

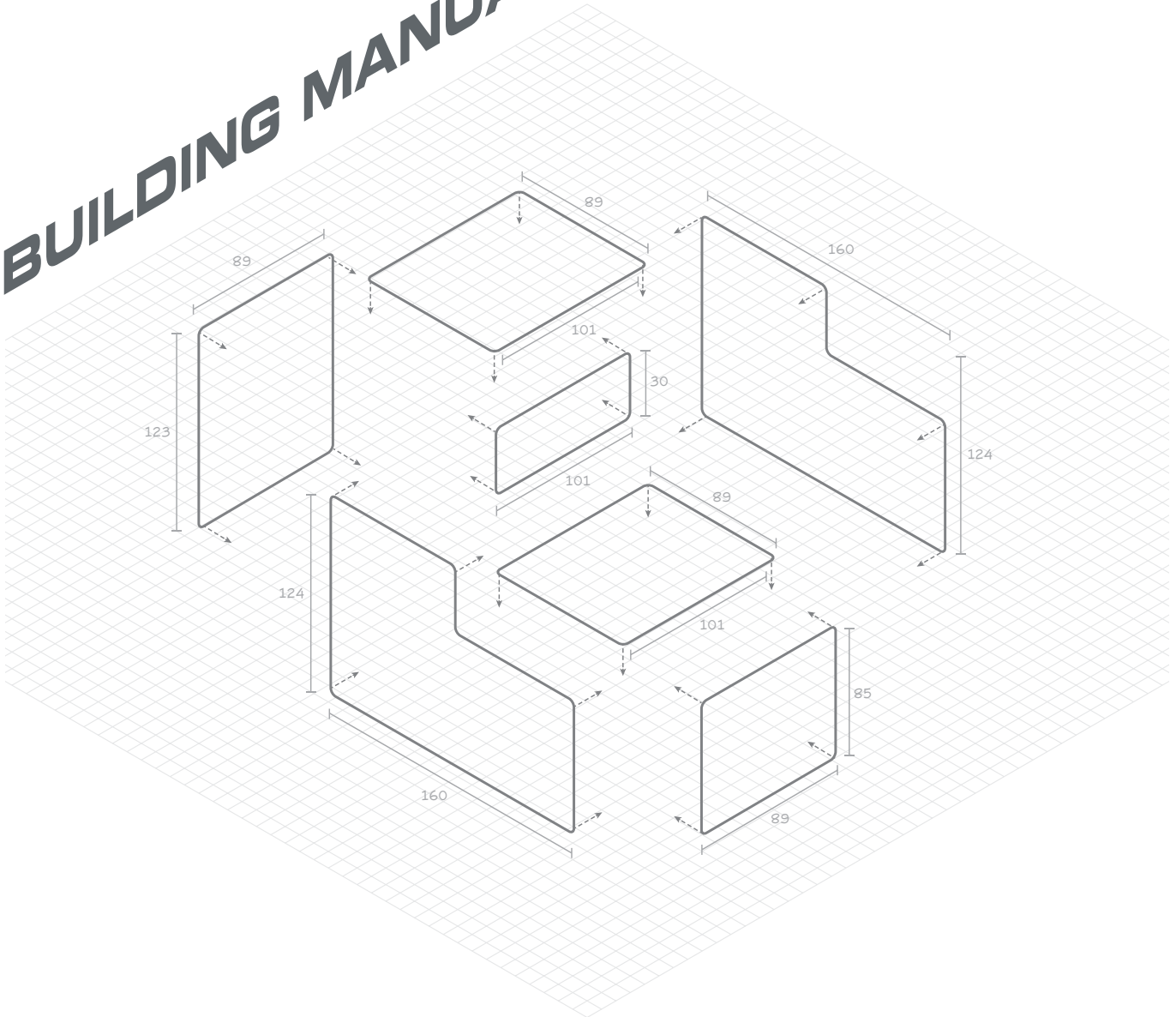
The Kris Kringle Gingerbread Clinic for Elves

BUILDING MANUAL



ROBINS & MORTON

BUILDING MANUAL



LAST UPDATED: NOVEMBER 27, 2023

**Produced by Robins & Morton
For North Pole, LLC
123 Elf Road, North Pole 88888**

TABLE OF CONTENTS

BUILDING MANUAL	2
------------------------------	----------

PRECONSTRUCTION PHASE	5
------------------------------------	----------

Keep Collaboration at the forefront.	5
Best Practices.....	5
Construction Type	6
Color System	6
Architecture and Landscape Design.....	6
Estimate Summary.....	7

