U-CARA®

MODULAR FIREPLACE SYSTEM

U·CARA®
MODULAR FIREPLACE SYSTEM

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 overall project.
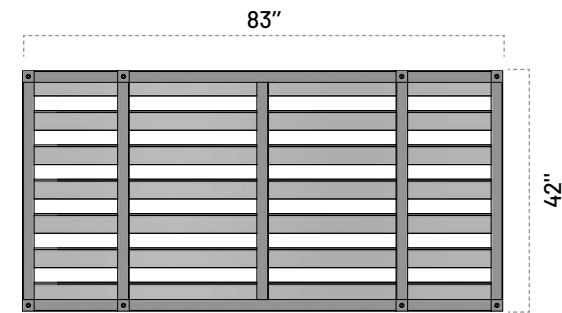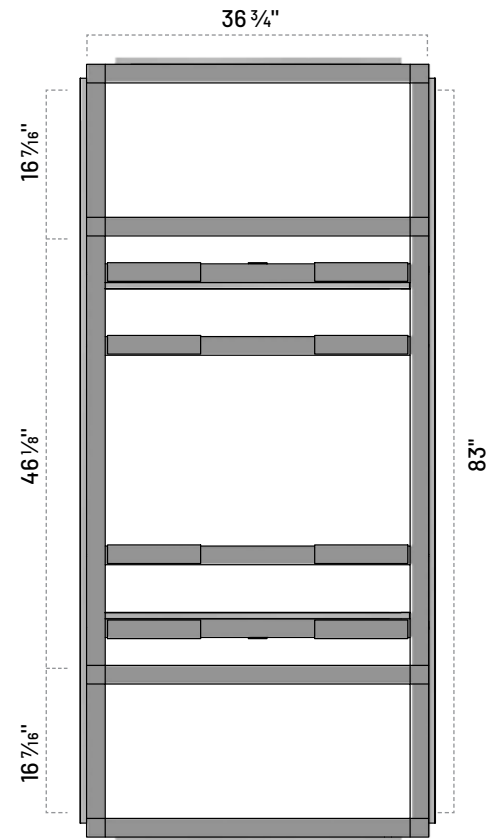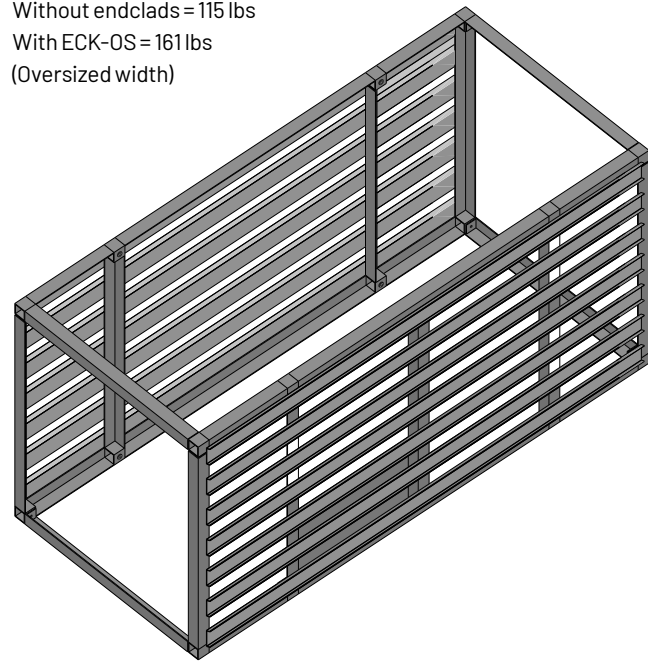
Table of contents

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

42" **Fireplace** *Woodburning*
CABINET COMPONENTS

MUST BE BUILT WITH OVERSIZED WIDTH COMPONENTS
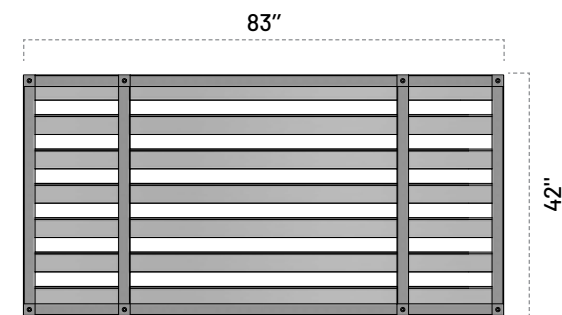
DIMENSIONS
WITH FASCIA PANEL
41¾" x 88" (Outside To Outside)

WEIGHT
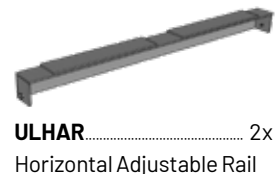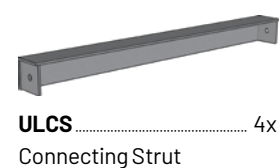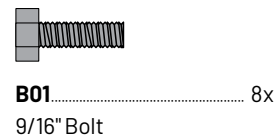Without endclads = 115 lbs
With ECK-OS = 161 lbs
(Oversized width)

36¾"

16⁷⁄₁₆"

46⅛"

83"

16⁷⁄₁₆"

83"

42"

UL-FIR-FP.......................1PC
Fireplace Cabinet Front Panel

83"

42"

UL-FIR-BP.......................1 PC
Fireplace Cabinet Back Panel

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

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

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

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

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

42" Fire Cabinet *Woodburning*
CABINET COMPONENTS *(CONTINUED)*

ULHAR.......................... 2x
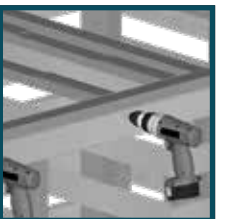Horizontal Adjustable Rail
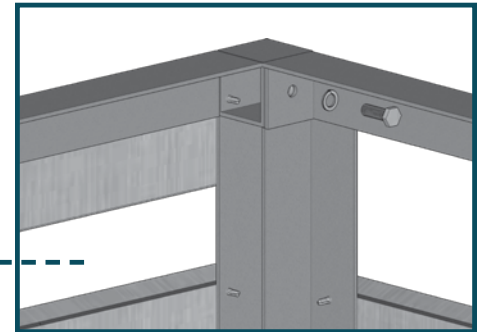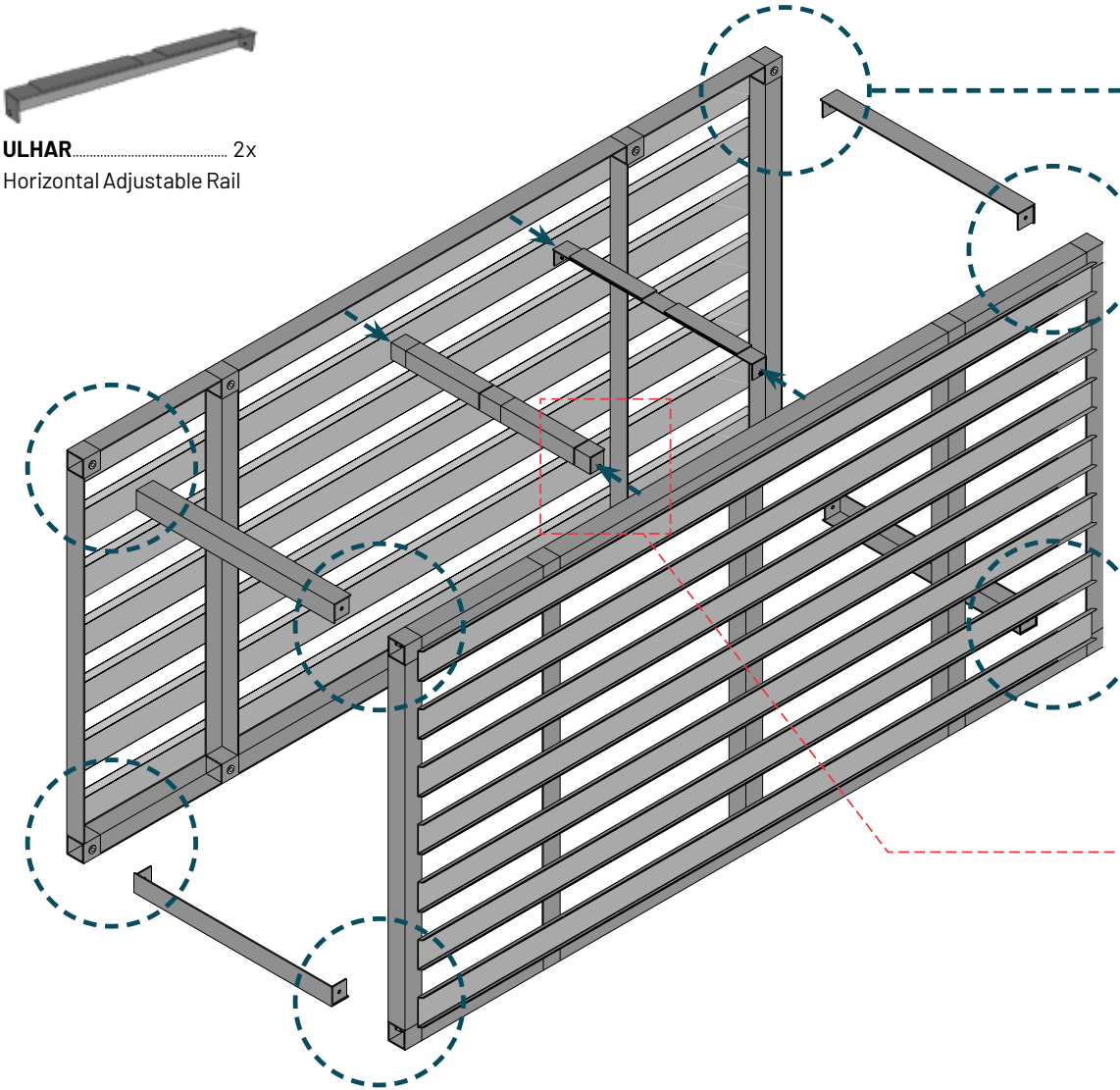
NOTE:

Always use included lock washer with 9/16" bolt connection on each corner (8 total).

CLAMPS MAY BE USED TO SECURELY HOLD STRUTS IN PLACE WHILE CONNECTING

Braces are attached via tab and a self-tapping screw (ST02)

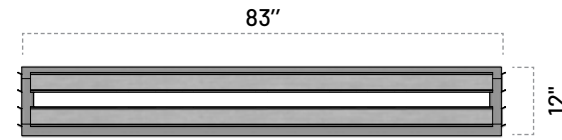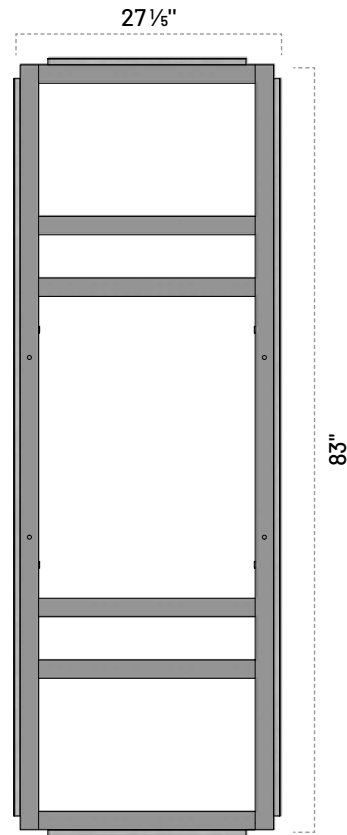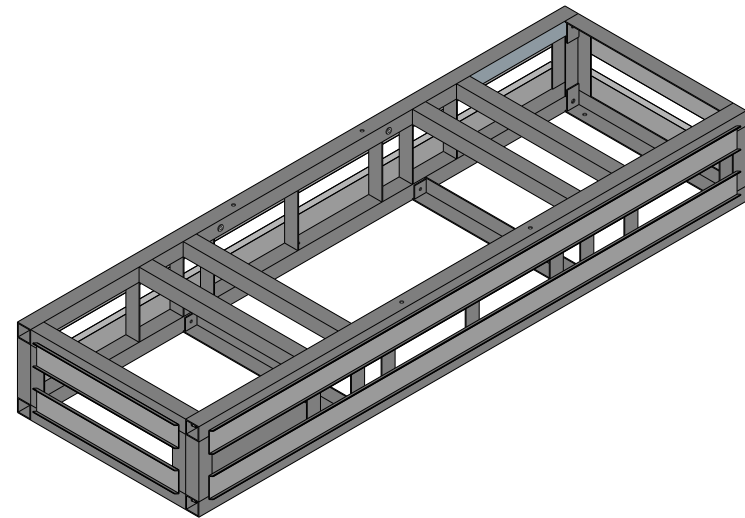Connect with self-tapping screw (ST02)
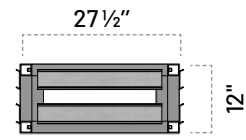
42" **Fireplace** *Woodburning*
MANTLE COMPONENTS

OVERSIZED WIDTH COMPONENTS

**DIMENSIONS
WITH FASCIA PANEL**
32 ½" x 88" x 12"
(Outside To Outside)
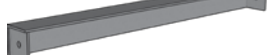
WEIGHT
68 lbs

27 ⅛"

83"

83"

12"

UL-FIR-M-BP.................2PC
Base Module Front Panel

27 ½"

12"

UL-FIR-M-ECP.................2 PC
Base Module End-Cap Panel

B03.................6x
3" Bolt & Locking Nut

B01.................22x
9/16" Bolt

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

LW01.................22x
3/8" Lock Washer

ULCS.................6x
Connecting Strut

42" **Fire Cabinet** *Woodburning*
MANTLE COMPONENTS *(CONTINUED)*
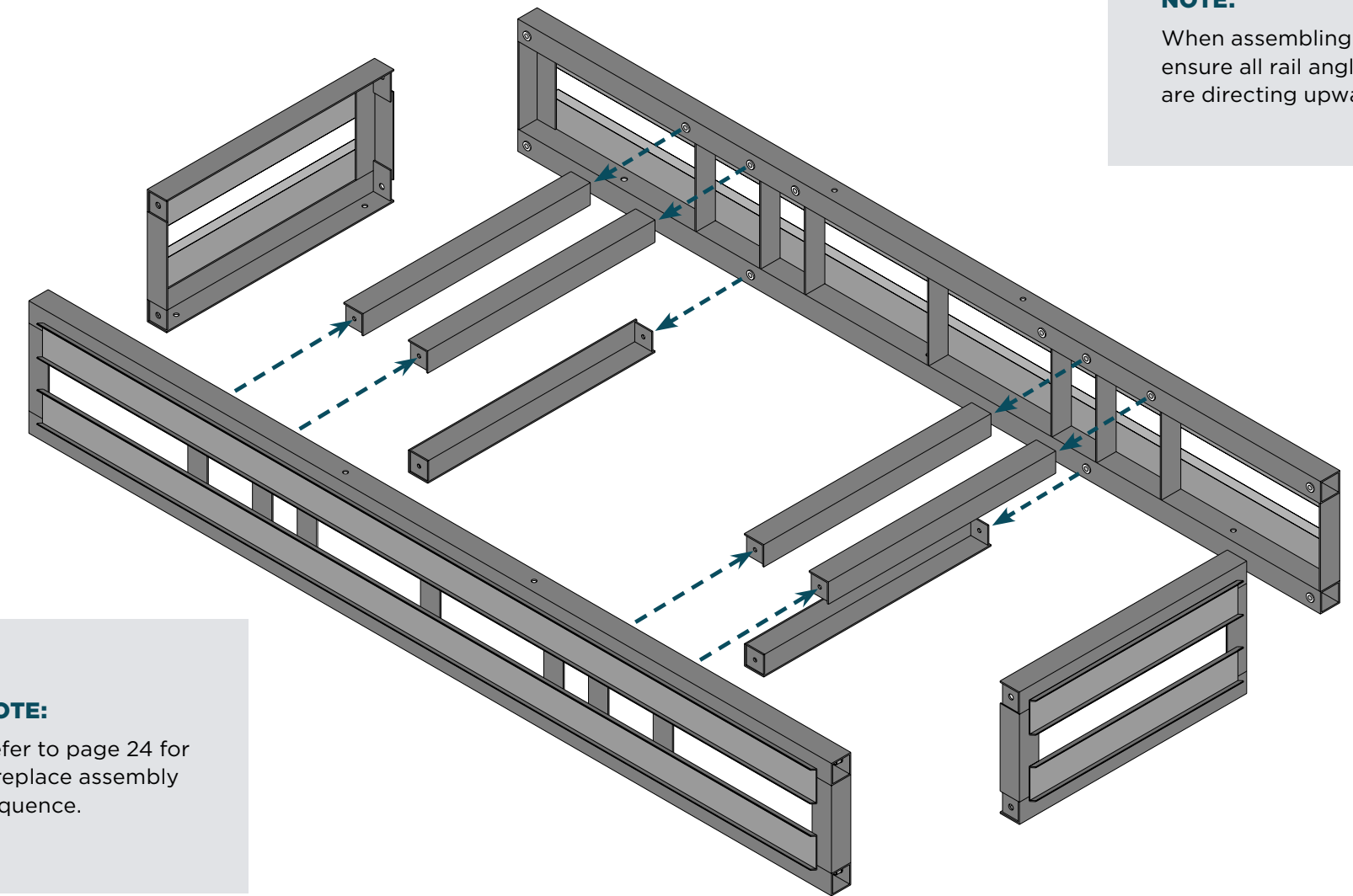
NOTE:

When assembling
ensure all rail angles
are directing upward.

NOTE:

Refer to page 24 for
Fireplace assembly
sequence.

42" **Fireplace** *Woodburning*
CHIMNEY COMPONENTS

OVERSIZED WIDTH COMPONENTS
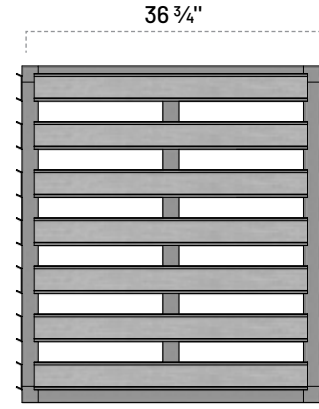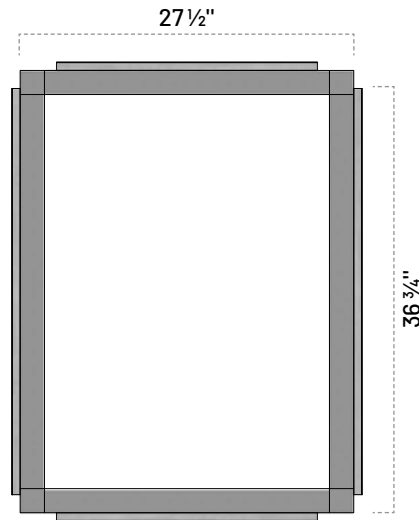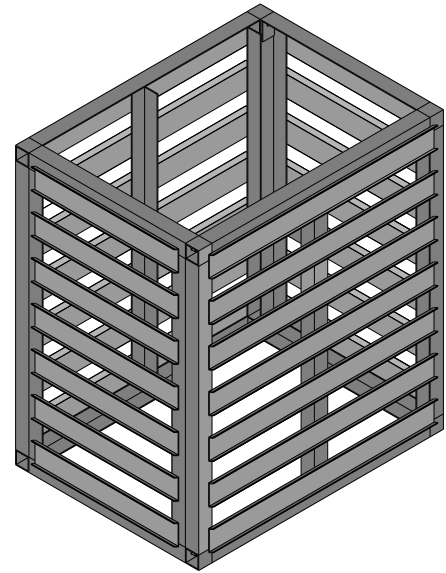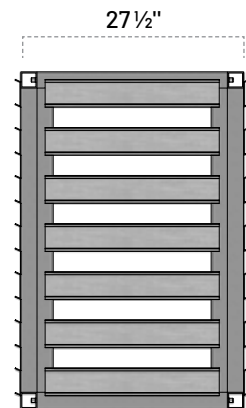
DIMENSIONS
WITH FASCIA PANEL
32 ½" x 41 ¾" (Outside To Outside)

WEIGHT
65 lbs
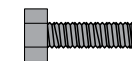
36 ¾"

UL-CCBP-OS .... 2 PC
Chimney Front & Back Panel

27 ½"

27 ½"

36 ¾"

UL-ECP .... 2 PC
Chimney End-Clad Panel

B01 .... 8x
9/16" Bolt
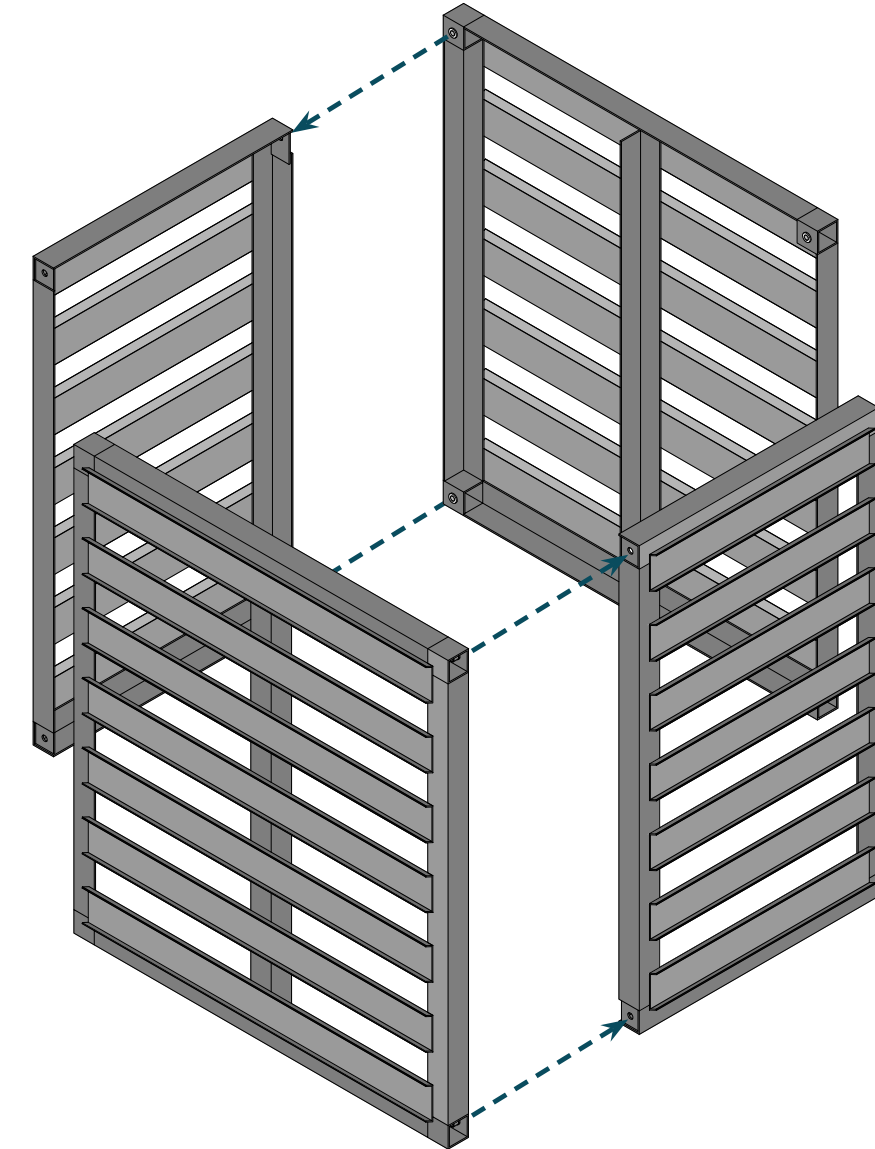
ST02 .... 14x
1 ¼" Self-Tap Screw

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

ULHAR 4x
Horizontal Adjustable Rail

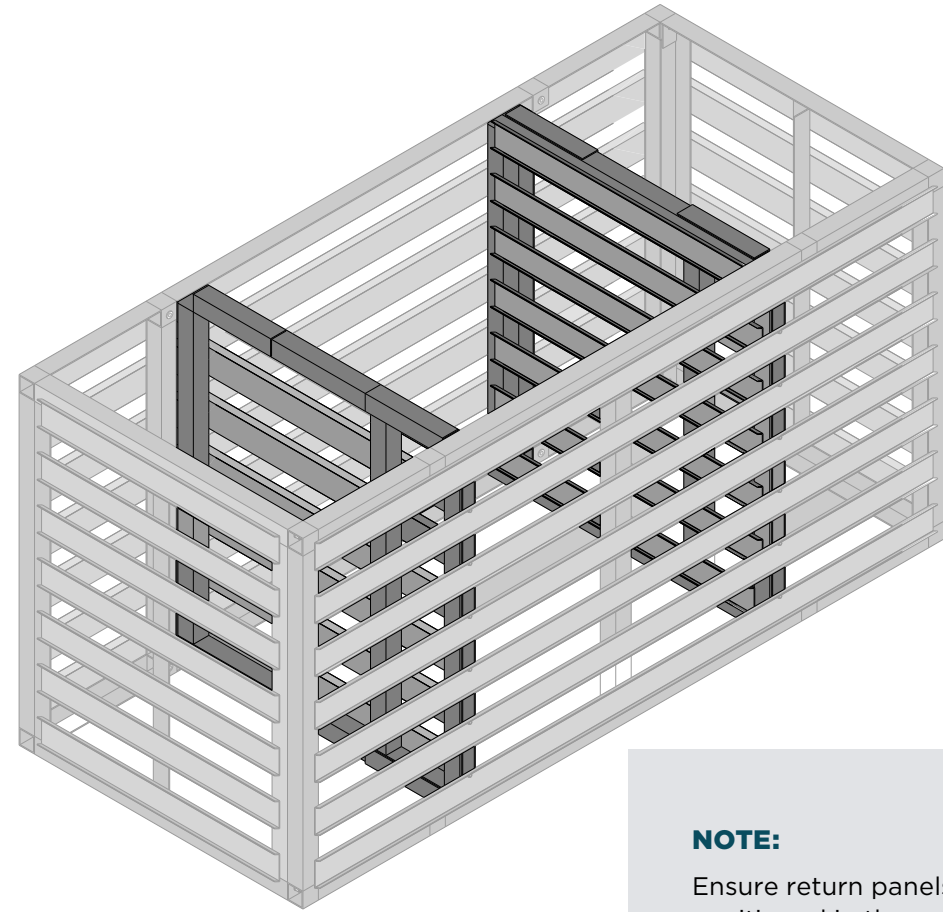# 42" **Fire Cabinet** *Woodburning*
CHIMNEY COMPONENTS *(CONTINUED)*

NOTE:

Refer to page 28 for Fireplace assembly sequence.
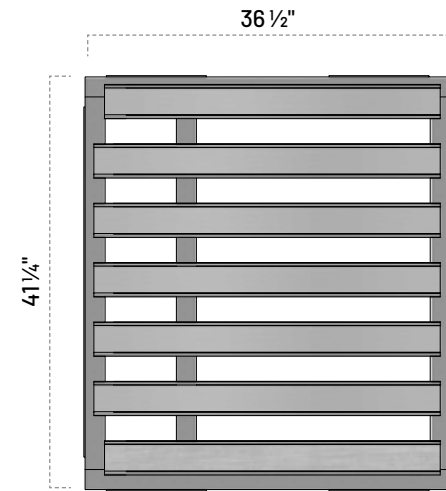
42" **Fireplace** *Woodburning*
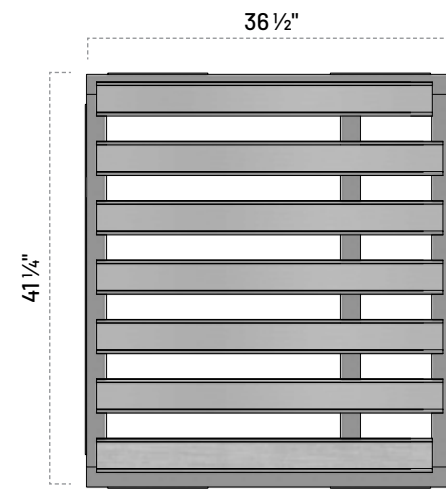## OVERSIZED RETURN PANEL

MUST BE BUILT WITH
OVERSIZED WIDTH
COMPONENTS

NOTE:

Ensure return panels are
positioned in the correct
orientation (right and left).
Rails should be facing inward
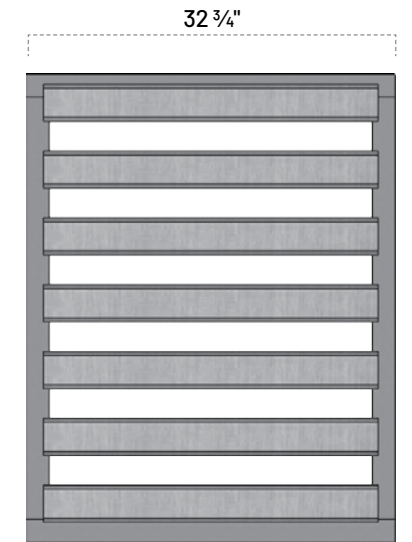and mantle tube support
should be facing frontside.

36 ½"

41 ¼"

UL-FIR-LFT-OS..............1 PC
Left Return Panel

36 ½"

41 ¼"

UL-FIR-RTN-OS..............1 PC
Right Return Panel

42" **Fireplace** *Woodburning*
OVERSIZED END-CLAD

32 ¾"
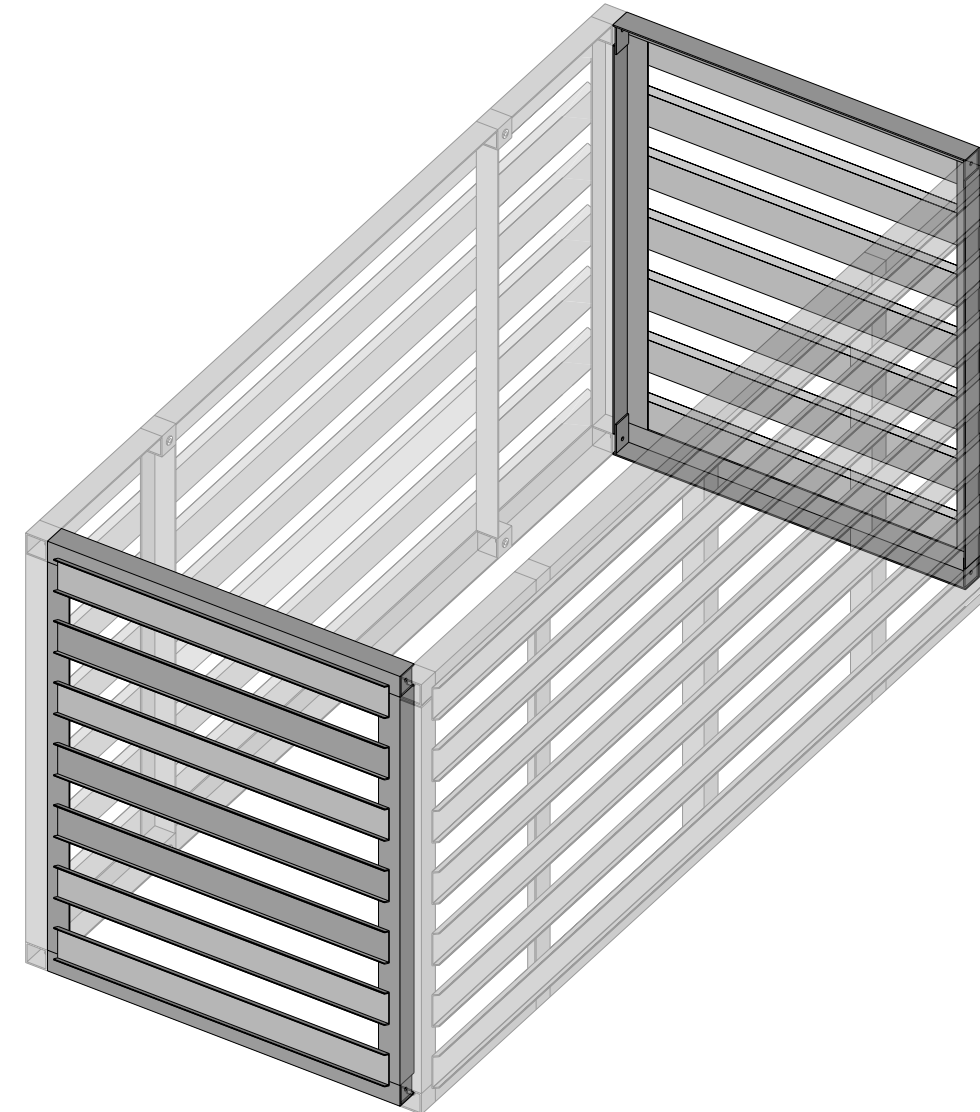
UL-ECP-OS..............2x
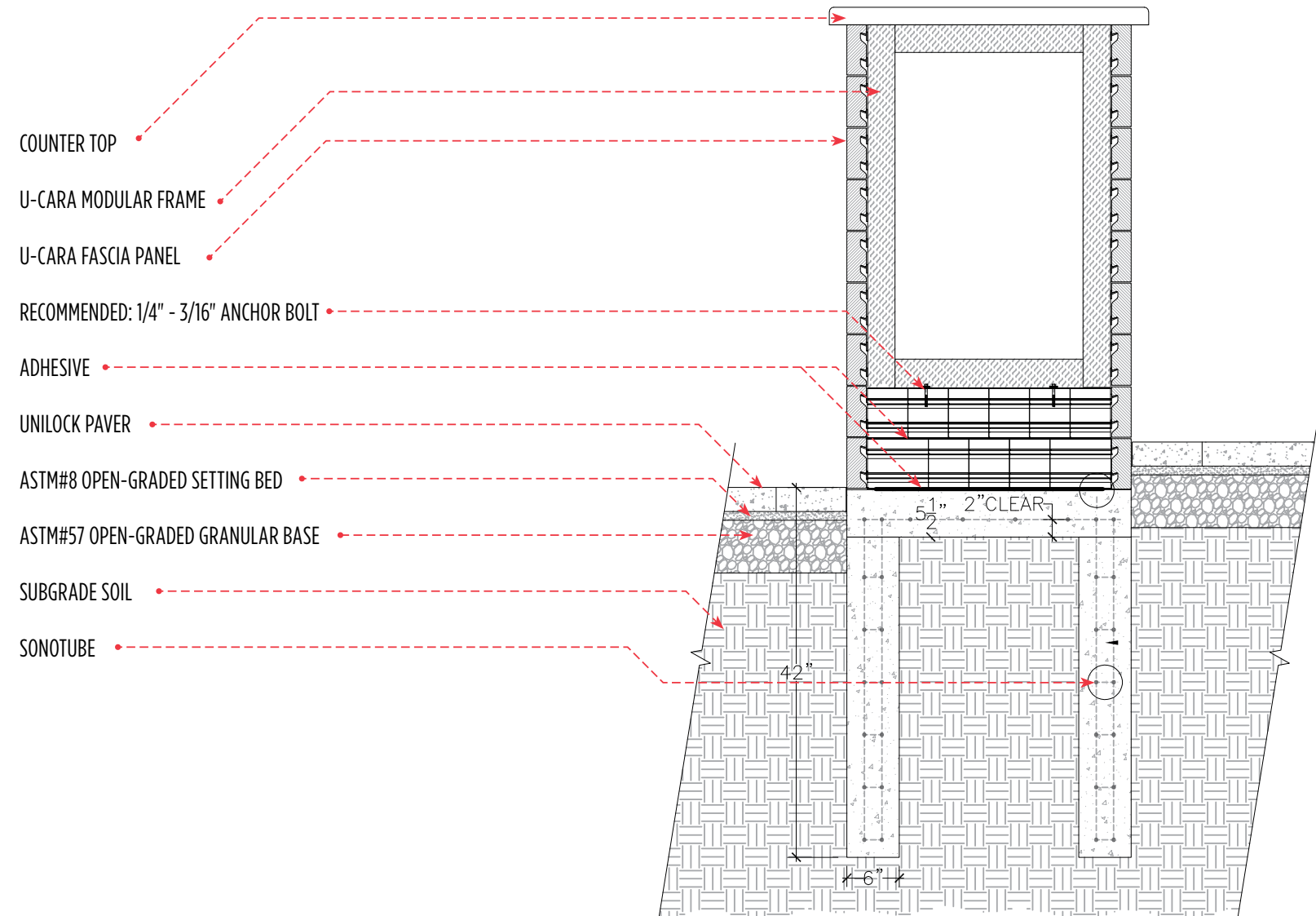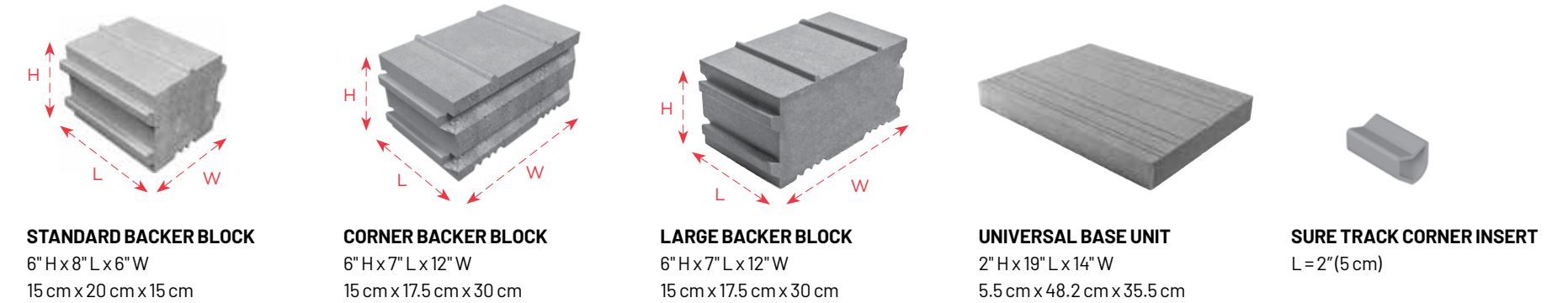End Clad Panel Oversized

