STONEWALL® ORANA

Outdoor Fire Place Installation Guide

WESTBLOCK SYSTEMS®

Necessary Tools


Gloves


Safety Glasses


Layout Stakes


String Line


Shovel


Wheelbarrow

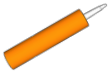

Compactor

Level


Rubber Mallet


Concrete Saw

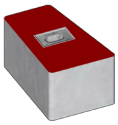

Caulking Gun

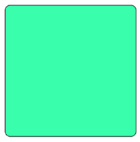

Concrete Adhesive

Unit Guide


Large
16/14"x10.5"x6"


Medium
12/10"x10.5"x6"

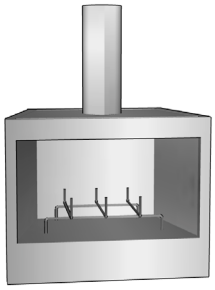

Small
7/5"x10.5"


Caps*

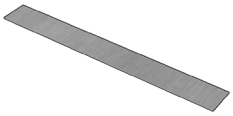

Cut Units

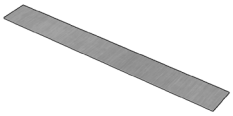
**See Manufacturer for Dimensional Details*

Additional Accessories


Fireplace Insert*


Chimney top*


4" x 1/4" x 24"
Steel Bars
x2 (Woodbox layout)


6" x 1/4" x 56"
Stainless Steel
Bar

**These plans depict a 40" wide fireplace opening for inserts, if no insert is used, fire brick can be used to line the interior of the fireplace. Please verify with your local supplier for insert options..*

Certified Designs

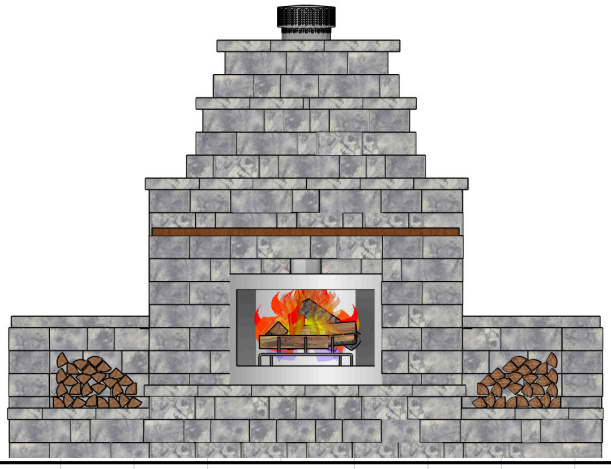
Stand Alone Fire Place 40"

Page: 5 Start

Necessary Units:
7/5" - 106 units
12/10" -106 units
16/14" - 107 units
Total: 319 units

								Fireplace										
Standard	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	Course 11	Course 12	Course 13	Course 14	Course 15	Course 16	Course 17	TOTAL
7/5 Unit	7	15	6	7	7	6	7	6	7	4	7	5	6	6	0	7	3	106
12/10 Unit	15	18	9	5	5	4	5	4	5	5	5	8	5	4	3	4	2	106
16/14 Unit	9	5	8	6	6	7	6	7	6	10	8	7	4	4	7	3	4	107
Cuts	0	1	0	1	0	0	0	0	2 small	0	0	1	0	0	0	0	3*	319

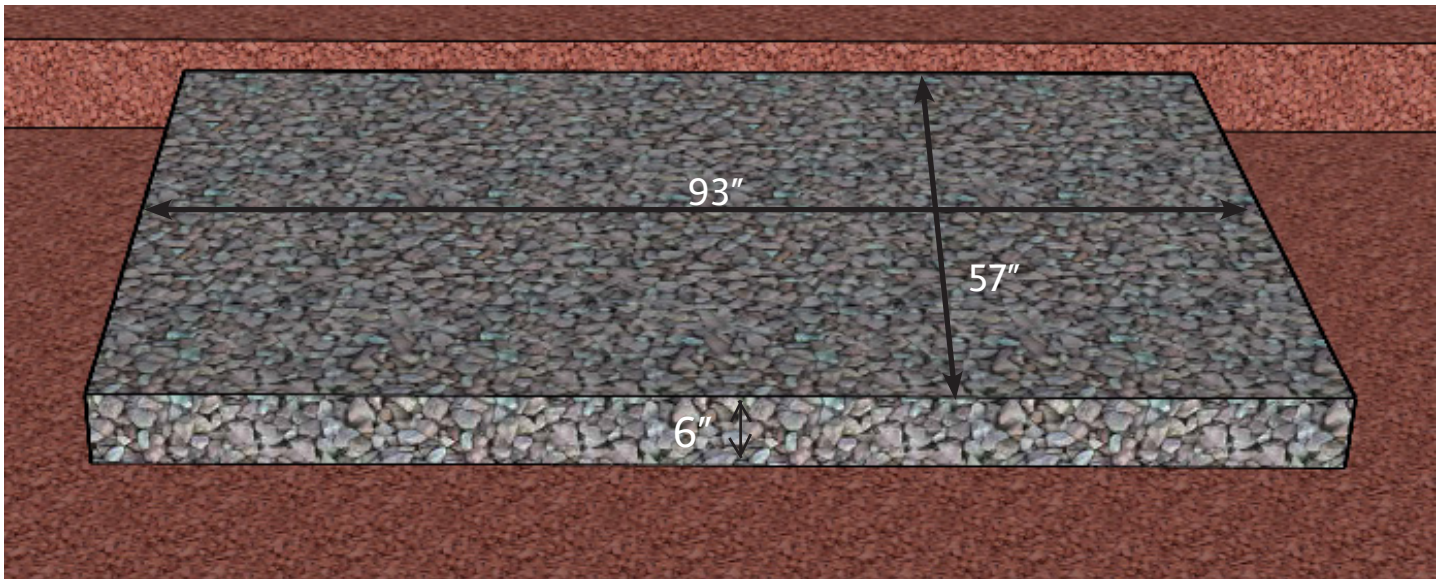
Fire Place with Wood Box



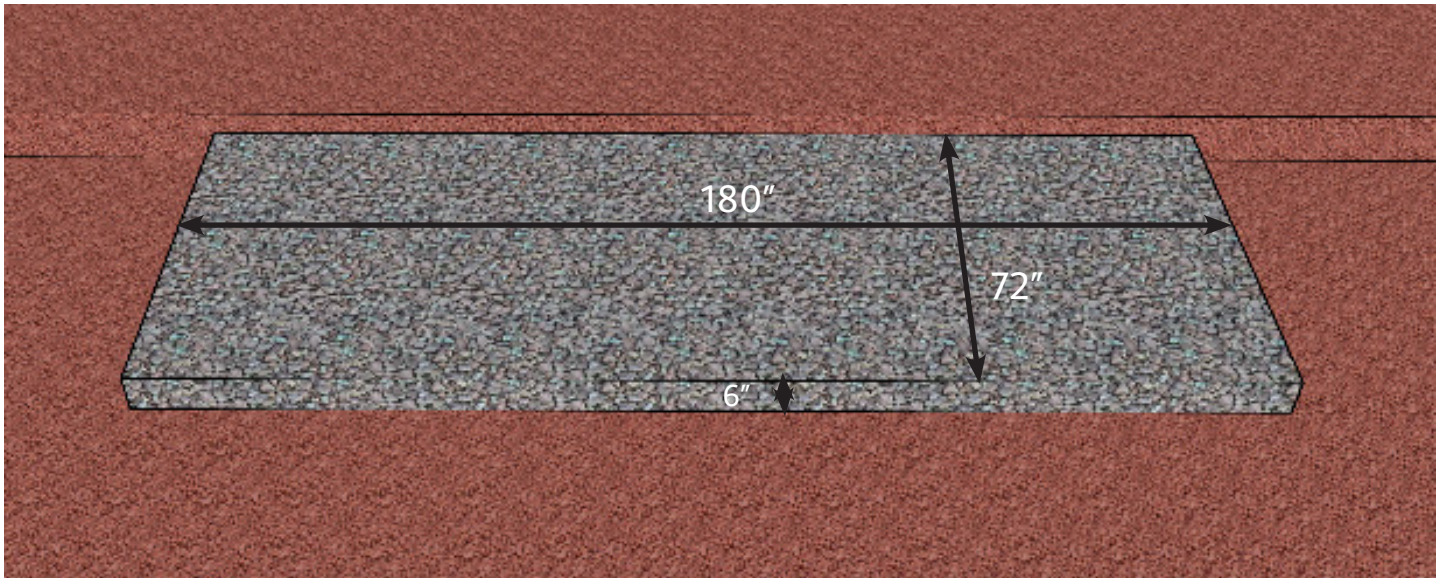
Necessary Units:
7/5" - 140 units
12/10" -142 units
16/14" - 141 units
Total: 423 units

								Woodbox Fireplace										
Standard	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	Course 11	Course 12	Course 13	Course 14	Course 15	Course 16	Course 17	TOTAL
7/5 Unit	15	22	11	6	7	6	5	6	5	5	6	4	12	2	9	12	7	140
12/10 Unit	25	27	12	12	10	12	4	5	3	6	7	7	3	4	2	3	0	142
16/14 Unit	19	16	13	9	10	9	7	6	8	9	7	8	3	6	4	2	5	141
	0	2 Cut	1 Cut	0	0	2 Small cuts	0	0	3 Cuts	1 Cut	0	0	0	0	0	0	1 Cut	423

Stand Alone Leveling Pad



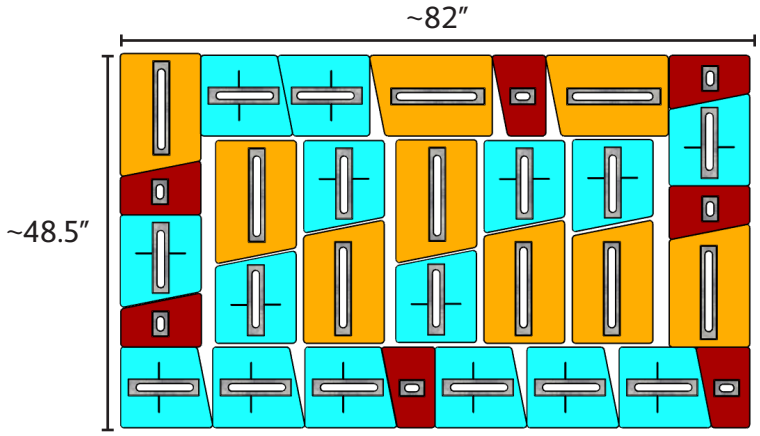
Wood Box Leveling Pad



- *Note that foundation building codes may vary, and should be verified before construction begins.*

