

# GINGERBREAD HOUSE

## DESIGN AND CONSTRUCTION PLANS



DCS  
DIGITAL CONSTRUCTION  
SOLUTIONS

**GET IN TOUCH:**

NO RFIS WERE HARMED IN THE  
MAKING OF THIS PROJECT.



PROJECT  
GINGERBREAD HOUSE

DRAWING NUMBER  
GINGER-00-000

# SPECIFICATION NOTES

## GENERAL NOTES

- G1.** THIS DOCUMENT OUTLINES THE REQUIREMENTS FOR THE FABRICATION, ASSEMBLY, FINISHING, AND PRESENTATION OF A DECORATIVE GINGERBREAD HOUSE STRUCTURE.
- G2.** ALL MATERIALS SHALL BE FOOD-GRADE, FIT FOR HUMAN CONSUMPTION, AND PREPARED IN ACCORDANCE WITH STANDARD DOMESTIC FOOD-SAFETY PRACTICES. REFER TO FOOD SAFETY NOTES.
- G3.** THE GINGERBREAD HOUSE IS INTENDED AS A NON-HABITABLE, TEMPORARY, CONFECTIONERY DISPLAY STRUCTURE. STRUCTURAL REQUIREMENTS ARE LIMITED TO ENSURING STABILITY FOR DISPLAY PURPOSES ONLY.
- G4.** DIMENSIONS SHOWN ON DRAWINGS SHALL BE VERIFIED DURING CONSTRUCTION; MINOR VARIATIONS IN BAKED COMPONENTS ARE EXPECTED DUE TO DOUGH EXPANSION OR CONTRACTION.
- G5.** WORKMANSHIP SHALL BE CONSISTENT AND ALIGNED WITH STANDARD GINGERBREAD CONSTRUCTION PRACTICES. EDGES SHALL BE CLEANLY CUT, JOINTS FULLY SUPPORTED WITH ROYAL ICING, AND DECORATIVE FINISHES APPLIED NEATLY.

## MATERIALS

- M1.** MATERIALS USED IN THE CONSTRUCTION OF THE GINGERBREAD HOUSE REQUIRE INDIVIDUAL PREPARATION. IDEAL MATERIAL CONDITIONS ARE AS DESCRIBED:
- M2. GINGERBREAD DOUGH - STRUCTURAL MATERIAL**
  - SHALL BE A FIRM, LOW-MOISTURE DOUGH SUITABLE FOR STRUCTURAL APPLICATIONS.
  - DOUGH SHALL BE ROLLED TO A NOMINAL **10mm** THICKNESS UNLESS NOTED OTHERWISE.
  - FINISHED BAKED PANELS SHALL BE ALLOWED TO COOL AND CURE COMPLETELY BEFORE ASSEMBLY.
- M3. ROYAL ICING - STRUCTURAL ADHESIVE**
  - SHALL BE OF STIFF-PEAK CONSISTENCY.
  - USED FOR BONDING WALL PLATES, ROOF PANELS, DECORATIVE ELEMENTS, AND REINFORCING JOINTS.
  - COLOUR: WHITE, UNLESS OTHERWISE SPECIFIED.
- M4. FINISHES AND DECORATIONS**
  - ALL FINISHES SHALL BE EDIBLE.
  - DECORATIVE LOADS SHALL NOT EXCEED THE CARRYING CAPACITY OF THE GINGERBREAD PANELS. REFER TO STRUCTURAL STABILITY REQUIREMENTS.

## STRUCTURAL STABILITY REQUIREMENTS

### S1. PANEL QUALITY

- GINGERBREAD PANELS SHALL BE BAKED UNTIL FIRM AND DRY TO MINIMISE DEFORMATION.
- PANELS WITH CRACKS, UNEVEN THICKNESS, OR COMPROMISED EDGES SHALL NOT BE USED AS LOAD-BEARING COMPONENTS.

