# EXPLORING THE WORLD OF HOME BUILDING

Skills for Home building Success

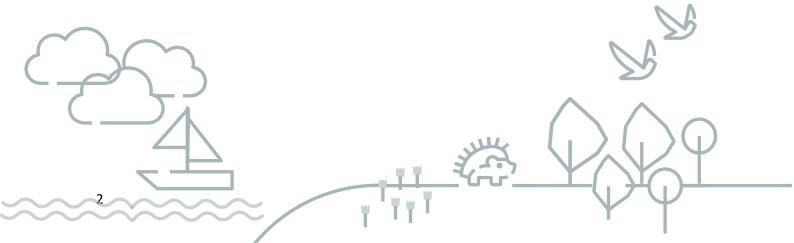


METROMAYOR LIVERPOOL CITY REGION

Liverpool City Region CAREERS HUB

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# Welcome.

Keepmoat would like to welcome you to your homebuilding overview, and we hope you enjoy your experience and gain an initial understanding of Keepmoat and the homebuilding industry. This is your chance to become more confident and learn lots of new skills, which will look great on your CV to future employers.

Please keep your workbook safe, this will give you the opportunity to review and track your progress, as well as make notes of the things you have learned whilst on your journey with us.

At the end of your journey, you will be able to review your experience and look back on what you learned about Keepmoat, homebuilding and the skills and qualities required to work in this industry.

#### This booklet comprises a

- > 360-degree virtual tour of a building site
- > 360 tours of the Keepmoat Office.
- > 10-minute insight video
- Multi-page interactive workbook.

The workbook is divided into various topics and once the workbook is complete, you can develop an action plan and set goals to support your journey into the homebuilding or construction sector.

## KEEPMOAT OVERVIEW AND REGIONAL MAP

Keepmoat are a top 10 UK homebuilder with a track-record of delivering quality homes across the UK. However, bricks and mortar are only one side of our corporate story.

Working alongside our partners, we have built thousands of new homes across the country, transforming brownfield sites into thriving new communities. We're also leading the way for first time buyers with around 70% of the homes we build helping people take their first steps on the property ladder.

Our aim is simple: to deliver more of the high-quality, multi-tenure, new homes the UK needs – at prices people can afford, in places where they want to live.

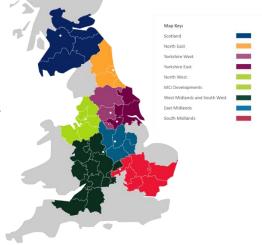
We are delighted to have achieved 5-star builder status in the National Home Builders Federation (HBF) Awards. This is only awarded to homebuilders who receive a rating of at least 90% in the National New Homes Customer Satisfaction Survey.

#### Our business at a glance:

We have 9 regional offices across Britain from the south of England right up to Scotland.

We work with local authorities, Homes England, social housing providers and over 200 partners up and down the UK to make this happen.

We work closely with schools, local representatives, community leaders and groups to support localised priorities and people.



### VALUES, MISSION AND VISION

Do you know what a company's values, mission and vision are and what they mean? Write a definition for each of the following words and explain why it is important for a company to have them. **Hint** www.keepmoat.com/corporate

VALUES. Write your definition and explain why it is important for a company to have them.

MISSION. Write your definition and explain why it is important for a company to have one

VISION. Write your definition and explain why it is important for a company to have one

### **BUILDING HOUSES**

What Do Homebuilders Do? Homebuilders are people who build houses. They find good land to build on, design the houses, construct them, and then sell them. There's a lot more to it than just bricks and mortar!

Why Is House Building Important? Right now, there aren't enough houses for everyone who needs one. This is a big problem, and it's something that the government is trying to fix. Homebuilders play a very important role in helping to solve this problem by building more houses.

How Can You Help? To build all the houses we need, we need smart and talented people to join the homebuilding industry. If you like the idea of helping to build homes for people, this could be a great career for you!

Who Are Homebuilders? Homebuilders do many different jobs. They find land to build on, design the houses, build them, sell them, and even help new homeowners after they move in.