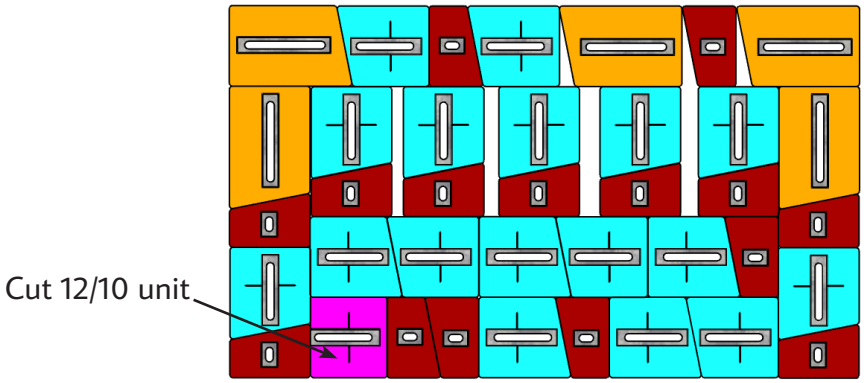
Standard Design

Stand Alone Course 1



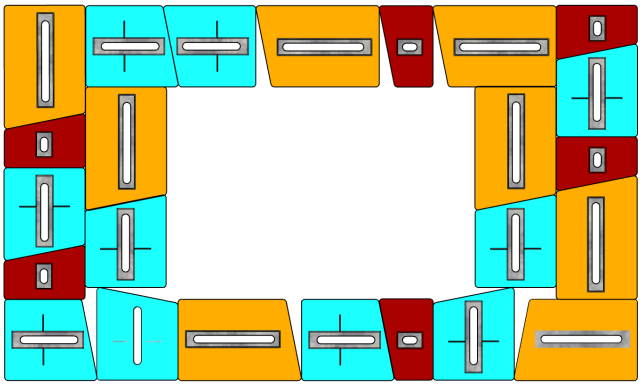
- Place the units in the pattern depicted, using a level and rubber mallet, ensure the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Stand Alone Course 2



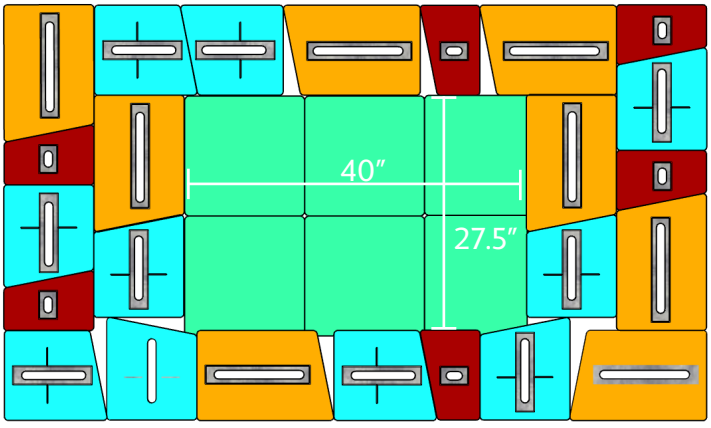
- Place the units on top of the first course in the pattern depicted, if needed shim to ensure that the units are level side-to-side, and front-to-back
- Cut marked unit to fit as necessary
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

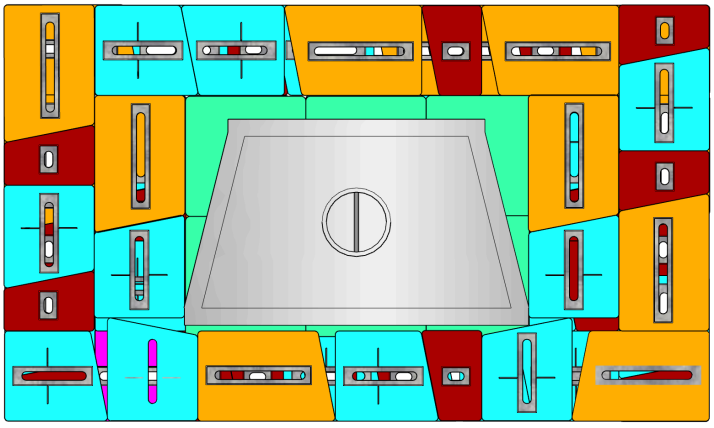
Stand Alone Course 3



- Starting from a corner of the second course place the units in the pattern depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Placing Insert

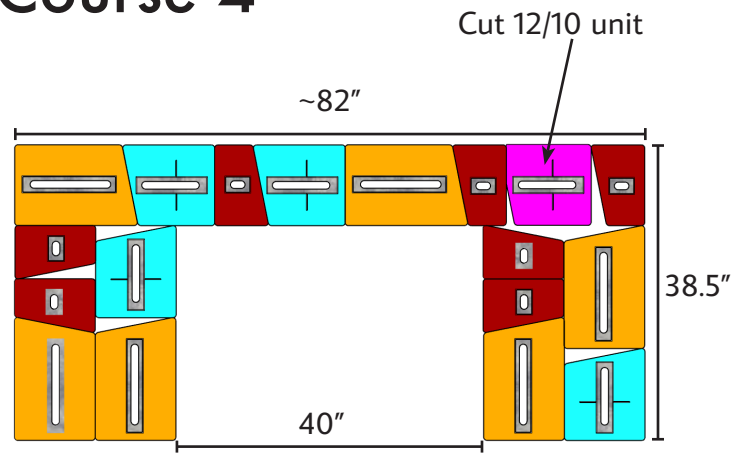




- Place caps within the firebox area, cutting as needed for a finished fit, affixing them to the top of the second course using concrete adhesive.
- If using a fireplace insert, place on the caps once the adhesive has cured.

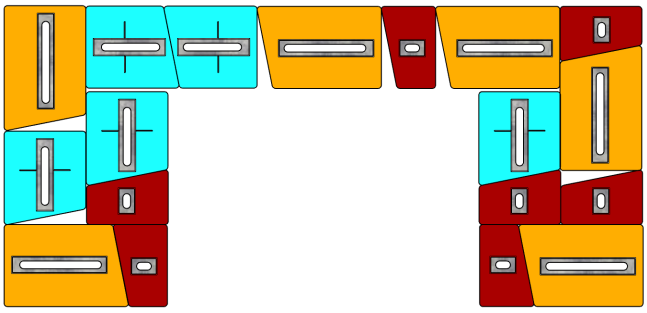
Standard Design

Stand Alone Course 4

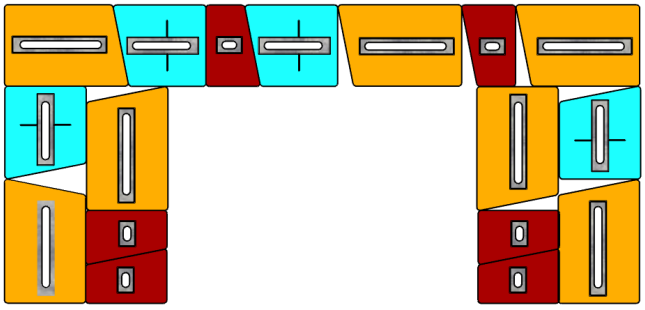


- Starting from a corner, place the units in the pattern depicted, cutting the marked unit as needed to fit
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Stand Alone Course 5

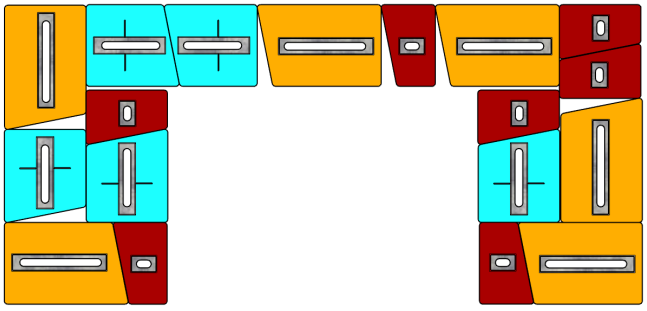


Stand Alone Course 6

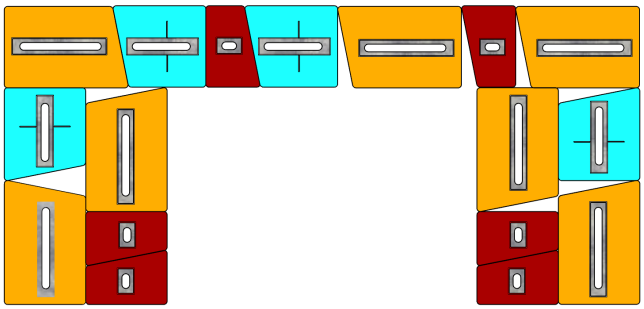


- Starting from a corner, place the units in the pattern depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Stand Alone Course 7

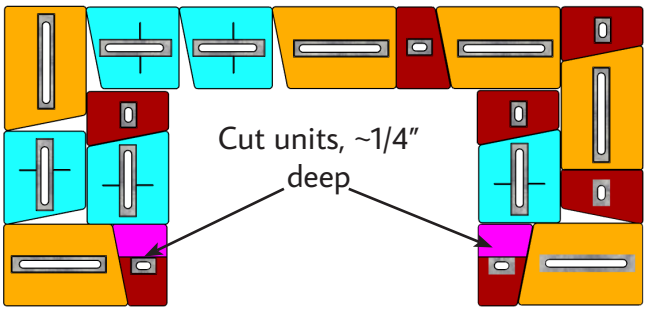


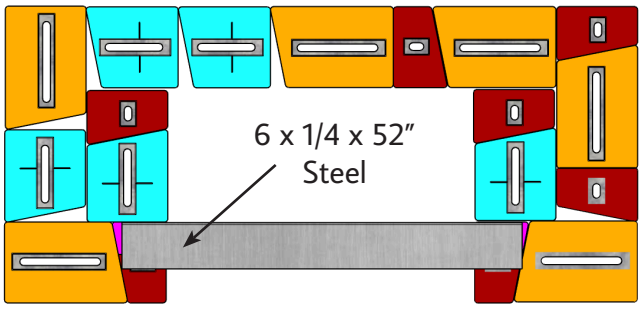
Stand Alone Course 8



- Starting from a corner, place the units in the pattern depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Course 9 & Bridging The Gap

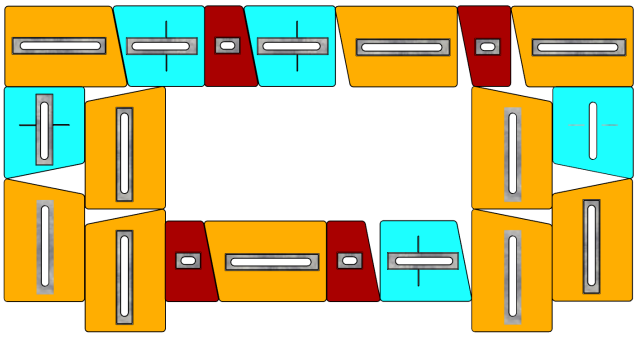




- Starting from a corner, place the units in the pattern depicted
- Once laid out place 6" steel bar across the hearth opening and mark units to cut a ~1/4" deep recess into the top of the units
- Once trough has been cut, place steel beam across the gap, lay out test units to ensure they stack level, and then secure the steel to the cut units below with construction adhesive

