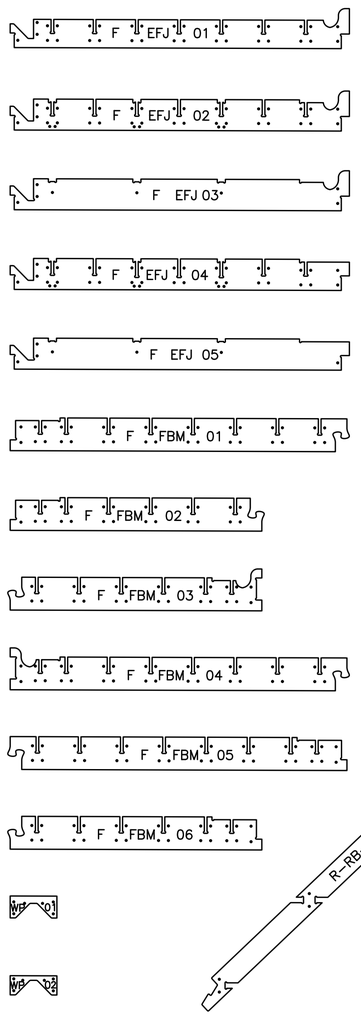
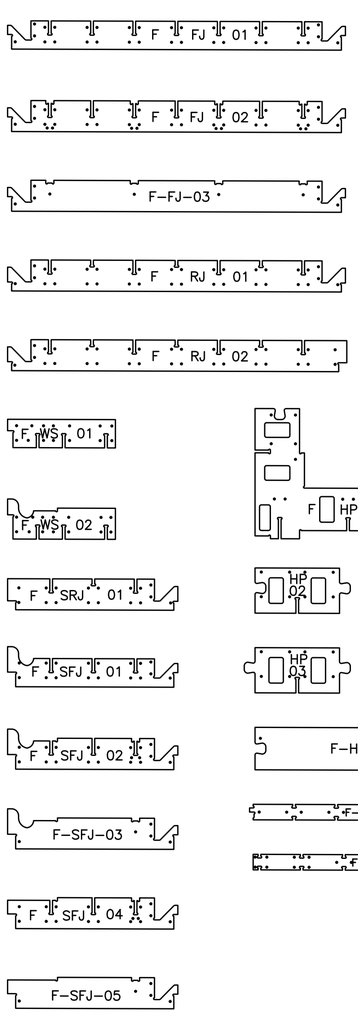
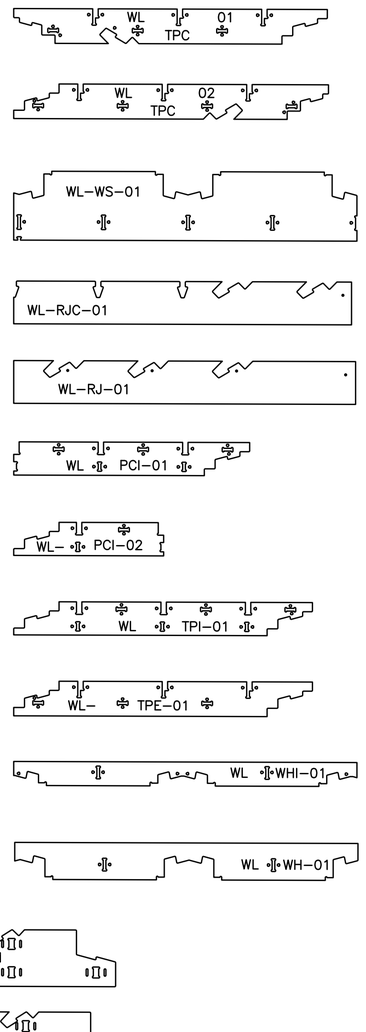
WELCOME TO

