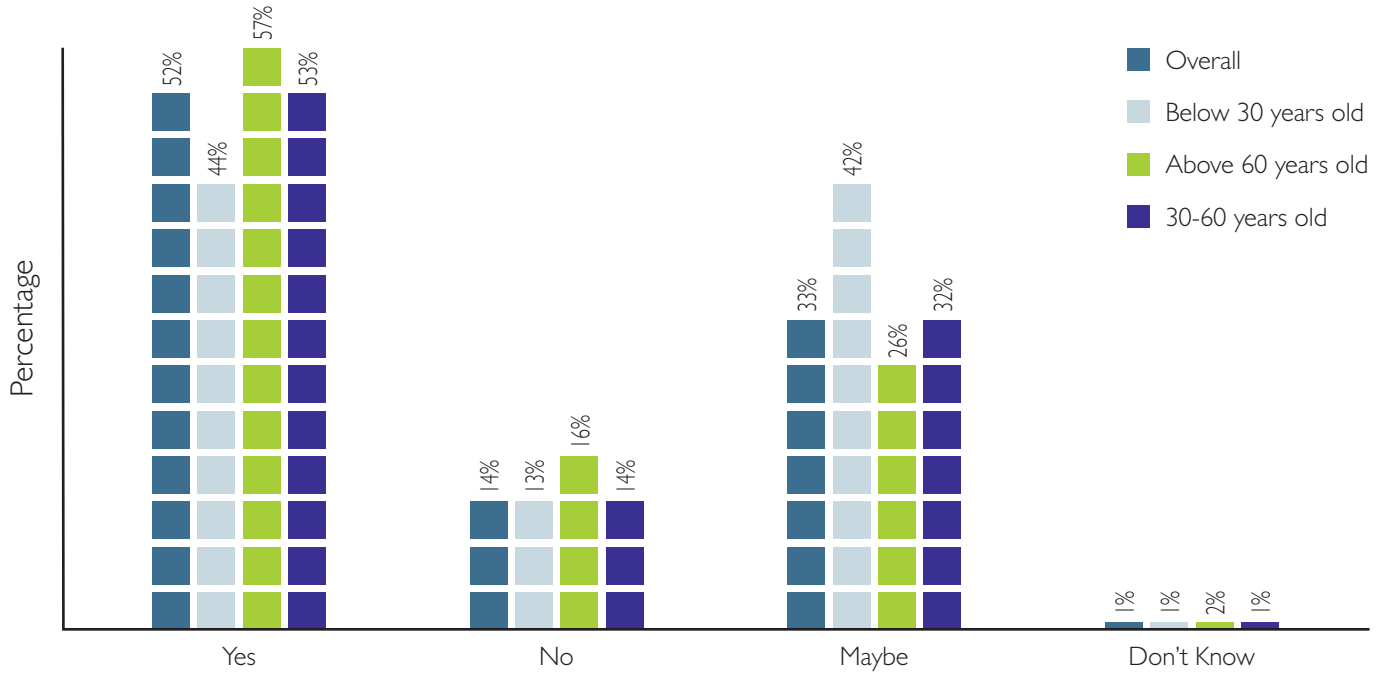
- Overall
- Below 30 years old
- Above 60 years old
- 30-60 years old