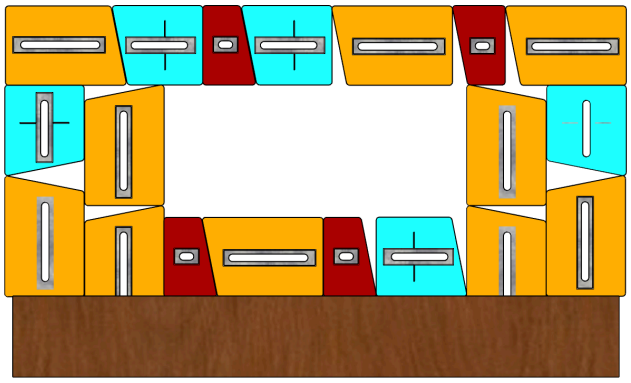
Standard Design

Stand Alone Course 10



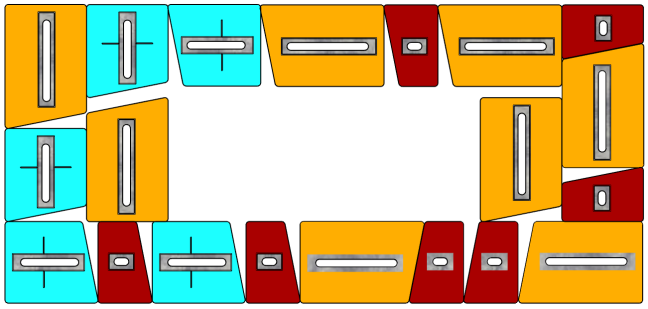
- Starting from a corner, place the units in the pattern depicted, *if no mantle is desired, cut the protruding 16/14 units to fit flush with the rest of the units*
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Adding Optional Shelf

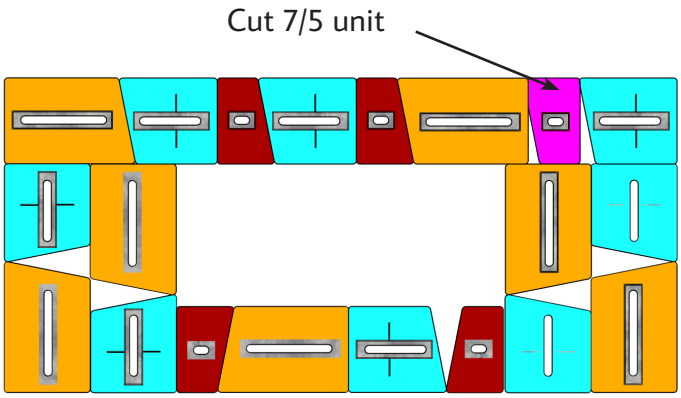


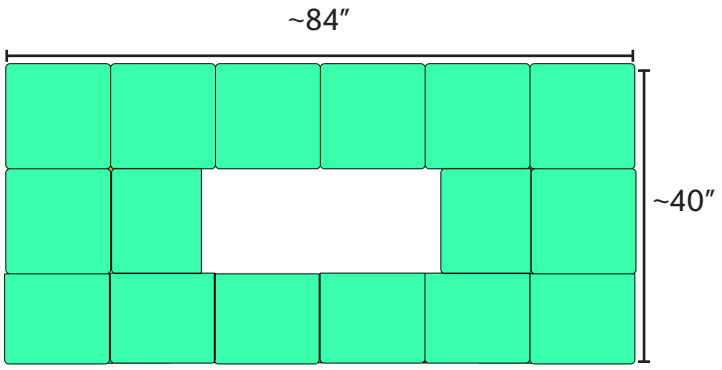
- If constructing a mantle, place it on the protruding 16/14" units, adhering the mantle to these units with construction adhesive.
- *Mantle material and sourcing is the responsibility of the owner, additional reinforcement may be necessary depending on material used*

Stand Alone Course 11



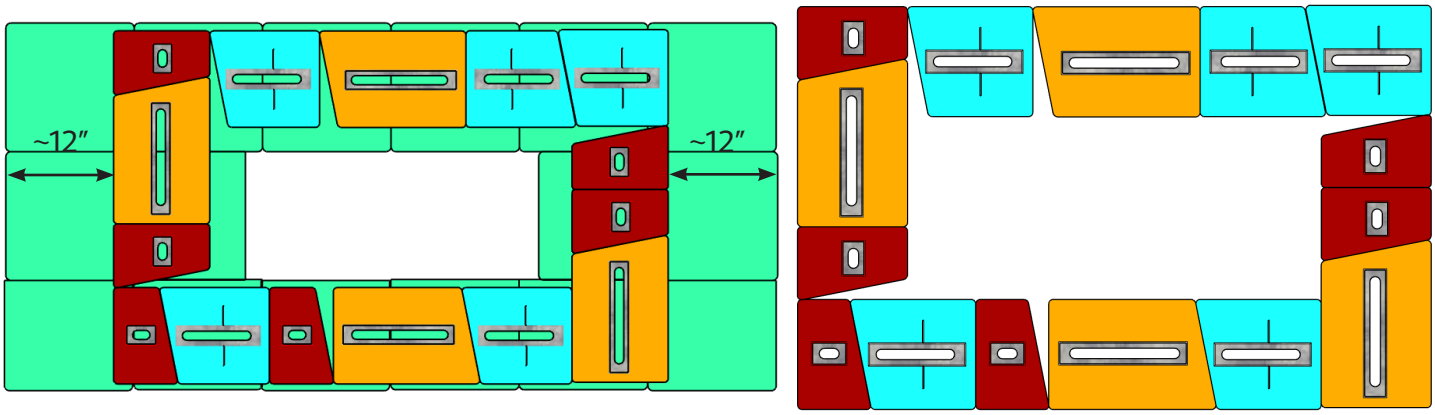
Stand Alone Course 12





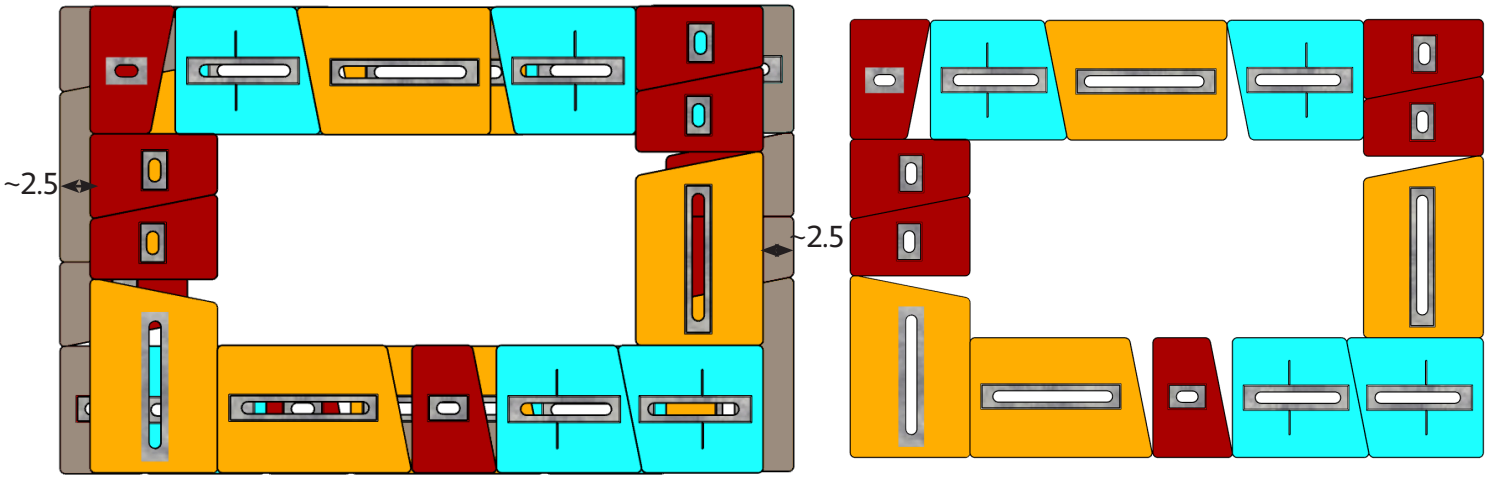
- Starting from a corner, place the units in the pattern depicted, cutting the marked units as needed to maintain proper fitting.
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed caps across the course, adhering them with construction adhesive to the course below. It is recommended to have a 1.5-2″ overhang.

Stand Alone Course 13



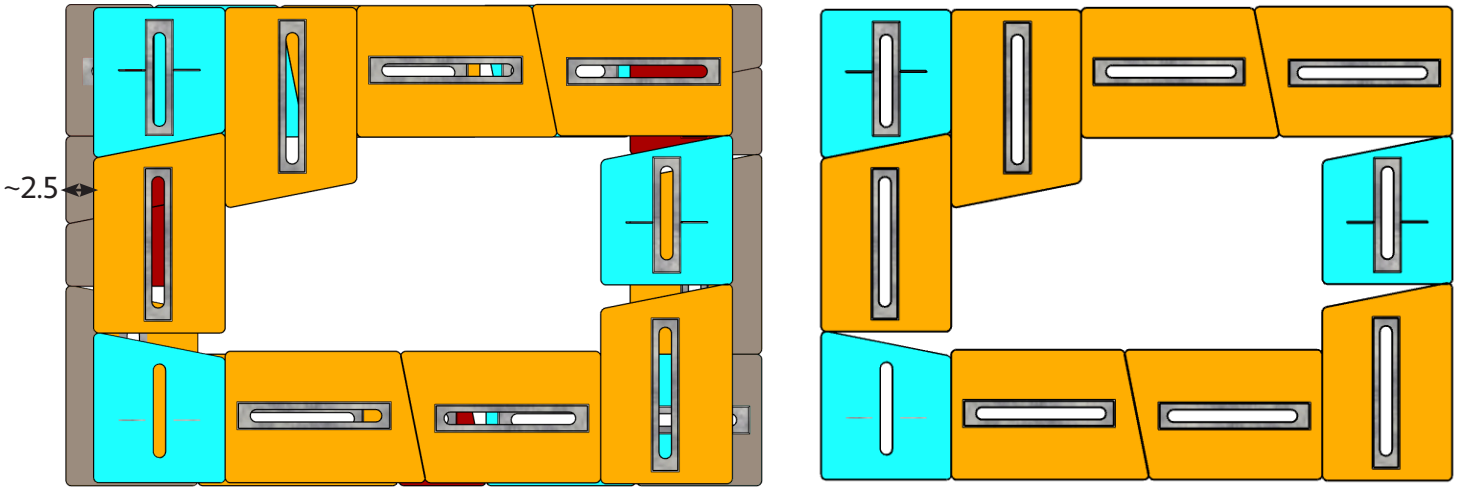
- Moving in approximately 12″ from the edge of the caps, starting from a back corner, place the units in the pattern depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Stand Alone Course 14