## STRUCTURAL STABILITY REQUIREMENTS - CONTINUED

- S2. CONNECTION STRENGTH**
  - ALL JOINTS SHALL BE BONDED USING A SUFFICIENT QUANTITY OF ROYAL ICING TO CREATE A CONTINUOUS FILLET WELD ON THE INTERIOR SIDE OF THE CONNECTION.
  - JOINTS SHALL BE ALLOWED TO CURE FULLY (MINIMUM 1-2 HOURS) BEFORE ADDITIONAL LOADS ARE APPLIED.
- S3. WALL AND ROOF ASSEMBLY**
  - WALLS SHALL BE ASSEMBLED AND BRACED TEMPORARILY UNTIL ICING CURES.
  - ROOF PANELS SHALL NOT BE INSTALLED UNTIL THE WALL FRAME DEMONSTRATES SUFFICIENT RIGIDITY.
- S4. LOAD MANAGEMENT**
  - ROOF DECORATIONS SHALL NOT IMPOSE EXCESSIVE WEIGHT. HEAVY CONFECTIONERY ITEMS SHALL BE USED SPARINGLY OR WITH INTERNAL GINGERBREAD COLUMN REINFORCEMENT.
  - ADDITIONAL INCLUSION OF STRUCTURAL SUPPORT GINGERBREAD IS AT THE DISCRETION OF THE CONSTRUCTION MANAGER AND REQUIRES ADDITIONAL ENGINEER CONSULTATION IF GINGERBREAD HOUSE INTEGRITY IS TO BE GUARANTEED.
  - UNSUPPORTED SPANS SHALL BE KEPT TO A MINIMUM TO REDUCE RISK OF COLLAPSE.
- S5. ENVIRONMENTAL CONSIDERATIONS**
  - HUMIDITY SHALL BE CONTROLLED WHERE POSSIBLE. HIGH MOISTURE ENVIRONMENTS MAY WEAKEN GINGERBREAD PANELS AND REDUCE ADHESION STRENGTH.
  - AVOID PLACING THE STRUCTURE NEAR HEAT SOURCES OR DIRECT SUNLIGHT TO PREVENT SOFTENING OR DEFORMATION.

## DOCUMENTATION

- D1.** THIS SPECIFICATION SHALL BE READ IN CONJUNCTION WITH THE GINGERBREAD HOUSE CONSTRUCTION DRAWINGS, THE GINGERBREAD DOUGH TECHNICAL DATA SHEET AND ROYAL ICING TECHNICAL DATA SHEET.
- D2.** CONSTRUCTION DRAWINGS SHALL INDICATE:
  - PLAN LAYOUT
  - WALL AND ROOF ELEVATIONS
  - DIMENSIONS OF ALL PANELS
  - LOCATION AND SEQUENCING OF JOINTS
- D3.** CONSTRUCTION IS SIMPLIFIED BY PRINTING PLANS AT A4 SHEET SIZE AS INDICATED, CUTTING OUT THE HOUSE PANELS, PLACING THESE PANELS ONTO BAKED BISCUIT AND CUTTING OUT HOUSE PANELS REQUIRED.
- D4.** CONSTRUCTION DRAWINGS SHALL NOT INDICATE:
  - DECORATION PLACEMENT.GUIDANCE FOR DECORATION PLACEMENT IS: FOLLOW THE INDIVIDUALS HEART AND FIND INSPIRATION IN CHILDLIKE GLEE.



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SOLUTIONS

## GET IN TOUCH:

IF YOU'D LIKE YOUR REAL PROJECTS  
TO BE THIS WELL DOCUMENTED...



PROJECT

GINGERBREAD HOUSE

DRAWING NUMBER

GINGER-00-001

# **SAFETY**

## **GENERAL SAFETY NOTES**

- GS1.** SHARP TOOLS (KNIVES, COOKIE CUTTERS, BLADES) SHALL BE HANDLED IN ACCORDANCE WITH NORMAL KITCHEN-SAFETY PRACTICES.
- GS2.** HOT SURFACES (OVEN TRAYS, RACKS, PANS) SHALL BE HANDLED WITH APPROPRIATE PROTECTIVE EQUIPMENT.
- GS3.** CHILDREN PARTICIPATING IN THE WORKS SHALL BE SUPERVISED BY A COMPETENT ADULT AT ALL TIMES, ESPECIALLY DURING CUTTING, BAKING, AND ASSEMBLY USING ICING ADHESIVES.
- GS4.** DO NOT CONSUME RAW DOUGH CONTAINING EGG. ENSURE COMPONENTS ARE FULLY BAKED BEFORE HANDLING OR CONSUMPTION.

