

**UNILOCK<sup>®</sup>**

**UN-CARA<sup>®</sup>**  
**MULTI-FACE**  
**WALL SYSTEM**

US PATENT: 9,453,341  
INTERNATIONAL PATENTS PENDING

# The U-Cara<sup>®</sup> Advantage

Customizable fascia panel colors,  
textures and layout

Easy-to-handle backer blocks  
and panels

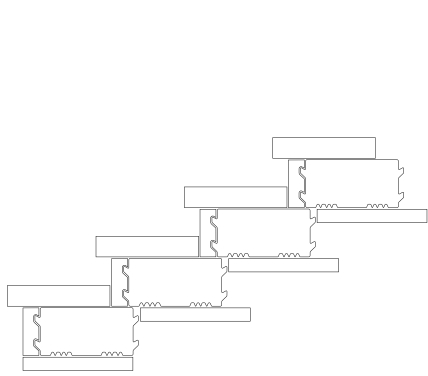
Complete hardscape solution for  
retaining walls, and verticals and  
foundation cladding

# Table of contents

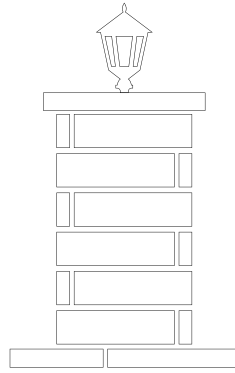
Build any hardscape verticals .....	4	Modular System Base / Rooftop Applications .....	29	Grill Module / Footprint .....	57
Combine all three U-Cara Systems .....	5	Base Module / Components .....	30	Standalone Unit / Bar - Fire Table .....	58
U-Cara Retaining Wall System .....	6	Base Module / Assembly.....	31	Standalone Unit / Grill .....	59
U-Cara Modular System .....	7	Base Module / Stand alone unit (with end cladding).....	32	Extending Modules / Grill Extension .....	60
U-Cara Wall Mount System .....	7	Base Module / Refrigerator cut-out-option .....	33	Extending Modules / Grill-Bar Combo .....	61
<b>RETAINING WALL COMPONENTS .....</b>	<b>8</b>	Grill Module / Components .....	34	L-Shaped Kitchen .....	62
Seat Walls .....	10	Grill Module / Assembly - Standard Width .....	35	L-Shaped Kitchen / Footprint .....	63
Two-sided seat wall - assembly .....	11	Grill Module / Stand-Alone Unit .....	36	U-Shaped Kitchen .....	64
Low Walls and Planters .....	12	Grill Module / Cut-out for Grill .....	37	U-Shaped Kitchen / Assembly .....	65
High Walls .....	13	Corner Module / Components .....	38	Fireplace / Woodburning .....	66
Raised Patios .....	14	Pillar Module / Standard and Oversize .....	39	Fireplace / Gas.....	67
Fire Pits.....	15	Pillar Module / Assembly .....	40	<b>WALL MOUNT SYSTEM .....</b>	<b>68</b>
Grill Islands .....	16	Pillar Module / Assembly and Cladding .....	41	Components .....	70
Pillars .....	17	Back Corner .....	42	Concrete Foundation Application.....	71
Corners .....	18	Back Corner / Standard Assembly .....	43	Wood Substrate Application .....	72
Curved Walls .....	19	End-clad Kits .....	44	Installation .....	73
<b>ENGINEERED RETAINING WALLS .....</b>	<b>20</b>	Backsplash Kits .....	45	Calculate .....	74
Gravity Walls / Standard Backfill .....	22	Corner Backsplash Kit / Components .....	46		
Gravity Walls / Wedge Backfill .....	23	Corner Backsplash Kit / Assembly.....	47, 48, 49		
Geogrid Reinforced Walls / Typical Cross Section.....	24	Height Conversion Kit / Components .....	50		
Geogrid Reinforced Walls / Typical Grid Length .....	25	Height Conversion Kit / Assembly.....	51, 52, 53		
<b>MODULAR SYSTEM.....</b>	<b>26</b>	Connecting Modules / Step-by-step process .....	54, 55		
Modular System Base / Typical .....	28	Module Dimensions / Calculations .....	56		

Visit the Unilock Hardscape Education Center for videos and other information.

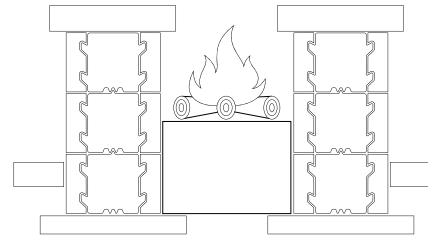
# Build Any Hardscape Verticals



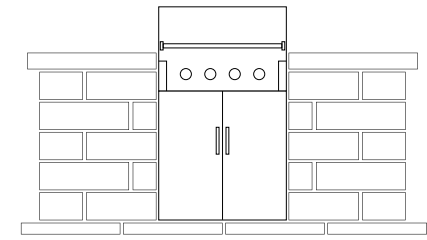
Steps



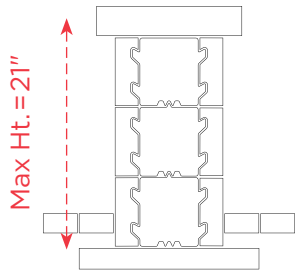
Pillars



Fire Pits

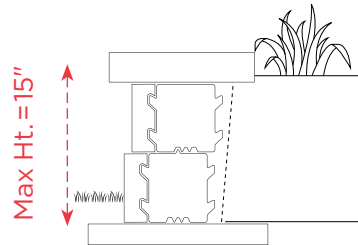


Grill Islands



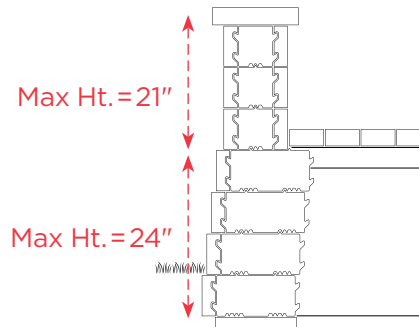
Max Ht. = 21"

Seat Walls



Max Ht. = 15"

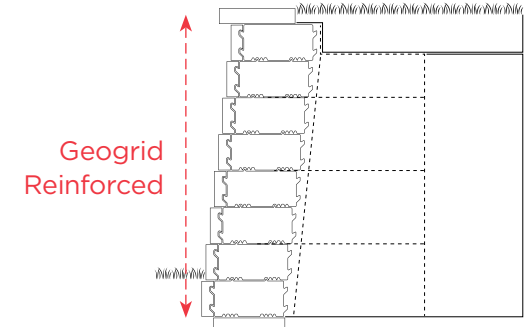
Garden Borders



Max Ht. = 21"

Max Ht. = 24"

Raised Patios  
(Railing may be required)

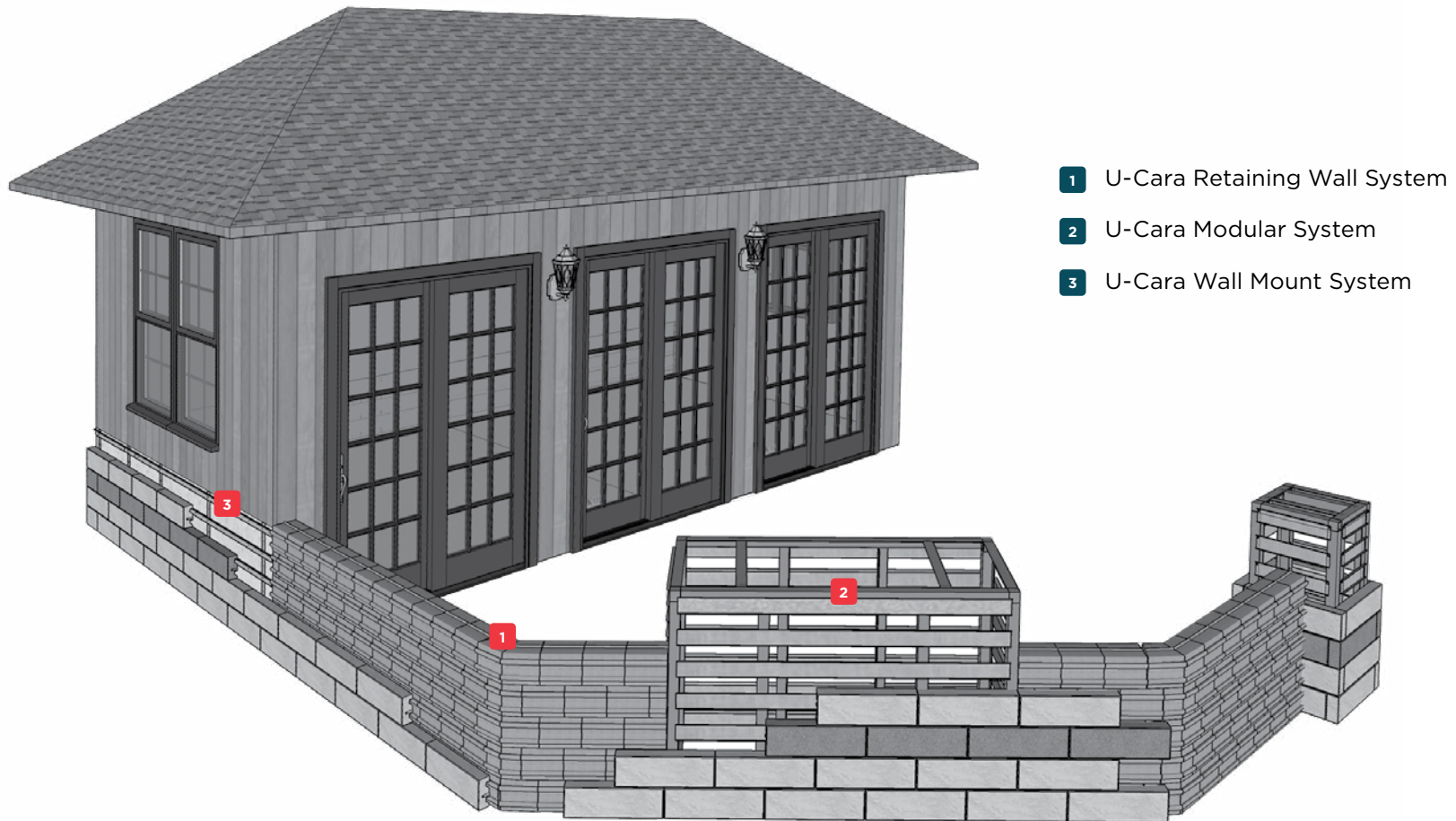


Geogrid  
Reinforced

High Walls  
(Railing may be required)

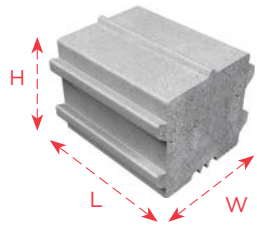
**Virtually any landscape wall or feature can be built using the U-Cara Multi-Face Wall System.** U-Cara's dimensions, sizes and technology make it the most flexible and easy to install system on the market. This manual will illustrate how to construct some of the most common walls and features. The more you work with it, the more you'll discover U-Cara's application flexibility.

# Combine All Three U-Cara Systems



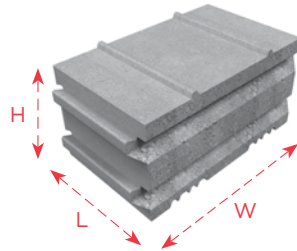
**By combining all three U-Cara systems you can create a cohesive design for the entire project.** The modular cabinets allow you to construct verticals fast, and they match up perfectly to the U-Cara Blocks and Fascia Panels used to construct the rest of the project. Enhance your project further by using the U-Cara Wall Mount System to cover up areas of exposed concrete on residences or outbuildings.

# U-Cara® Retaining Wall System



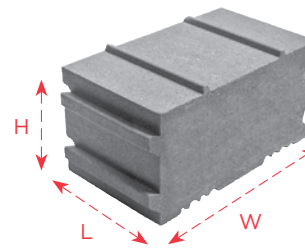
## STANDARD SURE TRACK® BACKER

6" H x 8" L x 6" W  
15 cm x 20 cm x 15 cm



## CORNER/LARGE SURE TRACK BACKER

6" H x 7" L x 12" W  
15 cm x 17.5 cm x 30 cm



## LARGE BACKER

6" H x 7" L x 12" W  
15 cm x 17.5 cm x 30 cm



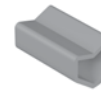
## UNIVERSAL BASE UNIT

2" H x 19" L x 14" W  
5.5 cm x 48.2 cm x 35.5 cm



## UNIVERSAL COPING

2.75" H x 19" L x 14" W  
7 cm x 48.2 cm x 35.5 cm



## SURE TRACK CORNER INSERT

L = 2" (5 cm)



reddot award 2019  
winner

The Red Dot Award is an international design award event that appraises the best products created each year. Awards are only given to those products which exhibit the highest level of design and engineering ingenuity.



## U-CARA® STANDARD FASCIA PANEL

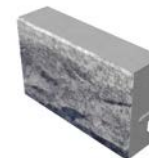
6" H x 18.5" L x 2.36" W  
15 cm x 46.6 cm x 6 cm



## U-CARA CLOSED-END FASCIA CORNER PANEL

6" H x 20.9" L x 2.36" W  
15 cm x 53 cm x 6 cm

CORNER PANEL SET



## U-CARA STANDARD FASCIA HALF PANEL

6" H x 9.25" L x 2.36" W  
15 cm x 23.3 cm x 6 cm



## U-CARA 3" PANEL

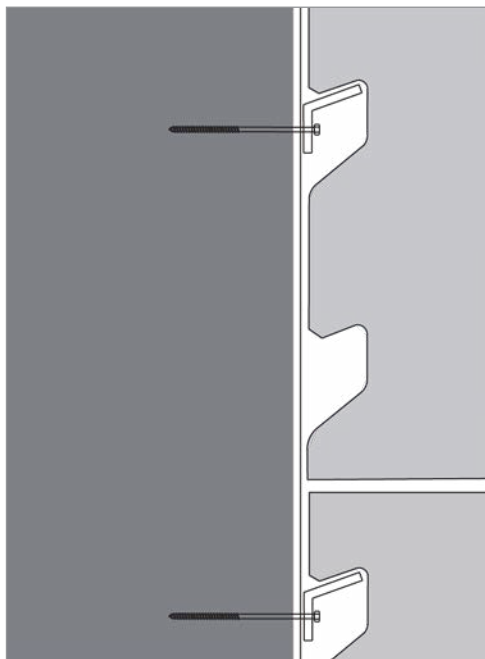
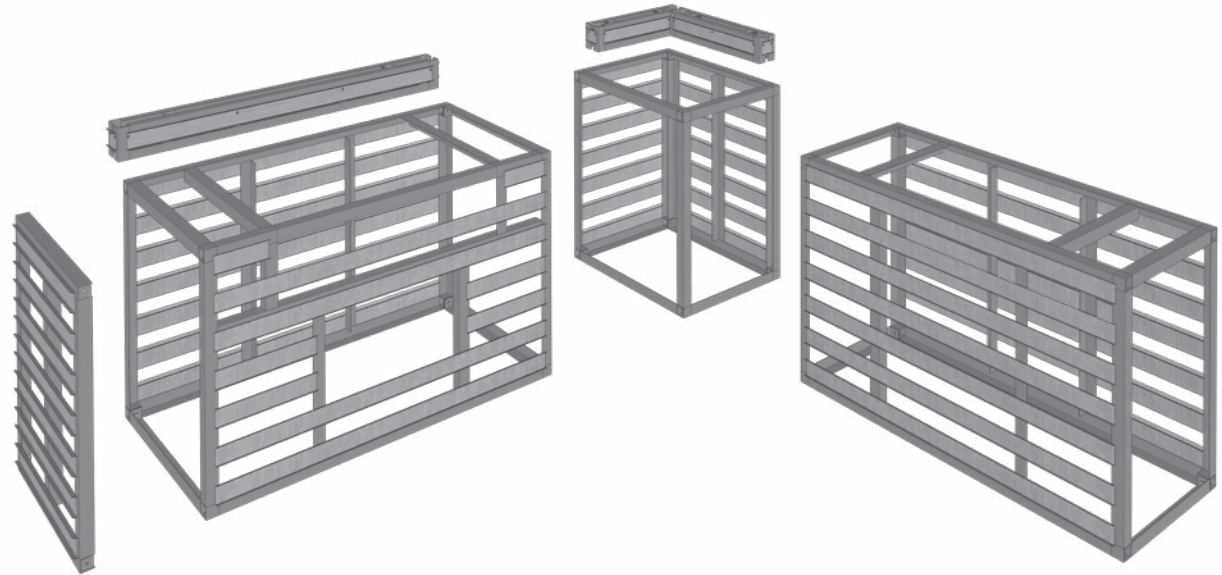
3" H x 9.25" L x 2.36" W  
7.5 cm x 23.3 cm x 6 cm

All measurements are nominal.

# U-Cara Modular System

U-Cara Modular Units are a brilliant complement to the U-Cara System. These aluminum framed cabinets offer up both a labor-saving and time-saving solution for constructing a variety of outdoor living features, such as grill islands, bars and columns.

**What usually would take 2 days to build, can now be constructed in only a few hours.** The framing of these units are 100% aluminum making them rust free and easily transported into a difficult access **locations**.



## U-Cara Wall Mount System

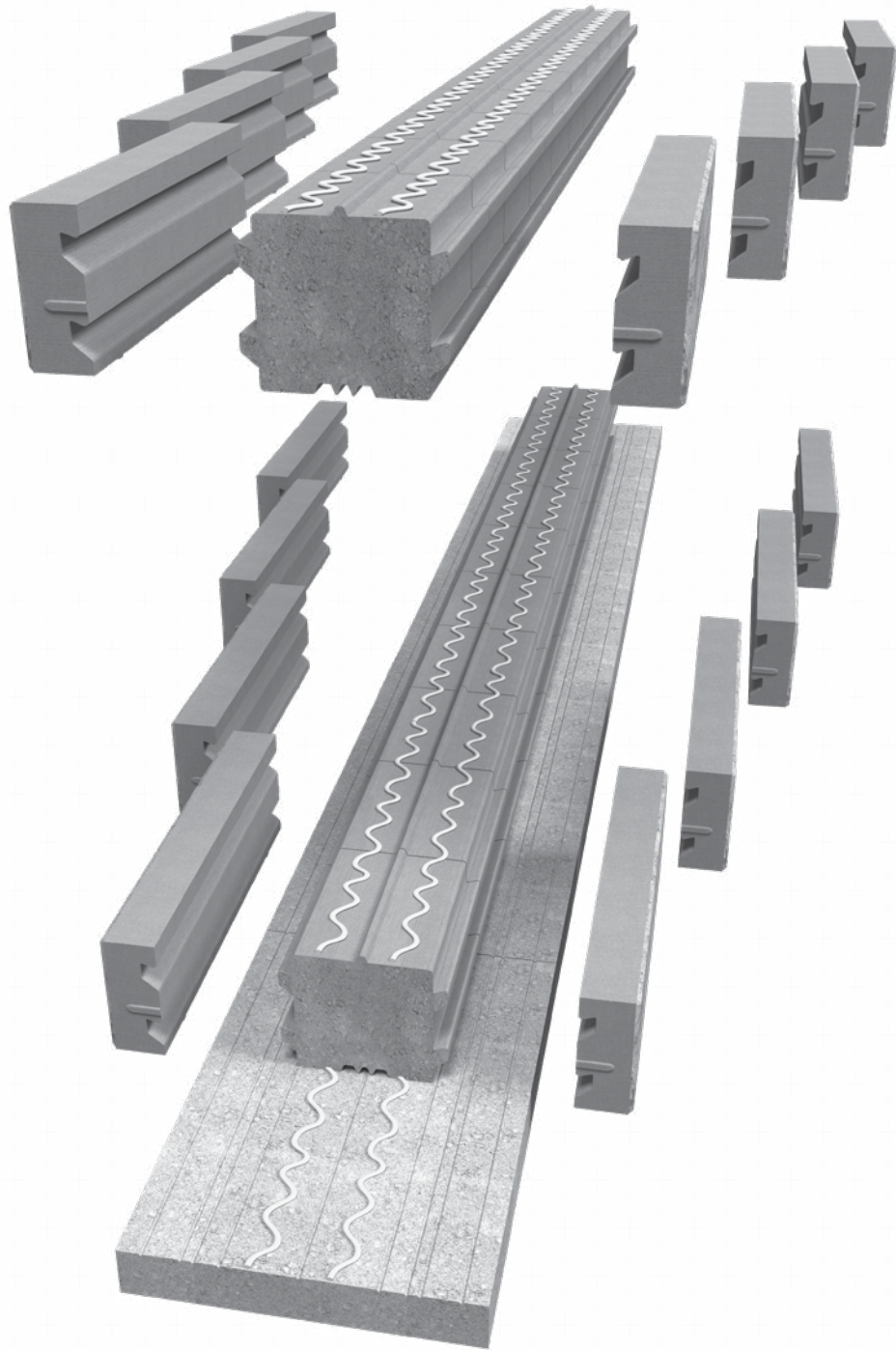
The U-Cara Wall Mount System is comprised of angled rails mounted on any vertical substrate using an alignment bar system so you can easily clad foundations, garages or cabanas with the same U-Cara Panels used elsewhere in your design creating a cohesive overall design.



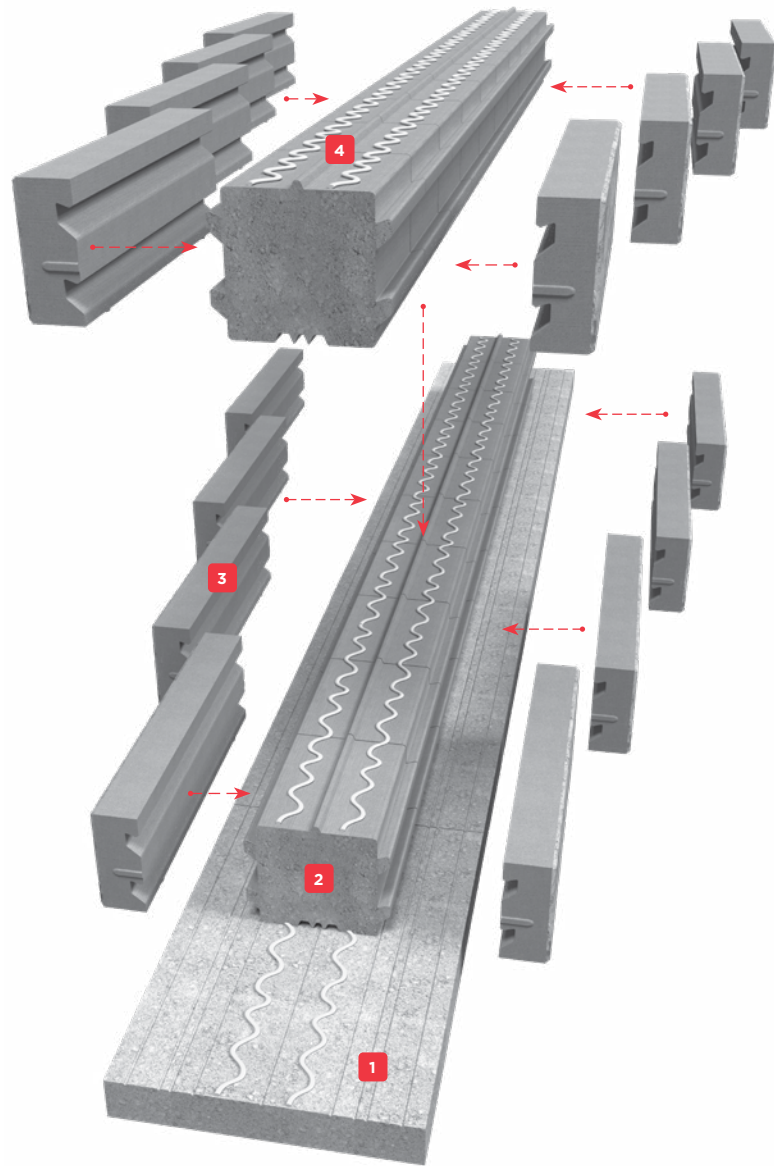
# RETAINING WALL COMPONENTS

U-Cara retaining walls are basically made up of two components, Sure Track® Backer Blocks and U-Cara Fascia panels. The backer blocks provide the structure and the fascia panels provide the look. The system also comes with corners units, accent fascias and U-Grip Base Pads for rapid installation.





# Seat Walls



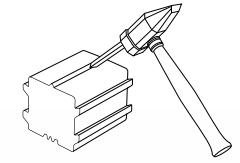
- 1 Universal Base Unit (or poured in place concrete pad).
- 2 Standard Backers must be glued to concrete base pad.
- 3 Hang fascia panels before glue sets.
- 4 Use concrete glue between all course of backer blocks.



## **A** LOCK-BONDING

When a fascia panel straddles two courses of backer blocks, the wall will automatically be strengthened by a mechanical connection called, "lock-bonding". The resulting channel on the top row can be used to run utilities.

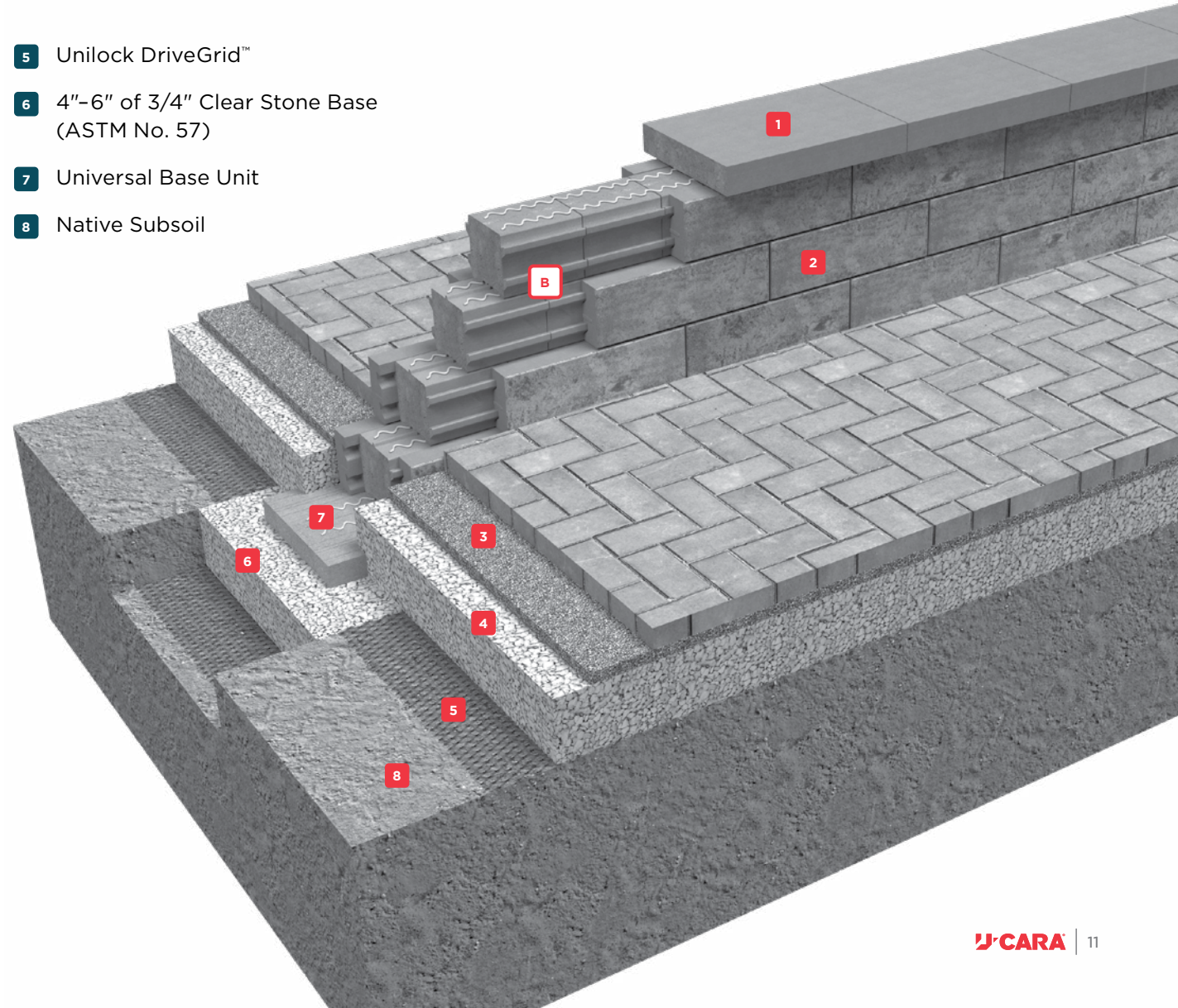
# Two-sided seat wall - assembly



Remove the alignment key from the top row of backers to properly adhere the coping.

Sure Track Backer Blocks offer various options for positioning U-Cara Fascia Panels. Fascia panels can be placed anywhere and on any track vertically or horizontally. This can only be done when the backers are stacked vertically.

- 1 Universal 14" x 19" Coping (1.75" overhang each side)
- 2 U-Cara Fascia Panels (on both sides)
- 3 Paver Bedding Course 1/4" Clear Chip Stone (ASTM No. 8 or 9)
- 4 4"-6" of 3/4" Clear Stone Base (ASTM No. 57)
- 5 Unilock DriveGrid™
- 6 4"-6" of 3/4" Clear Stone Base (ASTM No. 57)
- 7 Universal Base Unit
- 8 Native Subsoil



**B NOTE:**

Always offset each row of backers horizontally by half of a block width.

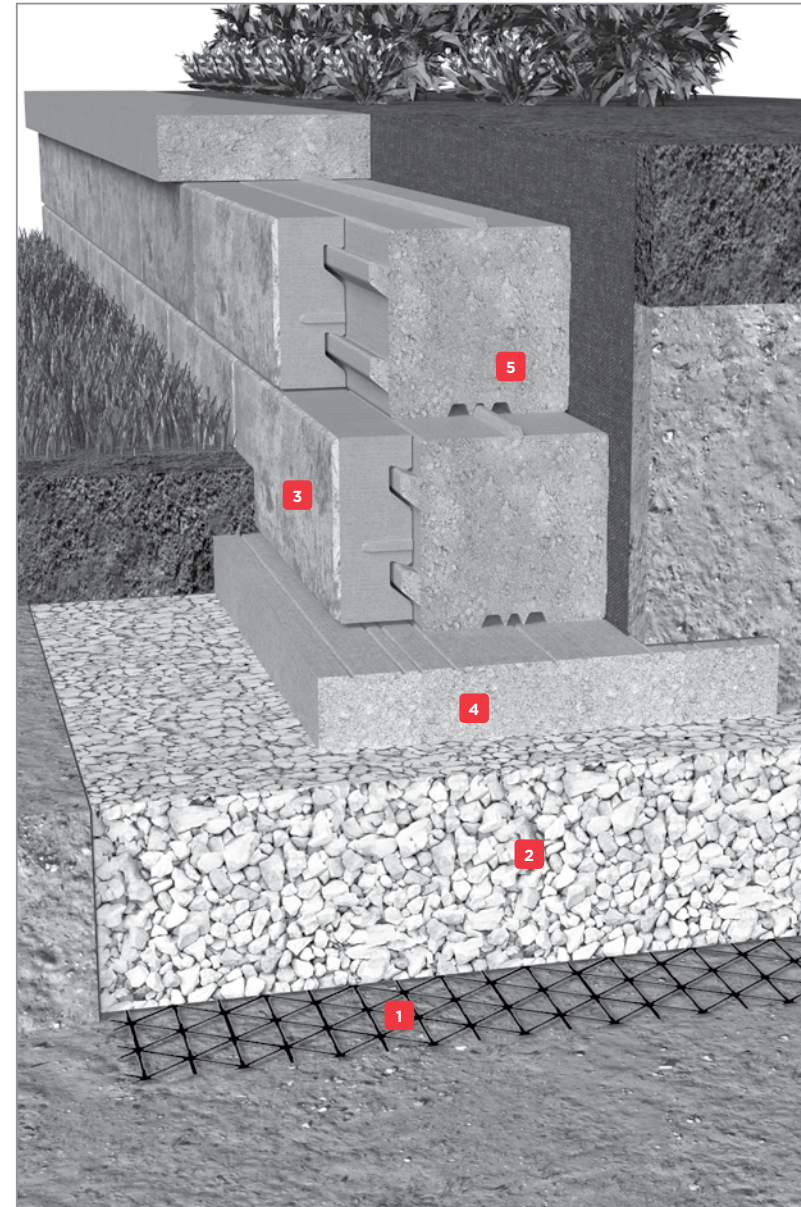
# Low Walls and Planters

- 1 DriveGrid or geotextile fabric.
- 2 ¾" Clear Stone (ASTM No. 57) or Road Base (6" thick).
- 3 ½ block height is required below grade.
- 4 Universal Base Units (U-Grip™) or poured concrete pad.
- 5 Set back the blocks with provided alignment channel to add strength to the wall or planter.

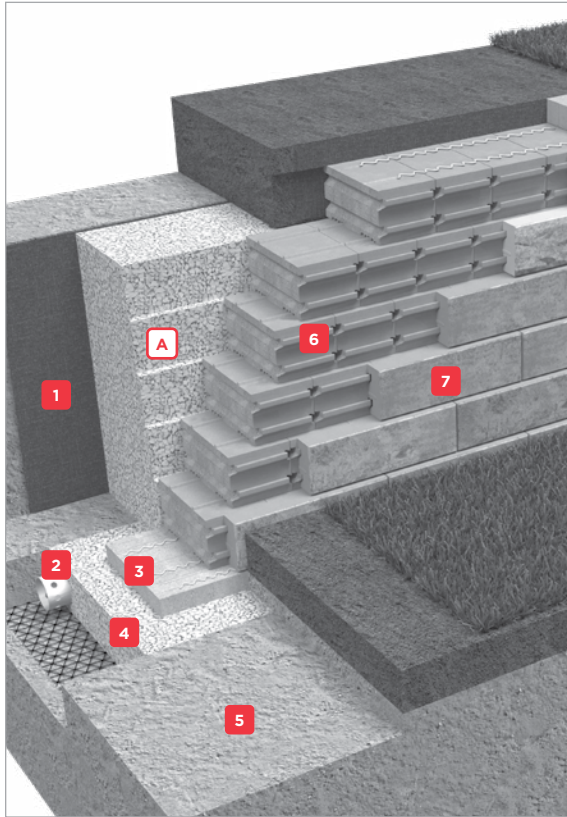
## NOTE:

Base trench must be deep enough to accommodate min 4" (100mm) of open -graded gravel, the universal base unit and ½ of the block height below finished grade.

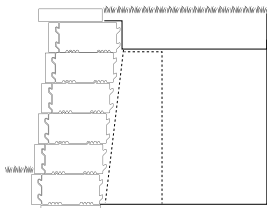
Be sure to remove all topsoil or any loose subsoil.