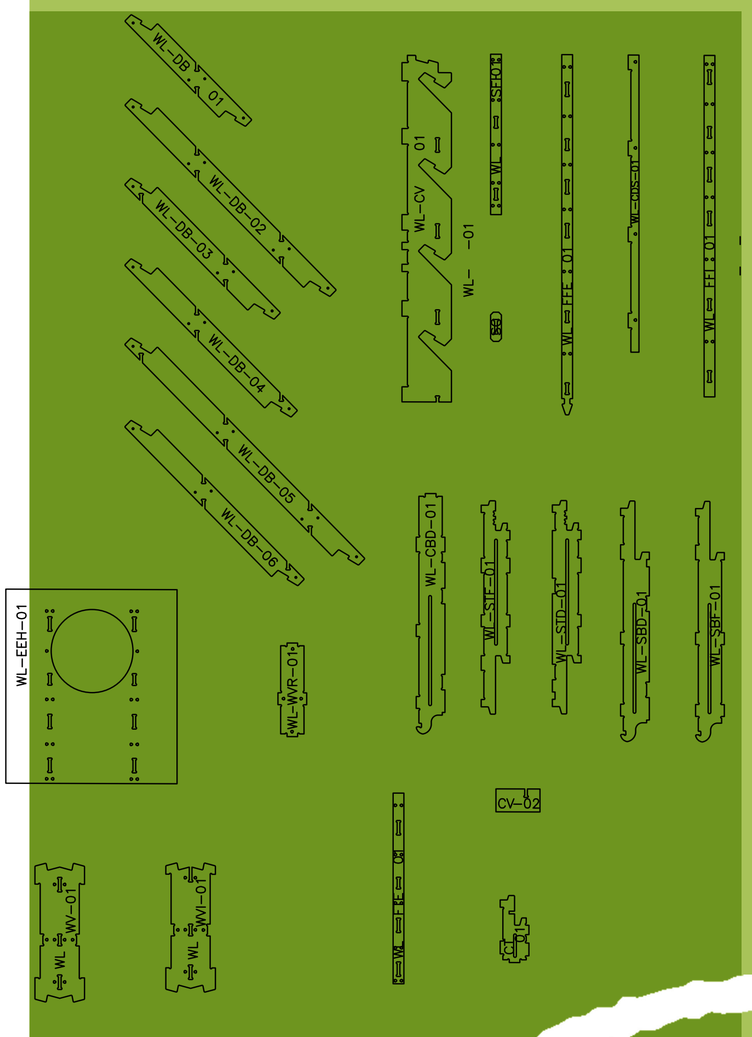
CROP STOP

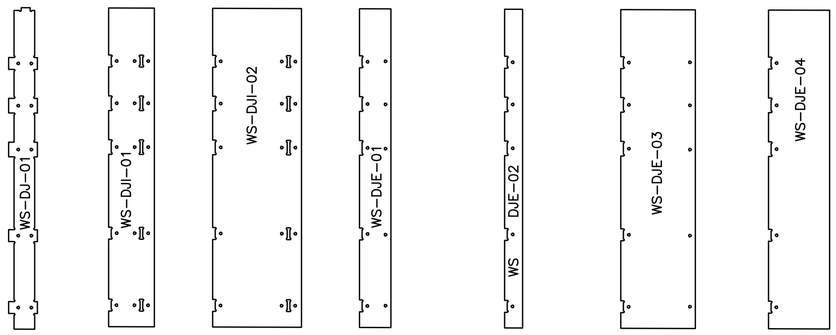
The final stop is here. **Ready to put it together?**

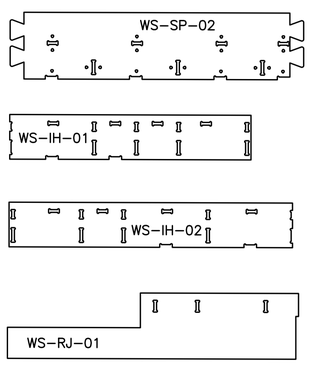


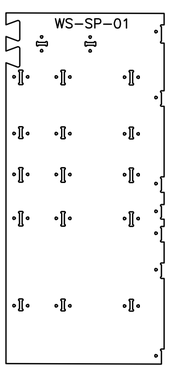


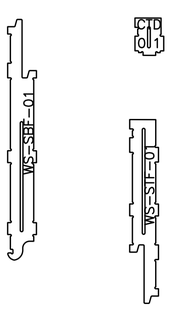


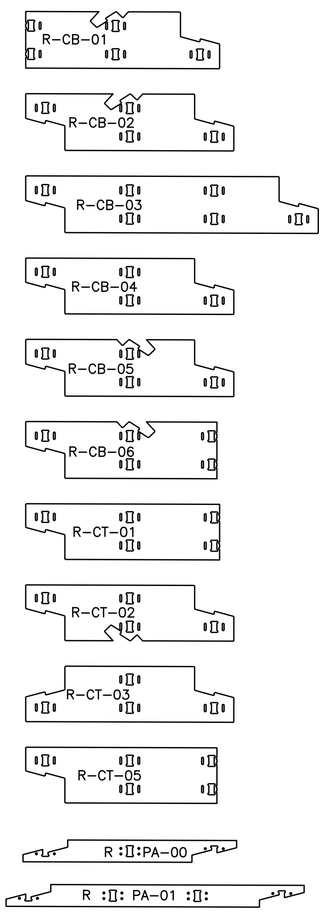


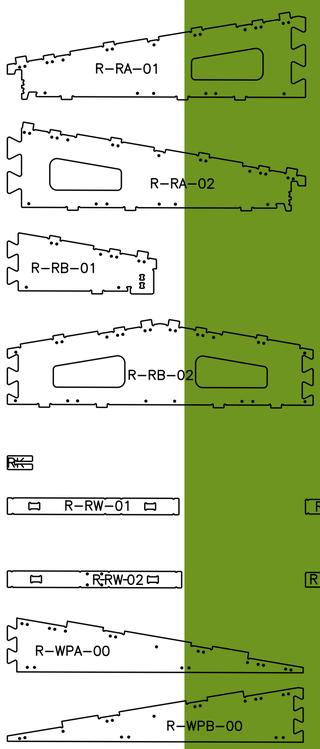


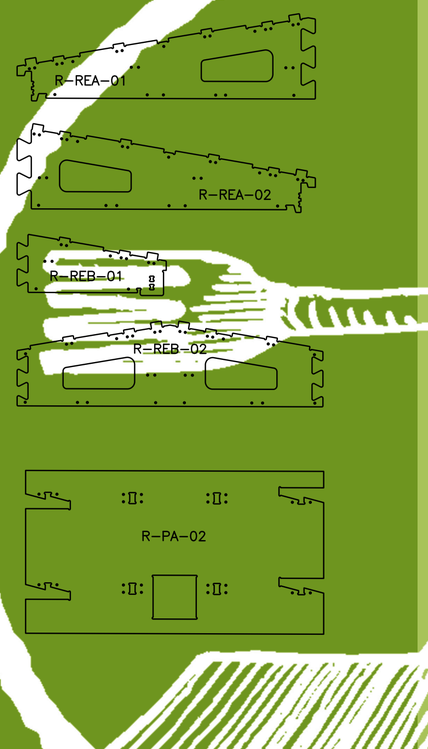












CROPSTOP *mission*

our MISSION

Since 2014, students at the Clemson Architecture Center in Charleston have been building a solution to problems faced by small-scale farmer communities. Their solution was a small processing kitchen called the Crop Stop, which can be rented and operated at cost for processing and preserving food. After three **years of research,** the Crop Stop is now on its **third prototype**.

The Crop Stop kitchen **aims to increase supply chain activities** between farm-to-school participants, provide a **low-cost, easily assembled processing kitchen** equipped to cook, can, freeze and process food for long term preservation and usage while improving healthy economic development within the communities it serves. Through these goals, the Crop Stop becomes integrated with the local community by engaging with local farms, schools, churches, at risk youth programs, urban gardens, and more.

our VALUES

innovation

Leverage **new technologies & materials** to address issues through **small scale interventions** worldwide

community involvement

Safe to build, wheelchair accessible & **easy to use**, we aim to promote community health & engagement.

low-environmental impact

Construct using **efficient** & **low-impact** systems with local materials with **less construction waste** on and off site.

affordability

Reducing building cost & creating a **econimically viable** option for farmers.

modularity

Flat-packed materials can be **transported anywhere** with all necessary materials arriving quickly and efficiently for **ease of installation**.