## **FOOD SAFETY NOTES**

- FS1.** ALL WORK SURFACES, TOOLS, AND EQUIPMENT SHALL BE CLEANED AND SANITISED PRIOR TO USE.
- FS2.** HANDS SHALL BE WASHED THOROUGHLY BEFORE AND AFTER HANDLING INGREDIENTS AND BAKED COMPONENTS.
- FS3.** PERISHABLE ITEMS (E.G., ICING CONTAINING EGG WHITES) SHALL BE PREPARED AND STORED ACCORDING TO STANDARD FOOD-SAFETY GUIDELINES. ROYAL ICING WITH RAW EGG WHITES SHOULD BE CONSUMED WITHIN RECOMMENDED TIMEFRAMES; ALTERNATIVELY, POWDERED MERINGUE MAY BE USED TO SUBSTITUTE ROYAL ICING.
- FS4.** THE COMPLETED GINGERBREAD HOUSE IS INTENDED PRIMARILY AS A DISPLAY ITEM. IF CONSUMPTION IS PLANNED, THE STRUCTURE SHALL BE STORED IN A CLEAN, DRY ENVIRONMENT AND PROTECTED FROM PESTS AND CONTAMINANTS.



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**GET IN TOUCH:**

BECAUSE GUESSING DOESN'T  
BELONG IN CONSTRUCTION.



PROJECT  
GINGERBREAD HOUSE  
  
DRAWING NUMBER  
GINGER-00-002

# GINGERBREAD DOUGH TECHNICAL DATA SHEET

## INGREDIENTS

**NG1.** IT IS APPROPRIATE TO SUBSTITUTE INGREDIENTS OR A RECIPE AS PREFERRED.

**NG2.** - 4 CUPS (500 G) ALL-PURPOSE FLOUR

- 1 TSP BAKING SODA
- 2 TSP GROUND GINGER
- 1 TSP GROUND CINNAMON
- ½ TSP GROUND CLOVES
- ½ TSP SALT
- ¾ CUP (150 G) BROWN SUGAR, PACKED
- ¾ CUP (180 ML) UNSULPHURED MOLASSES
- ½ CUP (115 G) UNSALTED BUTTER
- 1 LARGE EGG
- 1 TSP VANILLA EXTRACT (OPTIONAL)

## EQUIPMENT

**E1.** - LARGE MIXING BOWL

- SAUCEPAN
- ROLLING PIN
- PARCHMENT PAPER
- BAKING SHEETS
- CUT OUT TEMPLATES FOR HOUSE PIECES. REFER TO CONSTRUCTION PLANS.
- SHARP KNIFE

## DOUGH PREPARATION

### D1. WHISK DRY INGREDIENTS

IN A LARGE BOWL, COMBINE THE FLOUR, BAKING SODA, GINGER, CINNAMON, CLOVES, AND SALT.

### D2. HEAT WET INGREDIENTS

IN A MEDIUM SAUCEPAN OVER LOW HEAT, MELT THE BUTTER WITH THE BROWN SUGAR AND MOLASSES, STIRRING UNTIL SMOOTH AND COMBINED (DO NOT BOIL). REMOVE FROM HEAT.

### D3. COMBINE DRY AND WET INGREDIENTS

LET THE MOLASSES MIXTURE COOL SLIGHTLY, THEN WHISK IN THE EGG (AND VANILLA IF USING). POUR INTO THE DRY INGREDIENTS.

### D4. FORM GINGERDOUGH

USE A WOODEN SPOON OR STURDY SPATULA TO MIX UNTIL A COHESIVE DOUGH FORMS. IF IT FEELS STICKY, ADD A TABLESPOON OR TWO OF FLOUR.

### D5. CHILL GINGERDOUGH

FLATTEN DOUGH INTO A DISC, WRAP IN PLASTIC, AND REFRIGERATE AT LEAST **2 HOURS** (OVERNIGHT IS BEST). THIS MAKES IT EASIER TO ROLL AND REDUCES SPREADING DURING BAKING.