NOTE:

Remove connecting
struts and replace with
end-clad panel using
existing hardware.
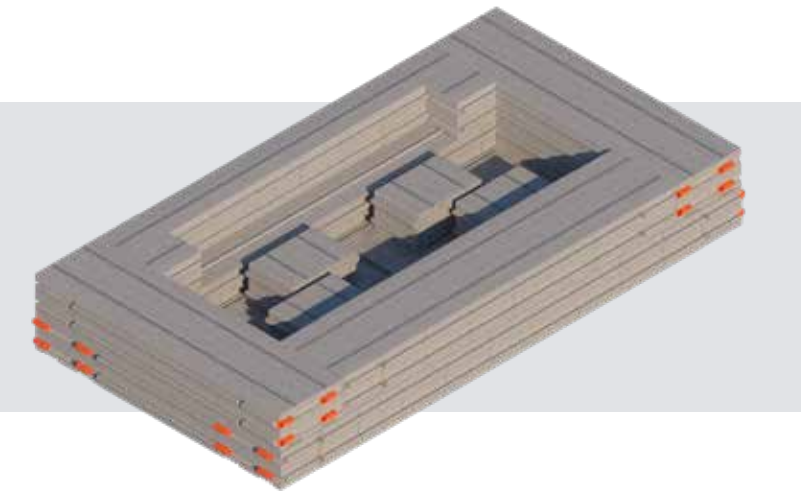
Modular System Base
TYPICAL

- COUNTER TOP
- U-CARA MODULAR FRAME
- U-CARA FASCIA PANEL
- RECOMMENDED: 1/4" - 3/16" ANCHOR BOLT
- ADHESIVE
- UNILOCK PAVER
- ASTM#8 OPEN-GRADED SETTING BED
- ASTM#57 OPEN-GRADED GRANULAR BASE
- SUBGRADE SOIL
- SONOTUBE

2"CLEAR

42"

6"

42" Fireplace
BACKER BLOCK COMPONENTS

STANDARD BACKER BLOCK
6" H x 8" L x 6" W
15 cm x 20 cm x 15 cm

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

LARGE BACKER BLOCK
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
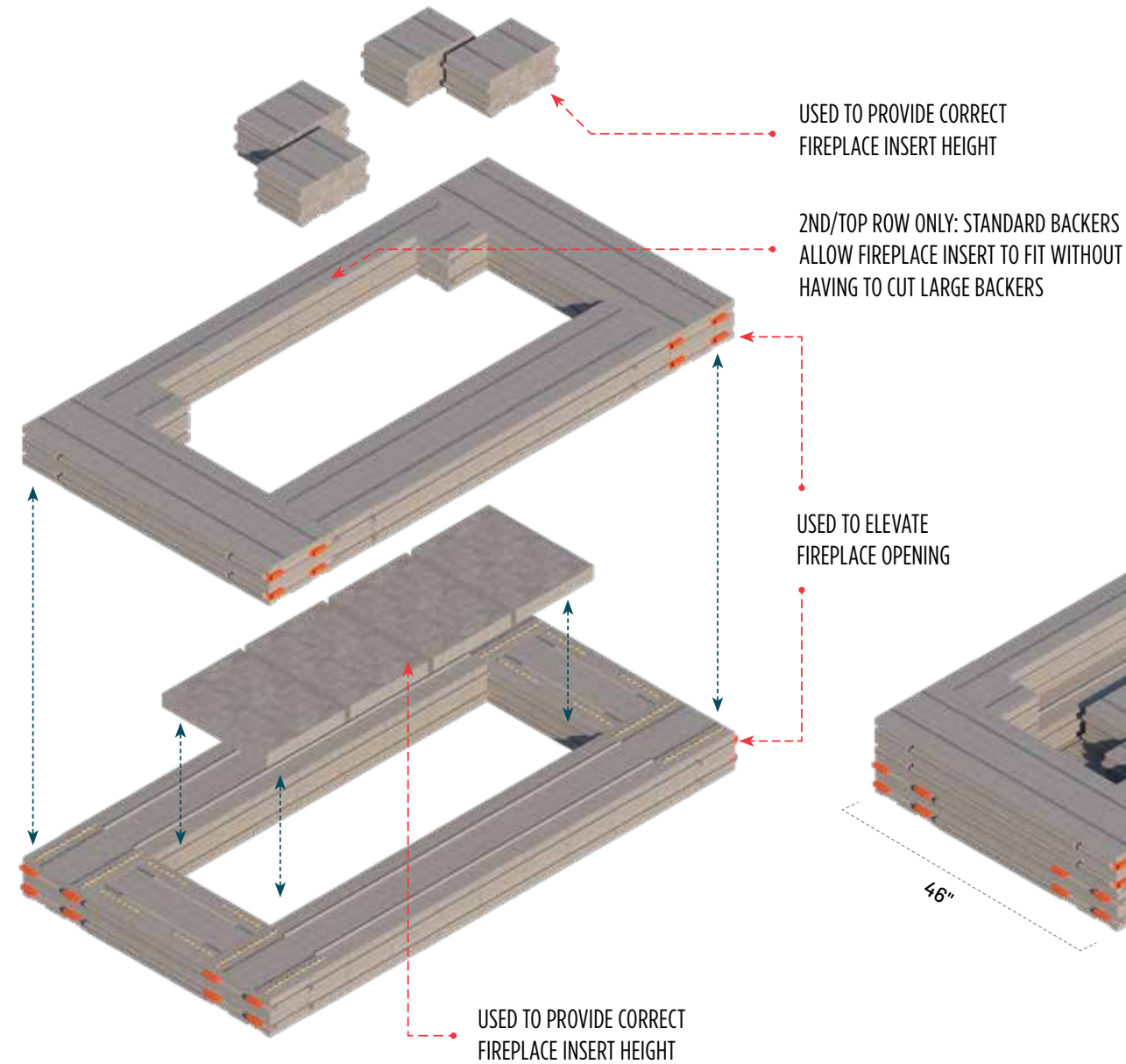
SURE TRACK CORNER INSERT
L = 2" (5 cm)

NOTE:

A Backer base is used to achieve desired firebox height and in some builds, add an attached hearth. Fireplace Cabinet is 42" tall and each row of Backer blocks will add an additional 6" of height.
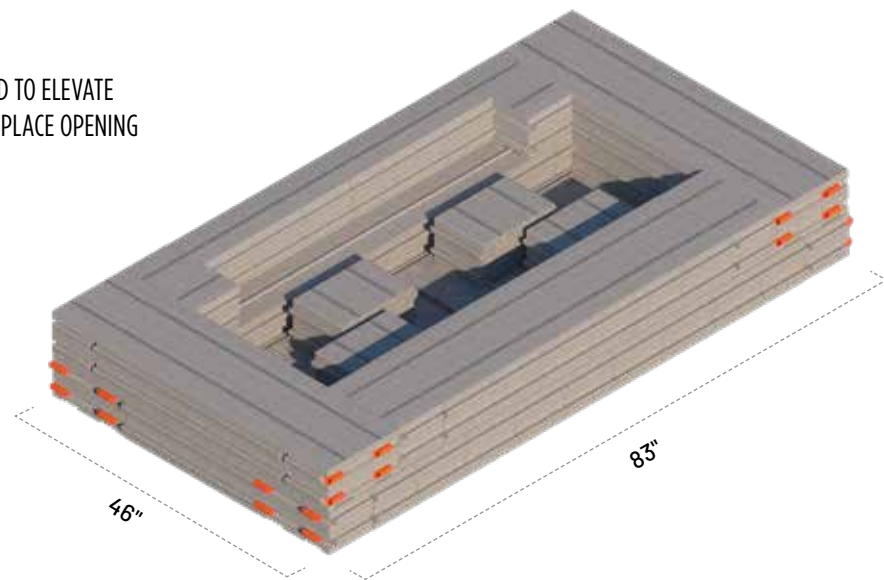
42" **Fireplace** *Woodburning*
BACKER BLOCK ADJUSTABLE BASE

USED TO PROVIDE CORRECT
FIREPLACE INSERT HEIGHT

2ND/TOP ROW ONLY: STANDARD BACKERS
ALLOW FIREPLACE INSERT TO FIT WITHOUT
HAVING TO CUT LARGE BACKERS

USED TO ELEVATE
FIREPLACE OPENING
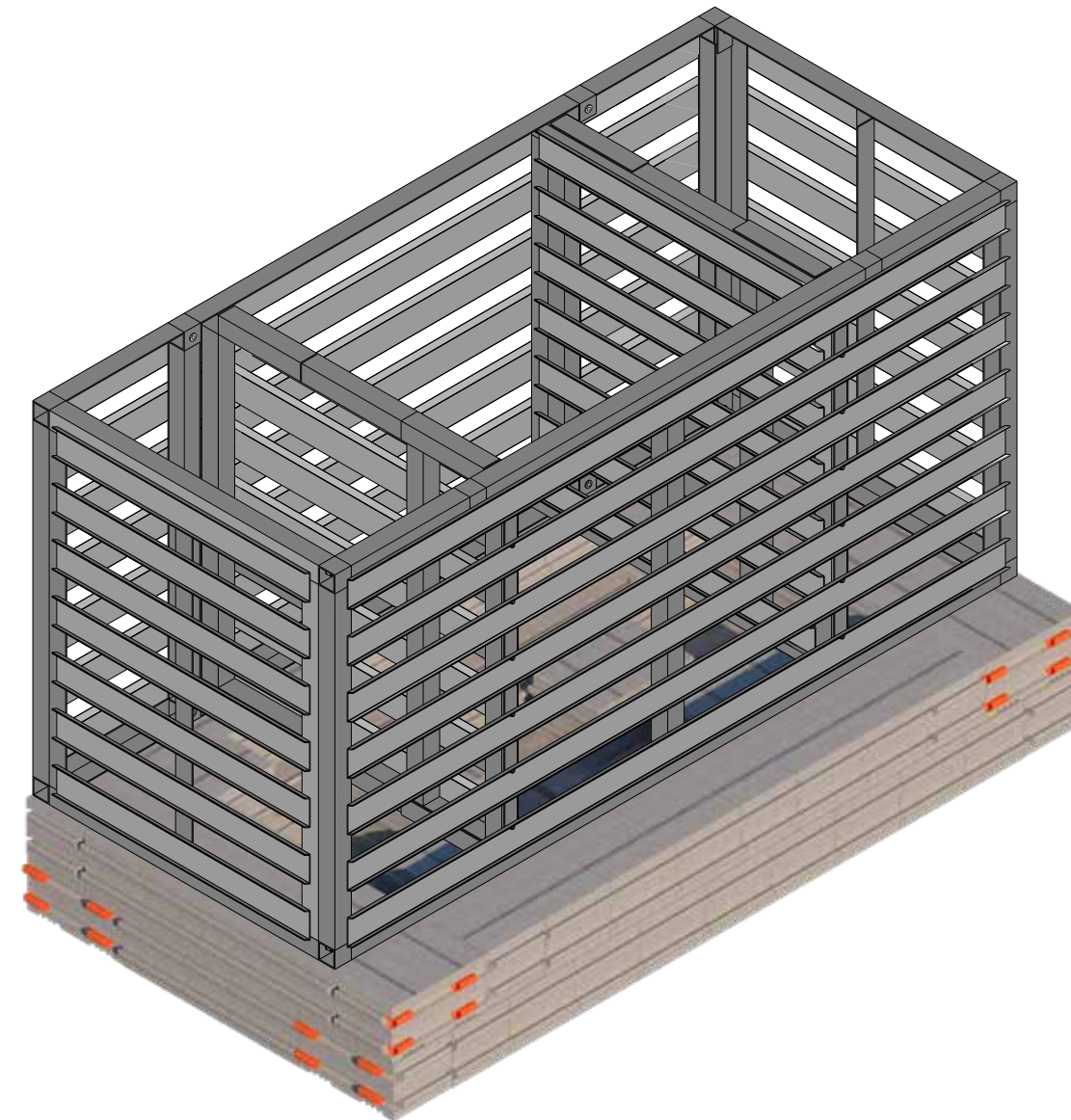
USED TO PROVIDE CORRECT
FIREPLACE INSERT HEIGHT

NOTE:

This should be
constructed on
top of poured in
place concrete
pad (similar to
page 12).

FINISHED DIMENSIONS
88" x 51" (With panels)

46"

83"

BACKER BLOCK ADJUSTABLE BASE *(CONTINUED)*

NOTE:

This layout includes
a hearth. If no hearth
is desired, width can
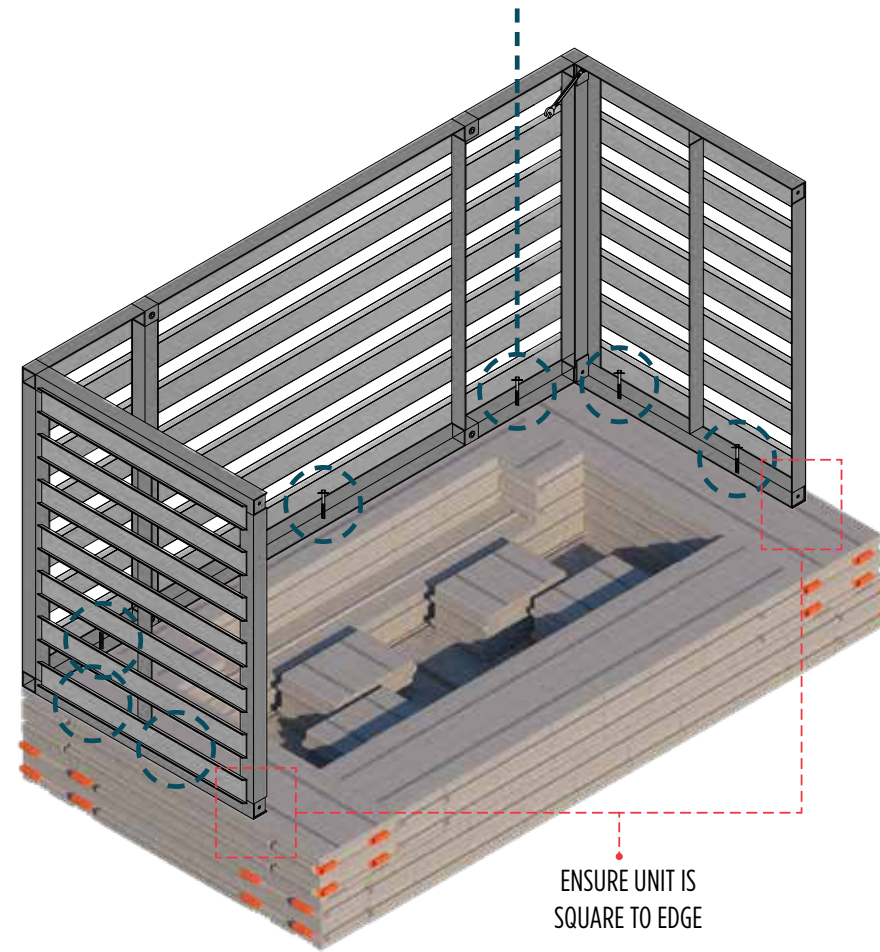be shortened by
9 ¼" to be flush with
cabinet.
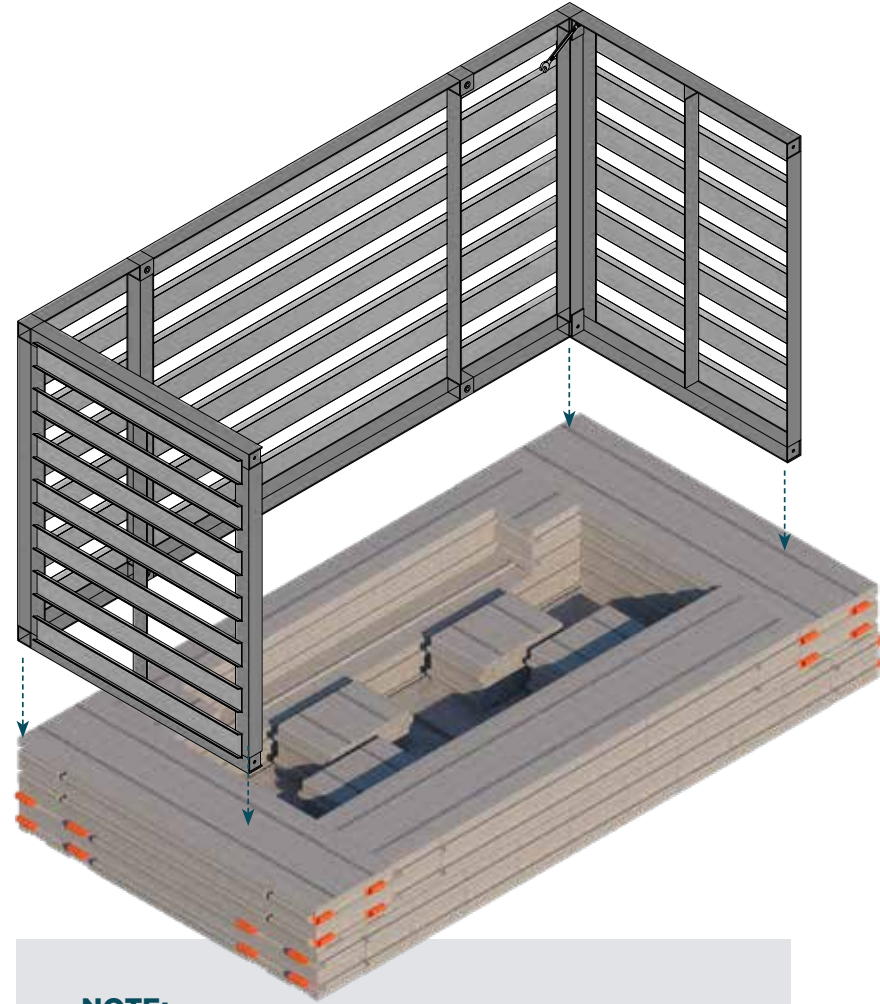
NOTE:
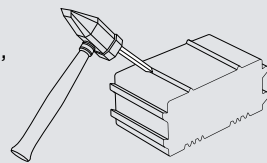
Place 3-sided assembly on Backer Base - Using 1/4"- 3/8" Concrete anchors (not included) connect cabinet to Backers.

NOTE:

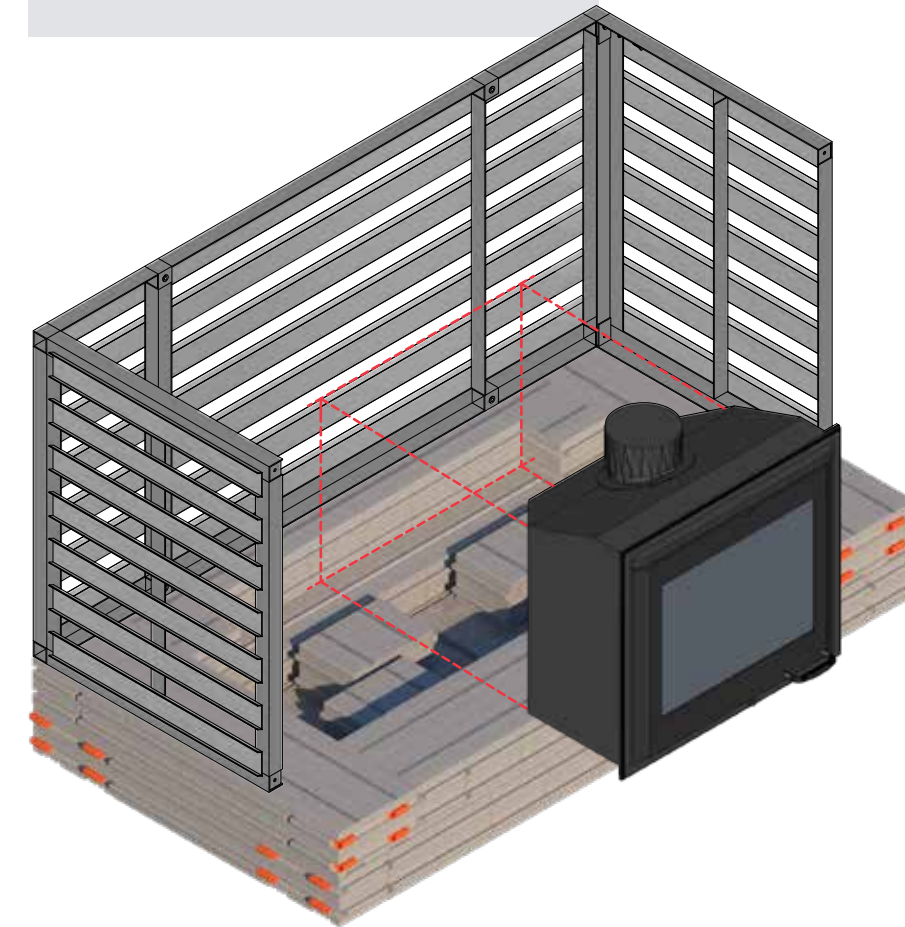Prior to attaching cabinet top, lugs will need to be removed with a hammer and chisel (top row of block only).
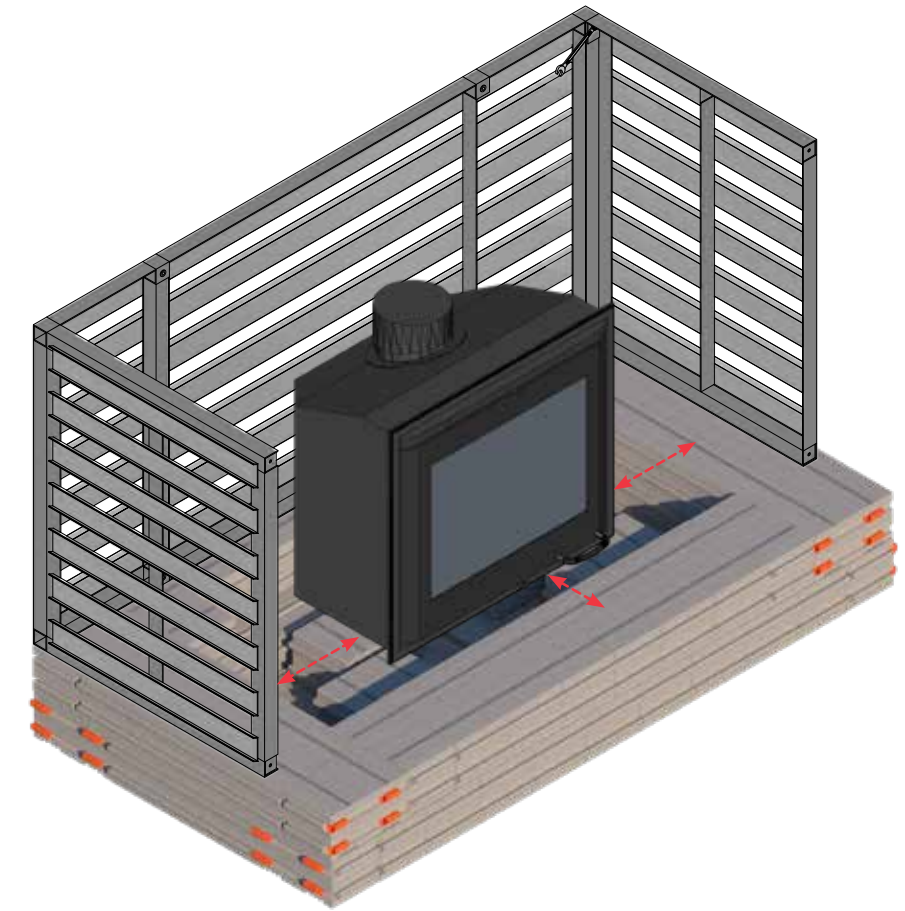
ENSURE UNIT IS
SQUARE TO EDGE

NOTE:

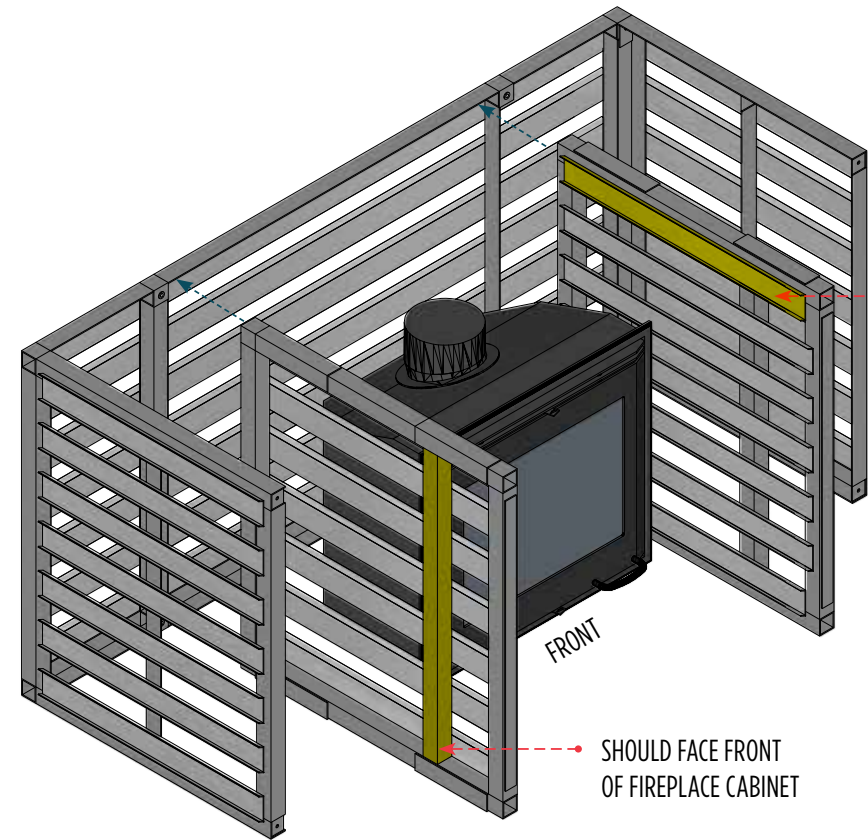Ensure to align with back row of Standard backer. This will ensure proper flue alignment with mantle.

NOTE:

Center Fireplace Cabinet in Backer Block cavity.

RAILS SHOULD FACE
INWARD AND UPWARD

FRONT

SHOULD FACE FRONT
OF FIREPLACE CABINET

NOTE:

Slide (tuck) Returns under the
top and bottom angle struts.
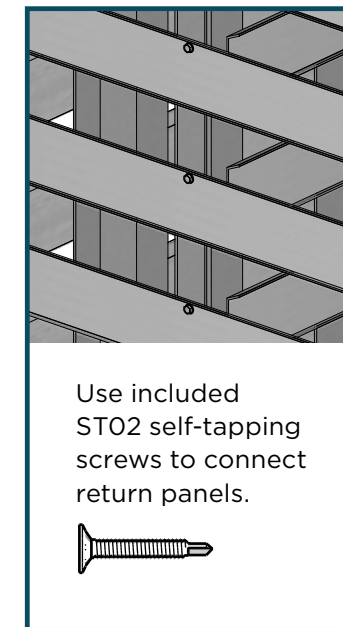
NOTE:

Return Panels have a Right
and Left unit. They should
be positioned on either side
of the firebox flange/edge.

360°

BACK
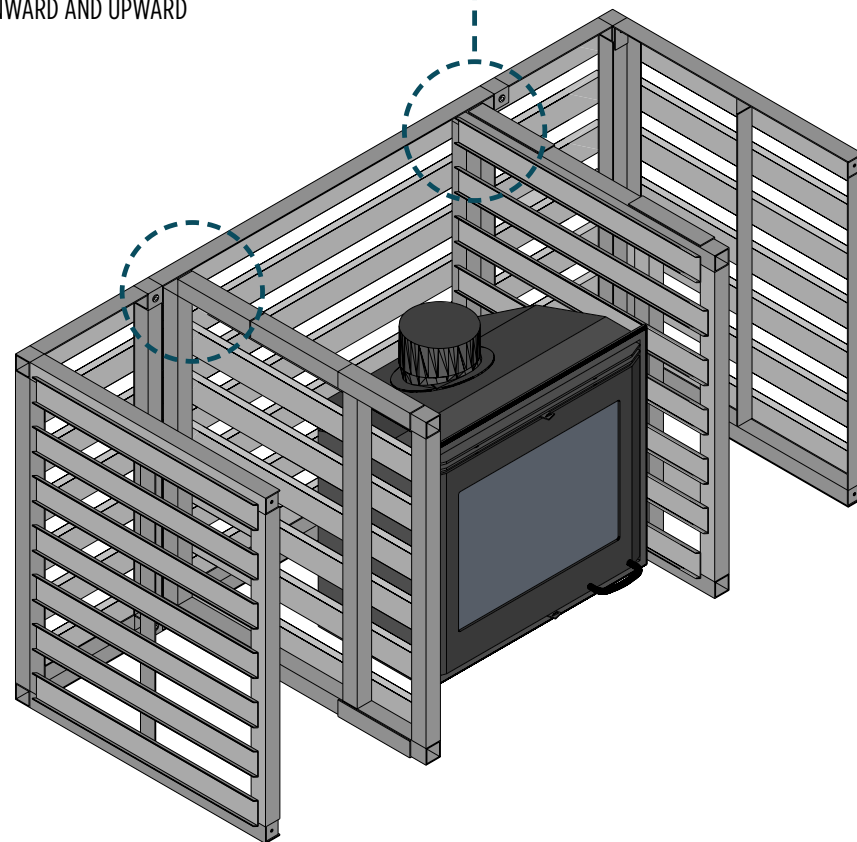
Use included
ST02 self-tapping
screws to connect
return panels.

NOTE:

Use a clamp to keep
returns aligned to
desired plumb and
level position while
attaching self-tapping
screws.