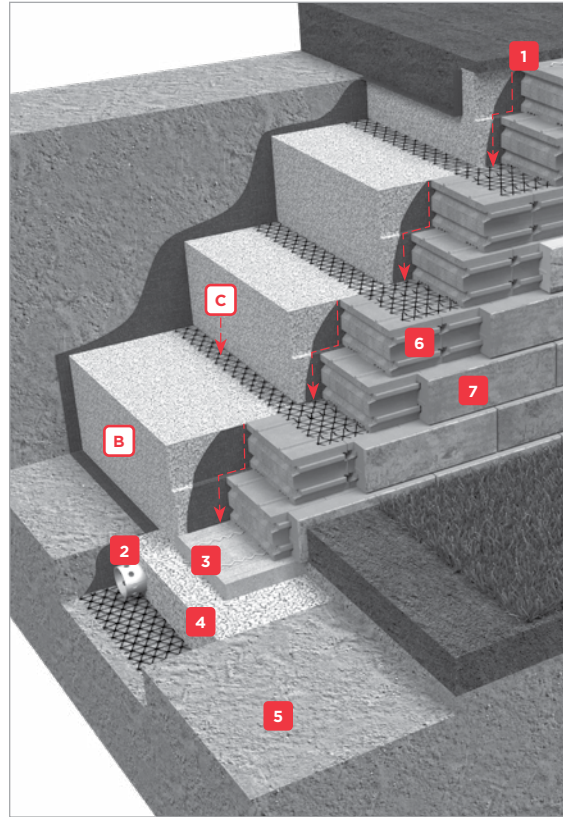
# High Walls



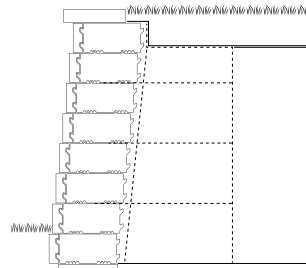
**Gravity Wall**



**Gravity Wall with Large Sure Track® Backer Blocks**



**Geogrid Wall**



**Geogrid Reinforced Wall with Large Sure Track® Backer Blocks**

- 1 Filter Fabric
- 2 Perforated Drainage Pipe
- 3 Universal Base Unit
- 4 3/4" Clear Stone (ASTM No. 57) or Road Base (6" thick)
- 5 Subsoil
- 6 Large Sure Track Backer Block
- 7 U-Cara Fascia Panel

**Gravity Wall**

- A 3/4" Clear Stone (ASTM No. 57) Backfill min. 12" wide

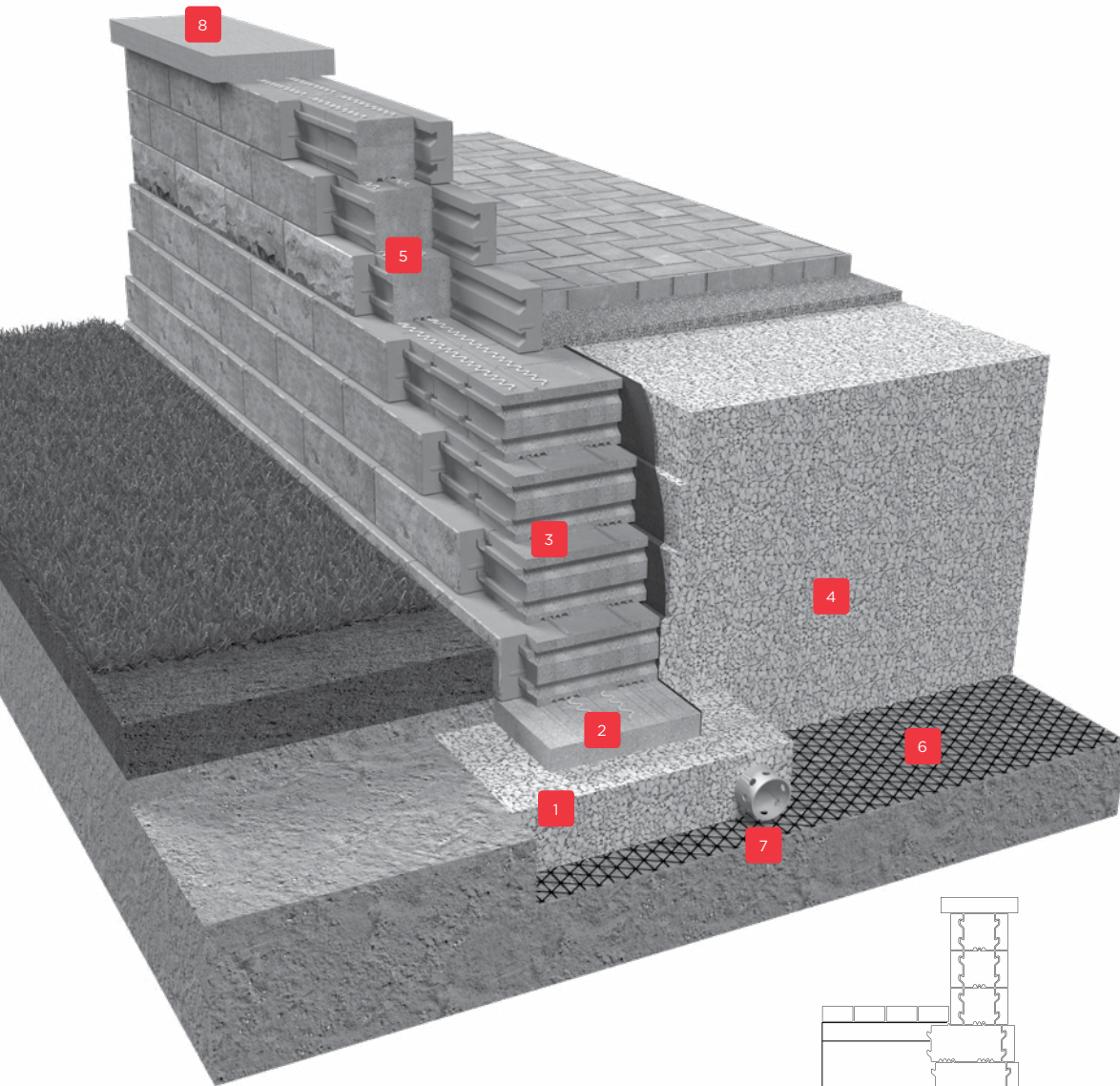
**Geogrid Wall**

- B Compacted Granular Fill as specified by engineer
- C Approved Geogrid

**NOTE:**

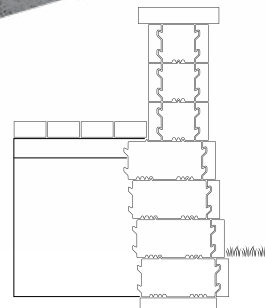
For more information on engineering high walls see page 21.

# Raised Patios



- 1 Minimum 6" (150mm) thick  $\frac{3}{4}$ " clear (ASTM No. 57) gravel base.
- 2 Adhere first row of Large Backers to Universal Base Units or poured concrete pad.
- 3 Install Large Backers in the set-back position.
- 4 Line with filter fabric and backfill patio area with  $\frac{3}{4}$ " clear (ASTM No. 57) gravel
- 5 Install Standard Backers vertically for the seat wall portion. Glue each row.
- 6 DriveGrid or geotextile fabric.
- 7 4" perforated drain. Must daylight for complete drainage.
- 8 Glue coping with concrete adhesive.

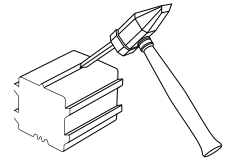
Raised Patio  
Side Elevation



## NOTE:

This wall may require a railing. Always follow prevailing building codes.

# Fire Pits

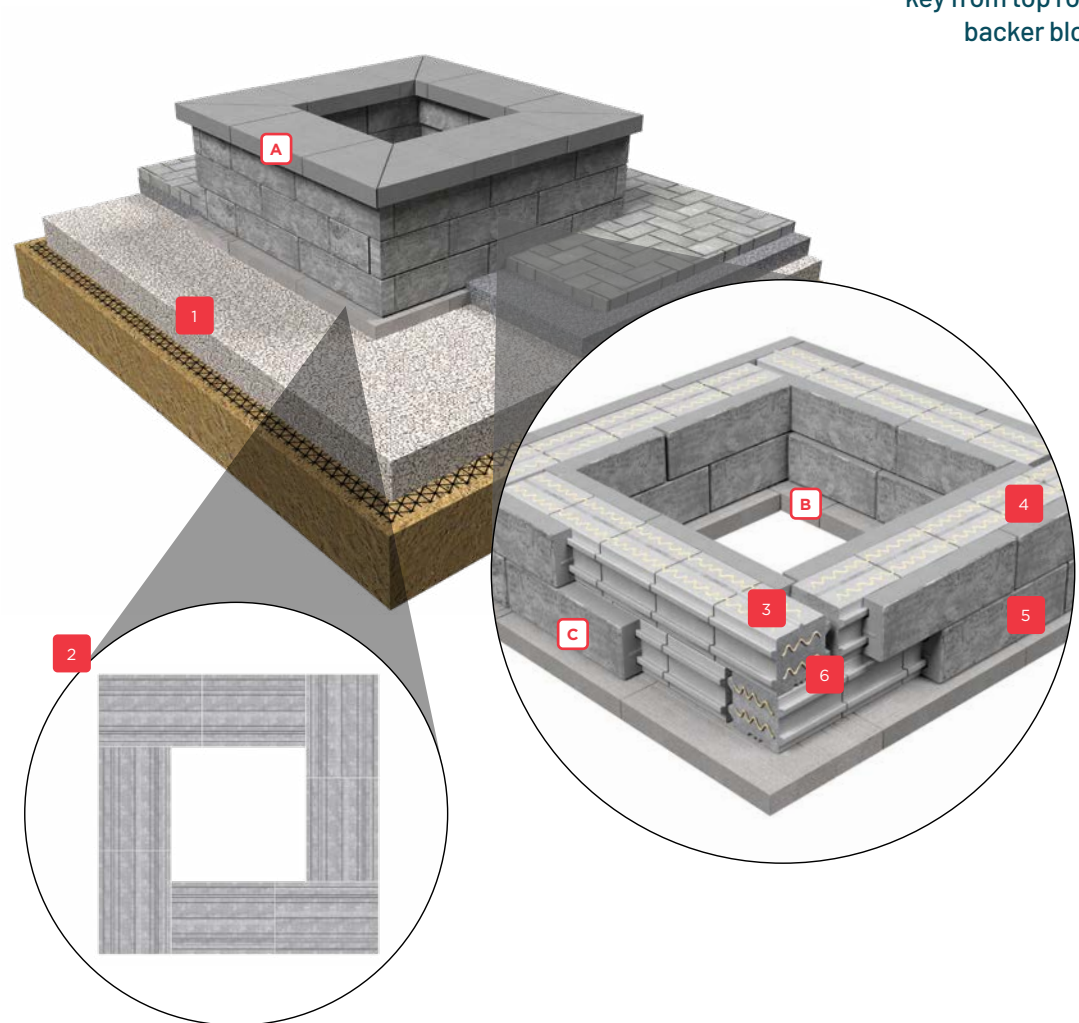


Remove alignment key from top row of backer blocks.

- 1 Minimum 6" (150mm) thick  $\frac{3}{4}$ " clear (ASTM No. 57) gravel base.
- 2 Install 8 Universal Base units.
- 3 Remove alignment keys as required to construct corners or to adhere coping.
- 4 All Backer Blocks must be glued with heat rated glue (1200 F).
- 5 Clad each course with U-Cara Fascia Panels.
- 6 Glue corner fascia panels where no rail exists.

## Tips

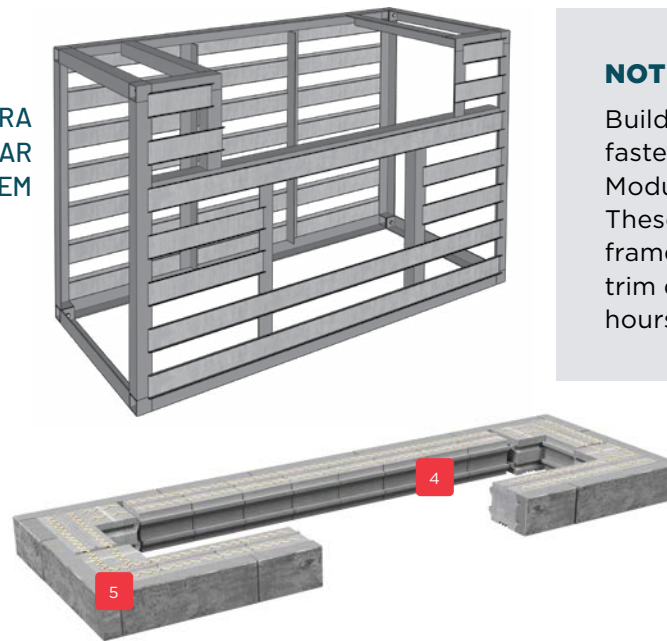
- A Only use construction adhesive rated for high-heat applications. A 1200°F minimum rating is recommended.
- B If you are building a gas fire pit, make sure that you run your gas line to the center of the pit area before installing the base units.
- C Always apply adhesive between the bottom of the first row of fascia panels and the Universal Base Unit.



# Grill Islands



U-CARA  
MODULAR  
SYSTEM

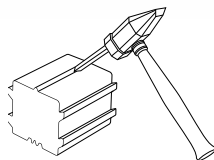


**NOTE:**

Build grill islands faster with U-Cara Modular Systems. These aluminum frame cabinets will trim days down to hours. *See page 27.*

- 1 Reinforced poured concrete pad 6" (150mm) thick
- 2 10" (250mm) Dia. Sono Tube supports required for frost protection
- 3 Minimum 6" (150mm) 3/4" clear (ASTM No. 57) gravel base
- 4 Use Standard Backers to build main structure. Glue all courses.
- 5 Use Large Backers to construct corners
- 6 Granite Countertop

Remove alignment key from top row of backer blocks.



TIPS

**A** Install gas lines right after drilling into the piers and before pouring the concrete pad.

**B** Order the grill in advance of constructing the grill island so that you will know the exact dimensions for the opening in the grill island and the counter top.



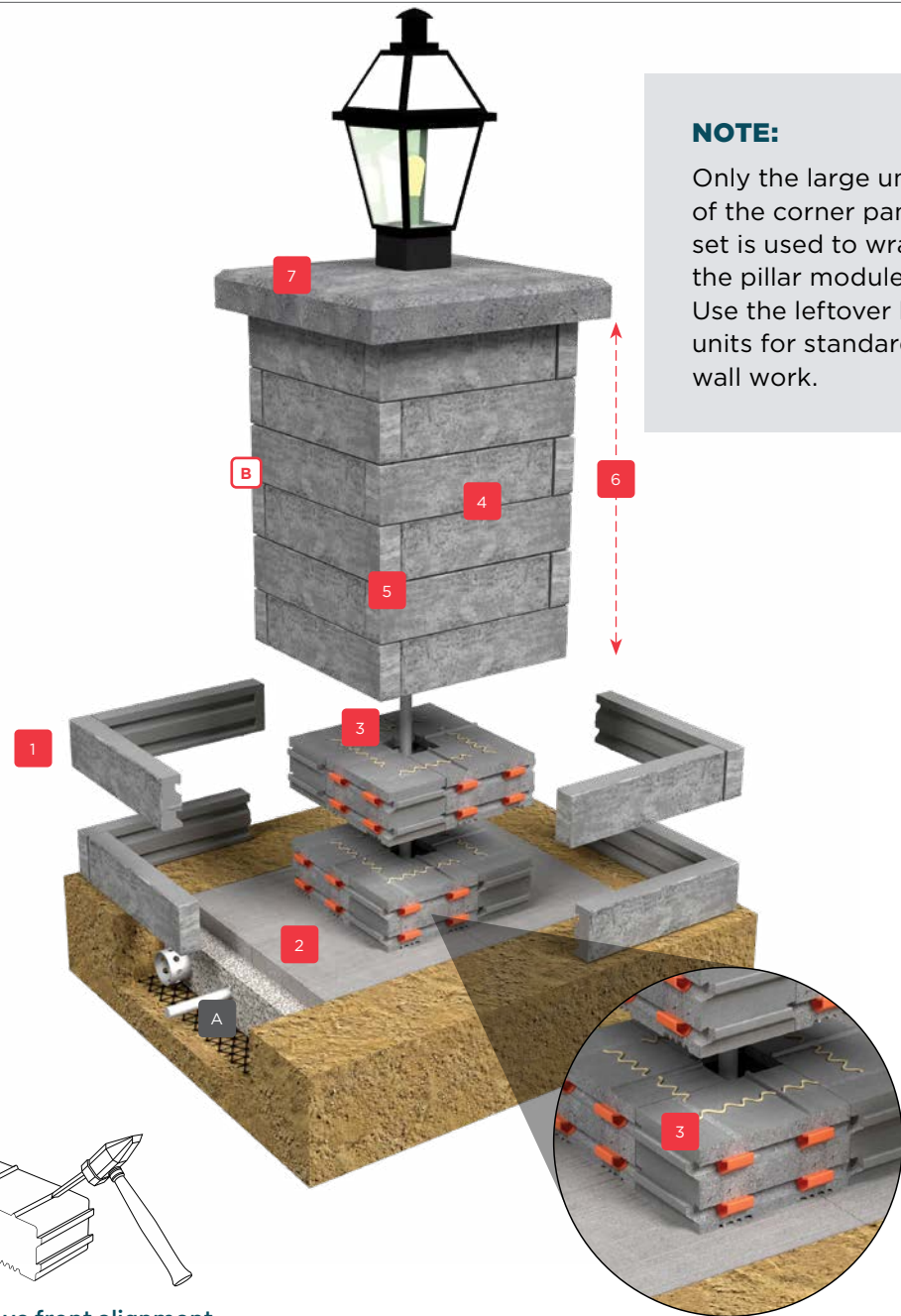
# Pillars

Pillars should be constructed on 6" (15 cm) to 12" (30 cm) of clear open graded gravel. The pillar embedment should never be less than 12" (30 cm) below grade.

- 1 Minimum pillar embedment below grade = 12" (300mm).
- 2 Installs on 4 Universal Base Units or a poured concrete pad.
- 3 Remove alignment keys from all 32 Large Backers.
- 4 Square up each layer of 4 Large Backers with carpenter's square.
- 5 Alternate each course with left and right U-Cara Corner Panels.
- 6 Maximum height above grade 60" (1800mm).
- 7 Pillar Cap

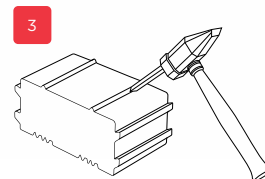
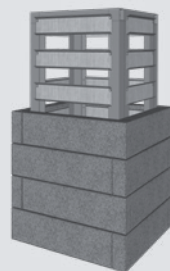
## NOTE:

Only the large unit of the corner panel set is used to wrap the pillar module. Use the leftover half units for standard wall work.



## NOTE:

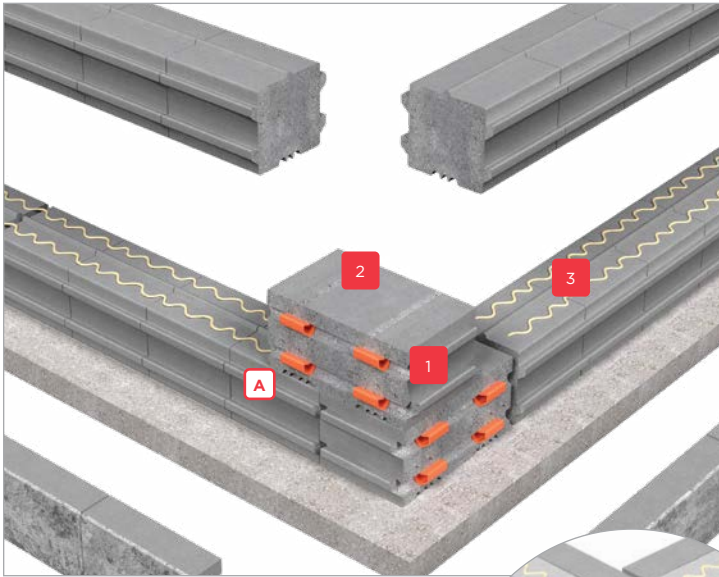
Build Pillars faster with U-Cara Modular Systems. These aluminum frame cabinets will trim days down to hours. See page 27.



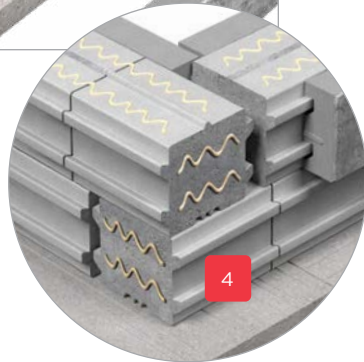
Remove front alignment key from top of each backer block.

# Corners

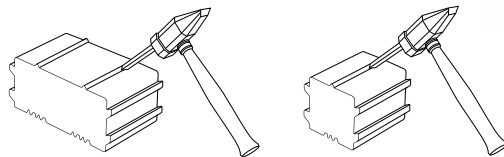
## 90° CORNER



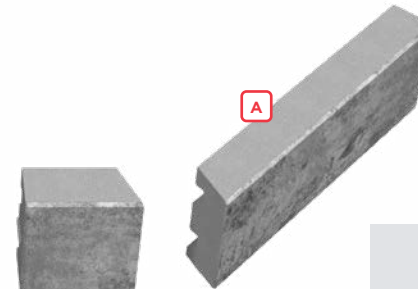
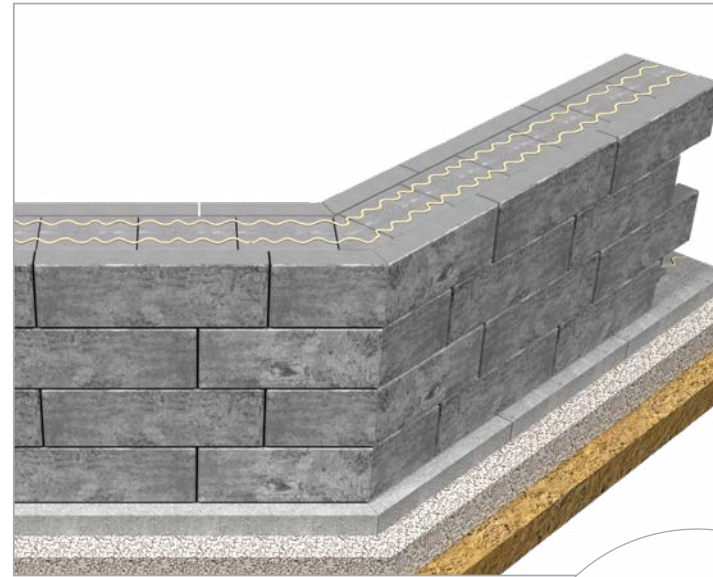
- 1 Use Large/Corner Backers to construct corners
- 2 Remove alignment key "log cabin" corners
- 3 Always use adhesive when constructing corners
- 4 Alternate corner can be constructed using Standard Backers



Remove alignment keys from corner backer blocks.



## 45° CORNER



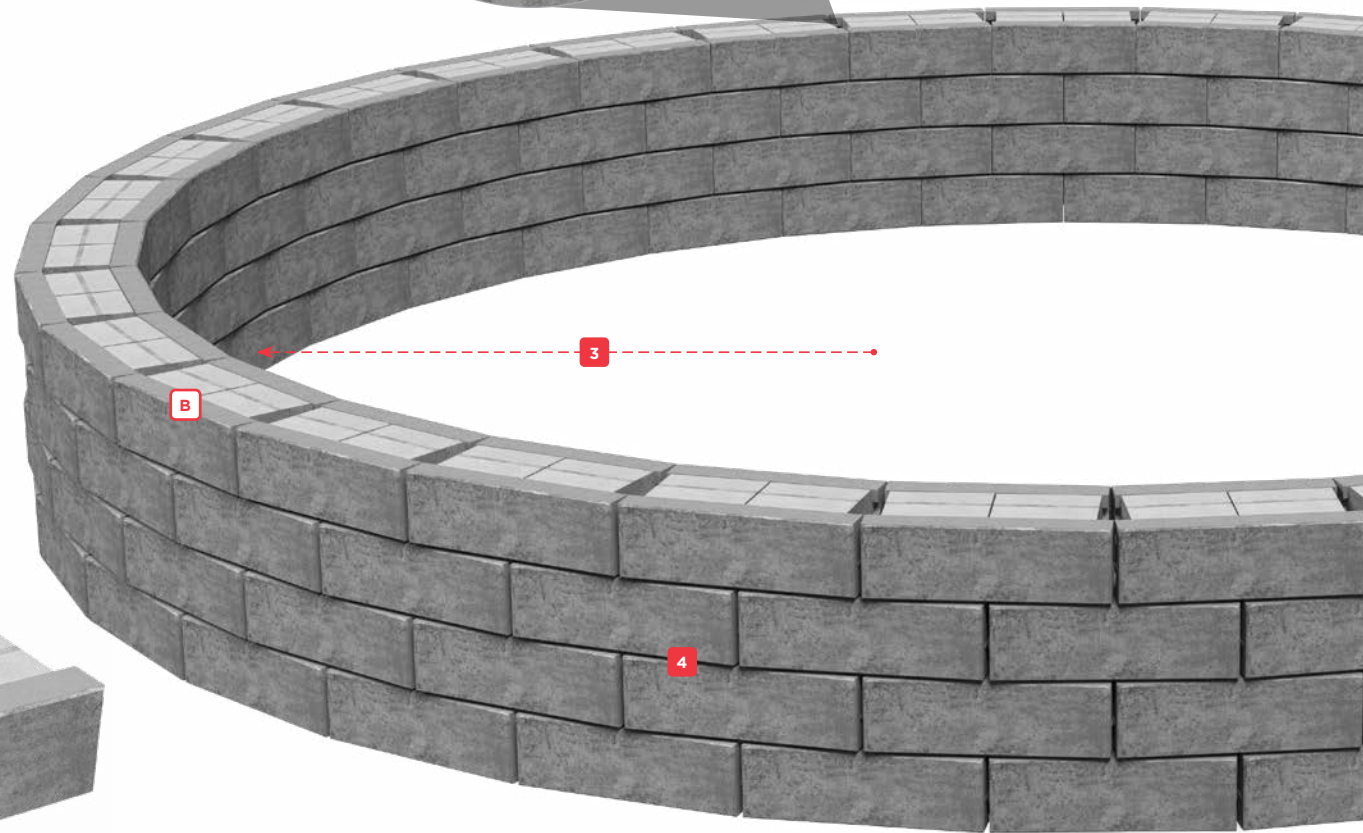
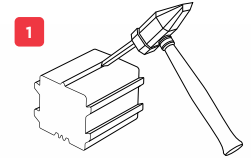
### **A TIP:**

Gaps between Backer Blocks are easily covered with the fascia panels

# Curved Walls

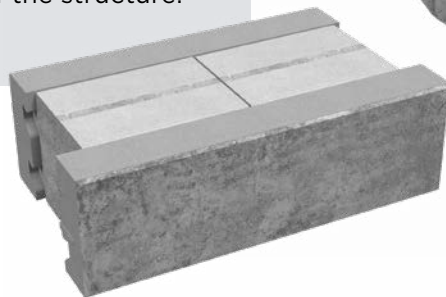
- 1 Prepare Standard Backer Blocks by removing the top alignment keys.
- 2 Angle cut fascia panels if desired to minimize gaps
- 3 Min. radius (r) = 8 ft (2 m)  
Inside panel length 8 ft r = 16.75" (42.5 cm)  
Max. curved wall height = 24" above grade
- 4 All rows must be glued

Removal of alignment key from top of all backer blocks is required to accommodate the radius.



**B TIP:**

Curved walls are constructed in clusters of 2 standard backers + one or two panels. Inside radius panels are cut shorter to accommodate the radius of the structure.

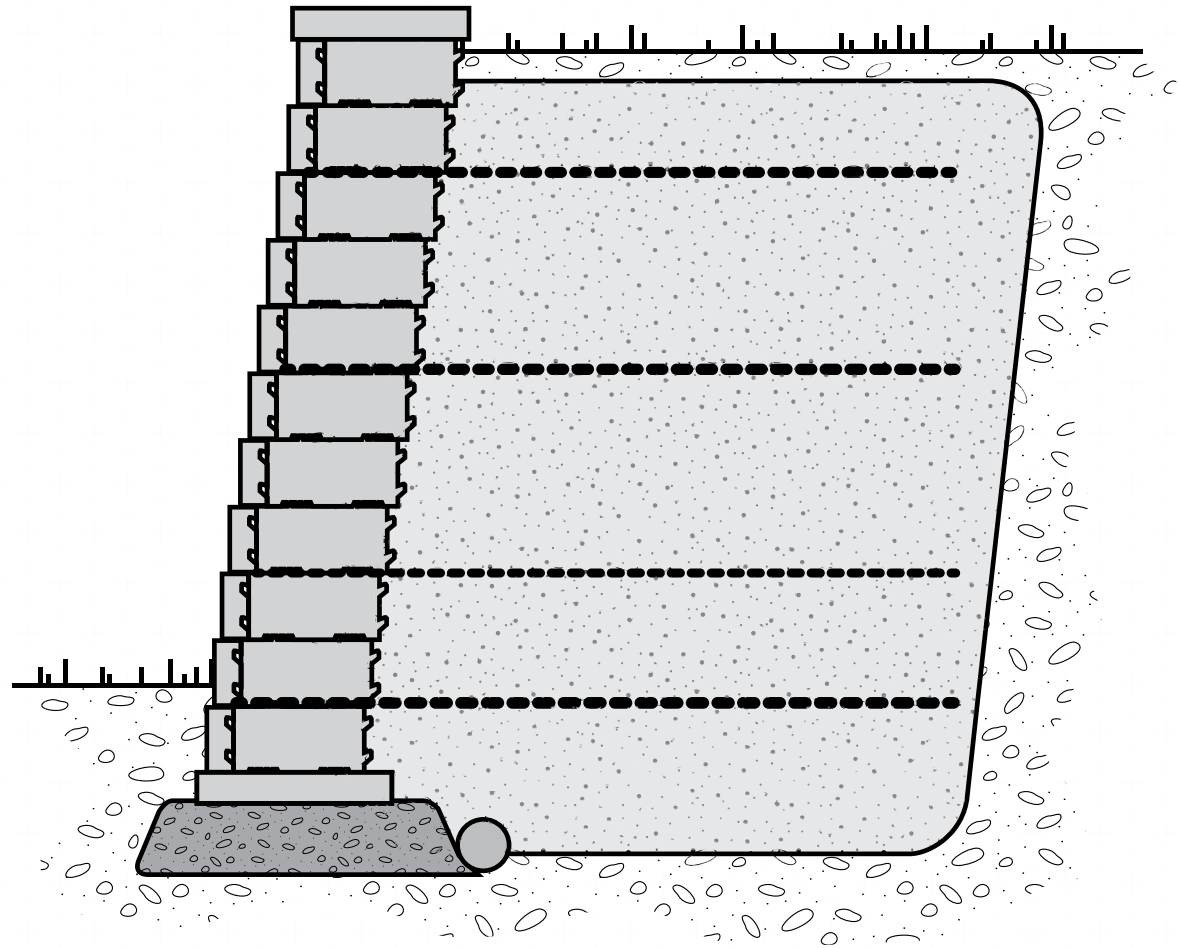




# ENGINEERED RETAINING WALLS

Structural retaining walls and walls over 3ft (1m) must be engineered to suit the application. U-Cara retaining walls incorporate geogrid as the primary reinforcement component of the wall.

The following wall height charts provide preliminary guidance as to how much geogrid may be required for various wall heights. These charts are for planning purposes only.



**NOTE:**

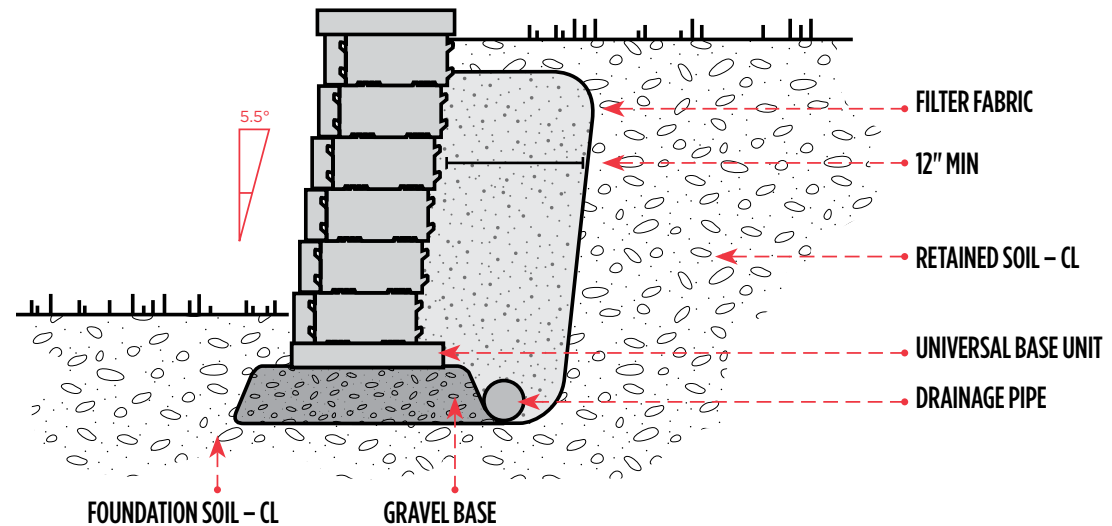
Unilock can help provide you with site-specific engineering so you can construct your retaining wall project with confidence and as always, we are happy to drop the jobsite where possible, to get you started on the right foot.

# Gravity Walls

## STANDARD BACKFILL

A gravity wall with "standard backfill" is backfilled with a vertical column of free draining gravel directly behind the block wall. This construction is generally used when the location of the wall requires that the embankment be cut in (excavated) first.

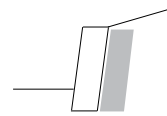
SEE HEIGHT CHART BELOW.



### BACKFILL TYPE "A"



Flat | Pedestrian Load  
(50psf/2.4kPa)



Slope | 3H:1V

Wall Alignment	Exposed Wall Height	Max Total Wall Height	Exposed Wall Height	Max Total Wall Height
-	(ft/m)	(ft/m)	(ft/m)	(ft/m)
0° Vertical	1.7/0.52	2.2/0.67	1.7/0.52	2.2/0.67
5.5° Battered	2.2/0.67	2.7/0.82	2.2/0.67	2.7/0.82

### DISCLAIMER:

The above design information is being provided for preliminary estimate and feasibility purposes only, and should not be used for construction. Prior to wall construction, a Final Design must be supplied by a qualified Engineer licensed in the applicable State/Province.

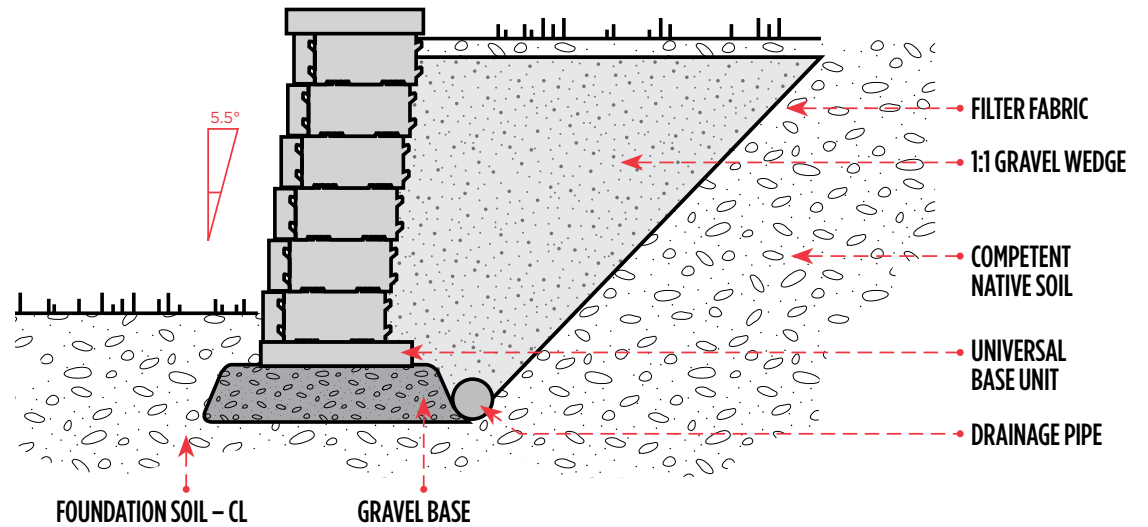
Handrails and/or traffic barriers are not shown but are typically required and may influence the wall design. The above design is not to be used with the terraced structures, water applications or within the line of influence of other permanent structures.