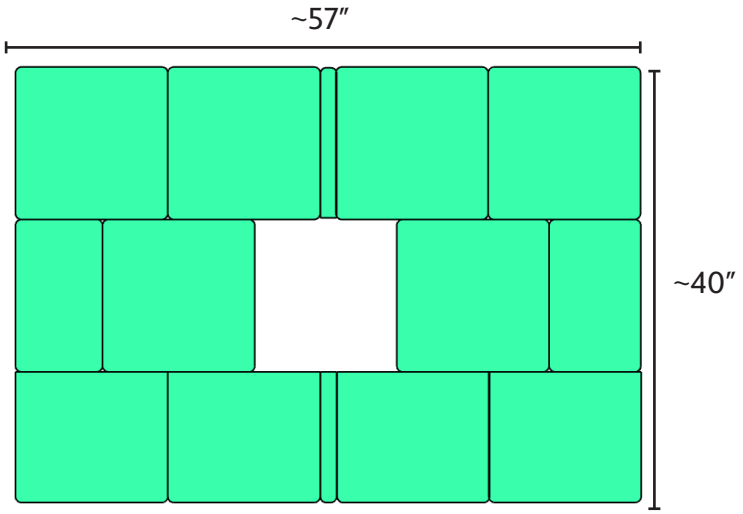
- Starting from a back corner, and offsetting approximately 2.5″ place the units in the pattern depicted, adhering non plug aligned units with construction adhesive
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Stand Alone Course 15



- Starting from a back corner, and offsetting approximately 2.5" place the units in the pattern depicted, adhering non plug aligned units with construction adhesive
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

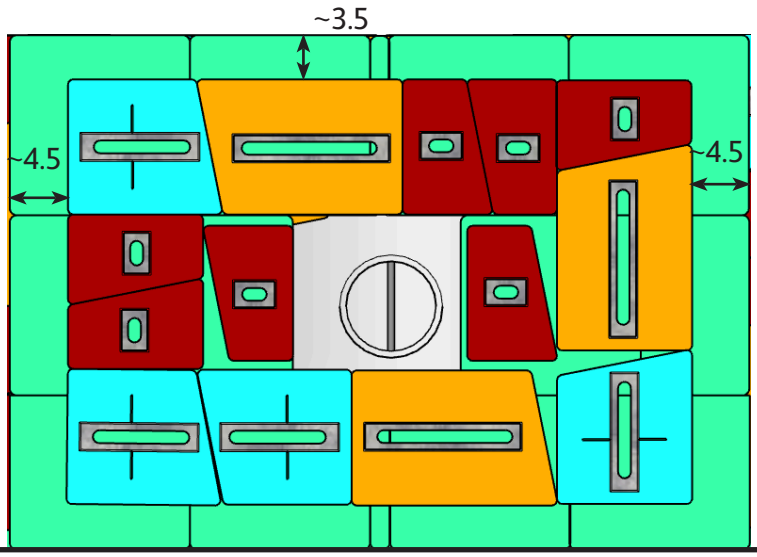
Stand Alone Course 15



- Once all units are placed caps across the course, cutting as needed and adhering them with construction adhesive to the course below. It is recommended to have a 1.5-2" overhang.

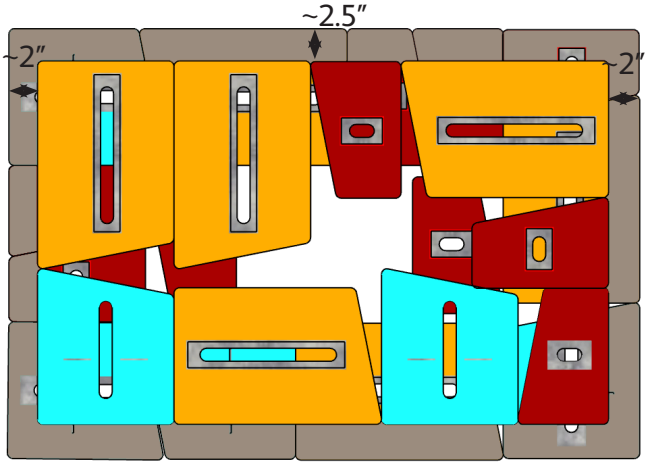
Standard Design

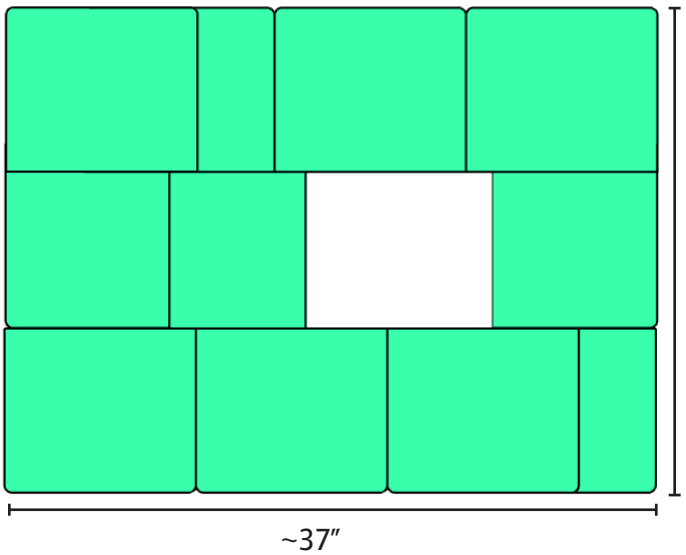
Stand Alone Course 16



- Starting in a corner place units in the pattern depicted, offsetting them from the edge of the caps below as depicted.
- Once all units have been place, insert 3WAPs; vertical construction is recommended

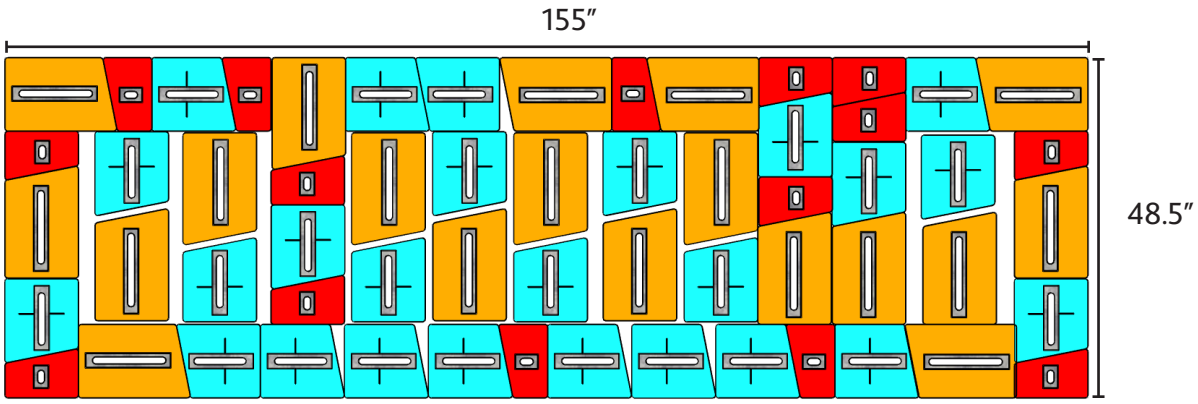
Course 17 and Capping





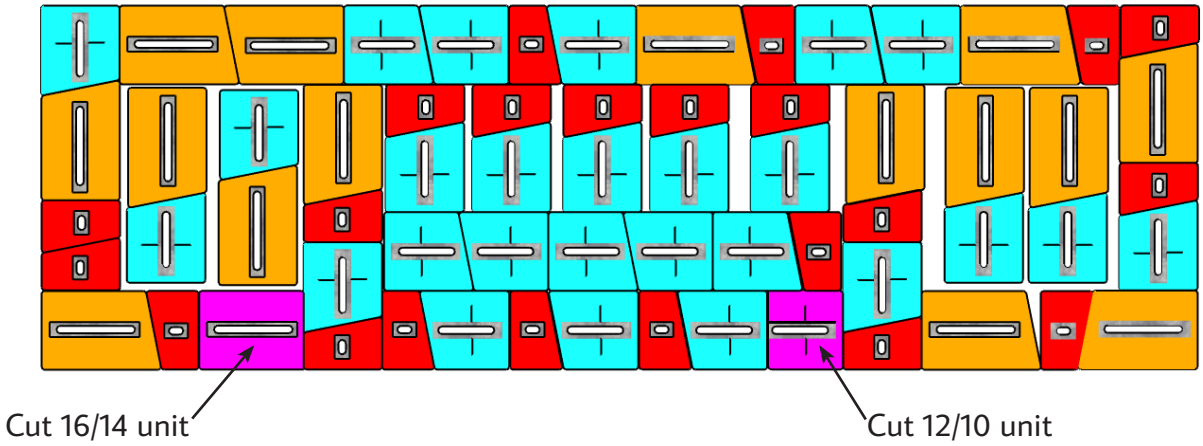
- Place units in the pattern depicted, offsetting them as shown.
- Once all units have been placed, place the final layer of caps, adhering them to the units below with construction adhesive.
- If using a fireplace inset with chimney, some cutting of units and cap may be necessary

Woodbox Fire Course 1



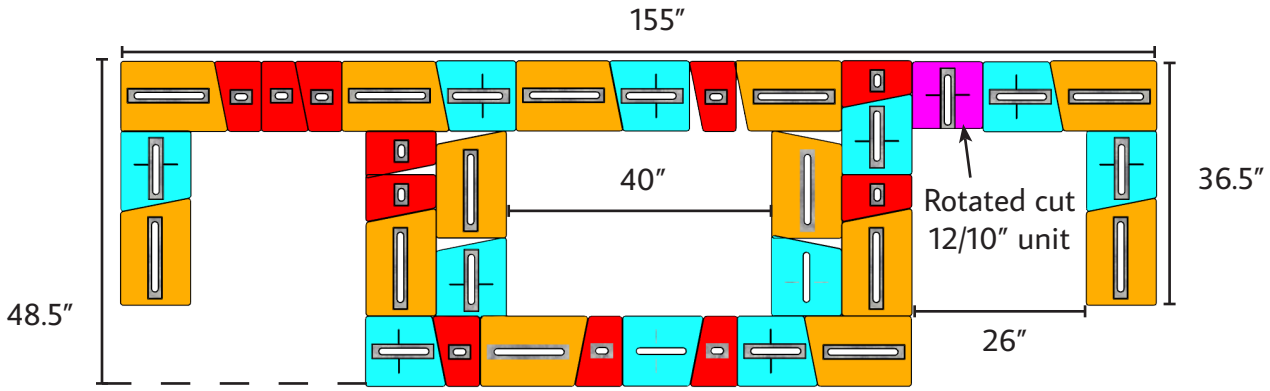
- Starting in a corner, base the units on the prepared leveling pad, placing them in the pattern depicted, using a level and rubber mallet, ensure the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Woodbox Course 2