## CUT AND BAKE HOUSE PIECES

### CB1. PREHEAT OVEN

PREHEAT OVEN TO 175°C

### CB2. PREPARE WORK SURFACE

LIGHTLY FLOUR A CLEAN COUNTER OR LARGE CUTTING BOARD.

### CB3. ROLL OUT DOUGH

ROLL CHILLED DOUGH TO ABOUT 10mm THICKNESS. IF DOUGH WARMS TO ROOM TEMPERATURE, CONSIDER REFRIGERATING AGAIN AFTER ROLLING.

### CB4. CUT SHAPES

USE YOUR CUT OUT GINGERBREAD HOUSE TEMPLATES TO CUT OUT GINGERBREAD HOUSE COMPONENTS. TRANSFER CAREFULLY TO PARCHMENT LINED BAKING SHEETS.

### CB5. BAKE

BAKE 10–15 MINUTES, UNTIL EDGES ARE FIRM AND JUST STARTING TO BROWN. **CAUTION:** DON'T BAKE TOO LONG. AS A GUIDE: STRONG BUT NOT BRITTLE GINGERBREAD IS MOST DESIRABLE.

### CB6. COOL

LET PIECES COOL COMPLETELY ON THE PAN OR A RACK SO THEY FULLY HARDEN BEFORE ASSEMBLY.



# ROYAL ICING TECHNICAL DATA SHEET

## INGREDIENTS

**NG1.** IT IS APPROPRIATE TO SUBSTITUTE INGREDIENTS OR A RECIPE AS PREFERRED.

**NG2.** - 3 CUPS (360 G) ICING SUGAR  
- 2 EGG WHITES (OR 4-5 TBSP MERINGUE POWDER + WATER)  
- ½ TSP CREAM OF TARTAR  
- SPLASH OF WATER (AS NEEDED)

## ICING PREPARATION

**CP1.** BEAT EGG WHITES AND CREAM OF TARTAR UNTIL FOAMY.

**CP2.** GRADUALLY ADD ICING SUGAR, BEATING UNTIL THICK AND GLOSSY.

**CP3.** ADD WATER VERY SLOWLY UNTIL YOU REACH A STIFF-PEAK PIPING CONSISTENCY — THICK ENOUGH TO HOLD SHAPES UPRIGHT.



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## GET IN TOUCH:

PROOF THAT GOOD  
DOCUMENTATION HOLDS  
EVERYTHING TOGETHER.