# Gravity Walls

## WEDGE BACKFILL

A gravity wall with **"wedge backfill"** is backfilled with a wedge shaped area of free draining gravel directly behind the wall filling in the area between the wall blocks and a sloped embankment. This construction method has superior drainage and load capacity.

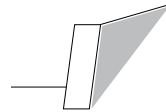
**SEE HEIGHT CHART BELOW.**



### BACKFILL TYPE "B"



Flat | Pedestrian Load  
(50psf/2.4kPa)



Slope | 3H:1V

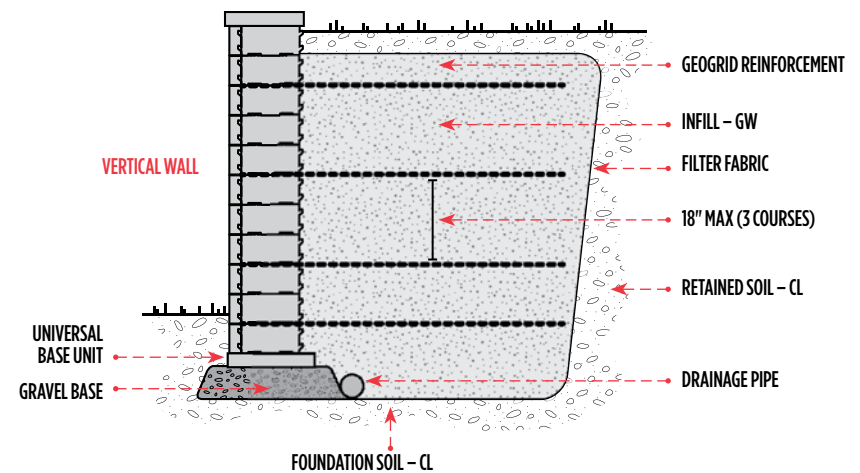
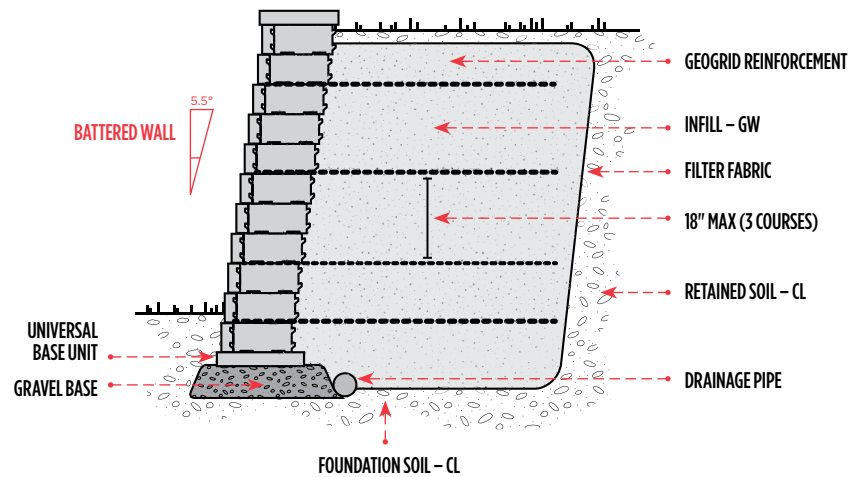
Wall Alignment	Exposed Wall Height	Max Total Wall Height	Exposed Wall Height	Max Total Wall Height
-	(ft/m)	(ft/m)	(ft/m)	(ft/m)
0° Vertical	2.6/0.79	3.1/0.94	2.6/0.79	3.1/0.94
5.5° Battered	3.1/0.94	3.6/1.10	3.1/0.94	3.6/1.10

#### NOTE:

Backfill gravel to be free-draining material in accordance with NCMA recommendations. A minimum embedment of 0.5 ft./0.15 m

# Geogrid Reinforced Walls

## TYPICAL CROSS SECTION



Soil Condition	Description	O-degrees	Unit Weight (g-lb/cu.ft)
Infill (Reinforced)	<b>GW</b> Well graded gravel, gravel sand, max 5% fine content	35	140
Retained	<b>CL</b> Inorganic Clays, low-med plasticity	28	125
Foundation	<b>CL</b> Inorganic Clays, low-med plasticity	28	125

### DISCLAIMER:

Geogrid Reinforcement to be Strategrid 200 or approval equivalent. The above design information is being provided for preliminary estimate and feasibility purpose only, and should not be used for construction. Prior to wall construction, a Final Design must be supplied by a qualified Engineer licensed in the applicable State/Province. Handrails and/or traffic barriers are not shown but are typically required and may influence the wall design. The above design is not to be used with the terraced structures, water applications or within the line of influence of other permanent structures.

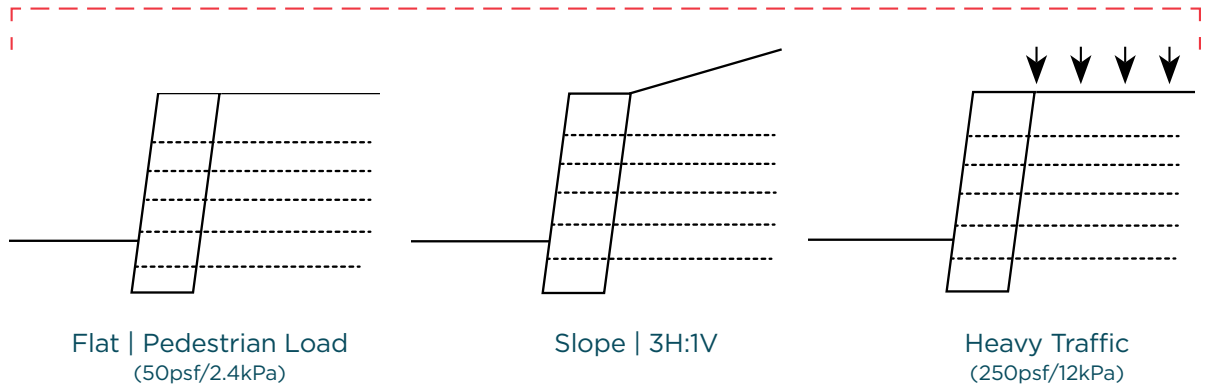


# Geogrid Reinforced Walls

## TYPICAL GRID LENGTH

### Top of Wall Load Conditions

- Geogrid Length
- Wall Embedment
- Load Conditions



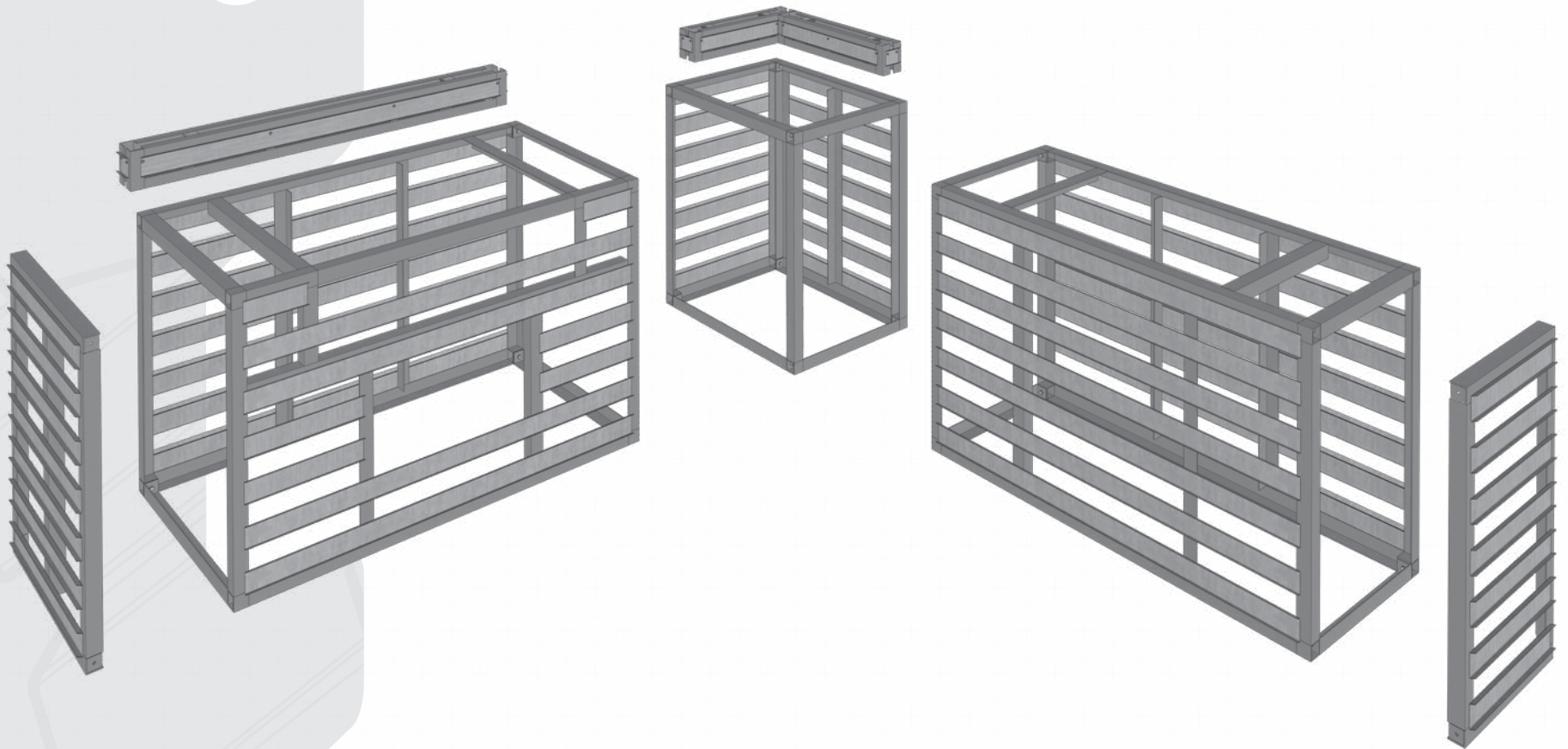
Exposed Wall Height	Embedment	Total Wall Height	No. Geogrid Layers	Flat   Pedestrian Load (50psf/2.4kPa)	Slope   3H:1V	Heavy Traffic (250psf/12kPa)
(ft/m)	(ft/m)	(ft/m)		Grid Length (ft/m)	Grid Length (ft/m)	Grid Length (ft/m)
3.2/0.97	0.5/0.15	3.7/1.12	2	4.0/1.22	4.0/1.22	4.0/1.22
3.7/1.12	0.5/0.15	4.2/1.27	2	4.0/1.22	4.0/1.22	4.0/1.22
4.1/1.27	0.5/0.15	4.7/1.42	3	4.0/1.22	4.5/1.37	4.5/1.37
4.6/1.41	0.5/0.15	5.2/1.56	3	4.5/1.37	4.5/1.37	4.5/1.37
5.1/1.55	0.6/0.17	5.6/1.72	3	4.5/1.37	5.0/1.52	5.0/1.52
5.5/1.68	0.6/0.19	6.1/1.87	4	5.0/1.52	5.5/1.68	5.5/1.68
6.0/1.82	0.7/0.20	6.6/2.02	4	5.0/1.52	5.5/1.68	5.5/1.68
6.4/1.95	0.7/0.22	7.1/2.17	4	5.5/1.68	6.0/1.83	6.0/1.83
6.8/2.09	0.8/0.23	7.6/2.32	5	6.0/1.83	6.5/1.98	6.5/1.98
7.3/2.22	0.8/0.25	8.1/2.47	5	6.0/1.83	7.0/2.13	7.0/2.13
7.7/2.36	0.9/0.26	8.6/2.62	5	6.5/1.98	7.0/2.13	7.0/2.13



**U-CARA<sup>®</sup>**

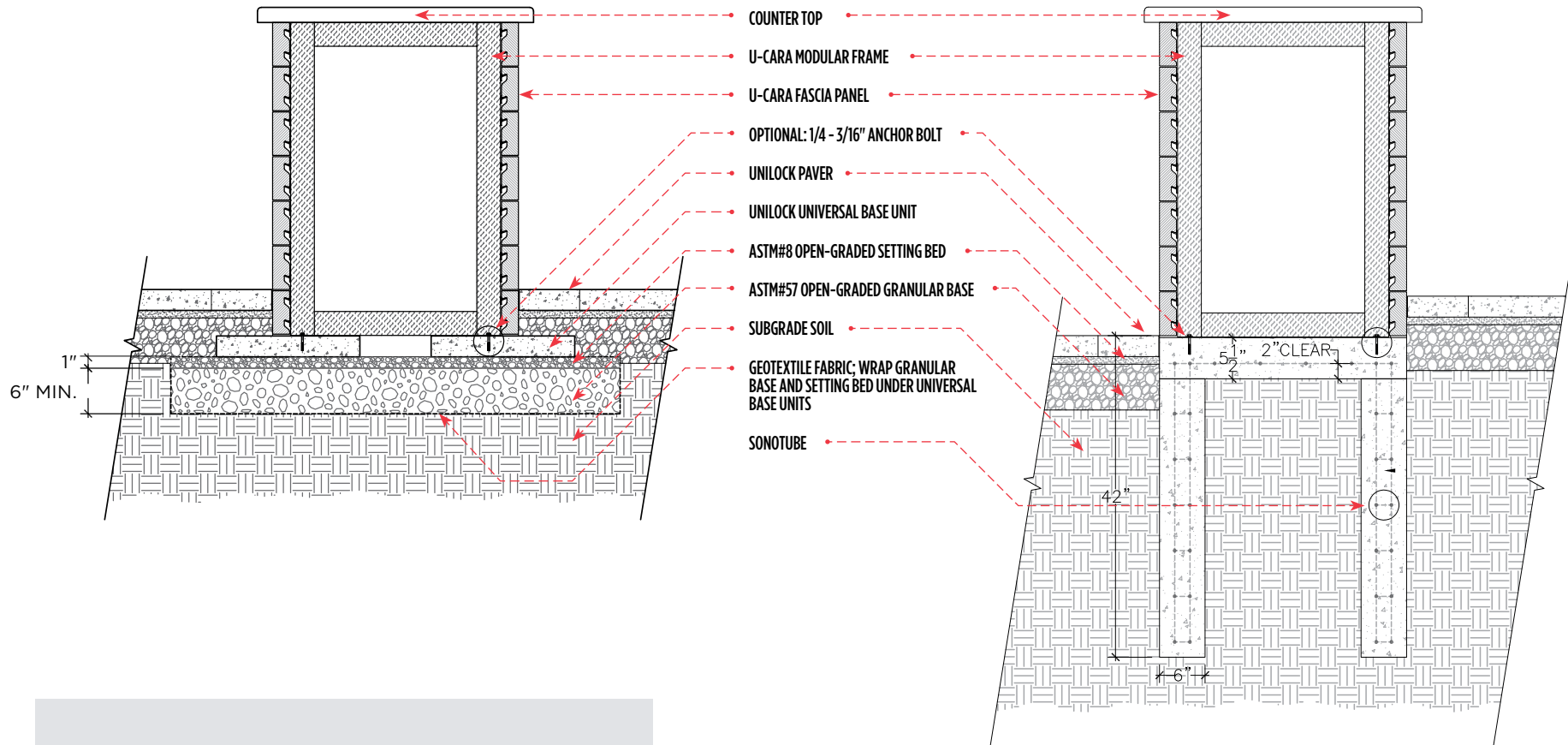
# **MODULAR SYSTEM**

U-Cara Modular System is comprised of precision manufactured aluminum cabinets and panels which are used to rapidly build outdoor living features such as grill islands, fire features and columns in a fraction of the time compared to using conventional backer blocks. Easy to transport, assemble and clad with U-Cara fascia panels these modules are a hardscape game-changer.



# Modular System Base

## TYPICAL

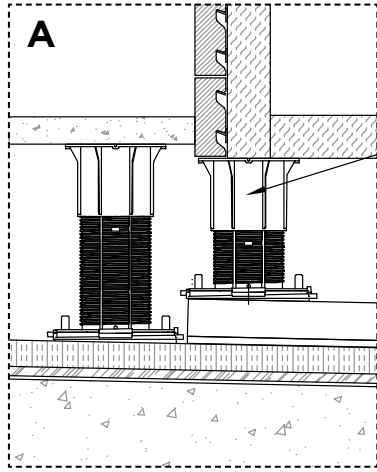


**NOTE:**

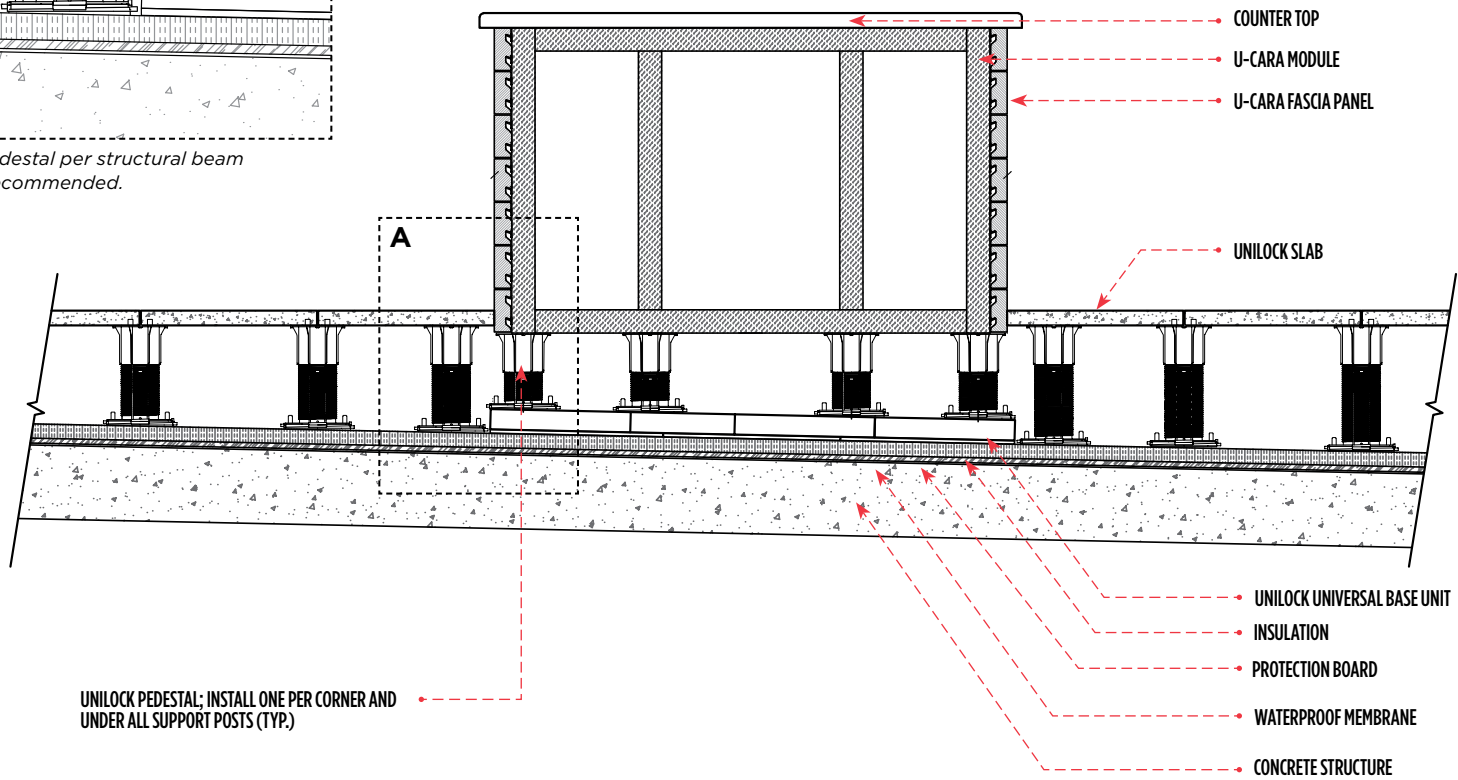
When connecting multiple modules together, a reinforced poured-in-place slab is required.

# Modular System Base

## ROOFTOP APPLICATIONS



1 pedestal per structural beam is recommended.



# Base Module

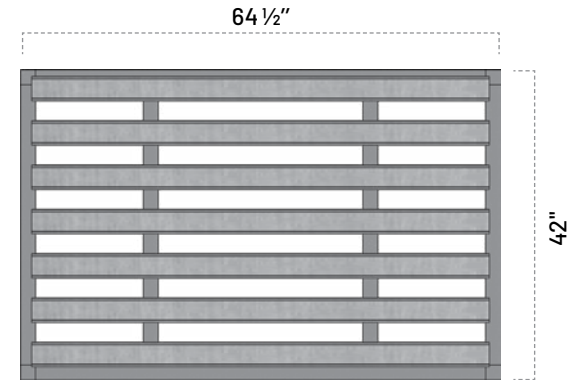
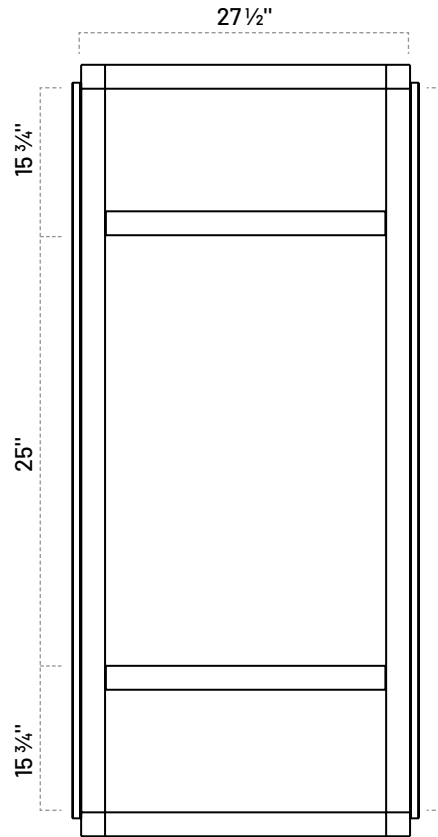
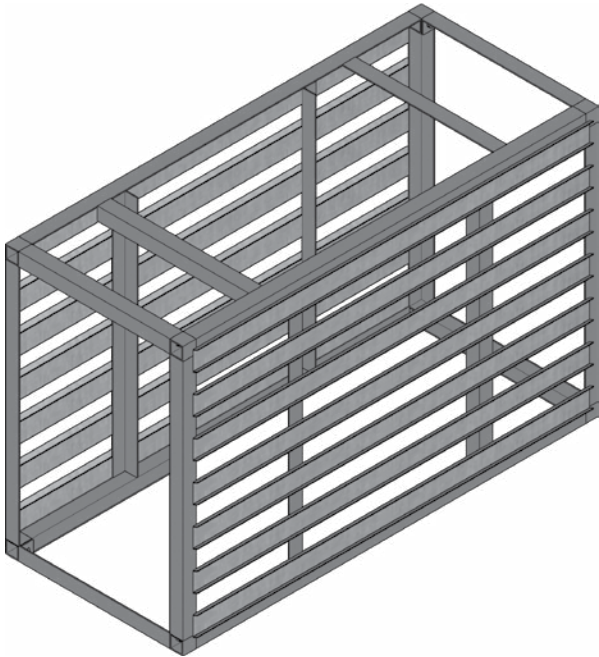
## COMPONENTS

### DIMENSIONS

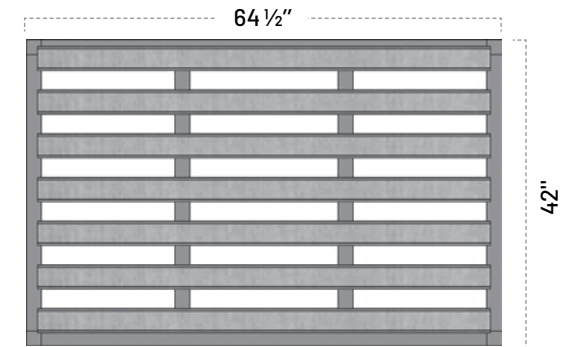
32 1/2" X 69 1/2"  
(Outside To Outside)

### WEIGHT

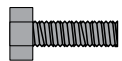
Without end = 59 lbs  
With end = 81 lbs



**ULBCP** ..... 2PC  
Base Module Front Panel



**BACK PANEL** ..... 1PC  
Base Module (ULBCBP)



**B01** ..... 8x  
9/16" Bolt



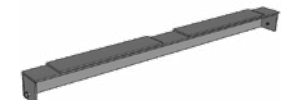
**ST02** ..... 14x  
1/4" Self-Tap Screw



**LW01** ..... 8x  
3/8" Lock Washer



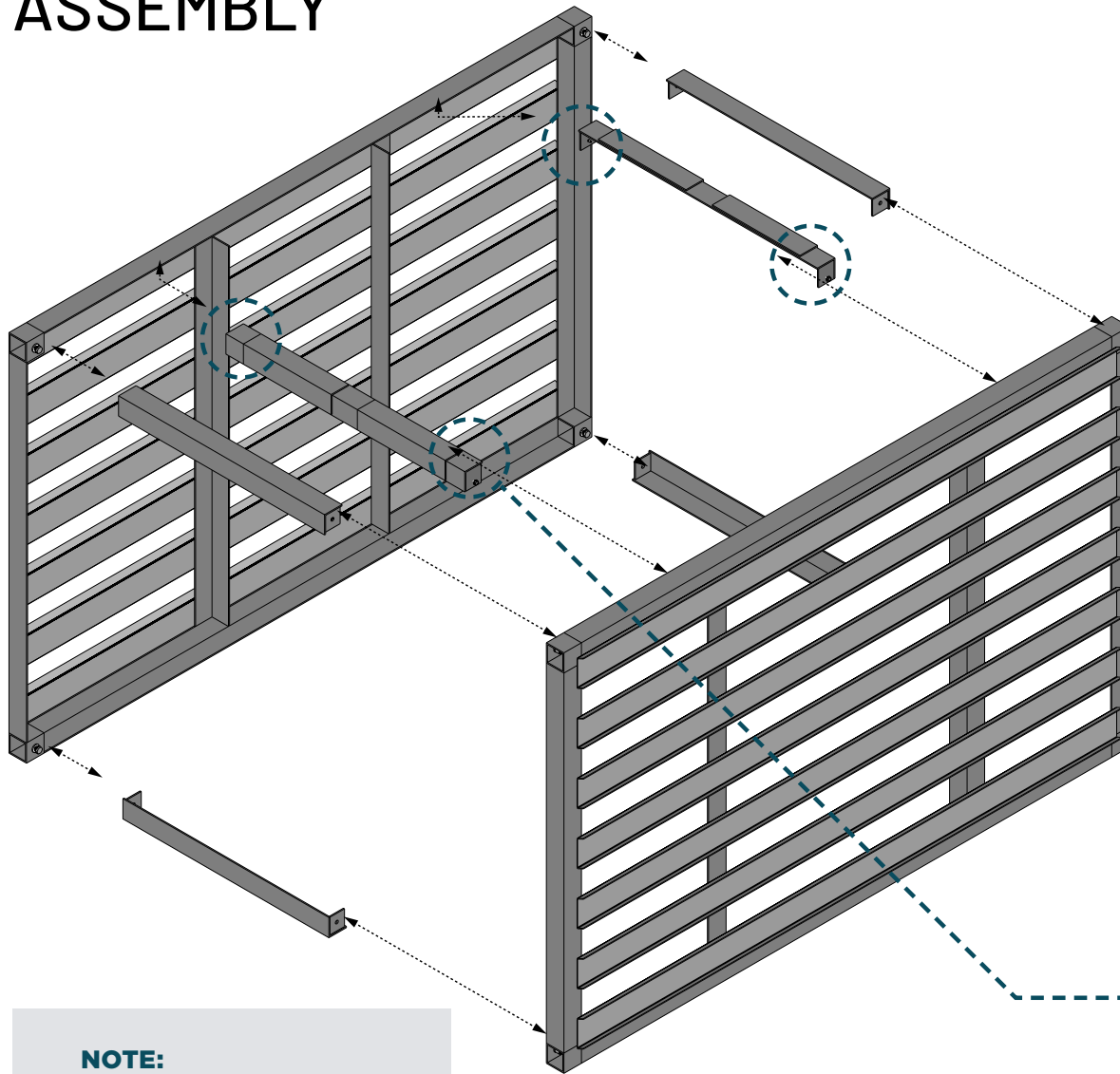
**ULCS** ..... 4x  
Connecting Strut



**ULHAR** ..... 2x  
Horizontal Adjustable Rail

# Base Module ASSEMBLY

MODEL UL-BC



**FULLY  
ASSEMBLED**

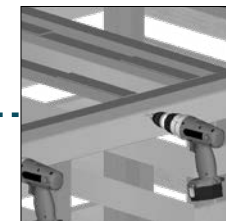


**NOTE:**

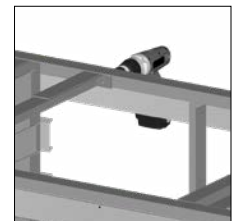
Base module has 2 open ends (no rails) to accommodate connections.

**NOTE:**

If oversized stand-alone bar unit is desired, 2 Oversized End Clad Kits are required (UL-ECK-OS).

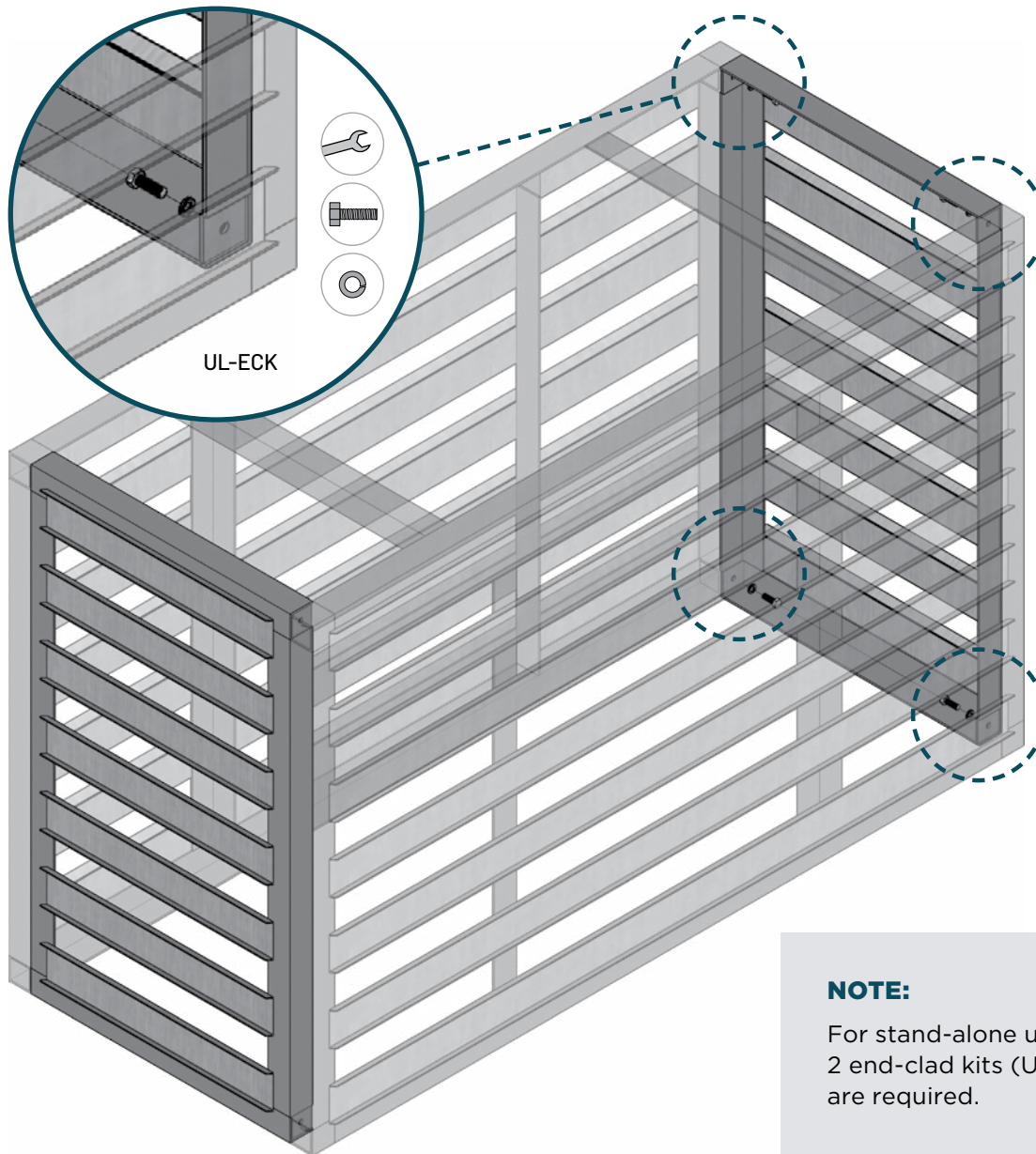


Connect with self-tapping screw (ST02)

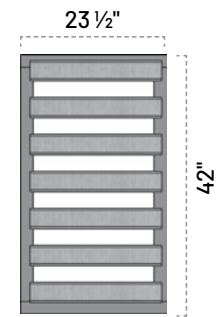


Braces are attached via tab and a self-tapping screw

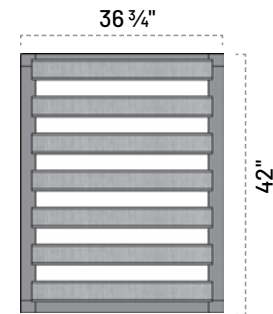
# STAND ALONE UNIT (WITH END CLADDING)



**NOTE:**  
Remove connecting struts and replace with end-clad panel using existing hardware.



**UL-ECK** ..... 2x  
Standard End-Clad Panel

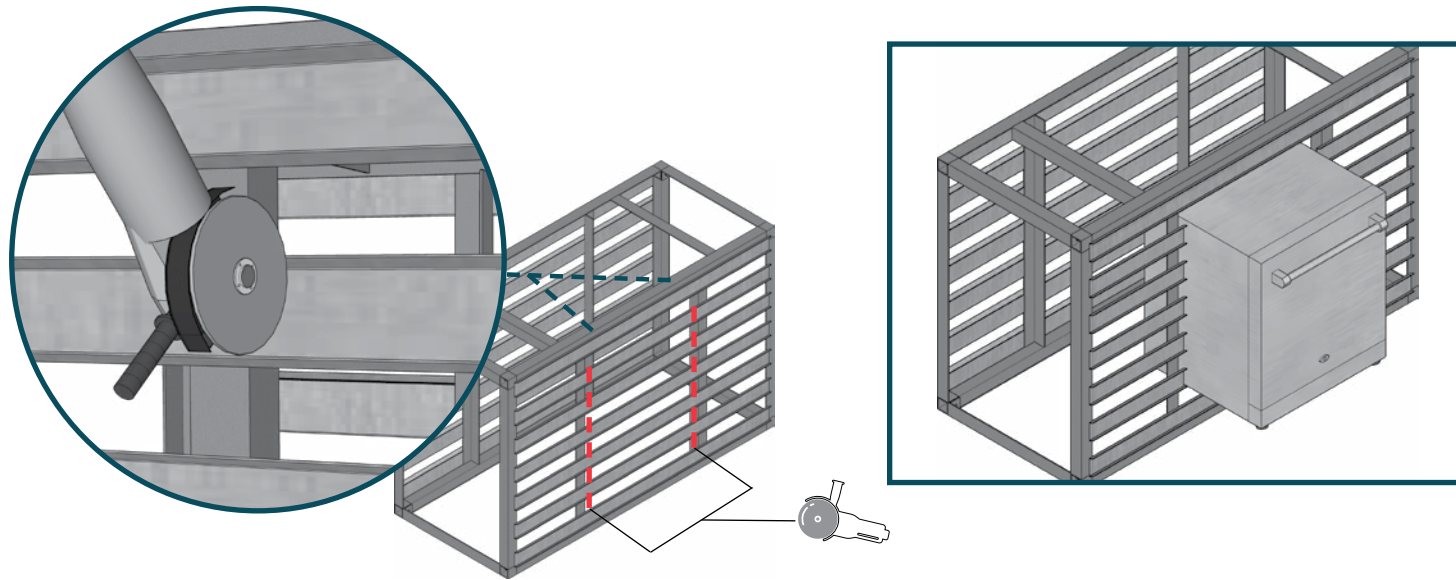


**ULECPOS** ..... 2x  
Oversized End-Clad Panel

**NOTE:**  
For stand-alone unit  
2 end-clad kits (UL-ECK)  
are required.



# REFRIGERATOR CUT-OUT OPTION



**NOTE:**

Cut opening to provide sufficient clearance for refrigerator. (Max opening 25"). Top and bottom support beams should not be cut.