CONSTRUCTION PHASE	8
---------------------------------	----------

Procurement Guide and material layout.....	9
Prefabricated Wall Form Templates	10
Prefabricated Wall Form Templates	11
Construction Sequence	12
Construction Sequence continued	13
Assembly Documentation	13

WARRANTY AND CLOSE OUT	14
-------------------------------------	-----------

Sustainable Disposal Plan.....	15
--------------------------------	----

ROBINS & MORTON

In early 2023, the team at Robins & Morton received a request for proposal (RFP) from a new, jolly client. The design-build RFP outlined the need for a new health clinic at the North Pole to improve the wellbeing of Kris Kringle's team of elves. The catch? It had to be constructed by Christmas 2023.

The team at Robins & Morton got to work, collaboratively designing a facility that would be whimsical, but functional, to meet the needs of the hardworking elves.

In the following pages, please find the official building manual for Robins & Morton's latest project, the Kris Kringle Gingerbread Clinic for Elves. We encourage you and your loved ones to follow along with our building process and learn firsthand what it took to meet this immovable deadline before the clock struck midnight on Christmas Day.

This manual includes everything you will need on your gingerbread building journey from preconstruction through warranty and close out, as well as lessons learned and best practices.

Once complete, participate in a retrospective by sharing your creations and lessons learned on social media using **#RMElfClinic**.

Merry Christmas and Happy Holidays
from the jolliest construction services provider
south of the North Pole.

UP NEXT: PRECONSTRUCTION 

PRECONSTRUCTION PHASE

Welcome to the preconstruction phase of the Kris Kringle Gingerbread Clinic for Elves! In this crucial stage, we will help you plan and assess the resources needed to turn your gingerbread blueprints into reality. In any successful construction endeavor, detailed preconstruction is vital to ensuring a smooth and efficient building process.

KEEP COLLABORATION AT THE FOREFRONT.

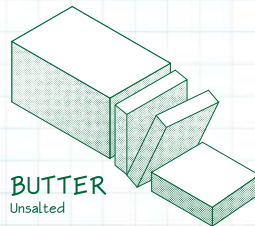
Engaging in open discussions with your fellow builders will not only spur innovation but will also help in making informed decisions. Together, you can analyze the project requirements, set realistic goals, and allocate resources wisely.

BEST PRACTICES

Lessons learned from past gingerbread structure construction will be instrumental in the preconstruction phase. By drawing from our experiences, we can better anticipate potential challenges. Let's review several essential lessons:

› Material Quantities

Accurately calculating the materials required for the gingerbread dough, icing, and various toppings will prevent any last-minute trips to the store. Material takeoff can be found in our estimate summary on page 7, as well as in the procurement guide on page 9.



› Contingency Planning

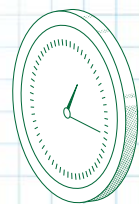
Preparing for unexpected events, such as broken gingerbread pieces, will keep the project on track. The procurement guide on page 9 provides guidance for excess material which can be used for replacement walls or decoration, should an unexpected event arise.

› Skill Assessment

Recognizing the strengths and skills of your team members will help you delegate tasks appropriately, optimizing the efficiency of the construction process. For example, small hands may be best for decorating the clinic's nooks and crannies, while more experienced builders may need to handle the baking tools.

› Time Management

Understanding the time needed for baking, cooling, and assembling the gingerbread pieces will enable you to create a reliable construction schedule.



By meticulously estimating the project's requirements and potential challenges, you set the foundation for a successful and enjoyable gingerbread construction experience.

Embrace creativity in finding resource-efficient solutions and cost-effective alternatives without compromising the quality of your gingerbread clinic. So, gather your team, brainstorm ideas, and let the preconstruction phase lead you to the next: construction.

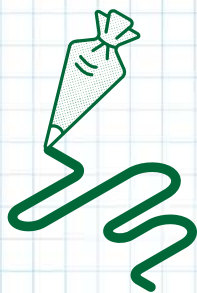
CONSTRUCTION TYPE

OPTION 01 // EDIBLE

PREFABRICATED GINGERBREAD WALLS

Outlined in this manual are the instructions to create the Kris Kringle Gingerbread Clinic for Elves utilizing prefabricated gingerbread walls. Prefabricated gingerbread walls enable quicker assembly, which can improve safety.

Choose edible icing mortar system below.