BRIDGING THE GAP BETWEEN *farms & schools*

Schools need access to fresh & healthy food

If they must purchase food why not **invest in the local economy?**

Crop Stops bridge the gap between farmers, schools, and local communities

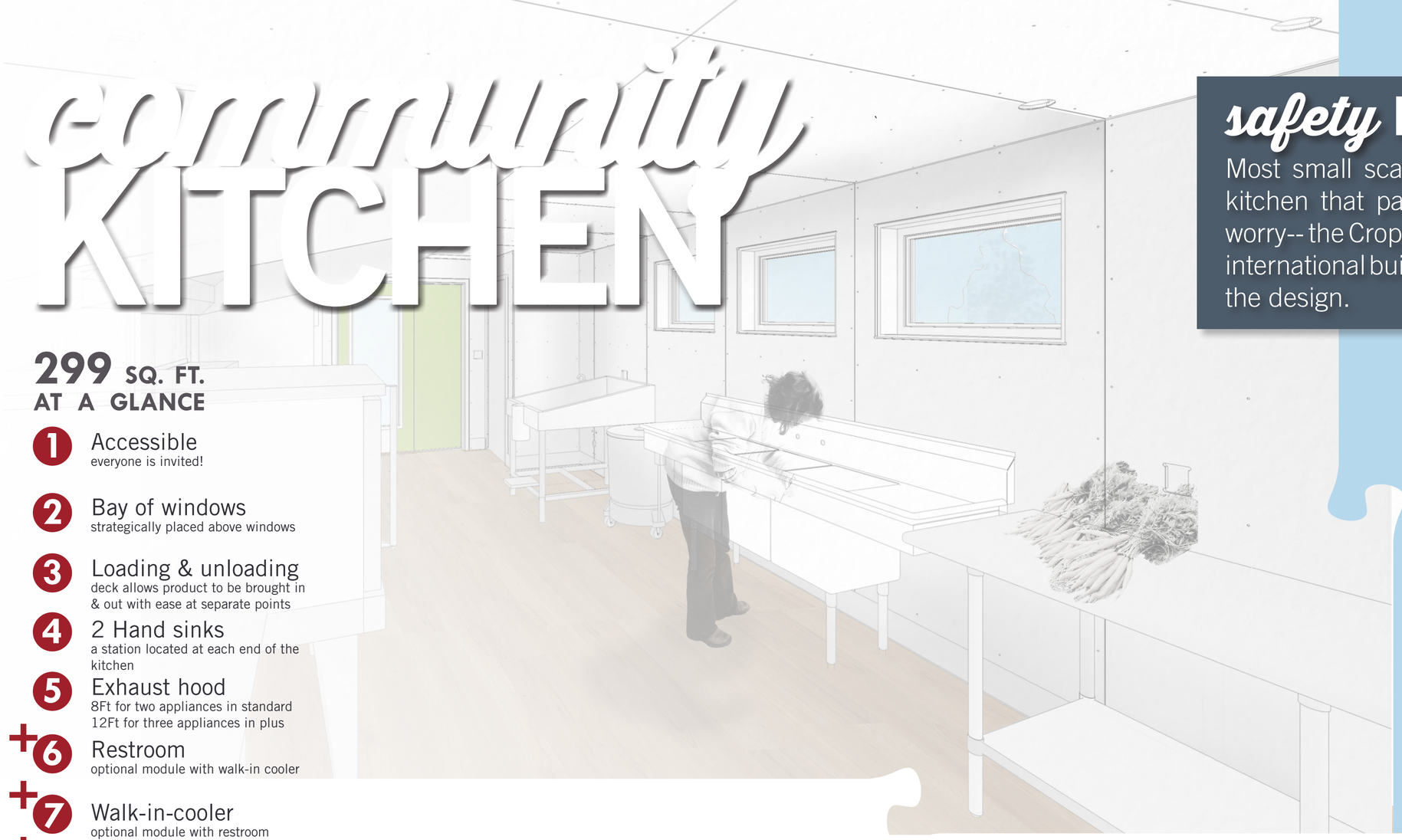
Processing kitchens are **financially unaccessible** for small to mid-sized farms

Farmers need a way to **add value** to their produce

our SOLUTION

A compact super-efficient kitchen vigorously designed using safe simPLY & ACM construction systems that can be deployed around the world for local farmers to safely prepare, process,and package foods.

community KITCHEN



299 SQ. FT. AT A GLANCE

1. **Accessible**
   everyone is invited!
2. **Bay of windows**
   strategically placed above windows
3. **Loading & unloading**
   deck allows product to be brought in & out with ease at separate points
4. **2 Hand sinks**
   a station located at each end of the kitchen
5. **Exhaust hood**
   8Ft for two appliances in standard
   12Ft for three appliances in plus
+6. **Restroom**
   optional module with walk-in cooler
+7. **Walk-in-cooler**
   optional module with restroom
+8. **Gap shed**
   optional module for pre-wash stage

safety FIRST

Most small scale CSA farmers can't afford a processing kitchen that passes all of the national approvals. Not to worry-- the Crop Stop has done it's homework by considering international building codes and food regulations throughout the design.

REGULATIONS

- ☑ IBC
- ☑ HAPSA
- ☑ DHEC
- ☑ GAP
- ☑ USDA
- ☑ ADA

A CROP STOP KITCHEN...

IS EFFICIENT

Paying close attention to **product movement & processing,** the kitchen is streamlined to contain the **essential tools** that communities actually use while **minimizing** plumbing & heavy electricity lines. The **maximized space** is not short on function with ample **movable surfaces** along with dual **hand-washing stations.** Deck layout allows for separate **truck access points** for product intake & outtake.