What Jobs Are There in House Building? There are many different jobs in homebuilding. Some people work with communities to find good places to build. The architects and engineers design the land and the houses. There are also craftsmen who build the houses, project managers who make sure everything goes smoothly, and sales advisors who help sell the houses.

Why Are These Jobs Important? All these jobs are important because they help make sure that the houses are nice to live in. They make sure the houses are warm in the winter, cool in the summer, and help families save money on their bills.

#### Key facts and figures

- The country needs to deliver 1.5 million more homes.
- To do that, we need another 950,000 construction workers by 2030
- Women make up 15% of the construction workforce. This number is steadily growing.

## Building homes is a team effort, and every job is important to make sure people have a nice place to live!

# THE RANGE OF CAREERS IN HOUSEBUILDING

Ever wondered what kinds of jobs are involved in building houses? There are so many different roles, from working in an office to getting your hands dirty on a building site. Let's explore some of the cool jobs you can find at a Keepmoat construction site!

#### Trades

If you like hands-on work, there are lots of trades you can choose from. These are the people who do the practical work to build houses. Here are some of the tradespeople you might find:

- Ground Workers: They prepare the land for building.
- **Bricklayers:** They build the walls.
- > Plasterers: They make the walls smooth.
- Tilers: They put tiles on walls and floors.
- Joiners/carpenter: Build wooden structures for walls, floors, and roofs. They fit staircases, skirting boards and architraves
- > Plant Drivers: They operate big machines.
- > Painters and Decorators: They make the houses look nice with paint and wallpaper.
- Labourers: They help with various tasks on the site.
- **Scaffolders:** They build the scaffolding so others can work safely at heights.
- **Roofers:** They put the roofs on houses.
- Electricians: They install the electrical systems.
- > Plumbers: They install the pipes for water and heating.
- Floor Layers: They lay down flooring
- Glaziers: They install windows and doors.
- Landscape Gardeners: They make the gardens look beautiful.
- Fencers: They put up fences around the houses.

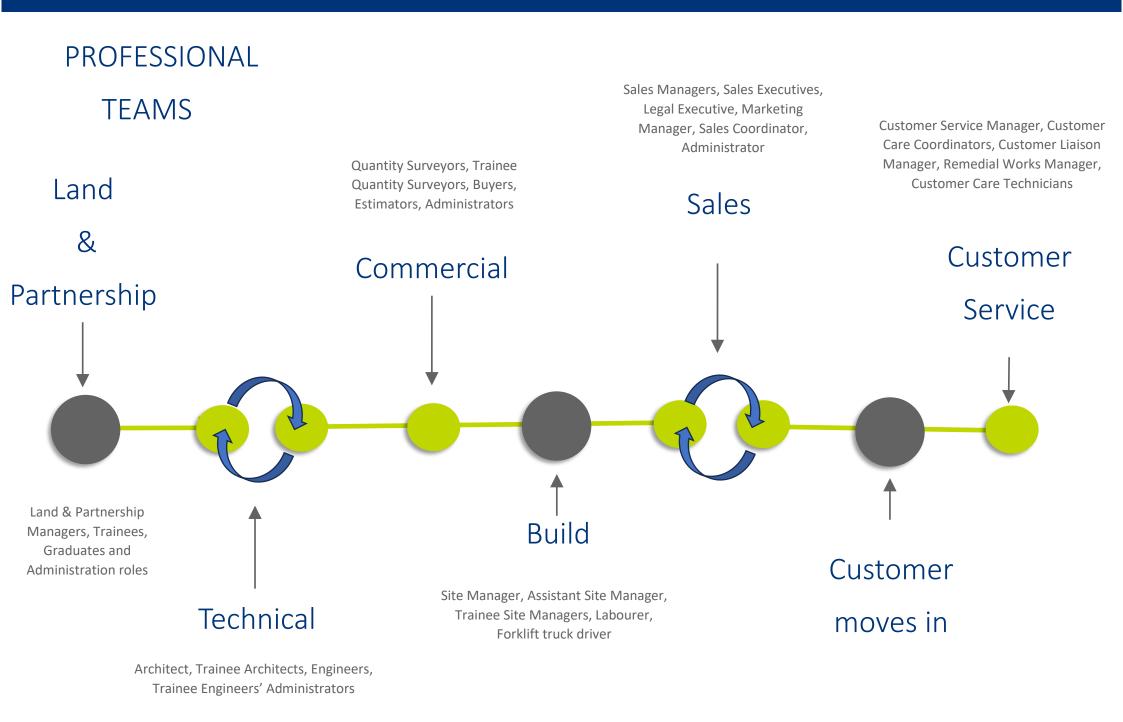
Next, we'll look at some of the professional roles. These jobs are mostly in the office, but sometimes they visit the building sites too. Stay tuned!