ICING MORTAR SYSTEM REVIEW

COMPARE:	COST	STRENGTH	ACCESSIBILITY	Mark your selection here
Store-bought	★★★★	★★	★★★★★★	<input type="checkbox"/>
Homemade	★★★★	★★★★	★★★	<input type="checkbox"/>

COLOR SYSTEM

Robins & Morton recommends the following decorative mortar colors to build a classic gingerbread clinic. However, colors can be customized to each client's preferences.

CLASSIC

- Snow White
- Evergreen
- Holly Berry Red

CUSTOM COLOR EXPLORATION

ARCHITECTURE AND LANDSCAPE DESIGN

The blueprints and design documents were designed to adapt to each client's particular needs. When determining the architectural details and landscape for your clinic, think through what style inspires you and your team. Below are some frequently-used elements in the final design and landscape of gingerbread clinics.

> Candy canes

> Licorice

> Nuts and/or seeds

> _____

> Gumdrops

> Small, colorful candies

> Cookies

> _____

> Pretzels

> Peppermints

> _____

> _____

> Cereal

> Sprinkles

> _____

> _____

> Fruit

> Marshmallows

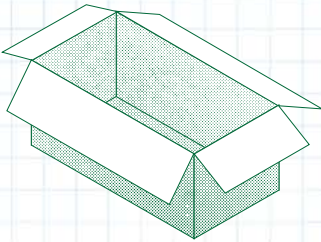
> _____

> _____

OPTION 02 // NON-EDIBLE

RECYCLED MATERIALS

If you wish to utilize recycled or non-edible materials in your construction process, the procurement guide and assembly instructions may serve as a starting place for innovation. Some recommended materials include recycled cardboard, wood, or paper. Material selection for this construction alternative will affect the warranty lifespan, which can be found on page 15.



ESTIMATE SUMMARY

ITEM OF WORK	UNIT COST	TOTAL COST	% OF TOTAL
All-Purpose Flour	\$0.50/lb	\$2.49	10%
Baking Powder	\$0.34/oz	\$2.79	10%
Ground Ginger	\$1.59/oz	\$3.19	11%
Ground Cinnamon	\$0.50/oz	\$1.19	4%
Ground Nutmeg	\$1.74/oz	\$3.69	13%
Ground Cloves/Allspice	\$0.99/oz	\$1.99	7%

ITEM OF WORK	UNIT COST	TOTAL COST	% OF TOTAL
Salt	\$0.03/oz	\$0.69	2%
Butter (Unsalted)	\$3.79/lb	\$3.79	13%
Light Brown Sugar	\$0.99/lb	\$1.99	7%
Eggs	\$0.08/egg	\$0.99	3%
Molasses	\$0.31/oz	\$3.69	13%
Powdered Sugar	\$0.99/lb	\$1.99	7%
Total Project Cost		\$28.48	100%

UP NEXT: CONSTRUCTION 

CONSTRUCTION PHASE

For more than 75 years, Robins & Morton has constructed healthcare and commercial facilities across the country, gathering best practices along the way. We are excited to share this knowledge with you as you embark on your own project.

Collaboration is at the heart of all construction, as teamwork is essential for bringing your vision to life. Whether you're working with family, friends, or colleagues, each member's unique skills and creativity can contribute to a truly remarkable result. The more hands-on deck, the merrier the experience!

Innovation is key in the world of gingerbread construction. While we will provide you with a step-by-step guide, don't be afraid to think outside the box and add your own special touches. From creative frosting techniques to inventive candy decorations, the possibilities are endless. Embrace your inner builder and let your imagination soar.

Before we delve into construction, let's discuss several lessons learned from the Kris Kringle Gingerbread Clinic for Elves:

Structural Integrity Matters: Just like any building, a gingerbread clinic requires a solid foundation. Ensuring the gingerbread pieces are baked to perfection and using a sturdy base will prevent any instability.