MEETS HIGHEST HEALTH STANDARDS

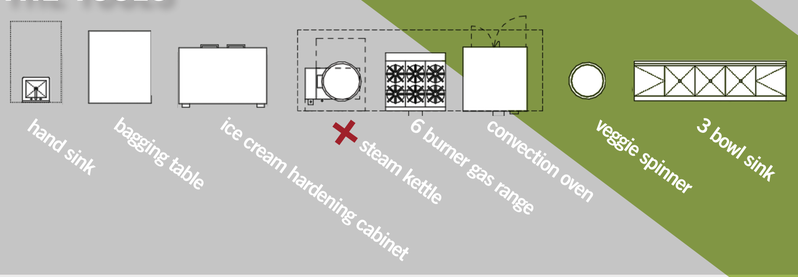
In addition to **surpassing Good Agricultural Practice** (GAP) requirements the Crop Stop kitchen **meets stringent DHEC requirements** so food can be sold in grocery stores & schools. It is intentionally calibrated to create a **safe & effective path** for the product to travel. Hand washing stations on both entry & exit ends **uphold cleanliness standards**, as food begins with a table for staging the product before it is cycled through the space, **leaving prepped & packaged for sale**.

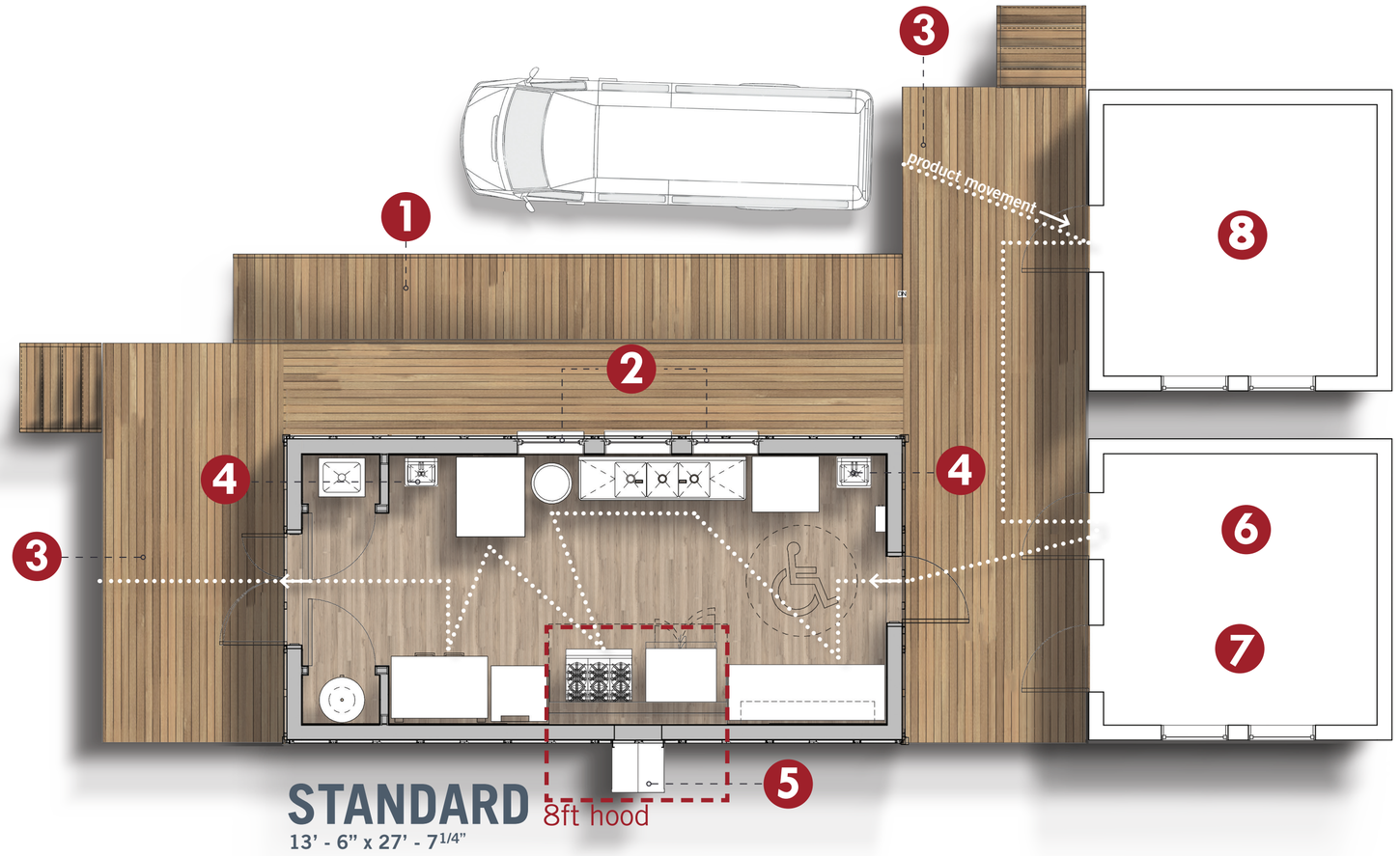
IS ACCESSIBLE

The porch & kitchen are **ADA compliant** including a **ramp**, wide doorways & open spaces for **wheelchair turn radius**. All are welcome here!

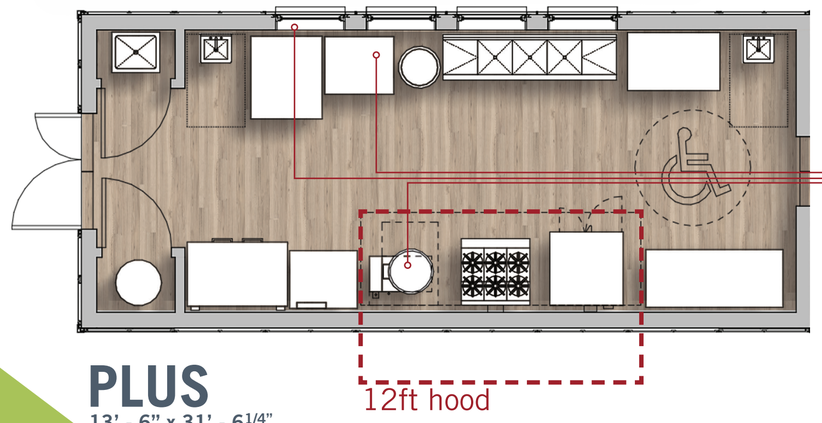
Providing a space to cook, can, freeze & process foodstuffs for long term preservation & usage.