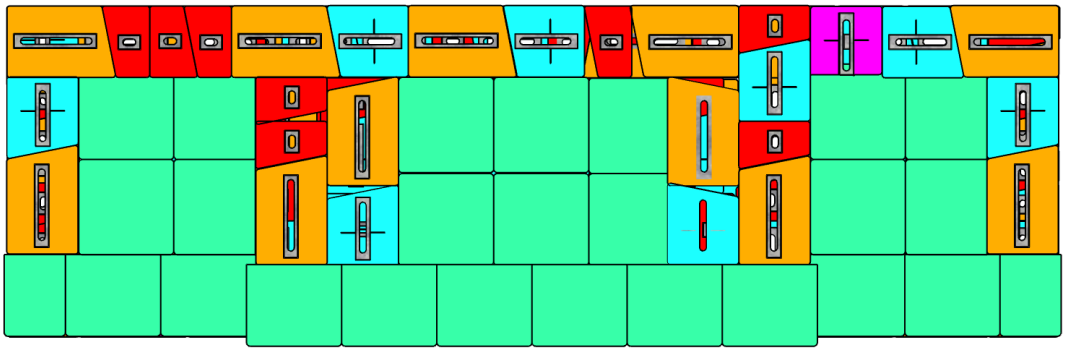
- Starting in a corner. Place the units on top of the first course in the pattern depicted, cutting the marked units as needed to fit if needed shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Woodbox Course 3

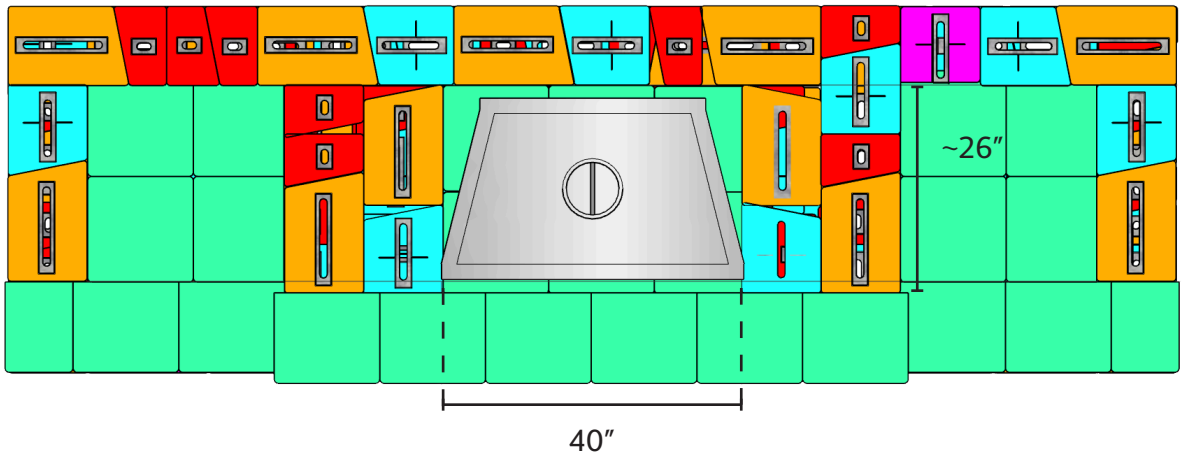


- Starting from the back left corner of the second course place the units in the pattern depicted, cut the marked unit to have a consistent back wall of the fire box
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Capping & Placing Insert

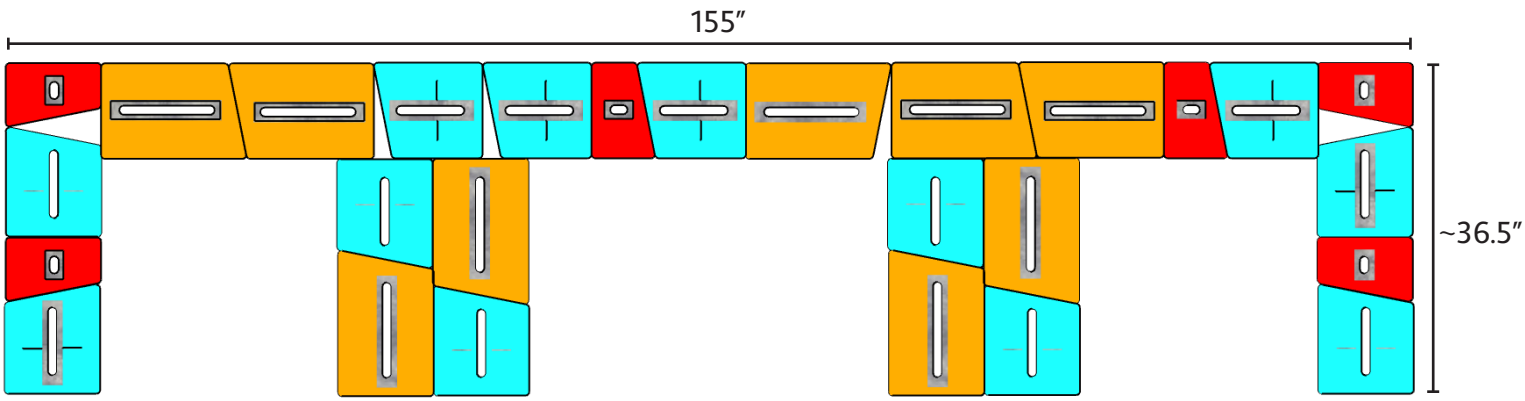


- Once the third course has been set. Cap the top of the second course in the wood boxes, and hearth area cutting the caps as needed for a consistent fit, using construction adhesive to secure them to the course below
- Place caps along the front of the third course to finish the front of the hearth, cutting as needed for a uniform look, and adhering to the course below with construction adhesive



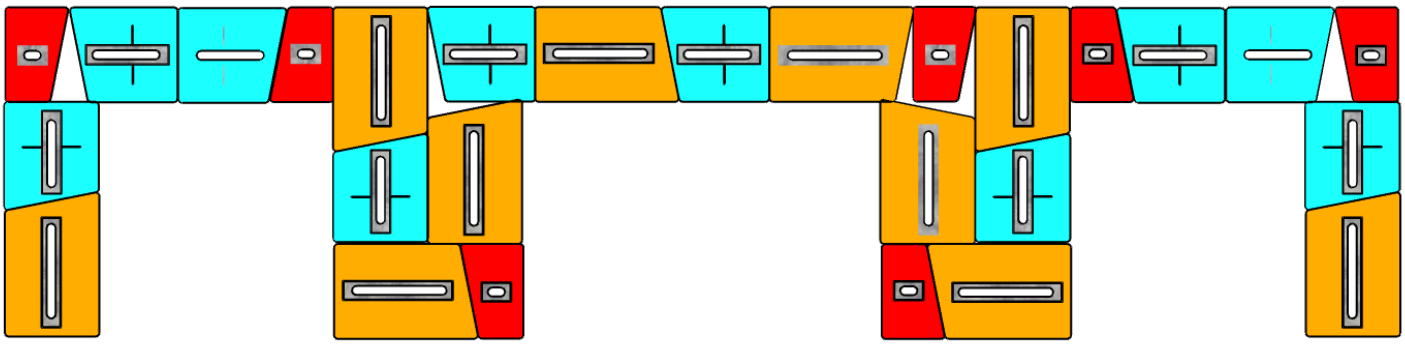
- If using a fireplace insert, place on the caps once the adhesive has cured.

Woodbox Course 4



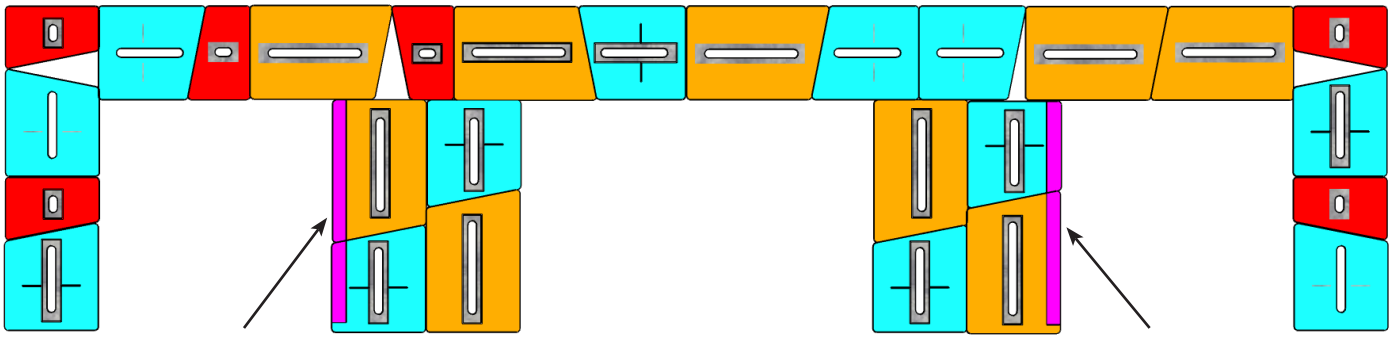
- Starting from a back corner, place the units in the pattern depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Woodbox Course 5

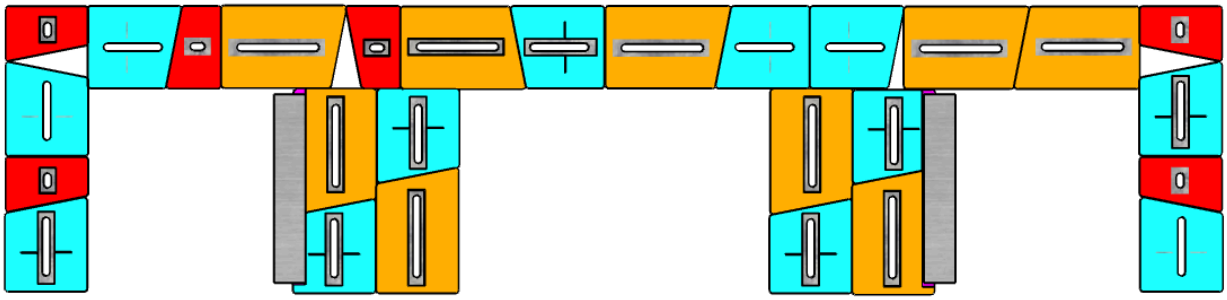


- Starting from a back corner, place the units in the pattern depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