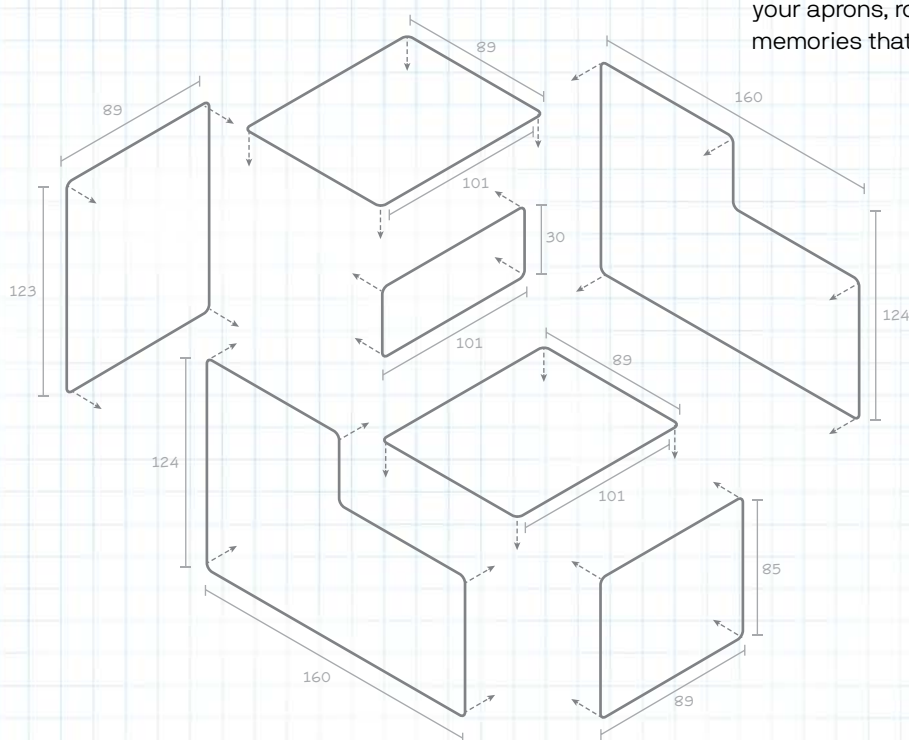
Everything in Place: Before construction begins, ensure each item is measured and prepped correctly for timely assembly. Our recommended layout for preparation follows.

Precise Measurements and Cutting: Accuracy is crucial when cutting out the gingerbread pieces. Use the cutters provided to achieve the desired shapes and sizes for the prefabricated clinic walls.

Icing Magic: Royal icing is the mortar of gingerbread construction. Learning to work with it effectively is key to securing walls and decorations. Store bought icing will save time but may not establish strong structural integrity.

Patience is Sweet: Building a gingerbread clinic can be time-consuming, but remember, good things come to those who wait. Take your time to avoid any mishaps and enjoy the creative journey.

Now, with a collaborative spirit and a thirst for innovation, it's time to begin the gingerbread construction process. Follow the upcoming sections of this manual diligently, and you'll be amazed at what you can achieve. So, grab your aprons, roll up your sleeves, and let's start building memories that are as sweet as the gingerbread itself!



PROCUREMENT GUIDE AND MATERIAL LAYOUT

DOUGH FOR PREFAB WALLS

6 cups (828g) all-purpose flour, plus more for rolling the dough (see recipe note)

1/2 teaspoon baking powder

4 teaspoons ground ginger

4 teaspoons ground cinnamon

1/4 teaspoon ground nutmeg

1/2 teaspoon ground cloves or allspice

1/2 teaspoon salt

3/4 cup (170g) butter, softened

1 1/2 cups (284g) packed light brown sugar

2 large eggs

1 cup (235g) molasses

1 tablespoon water

HOMEMADE ICING MORTAR

2 large egg whites

2 2/3 cups powdered sugar, divided

DIVISION 10 EQUIPMENT NEEDS

Large bowl(s)

Small bowl(s)

Prep area

Whisk

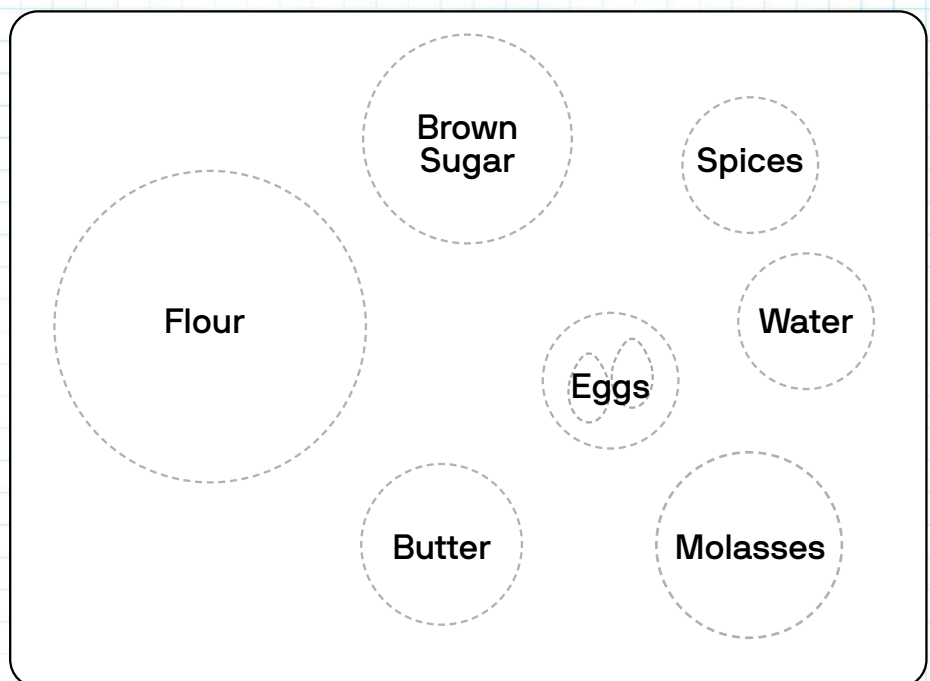
Stand mixer (or beaters)