THE TOOLS





STANDARD
13' - 6" x 27' - 7 1/4"



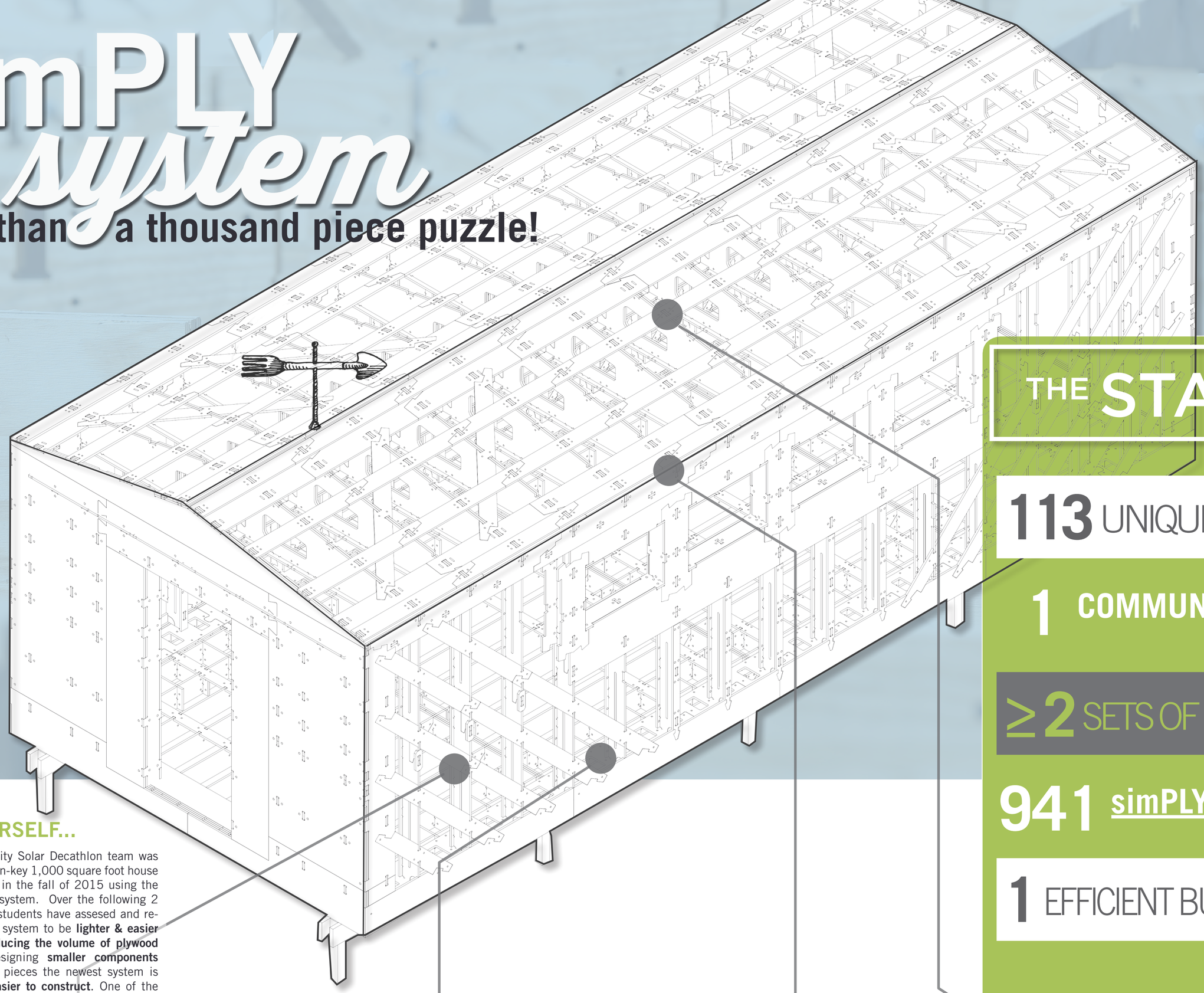
PLUS
13' - 6" x 31' - 6 1/4"

CAN YOU SPOT THE DIFFERENCE?

By lengthening the kitchen 4ft for **a 12ft hood** the kitchen gains space for a third "hot" appliance- the **steam kettle**. It also **increases table area** & grows the bay of windows from three to four.

simPLY *system*

easier than a thousand piece puzzle!



THE STATS

113 UNIQUE PARTS

1 COMMUNITY

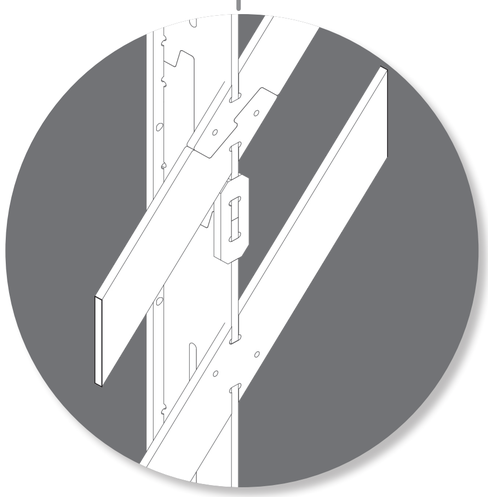
≥2 SETS OF HANDS

941 simPLY PIECES

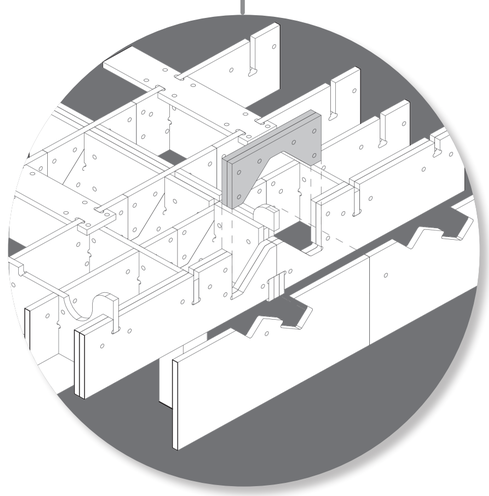
1 EFFICIENT BUILDING

BRACE YOURSELF...