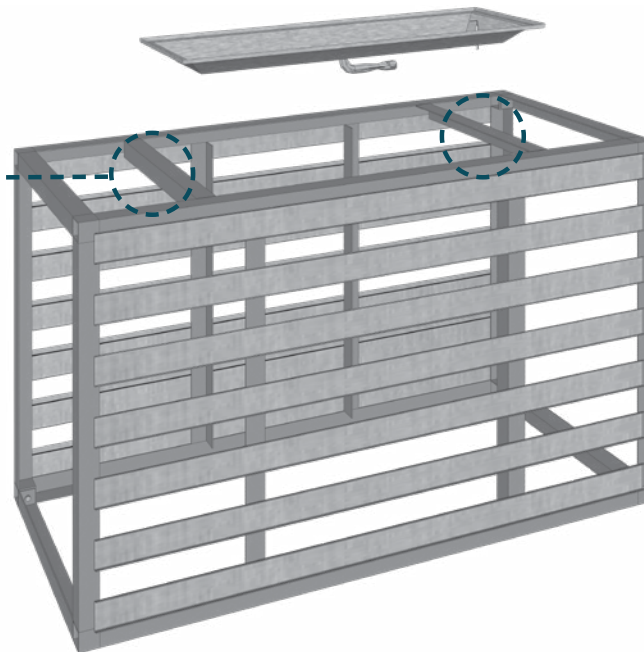
# FIRETABLE

**NOTE:**

Use adjustable rail to provide support for fire pan.

**CAUTION:**

Refer to manufacturer requirements for clearances and ventilation needed for Natural Gas/ Propane burner insert.



# Grill Module COMPONENTS

**DIMENSIONS WITH FASCIA**

**PANEL**

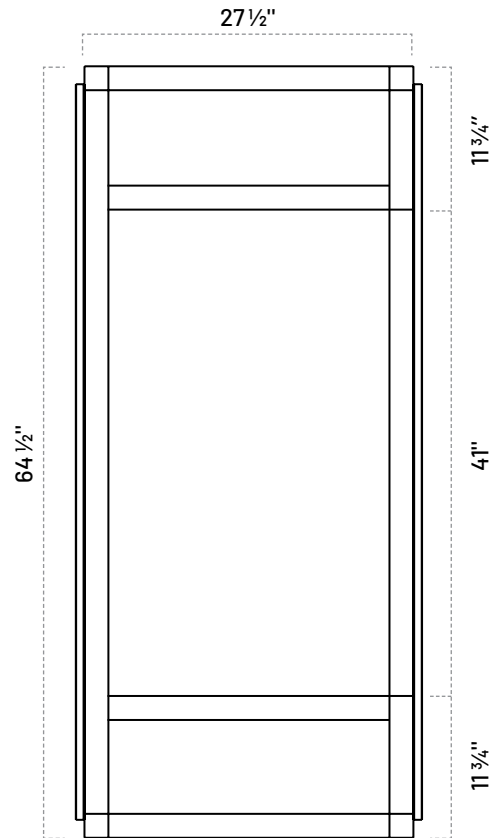
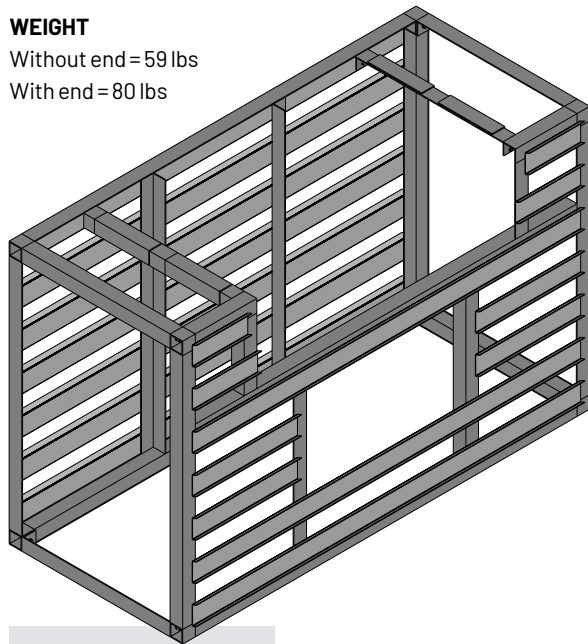
32 1/2" X 69 1/2"

(Outside To Outside)

**WEIGHT**

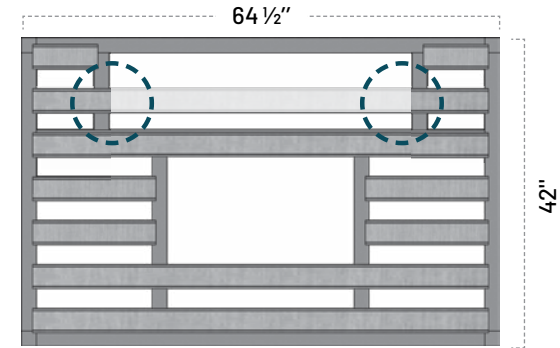
Without end = 59 lbs

With end = 80 lbs

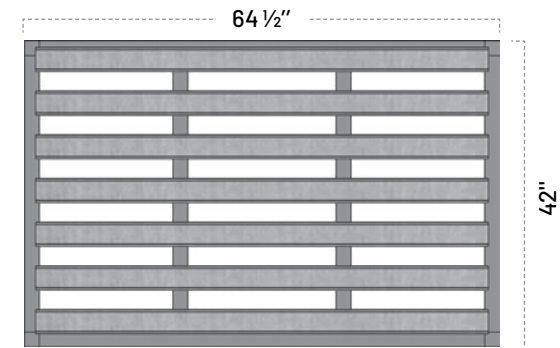


**NOTE:**

Rail is removed by unscrewing the self-tapping screws to accommodate various grills.



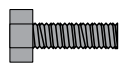
**FRONT PANEL** ..... 1 PC  
Grill Module (ULGCFP)



**BACK PANEL** ..... 1 PC  
Grill Module (ULGCFP)

**NOTE:**

Grill module has 2 open ends to accommodate connections.



**B01** ..... 8x  
9/16" Bolt



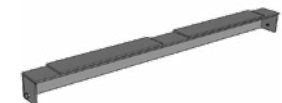
**ST02** ..... 14x  
1/4" Self-Tap Screw



**LW01** ..... 8x  
3/8" Lock Washer

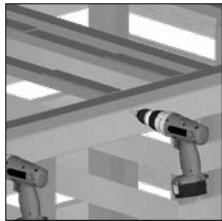


**ULCS** ..... 4x  
Connecting Strut

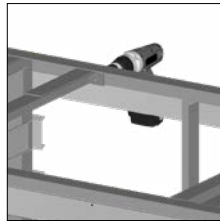


**ULHAR** ..... 2x  
Horizontal Adjustable Rail

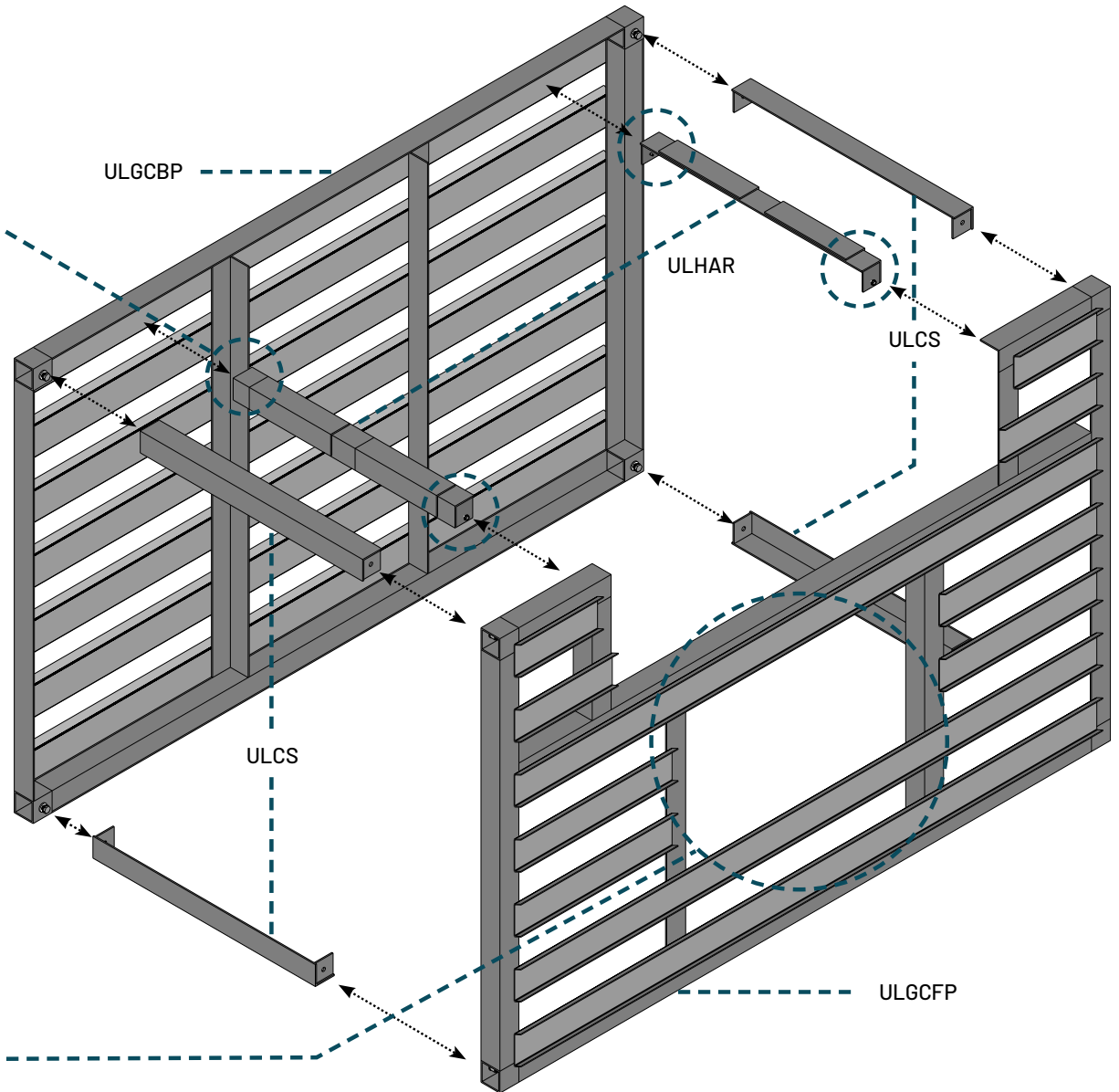
# ASSEMBLY - STANDARD WIDTH



Connect with self-tapping screw (ST02)



Braces are attached via tab and a self-tapping screw



**NOTE:**

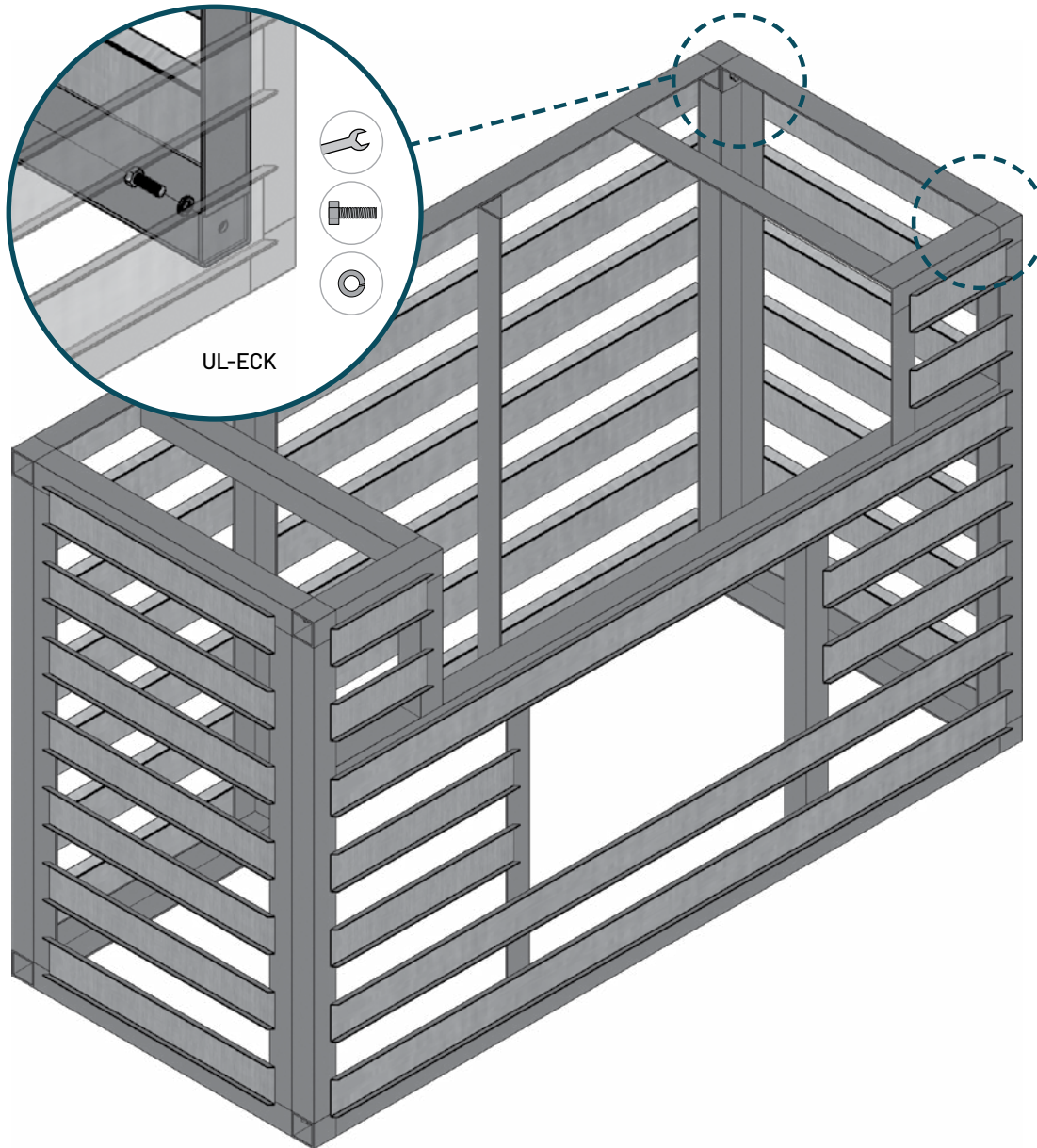
**ROUGH DOOR OPENING**

17<sup>3</sup>/<sub>8</sub>" H x 27<sup>1</sup>/<sub>16</sub>" W. U-Cara 27" stainless steel DBL door available to fit opening without metal modification.

# Grill Module

## STAND-ALONE UNIT

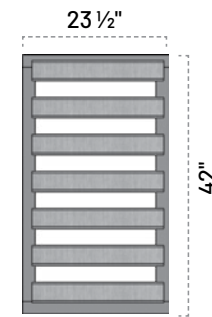
MODEL UL-GC



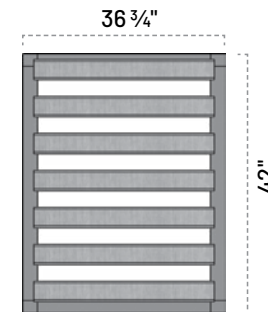
### NOTE:

Grill Module has 2 open ends (no rails) to accommodate connections.

If stand-alone grill is desired, 2 End-Clad Kits (ECK) are required.



**UL-ECK** ..... 2x  
Standard End-Clad Panel



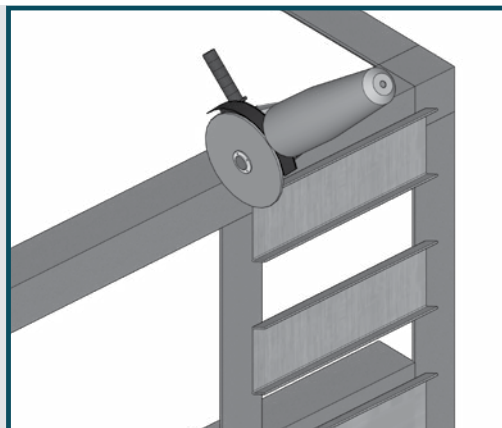
**ULECPOS** ..... 2x  
Oversized End-Clad Panel

## CUT-OUT FOR GRILL

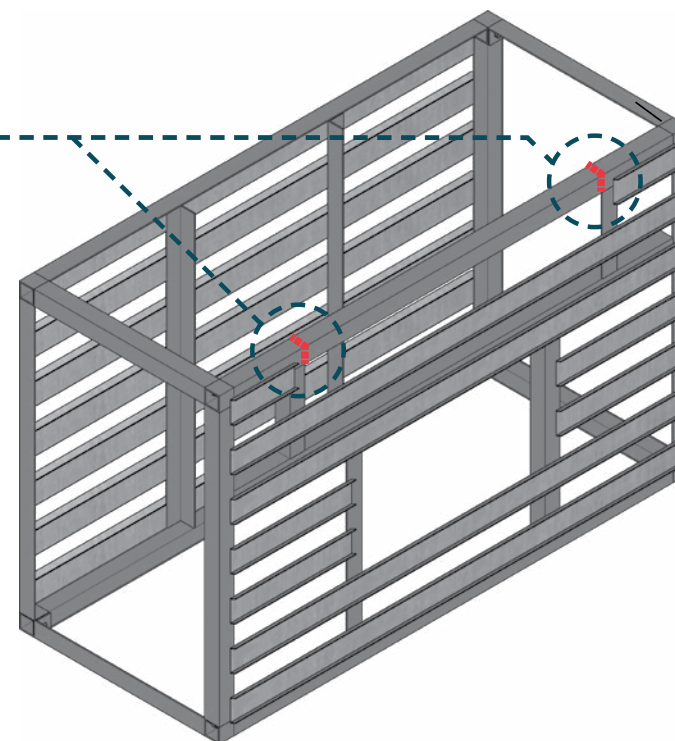
**NOTE:**

Typical cut for 42" drop in grill. Decrease cut-out dimension for smaller grills.

Grill module can accommodate 30" to 42" drop in grill.



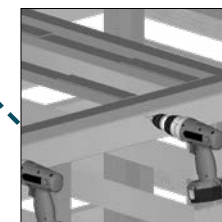
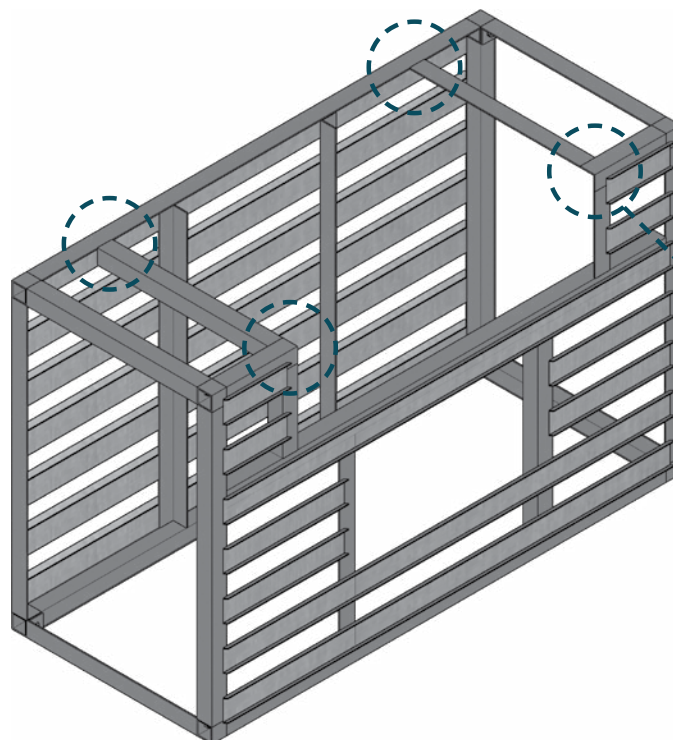
MAKE CUT-OUT FOR GRILL ON UL-GC



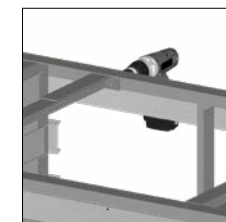
**NOTE:**

Typical cut for 42" drop in grill. Decrease cut-out dimension for smaller grills.

Grill module can accommodate 30" to 42" drop in grill.

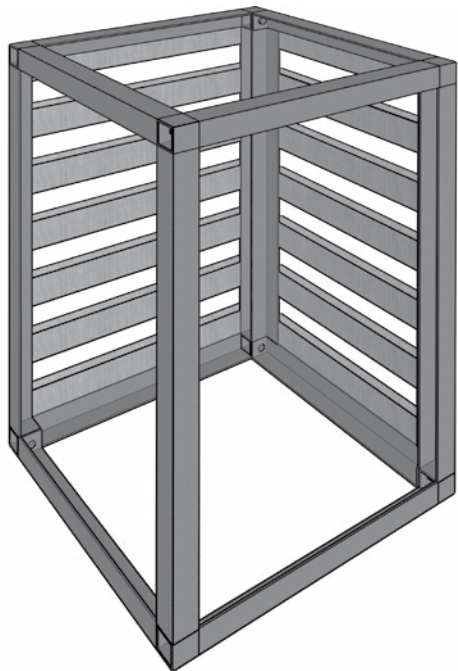


Connect with self-tapping screw (ST02)

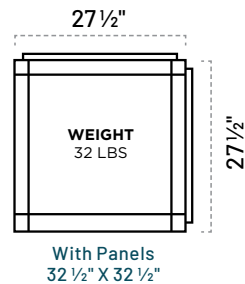


Braces are attached via tab and a self-tapping screw

# Corner Module COMPONENTS



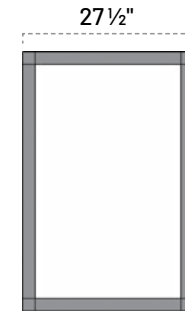
## STANDARD WIDTH



**ULCCBP** ..... 1x  
Corner Module Back Panel

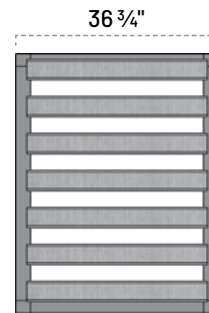
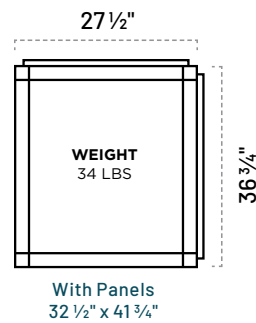


**ULECP** ..... 1x  
End-Clad Panel

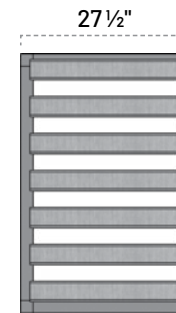


**ULCCFP** ..... 1x  
Corner Module Front Panel

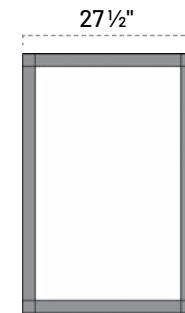
## OVERSIZED WIDTH



**ULECPOS** ..... 1x  
Oversized End-Clad Panel



**ULCCBP** ..... 1x  
Corner Module Back Panel



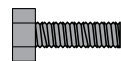
**ULCCFP** ..... 1x  
Corner Module Front Panel

### NOTE:

Can be used to extend the length of a base/grill module or to connect modules and change layout direction.

Oversized (OS) module will accommodate backsplash and or wider countertops.

Corner back panel (ULCCBP) can be utilized to assemble a 3-sided unit.



**B01** ..... 8x  
9/16" Bolt



**ST02** ..... 12x  
1/4" Self-Tap Screw



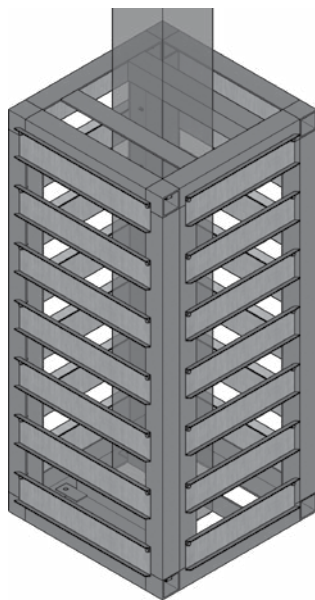
**LW01** ..... 8x  
3/8" Lock Washer



**ULCS** ..... 2x  
Connecting Strut

# Pillar Module

## STANDARD AND OVERSIZED

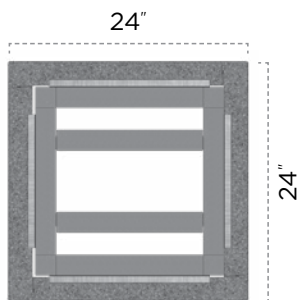


**MODULE DIMENSIONS**

18 1/2" x 18 1/2"

**DIMENSIONS WITH FASCIA PANELS**

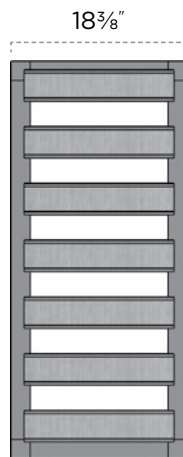
24" x 24" (Outside To Outside)



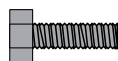
Top View With Fascia Panels



**ULPUP** ..... 2x  
END-CLAD PANEL



**ULPUECP14.375** ..... 2x  
CORNER MODULE PANEL



**B01** ..... 8x  
3/8" Bolt



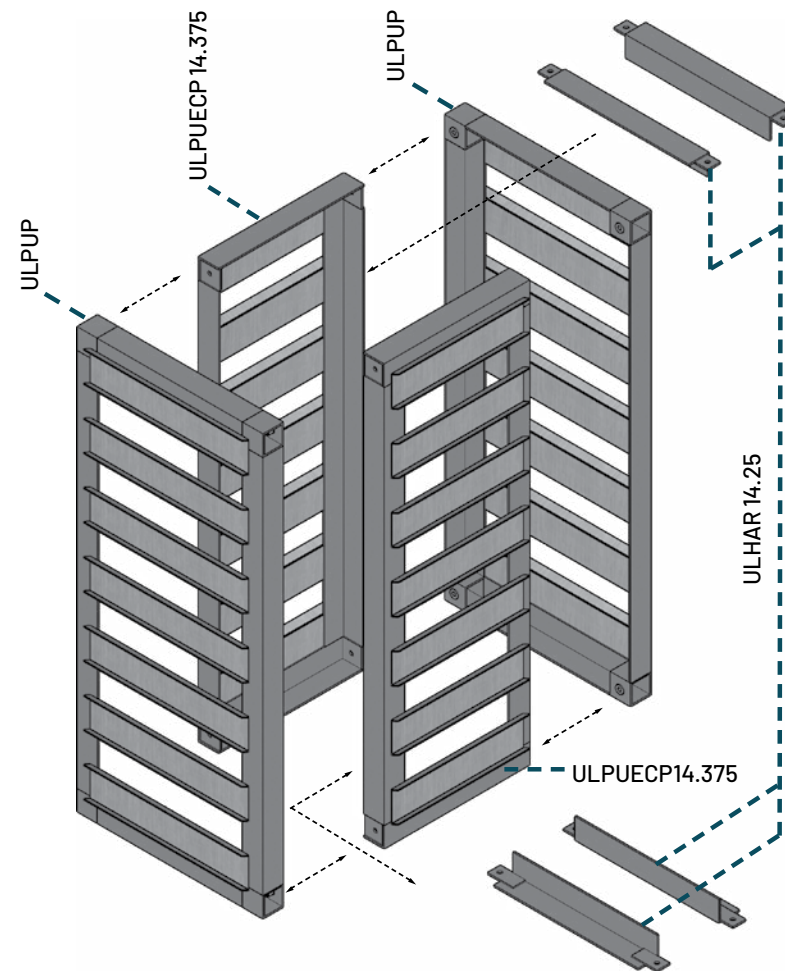
**ULHAR14.25** ..... 4x  
Connecting Strut



**ST02** ..... 14x  
1/4" Self-Tap Screw



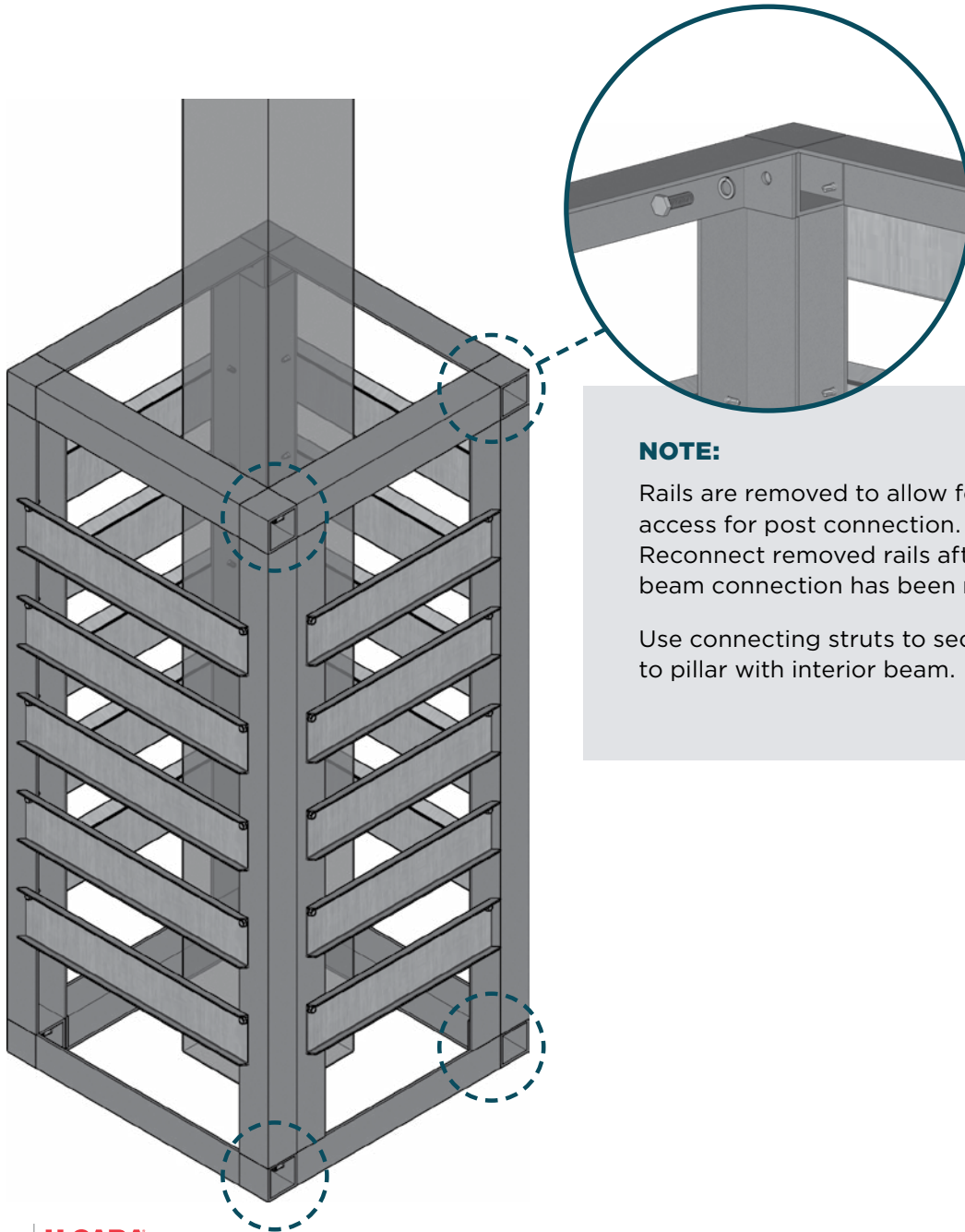
**LW01** ..... 8x  
Lock Washer



**NOTE:**  
28" x 28" pillar cap required if not wrapping post.

# Pillar Module ASSEMBLY

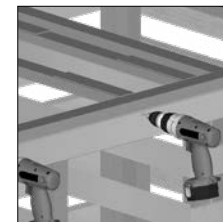
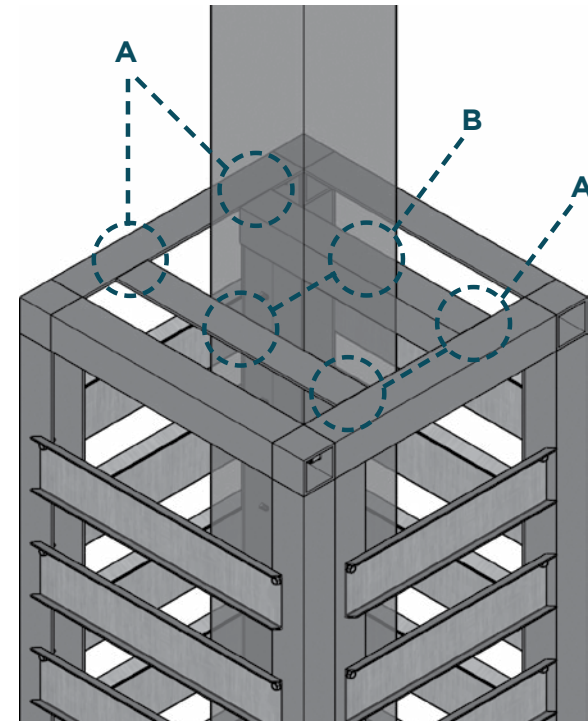
MODEL UL-PU



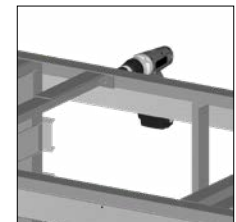
**NOTE:**

Rails are removed to allow for access for post connection. Reconnect removed rails after beam connection has been made.

Use connecting struts to secure to pillar with interior beam.