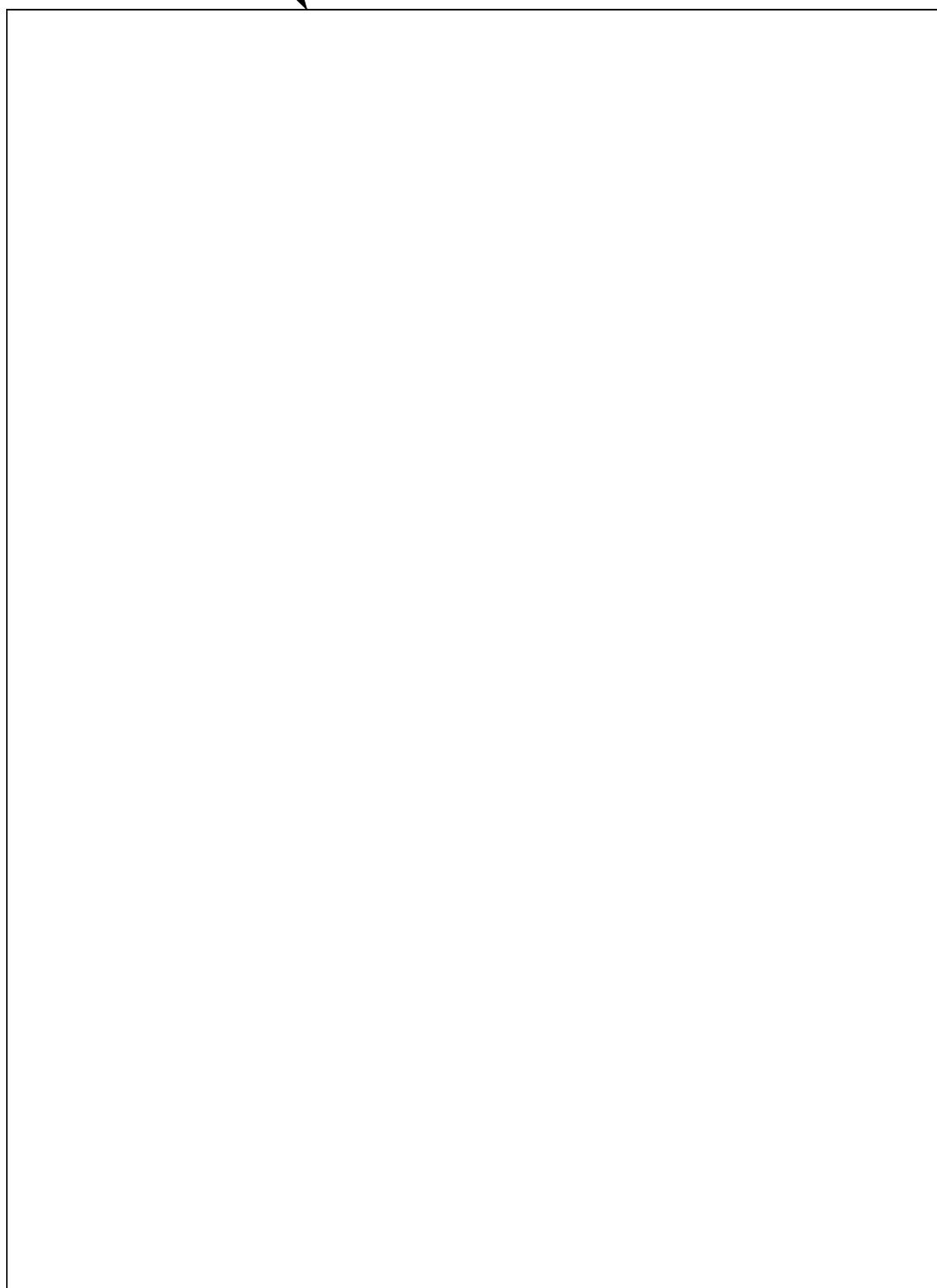
PROJECT

GINGERBREAD HOUSE

DRAWING NUMBER

GINGER-00-004

CUT OUT PLATE  
PLACE AS TEMPLATE OVER PREPARED  
DOUGH  
CUT OUT BUILDING ELEMENTS



# FLOOR (STRUCTURAL)

1 : 1

NOTE:  
SIMPLIFY CONSTRUCTION BY  
ATTACHING THE WALLS TO THIS  
FLOOR PLATE FIRST.