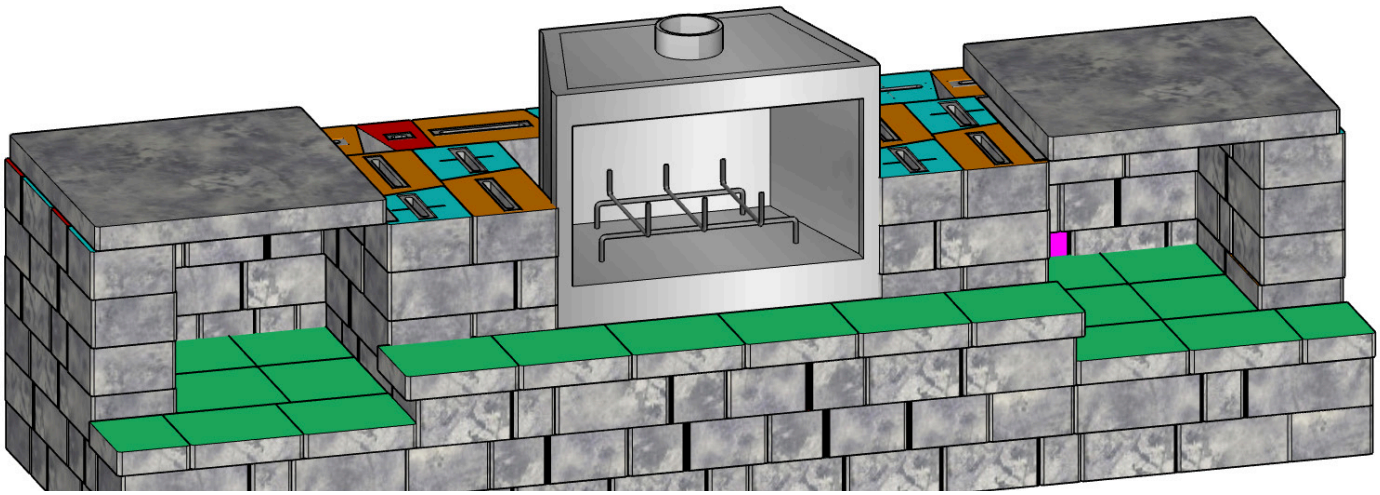
Woodbox Course 6



- Starting from a back corner, place the units in the pattern depicted
- Once laid out place 4 x 1/4 x 24" steel bar along each of the woodboxes with ~2" overlay and mark the units to cut a ~1/4" deep recess into the top of the units
- Once trough has been cut, place steel beam in the recess, securing it to the units below with construction adhesive; place course on top of steel to maintain position and ensure units sit flush

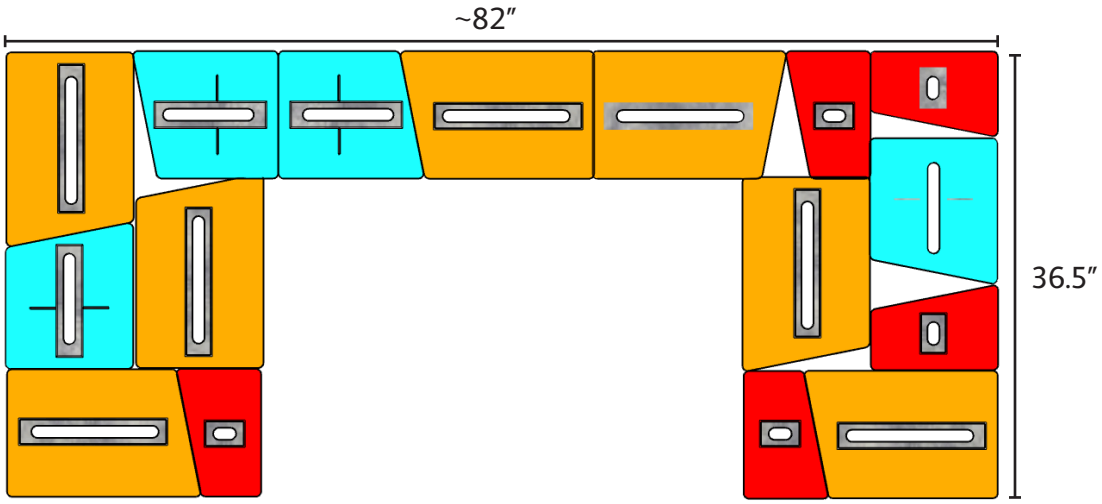


- Once the adhesive has cured and the steel bars are secured, place a ~36x36" concrete slab or other desired material across each woodbox to form a generally weather-proof enclosure, as depicted below.

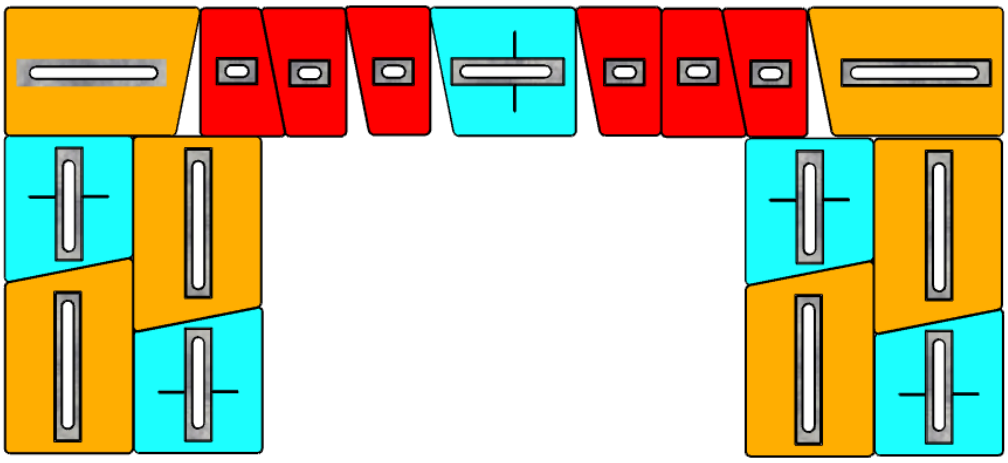


Woodbox Design

Woodbox Course 7

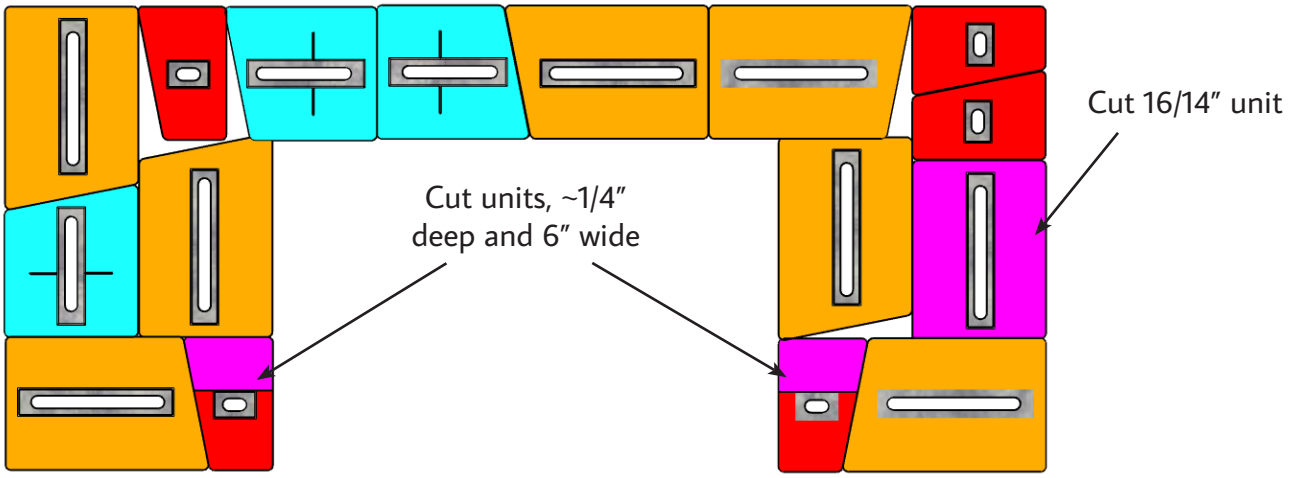


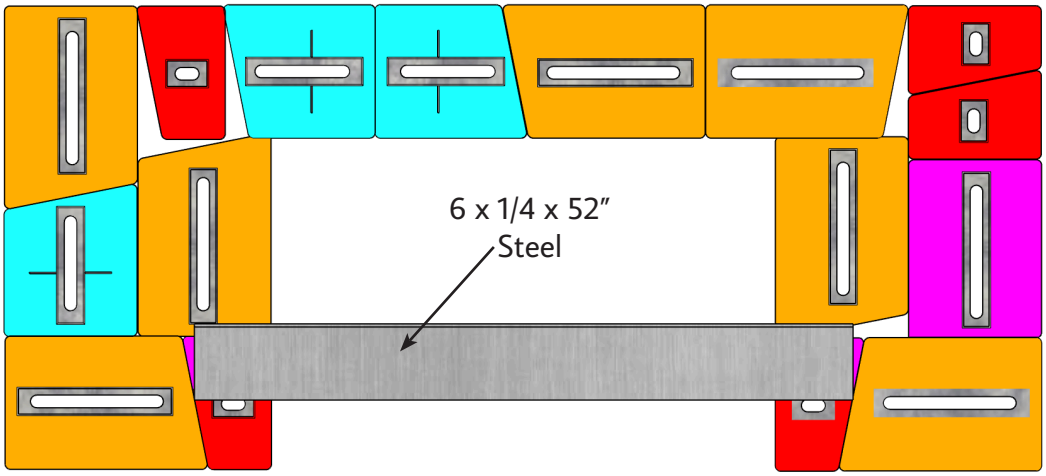
Woodbox Course 8



- Starting from a back corner, place the units in the pasterns depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

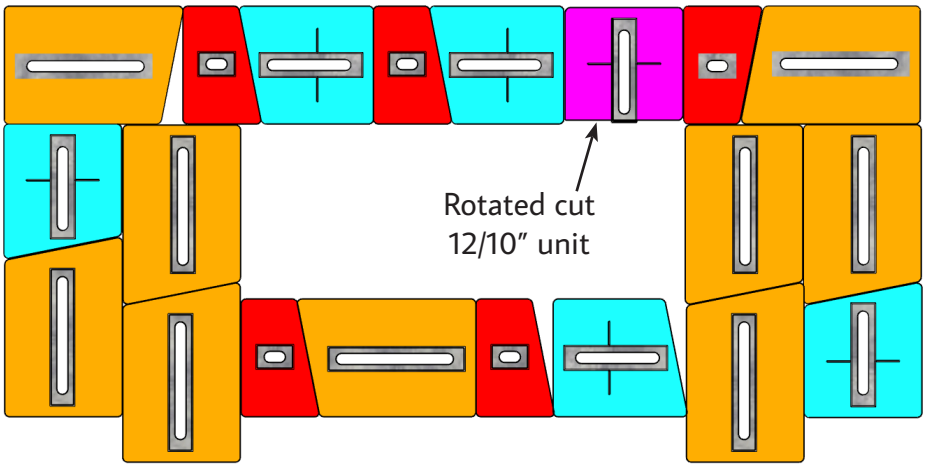
Course 9 & Bridging The Gap





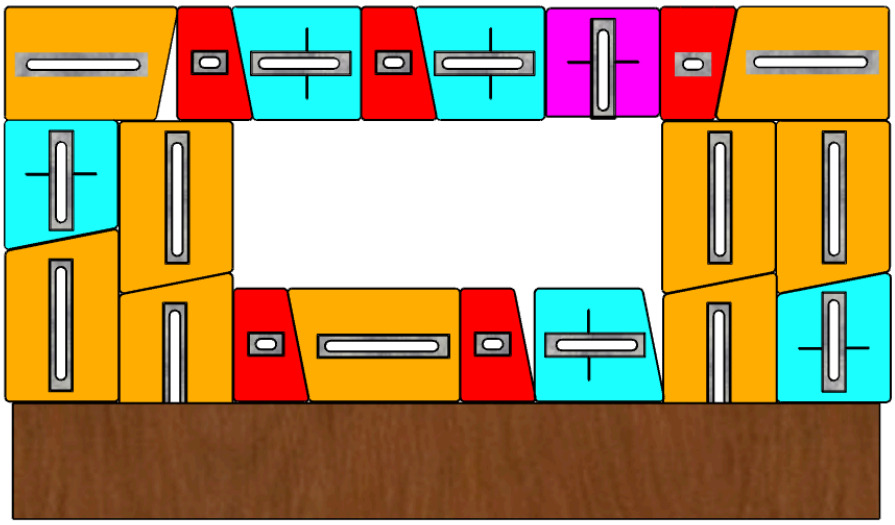
- Starting from a corner, place the units in the pattern depicted, Cutting the marked unit to fit
- Once laid out place 6" steel bar across the heart opening and mark units to cut a ~1/4" deep recess into the top of the units
- Once trough has been cut, place steel beam across the gap, lay out some test units to ensure they stack level, and then secure the steel to the cut units below with construction adhesive