## PROFESSIONAL ROLES IN HOMEBUILDING

These jobs are mostly in the office, but sometimes they visit the building sites too. Here are some of the professional roles:

- Land and Partnerships: They find land to build on and work with other companies.
- Architects: Create detailed plans for new buildings, ensuring they are functional, safe, and aesthetically pleasing. They deal with planning applications
- Engineers: Create detailed plans and specifications for structures, systems, and processes.
   They study the soil and rocks to make sure the ground is safe for building.
- Quantity Surveyors: They manage the costs and make sure the project stays on budget.
- **Estimators:** They figure out how much the building will cost.
- **Buyers:** They purchase the materials needed for building.
- Site Managers: They oversee the building site and make sure everything runs smoothly.
- Sales Executives: They sell the houses to people.
- Legal Executives: They handle the legal paperwork and make sure everything is done correctly.
- Marketing Managers: They promote the houses and make sure people know about them.
- **Customer Service Advisors:** They help customers with any questions or problems they have.

There are so many exciting careers in housebuilding! Which roles sounds the most interesting to you and why?



### TASK

Pick 1 role that you identified on page 8 and another role from page 8 you know nothing about. Now research them using the links below and complete the profiles for each job. Visit <u>www.housebuildingcareers.org.uk</u> or <u>www.goconstruct.org</u> for more information.

#### Write the name of role you identified you are interested in and outline the role:

\_\_\_\_\_

#### Qualifications required

#### Skills and qualities required

\_\_\_\_\_

How can you train / achieve your qualifications in this role? College/University/Apprenticeship

\_\_\_\_\_



Write the name of role you know nothing about and outline the role:

Qualifications required

Skills and qualities required

How can you train / achieve your qualifications in this role? College/University/Apprenticeship

.....

.....

.....

### PERSONALITY QUIZ

Take this quiz to find out which construction personality type you are. <u>www.goconstruct.org/educational-resources/ultimate-quiz/</u> Write your answer and a description below:

# SKILLS FOR CONSTRUCTION

These skills and qualities are super important in homebuilding and can help you succeed in many different jobs!

#### **Transferable Skills**

- **Communication:** Talking, listening and working well with your team and clients.
- Problem Solving: Finding solutions to challenges.
- Leadership and Teamwork: Leading a team and working well with others.
- Time Management: Using your time wisely to get things done.
- Technological Skills: Using tools and technology.
- **Research and Analysis:** Finding and understanding information.
- Organisation: Keeping things in order and planning well.

#### **Physical and Practical Skills**

- Strength and Stamina: Being strong and having lots of energy for manual work.
- Coordination and Dexterity: Handling tools safely and skilfully.
- Health and Safety Awareness: Knowing how to stay safe on the job.

#### Qualities

- Reliability and Punctuality: Time keeping and attendance is vital in this industry.
- > Strong Work Ethic: Working hard and doing your best.
- Adaptability and Willingness to Learn: Being flexible and eager to learn new things.

What skills and qualities do you think are the most important and why?