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**GET IN TOUCH:**

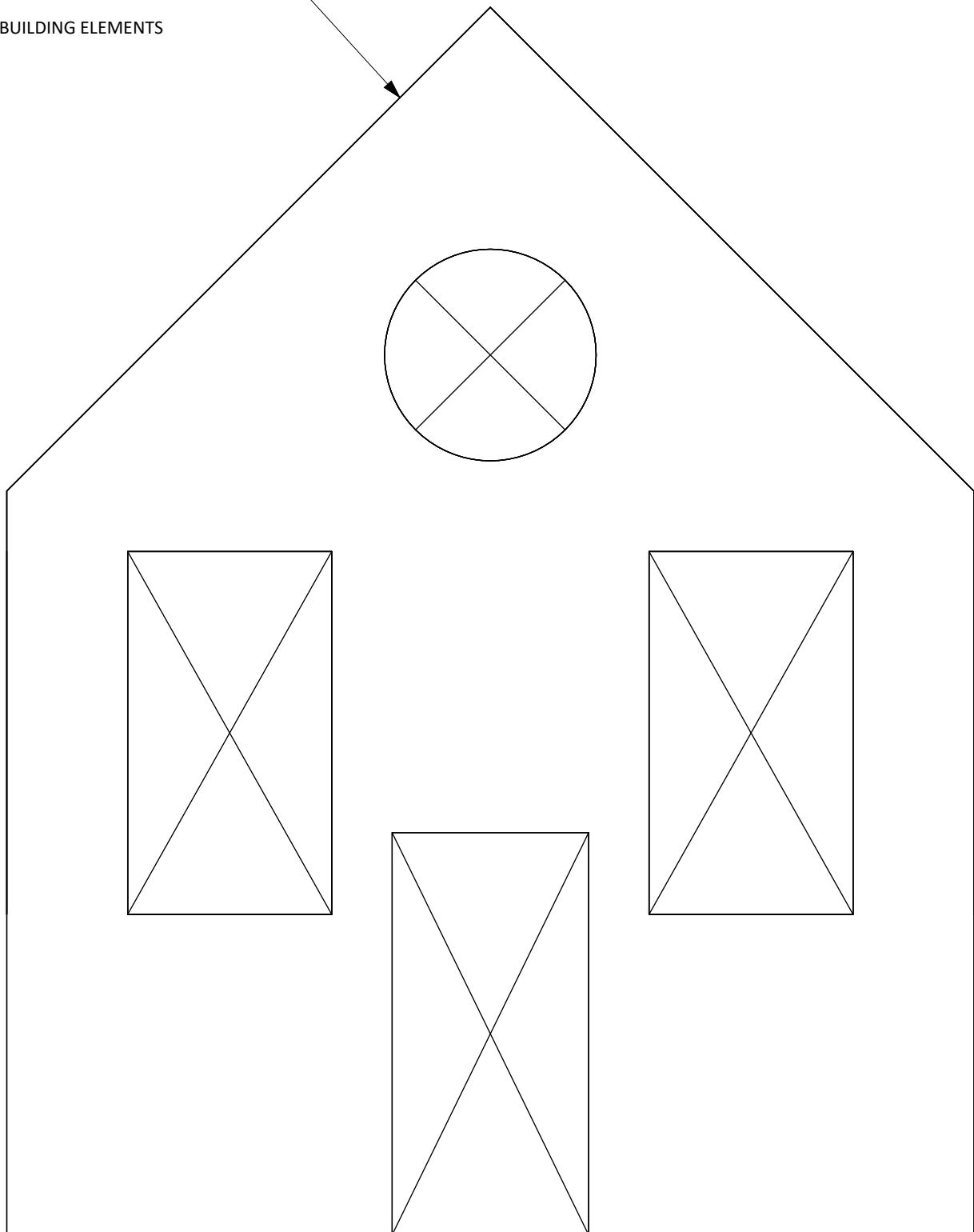
DESIGNED TO SCALE. ENGINEERED  
TO BE EDIBLE.