Woodbox Course 10



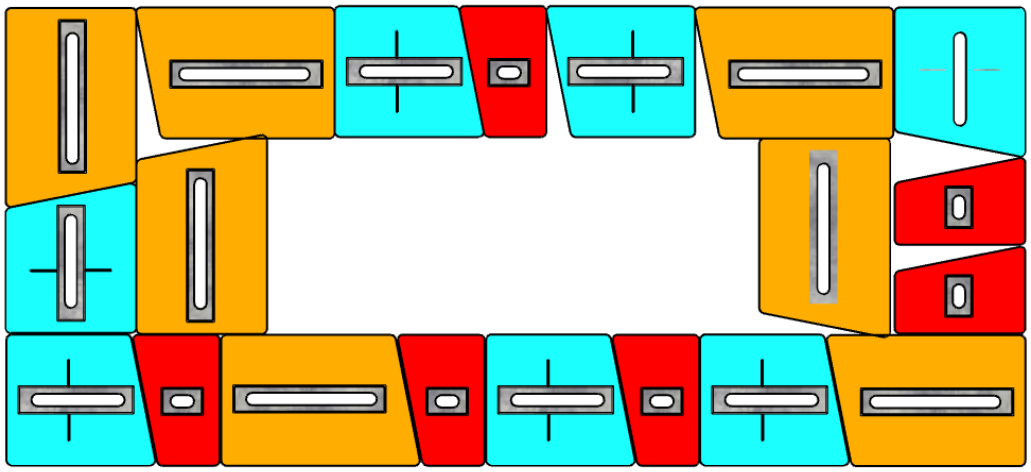
- Starting from a corner, place the units in the pattern depicted, cutting the marked unit for a flush finish
- *If no mantle is desired, cut the protruding 16/14 units to fit flush with the rest of the units*
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Adding Optional Mantle



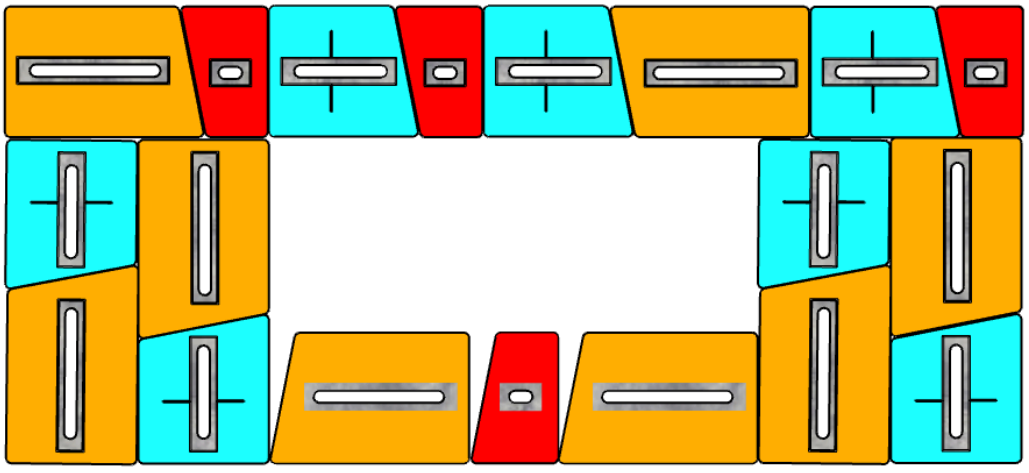
- If constructing with a mantle, place it on the protruding 16/14" units, adhering the mantle to these units with construction adhesive.
- *Mantle material and sourcing is the responsibility of the owner, additional reinforcement may be necessary depending on material used*

Woodbox Course 11



- Starting from a back corner, place the units in the pattern depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

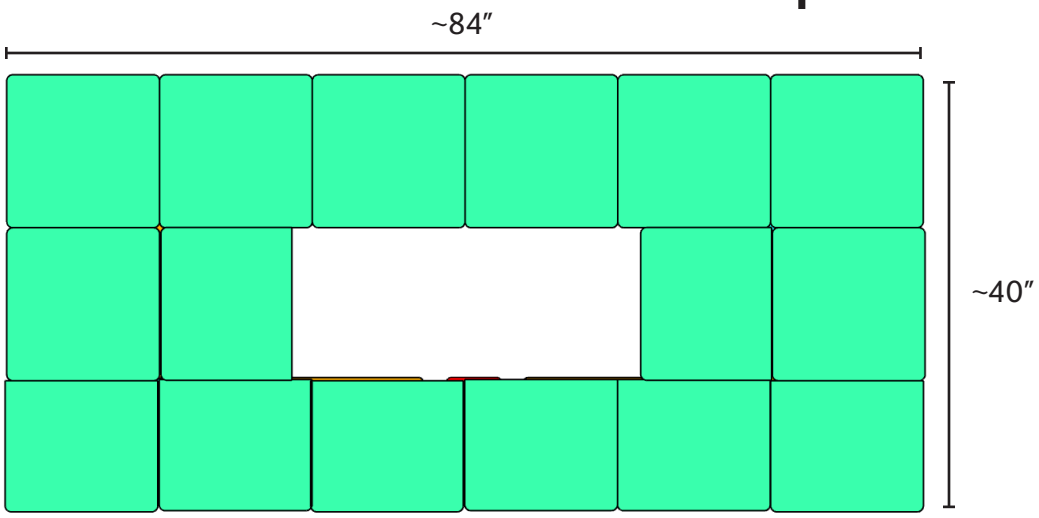
Woodbox Course 12



- Starting from a back corner, place the units in the pattern depicted
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

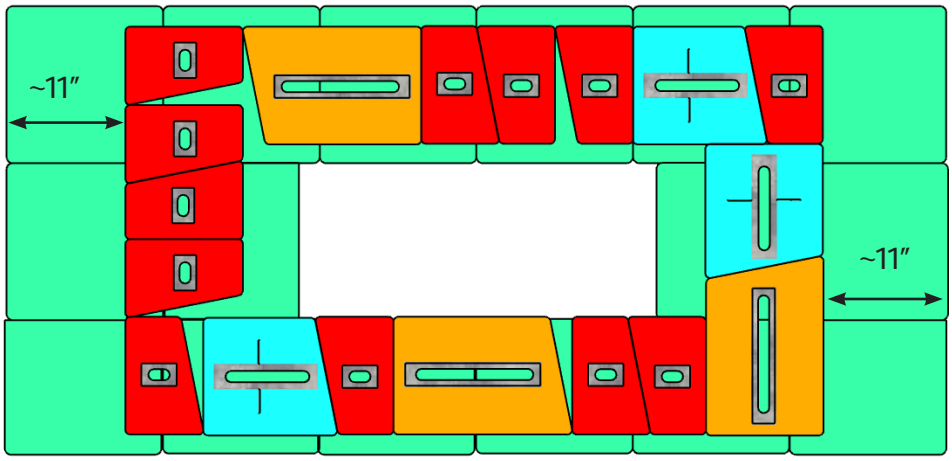
Woodbox Design

Woodbox Course 12 Cap



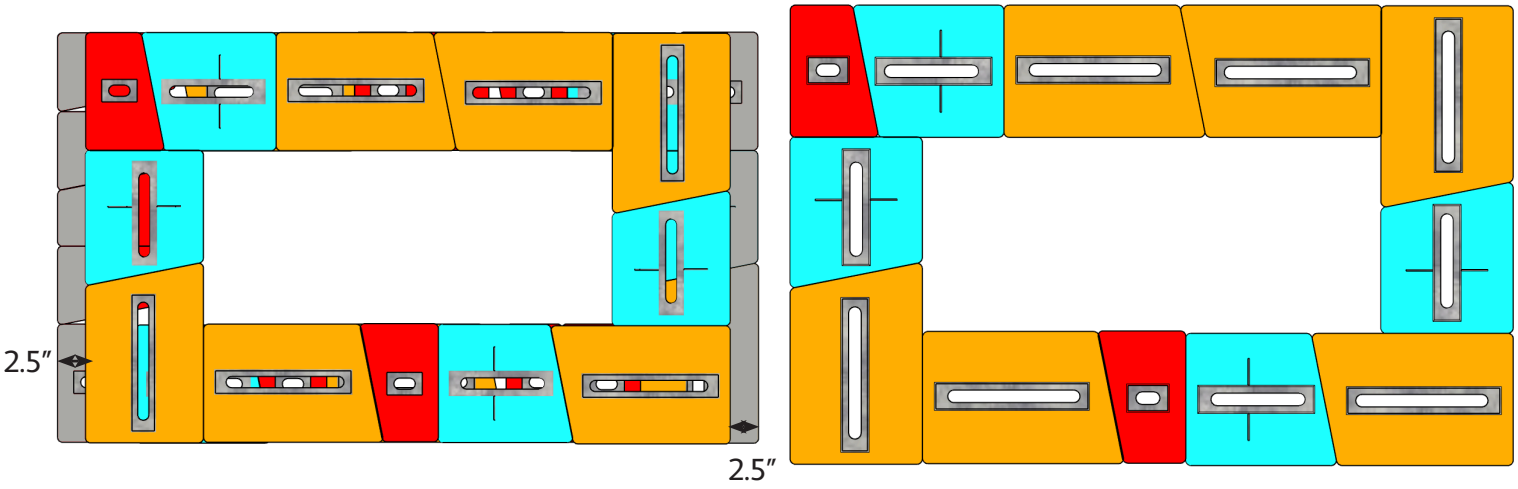
- Once all units are placed, lay caps across the course, adhering them with construction adhesive to the course below. It is recommended to have a 1.5-2″ overhang.