NOTE:

The screw position under the
top bend in each rail. Repeat
for opposite side.
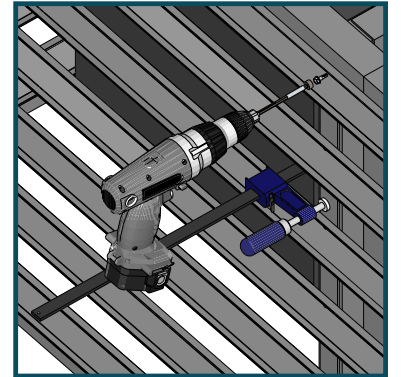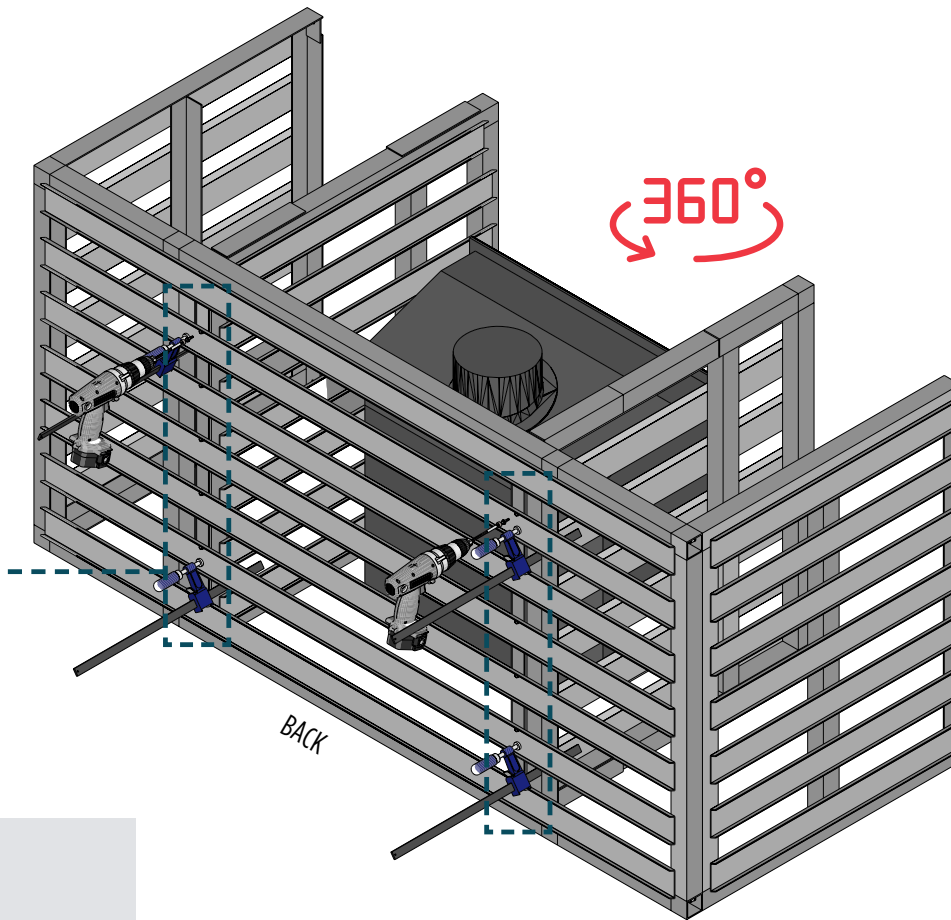
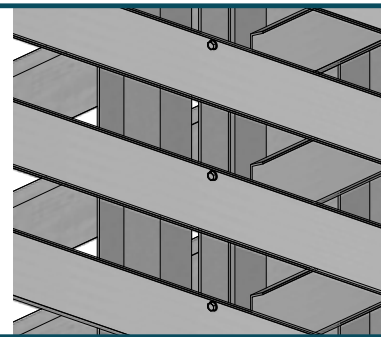REPEAT PREVIOUS
PROCESS FROM
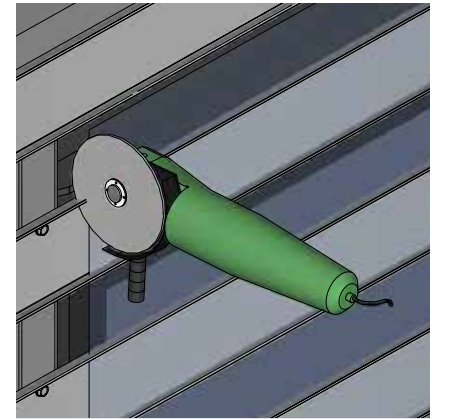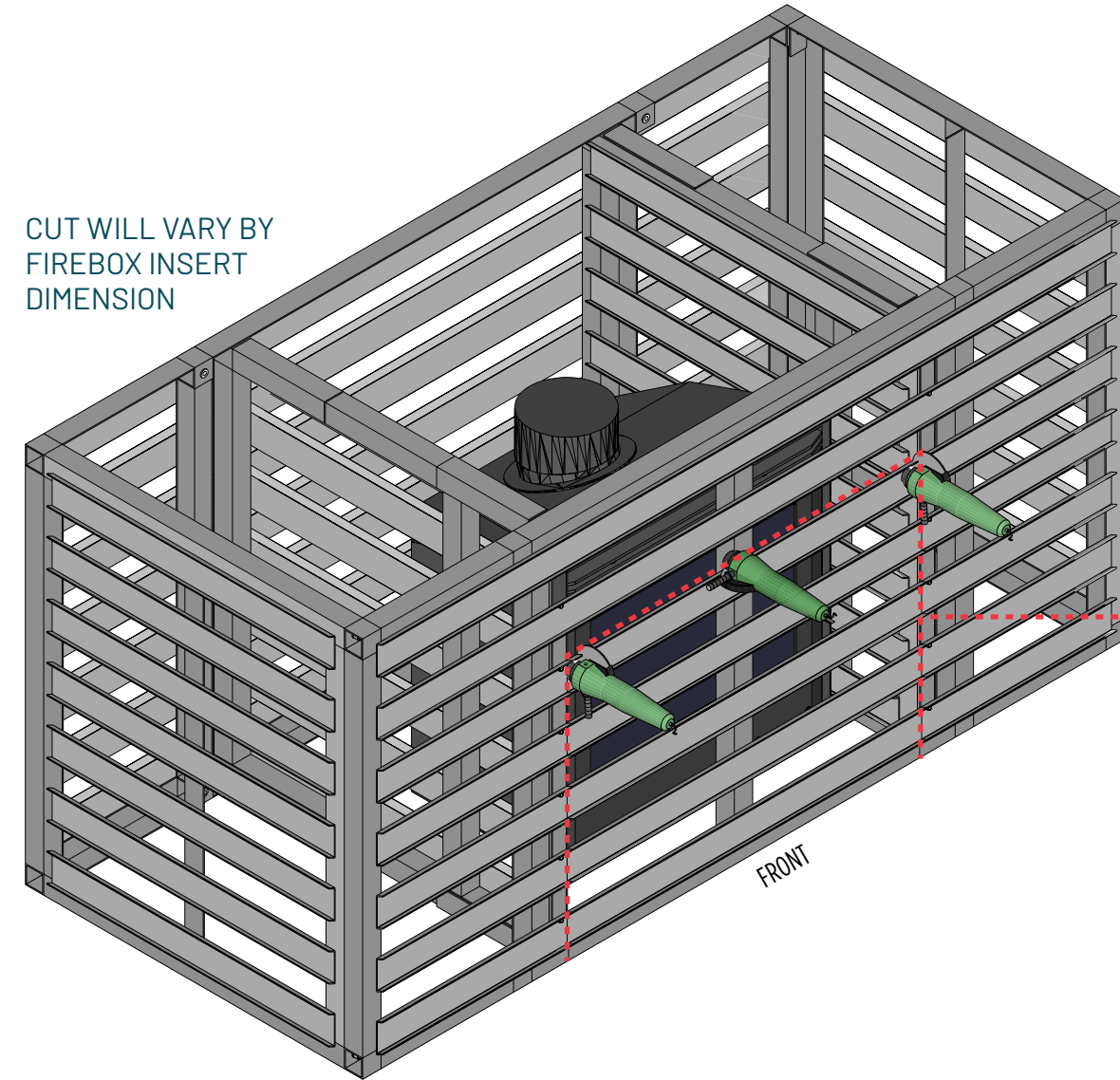BACK SIDE ON
PAGE 19
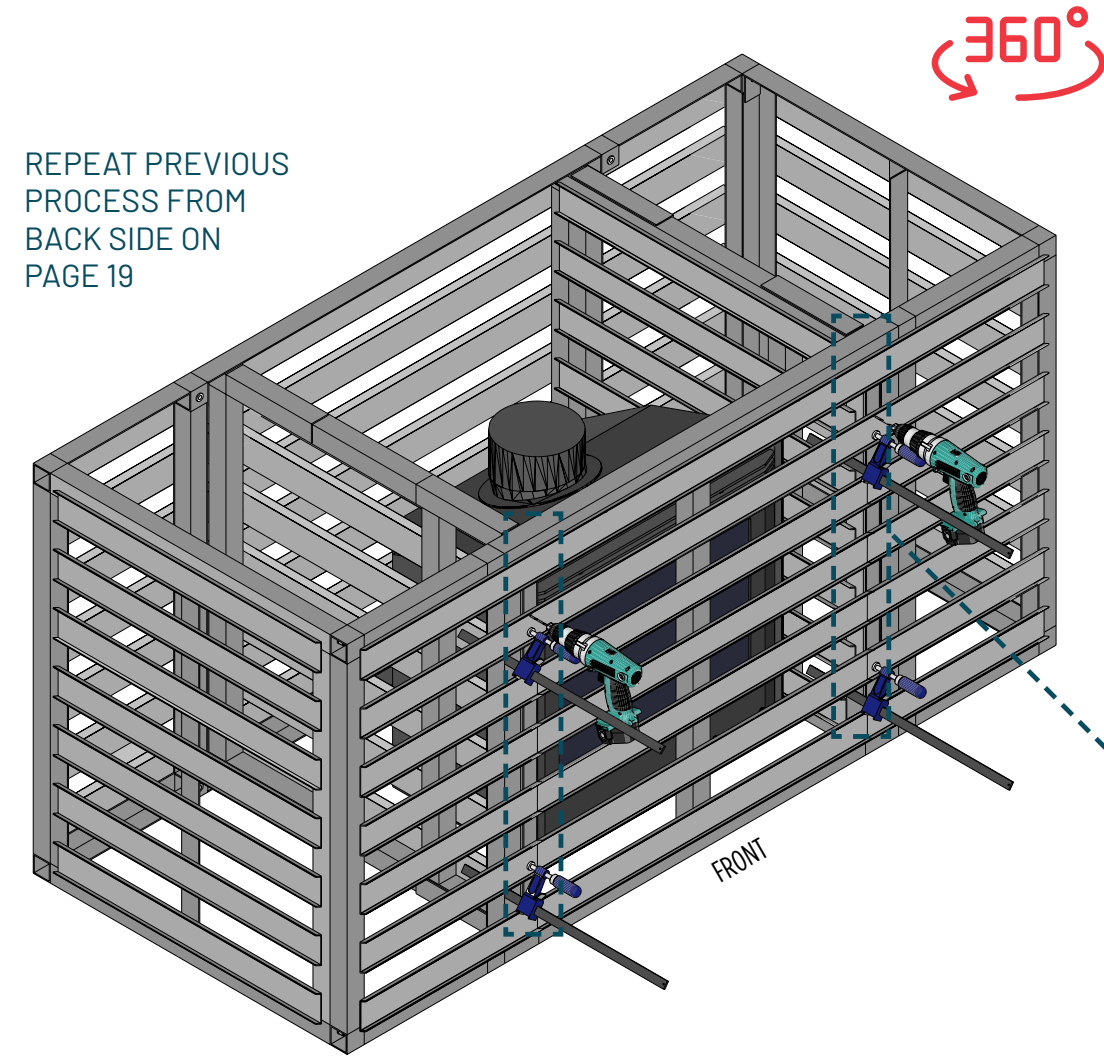
↻ 360°
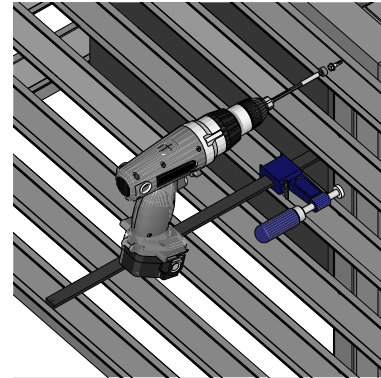
FRONT

NOTE:

Use a clamp to keep returns aligned to desired plumb and level position while attaching self-tapping screws.

Use included STO2 self-tapping screws to connect return panels.
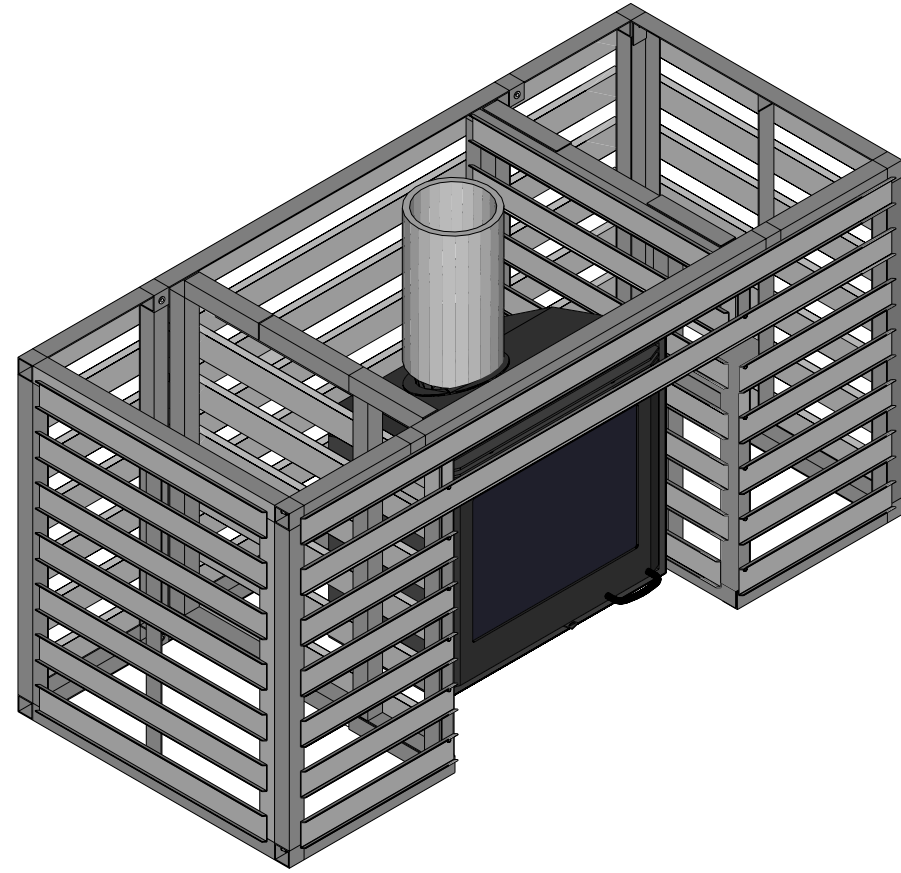
CUT WILL VARY BY
FIREBOX INSERT
DIMENSION

FRONT

NOTE:

Cut will start at the edge of each interior Return panel.

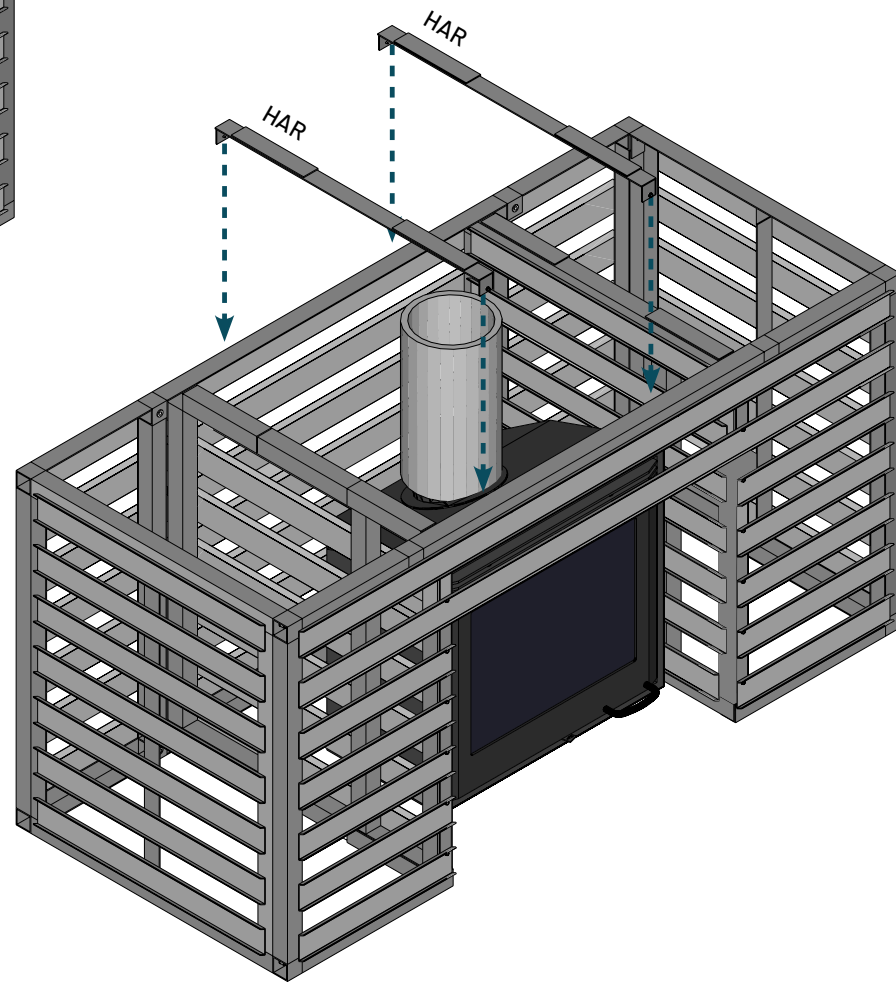Center Strut will also be cut as well as bottom rail.
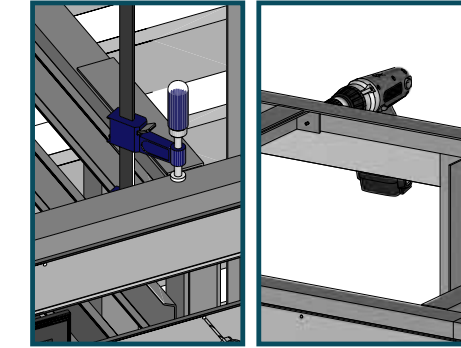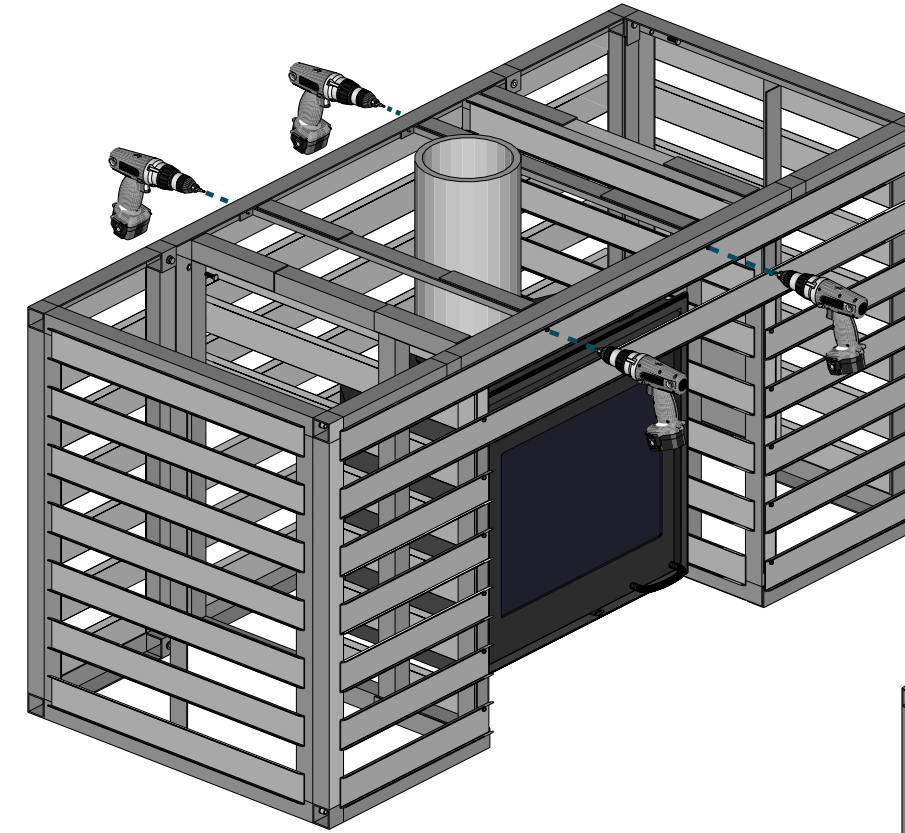
NOTE:

Adjust HAR on both sides of the flue pipe to help keep it aligned. These will be tucked under the top angle rail.
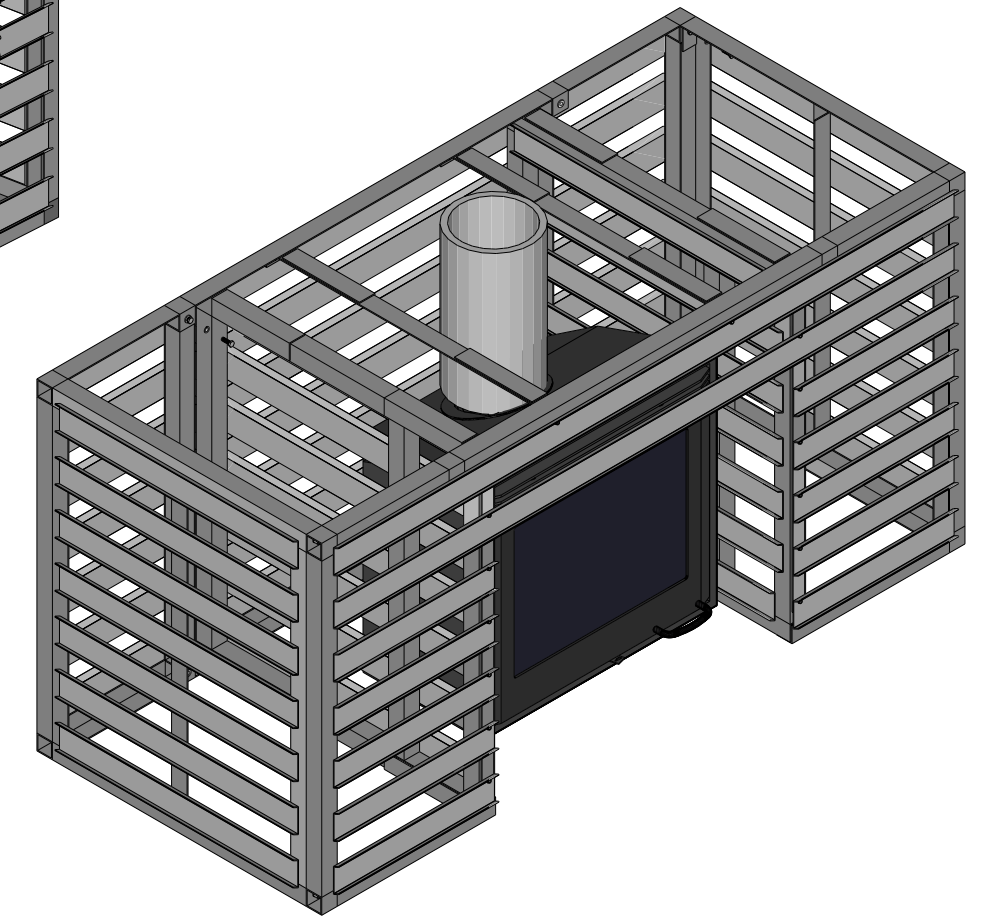
HAR
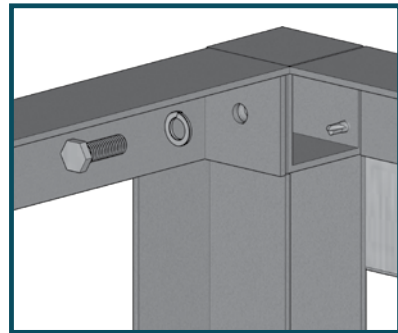
HAR

NOTE:

Snap 18" Flue pipe into insert.

NOTE:

Clamp and attach using ST02 self-tapping screws. Repeat process on backside.

NOTE:

Attach both ends and then bolt on the interior strut supports.
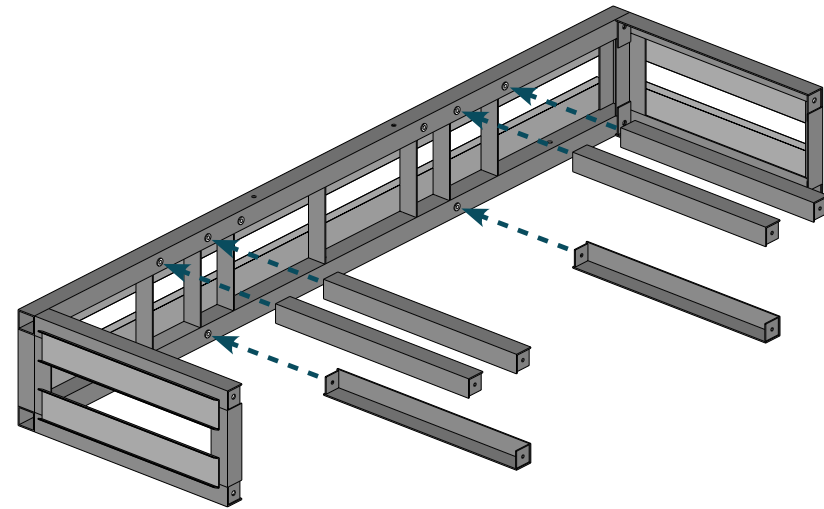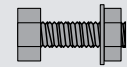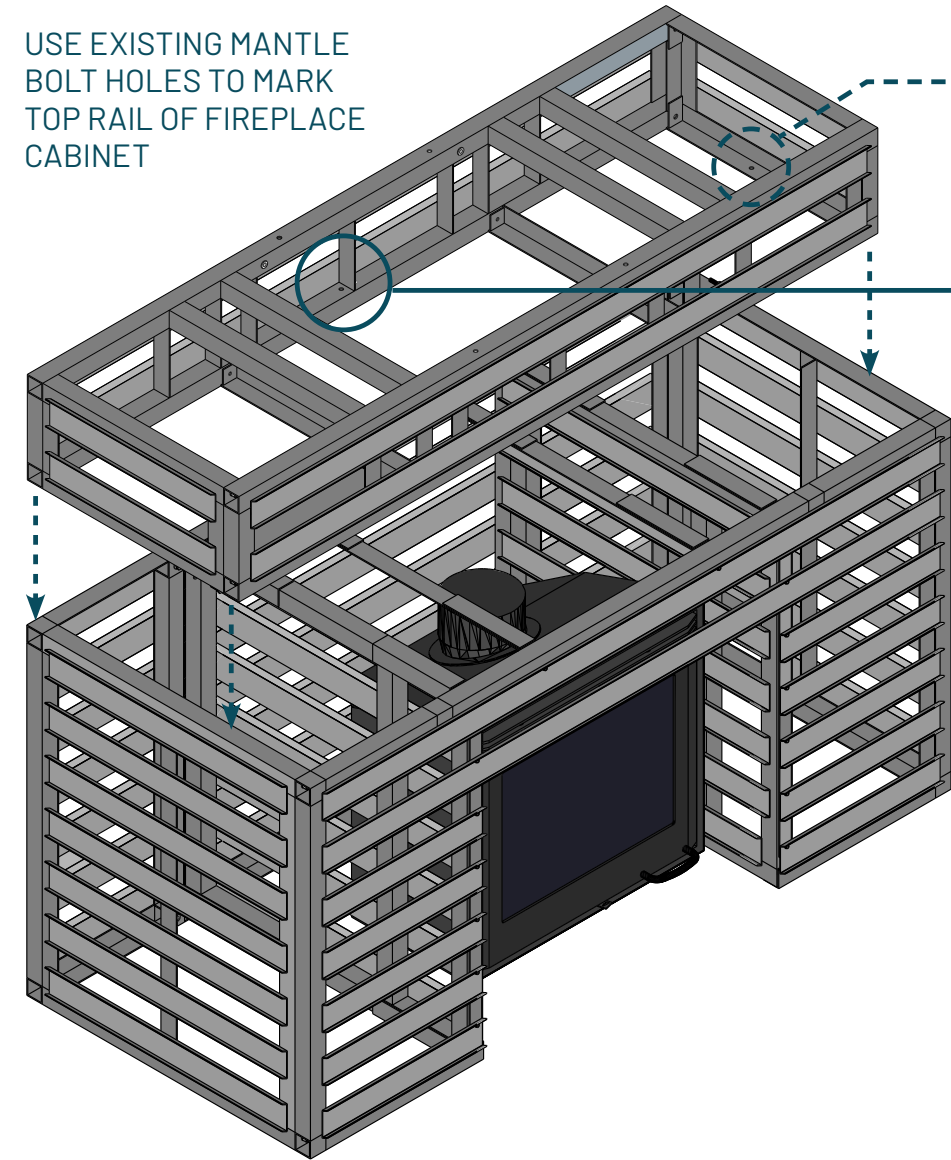
NOTE:

Attach front panel with included bolts. Hand tighten all components until all are attached and then tighten securely with impact/wrench.
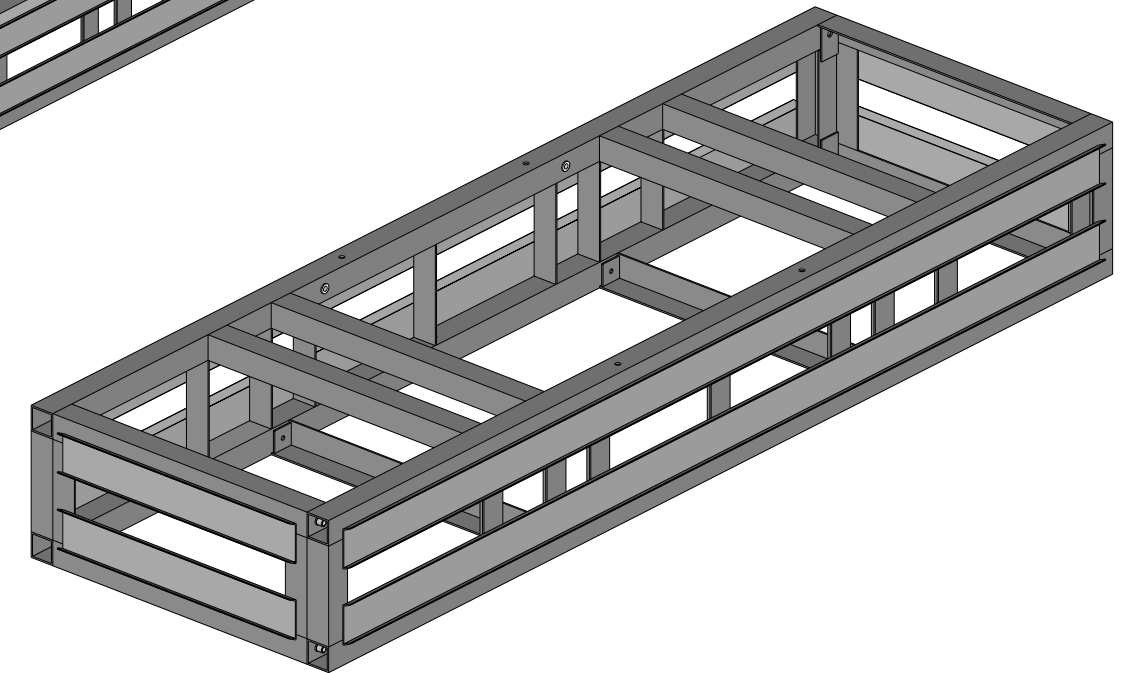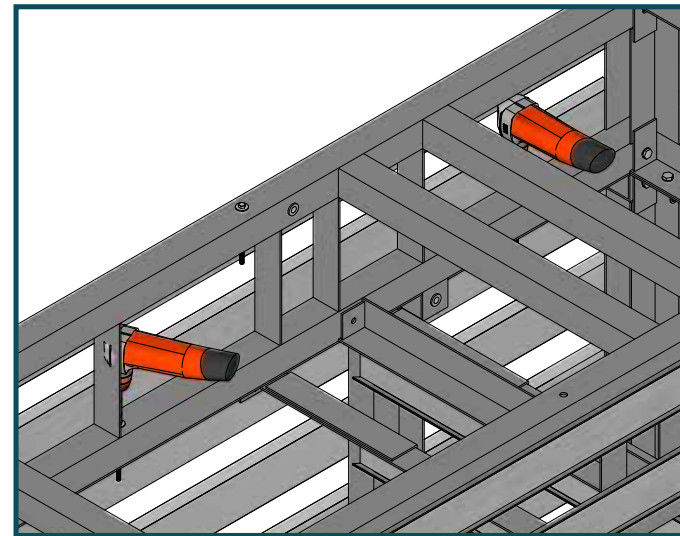
WIDE MANTLE ASSEMBLY *(CONTINUED)*

USE EXISTING MANTLE
BOLT HOLES TO MARK
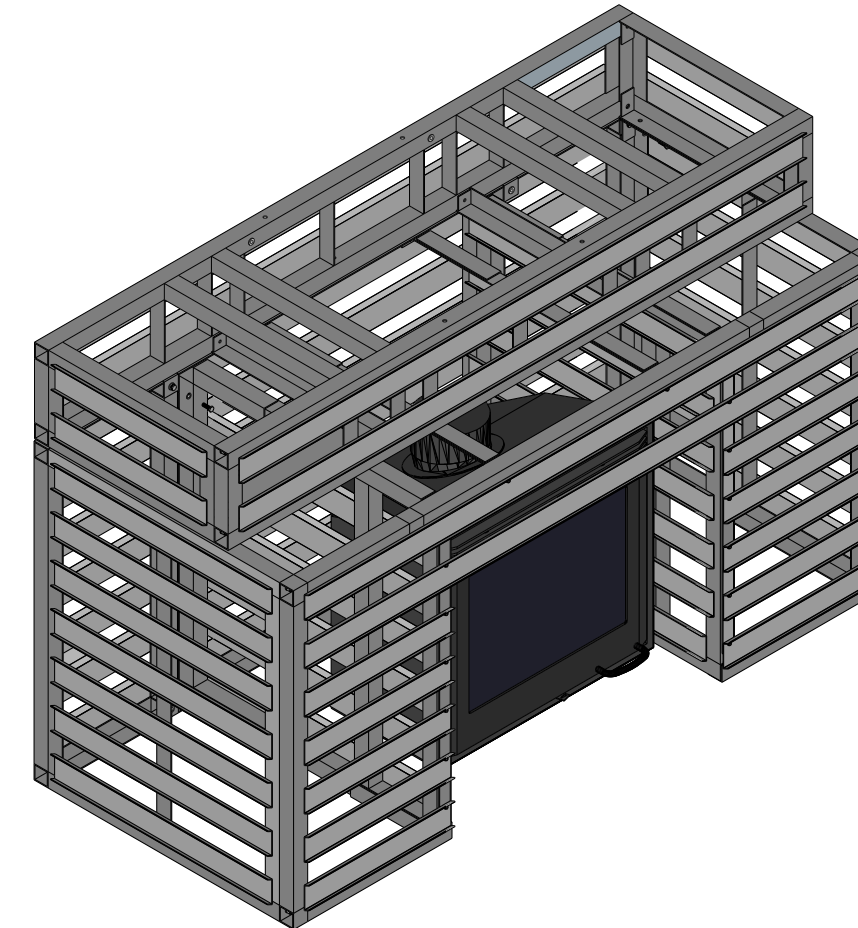TOP RAIL OF FIREPLACE
CABINET

B01 Bolts are to be used to connect
the end panels.