PROJECT  
GINGERBREAD HOUSE

DRAWING NUMBER  
GINGER-00-100

CUT OUT PLATE  
PLACE AS TEMPLATE OVER PREPARED  
DOUGH  
CUT OUT BUILDING ELEMENTS



## PANEL 1

1 : 1

NOTE:  
CUSTOMISE THIS HOUSE WITH  
UNIQUE DOORWAY AND  
WINDOW CUT OUTS



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**GET IN TOUCH:**

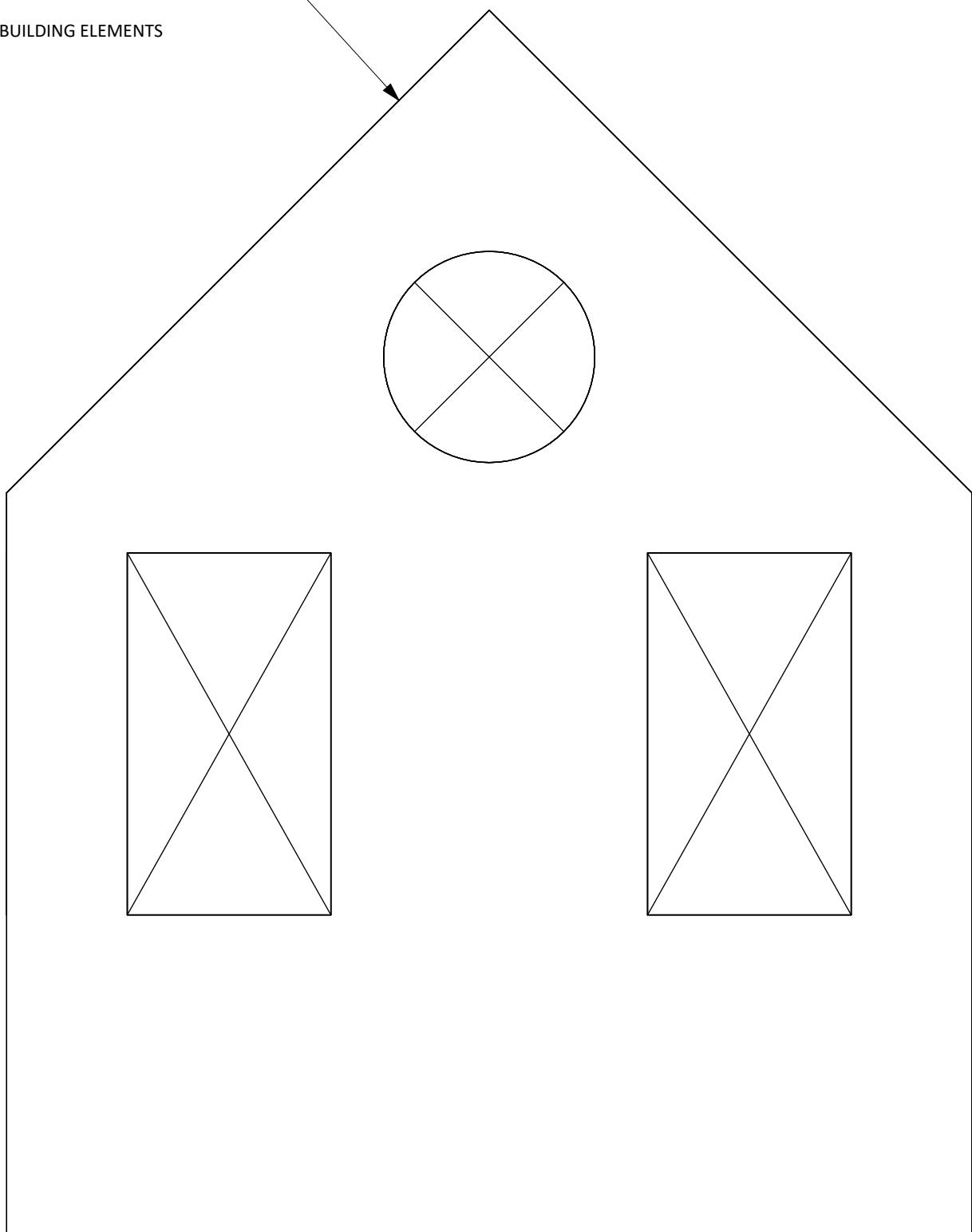
CLEAR PLANS. STABLE STRUCTURES.  
EVEN IN GINGERBREAD.