Woodbox Course 13



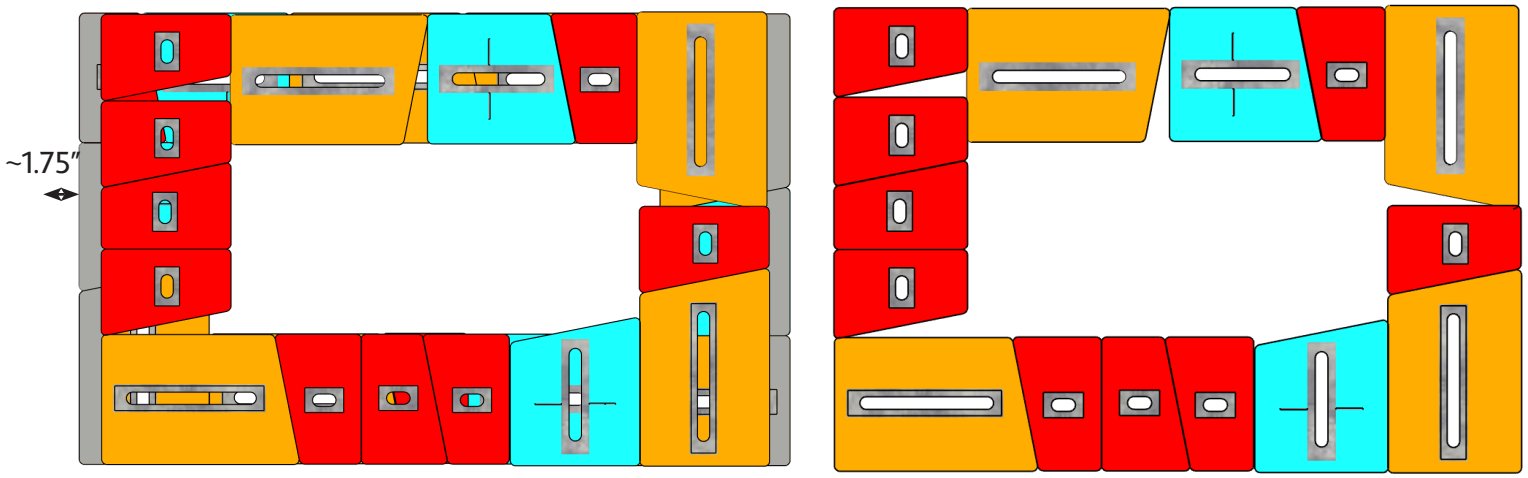
- Starting from a back corner, place the units in the pattern depicted, offset by the noted dimensions
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

Woodbox Course 14



- Starting from a back corner, and offsetting approximately 2.5″ place the units in the pattern depicted, adhering non plug aligned units with construction adhesive
- If needed, shim to ensure that the units are level side-to-side, and front-to-back
- Once all units are placed insert a 3-Way Alignment Plug into the alignment cores; Vertical construction is recommended for best appearance

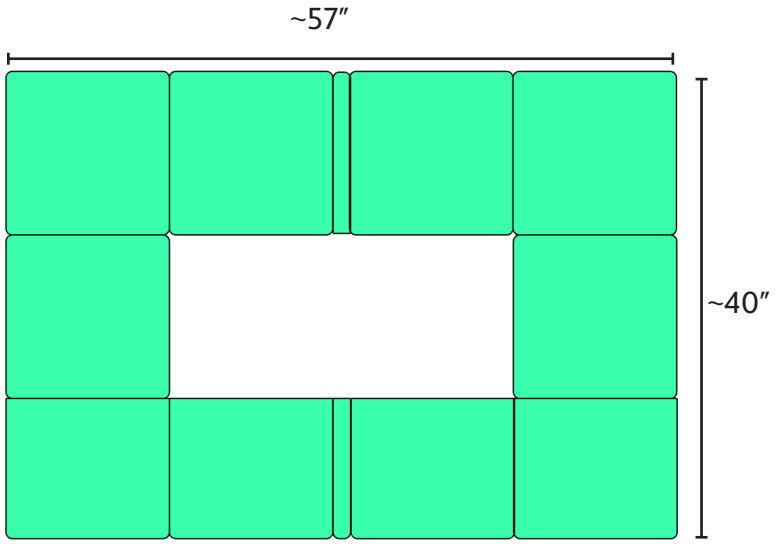
Woodbox Course 15



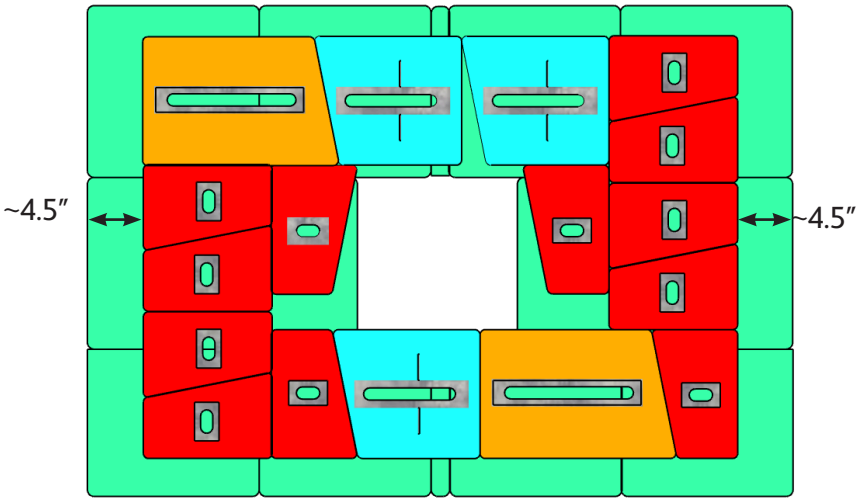
- Starting from a back corner, and offsetting approximately 1.75″ place the units in the pattern depicted, adhering non plug aligned units with construction adhesive
- If needed, shim to ensure that the units are level side-to-side, and front-to-back

Woodbox Course 15 Cap

- Once all units are placed, lay caps across the course, adhering them with construction adhesive to the course below. It is recommended to have a 1.5-2" overhang.



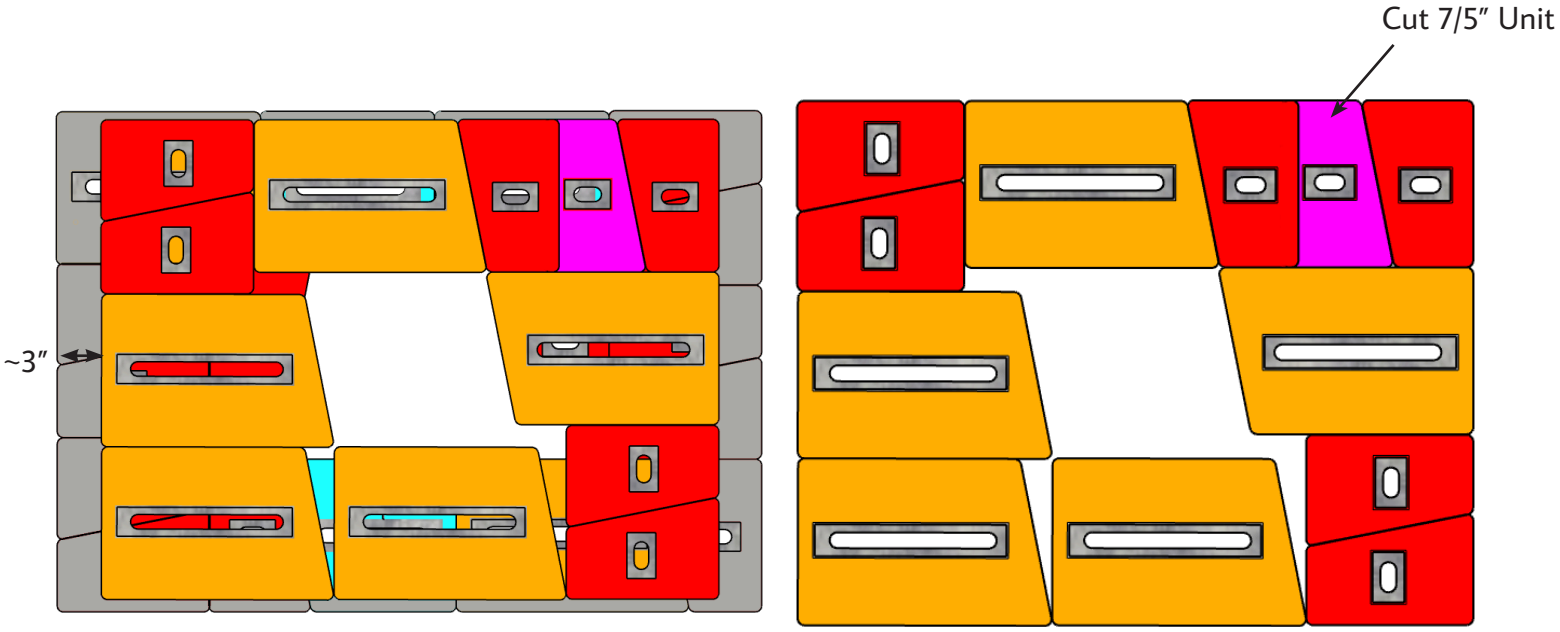
Woodbox Course 16



- Starting from a back corner, and offsetting approximately 4.5" place the units in the pattern depicted, adhering non plug aligned units with construction adhesive
- If needed, shim to ensure that the units are level side-to-side, and front-to-back

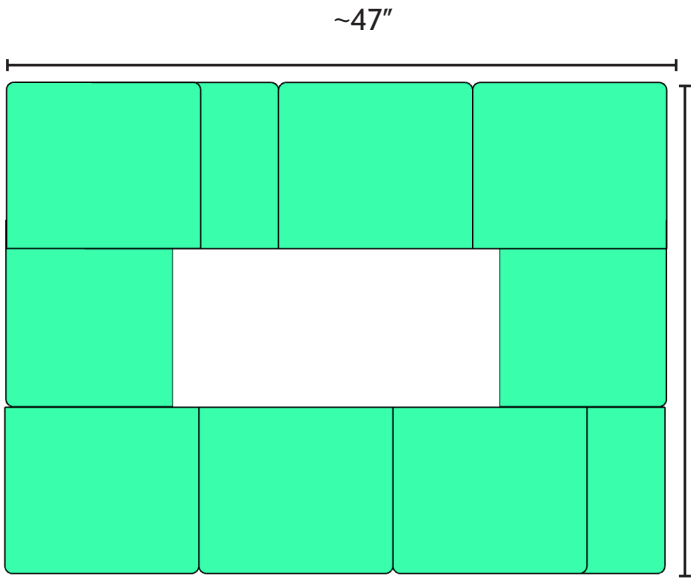
Woodbox Design

Woodbox Course 17



- Place units in the pattern depicted, offsetting them as shown, and cutting the marked unit to fit.
- Once all units have been placed, place the final layer of caps, adhering them to the units below with construction adhesive.
- If using a fireplace inset with chimney, some cutting of units and cap may be necessary

Woodbox 17 Capping



- Place units in the pattern depicted, offsetting them as shown.
- Once all units have been placed, place the final layer of caps, adhering them to the units below with construction adhesive.
- If using a fireplace inset with chimney, some cutting of units and cap may be necessary