## 22.1 What do you think is the main reason for the construction industry's ageing workforce?

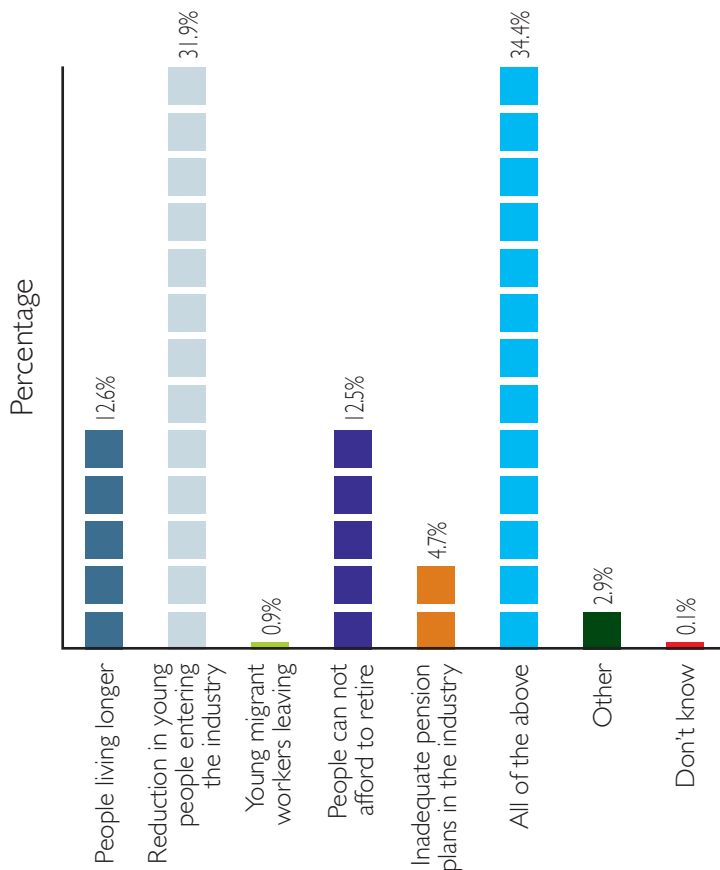




### 23. Do you consider an ageing population to be a serious challenge facing construction in the future?



#### 23.1 What do you think the main reason for this will be?

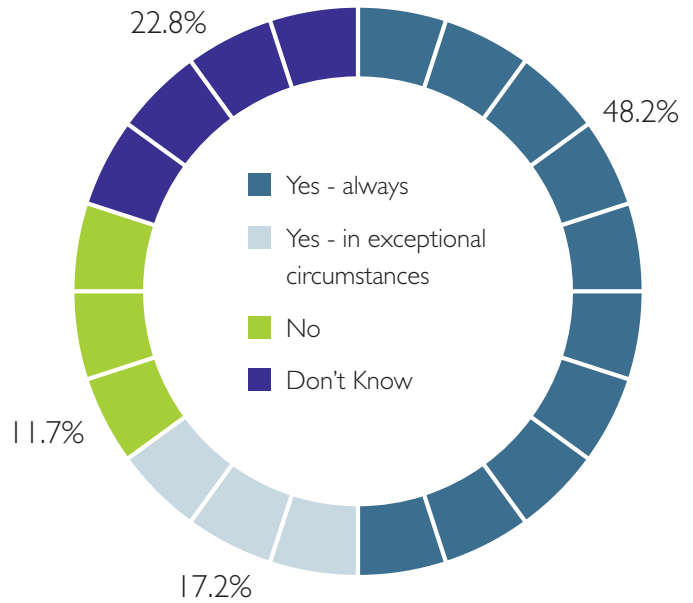


**24. Do you think the construction workforce in the following categories is increasing, decreasing or stable?**

<b>16-30 years old</b>	Decreasing
<b>31-40 years old</b>	Stable
<b>41-60 years old</b>	Stable
<b>61+ years old</b>	Increasing

65% of respondents believe that the number of construction workers aged 16-30 is decreasing, 39% of respondents believe that the number of construction workers above 60 is increasing.

