

# The House That She Built Patch Program

### Let's Get Building, Girl Scouts!

The House That She Built movement began after a team of real tradeswomen built a house in Utah to shine a light on women in these important and fulfilling careers. The project also inspired a book that showcases different careers responsible for building the home. Through the book, accompanying programs like this patch, and elevating the stories of these amazing women, we can shift the mindset that any one person is more "right" for a job than another.

### Steps:

- · Investigate the World of Construction
- · Design Something Great
- · Build a Scale Model
- · Reflect & Share

### **Purpose:**

Girl Scouts that earn this patch will know more about the field of construction, feel confident in utilizing their unique skillset to contribute to a team, and build something great.







Today, women make up nearly half of the U.S. workforce, but they are drastically underrepresented in many fields under the STEM umbrella, including construction. The mission of The House That She Built is to support workforce development initiatives in the construction industry by raising awareness of the largest underrepresented community in construction – women. The shortage of skilled trade workers is such a growing issue that women of all interests and skills are needed.

Before you get started, **listen to Mollie Elkman**, the author of The House That She Built (and a woman in the construction field), share why she's passionate about getting Girl Scouts ready to build.

### Step One: Investigate the World of Construction

Before you decide whether a construction site is a place you want to work, spend some time investigating what it might be like. When thinking about what kind of job you want in the future, it's important to consider the things you enjoy and are skilled at doing. Combining the two is a great way to make sure you're in a job that makes you happy.

Complete this step by choosing one of the three options below. Feeling ambitious? Try all three!

1.

Explore the physical space you could work in while taking part in a building project.

Depending on what your job is on the build team, you could work in an office creating engineering plans; in a warehouse getting all the materials ready; or outdoors framing the walls of a house.

• To take a tour of some of these spaces, **watch this special video tour** for Girl Scouts by our friends at CBH homes in Idaho. Can you see yourself in any of these spaces? Talk with a friend and brainstorm the type of space you may want to work in one day.



**Explore different types of careers in the construction field.** Below are some examples of job titles you can research. Each one of these jobs require specific skills and all are just as important as the other to ensure that any building job goes smoothly. Make a list of skills you have and things you enjoy doing. For example, are you good at solving problems? Are you artistic? Do you enjoy working with your hands? Choose 3-4 of the careers listed below and see if anything might be a good fit for you in the future.

- Before you decide where to start, **check out this video** by Kayleen McCabe, a professional woodworker, TV host, and member of The House That She Built team. Listen to how she took her passion and made it into her career you can do that too!
- General Contractor
- Interior Designer
- Project Manager
- Architect
- Drywaller
- Tiler
- Framer
- Painter
- HVAC Technician
- Concrete Laborer
- Landscaper
- Cabinet Manufacturer
- Electrician
- Insulation Contractor
- insulation contractor
- Roofer
- Plumber
- Excavator

Carpenter

Engineer

3.

**Reach out to home builders or construction firms in your community.** Talking to the people in your community that do some of the jobs listed in option 2 is a great way to learn about the field of construction! Find a company that does work you find interesting and set up time to interview at least one woman who works there.

• Before your interview, create a list of questions you want to ask. Girl Scouts are always prepared!

# Step Two: Design Something Great

One of the best parts about being in construction is getting to build something from the ground up. More than a million homes are built each year in the United States, but there are so many other things that can be built! From playgrounds to airports, it takes a large crew of people to build something, but it all starts with an idea and a design.

To complete this step, put on your architect hat and follow the guide below to design something. Choose one of the following options and then answer the questions below before getting started.