3" bolts are to be used on front and
back panel attachment and 1" bolts
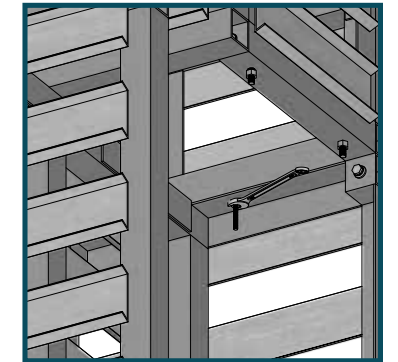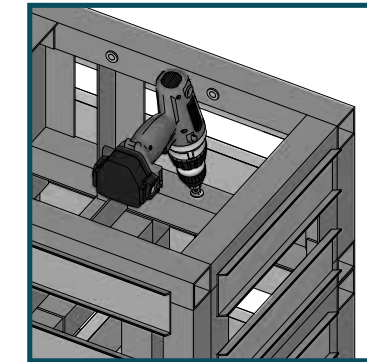are for the left and right panel.
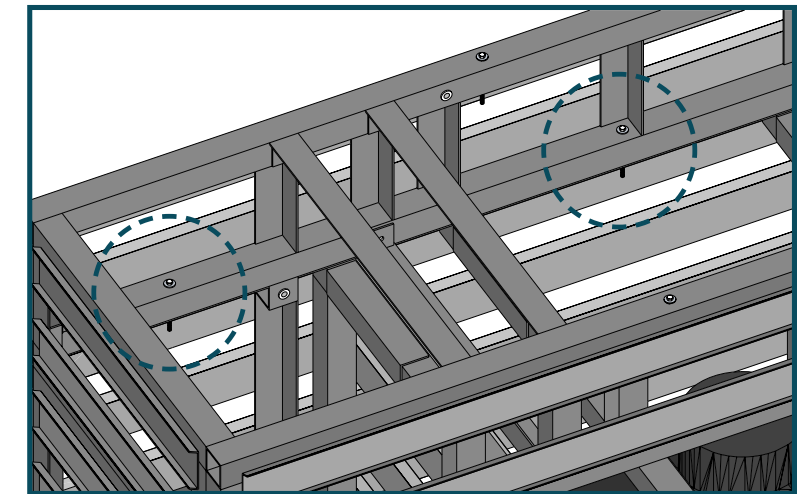
WIDE MANTLE ASSEMBLY *(CONTINUED)*

NOTE:

Drill hole into marked top rail of fireplace.
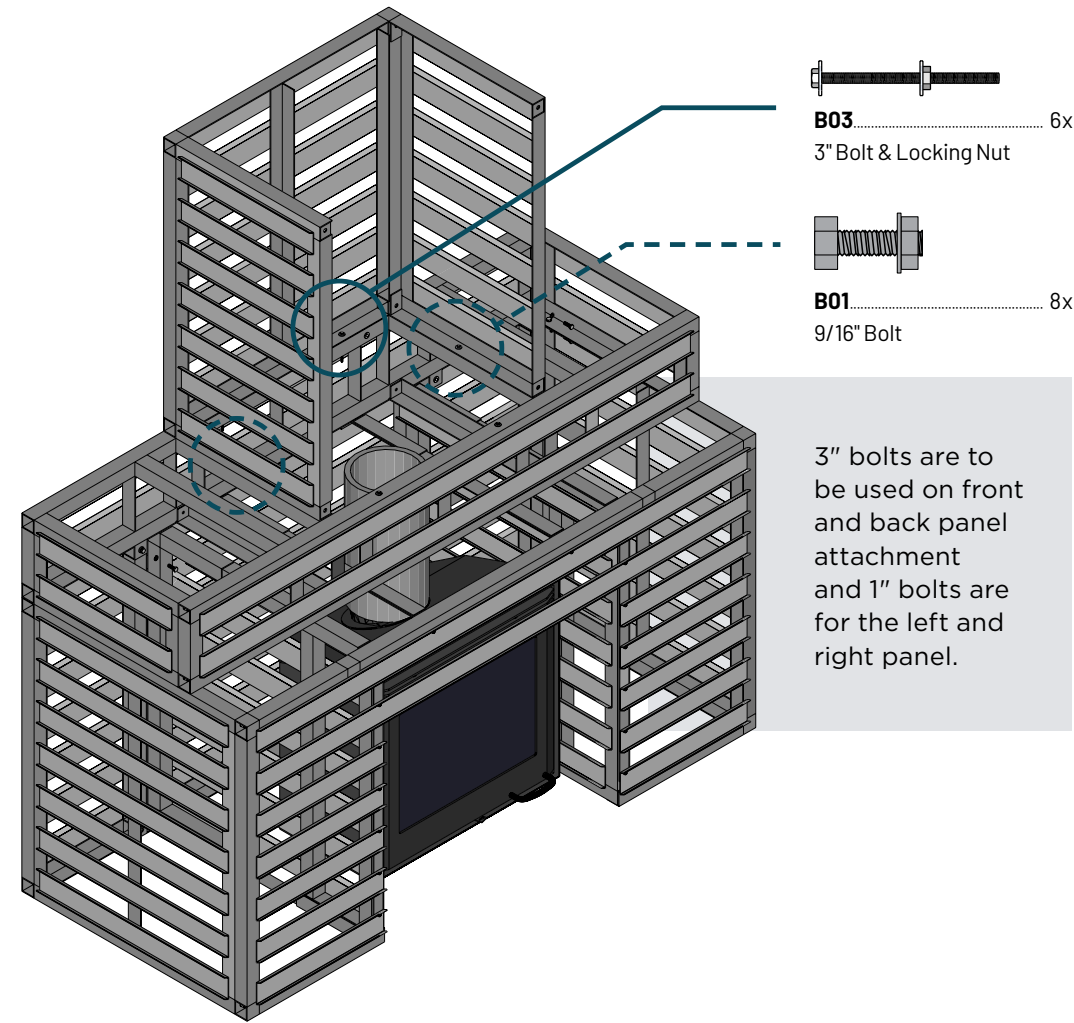Connect with 3" bolts and ensure locking-nuts
are used to secure cabinets.

NOTE:

Ensure bottom fireplace cabinet is
aligned with top mantle unit before
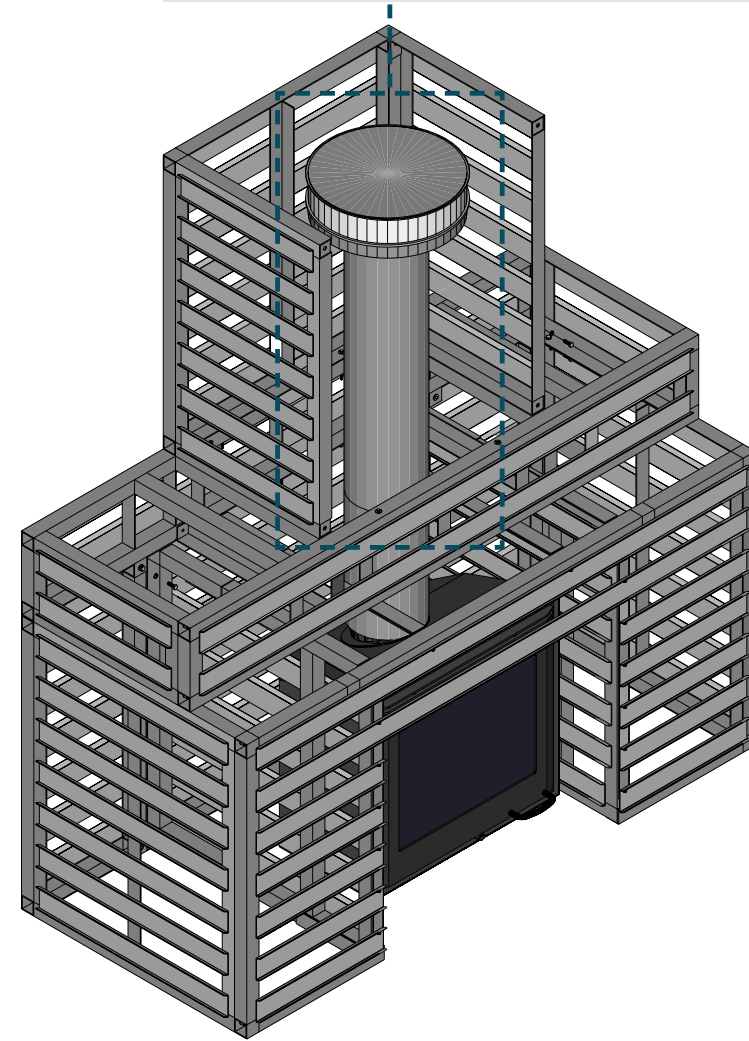securely tightening bolts.

42" Fireplace *Woodburning*
WIDE CHIMNEY ASSEMBLY

B03 .... 6x
3" Bolt & Locking Nut

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

3" bolts are to be used on front and back panel attachment and 1" bolts are for the left and right panel.
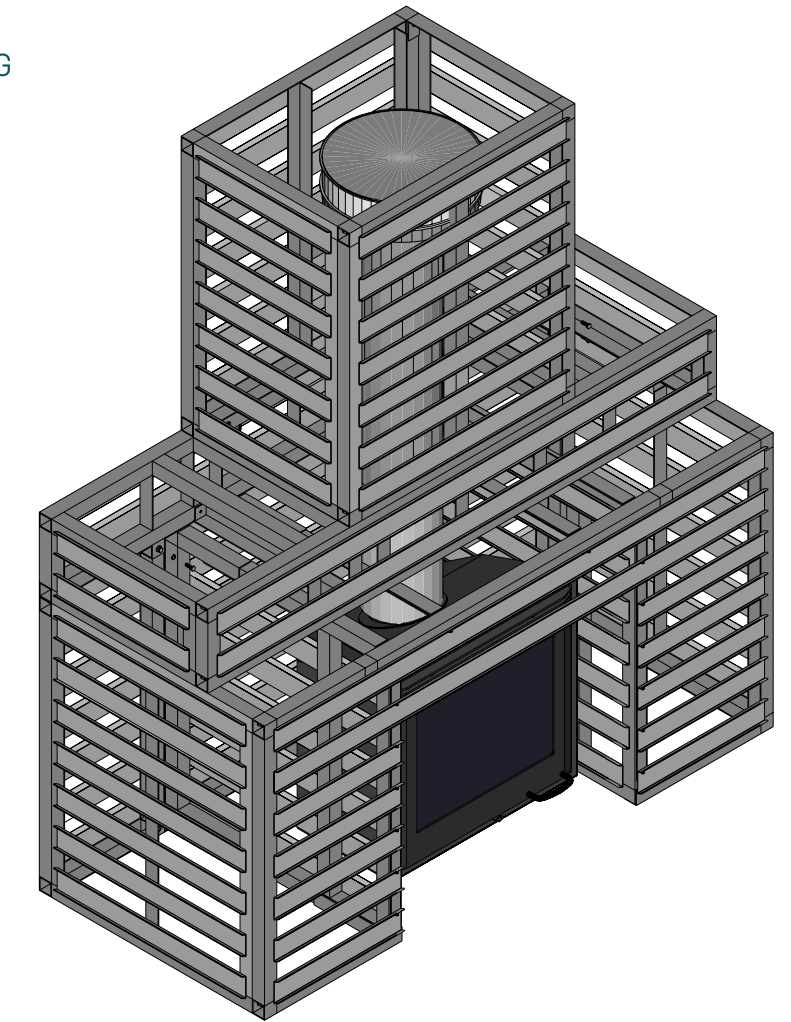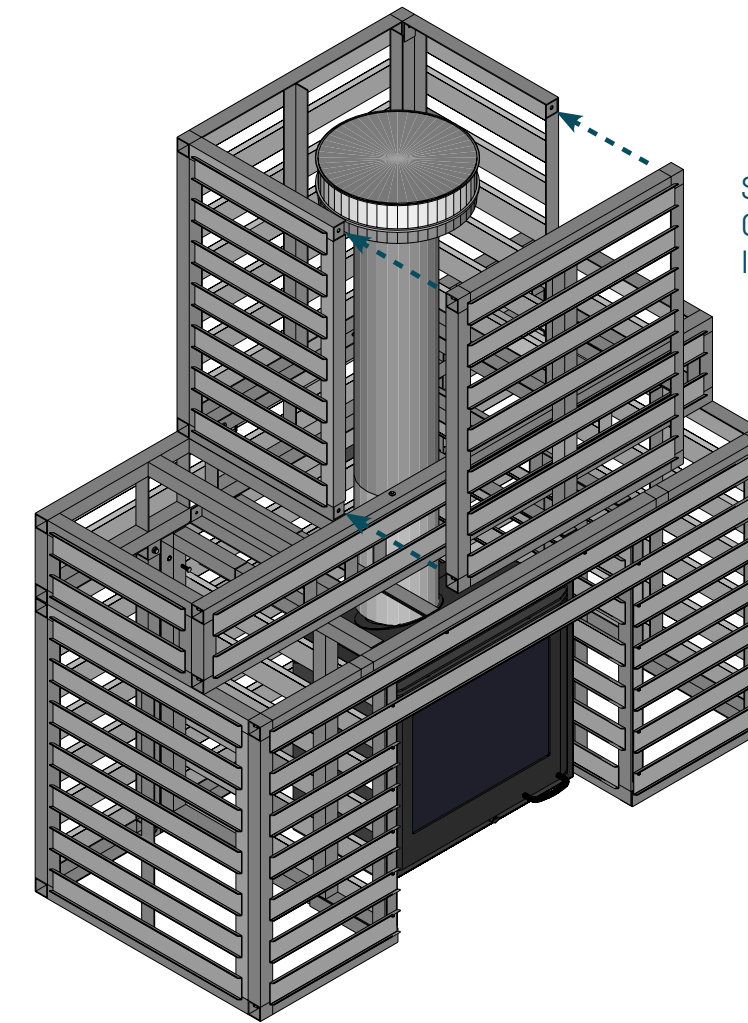
NOTE:

Remaining 36" flue assembly can be snapped in to bottom flue. Spark Arrestor can also be added at this point or as the final step once front panel is attached.
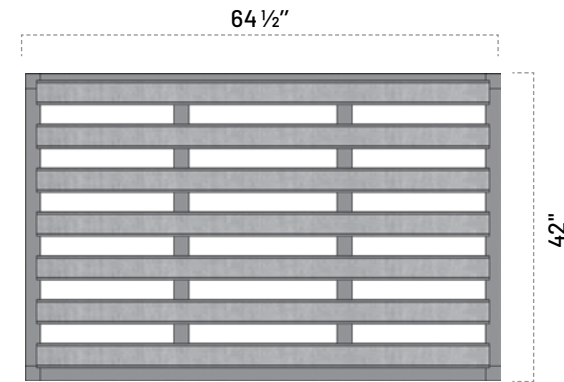
SECURE FRONT CHIMNEY PANEL USING INCLUDED B01 BOLTS
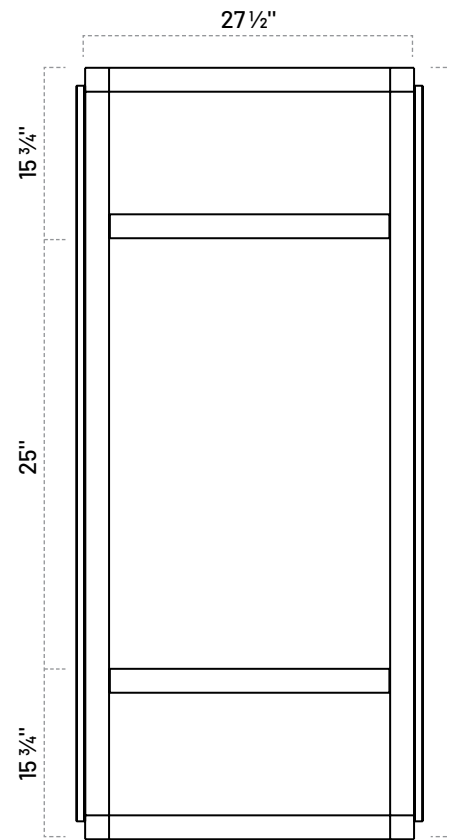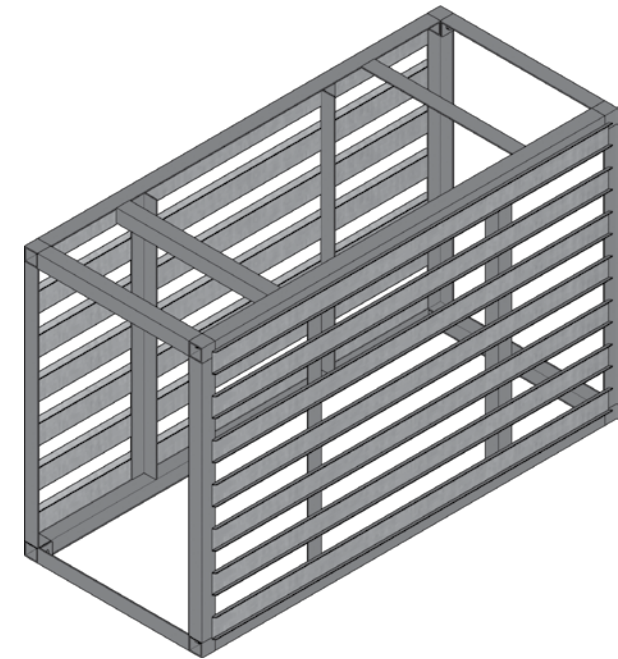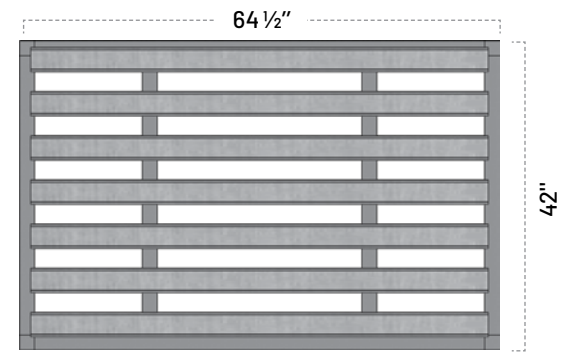
36" Fireplace *Woodburning*
BASE CABINET COMPONENTS

DIMENSIONS
32 ½" X 69 ½"
(Outside To Outside)

WEIGHT
Without end = 59 lbs
With end = 81 lbs

27 ½"

15 ¾"

25"

15 ¾"

64 ½"

64 ½"

42"

UL-BCP...................1 PC
Base Module Front Panel

64 ½"

42"

UL-BCBP...................1 PC
Base Module Back Panel
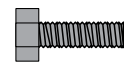
B01.................... 8x
9/16" Bolt

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

LW01.................... 8x
3/8" Lock Washer
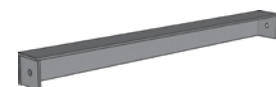
ULCS.................... 4x
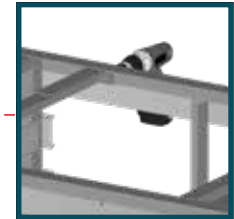Connecting Strut
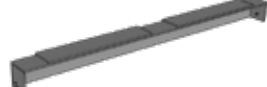
ULHAR.................... 2x
Horizontal Adjustable Rail

36" Fireplace *Woodburning*
BASE CABINET ASSEMBLY
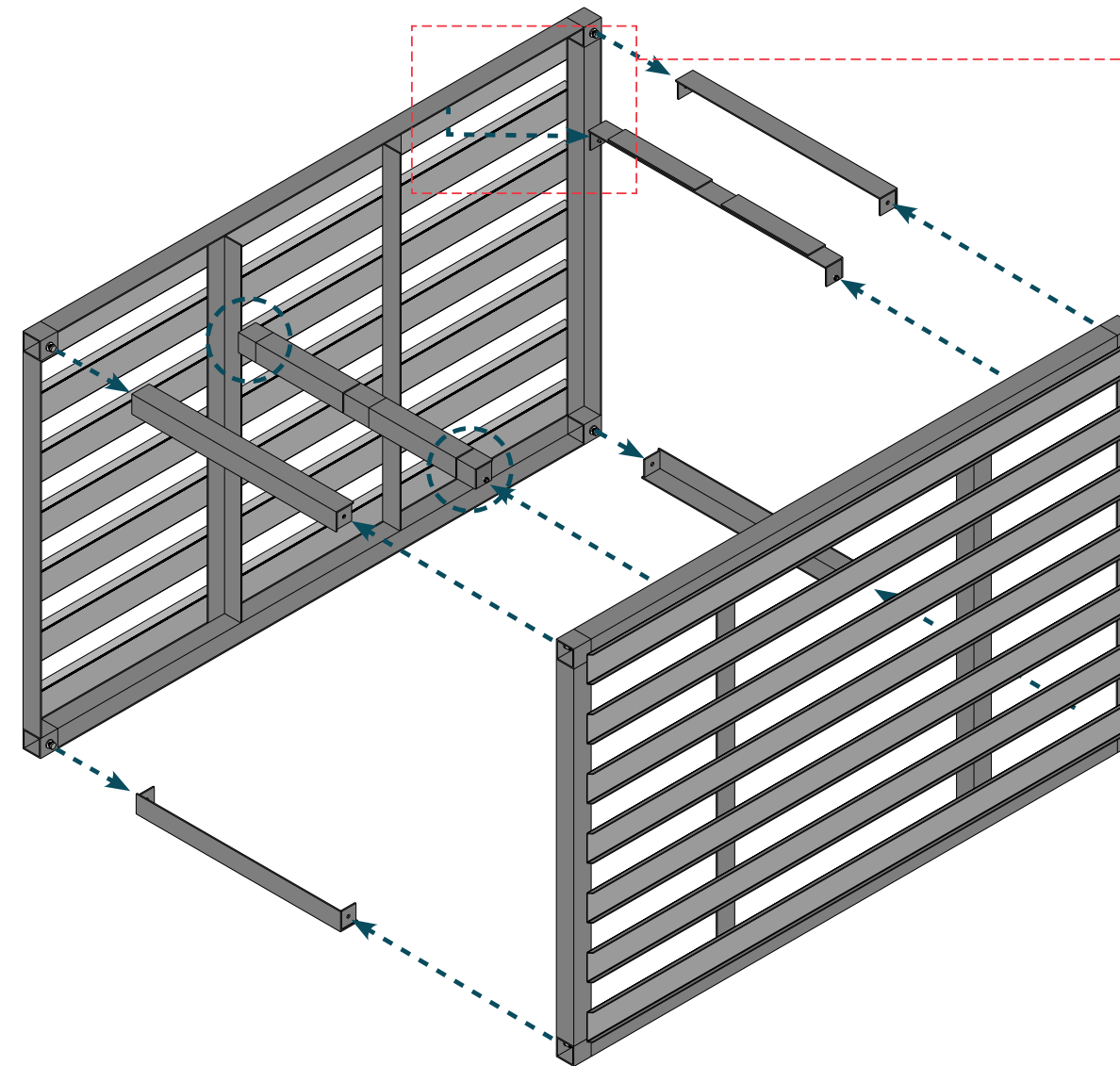
CLAMPS MAY BE USED TO SECURELY HOLD STRUTS IN PLACE WHILE CONNECTING

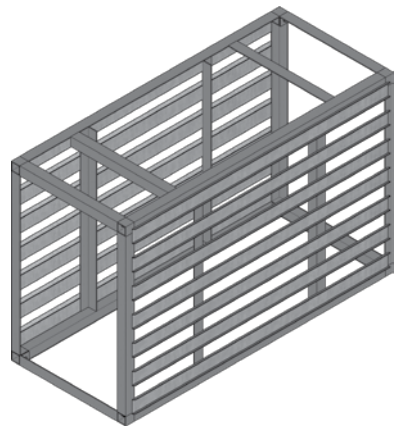Braces are attached via tab and a self-tapping screw (ST02)

Connect with self-tapping screw (ST02)

NOTE:

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

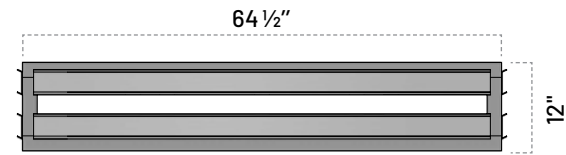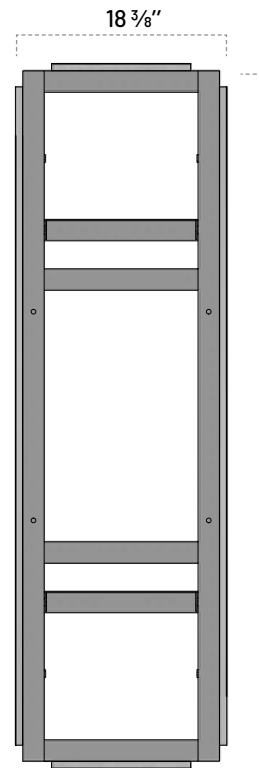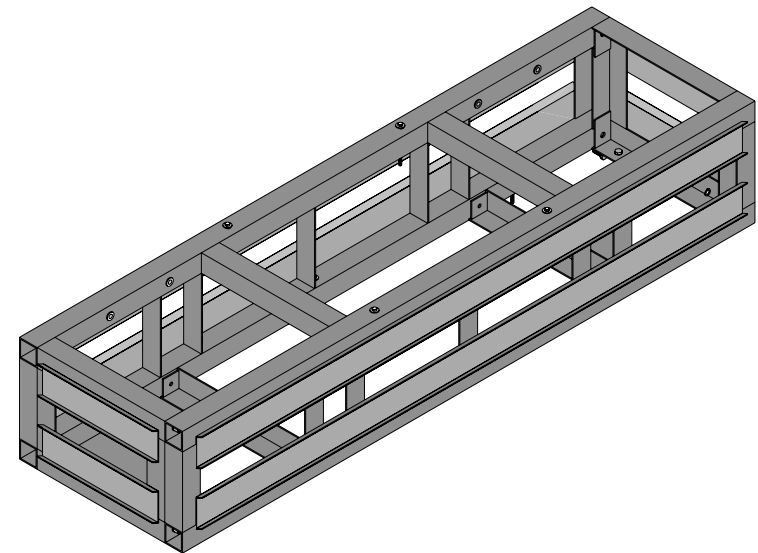**UTILIZING THE BASE CABINET WILL PROVIDE A COMPACT FOOTPRINT**
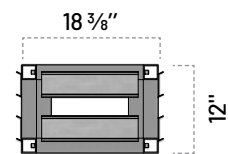
36" Fireplace *Woodburning*
STANDARD MANTLE COMPONENTS

DIMENSIONS
WITH FASCIA PANEL
69 ½" x 23 ⅜" (Outside To Outside)

WEIGHT
45 lbs

18 ⅜"
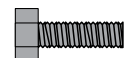
64 ½"

64 ½"   12"

UL-FIR-M-BP..............2PC
Base Module Front Panel

18 ⅜"

12"

UL-FIR-M-ECP............2 PC
Base Module End-Cap Panel

B03..............6x
3" Bolt & Locking Nut

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

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

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

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

36" Fireplace *Woodburning*
STANDARD MANTEL COMPONENTS *(CONTINUED)*

NOTE:

Hand tighten all components first. Once entire unit is connected, securely tighten with impact/wrench.

NOTE:

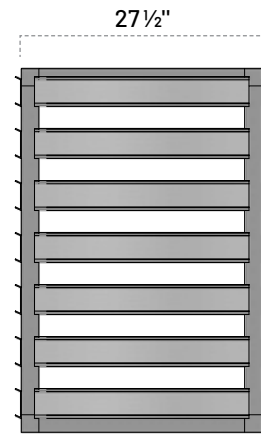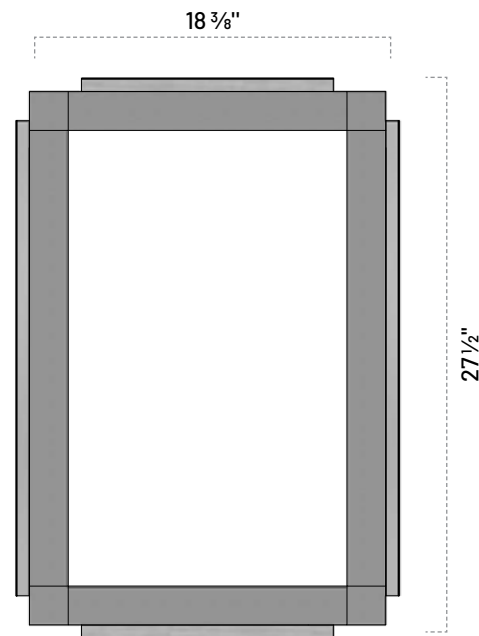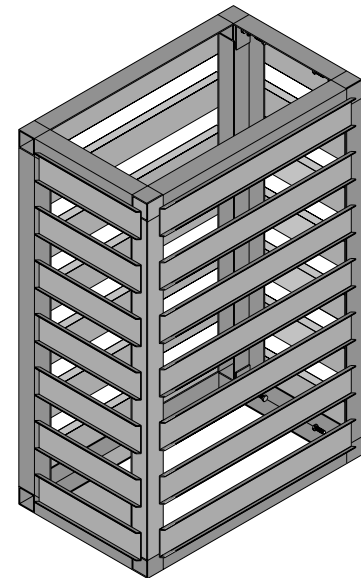Refer to page 44 for Fireplace assembly sequence.
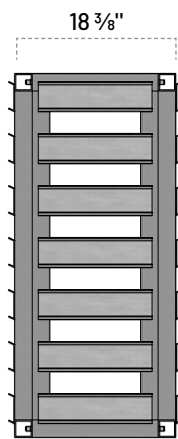
36" Fireplace *Woodburning*
STANDARD CHIMNEY COMPONENTS

DIMENSIONS
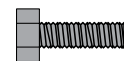**WITH FASCIA PANEL**
32 ½" x 23 ⅜" (Outside To Outside)

WEIGHT
43 lbs

18 ⅜"

27½"

27 ½"

UL-CCBP-OS .... 2 PC
Chimney Front & Back Panel

18 ⅜"

UL-ECP .... 2 PC
Chimney End-Clad Panel

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

ST02 .... 14x
1¼" Self-Tap Screw

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

ULHAR 4x
Horizontal Adjustable Rail

STANDARD CHIMNEY COMPONENTS *(CONTINUED)*

NOTE:

36" Fireplace *Woodburning*
BACKER BLOCK ADJUSTABLE BASE

USED TO ELEVATE FIREPLACE OPENING

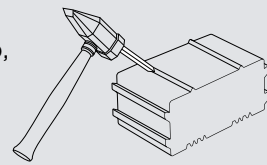USED TO PROVIDE CORRECT FIREPLACE INSERT HEIGHT

46"

83"
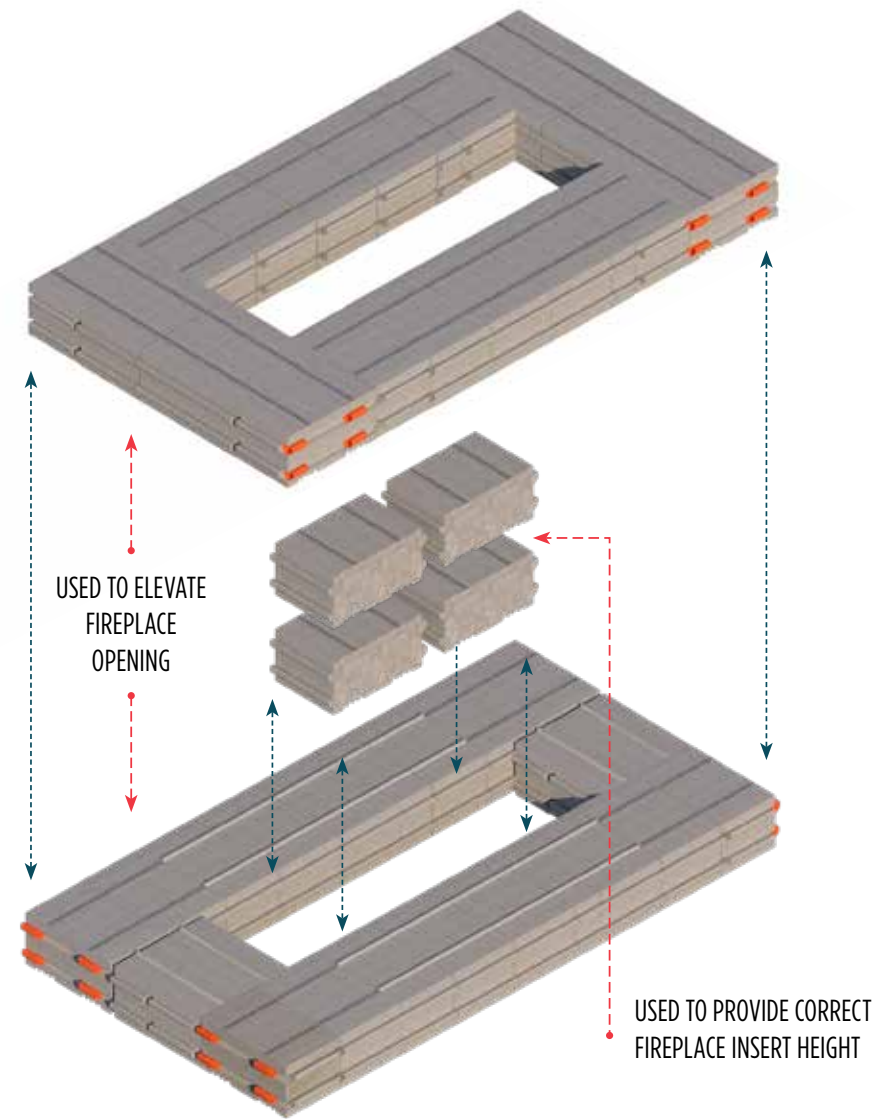
NOTE:

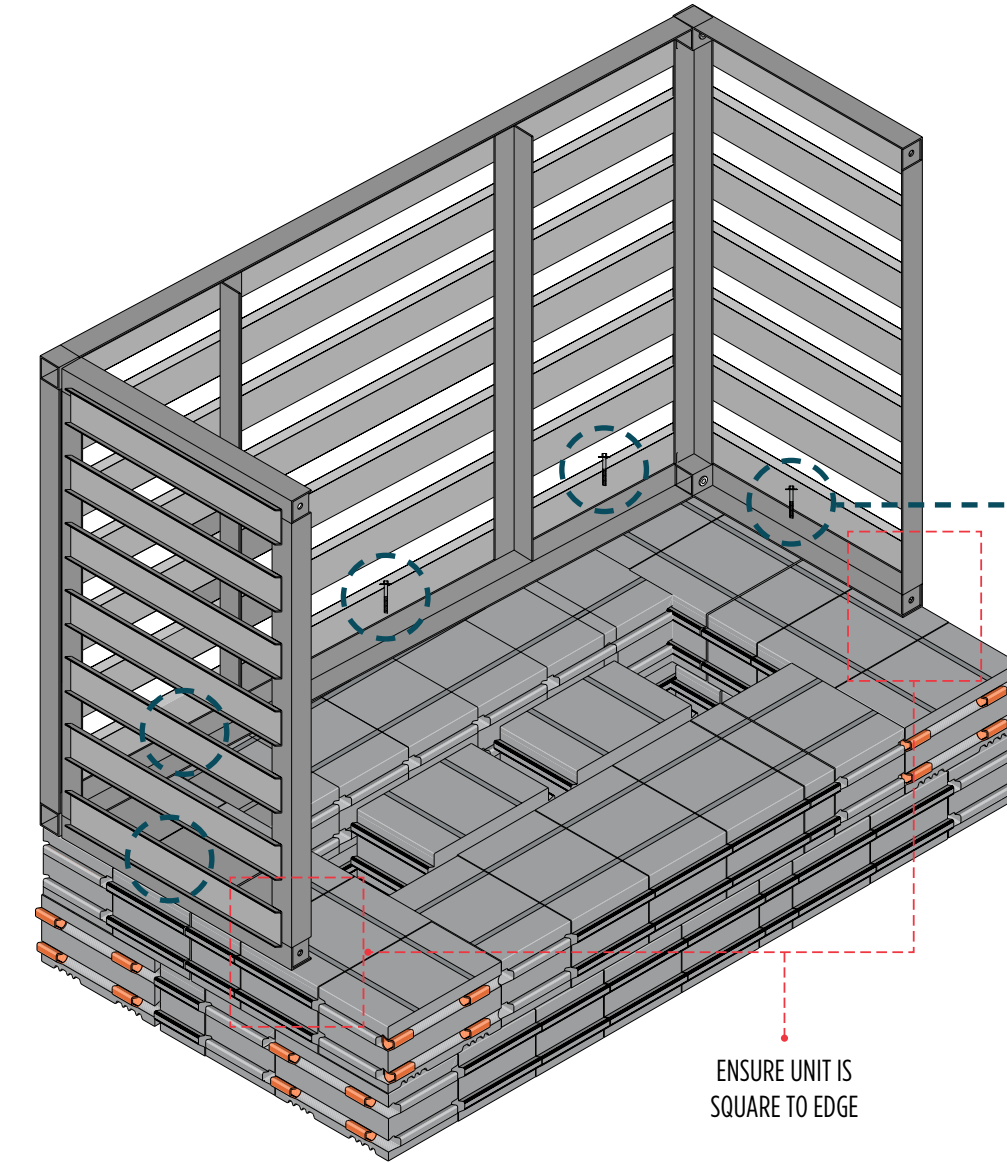This should be constructed on top of poured in place concrete pad (similar to page 12).
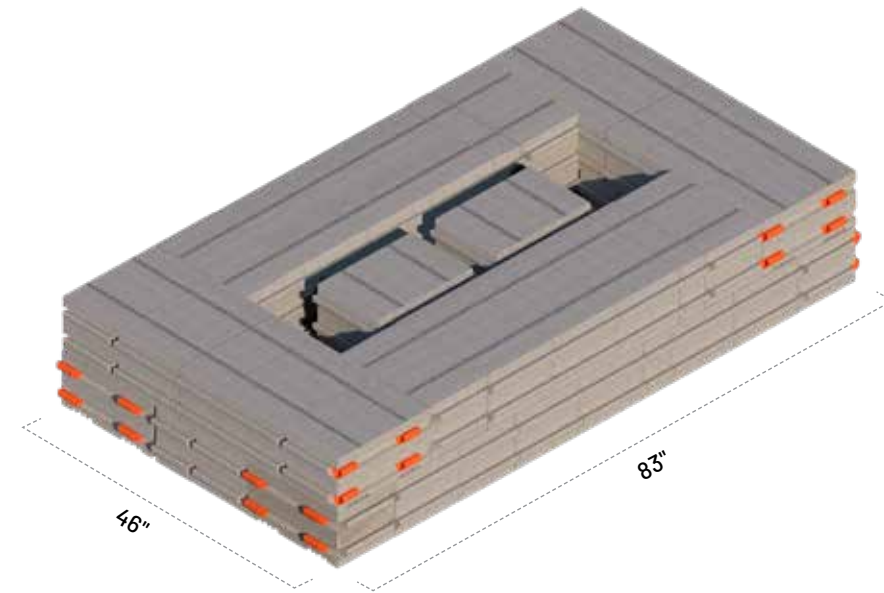
NOTE:

Prior to attaching cabinet top, lugs will need to be removed with a hammer and chisel (top row of block only)

36" Fireplace *Woodburning*
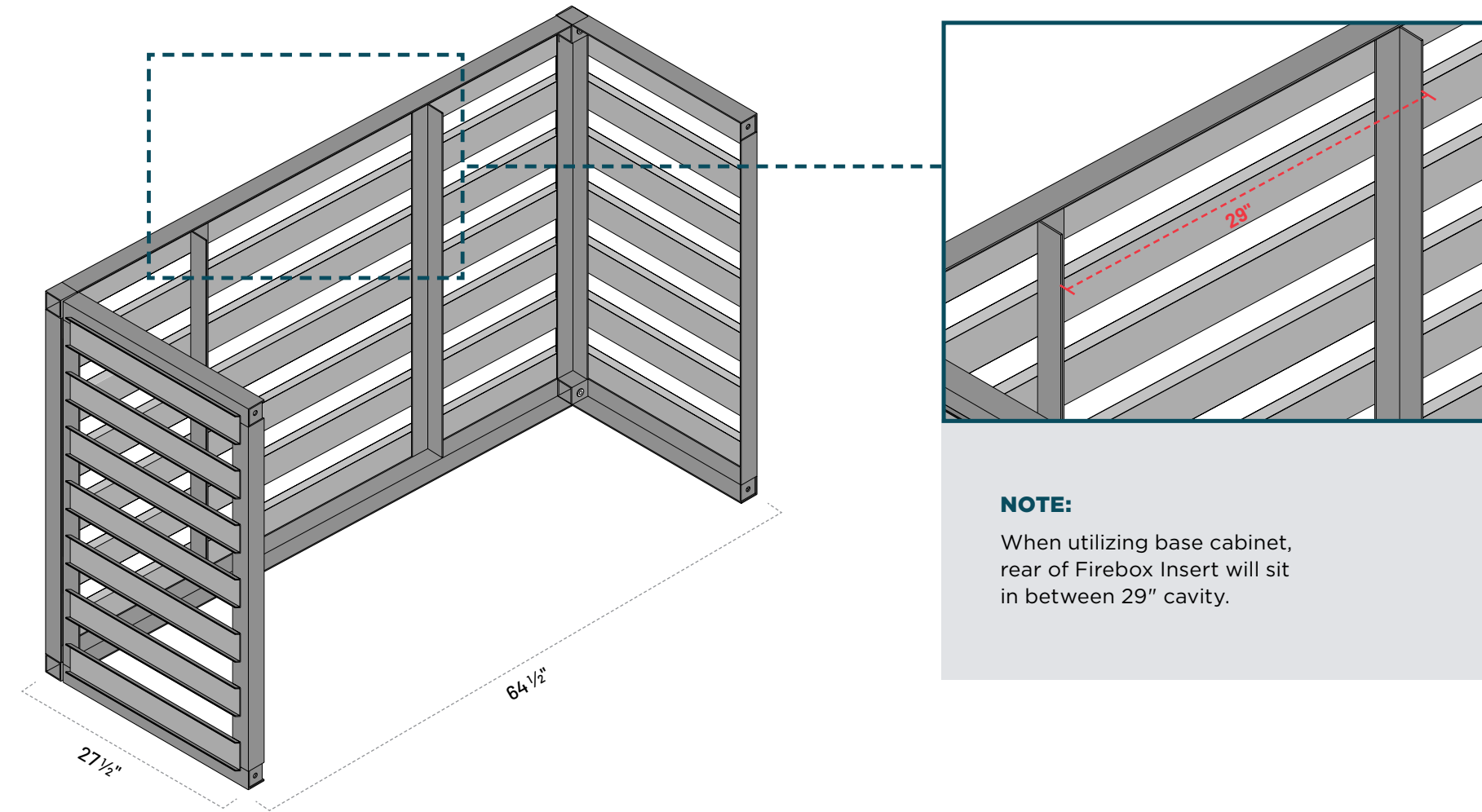## CABINET AND BACKER BLOCK BASE CONNECTION

NOTE:

Attach back panel to 2 standard end clads (ECK). Place and secure over backer block base with 1/4"- 3/8". Concrete anchors (not included).
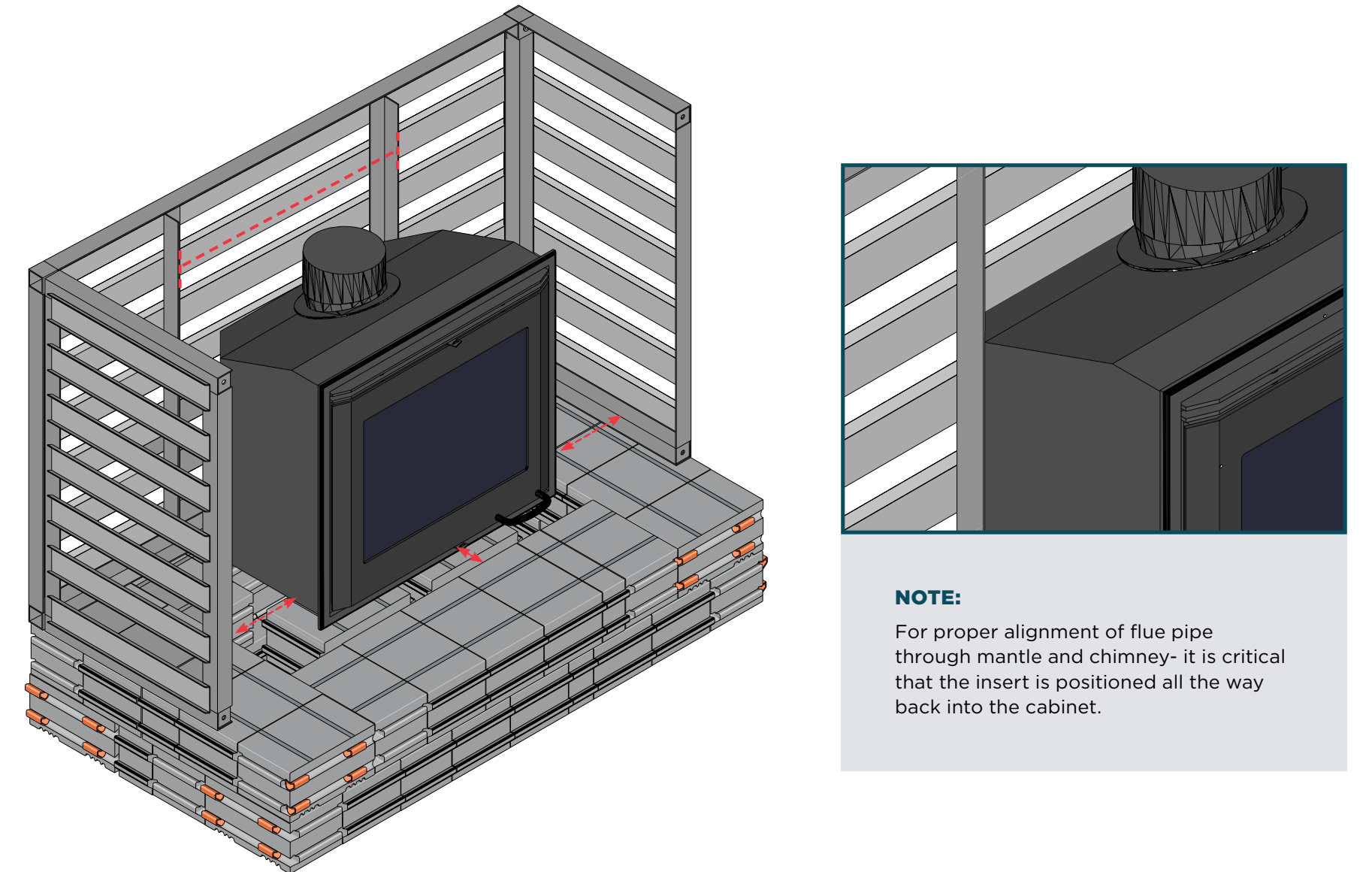
THIS LAYOUT INCLUDES A HEARTH. IF NO HEARTH IS DESIRED, WIDTH CAN BE SHORTENED BY 9 1/4" TO BE FLUSH WITH CABINET

ENSURE UNIT IS SQUARE TO EDGE

36" **Fireplace** *Woodburning*
END-CLAD ASSEMBLY

29"

64 ½"

27½"

NOTE:

When utilizing base cabinet, rear of Firebox Insert will sit in between 29" cavity.

36" **Firebox** *Woodburning*
INSERT ASSEMBLY

NOTE:

For proper alignment of flue pipe through mantle and chimney- it is critical that the insert is positioned all the way back into the cabinet.
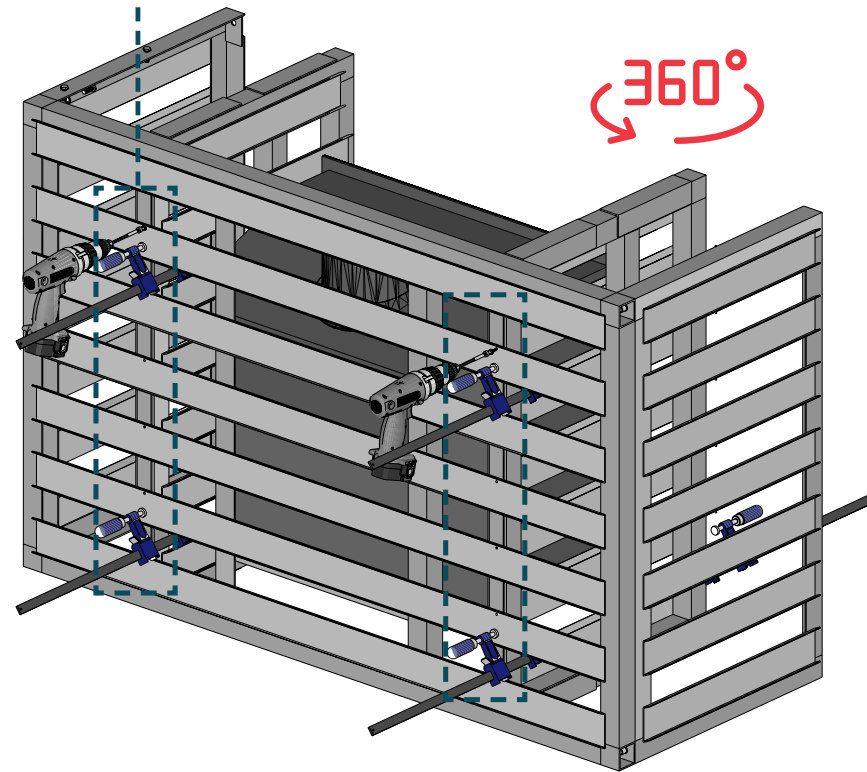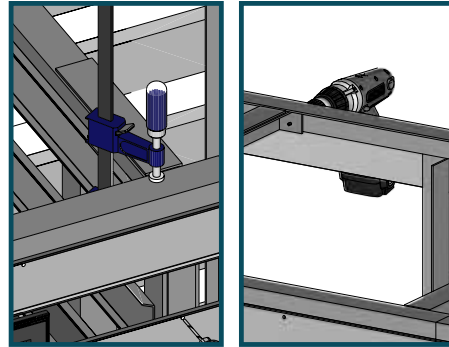
36" Fireplace *Woodburning*
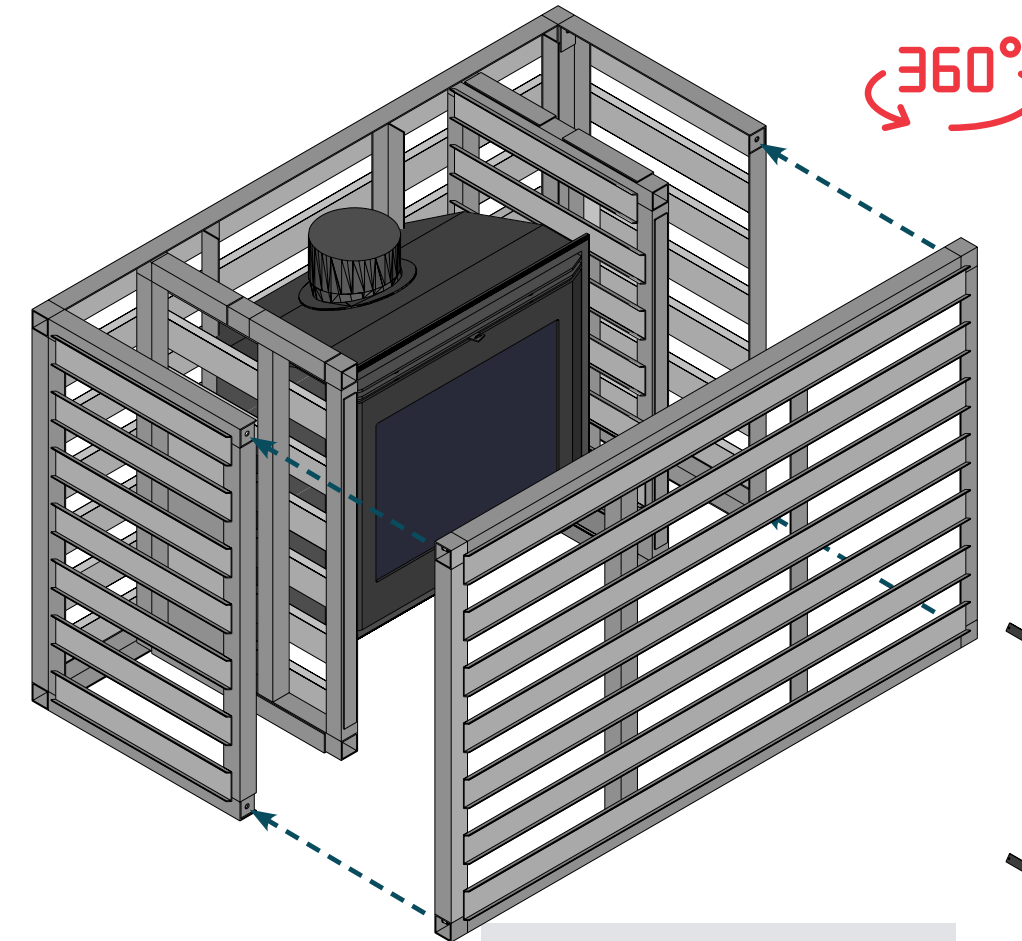## STANDARD FIREPLACE RETURN ASSEMBLY
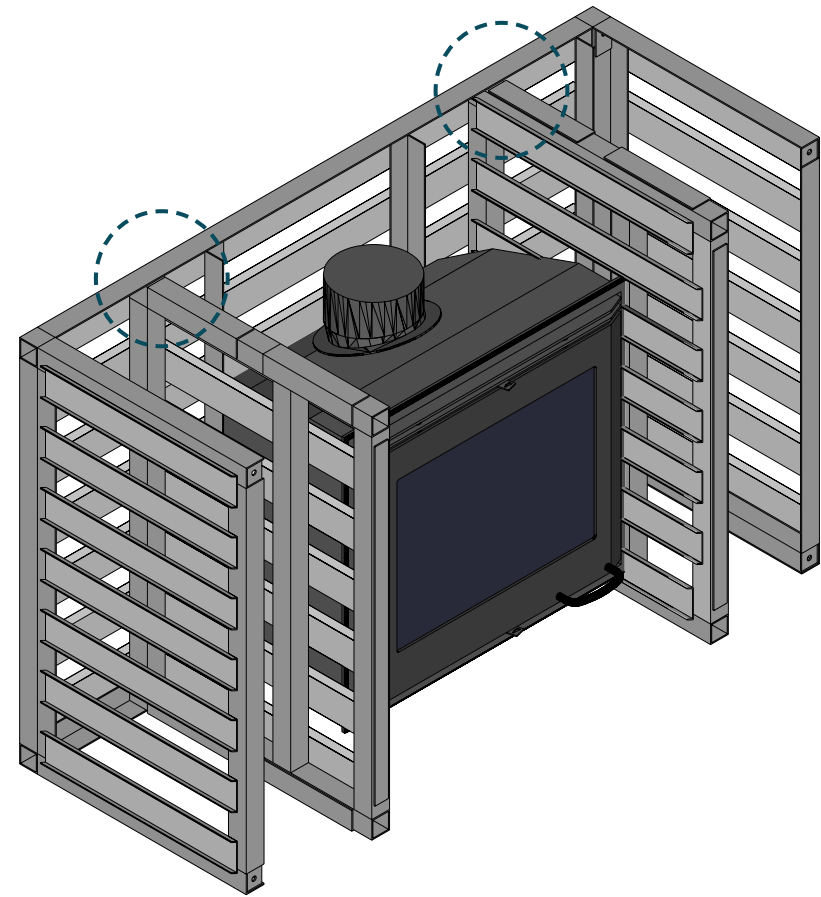
NOTE:

Clamp and attach using STO2 self-tapping screws. Repeat process on backside.
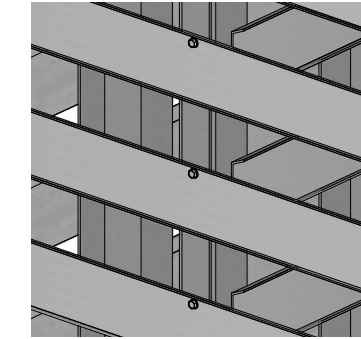
360°

36" Fireplace *Woodburning*
FRONT PANEL INSTALLATION

360°

NOTE:

Use included STO2 Self-tapping Screws to connect return panels.
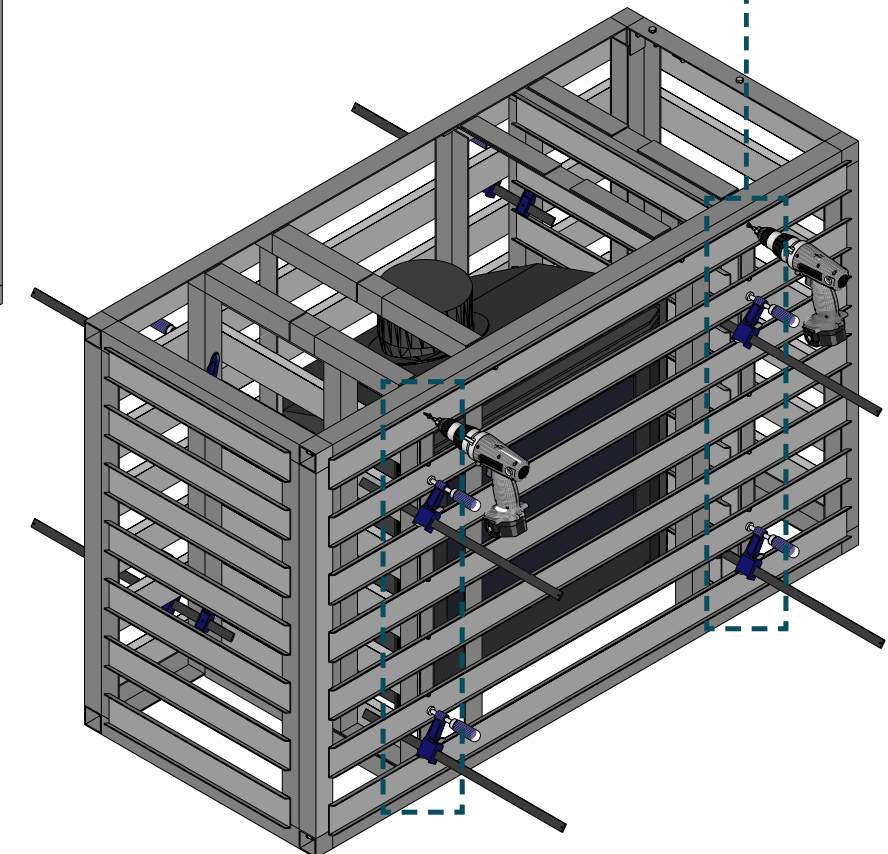
SECURE FRONT PANEL WITH INCLUDED B01 BOLTS AT EACH CORNER

NOTE:

Use a clamp to keep returns aligned to desired plumb & level position while attaching self-tapping screws.
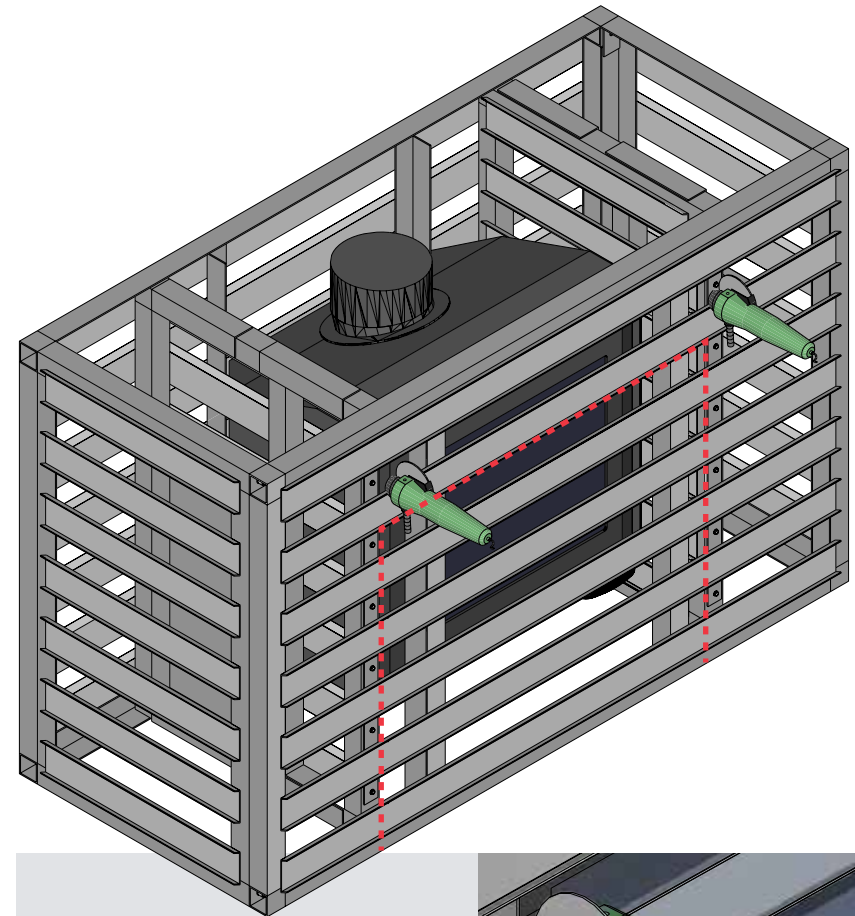
36" Fireplace *Woodburning*
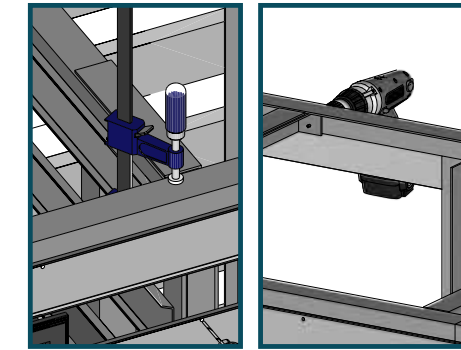## FRONT PANEL MODIFICATION
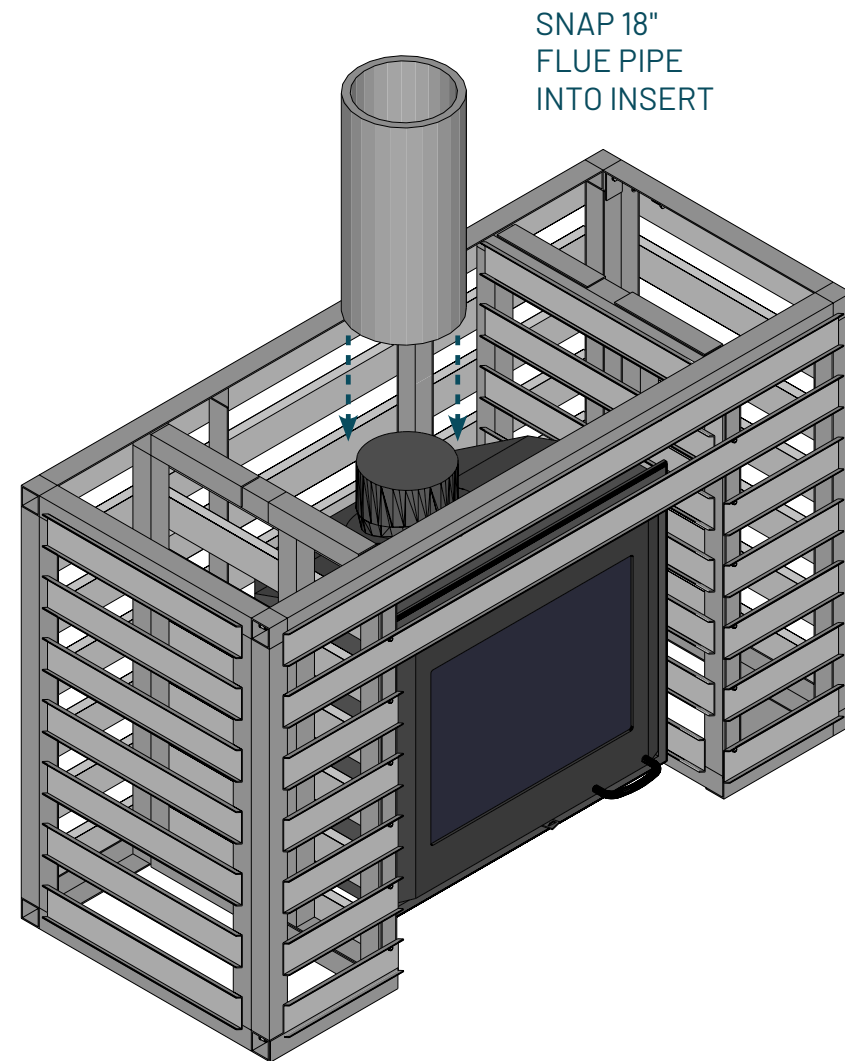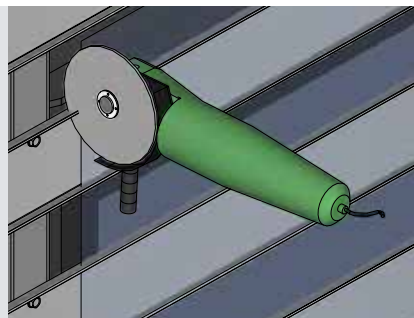
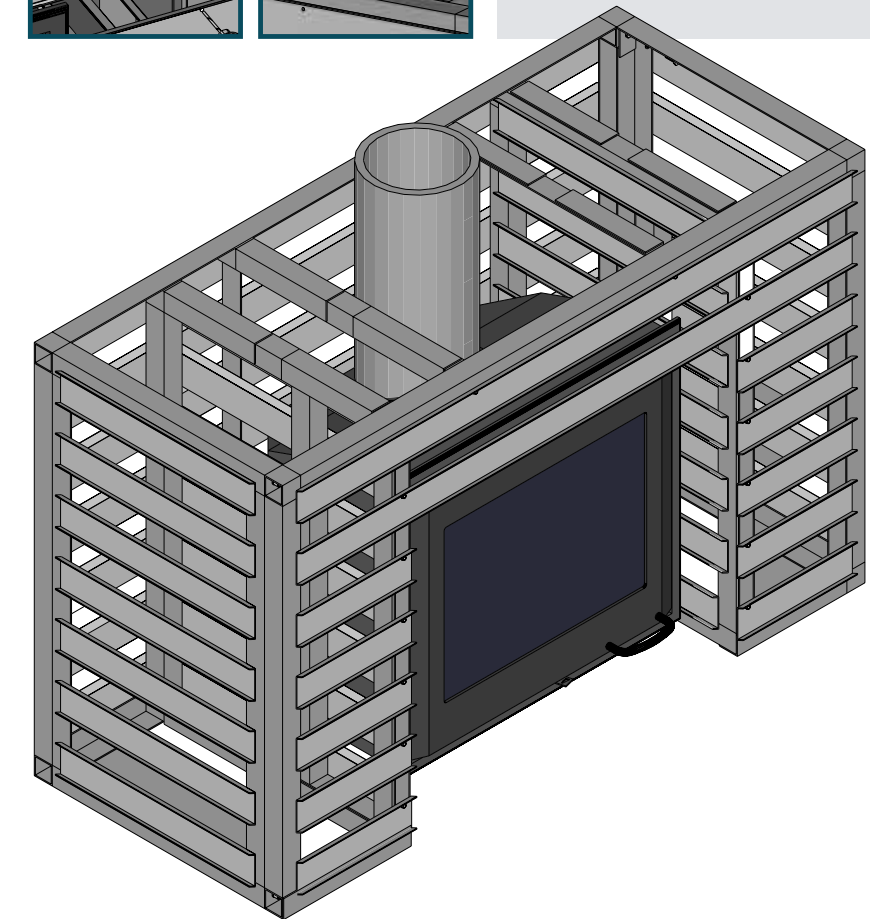
SNAP 18"
FLUE PIPE
INTO INSERT