Piping or freezer bag

2-3 cookie sheets

Prefabricated wall form templates (see next page)

Note: Prior to construction, Robins & Morton recommends laying out all materials on a cutting board or prep area to ensure your project stays on schedule and budget.



PREFABRICATED WALL FORM TEMPLATES

Note: You should have a total of seven wall panels for a complete clinic.

Front/Back
Qty: 2

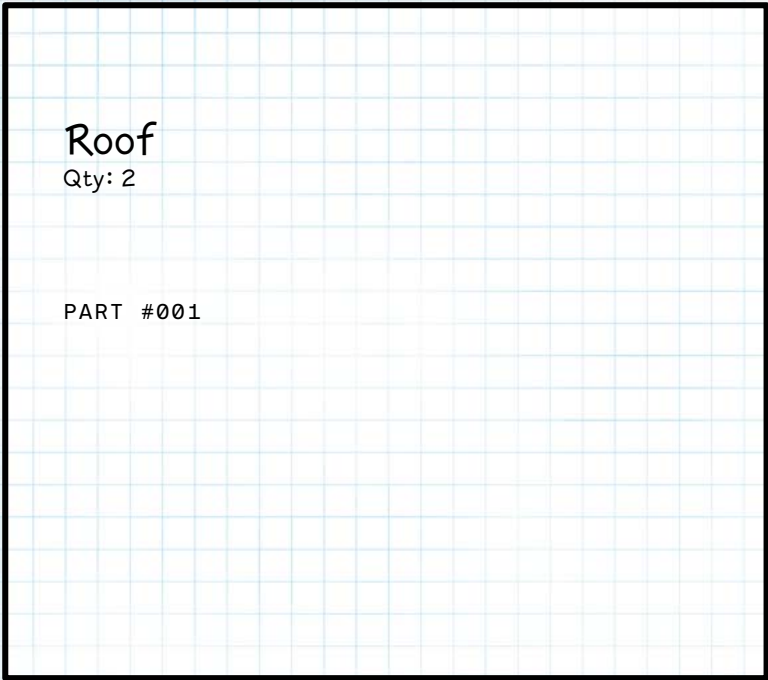
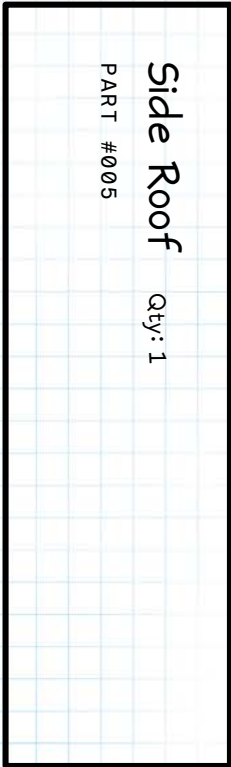
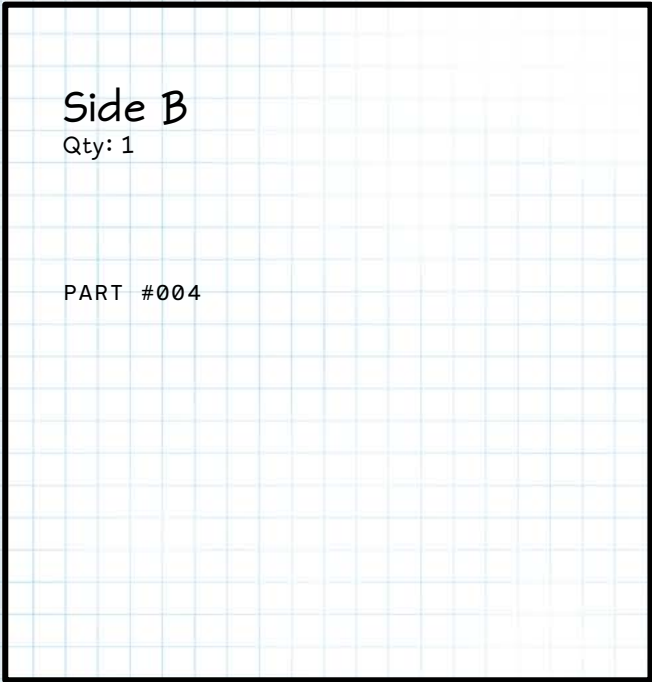
PART #003

Side A
Qty: 1

PART #002

PREFABRICATED WALL FORM TEMPLATES

Note: You should have a total of seven wall panels for a complete clinic.