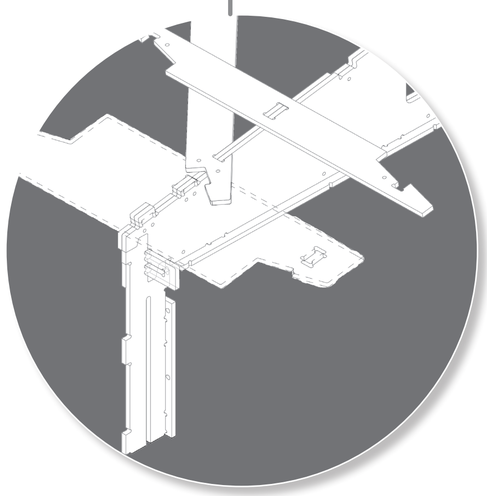
The Clemson University Solar Decathlon team was able to assemble a turn-key 1,000 square foot house in less than 10 days in the fall of 2015 using the simPLY construction system. Over the following 2 academic semesters students have assesed and re-designed the simPLY system to be **lighter & easier to assemble**. By **reducing the volume of plywood** per square foot, designing **smaller components** with fewer & unique pieces the newest system is **more affordable & easier to construct**. One of the most effective ways was through the use of diagonal braces.



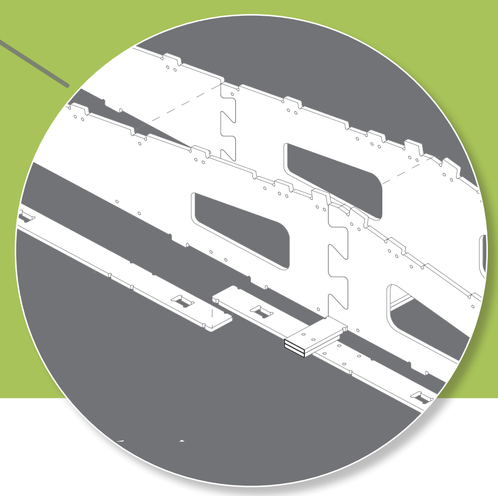
STUD SCARF JOINT



RIM JOIST CONNECTION

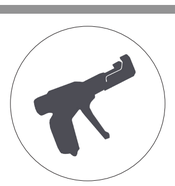


RAFTER AT STUD CONNECTION

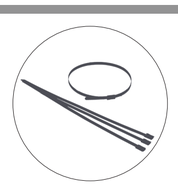


RAFTER DOVETAIL CONNECTION

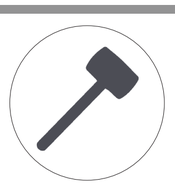
TOOLS USED:



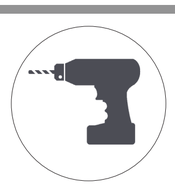
ZIP TIE GUN



STAINLESS STEEL ZIP TIES

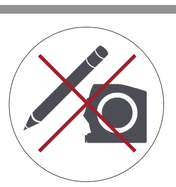


RUBBER MALLET



CORDLESS SCREW GUN

TOOLS NOT USED:



NO PENCILS OR TAPE MEASURES - IT'S ALREADY MEASURED!

NO SAWS - IT'S ALREADY CUT!

NO NAILS / NAIL GUNS - WE VALUE SAFETY.

our ASSEMBLY

built by ANYONE, ANYWHERE

FROM OUR COMPUTER TO YOUR COMMUNITY

SimPLY uses pre-cut and flat-packed pieces of plywood that can be easily put together without the need of power tools or measuring. The pieces are put together similar to ready-to-assemble furniture by following an easy to understand assembly manual that shows the process step by step.

SimPly pieces and assemblies were designed to be built and carried by a crew of two people and because everything is precut and measured, the kitchen's framing can be built by anyone with limited knowledge of construction. Without the need for power tools the system allows for a greater range of skill levels to participate in construction. This construction method achieves affordability, ease of construction, and community engagement through simplicity and feasibility.

1

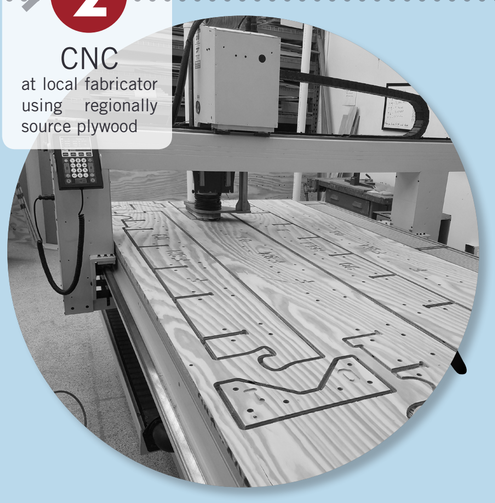
EMAIL

digital precision is shared at the press of a button

2

CNC

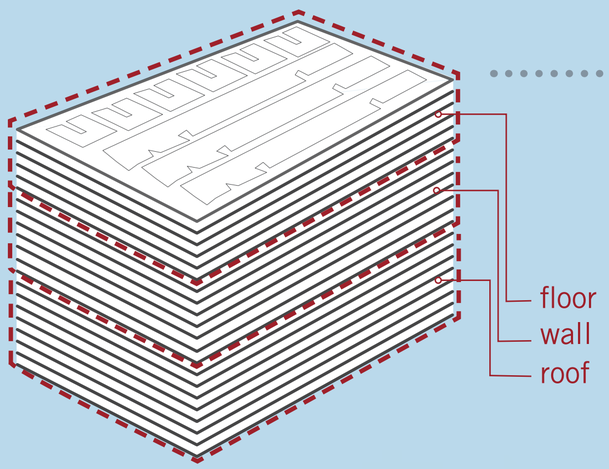
at local fabricator using regionally source plywood