Connect with self-tapping screw (ST02)

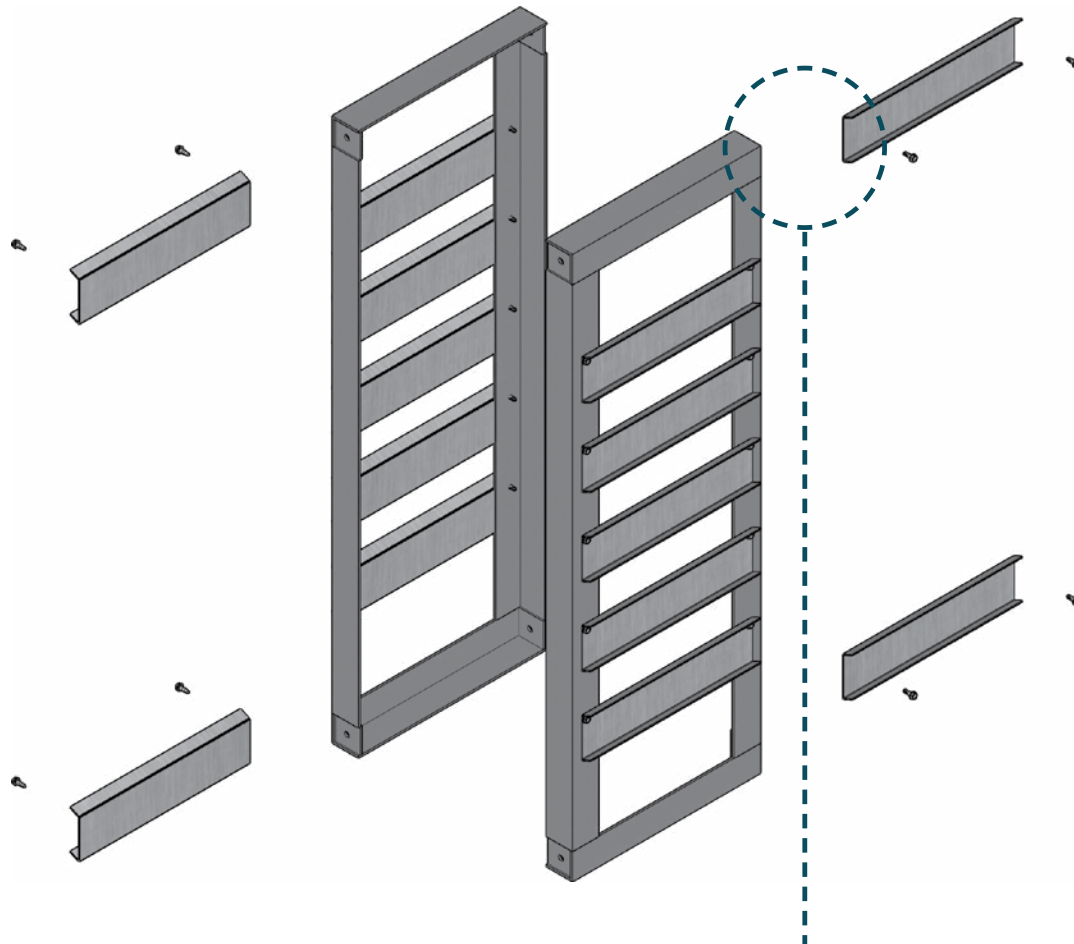


Braces are attached via tab and a self-tapping screw



## Pillar Module

# ASSEMBLY AND CLADDING



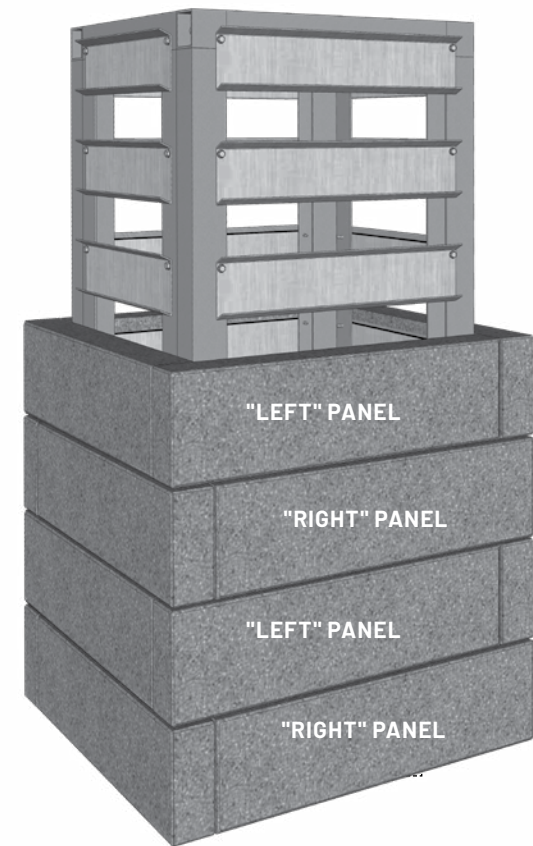
**NOTE:**

Rails are removable to allow for access for post connection. Reconnect removed rails after beam connection has been made.

*REMOVE INDICATED PARTS AND LABEL FOR LATER INSTALLATION IN SAME LOCATION*

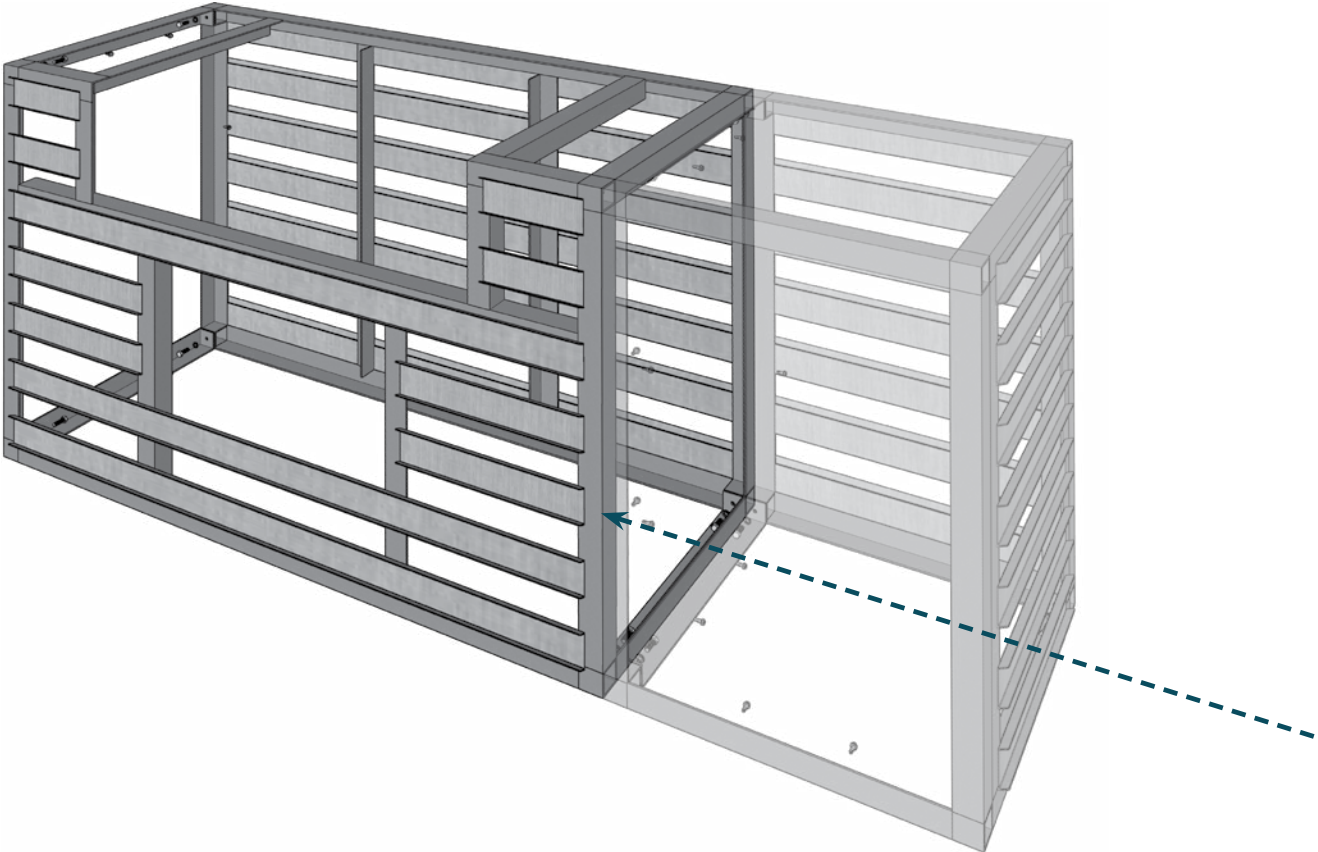
**NOTE:**

Only the large unit of the corner panel set is used to wrap the pillar module. Use the leftover half units for standard wall work.

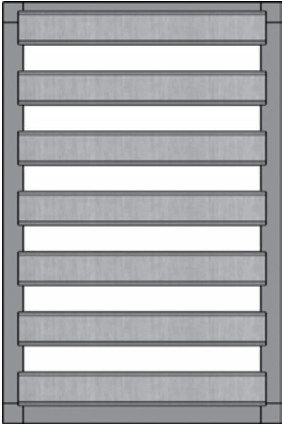


# Back Corner

(Used to convert both Corner Module and Oversized Corner Module to a three-sided unit)



**NOTE:**  
Do Not substitute End-Clad Kit as the connections will not match up to Corner Module.



**ULCCBP** .....1x  
Corner Module back panel

### INCLUDED IN BOTH MODULES



**B01** ..... 8x  
3/8" Bolt

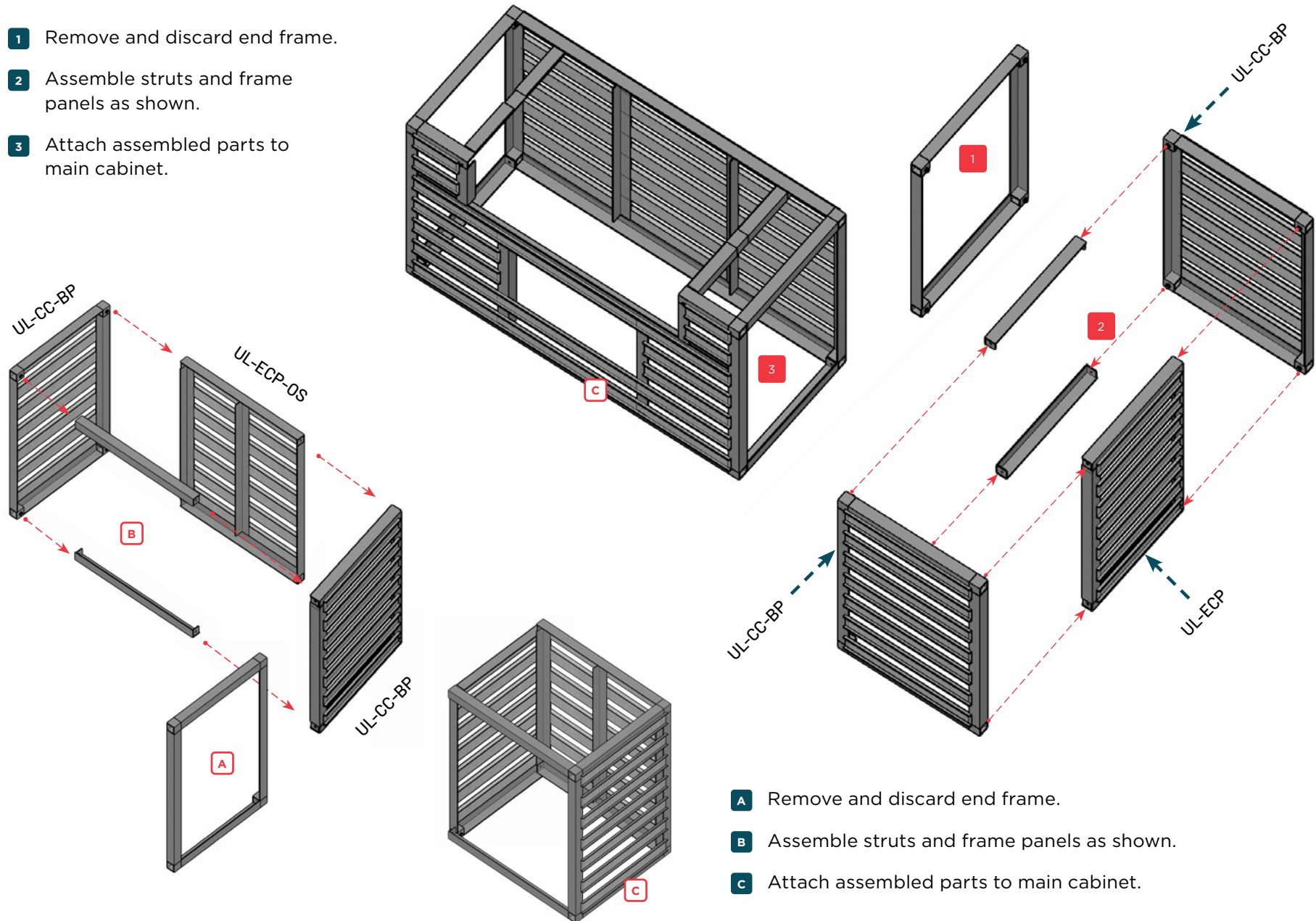


**LW01** ..... 8x  
Lock Washer

## Back Corner

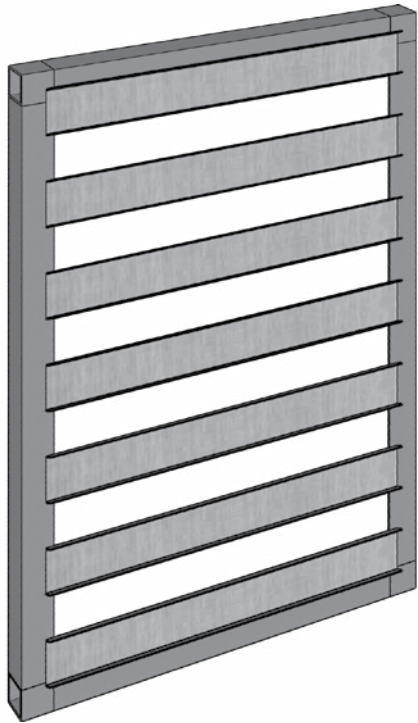
# STANDARD ASSEMBLY

- 1 Remove and discard end frame.
- 2 Assemble struts and frame panels as shown.
- 3 Attach assembled parts to main cabinet.

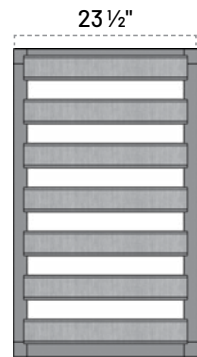


# End-Clad Kits

(Used to convert base & grill module into stand-alone units)

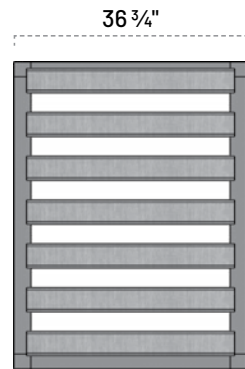


## STANDARD WIDTH



WEIGHT: 11 LBS

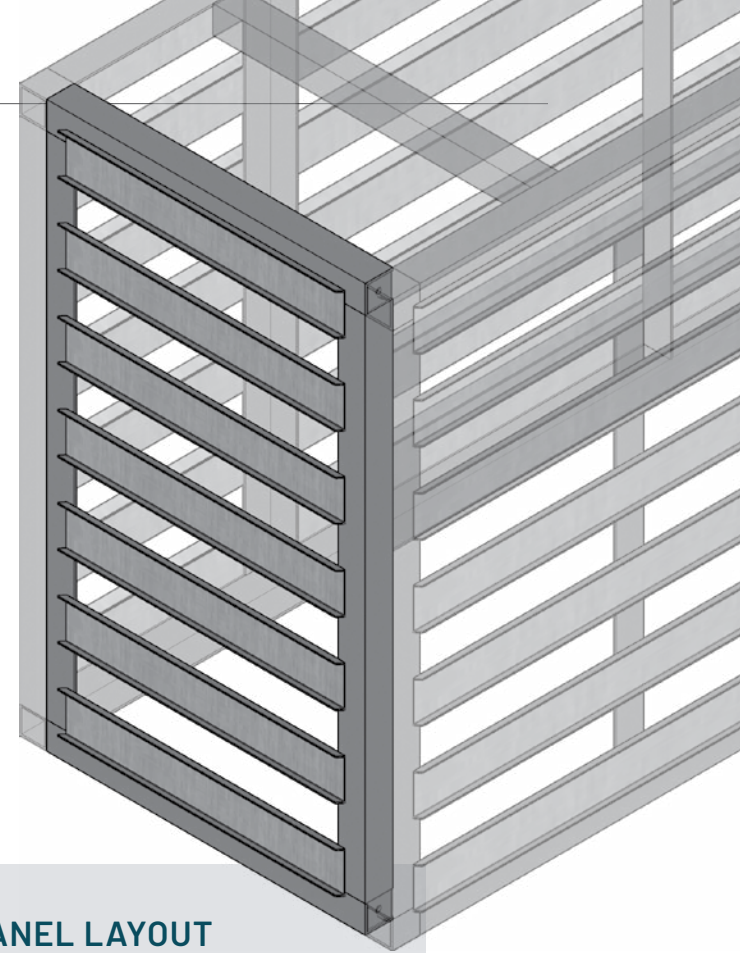
## OVERSIZED WIDTH



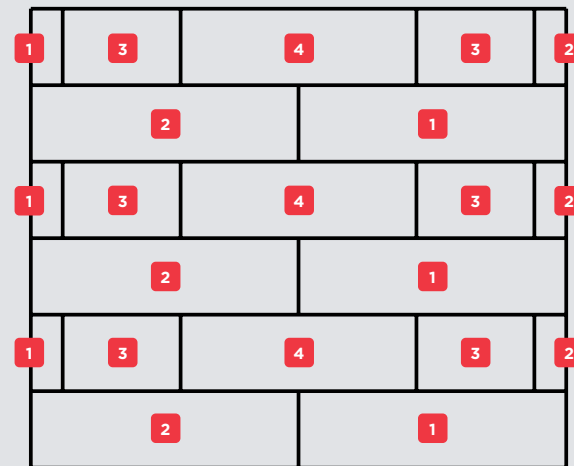
WEIGHT: 16 LBS

## OVERSIZED CABINET FRAME

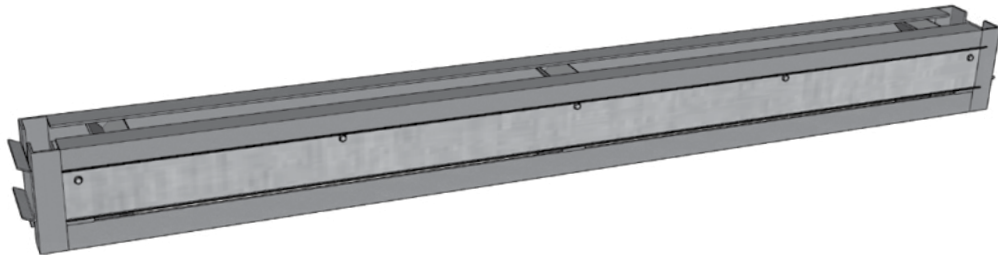
- 1 Right Corner
- 2 Left Corner
- 3 Half Panel
- 4 Standard Panel



## OVERSIZED PANEL LAYOUT

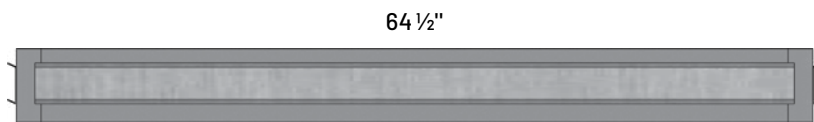


# Backsplash Kits



**NOTE:**

Backsplash Width = 10¼" including thickness of front and back fascia panels.



**ST02** ..... 14x  
1¼" Self-Tap Screw

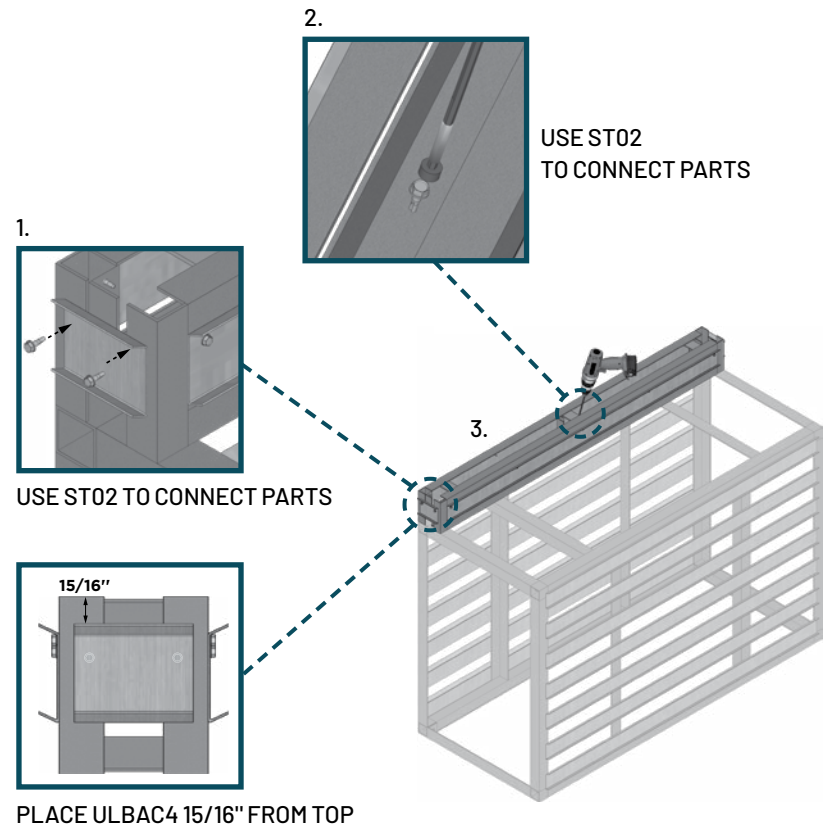


**ULBAC4** ..... 1x  
4" Endcap Rail

WEIGHT: 15 LBS

**NOTE:**

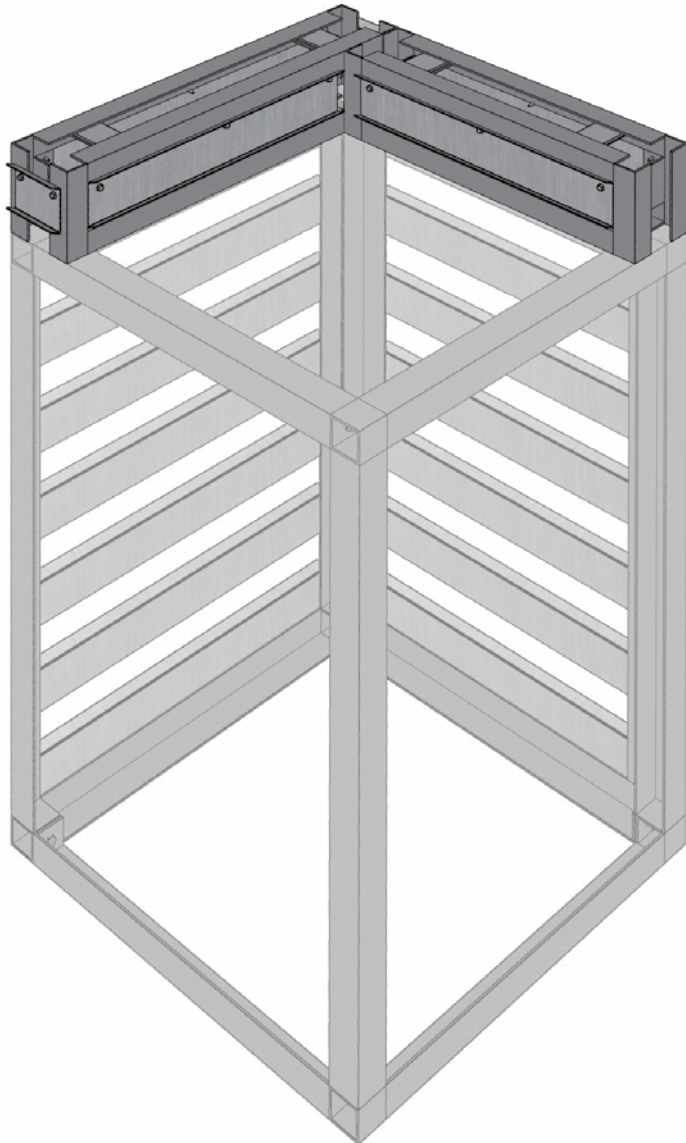
1. An additional end-cap rail has been provided so that you can finish the end of the backsplash unit (if you are not extending or connecting to another unit).
2. Multiple units can be connected to each other or use included end rail to make a stand alone unit with 4 finished sides.
3. Each backsplash will accommodate 1 module per unit.



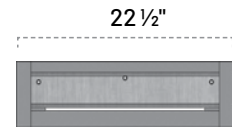
# Corner Backsplash Kit

## COMPONENTS

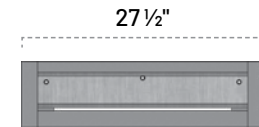
MODEL UL-BS-CC



### STANDARD WIDTH

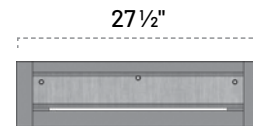


**ULBSXS**..... 1x  
Backsplash Wall - S

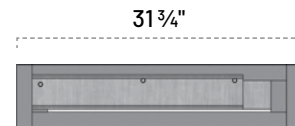


**ULCCBSSS**..... 1x  
Backsplash Wall - S

### OVERSIZED WIDTH



**ULCCBSSS**..... 1x  
Backsplash Wall - S



**ULCCBSOS**..... 1x  
Backsplash Wall - M

### WHATS INCLUDED IN BOTH KITS



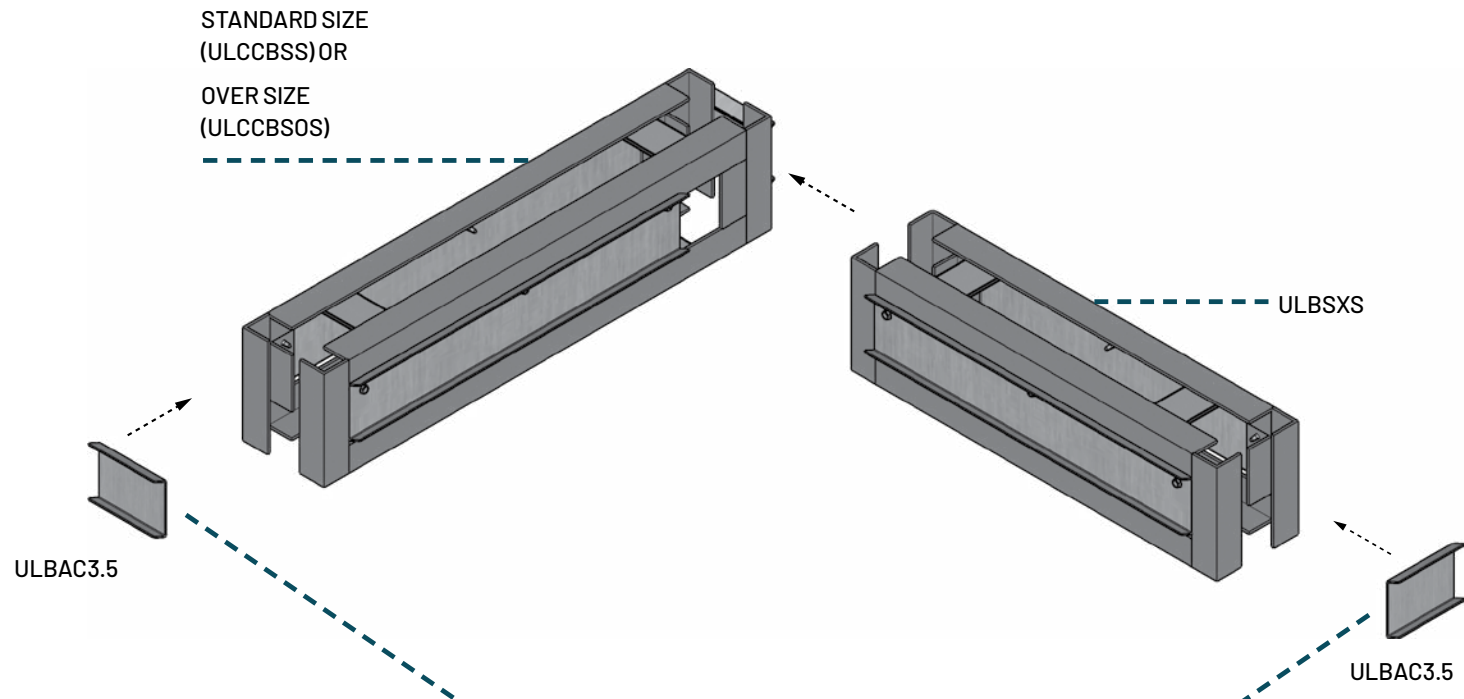
**ST02**..... 14x  
1/4" Self-Tap Screw



**ULBAC4**..... 1x  
4" Endcap Rail

# Corner Backsplash Kit

## ASSEMBLY



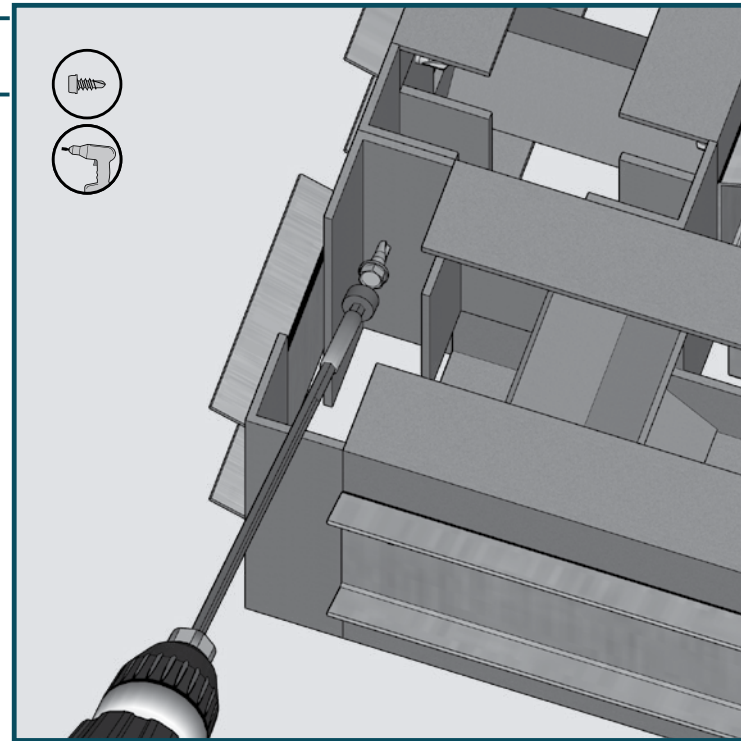
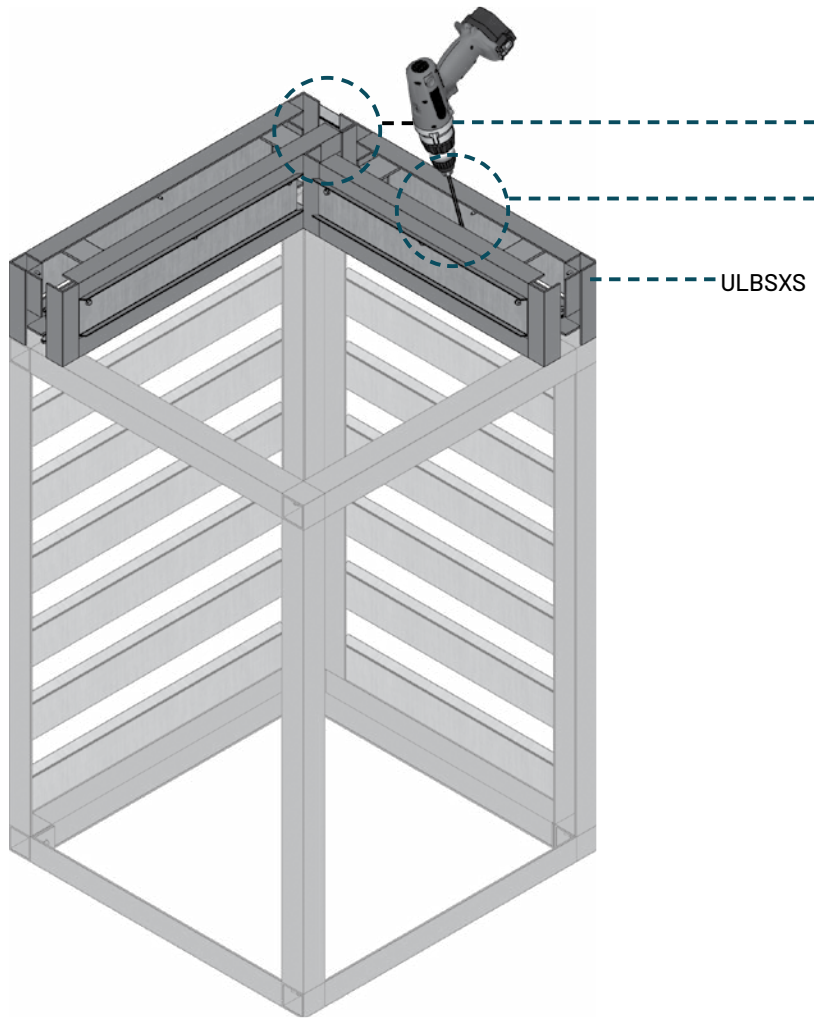
**NOTE:**

An additional end-cap rail has been provided to finish the end of the backsplash unit (if you are not extending or connecting to another unit).

Attach with included self-tapping screws.