CONSTRUCTION SEQUENCE

MAKE THE GINGERBREAD DOUGH

01. Whisk the dry ingredients

- In a large bowl, whisk together the flour, baking powder, ginger, cinnamon, cloves or allspice, and salt. Set aside.

02. Make the wet mixture

- Using a stand mixer fitted with the paddle attachment, or a hand mixer, beat the butter and brown sugar on medium speed until fluffy and well blended. Beat in the eggs, molasses, and water until well combined.

03. Combine the wet and dry ingredients, and knead the dough

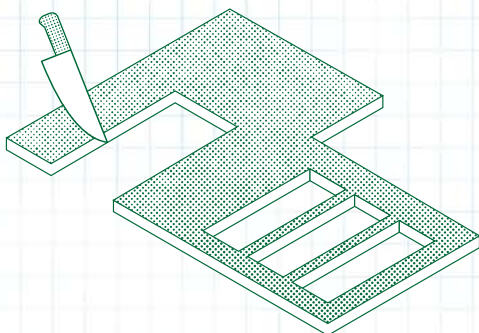
- Beat half of the flour mixture into the molasses mixture until well-blended and smooth. Add in the remaining flour and continue to mix until well blended and a soft cohesive dough forms.
- Turn the dough out onto a lightly floured work surface and knead by hand five or six times until the dough is smooth and combined. If dough is too soft, add a little more flour.

04. Divide the dough, wrap and chill

- Divide the dough in half, pat into disks, and wrap each half in plastic wrap. Refrigerate for at least two hours, preferably overnight. You can make it up to three days ahead of time. Let sit at room temperature for at least 10 minutes before rolling out.

07. Create prefab walls with cookie templates

- Rub a little flour over the surface of the dough. Place the template pieces on the dough, using as many pattern pieces as will fit on the dough. Use a pressing action to cut out the pattern pieces from the dough. Continue with all templates, repeating the action for Part #001 (roof) and Part #004 (front/back).
- Space the pieces on the cookie sheet an inch apart from each other. If dough pieces stretch during the transfer process, push them back into shape.
- You can cut out a door and window(s) at this point, or you can wait until after baking, soon after the pieces have come out of the oven while the cookies are still warm. Doors and windows can also be created with frosting in the final stages of construction.



PREPARE THE GINGERBREAD CLINIC PIECES

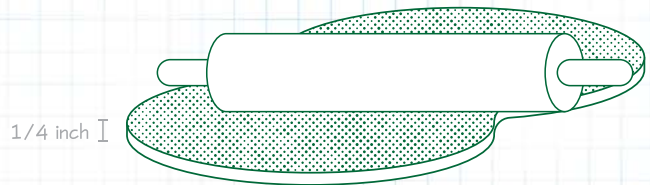
05. Prepare the oven and cookie sheets

- Preheat oven to 350°F, with the oven rack in the middle. Have two to three flat cookie sheets ready.

06. Roll out the dough

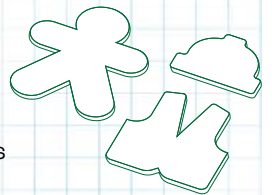
- Spread parchment paper on a large flat surface.
- Dust the paper lightly with flour.
- Working with half of the dough at a time, use a rolling pin to roll out the dough to an even thickness of 1/4 inch. If it sticks to either your rolling pin or the rolling surface, dust with flour.

Best Practice: If the rolled-out dough is very soft, you may want to freeze it for an hour before cutting out the walls.



08. Bake

- Bake in a 350°F oven until the edges are just beginning to darken, 11-15 minutes for the large pieces, six to eight minutes for the small pieces.
- Rotate the cookie sheets halfway through the baking for more even browning. Remove the sheets to racks to cool, about 10-15 minutes.



Best Practice: Place small pieces on one sheet and large pieces on a separate sheet to ensure consistent baking times.