36" Fireplace *Woodburning*
HAR & FLUE INSTALLATION
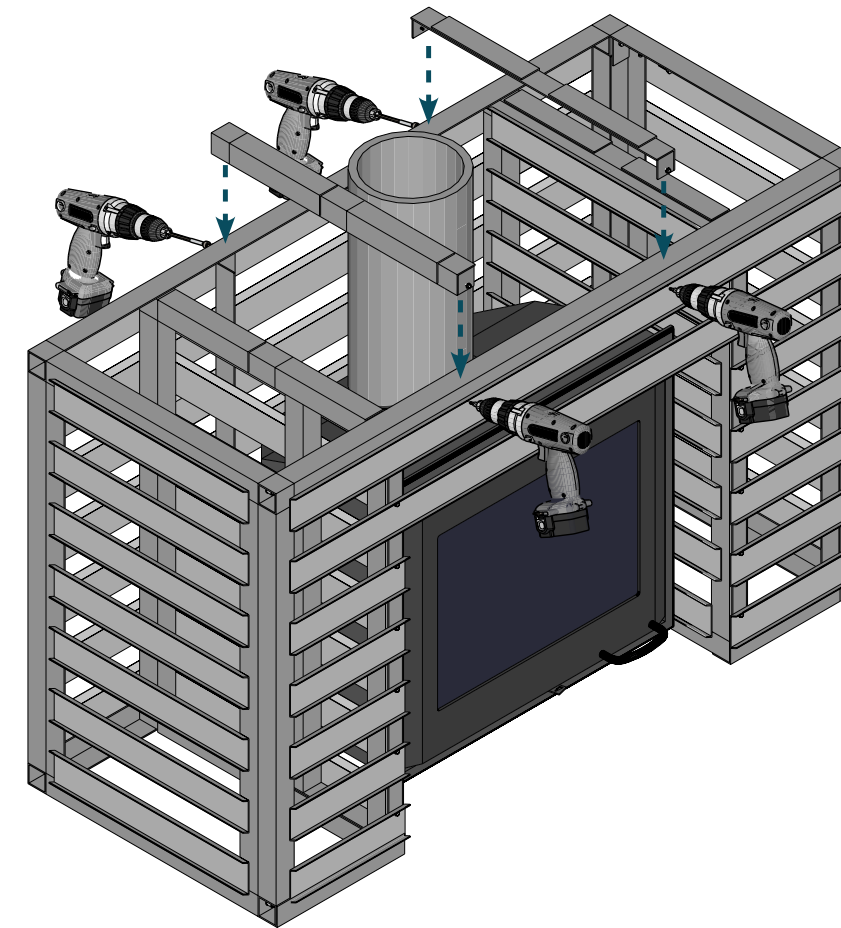
ADJUST HAR ON BOTH SIDES OF THE FLUE PIPE
TO HELP KEEP IT ALIGNED. THESE WILL BE
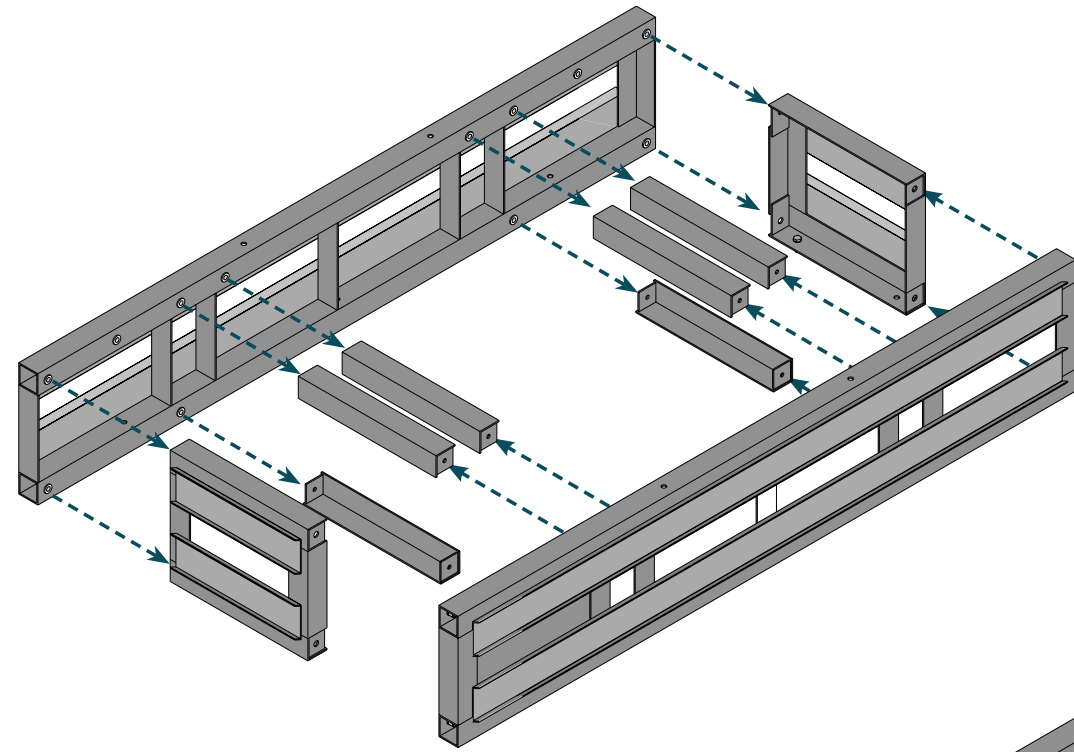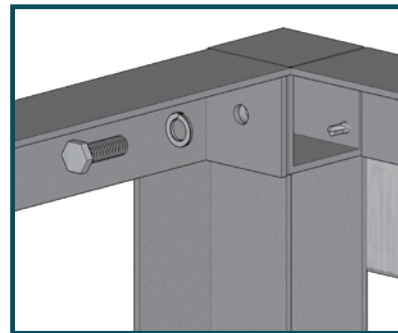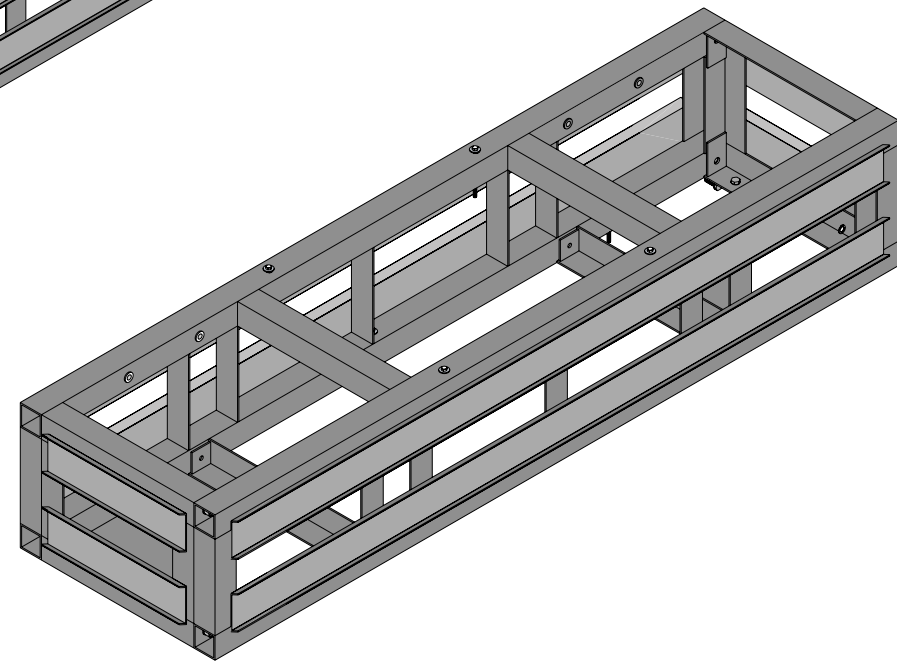TUCKED UNDER THE TOP ANGLE RAIL.

36" Fireplace *Woodburning*
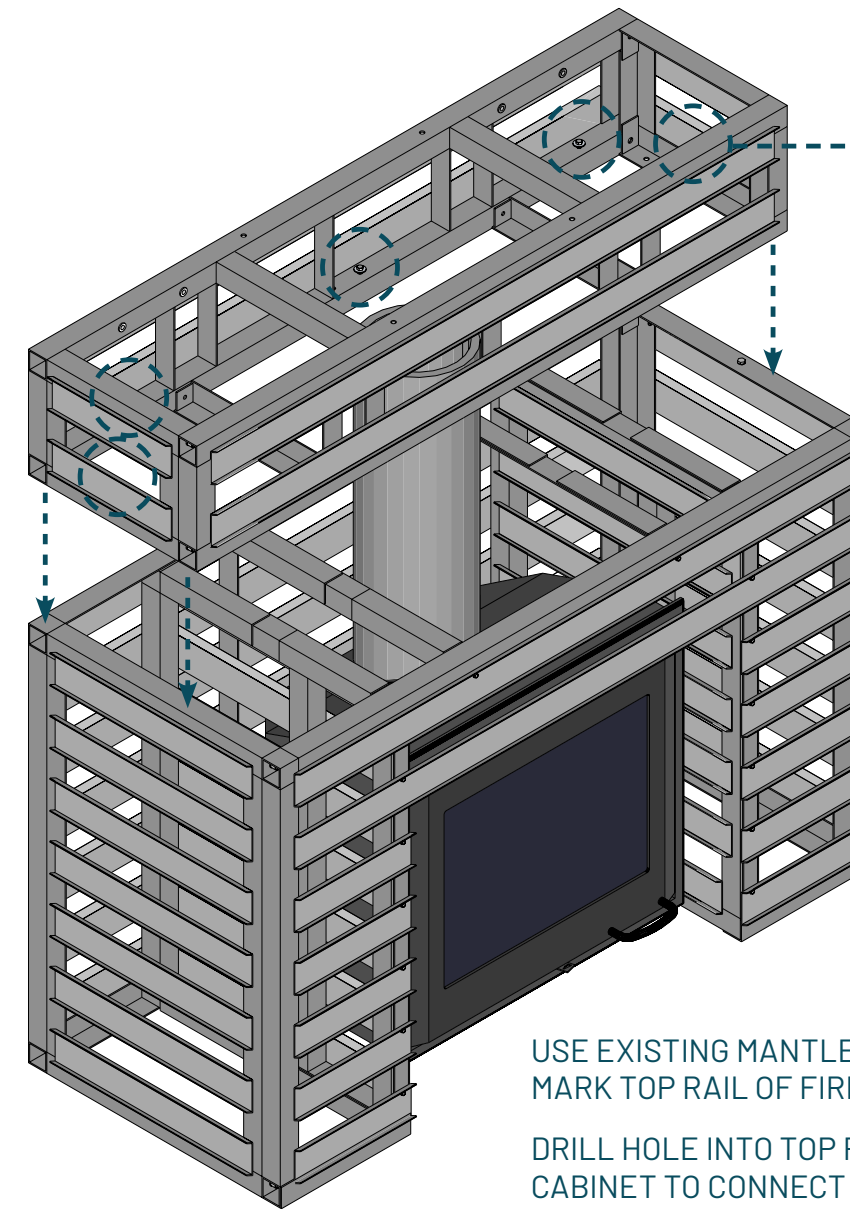## STANDARD MANTLE INSTALLATION

NOTE:

Attach both ends and then bolt on the interior strut supports.

NOTE:

Hand tighten all components first. Once entire unit is connected, securely tighten with impact/wrench.

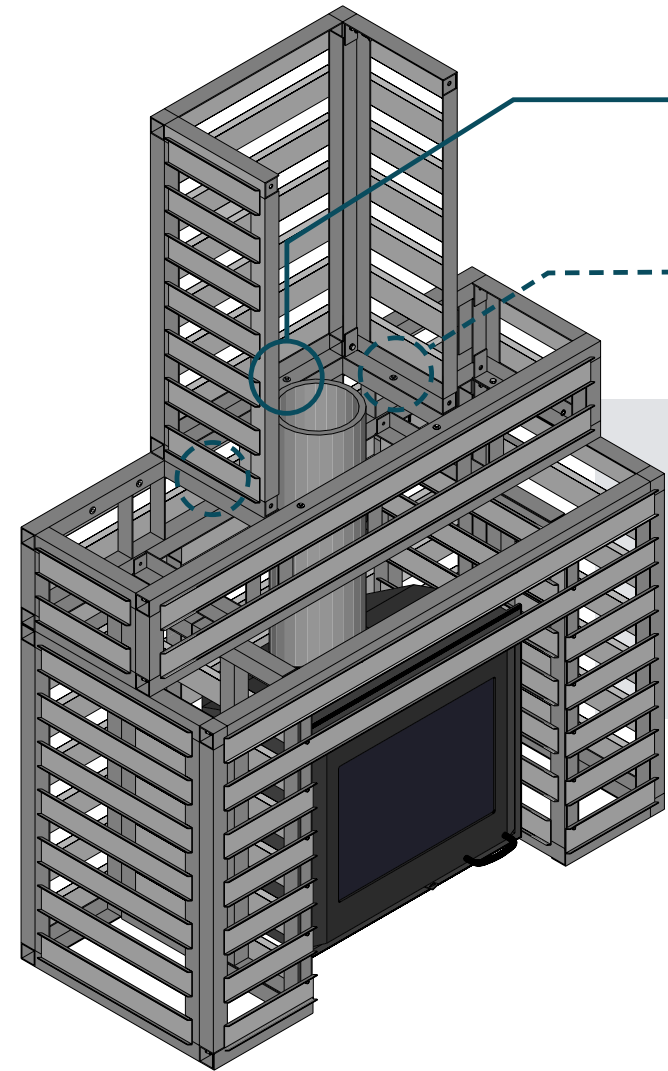## STANDARD MANTLE INSTALLATION *(CONTINUED)*

B01 Bolts are to be used to connect the end panels.

3" bolts are to be used on front and back panel attachment and 1" bolts are for the left and right panel.

USE EXISTING MANTLE BOLT HOLES TO MARK TOP RAIL OF FIREPLACE CABINET

DRILL HOLE INTO TOP RAIL OF FIREPLACE CABINET TO CONNECT USING 3' BOLTS
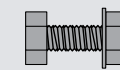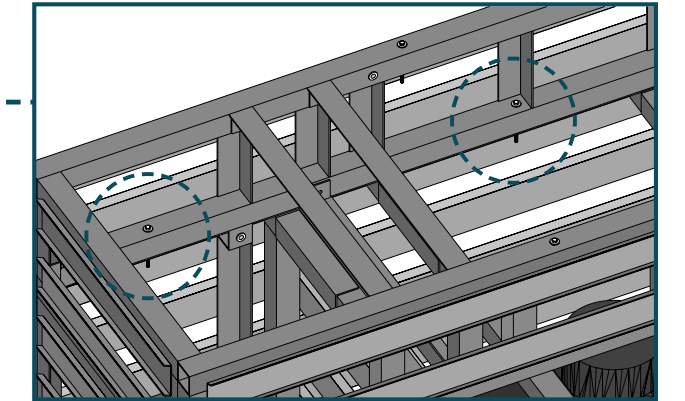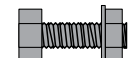
36" Fireplace *Woodburning*
STANDARD CHIMNEY INSTALLATION

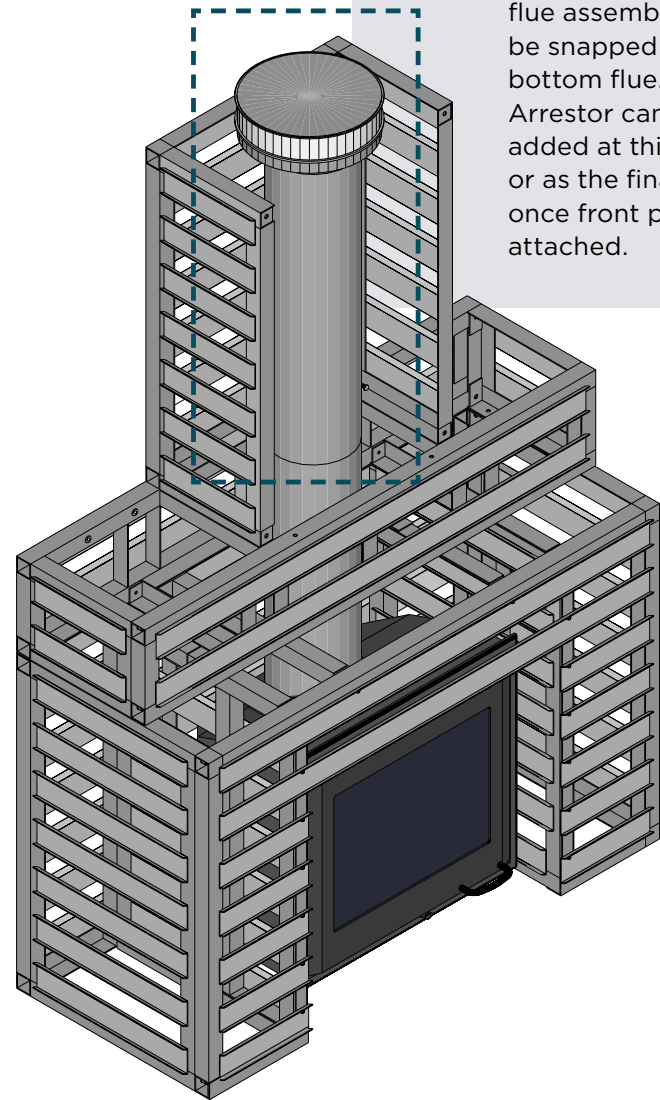**B03** 6x
3" Bolt & Locking Nut

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

3" bolts are to be used on front and back panel attachment and 1" bolts are for the left and right panel.
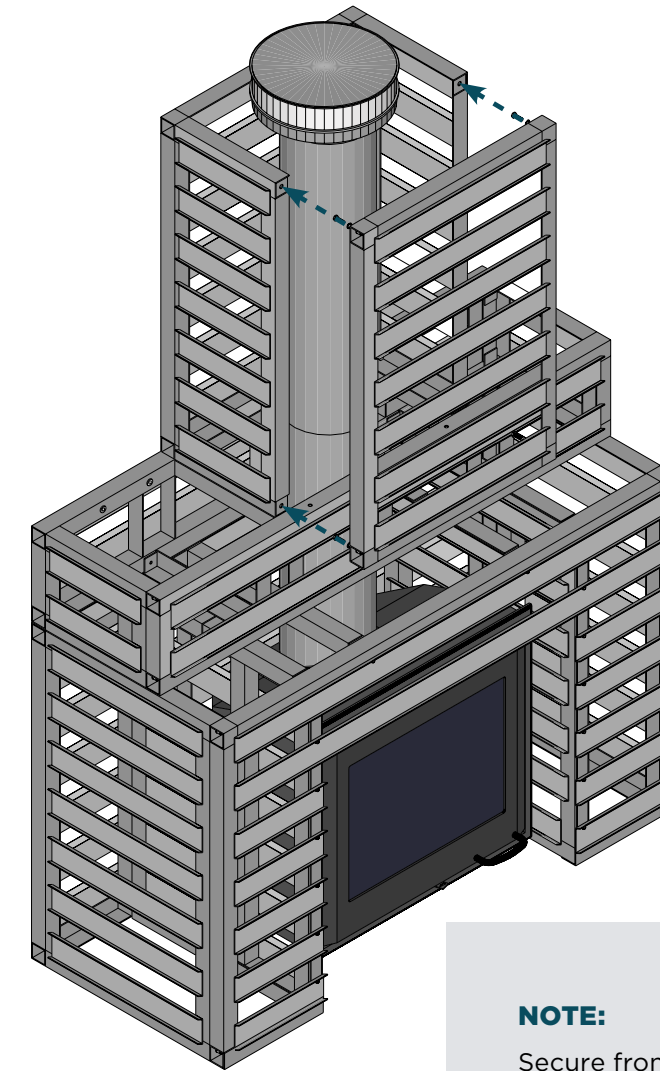
NOTE:

Remaining 36" flue assembly can be snapped in to bottom flue. Spark Arrestor can also be added at this point or as the final step once front panel is attached.
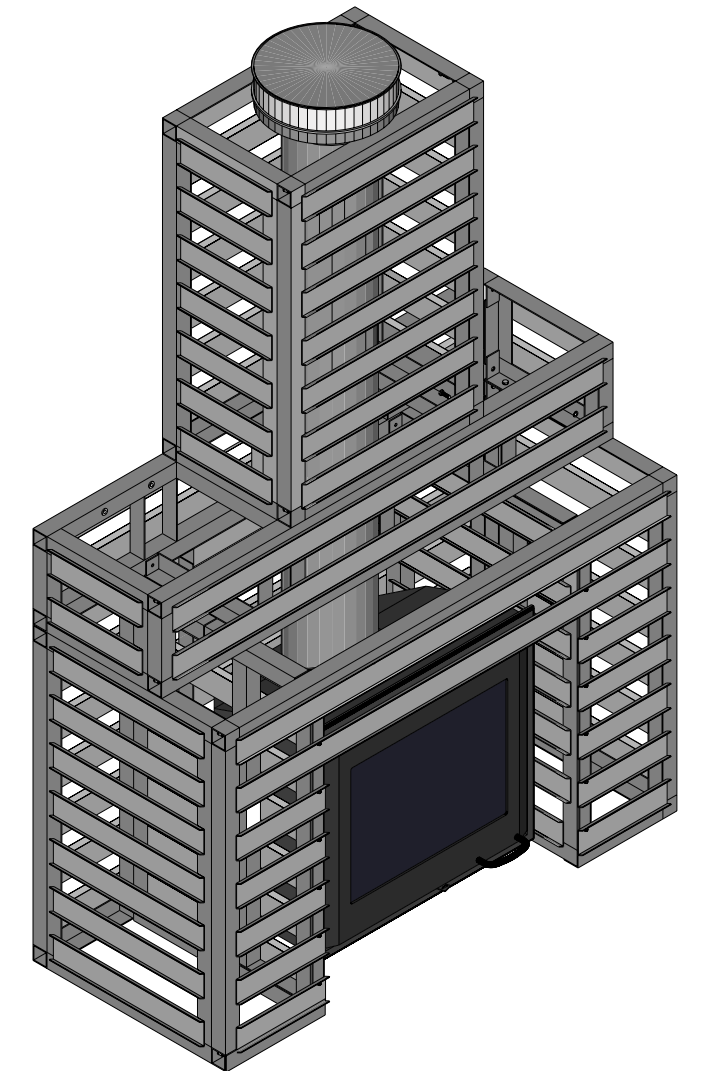
STANDARD CHIMNEY INSTALLATION *(CONTINUED)*
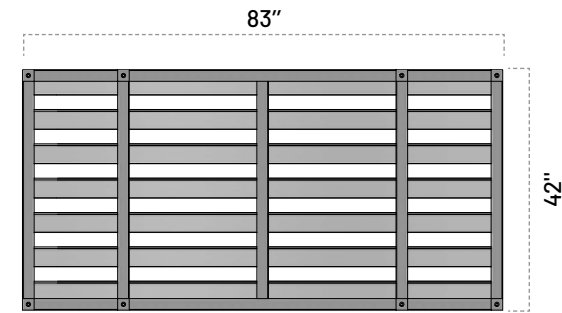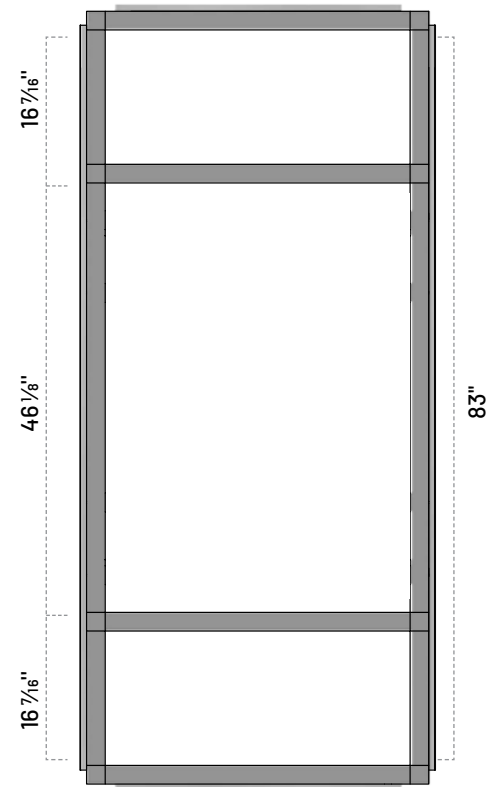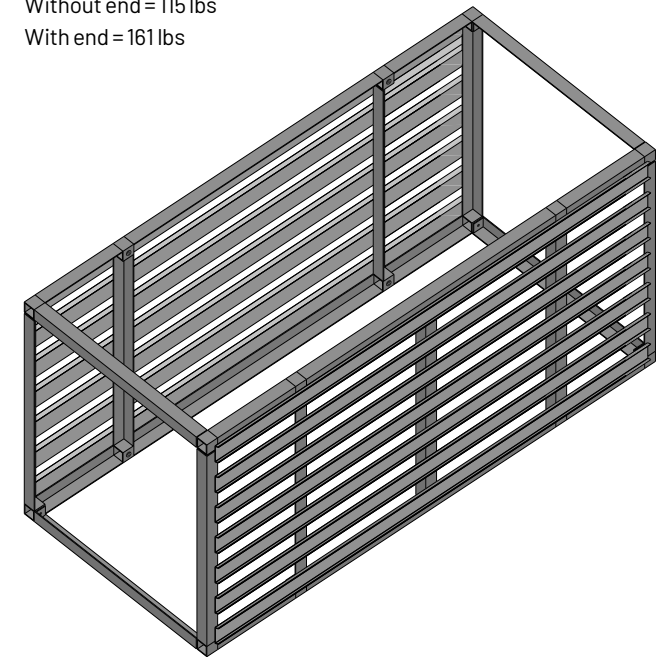
NOTE:

Secure front Chimney Panel using included B01 bolts.
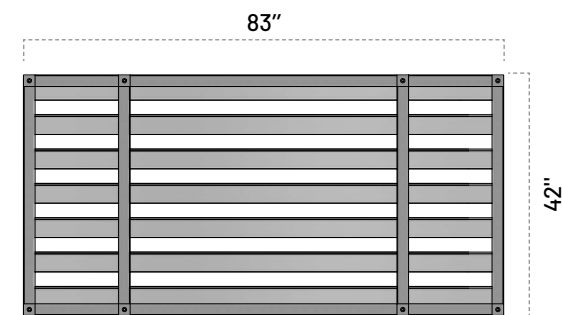
See-Thru Fireplace *Natural Gas*
CABINET COMPONENTS

**DIMENSIONS
WITH FASCIA PANEL**
41¾" x 88" (Outside To Outside)

WEIGHT
Without end = 115 lbs
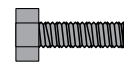With end = 161 lbs

16 ⅞"

46 ⅛"

16 ⅞"

83"

83"

42"

UL-FIR-FP................... 1 PC
Fireplace Cabinet Front Panel

83"

42"

UL-FIR-BP................... 1 PC
Fireplace Cabinet Back Panel

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

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

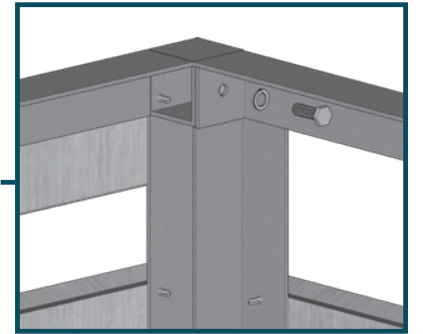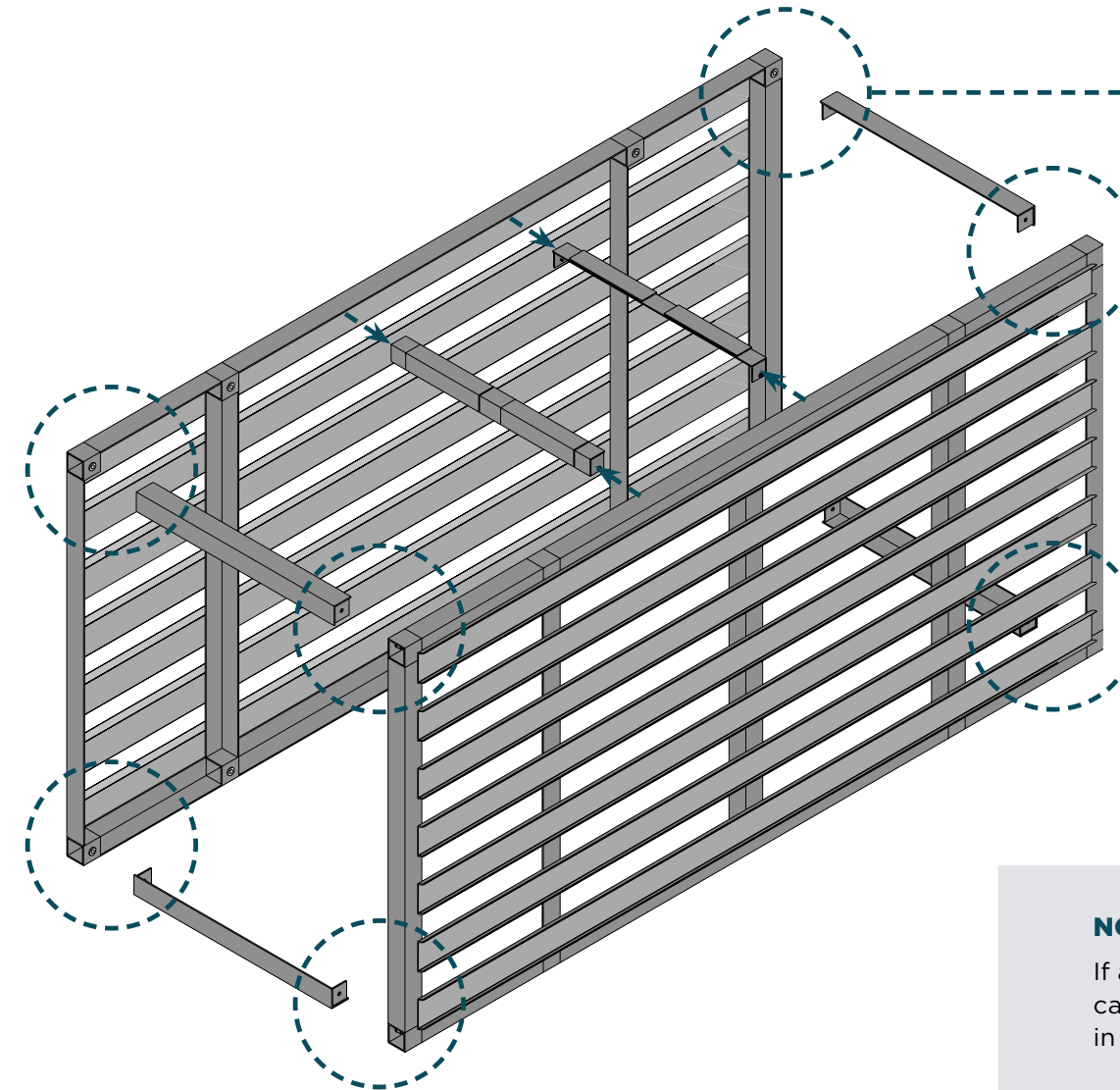**LW01**................... 8x
3/8" Lock Washer
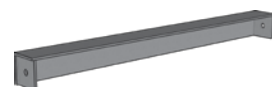
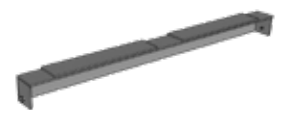**ULCS**................... 4x
Connecting Strut
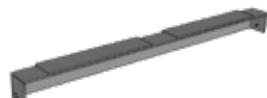
ULHAR................... 2x
Horizontal Adjustable Rail

See-Thru Fireplace *Natural Gas*
CABINET COMPONENTS *(CONTINUED)*

NOTE:

Always use included lock washer with 9/16" bolt connection on each corner (8 total).

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

NOTE:

If adding side walls or connecting to other cabinets use this method along with 2 ECK's in the interior connected positions.