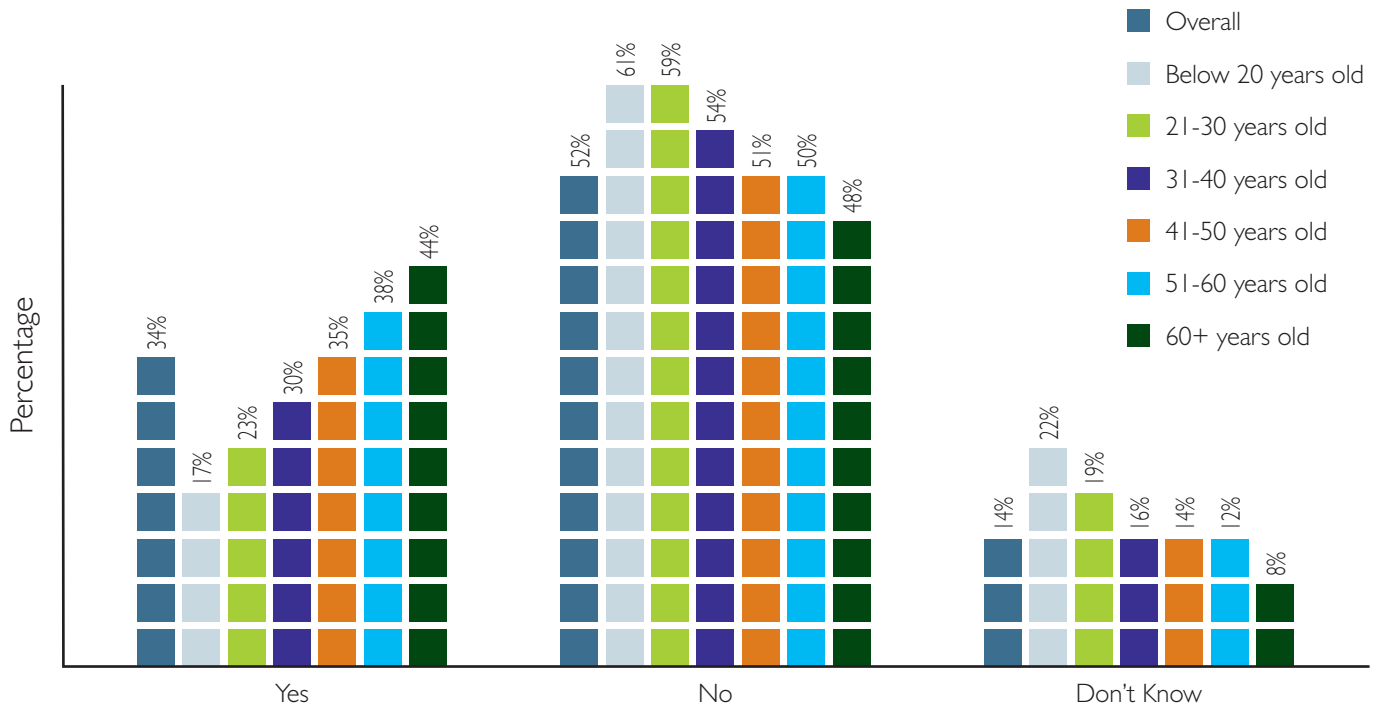
**25. Would your company give equal consideration to potential employees who are nearing the age of retirement and those who are younger?**



Companies with more than 501 employees had the lowest percentage of “Yes – always” responses (45%).

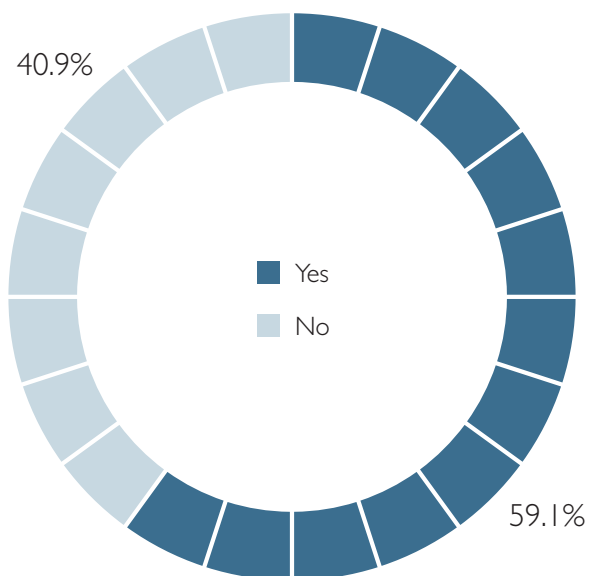
Companies employing 21 – 50 people had the highest percentage of “Yes – always” responses (56%).

## 26. Do you think the retirement age should be extended in the construction industry?



It is interesting that the percentage of respondents thinking the retirement age should be extended increases with age.