3

STACK

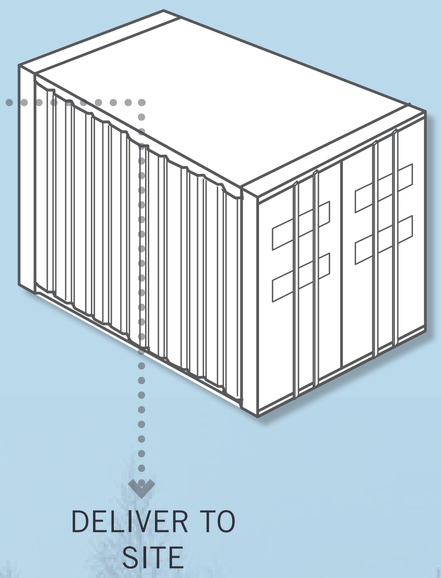
sheets are cut in reverse order- leaving the first pieces on top of your delivery



4

TRANSPORT

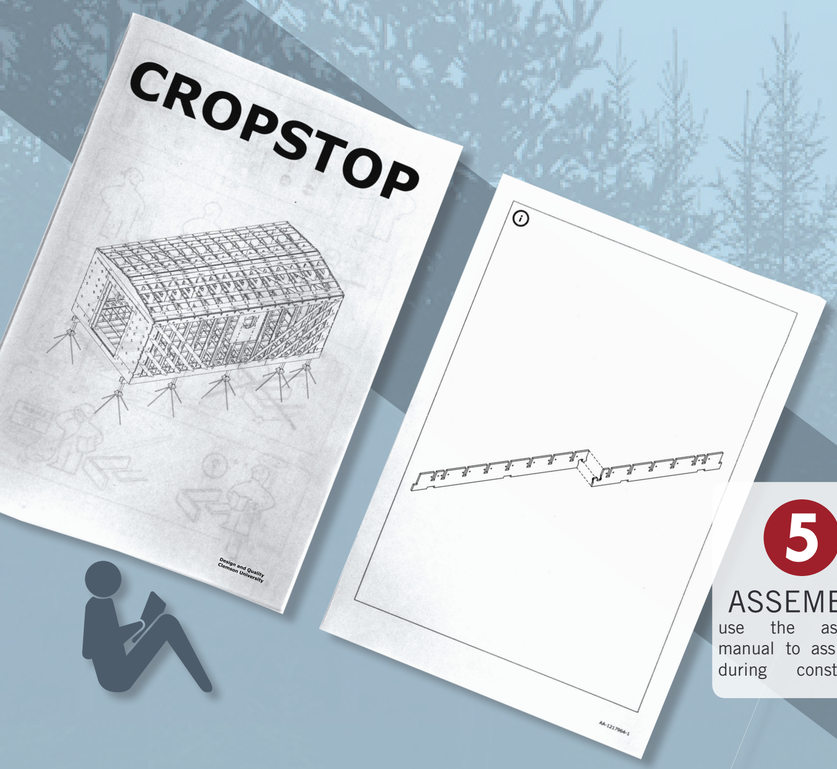
flatpacked plywood stacks to site (or an assembly site)



DELIVER TO SITE

no thinking required, but some assembly needed

The Crop Stop comes to you pre-packaged and arranged in order needed for construction. We did the thinking off site, so you don't have to on site.



5

ASSEMBLE

use the assembly manual to assist you during construction

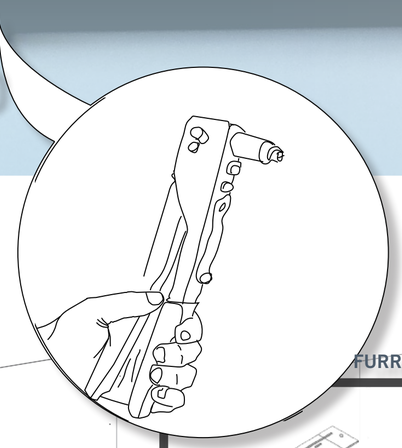
6

INSTALL

grab a friend, engage your local community, and begin construction

smart SIDING

SOME ASSEMBLY REQUIRED



HOW IS IT DIFFERENT?

NO MEAURING TAPES - NO LEVELS

The **pre-cut aluminum composite metal pieces (ACM)** contain all of the register marks needed to assemble. The **horizontal spacing is established** through base & roof flashing & the vertical spacing is designated by a furring strip system that provides the **points for attachment**.

NO CUTTING

All of the components are **precisely cut** out of 4x8 panels on the CNC (just like simPLY!) before they are shipped to site. Every piece is **cut for your Crop Stop** & provides a **perfect fit** as-is.

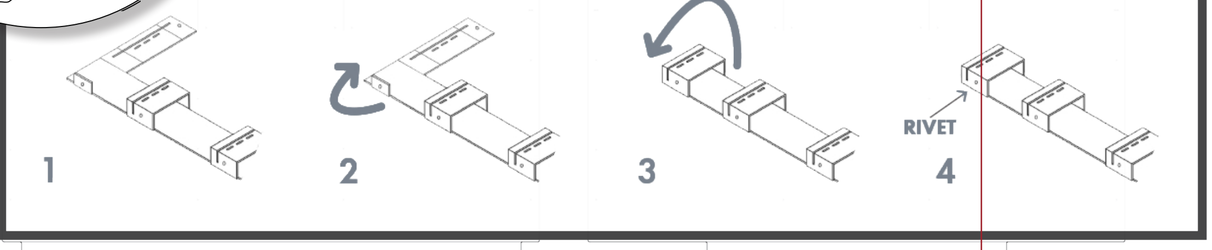
SPEED

The **standardized system** has a straightforward step by step installation process using **managably sized pieces**. Assembled through **folds, rivets & screws** through pre-cut holes.