See-Thru Fireplace *Natural Gas*
STANDARD END-CLAD OPTION

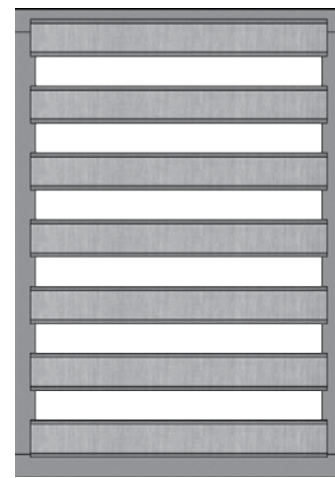**DIMENSIONS
WITH FASCIA PANEL**
88" x 32 ½" (Outside to Outside)

83"

27 ⅛"
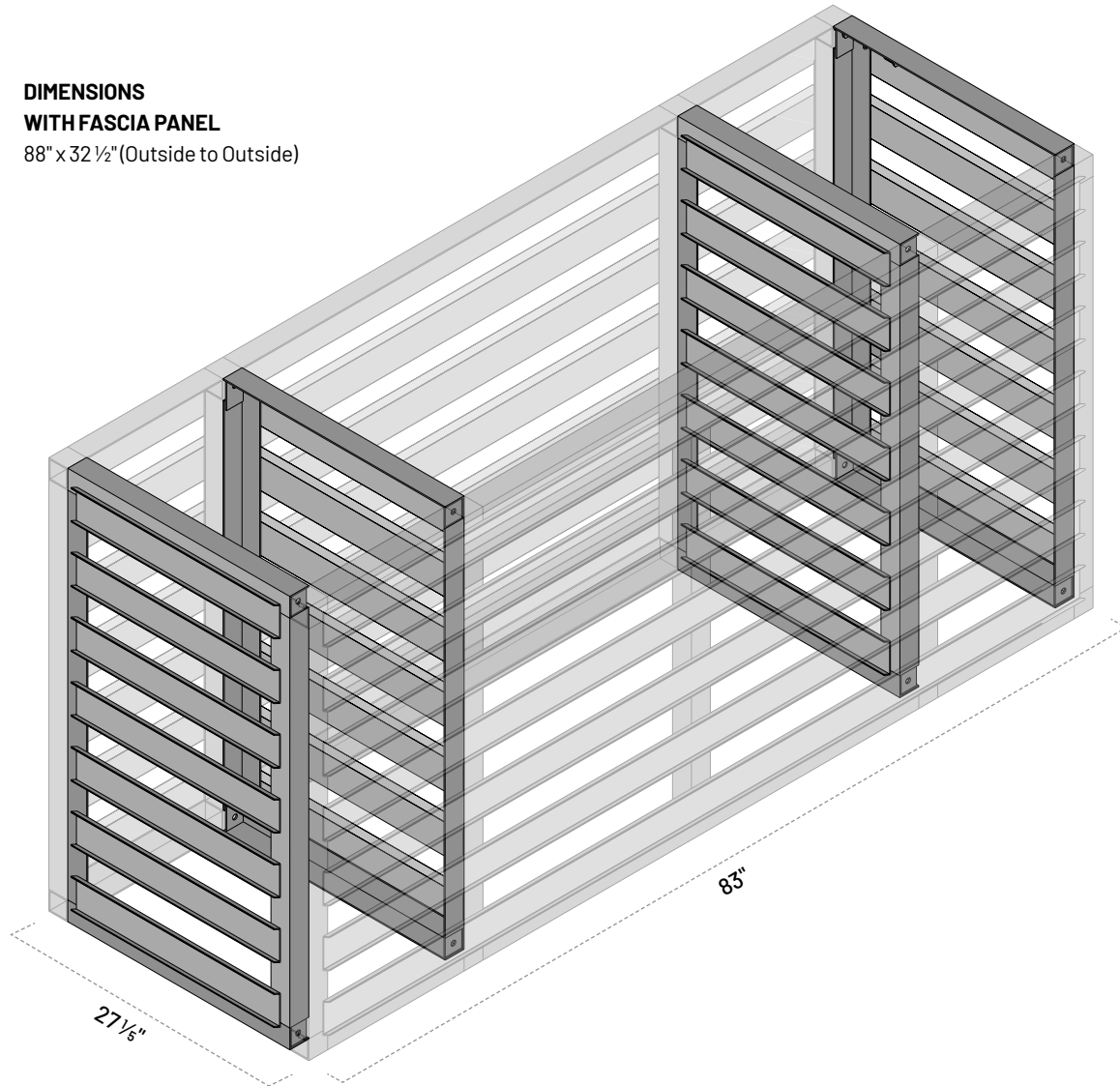
NOTE:

4 Standard End Clad (ECK) are needed to achieve this build.
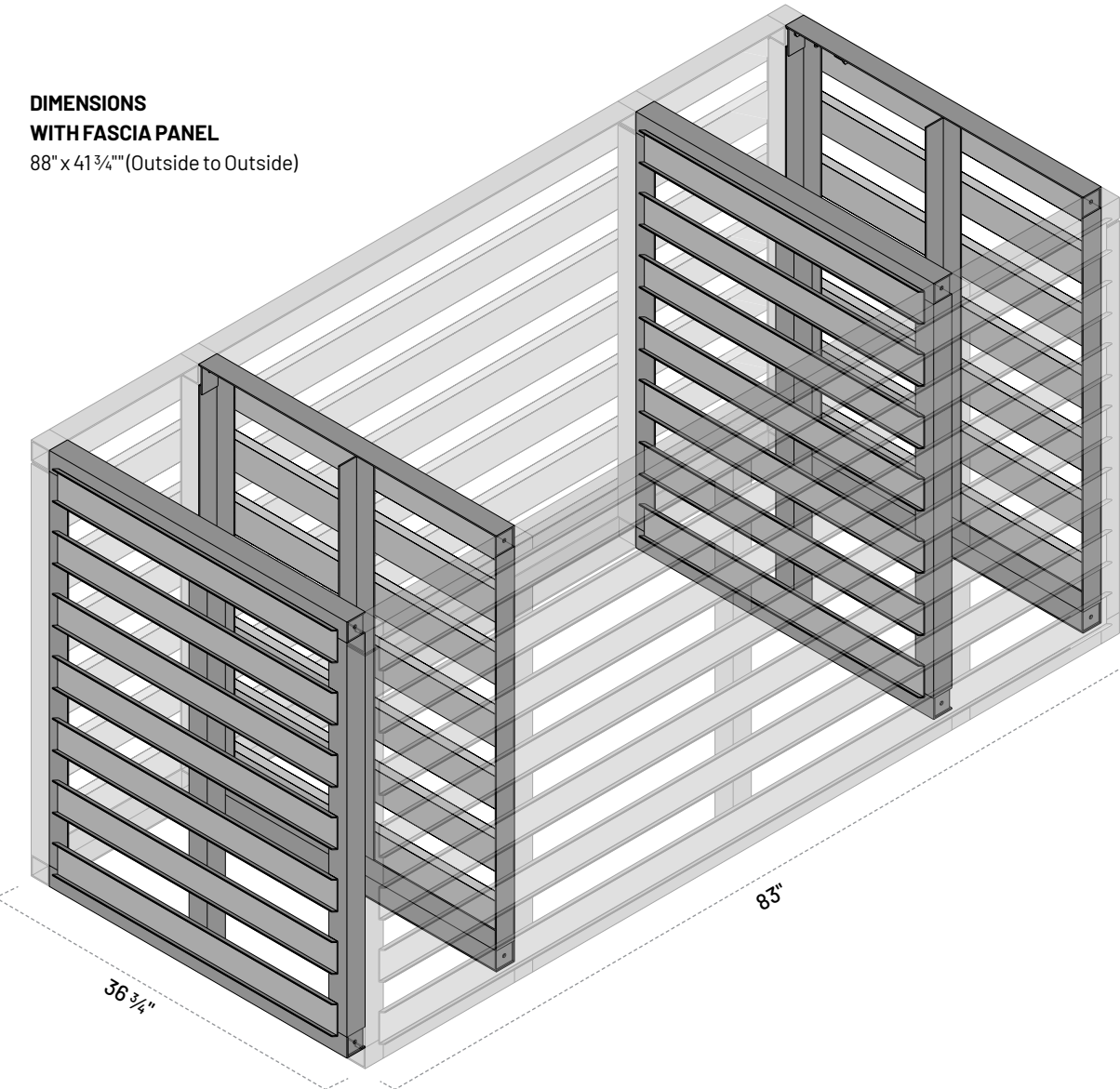
23 ½"

UL-ECK.................... 4x
End Clad Panel Standard

See-Thru Fireplace *Natural Gas*
OVERSIZED END-CLAD OPTION

**DIMENSIONS
WITH FASCIA PANEL**
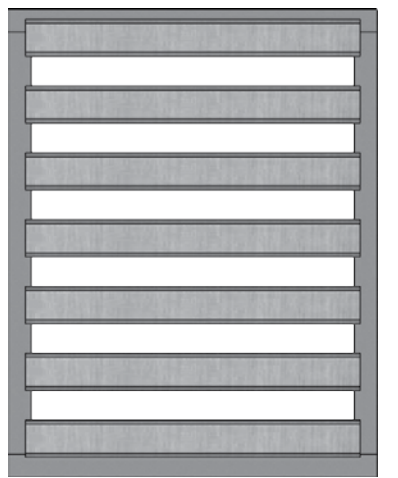88" x 41 ¾"" (Outside to Outside)

83"

36 ¾"

NOTE:

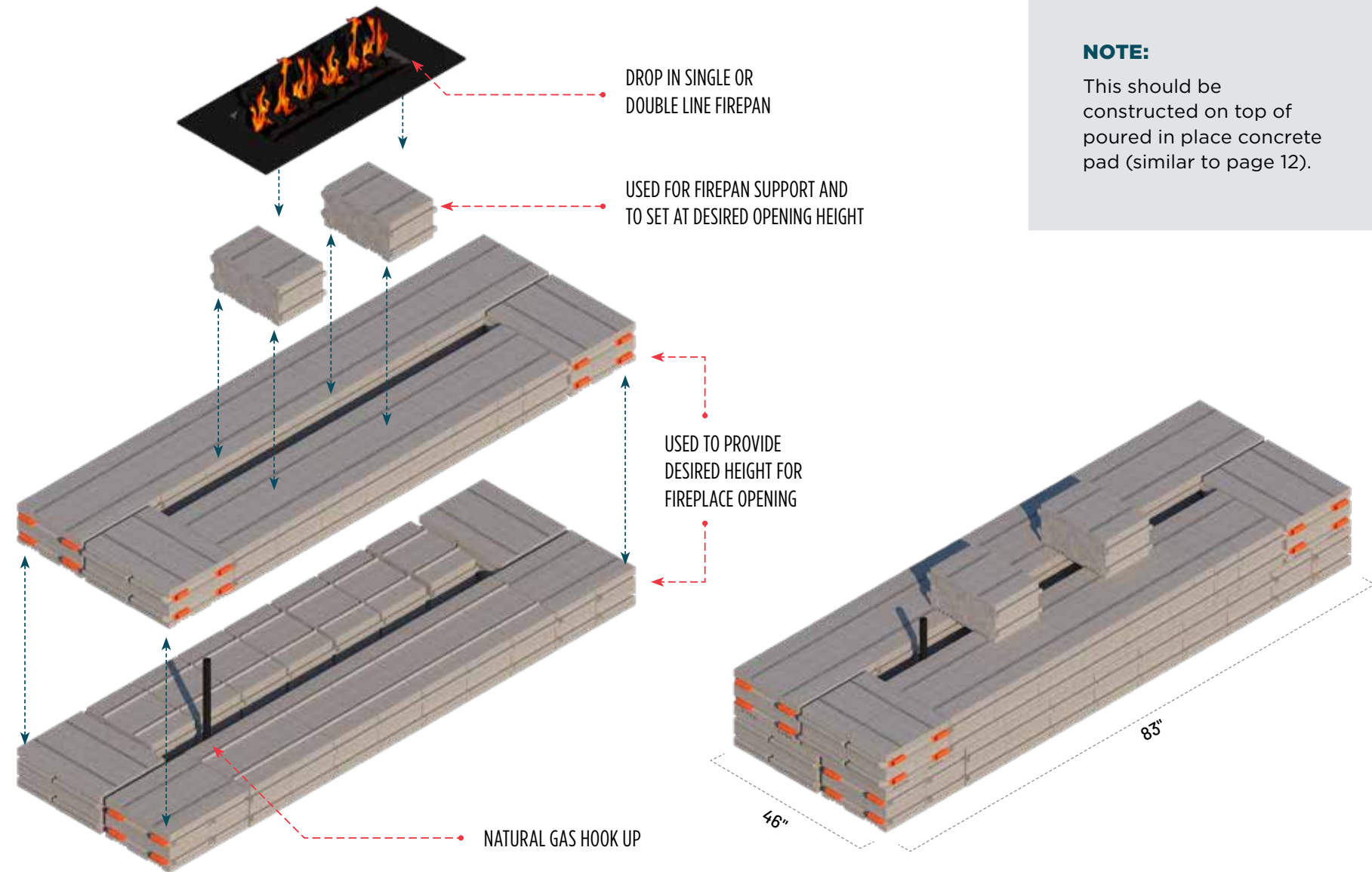4 Oversized End Clads (ECK-OS) are needed to achieve this build.

32 ¾"

UL-ECK-OS.................... 4x
End Clad Panel Oversized

See-Thru Fireplace *Natural Gas*
BACKER BLOCK ADJUSTABLE BASE

DROP IN SINGLE OR
DOUBLE LINE FIREPAN

USED FOR FIREPAN SUPPORT AND
TO SET AT DESIRED OPENING HEIGHT

USED TO PROVIDE
DESIRED HEIGHT FOR
FIREPLACE OPENING

NATURAL GAS HOOK UP

83"

46"

NOTE:

This should be
constructed on top of
poured in place concrete
pad (similar to page 12).
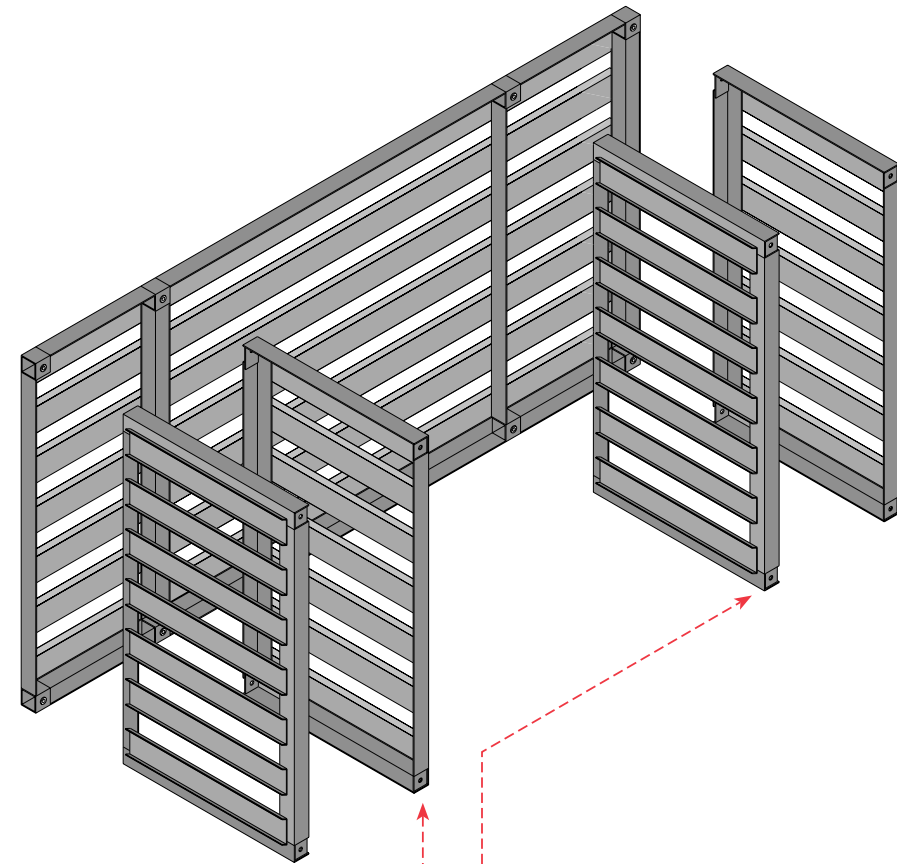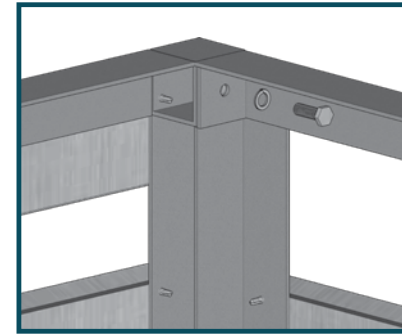
BACKER BLOCK ADJUSTABLE BASE *(CONTINUED)*
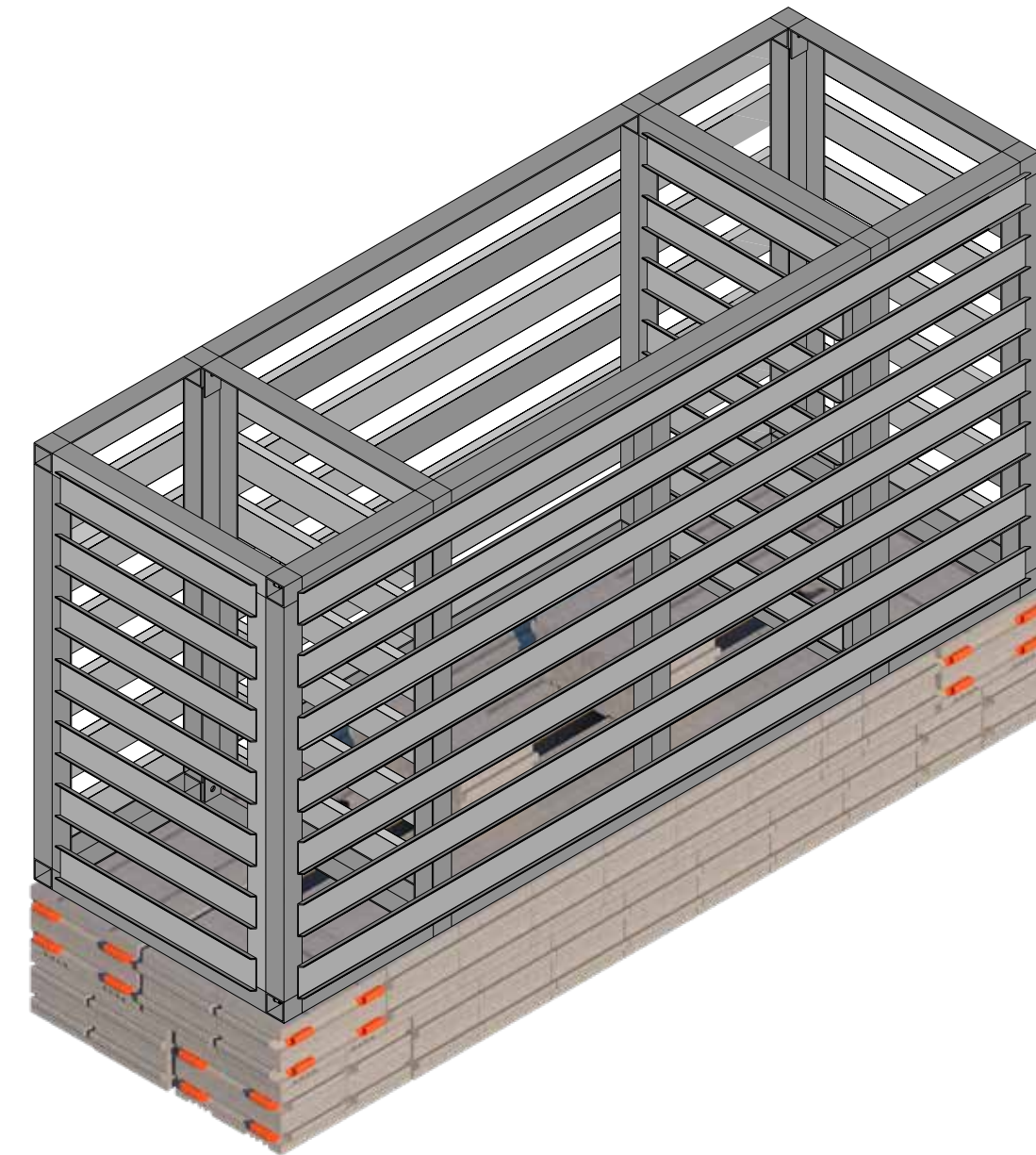
NOTE:

Fireplace Cabinet will sit
flush with backer base to
provide desired overall
height.
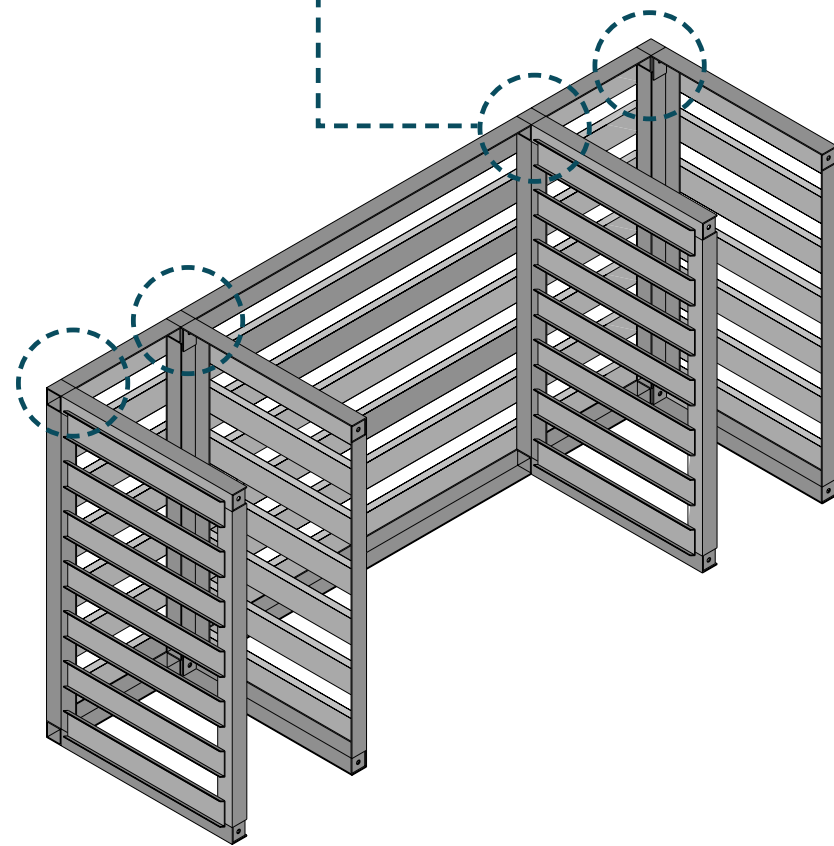
See-Thru Fireplace *Natural Gas*
ASSEMBLY

NOTE:

Use predetermined connection points to attach the 4 End Clads.

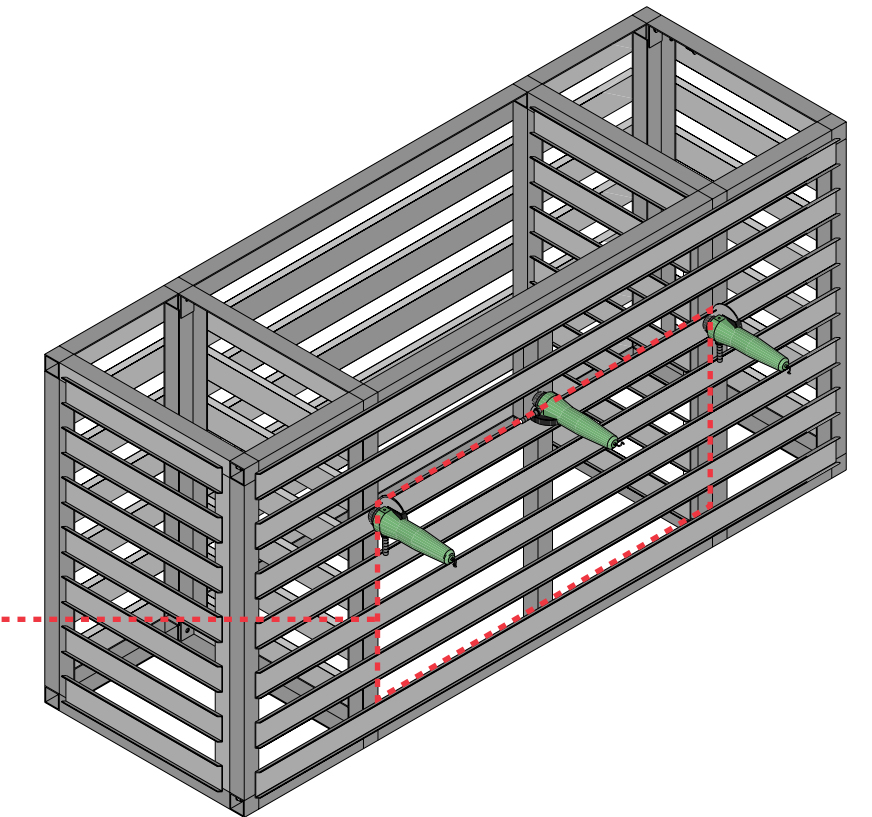ENSURE THE 2 INTERIOR END CLADS ARE FACING INWARD AND RAILS ARE FACING UPWARD
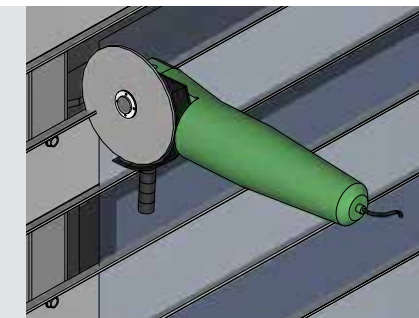
ASSEMBLY *(CONTINUED)*
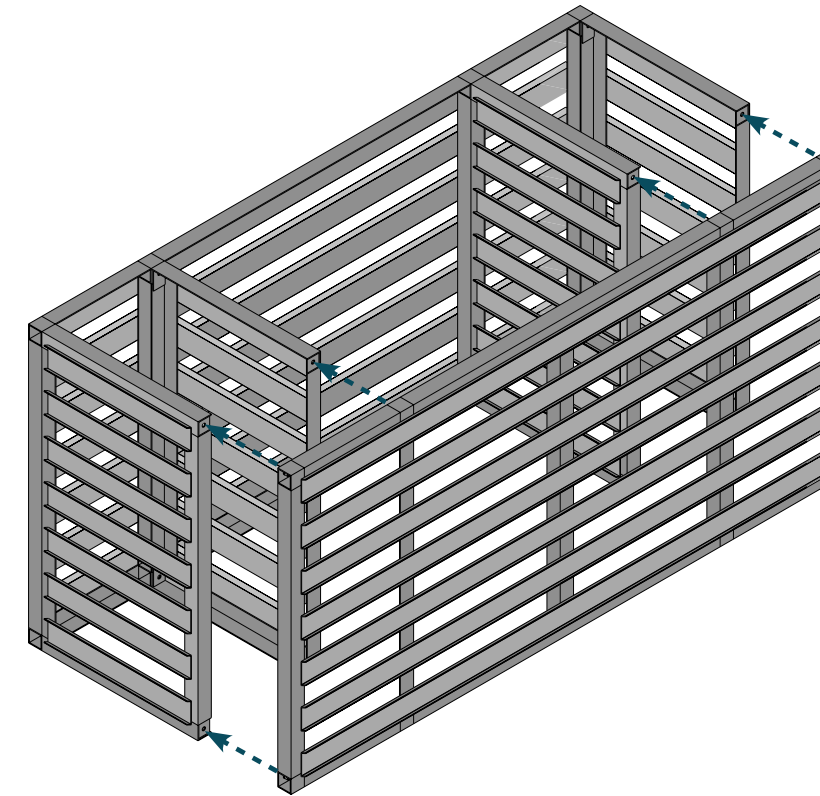
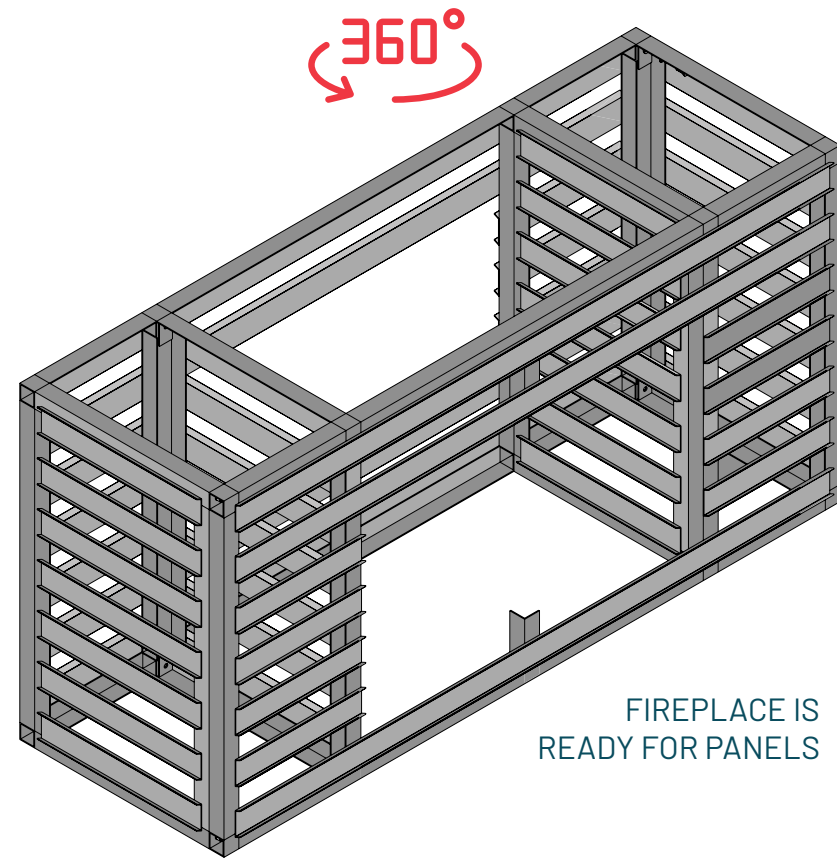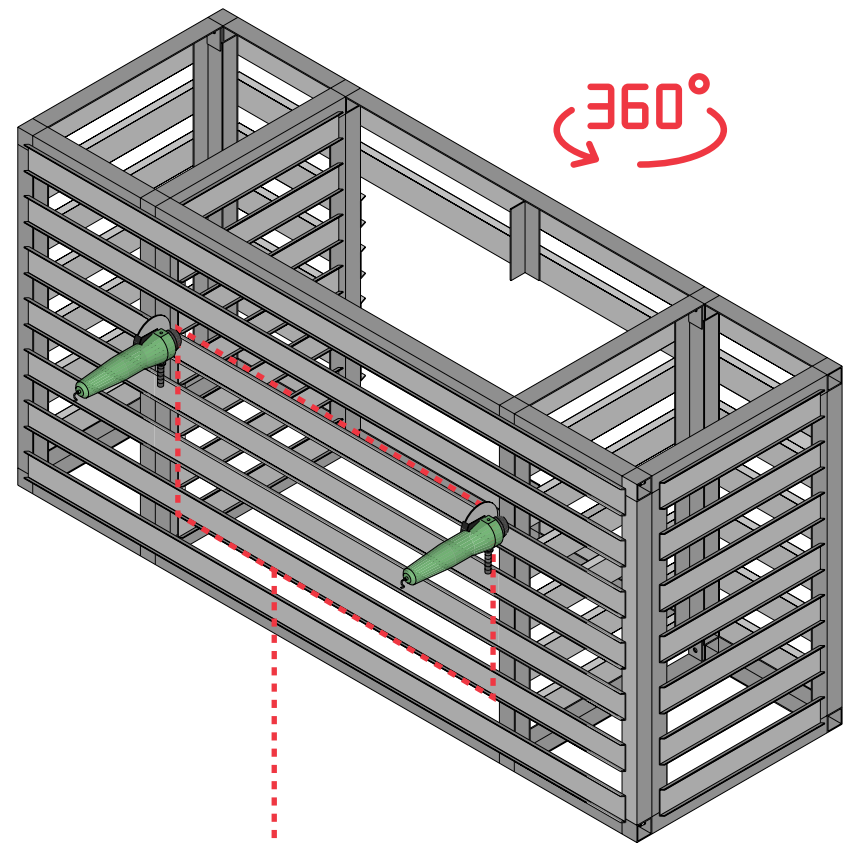ATTACH THE FRONT PANEL USING INCLUDED HARDWARE AND SECURELY TIGHTEN ALL BOLTS

NOTE:

Cut will start at the edge of each interior End Clads. Center Strut will also be cut. Bottom Rail along with the top 2 rails will stay intact.
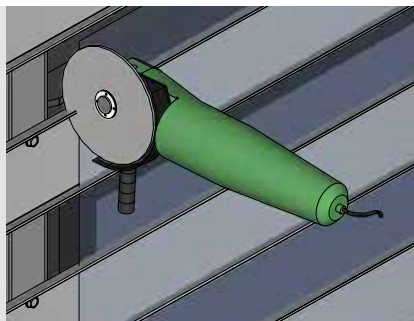
See-Thru Fireplace *Natural Gas*
OVERSIZED RETURN PANEL

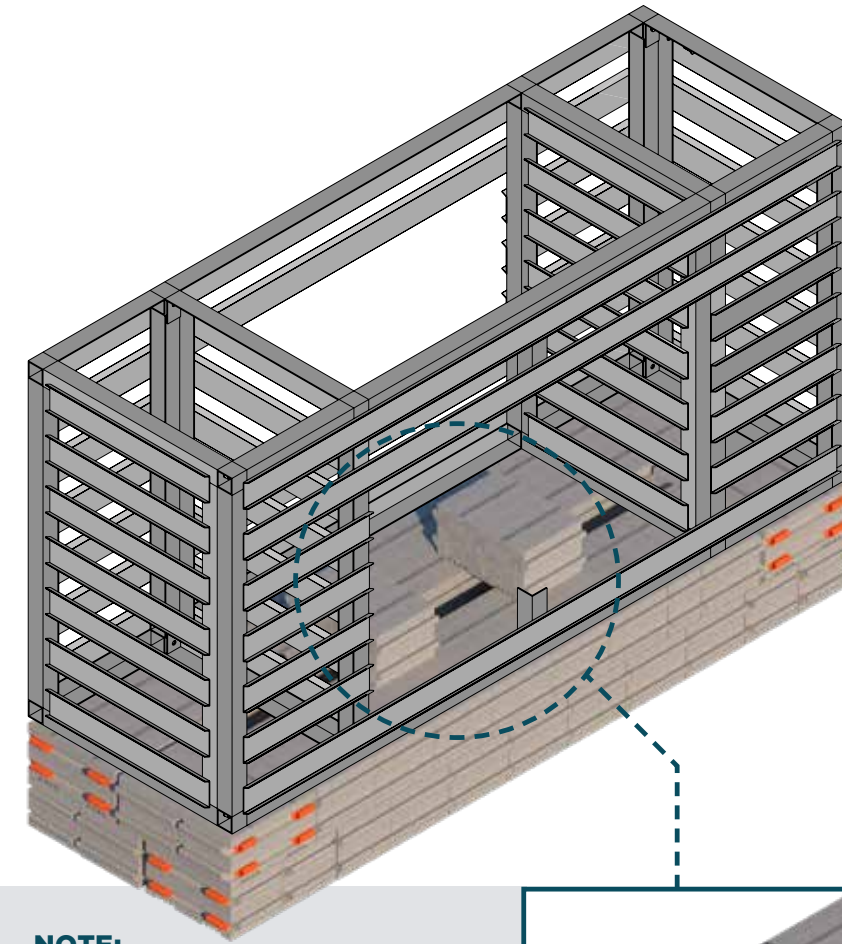360°

360°

FIREPLACE IS
READY FOR PANELS

NOTE:

To achieve see-thru
effect, repeat cutting
process from front
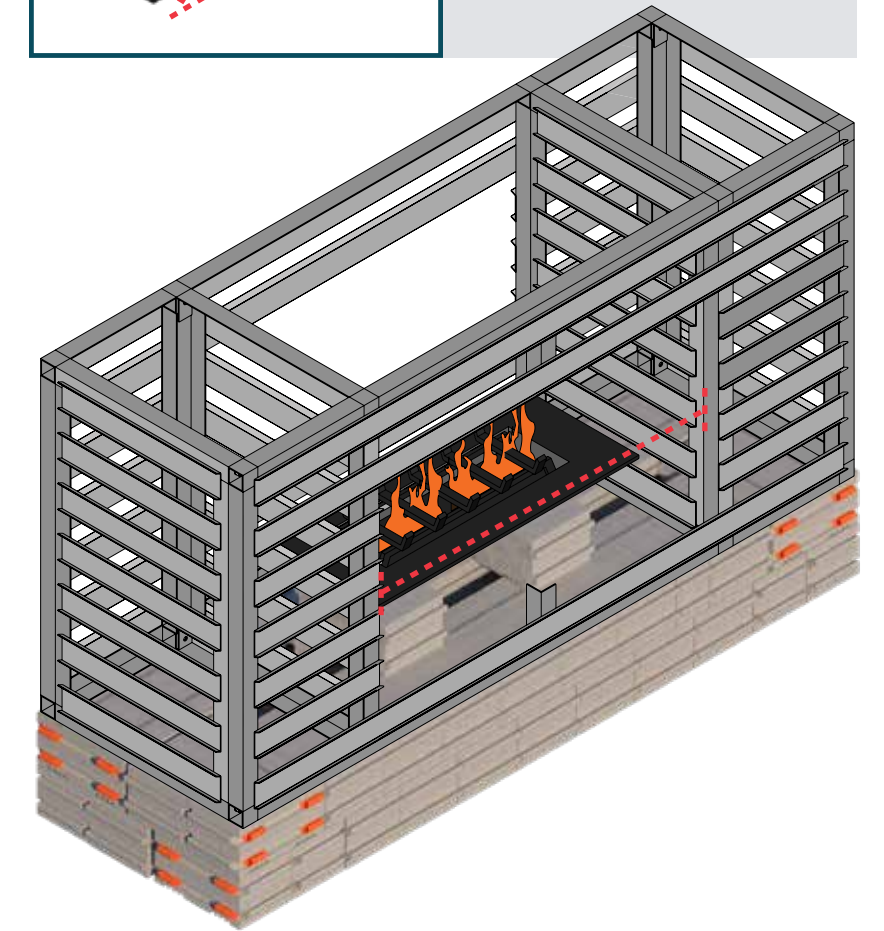panel on back panel.