## 27. Are you aware of employees extending their careers after retirement age in your company?



The survey identifies various reasons for this phenomenon, which will be explored in the Discussion section.

# Discussion

## The impact of the ageing population on the construction industry

This research explores the various impacts of an ageing population upon the construction industry. Several key questions have arisen, including:

- 1) What are perceived as the most significant challenges?
- 2) How do construction professionals feel this will affect the built environment?
- 3) How will this impact the construction workforce?

## The challenges

The results show that 76% of all respondents are aware of the challenges facing the construction industry as a result of the ageing population. Further analysis clearly shows that the older the respondent, the more aware he or she becomes of the challenges that would arise. Respondents were asked to add further comment and specify the challenges they feel are a particular issue for the industry. The majority of respondents cite the following three challenges:

- The ageing construction workforce
- The economic impact of this demographic change
- The state of the existing building stock

## The ageing workforce

The comments show that the ageing construction workforce is the primary concern for the majority of respondents. Several responses highlight a fear of many workers entering retirement within a short space of time and the resulting significant loss of skills in the industry (given that there are fewer young professionals coming into the industry to replace those retiring). This would also mean that the industry is losing a valuable teaching resource, as older workers often use their expertise and experience to help develop new entrants. This issue is closely related to the industry's dilemma of skills shortages and its problems in recruiting enough new employees.

While the industry's older members are acknowledged for their significant expertise and experience, it was suggested that a fresher perspective from younger employees is important to drive innovation in the industry. These respondents believe that developing new ideas and innovative ways of working will help to strengthen the industry's future. Currently, there's no balance between these different aspects of the industry workforce, causing important skills to be lost and innovation to be constrained.

One way to tackle this challenge is to extend the retirement age. Overall, only 34% think this should be done, although the percentage does rise consistently with age; 44% of respondents over 60 feel that the retirement age should be extended. 59% of respondents are already aware of employees staying on past the official retirement age. The most common explanations for this include employees enjoying their jobs, feeling they would be bored by retirement, financial reasons, or because they were asked to stay on due to a lack of a replacement.

## Economic impact

Another significant challenge identified in the survey is the economic impact of an ageing population. The increase in the number of retired people will cause a strain on the economy and on those still working, as the ratio of workers to pensioners declines. The Office of National Statistics has identified that there are currently 3.3 people of working age to each retired person, and expect that by 2032 the figure will fall to 2.9 people of working age<sup>6</sup>. This will have a great impact on pensions, and there are many people in the construction industry without any viable alternatives to the state pension as a means of financial support.

The extension of the retirement age could help to improve this situation, although it doesn't defeat the problem of inadequate pension planning. Many employees with young families or children at university depending on them for support will be unable to offer this help on a basic state pension. Employees need to make more provision throughout their lifetime and career, yet many people don't realise this until it's too late to set aside a sufficient amount. More information and advice is needed, especially for those who are beginning their careers, to raise the awareness of the importance of pension provisions.

<sup>6</sup> Office of National Statistics, 'Benefits and challenges of an ageing population', December (2008)

## The existing building stock

The third biggest challenge identified by respondents is the impact of the ageing population on the built environment. The comments in the survey show a particular concern for the existing building stock. Many pensioners are living in inadequate housing, but are unable to fund the improvements needed. Although funding is available in such circumstances, many are unaware that it exists.

It's particularly challenging and expensive to adapt the existing building stock and bring it up to a suitable standard. But, improving the homes of the elderly will allow them to stay safely in familiar surroundings for as long as they wish, and not have to move into care homes or lose their independence. More information is needed on the methods available for improving the built environment, and how it can be done in an efficient and affordable way. It's not just construction workers who need access to this information, but also society in general so that everyone knows the importance of improving the efficiency of their homes.

## Adapting the built environment

97% of respondents state that it's important to adapt and improve the built environment for the elderly, 25% of those who acknowledge this importance are already incorporating designs appropriate for the elderly into their projects. It's mainly respondents in the housing sector who are already taking into account the needs of the elderly in their projects, with 41% always considering them and 29% sometimes considering them. These results aren't too surprising, as the Government's main focus in response to the ageing issue has been on housing and it has established the Lifetime Homes standard to guide the improvements.