# HOW IS HOMEBUILDING LINKED TO YOUR OTHER SCHOOL SUBJECTS?

#### Maths

- Measurement: Calculating materials needed for walls, floors, and roofing.
- Geometry: Understanding angles in construction, floor plans, and structural design.
- Ratio & Proportion: Mixing cement and plaster correctly.
- **Estimation & Budgeting:** Working out costs of materials for a project.

#### Science

- > Physics: Forces acting on a building, structural stability, and insulation.
- Chemistry: The properties of materials like cement, plaster, and bricks.
- Environmental Science: Sustainable building materials and energy efficiency.

#### Design & Technology (D&T)

- Construction techniques: How houses are built and what materials are used.
- > CAD & Technical Drawing: Designing floor plans and understanding blueprints.
- Engineering principles: Structural integrity and building safety.

#### Geography

- Land Use & Urban Planning: Where houses are built and why.
- **Sustainability:** Eco-friendly construction methods.
- > Natural Resources: Sourcing materials like wood, stone, and sand.

#### **Business & Economics**

- Property Development: How houses are priced and sold.
- **Jobs & Careers:** Exploring roles in the construction industry.

#### English

- Report Writing: Creating a project report on housebuilding.
- **Bid Writing:** Producing written documents to win contracts (tenders)
- **Communication**: Presenting a design pitch for a new housing development.

Can you think of any other school subjects you are studying that could be linked to the many careers in housebuilding?

Review the skills and qualities for construction on page 12 and consider how you are developing these skills in your school subjects. You can also refer to page 27 for more information about skills.

#### **Provide examples:**

E.g.: Some of the roles in construction require strength and stamina – I develop these skills through my PE Lessons and extra-curricular activities.

# 360 TOUR OF A KEEPMOAT BUILDING SITE

Follow this link: <a href="https://my.matterport.com/show/?m=JZYBekHV2j4">https://my.matterport.com/show/?m=JZYBekHV2j4</a>



Make a note of the order of the development work from start to finish and the roles involved. What aspect appeals to you? Explain your answer.


## 360 TOUR OF KEEPMOAT HEAD OFFICE

Follow this link: <a href="https://my.matterport.com/show/?m=JVyuPcFFU3c">https://my.matterport.com/show/?m=JVyuPcFFU3c</a>



# ROUTES INTO CONSTRUCTION

#### There are many routes into construction to choose from:

#### College & Training courses:

Vocational & Technical Qualifications (VTQS)

Many colleges and training providers offer vocational and technical courses (VTQs) which are directly linked to construction and the built environment, such as bricklaying, carpentry and joinery, civil engineering etc.

They are also likely to offer courses which could help you move into other areas of the sector such as administration, accountancy, law, computer-aided design (CAD) and IT.

Colleges and training providers also offer A Levels, T Levels and Access courses as a stepping stone to university.

#### Apprenticeships

An apprenticeship is a great way to learn new skills while working with a home builder. You get to earn money and gain experience at the same time! You can start an apprenticeship at any age, whether you're 16 and just finished school, or older and looking for a new career. Apprentices usually earn between £9,500 and £18,000 a year.

#### Graduate Training Schemes

Graduate training schemes are for people who have finished university. These programs let you try out different jobs within a homebuilding company. You get to learn and earn money (between £20,000 and £28,000 a year) while gaining important work experience.

#### Industry sponsored degree.

If you want to get a degree while also working and learning practical skills, this program might be for you. It usually lasts 3 to 5 years and combines university studies with hands-on work. This will help you build a bright future in the homebuilding industry.

#### Internships and work placements

Internships and work placements give you real-world experience. You might do a short placement while in college or a longer one during the summer or for a year. These opportunities help you understand what it's like to work in homebuilding.

#### Site Labourer

A site labourer is a great way to start in homebuilding. Start by getting a Construction Skills Certification Scheme (CSCS) card and search job sites or join a recruitment agency.