09. Trim the pieces while warm

- While the pieces are still slightly warm, lay the pattern pieces over them and use a large straight chef's knife to trim off any parts of the pieces that have spread beyond the pattern.
- Remove pieces to cool directly on racks.

CONSTRUCTION SEQUENCE CONTINUED

MAKE THE MORTAR

10. Make the royal icing

- Whisk the egg whites and 1 1/3 cups of the powdered sugar together until smooth.

11. Add more powdered sugar, beat to stiff peaks

- Add the remaining 1 1/3 cup of powdered sugar to the sugar and egg mixture. Using an electric mixer, beat on high speed until the icing holds stiff peaks. If it doesn't form stiff peaks, add more powdered sugar.
- **Best Practice:** Place a dampened clean towel over the bowl of royal icing. Keep this towel over the icing to prevent it from drying out while you work with it.

12. Pipe the icing with a pastry bag or cut freezer bag

- When you are ready to mortar or decorate, fill a pastry bag with the icing. If you don't have a pastry bag, you can make your own with a resealable plastic freezer bag, just cut off the tip (a small cut) of one of the corners of the bag.

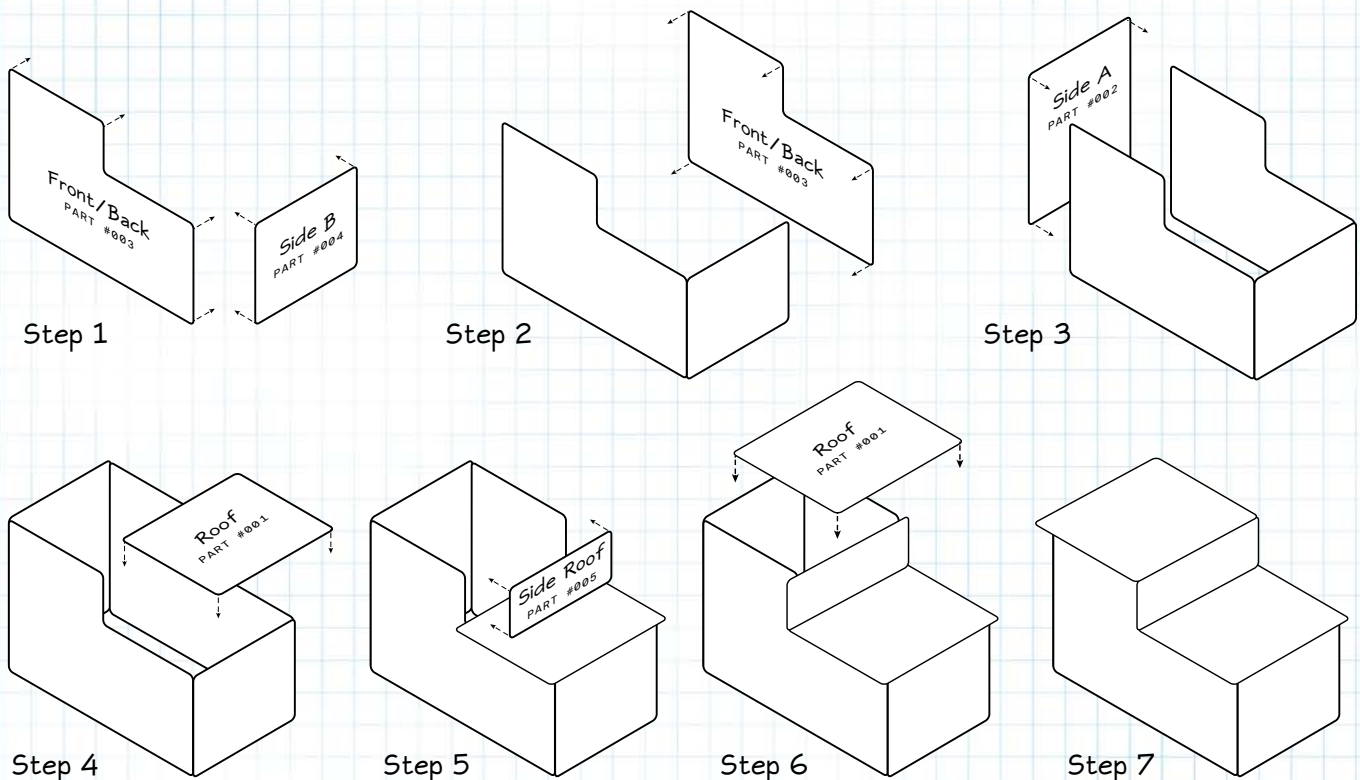
Best Practice: Plastic or metal piping tips are available in supermarkets for more controlled piping. These tips can also be used with a freezer bag.