In general, respondents feel that accessibility is the most important aspect of adapting the built environment; 51% selected this option as their first choice. Accessibility can apply to housing, the local community and commercial buildings.

60% of respondents believe that the Government hasn't dealt with the challenge of an ageing population in an effective way. This percentage is higher (72%) among retired respondents. These critics were asked to suggest what the Government should be doing; popular responses include incentives to encourage the uptake of the designs, more single storey houses, and a rethinking of the Lifetime Homes Standards. The most popular response suggests that the Government has to consider the existing building stock and encourage renovations.

More information, communication and building standards are needed to ensure widespread acknowledgement of the ageing population and the adaptation of buildings. 63% of all respondents feel this is the best way to encourage the industry to incorporate designs appropriate for the elderly in their projects; 57% favour raising awareness of the topic through professional institutions, 56% advocate involving the industry in the development of standards, while 56% support producing best practice information and guidance.

## Housing

The Government has given a lot consideration to adapting the design of new builds to ensure they are suitable for the ageing population. Its national strategy, called *Lifetime Homes; Lifetime Neighbourhoods* sets out the challenge and the governmental plan of response. The plan sets out sixteen design features that should be incorporated into all new homes, such as level access, wide corridors and doorways, ground floor bathroom facilities, and sockets and light switches at a convenient height<sup>7</sup>.

The Lifetime Homes Standard forms part of the Code for Sustainable Homes and will be mandatory by 2013 on all new-builds (if there has been an insufficient uptake beforehand). However, it is proposed that for housing funded by the public sector, it will be mandatory by 2011<sup>8</sup>.

Only 30% of all respondents and 37% of respondents in the housing sector feel that the Lifetime Homes Standard should be compulsory. Comments include the belief that not everyone wants these designs in their homes, and that it's not always practical to incorporate them within smaller homes (usually aimed at first time buyers). Many state that it would be better to make it compulsory for a percentage of new housing, but not for the entire stock.

Asked to identify the biggest improvements that could be made to housing to help the elderly, respondents suggest downstairs bathrooms (64%), greater energy efficiency (58%) and an adaptable design (54%). Only 1% of respondents think that no improvements need to be made.

<sup>7</sup> Lifetime homes; Lifetime neighbourhoods (2007), p.89

<sup>8</sup> Ibid. p.90

## Local community

The survey reveals that the biggest improvement that can be made to the local community is better public transport; 70% of respondents feel this is important. Better accessibility achieves the next highest response (63%), a popular selection for housing, the community and commercial buildings. Improvement to roads and pavements is the next most popular selection (49%). It's also important to have local shops and amenities close to homes, to ensure that essential items can be easily obtained without having to enter busy towns and shops. Other suggestions include community spaces, such as halls, where the elderly can meet on a regular basis, improved safety features (such as more lights and CCTV) and increased care and medical services.

## Commercial buildings

49% of respondents state that it's important to adapt workspaces to take into consideration the extension of the retirement age. The Government and industry have not properly considered the impact of the ageing population upon commercial and office buildings. Although all commercial buildings need to comply with standards set out in the Disability Discrimination Act, further measures could be taken to make them more 'age friendly'.

47% of respondents believe that standards should be developed for commercial and public buildings, similar to the Lifetime Homes Standards. These would set out key design features to help make buildings more accessible for the elderly. This would be particularly important when the retirement age is extended, as workspaces will have to reflect the needs of all employees.

Respondents think that the biggest improvements that could be made are as follows: level access to buildings (55%); lifts as standard (50%); car parks and drop off points (44%). Many other respondents state that the Government should introduce flexible working hours and schemes to promote working from home.

## The construction workforce

65% of respondents perceive the UK construction industry to have an ageing workforce. Various factors have contributed to this, such as a reduction in the number of young people entering the industry, employees being unable to afford to retire, inadequate pension plans, and young migrant workers returning home.