# Corner Backsplash Kit

## ASSEMBLY

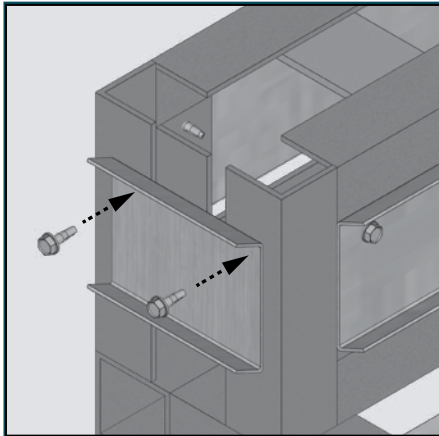


USE ST02 TO CONNECT PARTS

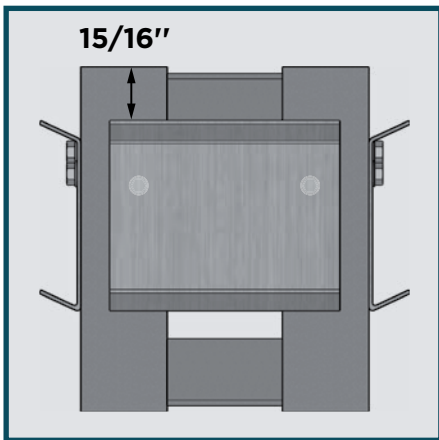


# Corner Backsplash Kit ASSEMBLY

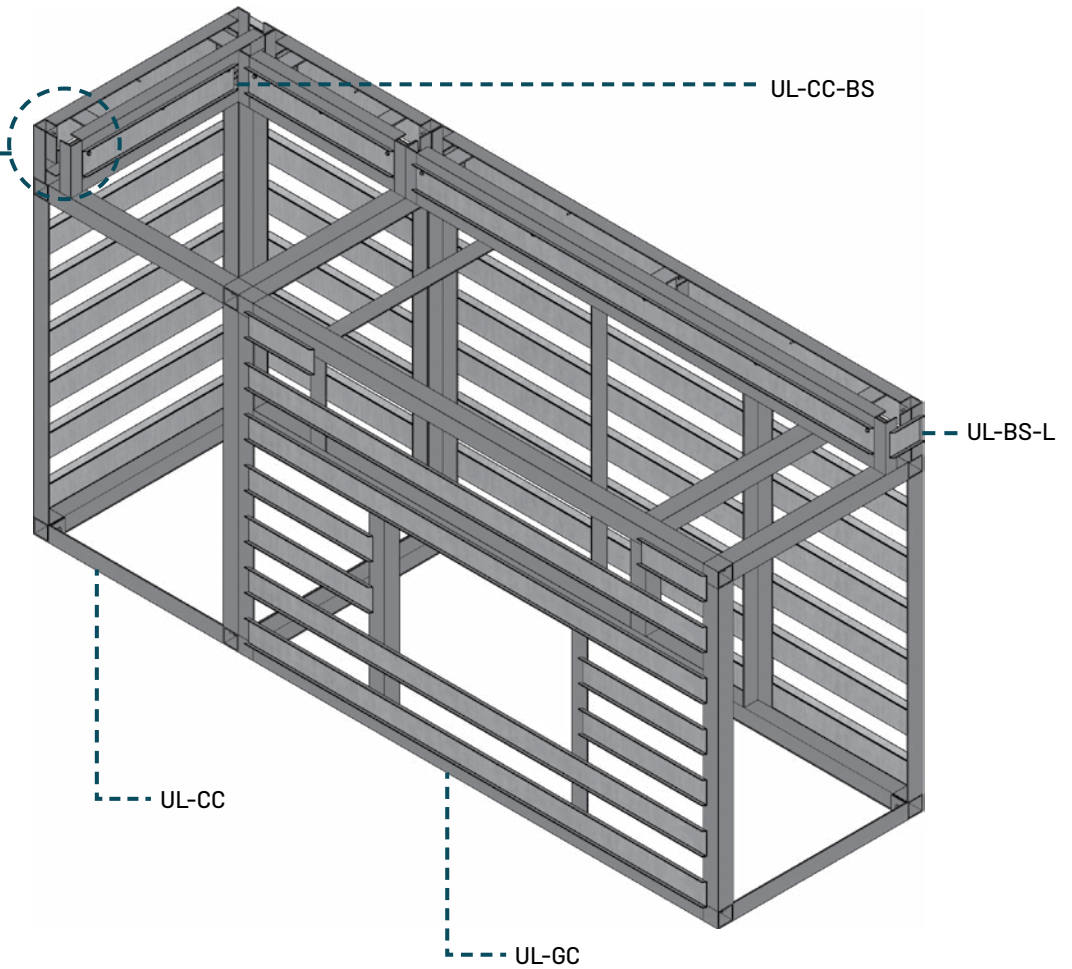
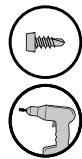
MODEL UL-BS



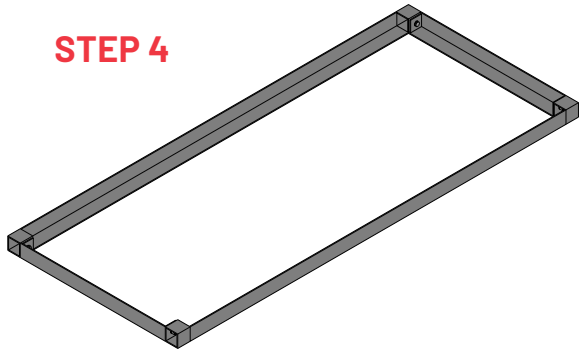
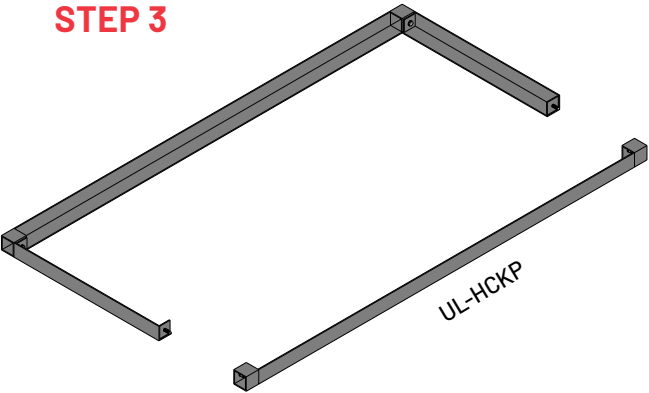
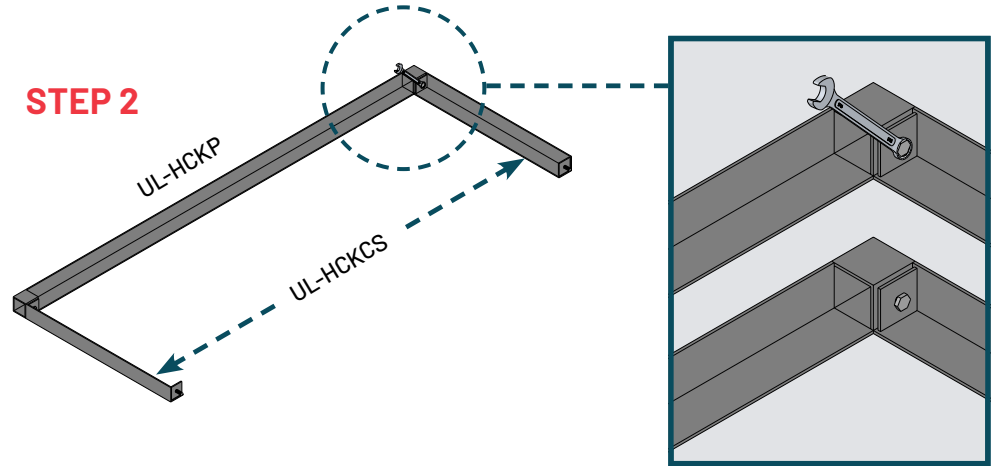
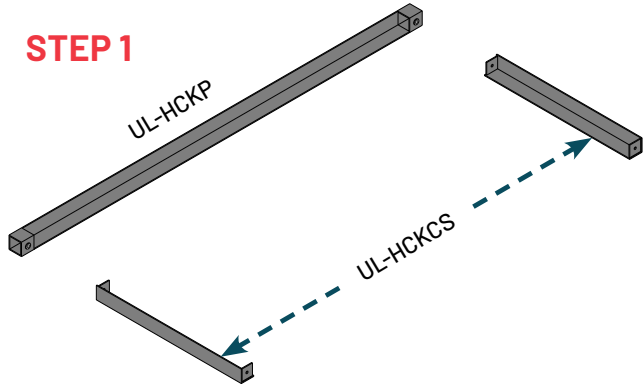
USE ST02 TO CONNECT PARTS



PLACE ULBAC3.5 15/16" FROM TOP



# Height Conversion Kit COMPONENTS



## WHAT'S INCLUDED



**B01**..... 8x  
9/16" Bolt



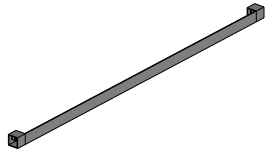
**ST02**..... 12x  
1 1/4" Self-Tap Screw



**LW01**..... 8x  
3/8" Lock Washer



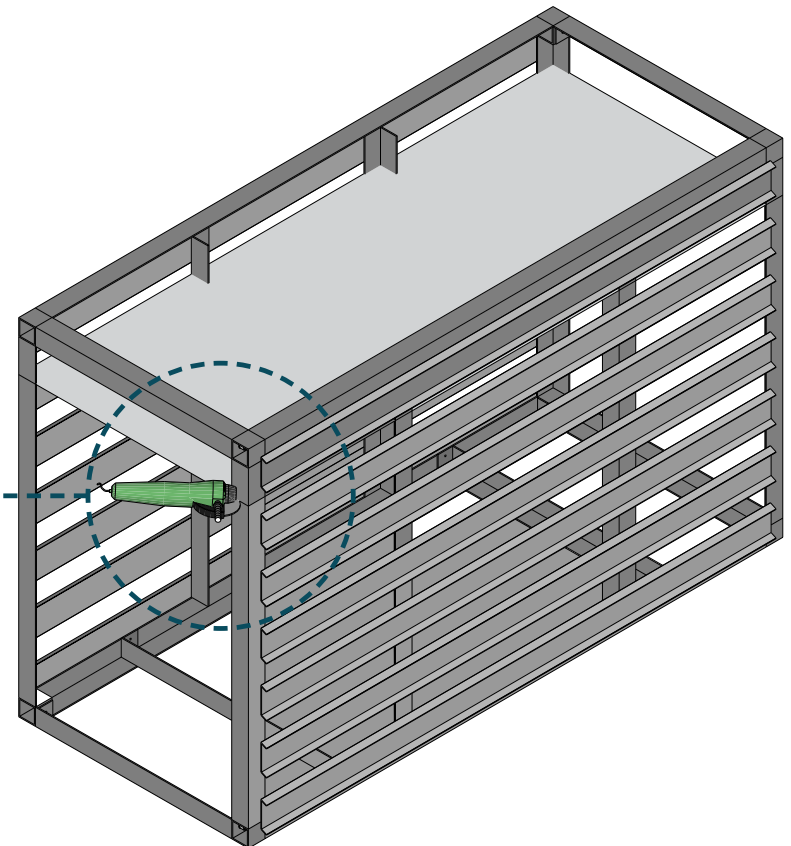
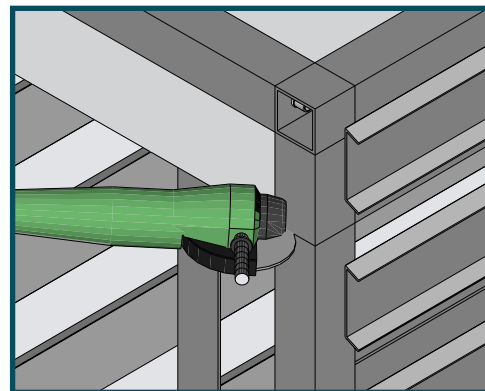
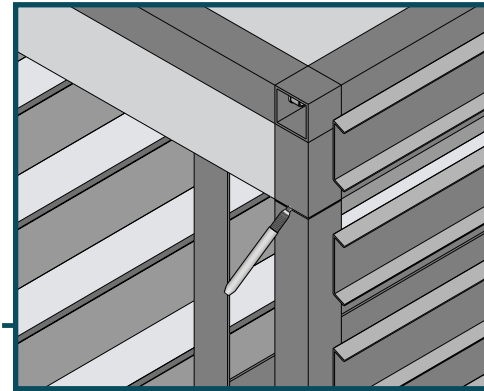
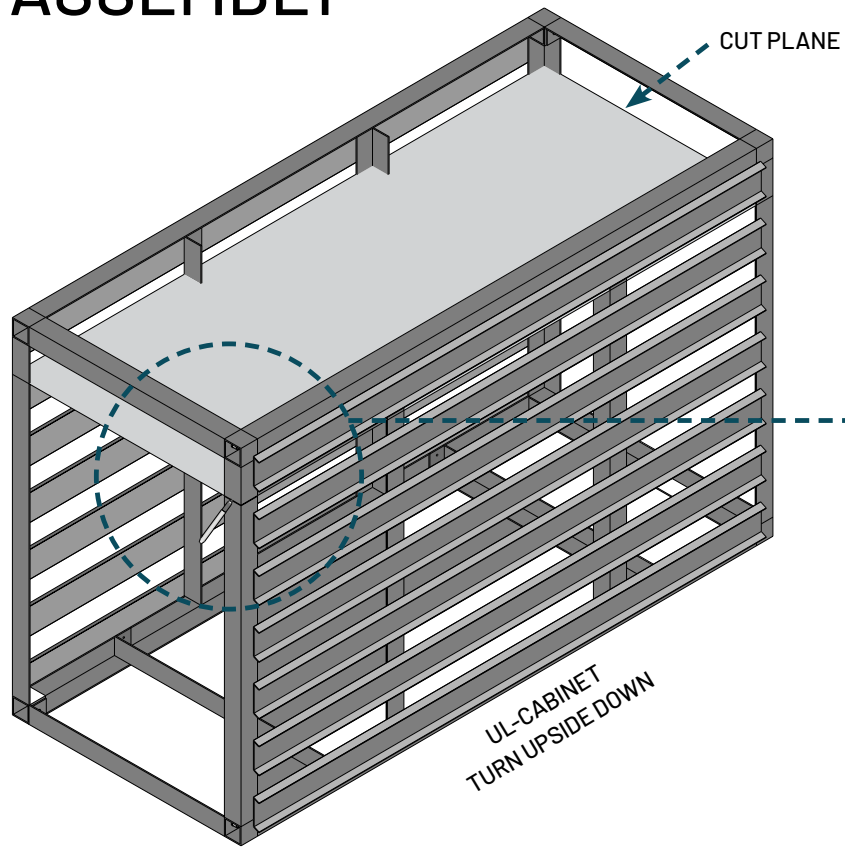
**ULCS**..... 2x  
Connecting Strut



**UL-HCKP**..... 2x  
Height Conversion Kit Panel

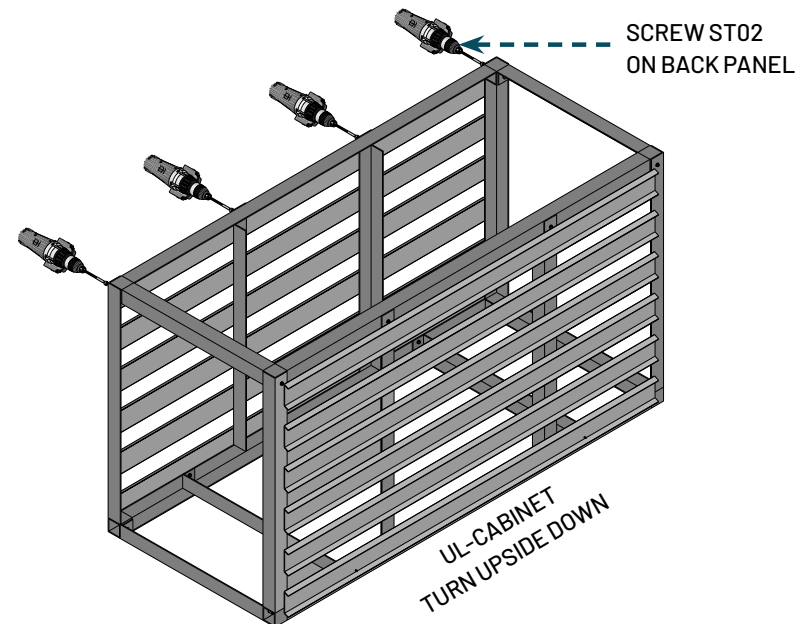
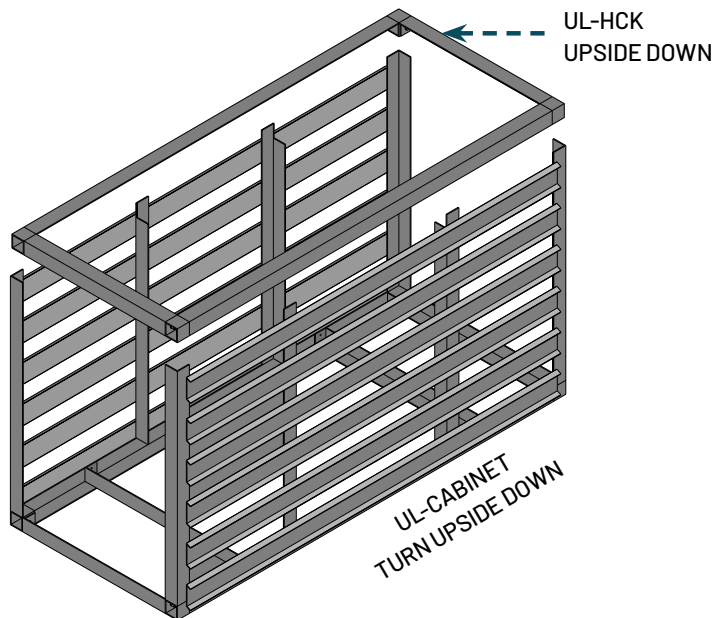
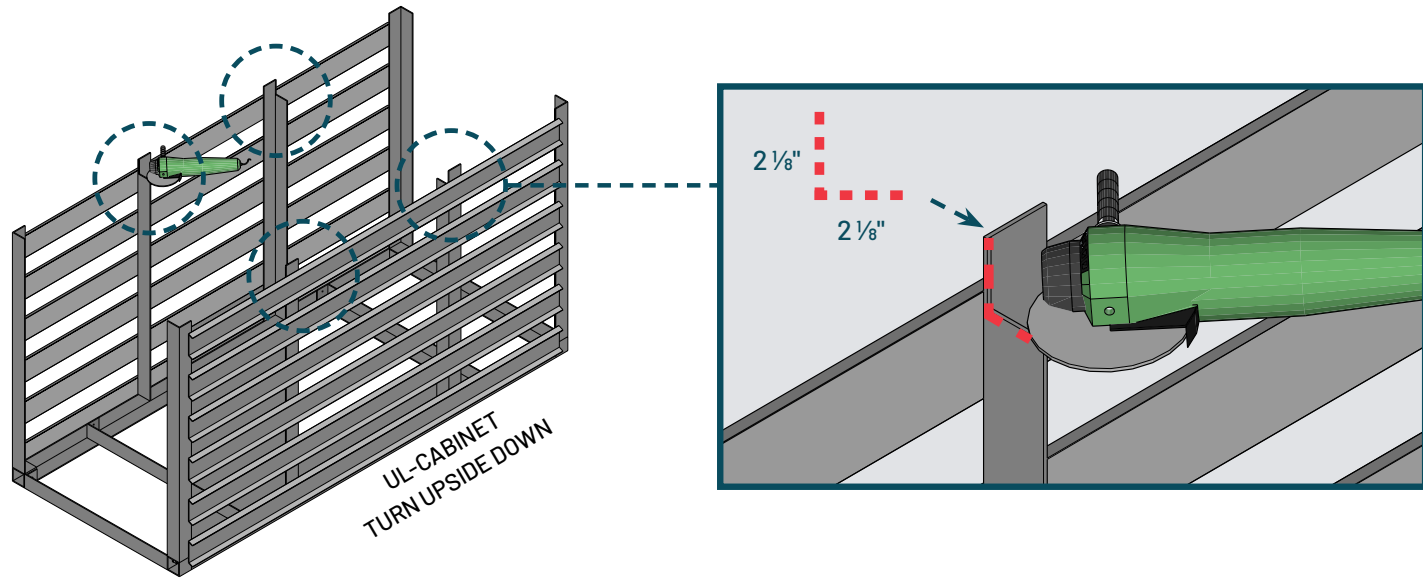
# Height Conversion Kit ASSEMBLY

MODEL UL-HCK



# Height Conversion Kit ASSEMBLY

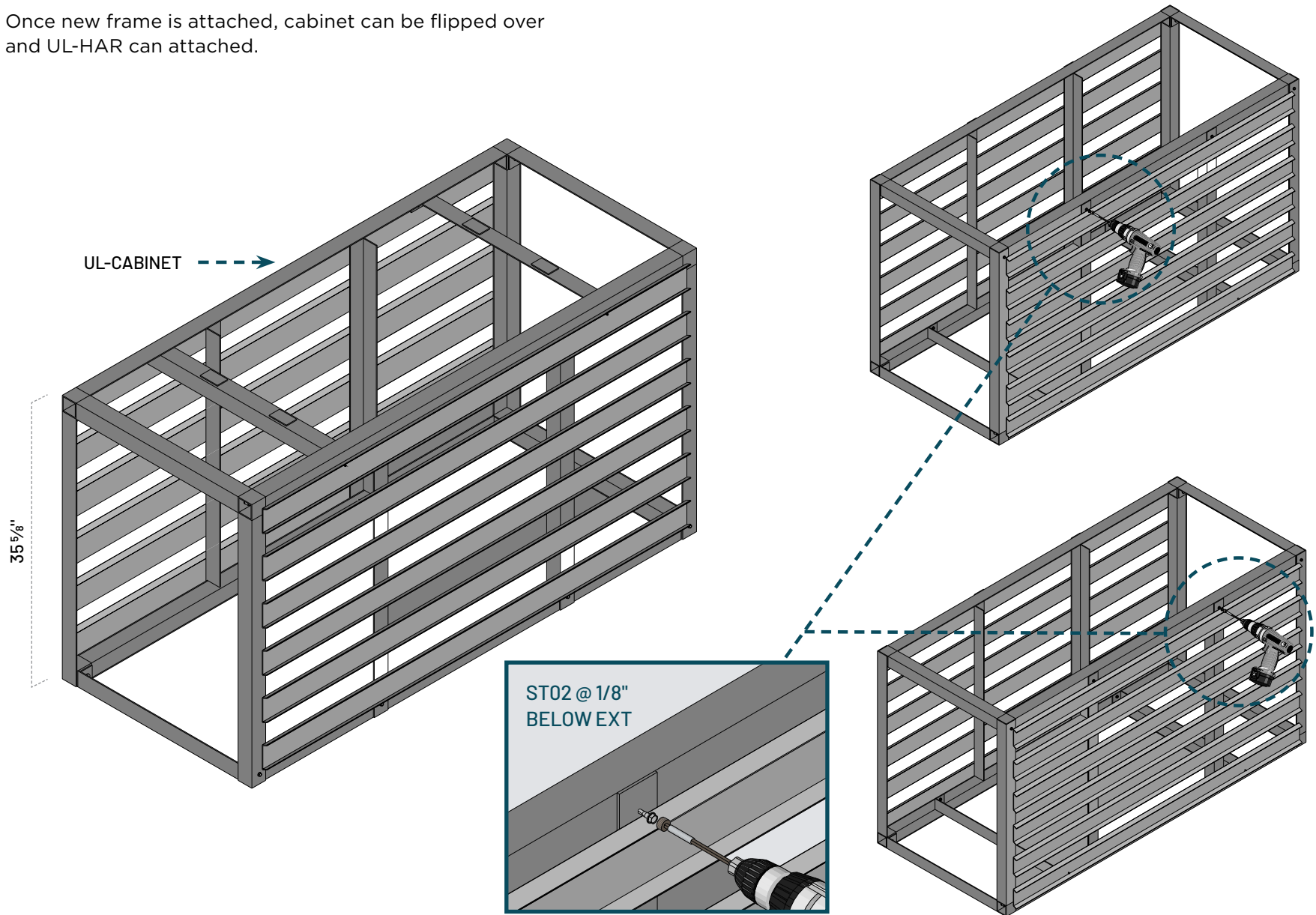
MODEL UL-HCK



# Height Conversion Kit ASSEMBLY

MODEL UL-HCK

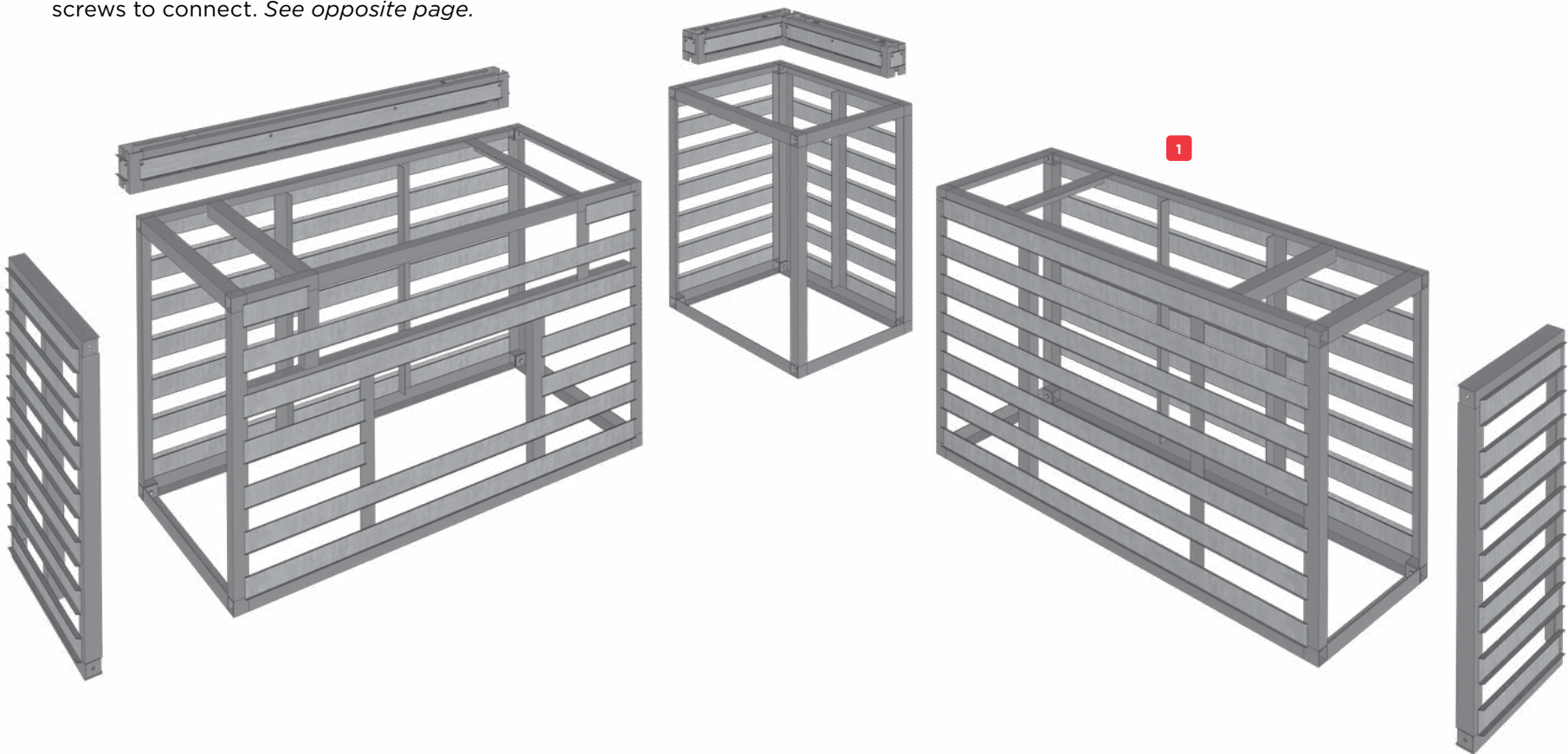
Once new frame is attached, cabinet can be flipped over and UL-HAR can be attached.



# Connecting Modules

## STEP-BY-STEP PROCESS

- 1 Fully assemble all individual modules prior to connecting.
- 2 Arrange the modules into the desired layout.
- 3 Clamp adjoining modules and use included self-tapping screws to connect. *See opposite page.*

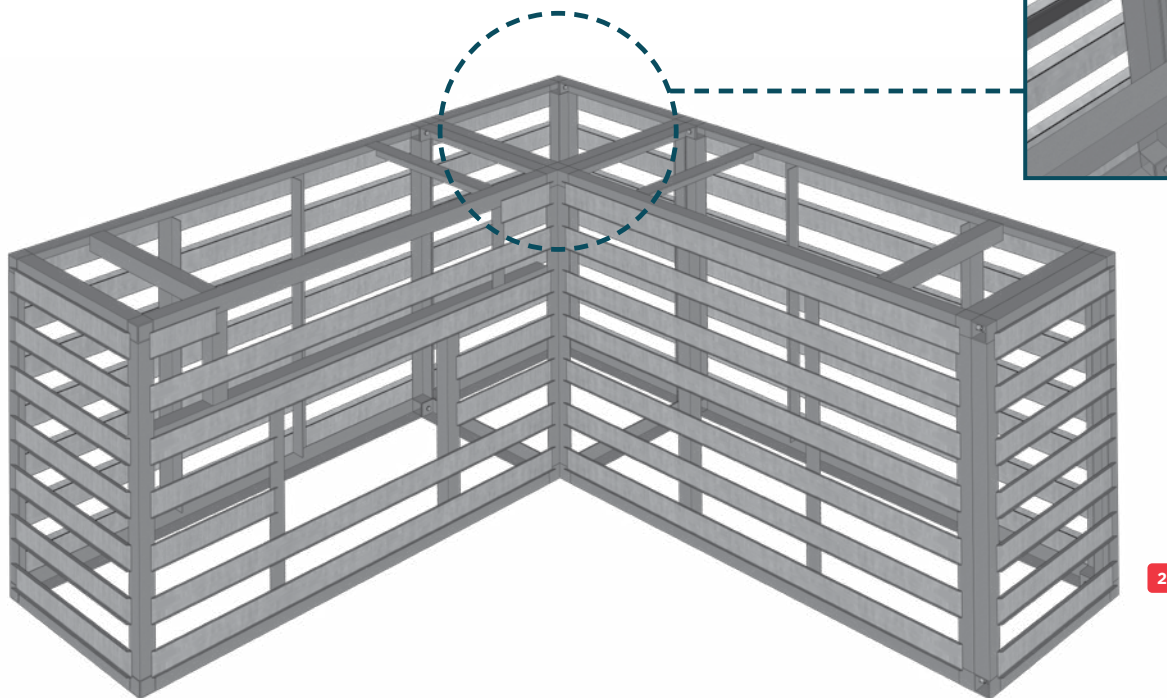
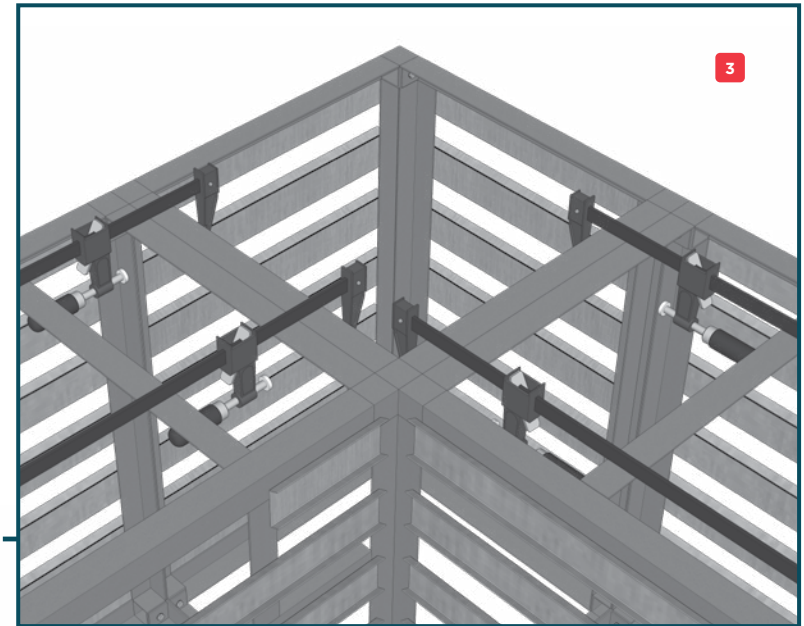


**NOTE:**

When connecting several modules, additional cross bracing may be required to stabilize the frame.

Use two self-tapping screws (included) per frame length to make connections.

Always square up, plumb and level before connecting with self-tapping screws.

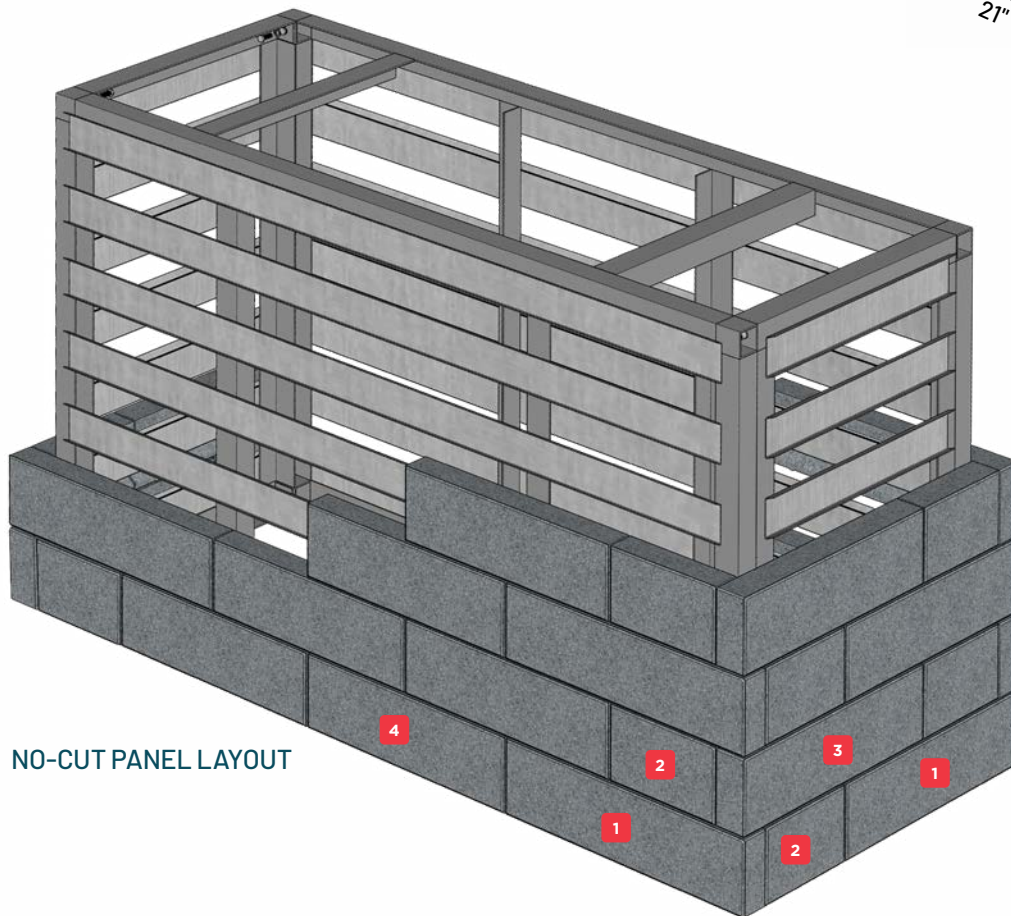
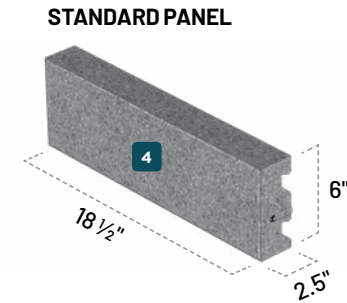
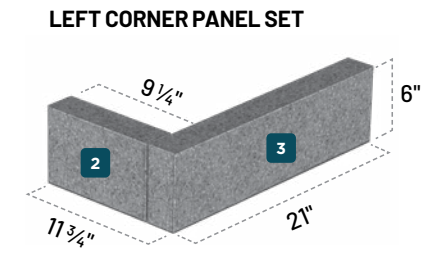
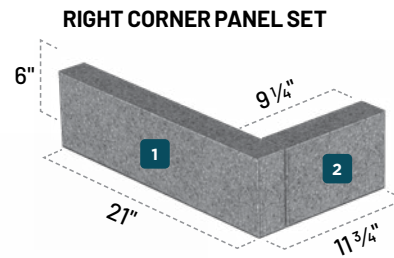


**ST02**..... 12x  
1 1/4" Self-Tap Screw

# Module Dimensions

## CALCULATIONS

Fascia panels are approximately 2 ½" thick.  
 This width must be added to the aluminum frame dimensions for all visible sides.  
 Example: 64 ½" (Grill) + 27 ½" (Corner Module) = 92"  
 Total Length 92" + 5" (2 Panel width) = 97"



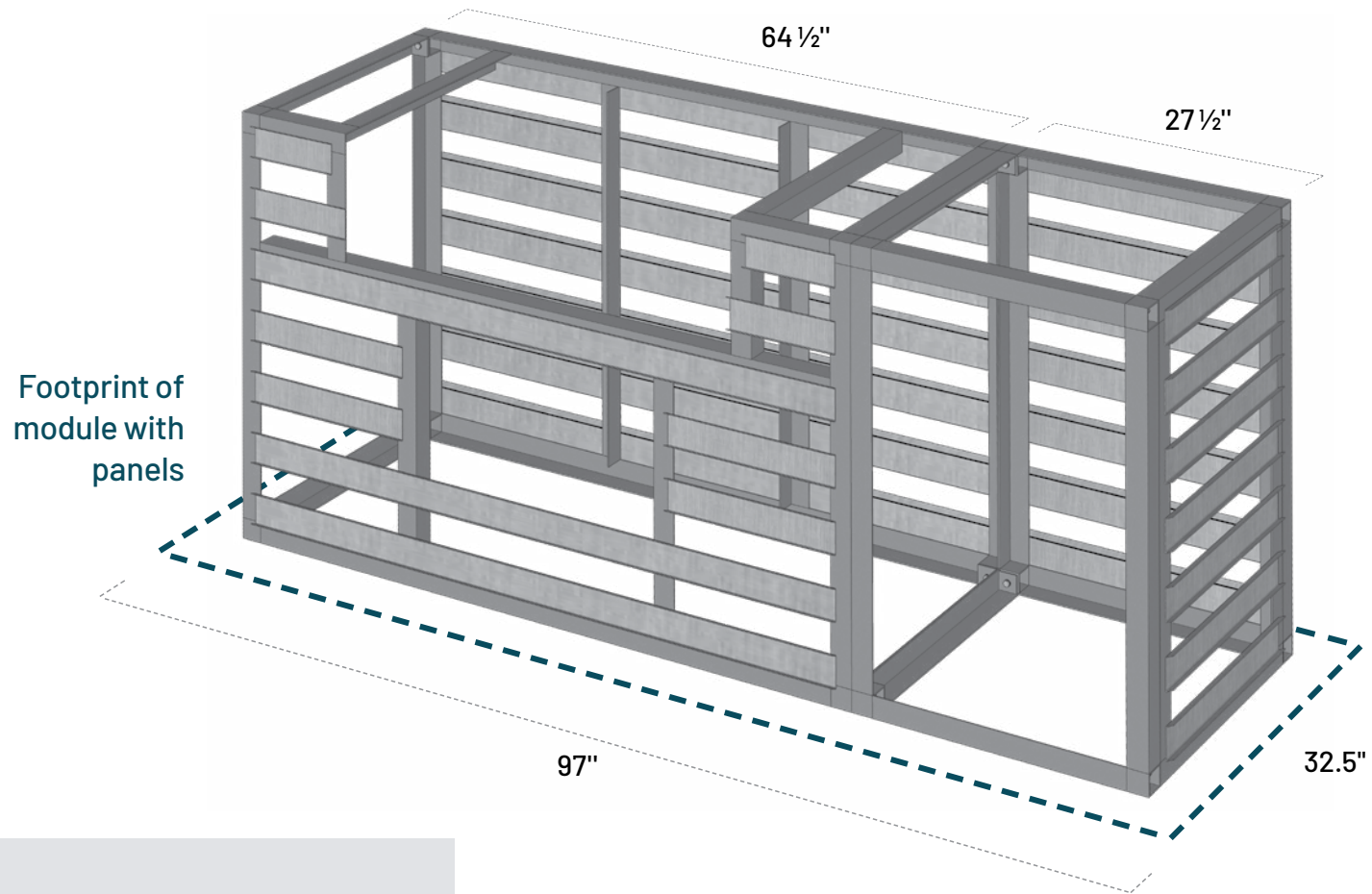
**NOTE:**

Always start with right corner sets since there are 7 more right panel sets in a bundle than left panel sets.