#### List the schemes Keepmoat offer.

Hint <a href="https://www.keepmoat.com/careers/working-at-keepmoat-homes">https://www.keepmoat.com/careers/working-at-keepmoat-homes</a>

### TASK

#### Activity: Design Your Dream House!

#### Materials Needed

- Paper use the page at the end of this booklet for your design or a separate larger piece of paper.
- Pencils or felt tips
- Ruler
- Calculator
- Computer for research check out Keepmoat's website to see the range of developments and house types <u>https://www.keepmoat.com/our-developments</u>

#### Instructions

In pairs or small groups imagine your dream eco-friendly home. What does it look like? Draw a picture of it.

• Give your team or house a name

#### Add Details

Think about the rooms inside your home. Where is the kitchen and how many bedrooms are there?

#### Sustainable energy

We need to start thinking differently about how we use energy in and around the home. Through smart thinking and switching to sustainable energy technologies you can reduce the energy consumption of your home, save money and help the planet.

#### What do we mean by 'sustainable energy'?

Put simply, sustainable energy is about ensuring our energy consumption does not have negative effects on the planet, securing the longevity of the earth for generations to come

#### Make your home eco - friendly

- > To make your home eco-friendly two renewables must be designed into your home
- > There is a list of renewables to choose from on the build cost list on page
- Research them before choosing which two you will use
- Using the eco-friendly measure sheet on page 24, note why you have chosen those specific renewables.

#### Materials

What materials you will build your house with, are they better for the environment and why. Note why you have chosen those specific materials on page 24.

#### Outdoor area

What will you plant, why did you choose the trees/plants for your garden, what other things can you add to the outdoor area and how do they improve the environment etc. Note why you have chosen those specific plants/trees etc on page 24.

#### Present your dream house to your class

Present your dream house and ideas to your class, all team members must take part in the presentation. (Keepmoat will attend to judge if requested)

#### Time frame

> To be advised by the teacher

#### Financial breakdown

Using the build cost list below, produce a financial breakdown showing the costs to build your dream home and your selling cost.

# Be creative and think outside the box, do your research and have fun designing your dream house!

# **BUILD COST**

£8,500 £9,500 £60,000
£60,000
£60,000
£50,000
£80,000
£800
£1,400
£2,300
£7,300
£3,000
25
les
Cost to build