There is general consensus in the survey that the number of young people entering the industry is declining; 65% of respondents have noticed a decrease in the number of workers aged 16-30. 39% of members have also noticed an increase in the number of workers aged 60 or over. This number is likely to continue to increase, especially after the retirement age has risen.

As the average age of the construction workforce is increasing, it's crucial to ensure that the older members of the workforce are kept up-to-date with training and that their existing skills and experience are utilised. Despite the value that older workers offer the industry, only 48% of companies would always give equal consideration to workers nearing retirement age compared to those just entering the industry. 11% are sure that older workers would not have an equal opportunity. While it is understandable that some companies would be apprehensive, older workers could be valuable assets because of their experience. It is illegal for them to be overlooked because of their age.

# Recommendations

- 1. Raise awareness of the challenges posed by the ageing population** – The survey has shown that 76% of respondents were aware of the challenges facing the construction industry; despite this only 24% were reflecting the needs of the changing population in their projects. More information and encouragement is needed to ensure the industry is aware these challenges and outline how it can help to tackle the issues. Respondents felt this could be best achieved by Government raising awareness through professional institutions and providing best practice guidelines.
- 2. Adapt the existing building stock** – A significant proportion of elderly people are living in substandard housing. The existing building stock needs to be adapted and improved to allow the elderly to stay in their homes safely and independently for the duration of their retirement. This research has clearly shown the existing building stock needs to take priority.
- 3. Address the challenges facing the construction workforce** – The construction industry is at risk of losing a significant proportion of its skilled workforce as many are approaching the retirement age. There are not enough young people entering the industry to replace the number of employees retiring. More needs to be done to attract young people into the industry, but also to ensure that older members have up-to-date training.
- 4. Promote research & innovation** – As a result of this research the CIOB feels that further work is required to develop imaginative and innovative solution that will help improve the built environment for the changing demographic. We believe this should be a collaborative and joined up approach of key stakeholders, the construction industry and other industries that are affected by an ageing population.
- 5. Encourage construction employees to invest in their futures** – The survey has indicated that a significant proportion of the industry is not setting aside provisions for their retirement. Feedback has shown that a number of employees cannot afford to retire because of inadequate pension plans and no alternative financial investments to support them. Construction employees need to be encouraged to consider their retirement plans and set aside a sufficient amount to support them for, possibly, the next twenty to thirty years of their lives. Clear information needs to be provided and a focused campaign to this effect.
- 6. Review the Lifetime Homes Standards** – This research has shown that the Lifetime Homes Standards require greater consideration by Government and industry before they are made mandatory. There is concern that the current standards are not practical when applied to smaller properties, especially those aimed at first time buyers. The survey also demonstrated an appetite for similar standards to be developed for public and commercial buildings.

# The Chartered Institute of Building

The Chartered Institute of Building (CIOB) represents for the public benefit the most diverse set of professionals in the construction industry.

## Our Mission:

To contribute to the creation of a modern, progressive, and responsible construction industry; able to meet the economic, environmental and social challenges faced in the 21st century.

## Our 7 Guiding Principles:

- Creating extraordinary people through professional learning and continuous personal development.
- Promoting the built environment as central to the quality of life for everyone everywhere.
- Achieving a sustainable future, worldwide.
- Advocating exemplary ethical practice and behaviour, integrity and transparency.
- Pursuing excellence in management practice, and technological innovation rooted in evidence based science.
- Being socially responsible and working responsibly.
- Enabling our members to find an emotional resonance with the Institute; their success is our success.

We have over 40,000 members around the world and are considered to be the international voice of the building professional, representing an unequalled body of knowledge concerning the management of the total building process.

Chartered Member status is recognised internationally as the mark of a true, skilled professional in the construction industry and CIOB members have a common commitment to achieving and maintaining the highest possible standards within the built environment.

The Chartered Building Company and Consultancy Schemes (CBCs) are a vital part of the CIOB, providing the Institute's members with a further business perspective.

To find out more about the benefits of either individual CIOB membership or CBC schemes go to our website [www.ciob.org.uk](http://www.ciob.org.uk) or call us on +44 (0)1344 630 700 today.



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