# Grill Module

## FOOTPRINT



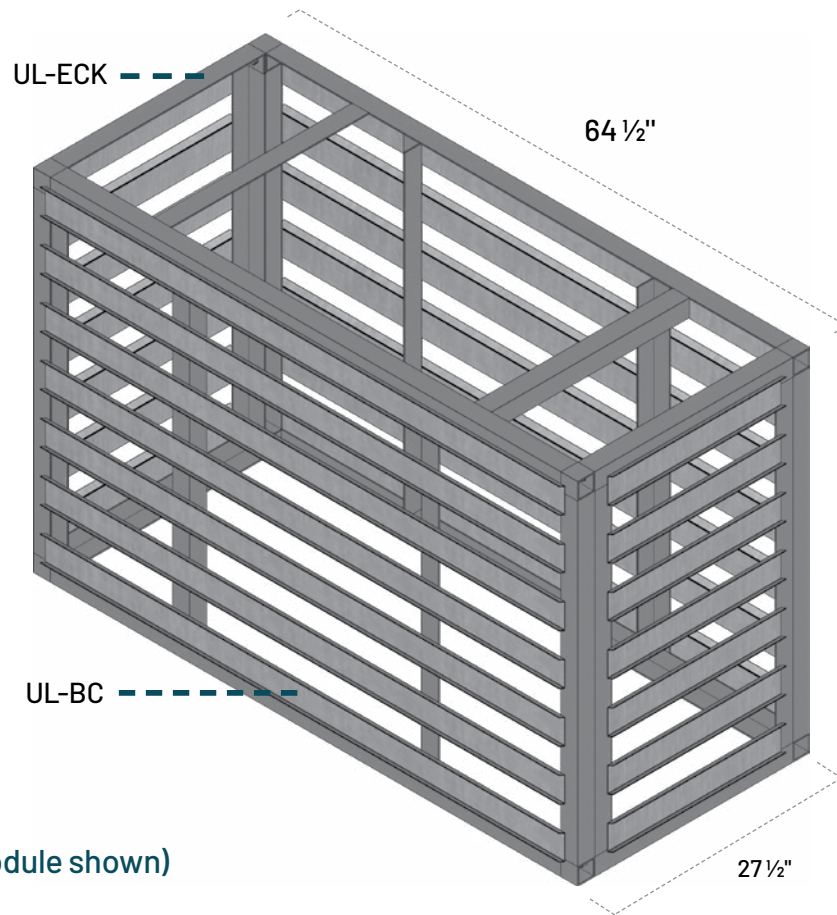
**NOTE:**

All dimensions are nominal. Always assemble modules and hang a few panels prior to finalizing footprint measurements.

# Standalone Unit

## BAR - FIRE TABLE

MODEL UL-BC + UL-ECK



(Bar Module shown)

### NOTE:

Quantities are estimated and may vary depending on modifications made to accommodate cut-outs/appliances. Contractor should field verify for accuracy.

### U-CARA® MODULAR SYSTEM

- 1 Base Module-UL-BC
- 2 End Clad Kit-UL-ECK

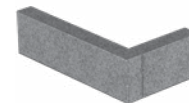
### U-CARA FASCIA PANELS

Standard Panels

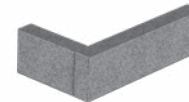
**28**

Corner Sets

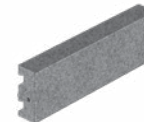
**28**



RIGHT CORNER PANEL SET

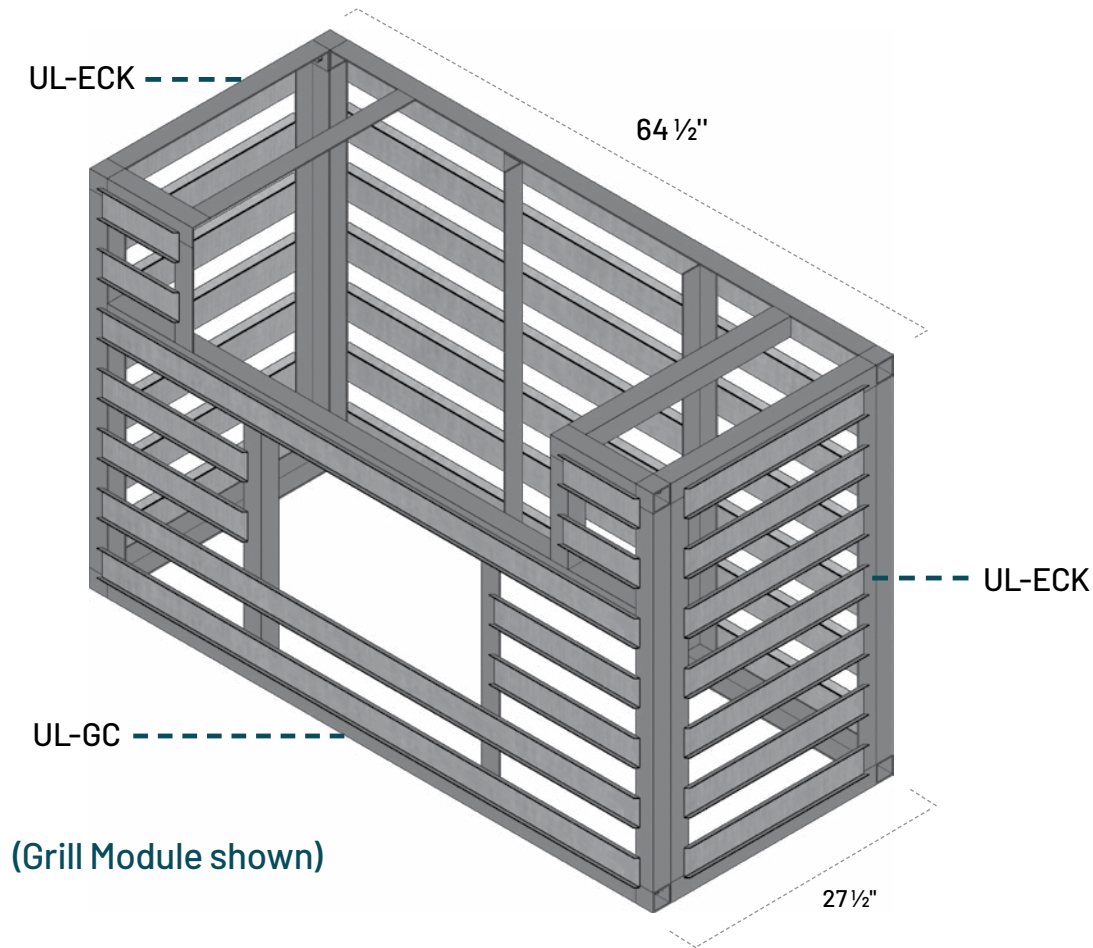


LEFT CORNER PANEL SET



STANDARD PANEL

# Standalone Unit GRILL



## U-CARA® MODULAR SYSTEM

- 1 Grill Module UL-GC
- 2 End Clad Kit UL-ECK

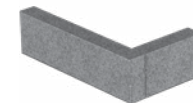
## U-CARA FASCIA PANELS

Standard Panels

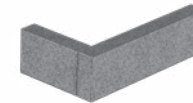
**28**

Corner Sets

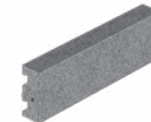
**28**



RIGHT CORNER PANEL SET



LEFT CORNER PANEL SET



STANDARD PANEL

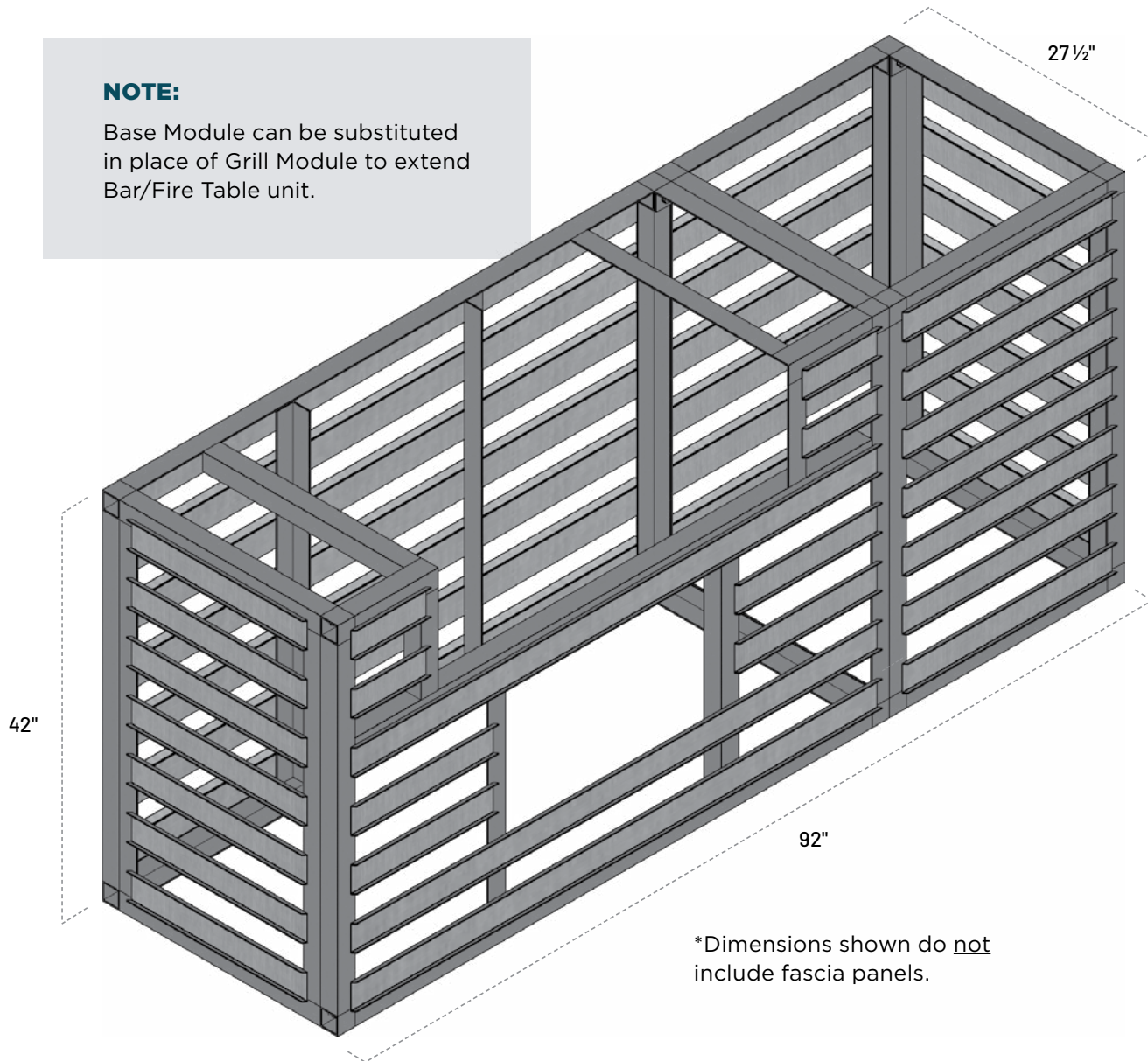
# Extending Modules

## GRILL EXTENSION

MODEL UL-GC/UL-CC/UL-ECK/UL-CC-BP

### NOTE:

Base Module can be substituted in place of Grill Module to extend Bar/Fire Table unit.



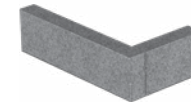
\*Dimensions shown do not include fascia panels.

### U-CARA® MODULAR SYSTEM

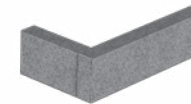
- 1 Grill Module UL-GC
- 1 Corner Module UL-CC
- 1 End Clad Kit UL-ECK
- 1 Back End Panel UL-BP

### U-CARA® FASCIA PANELS

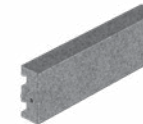
- Standard Panels  
**49**
- Corner Sets  
**28**



RIGHT CORNER PANEL SET



LEFT CORNER PANEL SET

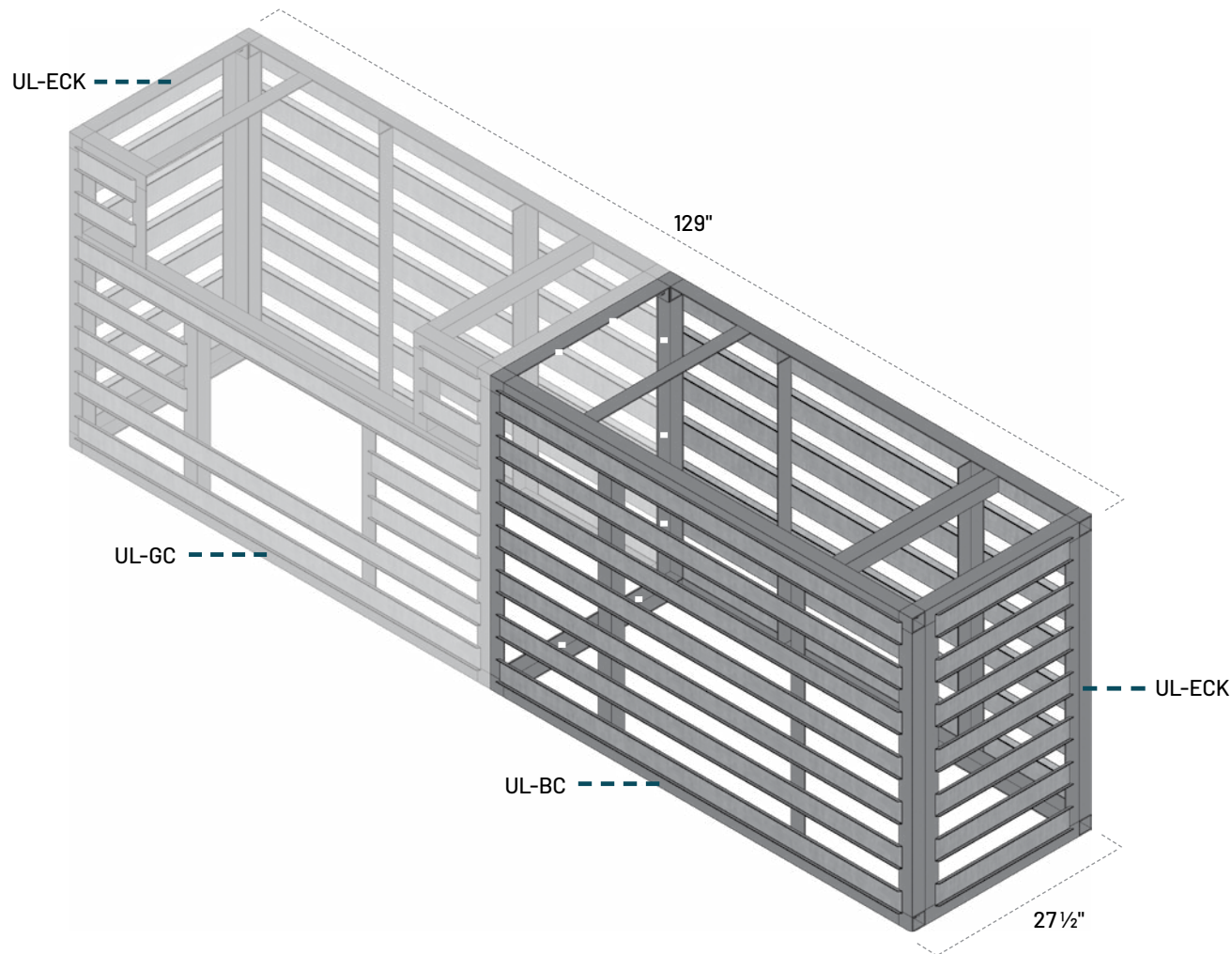


STANDARD PANEL

# Extending Modules

## GRILL-BAR COMBO

MODEL UL-GC/UL-BC/UL-ECK

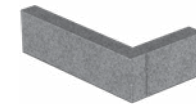


### U-CARA® MODULAR SYSTEM

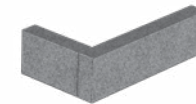
- 1 Grill Module UL-GC
- 1 Base Module UL-BC
- 2 End Clad Kit UL-ECK

### U-CARA® FASCIA PANELS

- Standard Panels  
**56**
- Corner Sets  
**28**



RIGHT CORNER PANEL SET



LEFT CORNER PANEL SET

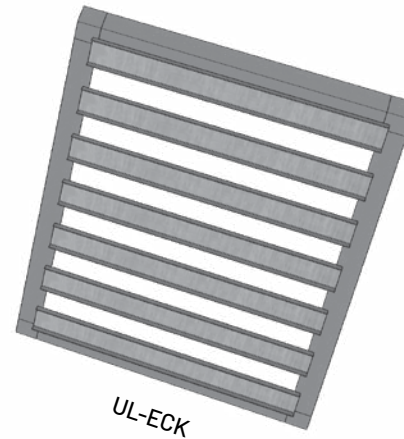
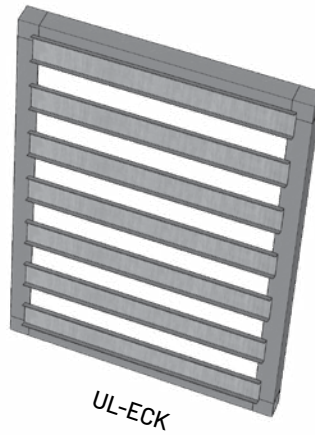
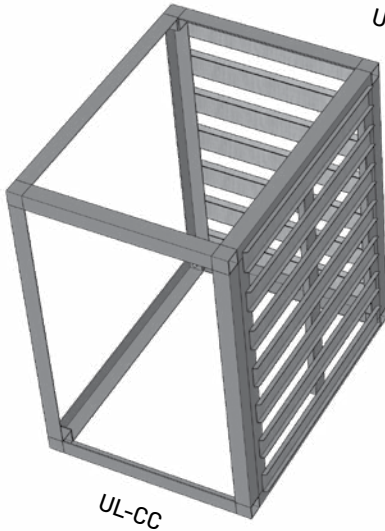
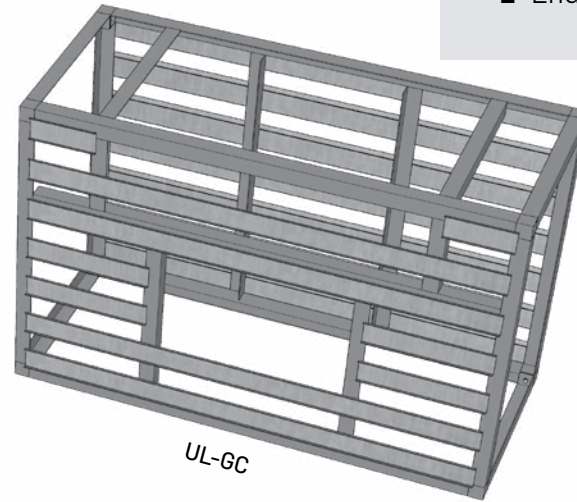
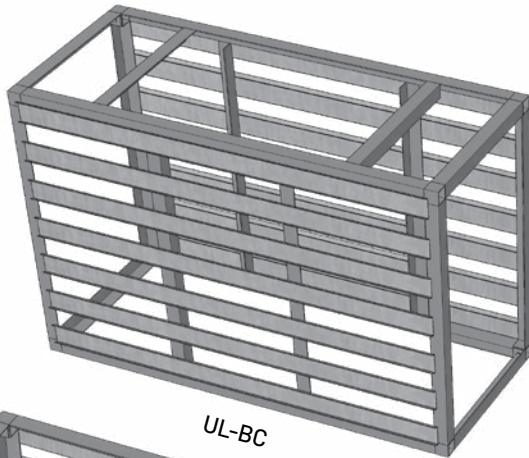


STANDARD PANEL

# L-Shaped Kitchen

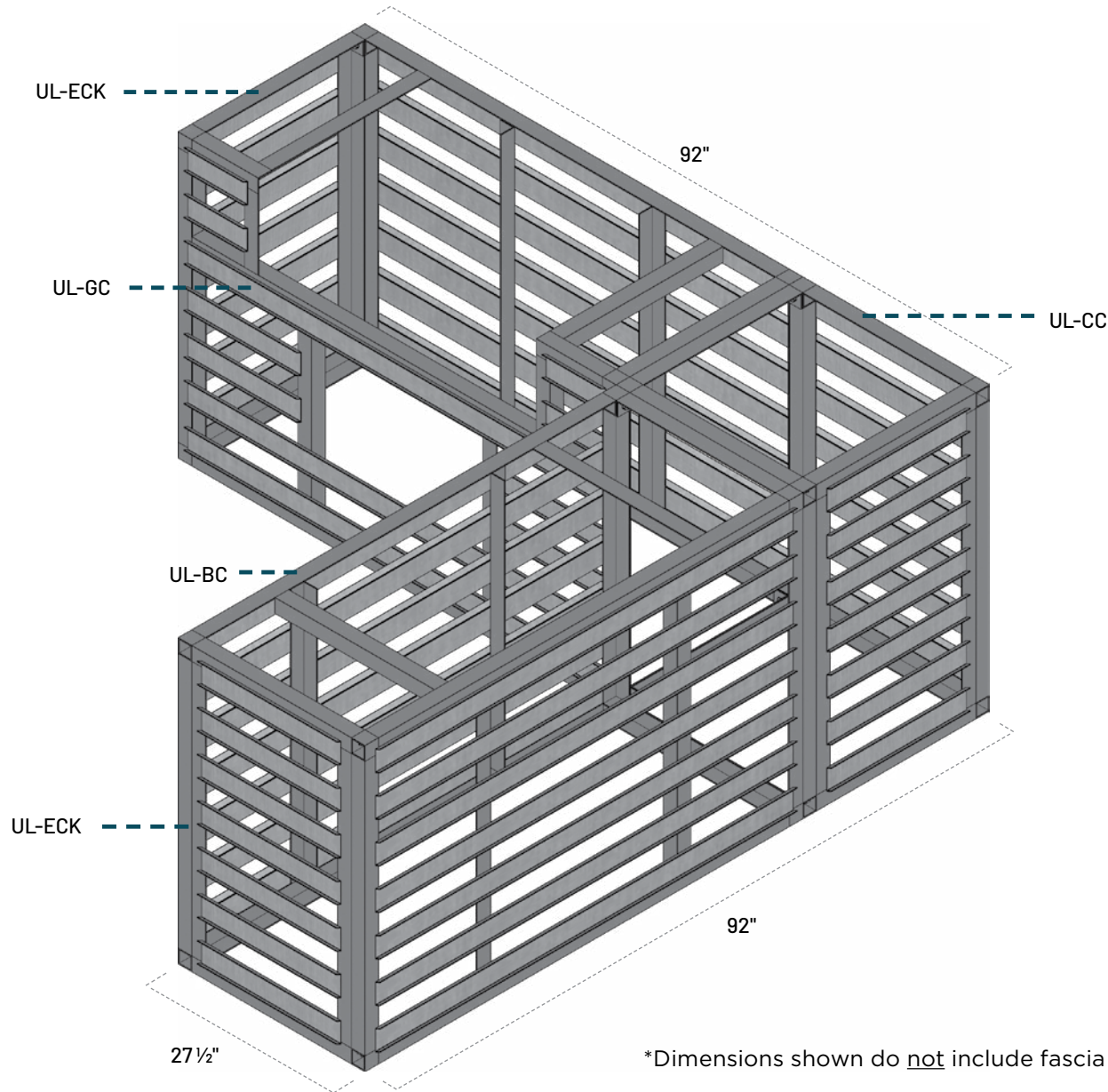
## U-CARA® MODULAR SYSTEM

- 1 Base Module UL-BC
- 1 Grill Module UL-GC
- 1 Corner Module UL-CC
- 2 End Clad Kit UL-ECK



# L-Shaped Kitchen FOOTPRINT

MODEL UL-BC+UL-GC+UL-CC+UL-ECK



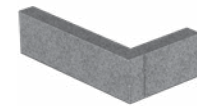
## U-CARA® FASCIA PANELS

Standard Panels

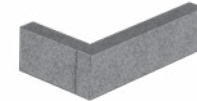
**88**

Corner Sets

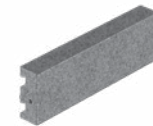
**35**



RIGHT CORNER PANEL SET



LEFT CORNER PANEL SET



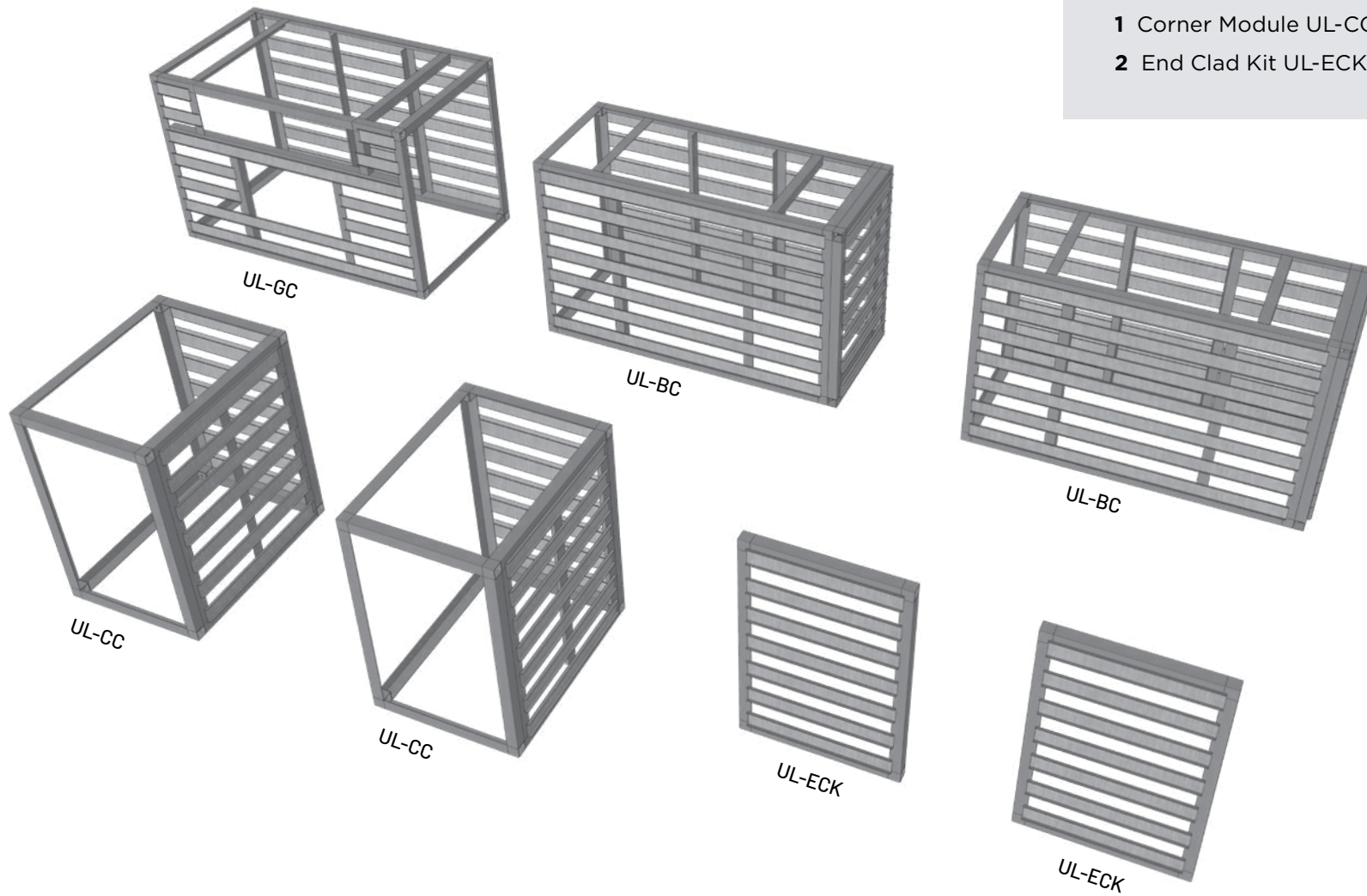
STANDARD PANEL

\*Dimensions shown do not include fascia panels.