PROJECT  
GINGERBREAD HOUSE

DRAWING NUMBER  
GINGER-00-150

CUT OUT PLATE  
PLACE AS TEMPLATE OVER PREPARED  
DOUGH  
CUT OUT BUILDING ELEMENTS



## PANEL 2

1 : 1

NOTE:  
CUSTOMISE THIS HOUSE WITH  
UNIQUE DOORWAY AND  
WINDOW CUT OUTS



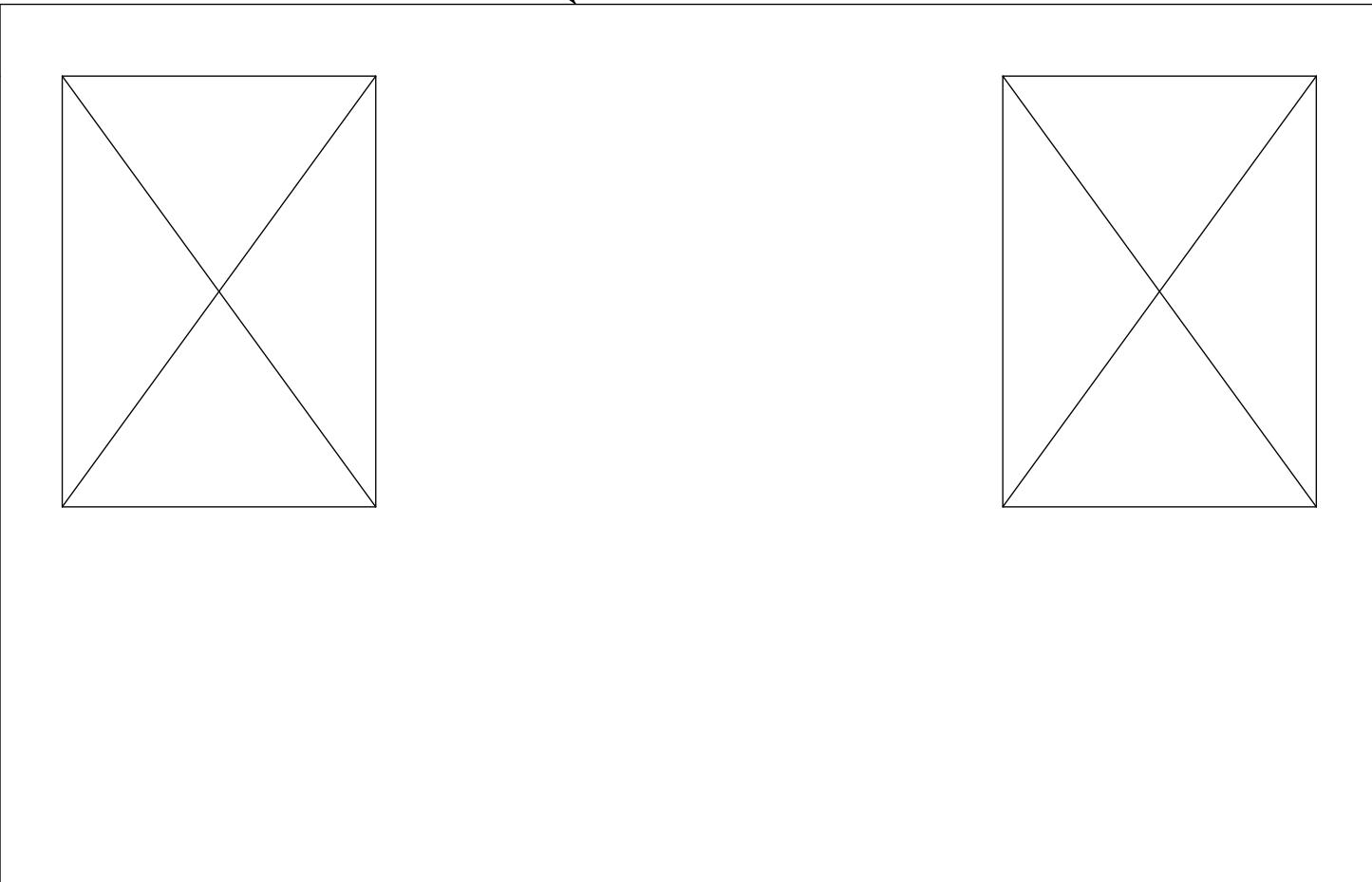
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**GET IN TOUCH:**  
GOOD DRAWINGS MATTER — EVEN  
WHEN THE BUILDING IS TEMPORARY.



PROJECT  
GINGERBREAD HOUSE  
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GINGER-00-151

CUT OUT PLATE  
PLACE AS TEMPLATE OVER PREPARED  
DOUGH  
CUT OUT BUILDING ELEMENTS



## SIDE PANEL

1 : 1

**PRODUCE 2**

NOTE:  
CUSTOMISE THIS HOUSE WITH  
UNIQUE DOORWAY AND  
WINDOW CUT OUTS



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PROJECT  
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GINGER-00-152



**GET IN TOUCH:**

DOCUMENTATION THIS CLEAR  
SHOULDN'T BE SEASONAL.

CUT OUT PLATE  
PLACE AS TEMPLATE  
OVER PREPARED  
DOUGH  
CUT OUT BUILDING  
ELEMENTS

# ROOF PANELS

1 : 1

## PRODUCE 2



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GET IN TOUCH:

IF ONLY ALL BUILDS WENT  
TOGETHER THIS SWEETLY.



PROJECT  
GINGERBREAD HOUSE

DRAWING NUMBER  
GINGER-00-200