**Option One:** Build something for you or your family (like a house or a barn).



**Option Two:** Build something for your community (like a school or a shopping mall).

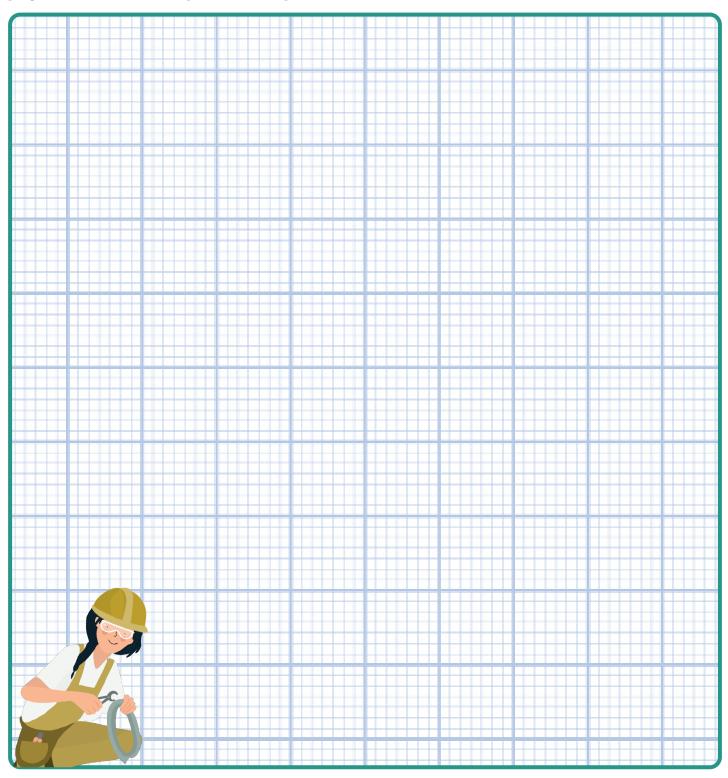
### Now, answer the following questions:

What type of structure are you building?
Why do you want to build it? Why is it needed or wanted?
Who is going to use the space?
How are they going to use the space?
What are the top 3 things that are important to include when building the space?



# Step Two, Continued

Let's start designing! Architects and designers have different methods of creating a plan for a building. Some like to draw on paper and others prefer to use a computer. If you would like to draw on paper, you can use the next page of graph paper to get started. Interested in trying to create a digital plan? Work with an adult to access the program Tinkercad on a computer, tablet, or phone.





**Note to adults:** Tinkercad is a kid-friendly version of AutoCAD, a professional 3-D design software. It is free to use and to create an account. The popular game Minecraft is not free but is a good option for 3-D world building if your Girl Scouts already play.



## Step Three: Build a Scale Model

What is a scale model? A scale model is like a prototype. It is a small, physical version of your design so that you can see what it might look like when brought to life. This step is a great way to understand what parts of your design might need to be adjusted before building the real thing. Many construction projects also use this as a tool to showcase what they are building to the communities that will use the structure.

- Collect materials from around your house that would be useful to create a model of your building. Review your design and think about what types of materials might best represent your vision. Don't forget something to help hold everything together, such as tape or glue.
- Create a base for your model to sit on. This could be cardboard, paper, or something similar that will help make sure it is sturdy. Fun fact: In a real building, this would be called the footer or the foundation.
- Start building!



Looking for a teamwork challenge? Remember that working in construction means you are part of a team. Whether you are the framer or the engineer, you must work with other skilled tradespeople to make the vision come to life. Consider the following two options to stretch your teamwork muscles.

### Teamwork Challenge Option One:

Partner up and build a friend's design. See if you can interpret their design plans and bring their vision to life on your own! This is a great way to learn why it is important to make sure you create a clear plan for your structure on big projects.

### Teamwork Challenge Option Two:

Divide into jobs based on some of the different trades listed in Step 1. Each job will be responsible for building a certain portion of the group's designs. For example, someone can be in charge of the walls, while someone else builds all the roofs, and another person begins work on creating some beautiful landscaping.

### Step Four: Reflect and Share

#### Reflect

We learned that there are a lot of people hoping to get more women involved because the majority of the construction workforce is currently made up of men. Why do you think that is? What are reasons that there are not enough women joining the construction field? What did you think about the jobs discussed in this patch program before you started? Did your mind change after?

#### Share

Even if you have decided that working in construction is not for you, you can still help challenge stereotypes about working in construction by sharing what you've learned. Choose one of the options below to complete this step.

1.

Imagine you are a company trying to hire more women to work at your construction business. Choose one or more of the jobs you learned about while completing this patch program and create a short commercial or brochure to convince people to come work for you.

2.

We have learned that building something can help your community. Brainstorm ideas for something that your community needs, like a park bench or perhaps some birdhouses. Reach out to a company in your community that builds things or work with an adult to create a community service project that involves building something! Always be sure to check with the place where you intend to put your project to be sure it is wanted.

3.

Be a mentor and find another troop in your area who is interested in completing this patch program. Talk about what you learned with them and help lead them through the design and building challenges in Steps 2 & 3.



Congratulations! You have completed the House That She Built Patch Program designed by Girl Scouts of Ohio's Heartland Council. You can purchase the patch by visiting our online shop.