#### Now add 30% profit to get the overall selling price of your house!

Selling price of your house	
House type	Selling price

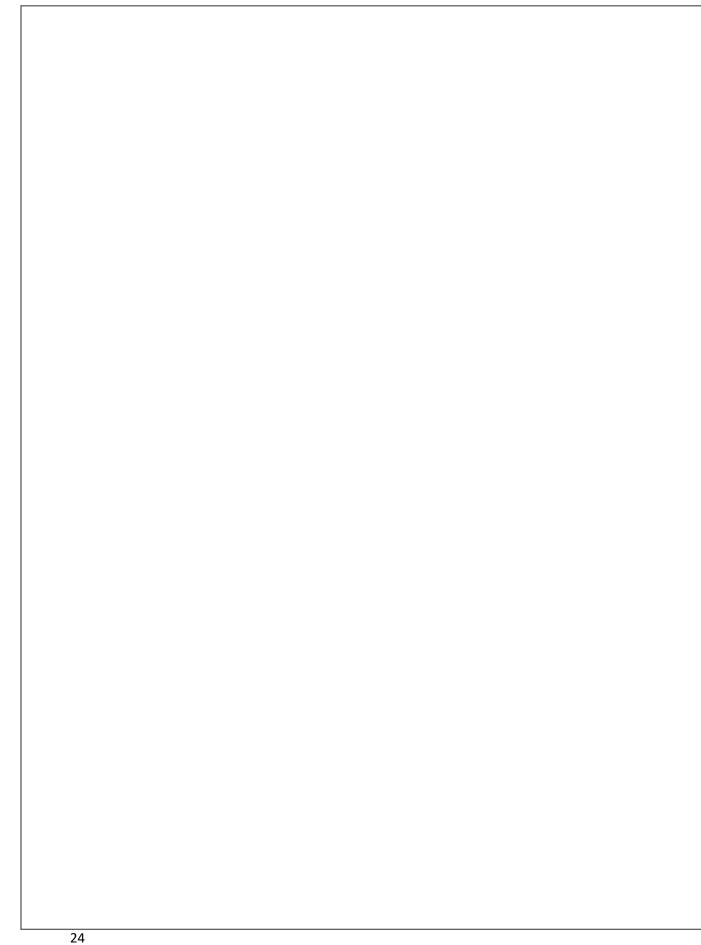
# VOCABULARY & MEANING

Vocabulary	Meaning
Aesthetics	An opinion or perception of an object based on its beauty.
Biomass	The 'natural material' from plants, trees, or animals. When biomass is burned in a power station, it releases heat and can be used to make steam to power electricity. Biomass-fuelled boilers can be used in houses to produce heat and hot water.
Client	A customer requiring the supply of goods or services
Costs	In this case, your costs are the plant, materials and labour used to build the houses
Geothermal	<ul> <li>'Geo' means 'from the earth' and 'thermal' means 'heat'. A geothermal heating system uses pipes buried more than a metre deep in the earth, where the temperature stays constant.</li> </ul>
Labour	All work carried out by employees.
Plant	All machinery needed to prepare the land (e.g., excavator, stone crusher) and build the houses (e.g., crane, cement mixer).
Profit	The financial gain after costs. For this activity, your estimated profit should not be less than 10% or you may make a loss. Your maximum profit should not exceed 25% or the houses will be too expensive for buyers.
Renewables	Energy-generators made from resources that are replaced by nature, like wind, water, and sunshine. Renewable energy is sometimes called 'clean' or 'green' because it doesn't pollute the air or water.
Rainwater harvesting	The collection of rainwater for reuse, rather than allowing it to run off. It can be used to water the garden, to flush toilets or for indoor heating.
Services	Gas, electricity, water, drains and telecommunications.
Solar panels	<ul> <li>'Solar' is the Latin word for 'sun'. Solar panels are designed to absorb and store the sun's rays as a source of energy for generating electricity or heating.</li> </ul>
Wind turbines	Using the power of the wind to turn it into electricity. The bigger the wind turbine, the more wind it reaches and the more electricity it produces.

# ROLES INVOLVED IN BUILDING YOUR HOMES

Job Roles	Overview
Architect	The architect is responsible for making up the 3D houses and will work closely with the civil engineer to position them correctly on the field in relation to pathways, boundaries, and sun direction.
Civil engineer	<ul> <li>The civil engineer marks out all the roads, vehicle and pedestrian access, car parking, individual plot boundaries and other features</li> <li>inside and outside the field. They should work closely with the architect to make sure that the houses are positioned correctly.</li> </ul>
Project manager	The project manager is the team leader. They need to make sure that everybody in the team understands their job and that everyone works together. They're also responsible for making sure all the tasks are completed in time to present to the client.
Sustainability manager	The sustainability manager is responsible for collecting information about the green technologies and other sustainability options. They should tell the rest of the team the advantages and disadvantages of each technology so that the team knows enough to make decisions about which ones to use. This role may involve research.
Quantity surveyor	The quantity surveyor is the financial whiz. Their job is to develop the tender on the tender submission sheet provided.
Land and Partnership Manager	The Land and Partnership Manager is in charge of the company's final presentation. They must make sure that the tender is correctly calculated and that all the client's criteria have been met. They will prepare the final presentation, making sure that any unique features are highlighted, and that each member of the team is involved.

# PICTURE OF MY DREAM HOUSE:



# **ECO-FRIENDLY MEASURES:**

We need to start thinking differently about how we use energy in and around the home. Through smart thinking and switching to sustainable energy technologies you can reduce the energy consumption of your home, save money and help the planet.

#### What do we mean by 'sustainable energy'?

Put simply, sustainable energy is about ensuring our energy consumption does not have negative effects on the planet, securing the longevity of the earth for generations to come.

Eco-friendly measure	Benefit to the environment

# **SKILLS BUILDER**



Many employers love these important skills because they can be used in lots of different jobs. They help you do any job well, no matter what kind of work it is.