ASSEMBLE & DECORATE

13. Using the mortar, assemble walls according to "Assembly Documentation" on page 13

- Place all walls on a stable cutting board or plate for final display and decor. After wall assembly, use candy and decorations to make the Kris Kringle Gingerbread Clinic your own.

ASSEMBLY DOCUMENTATION



WARRANTY AND CLOSE OUT

Preserving the gingerbread clinic through the holidays requires protecting it from humidity and temperature changes and implementing infection control procedures. Here are some steps you can follow:

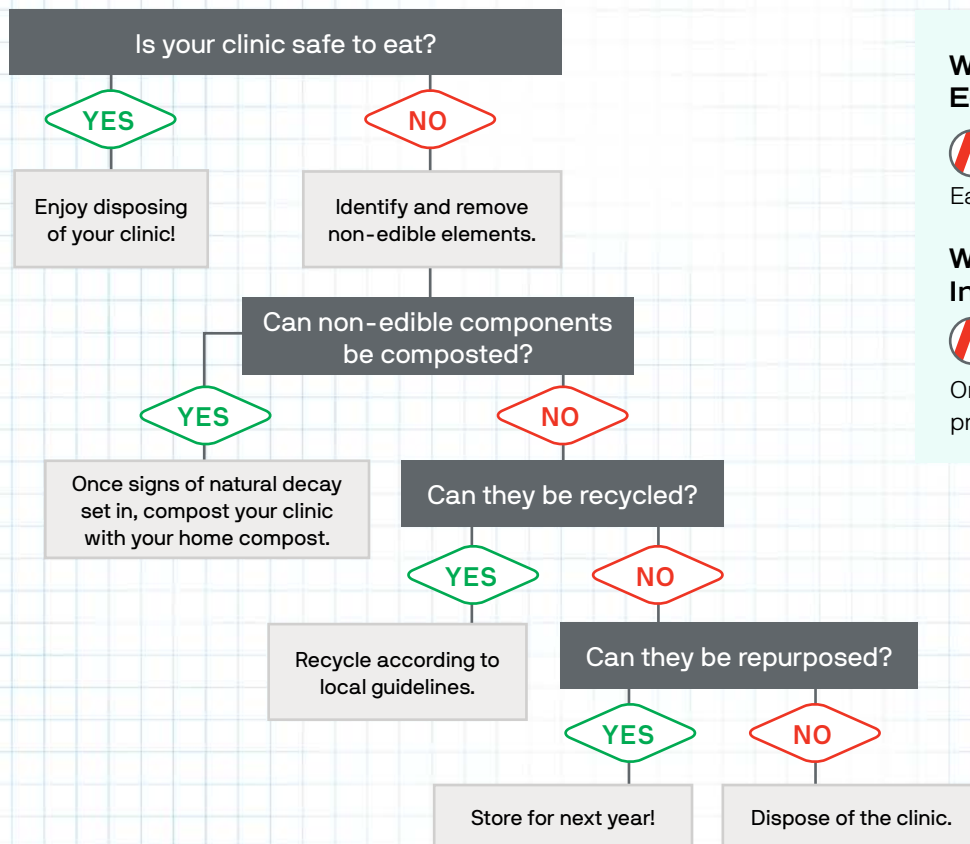
- › **Display in a cool and dry environment:** Place your gingerbread clinic in a cool, dry location away from direct sunlight, heat sources, and moisture.
- › **Avoid touching:** Minimize handling the gingerbread clinic, as the oils from your hands could damage the delicate decorations over time.
- › **Insert interior supports:** If your gingerbread clinic has intricate parts that may break down over time, you can insert thin dowels or toothpicks to provide structural support.
- › **Check regularly:** Periodically inspect the gingerbread clinic for any signs of moisture or insect activity. If you notice any issues, take corrective action immediately.
- › **Edible vs. inedible elements:** Consider the edibility of the decorations. If the gingerbread house contains edible items like candy or fondant, they may become less appealing after a month.
- › **Documentation:** If you want to preserve the memory of your gingerbread clinic, take final photos from various angles before displaying it.

Fig. A Rendering of example project

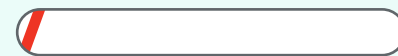


SUSTAINABLE DISPOSAL PLAN

Evaluate Edible Components



Warranty: Edible Materials



Eat immediately

Warranty: Inedible Materials



One to two years with proper storage

Don't forget to share your gingerbread clinic with us on social media!

#RMELFCLINIC