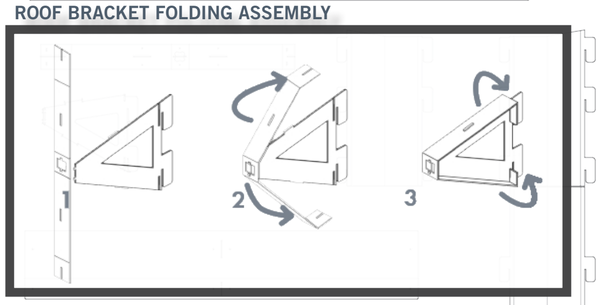
ALL INCLUSIVE

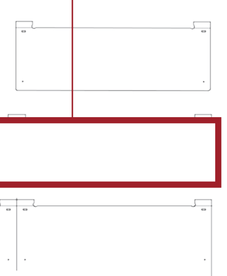
Flashing, siding, trim, roof brackets, openings for gutter attachments — **it's all here** in one system! Now that's smart.

FURRING STRIP FOLDING ASSEMBLY



ROOF BRACKET FOLDING ASSEMBLY





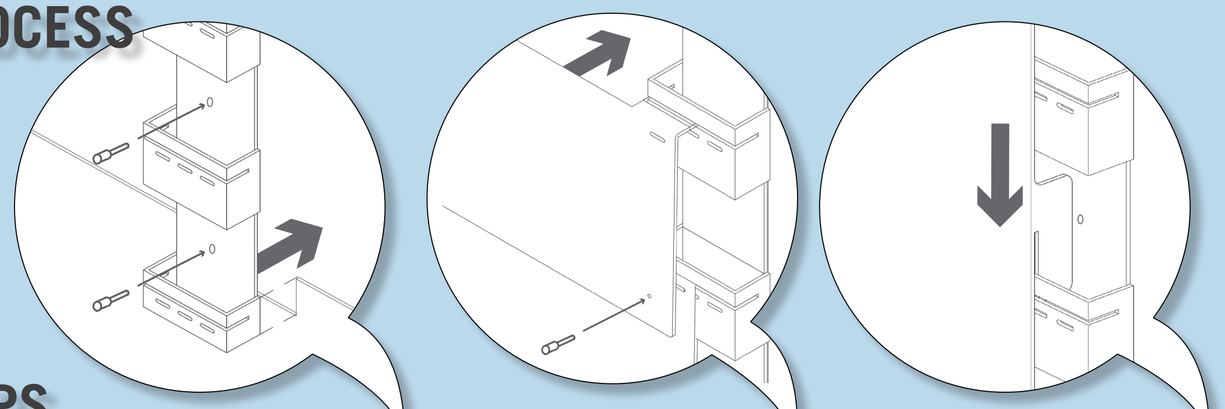
THE STATS

43 UNIQUE PARTS

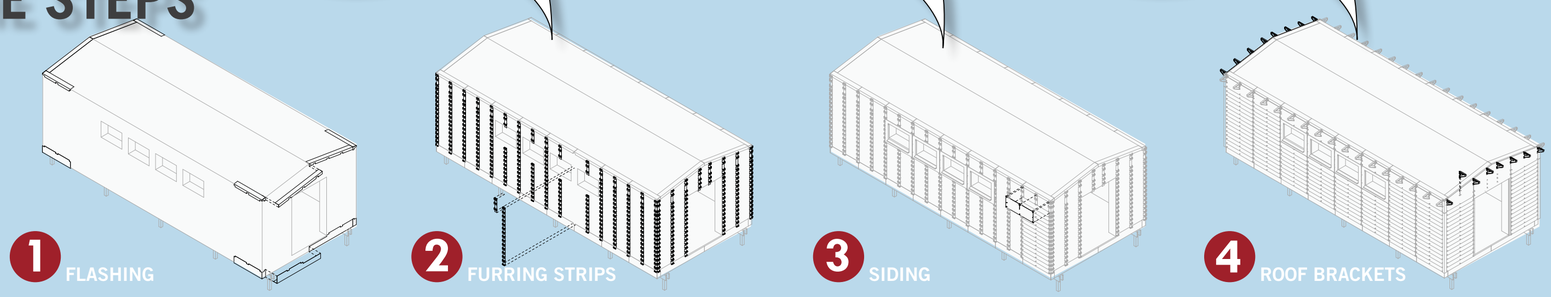
1 CROPSTOP

580 PIECES

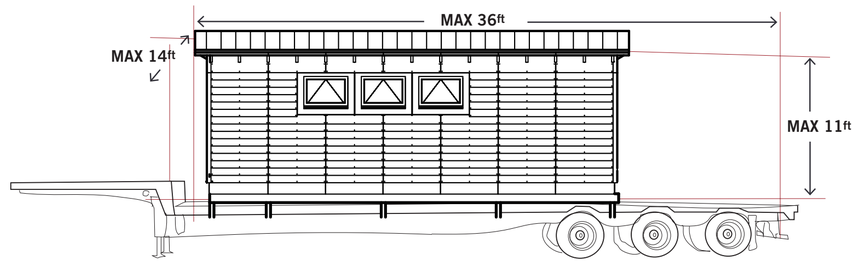
THE PROCESS



THE STEPS



our EXTENSION



our OUTREACH

The first Crop Stop was built on John's Island, just outside of Charlerston, SC . The Crop Stop's network quickly grew into the upstate of South Carolina and another was built in Greenville later that year. Interest in the Crop Stop as a community tool continues to rise, and the newest iterations of the building and its systems open up doors to build all over the world.

Teamwork makes the dream work.

affordability

ease of construction

community outreach

simplicity

feasibility

WHERE SHOULD WE GO NEXT?

After completition, the Crop Stop design allows for the building to be easily transported by a large drop deck trailer. This modularity allows communities to share the Crop Stop resources as needed. This flexibility, as well as the flat-pack design, also allows for new Crop Stops to be built worldwide.