# U-Shaped Kitchen

## U-CARA® MODULAR SYSTEM

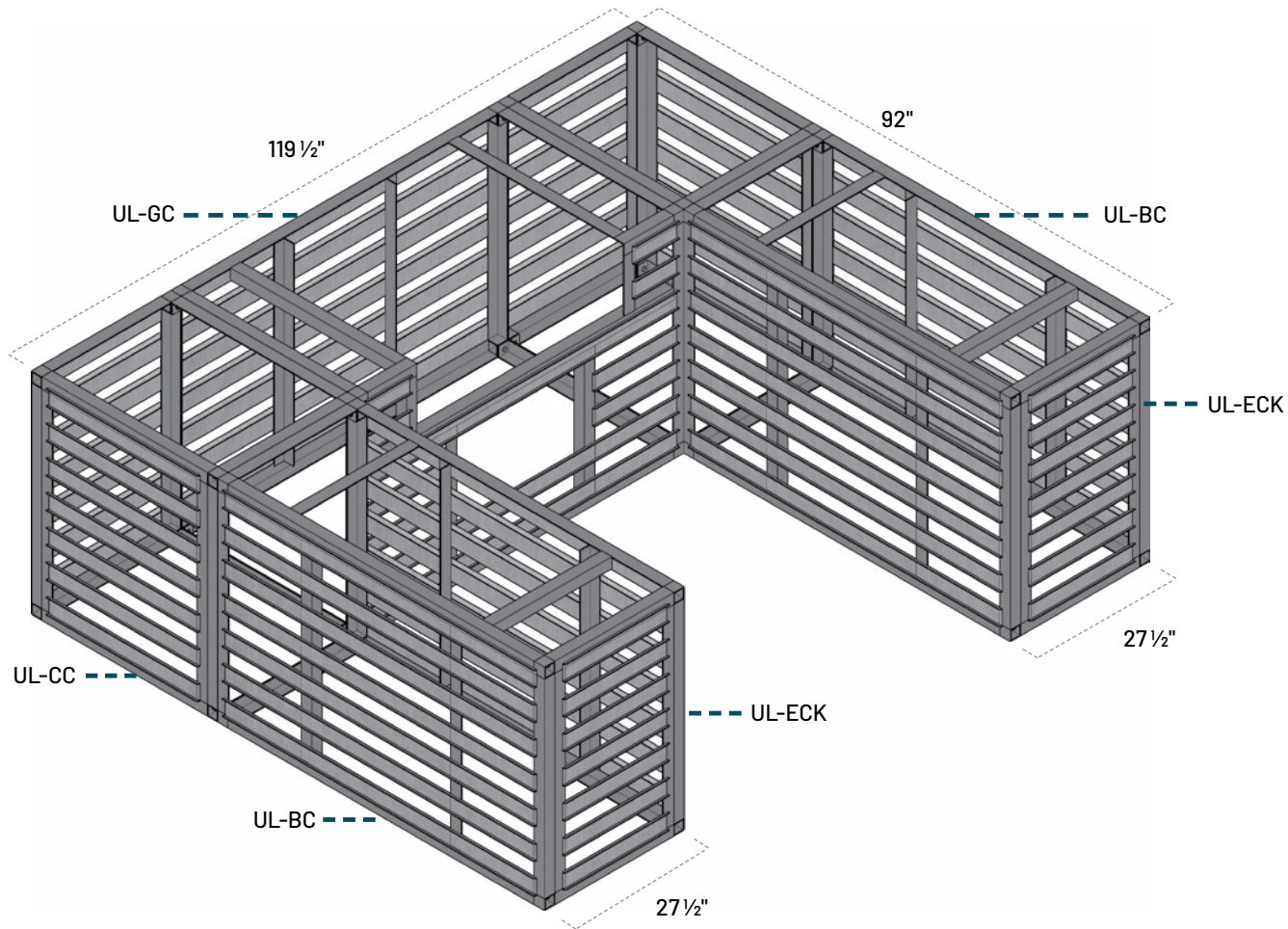
- 2 Base Module UL-BC
- 1 Grill Module UL-GC
- 1 Corner Module UL-CC
- 2 End Clad Kit UL-ECK





# U-Shaped Kitchen ASSEMBLY

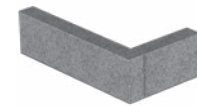
MODEL UL-BC+UL-GC+UL-CC+UL-ECK



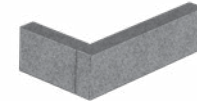
## U-CARA® FASCIA PANELS

Standard Panels  
**147**

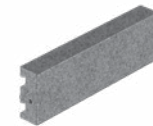
Corner Sets  
**42**



RIGHT CORNER PANEL SET



LEFT CORNER PANEL SET



STANDARD PANEL

# Fireplace

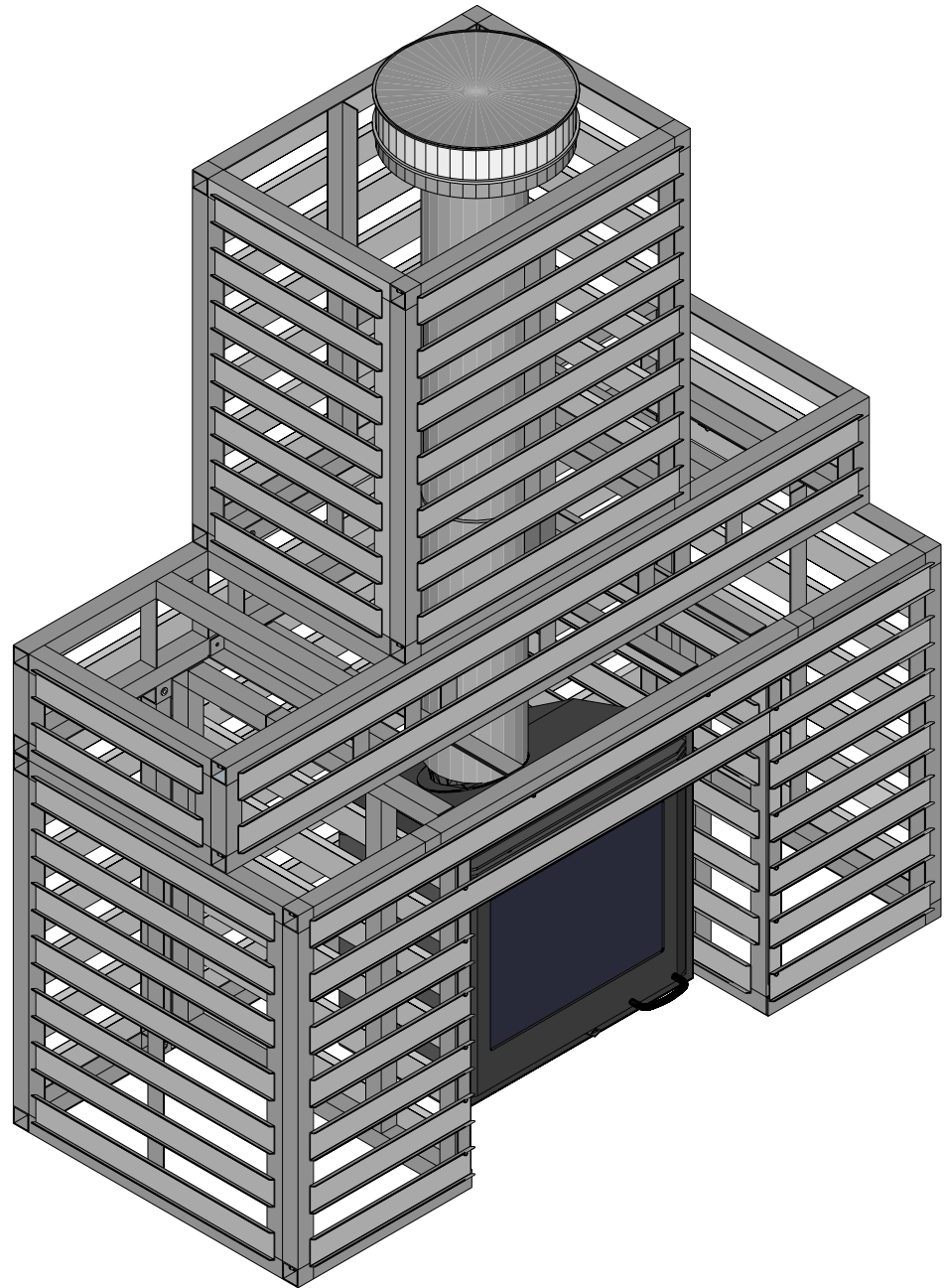
## WOOD BURNING

This truly revolutionary U-Cara Modular Fireplace is easily constructed in one day with only a handful of basic tools. The ability to mix and match several panel color and/or textures allows you to be creative while maintaining the theme of the project overall.

**NOTE:**

Complete assembly instructions can be downloaded from [unilock.com](http://unilock.com)

Always observe local building codes.



# Fireplace

## GAS

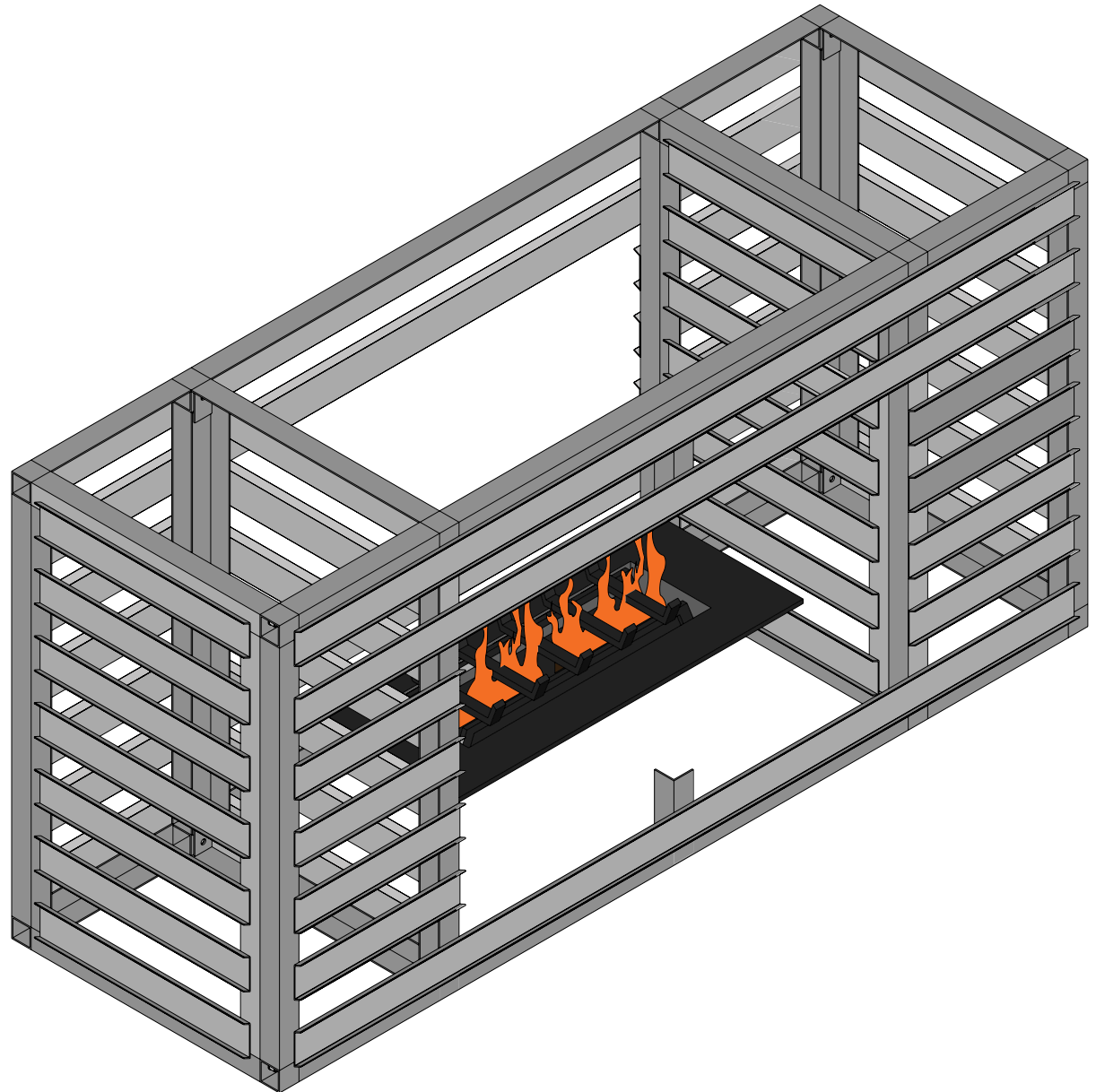
Gas Fireplaces make a wonderful addition to any urban landscape especially where access is limited and/or where wood burning is prohibited.

Construct one-sided or two-sided fireplaces in a matter of hours.

**NOTE:**

Complete assembly instructions can be downloaded from [unilock.com](http://unilock.com)

Always observe local building codes.

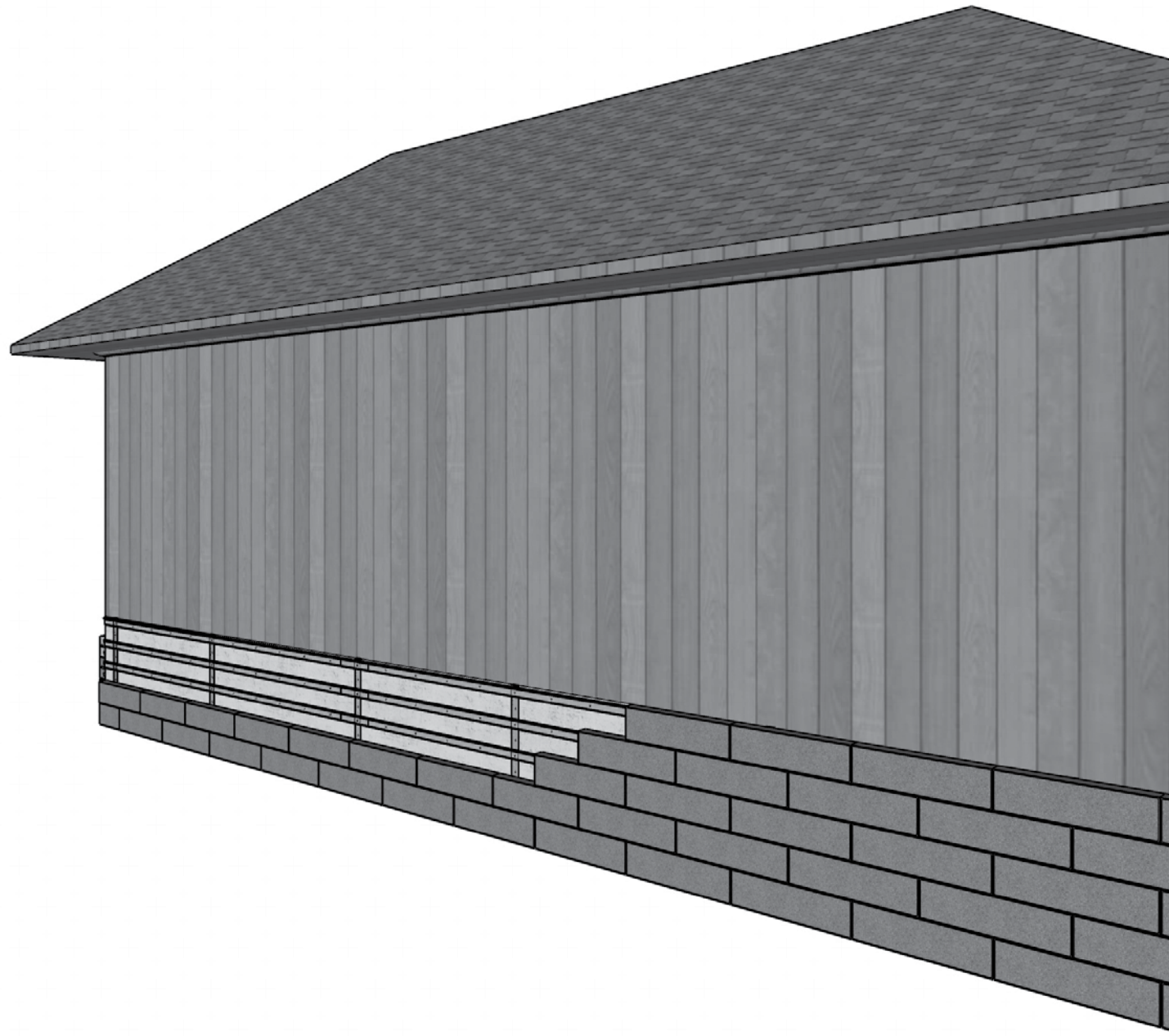




**U-CARA<sup>®</sup>**

# **WALL MOUNT SYSTEM**

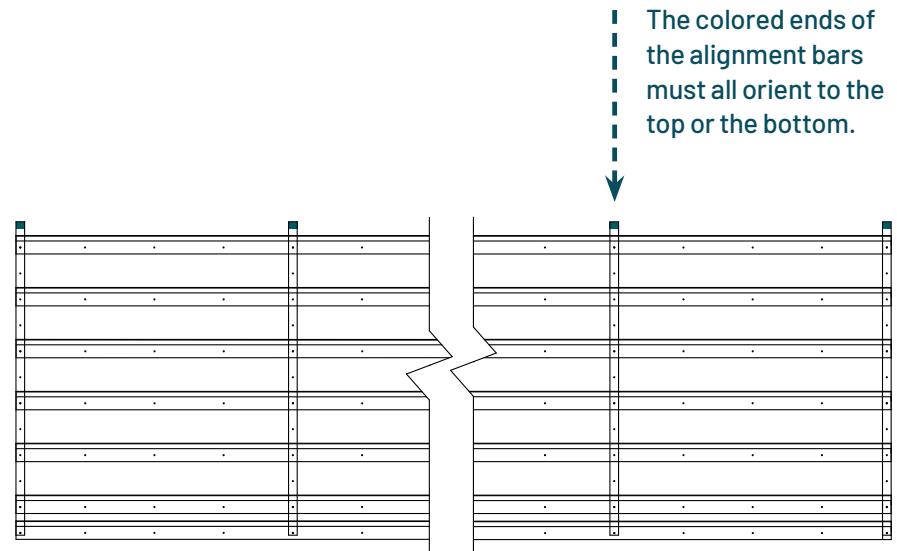
By using the U-Cara Wall Mount System, you can extend the landscape look and feel to any vertical structure or building within your project. Easily hang U-Cara Fascia Panels to horizontal rails which can be attached to concrete or wood substructures.



# U-Cara Wall Mount System

## COMPONENTS

The U-Cara Wall Mount System allows for the cladding of concrete foundation walls, existing poured-in-place retaining walls as well as cladding wooden structures such as deck skirts, cabanas and tool sheds. The simplicity of this 3-part system allows for rapid installation practically anywhere in your project to complete a cohesive design with the other U-Cara walls and vertical modules on site.



### 1 Vertical Alignment Bar

The purpose of the alignment bar is to allow for the accurate placement of the horizontal rails which support the U-Cara Fascia Panels to the substrate. This eliminates the need to measure spacing and speeds up installation time.

- **Material:** Galvanized Steel
- **Vertical length:** 38 5/8" (981mm)
- **Placement:** 32" O.C. (813mm)
- **Mounting hole spacing:** 3" (76mm) - accommodates 3" (75mm) or 6" (150mm)
- **Packaging:** 10pcs/Bundle

### 2 Horizontal Mounting Rails

The horizontal mounting rails are used to support the fascia panels to the vertical substrate.

- **Material:** Galvanized Steel
- **Horizontal length:** 96" (2438mm)
- **Placement:** 3" (75mm) or 6" (150mm)
- **Mounting hole spacing:** 8" (200mm) O.C.
- **Packaging:** 10 pcs/Bundle

### 3 Fascia Panels

The same U-Cara fascia panels used for retaining walls or modules can be used on the Wall Mount System.

- **Material:** EnduraColor Concrete



# U-Cara Wall Mount System

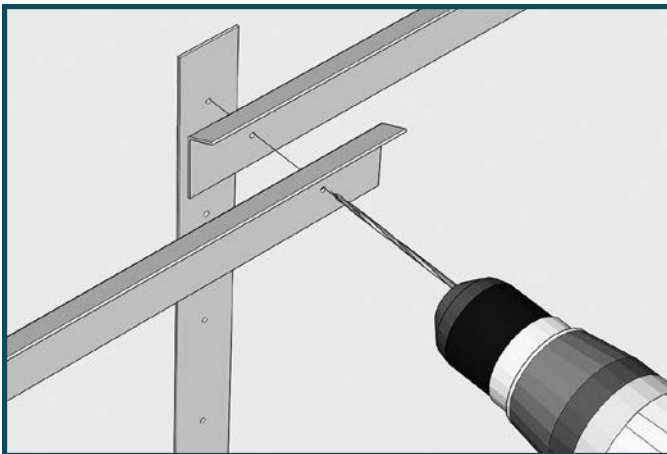
## CONCRETE FOUNDATION APPLICATION

- 1 U-Cara Fascia Panel
- 2 Galvanized Steel U-Cara Rail
- 3 Masonry Screw - 3/16 x 1 3/4 inch, min 16" O.C. (see specification below)
- 4 High Strength Concrete Adhesive in dollops to add additional strength. (Do not run continuous bead)
- 5 Galvanized Steel U-Cara Alignment Bar
- 6 Building concrete foundation

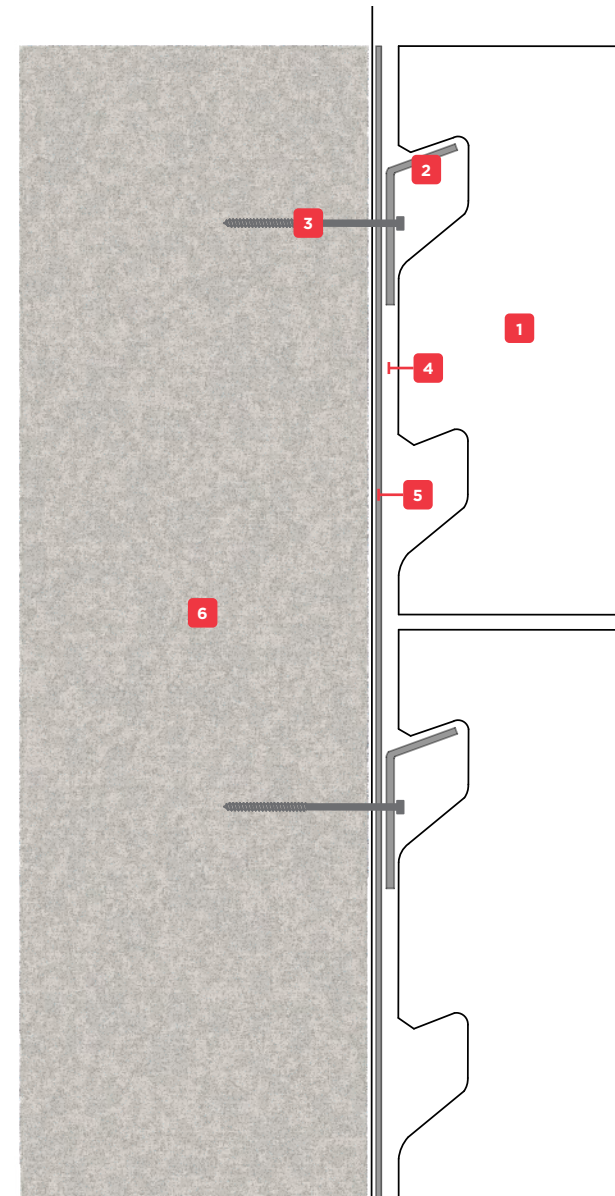
### Masonry Screw Specification:

Simpson strong-tie (or equivalent)

Titan 2 Concrete & Masonry Screw Model No. TTN2-1813H with hex head.  
Zinc plated w/baked on Ceramic coating 3/16 x 1 3/4 inch, min 16" O.C.



Always adhere to  
local building codes.



# U-Cara Wall Mount System

## WOOD SUBSTRATE APPLICATION

- 1 U-Cara Fascia Panel
- 2 Galvanized Steel U-Cara Rail
- 3 Wood Anchor Screw 3/16 x 1 3/4 inch, min 16" O.C.
- 4 Plywood Substrate with applied waterproofing (see note below)
- 5 Galvanized Steel U-Cara Alignment Bar
- 6 Wood Frame

### Waterproofing Specification:

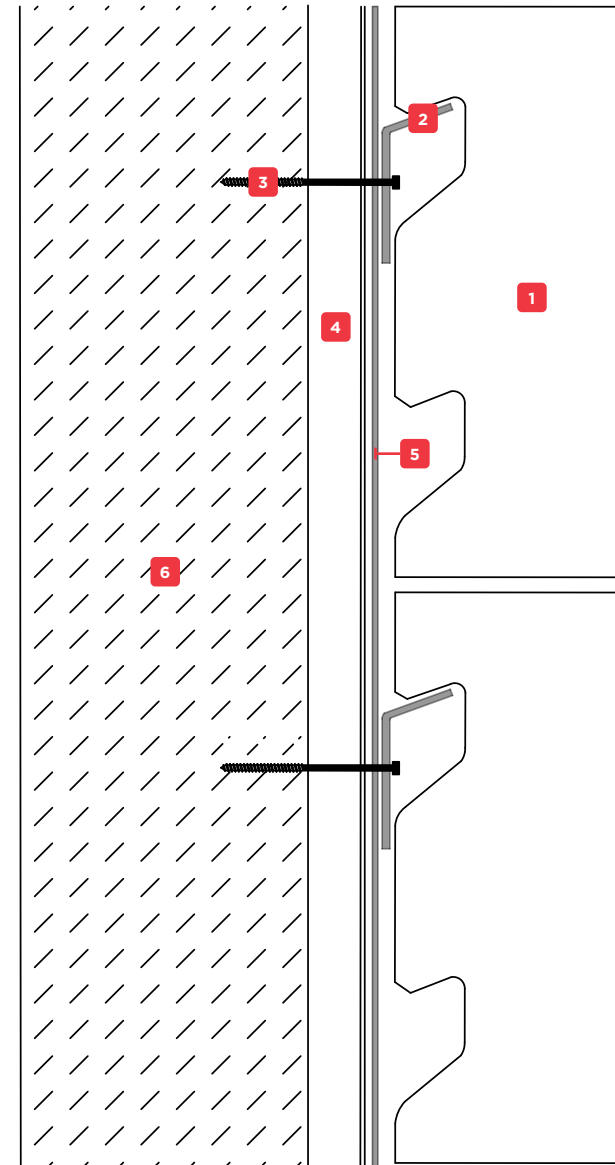
Seal all membrane punctures or use self-healing membrane or coatings

- Application as low as 15 Degrees F (-8° C)
- Damp surface tolerant; reliable all-season installation
- Single coat application
- Fire-retardant
- Low VOC
- Air and watertight.

### NOTE:

Alignment bars are screwed into studs every 32" and the rails are screwed in every stud. (16" O.C.)

Always adhere to local building codes.





# U-Cara Wall Mount System INSTALLATION

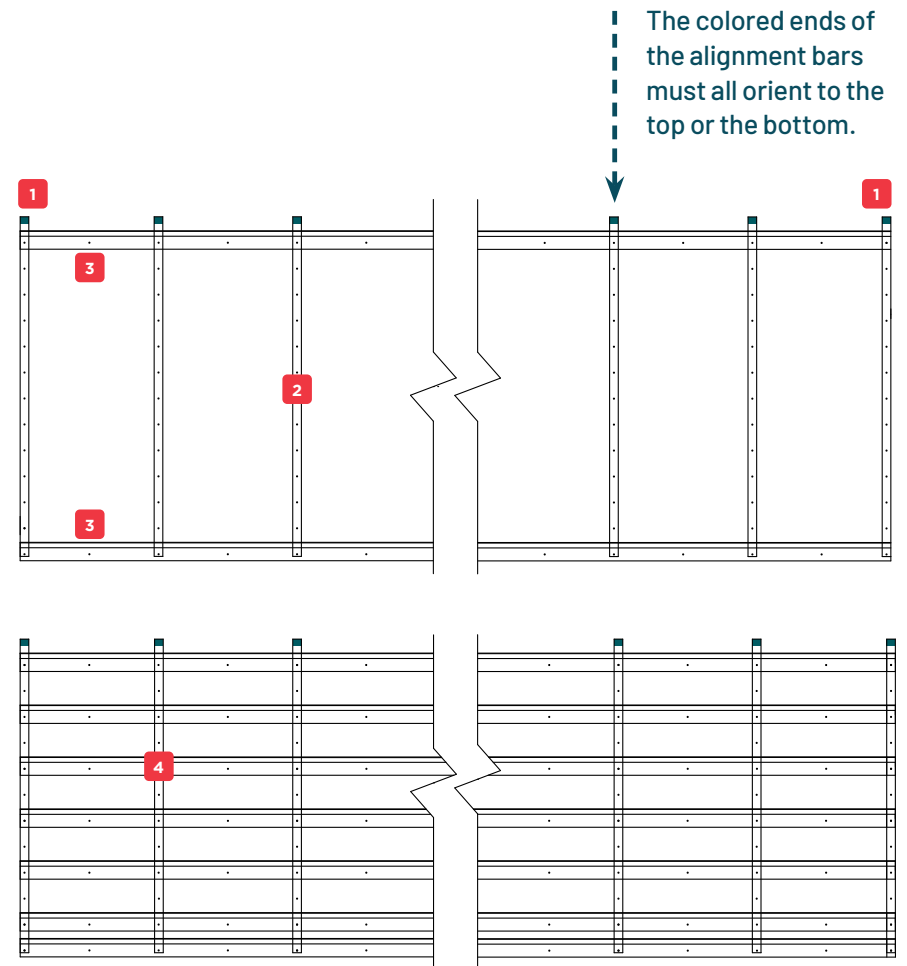
## Setting up Alignment Bars and Horizontal Rails

- 1 Establish desired starting height and use leveling device to plot and position vertical alignment bars. Transfer this same measurement to middle and end points. Use chalk line to mark all starting points for alignment bars. Use one screw to attach both alignment bar and rail into vertical substrate.
- 2 Install one vertical alignment bar every 16" O.C. for wood substrate, or 32" O.C. for concrete substrate.
- 3 Install an upper and lower U-Cara rail to help anchor vertical alignment bars to establish starting grid.
- 4 Install balance of horizontal rails at intervals according to fascia panel size.

### NOTE:

#### HORIZONTAL RAILS

- A Wood Substrate Application -Butt joint rails
- B Masonry Application - overlap rail joints



# Calculate

## CALCULATION:

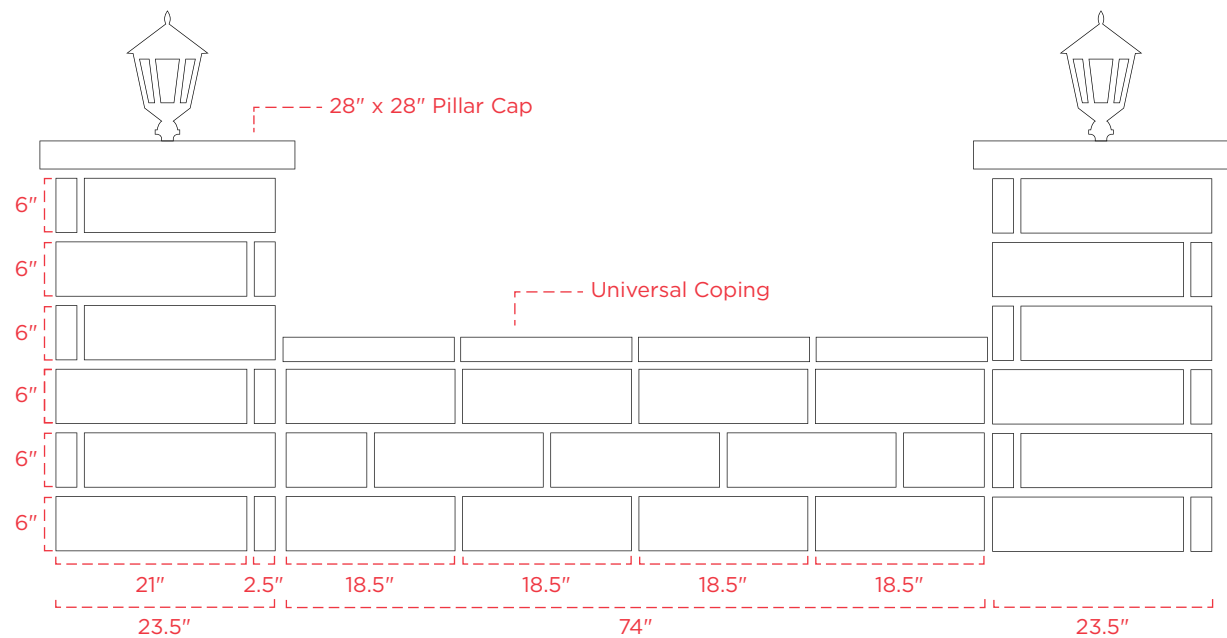
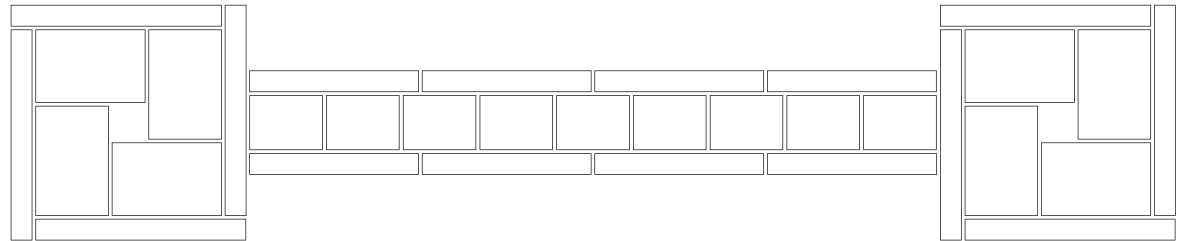
This example seat wall and pillar will give you an idea of how to calculate the panels required.

## PILLARS:

- 4 Large Backer Blocks per layer = 24 units per pillar x 2 = 48 units total
- 4 Standard U-Cara Closed-End Corner Panels per layer = 24 units per pillar x 2 = 48 units total
- 2 Pillar Caps
- 96 Sure Track® Corner Inserts
- 8 Tubes of Concrete Adhesive (10 oz Approx.)

## WALL:

- 9 Standard Sure Track Backer Blocks per layer = 27 units total
- 12 Standard U-Cara Fascia Panels per side = 24 units total
- 4 Universal Coping units



**SIMPLIFY AND SPEED UP YOUR CALCULATIONS WITH SPEED-CALC™**

**PILLARS:**

---

---

---

---

---

**WALLS:**

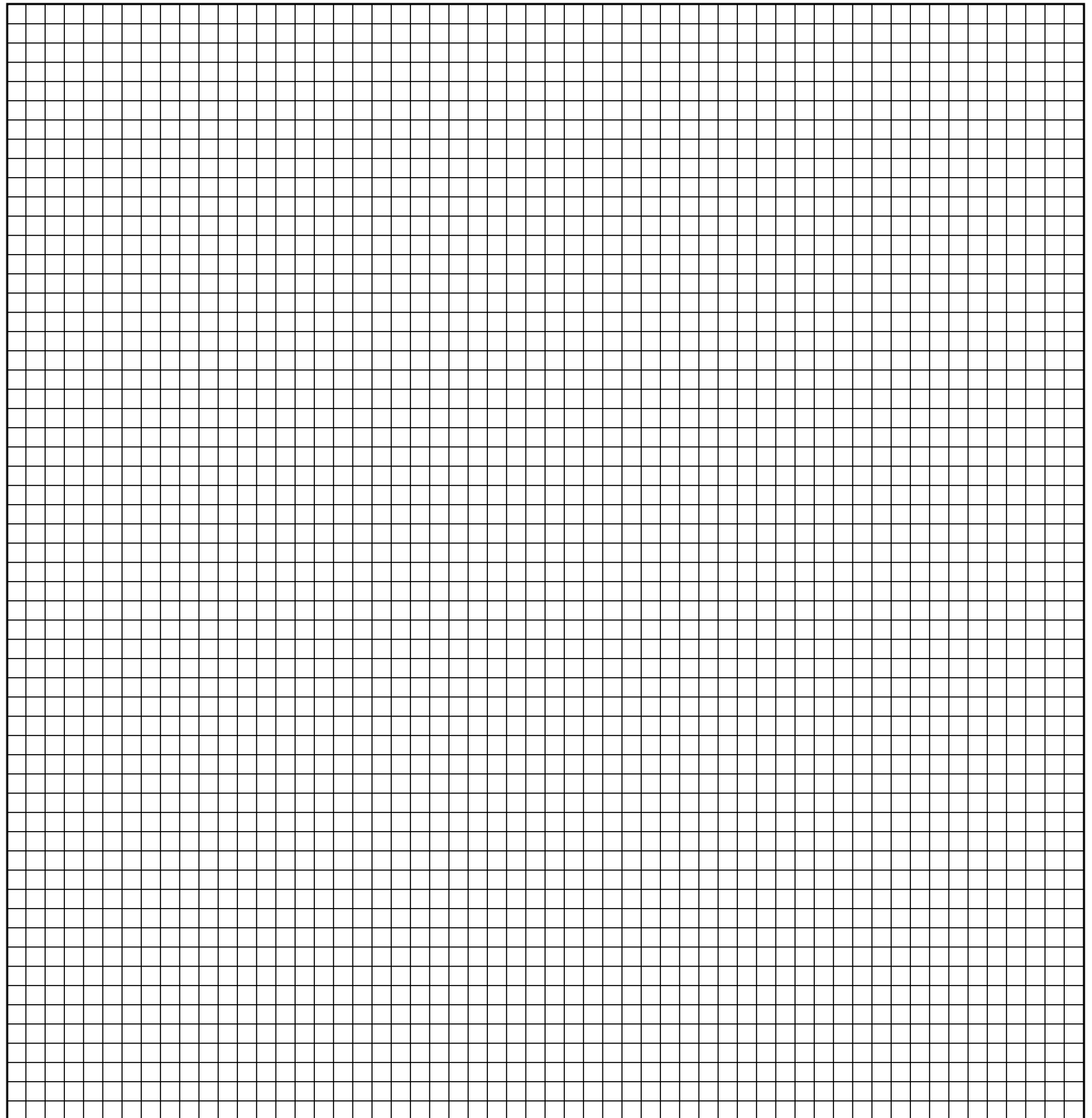
---

---

---


---

---



The logo for UNILOCK, featuring a stylized red 'U' icon followed by the word 'UNILOCK' in a bold, red, sans-serif font with a registered trademark symbol.

**UNILOCK<sup>®</sup>**

The background of the page is a dark teal color. On the left side, there are several white, interlocking shapes that resemble puzzle pieces or modular components, arranged in a way that suggests a larger system or structure. The shapes are slightly offset and layered, creating a sense of depth and complexity.

©2023 HENGESTONE HOLDINGS, INC. THE  
U-CARA SYSTEM IS PROTECTED UNDER  
US PAT. 9,453,341 (INTERNATIONAL  
PATENTS PENDING) U-CARA MODULAR  
SYSTEMS-PATENT PENDING-GRILLNETICS,  
FORT COLLINS, CO.

**1 800-UNILOCK | [UNILOCK.COM](https://www.uniunlock.com)**