By doing the activities in this workbook, not only have you learn about the homebuilding industry, but you are also developing a strong set of skills that will help you in school and in your future job. These include:

- Critical Thinking and Problem-Solving: You've learned to think about tricky problems, find different ways to solve them, and make smart choices.
- Communication: You've practiced sharing your thoughts clearly, both by talking and writing, so others can understand you better.
- Listening and Speaking: You've worked on listening carefully to others and speaking confidently about your ideas.
- Collaboration and Teamwork: You've done activities with others, learning how to work together, share tasks, and reach goals as a team.
- Time Management: You've learned to manage your time well by meeting deadlines and organising your tasks.
- Adaptability and Flexibility: You've become better at handling different situations and challenges by doing a variety of activities.
- Creativity and Innovation: You've been encouraged to think creatively, come up with new ideas, and find unique solutions to problems.
- Staying Positive: You've learned to keep a positive attitude, even when things get tough, which helps you grow personally and professionally.
- Aiming High: You've been inspired to set big goals and work hard to achieve them.
- Leadership: You've had chances to be a leader, guiding and motivating others to reach common goals.

#### Try the https://benchmark.skillsbuilder.org/auth/check tool to

- Learn more about yourself by completing a quick and easy skills reflection
- Discover your skill strengths
- Start building on your development areas with specific targets



# WHERE CAN YOU FIND OUT MORE INFORMATION?

**Keepmoat** is a great place where people work together to build new homes and make communities better! If you like the idea of helping to create houses and neighbourhoods, Keepmoat could be the perfect place for you. The website shows you all the different jobs you can do, like being a builder, a designer, or even someone who helps take care of the new homes. **Click the link to find out more** https://www.keepmoat.com/careers/working-at-keepmoat-homes

**Go Construct** is a fun and exciting website where you can learn all about the world of construction! If you like building things, solving problems, or working with cool machines, this is the place for you. The website shows you different jobs you can do in construction, like being a bricklayer, a surveyor, or even driving big diggers and cranes.

Go Construct is supported by people who work in construction and want to help you discover how important and amazing this industry is. You can read stories from real construction workers, get tips on how to start your own career, and see updates on amazing building projects happening around the UK. **Click the link to find out more** <u>www.goconstruct.org</u>

**Be More** is a super cool website where you can learn about all the array of jobs and apprenticeships available in the Liverpool City Region! This website can help you you're your perfect job or training program.

The site includes stories from real people who have started their careers, learn how you can do it too. There are lots of fun events and activities to help you get ready for your future job. **Click the link to find out more** <u>https://lcrbemore.co.uk</u>

**Apprenticeship.gov** is a fantastic website where you can learn about cool jobs and training programs called apprenticeships! No matter which role or industry you choose, this website can help you find the perfect apprenticeship to start your career. You can see stories from real people who have done apprenticeships and learn how you can do it too. Plus, there are lots of fun activities to help you get ready for your future job! **Click the link to find out more** www.apprenticeships.gov.uk

National Careers Service is a fantastic website where you can learn about all kinds of jobs and careers! No matter which role or industry you choose, this website can help you find out how to get there. You can explore different job profiles, take fun quizzes to see what jobs might suit you, and get advice from real career experts. Plus, you can find courses and training programs to help you learn new skills and get ready for your future job! Click the link to find out more <a href="https://nationalcareers.service.gov.uk/">https://nationalcareers.service.gov.uk/</a>

**CSCS** is a cool website where you can learn about special cards that help people work safely on construction sites. If you want to be a builder, an electrician, or do other fun jobs in construction, these cards show that you have the right training and skills. The website helps you find out which card you need and how to get it. It's all about making sure everyone on the construction site knows how to do their job safely and well. <u>https://www.cscs.uk.com/applying-for-cards/</u>

# Keepmoat is a top 10 UK home builder. We design, build and finance places where people want to live.

https://www.keepmoat.com/careers/working-at-keepmoat-homes