See-Thru Fireplace *Natural Gas*
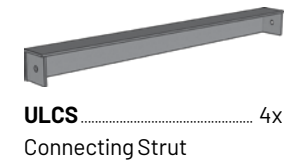# FIREPAN ASSEMBLY

NOTE:
Max 36"

NOTE:

Place backer blocks in the center
equally spaced apart for pan
support. Top connection lugs will
need to be removed with a hammer
and chisel to provide a flat surface
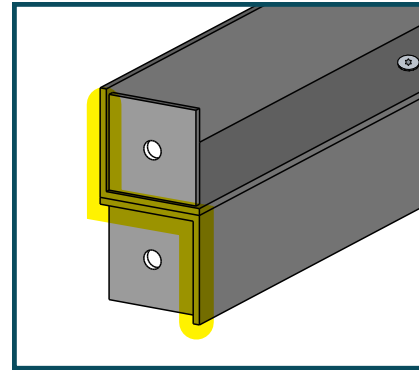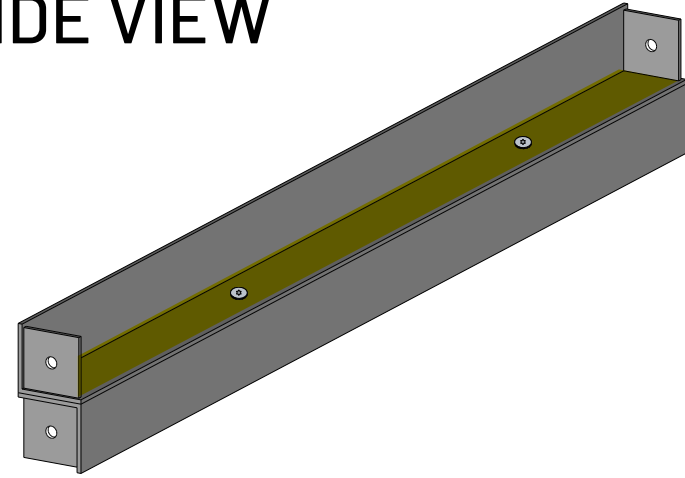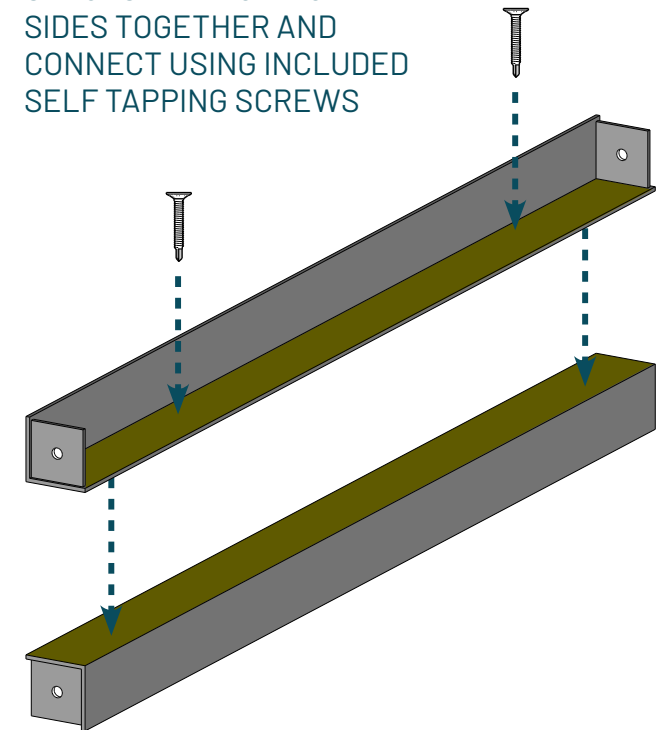for fire pan placement.

FOLLOW STEPS ON PAGE 52 - 55

ULCS................ 4x
Connecting Strut
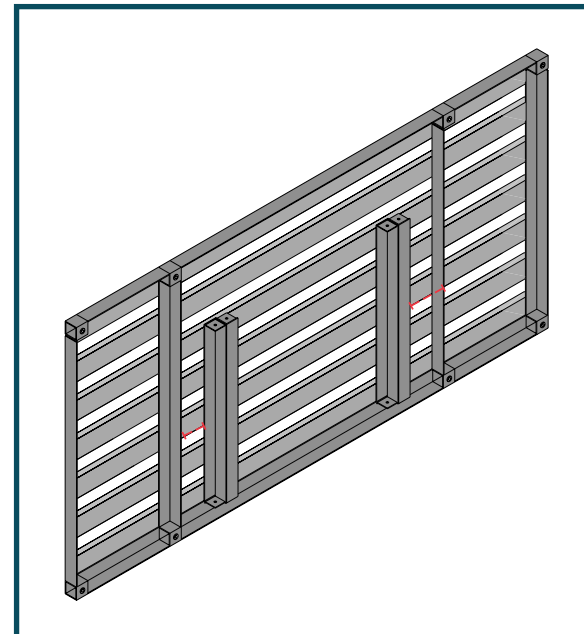
ASSEMBLE 2 CONNECTING
STRUTS BY ALIGNING FLAT
SIDES TOGETHER AND
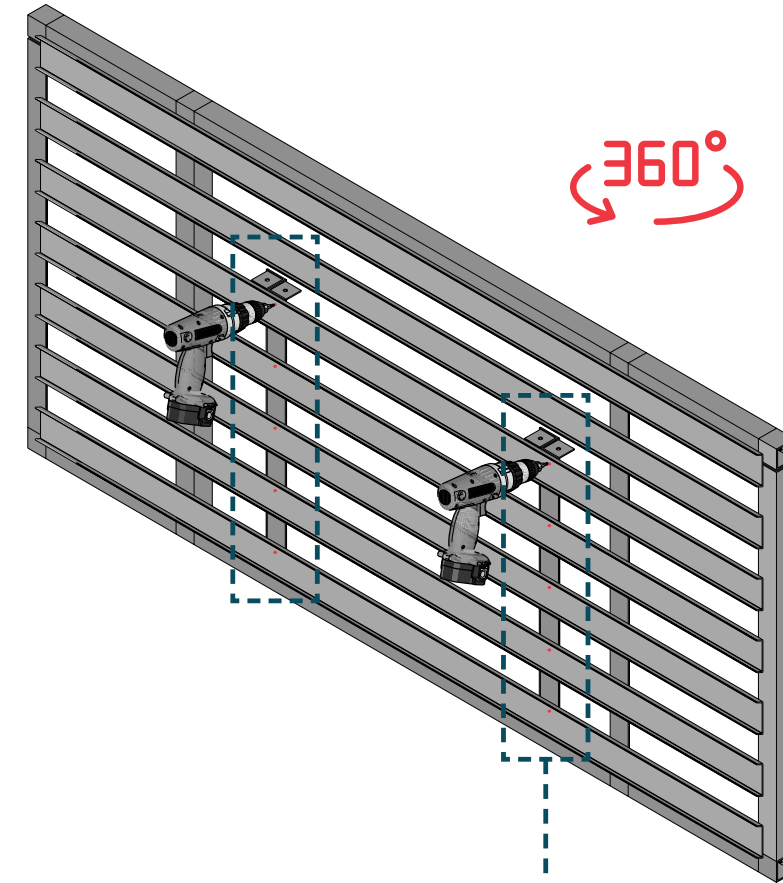CONNECT USING INCLUDED
SELF TAPPING SCREWS

**Once completed, there
will be 2 mounting sides
to allow for attachment
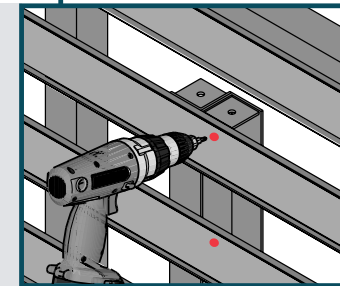to cabinet and for interior
rail cut-out.**

NOTE:

Mounting position
will be top of rail
#5 and 6-8" from
each end.

NOTE:

Cut-out will be attached
using the interior flat
side of connecting strut
bracket and the included
self taping screws.

↺360°

↺360°
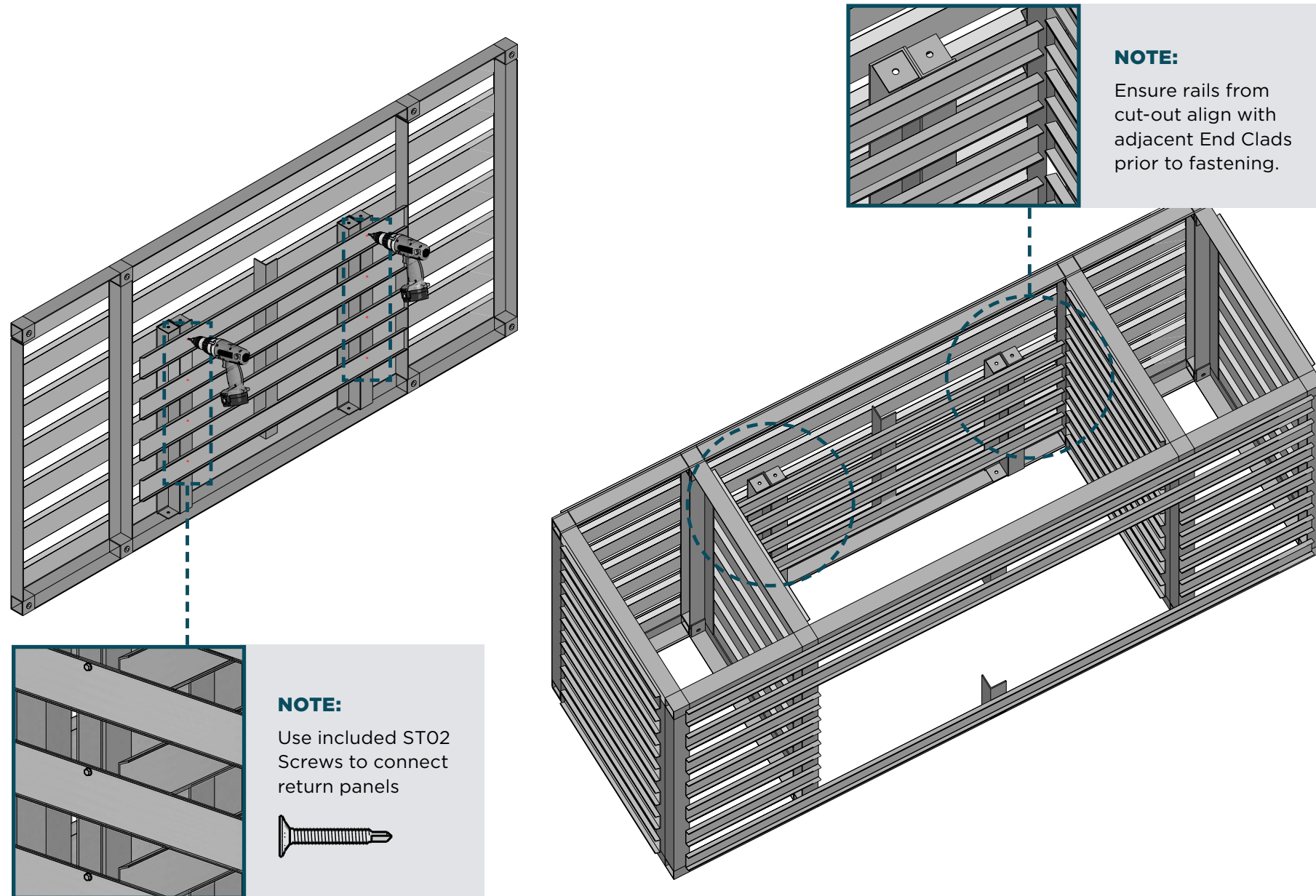
NOTE:

Attach connecting strut
bracket from the exterior side
of back panel. Use included
self taping screws and position
under top bend in rail.

PRIOR TO ATTACHING CUT-OUT REMOVE 1" FROM
EITHER END TO ALLOW FOR CLEARANCE

OPTIONAL SINGLE SIDE VIEW *(CONTINUED)*

NOTE:
Ensure rails from cut-out align with adjacent End Clads prior to fastening.

NOTE:
Use included ST02 Screws to connect return panels

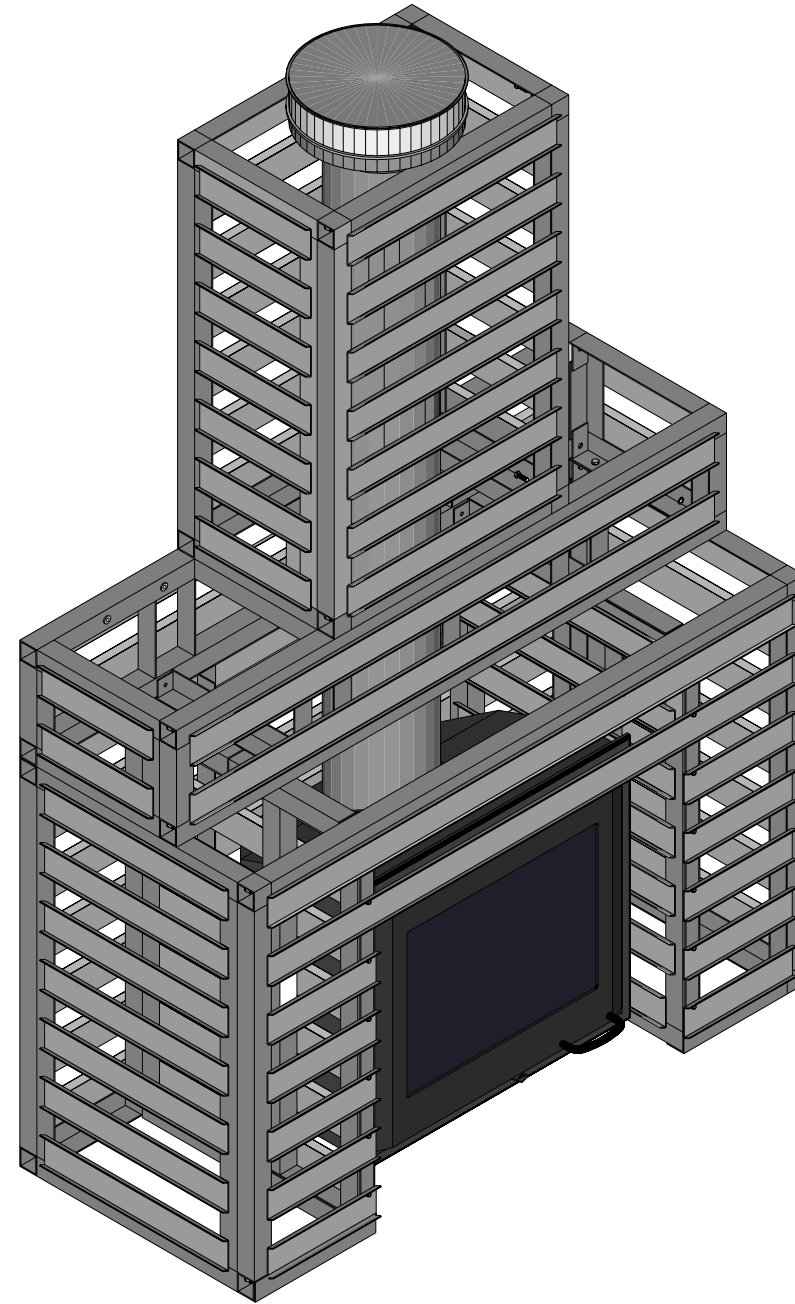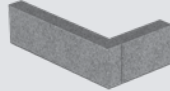## **Frontside View Fireplace** *Natural Gas*
ASSEMBLED
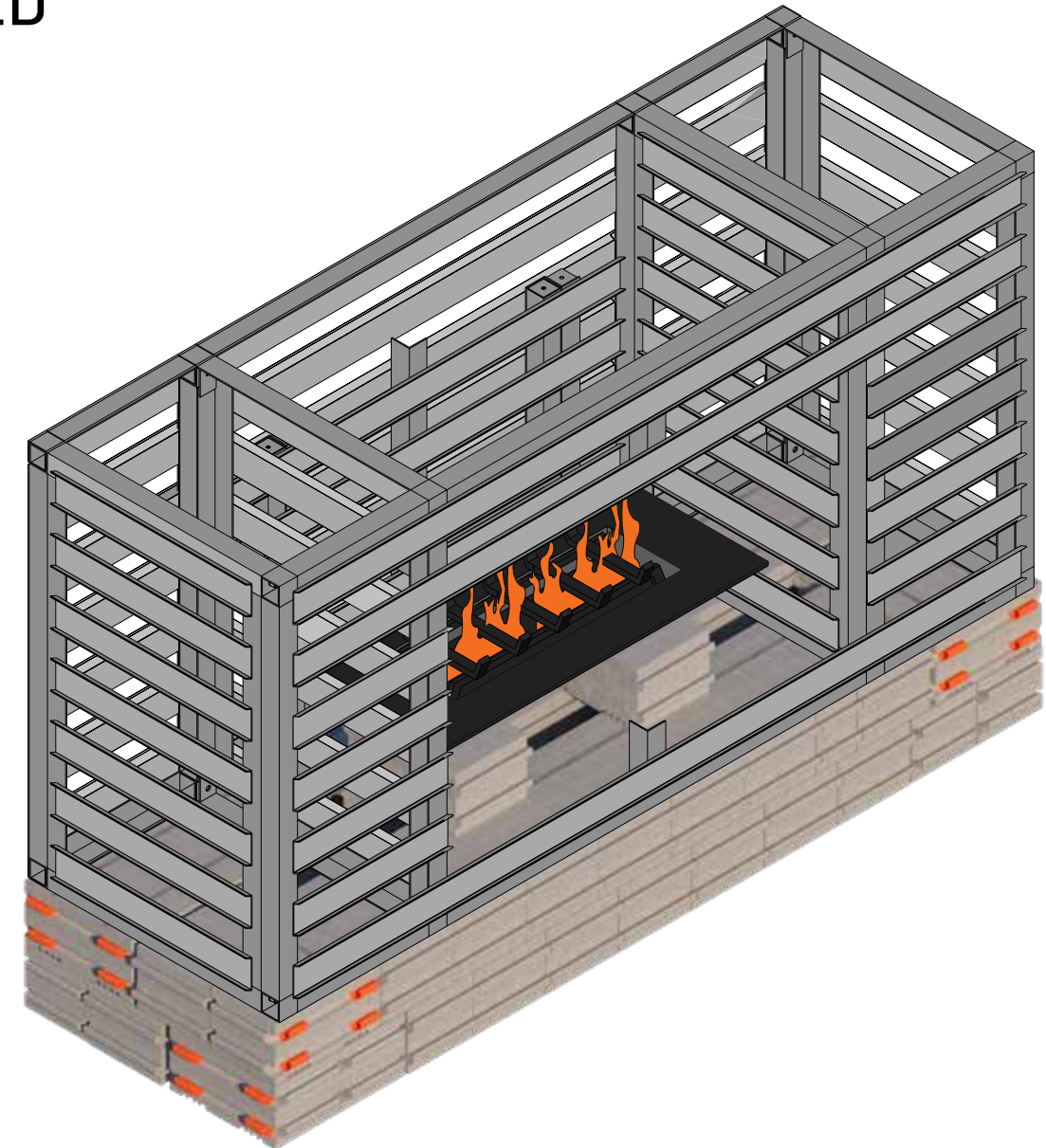
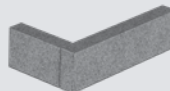# 36" Fireplace Module Components
WOODBURNING

U-CARA MODULAR SYSTEM

1 Standard Chimney *UL- FIR- CH*

1 Standard Mantle *UL- FIR- M*

1 Return Panel Set *UL- FIR- RTN*

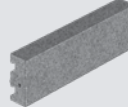**1** Base Cabinet *UL-BC*

2 End Clads *UL- ECK*

RIGHT CORNER PANEL SET

LEFT CORNER PANEL SET

STANDARD PANEL

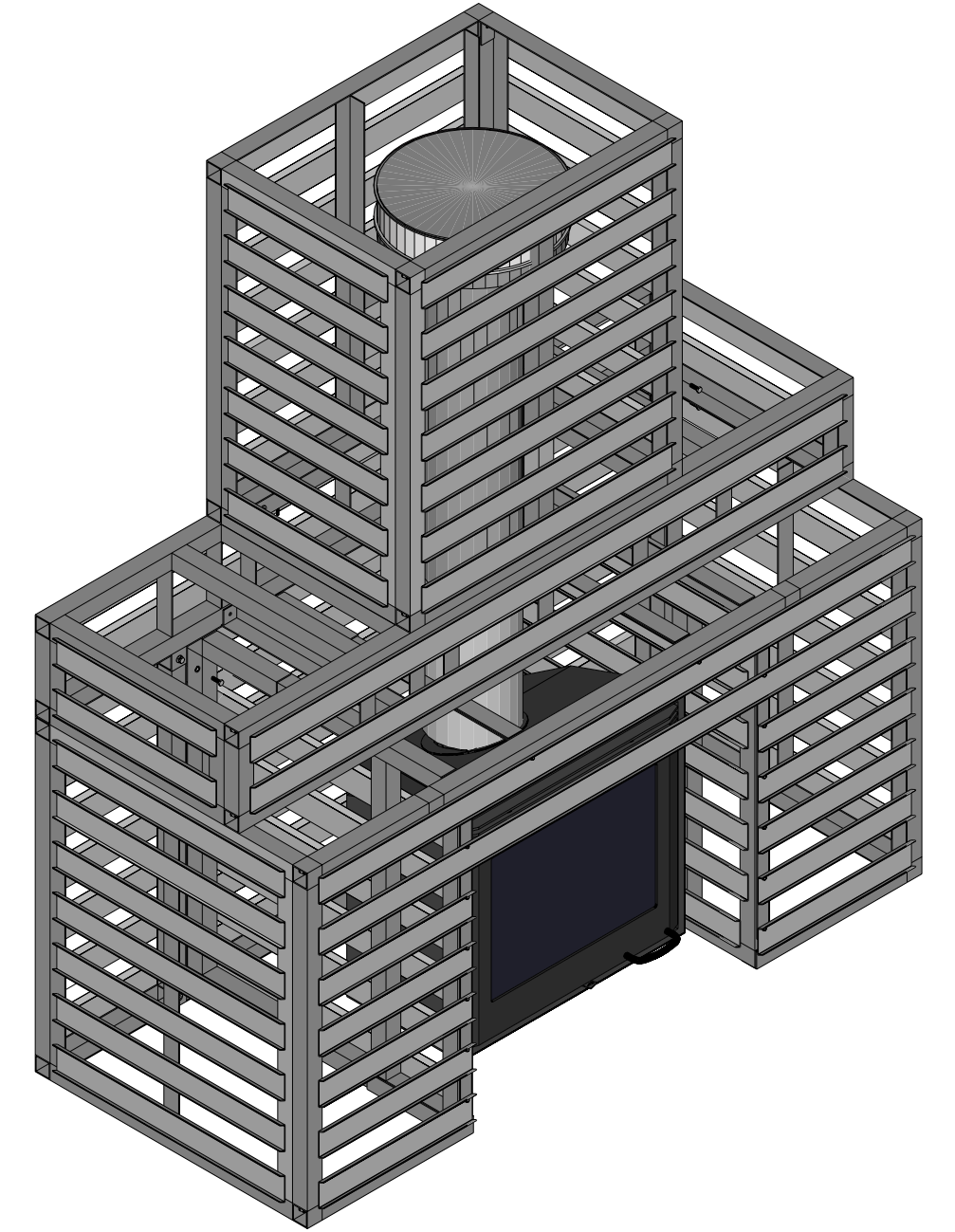**U-CARA FACIA PANELS**

Standard Panels
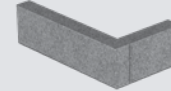**26**

Corner Sets
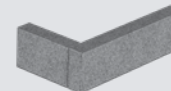**74**

42" Fireplace Module Components
WOODBURNING

U-CARA MODULAR SYSTEM

1 Fireplace Module *UL- FIR*

2 End Clad Oversized *UL- ECK-OS*

1 Return Panel *UL- FIR- RTN-OS*

1 Wide Mantle *UL- FIR- MW*

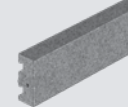**1** Wide Chimney *UL- FIR- CHW*

RIGHT CORNER PANEL SET

LEFT CORNER PANEL SET

STANDARD PANEL

U-CARA FACIA PANELS
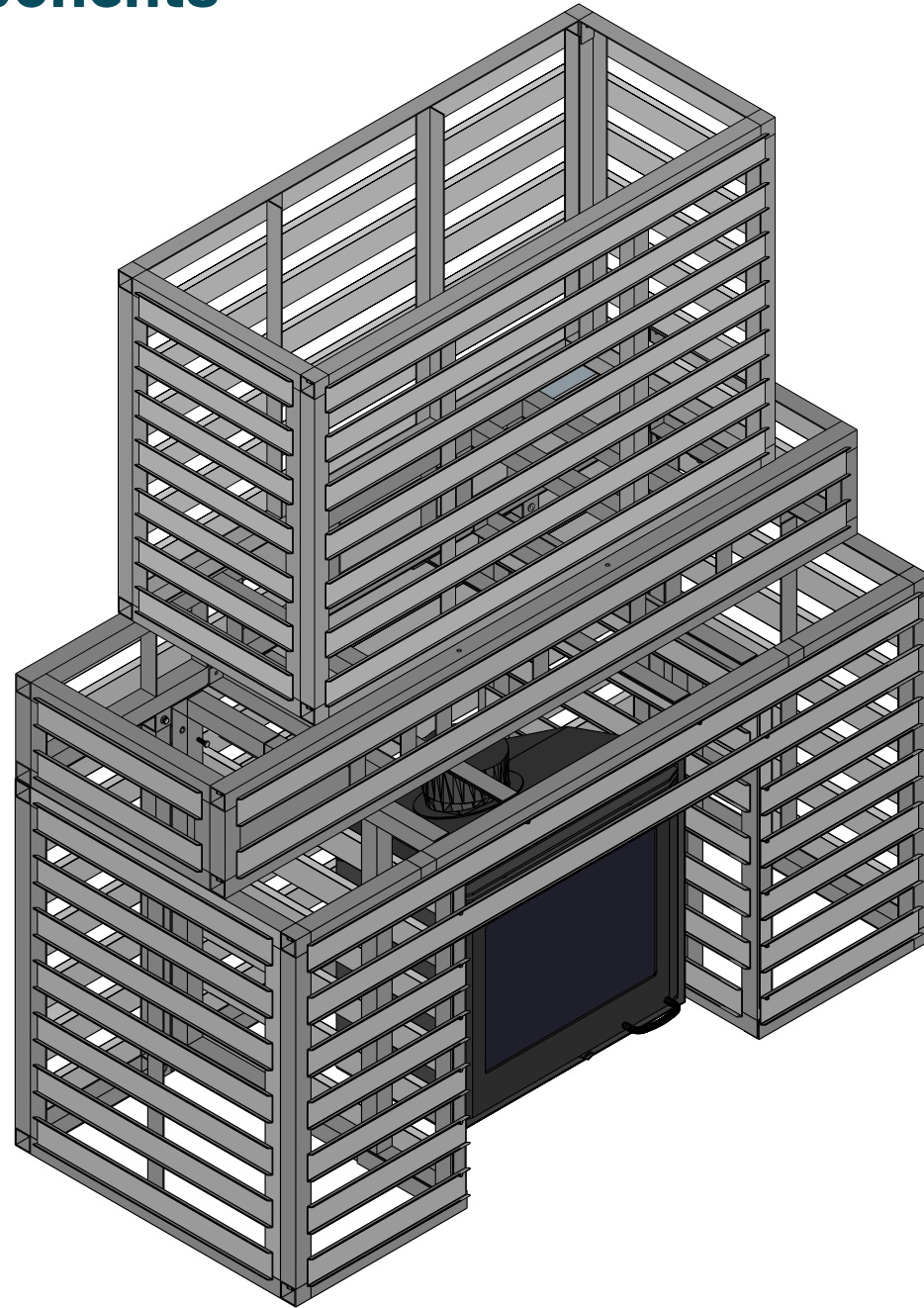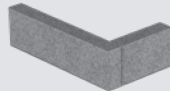
Standard Panels
71

Corner Sets
72

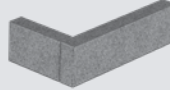# 42" Fireplace Module Components
TV MOUNT

U-CARA MODULAR SYSTEM

1 Fireplace Module *UL– FIR*

2 End Clad Oversized *UL– ECK–OS*

1 Return Panel *UL– FIR– RTN–OS*

1 Wide Mantle *UL– FIR– MW*

1 Base Cabinet *UL–BC*

2 End Clads *UL– ECK*

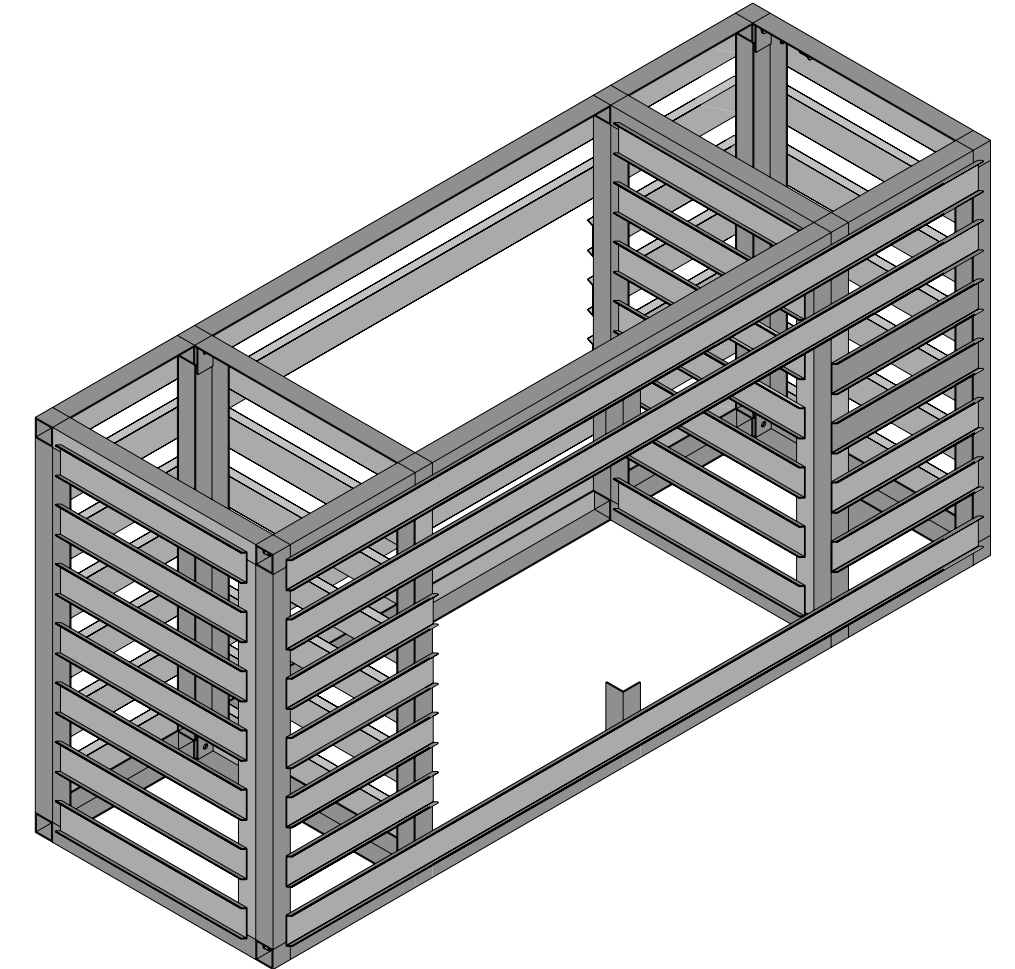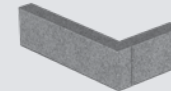|	U-CARA FACIA PANELS
RIGHT CORNER PANEL SET	Standard Panels **92**
LEFT CORNER PANEL SET	Corner Sets **72**
STANDARD PANEL	

Standard See-Thru Fireplace Module Components
NATURAL GAS
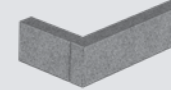
U-CARA MODULAR SYSTEM
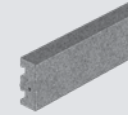
1 Fireplace Module– UL– FIR

4 End Clads– UL– ECK

	U-CARA FACIA PANELS
RIGHT CORNER PANEL SET	Standard Panels **18**
LEFT CORNER PANEL SET	Corner Sets **44**
STANDARD PANEL	

UNILOCK®