

Basic In Wall Slide: Installation Guidelines

Kit 1478-610

8 September 2014



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Chassis  Body  Interior 



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“Example” Sofa Slide





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“Example” Dinette Slide

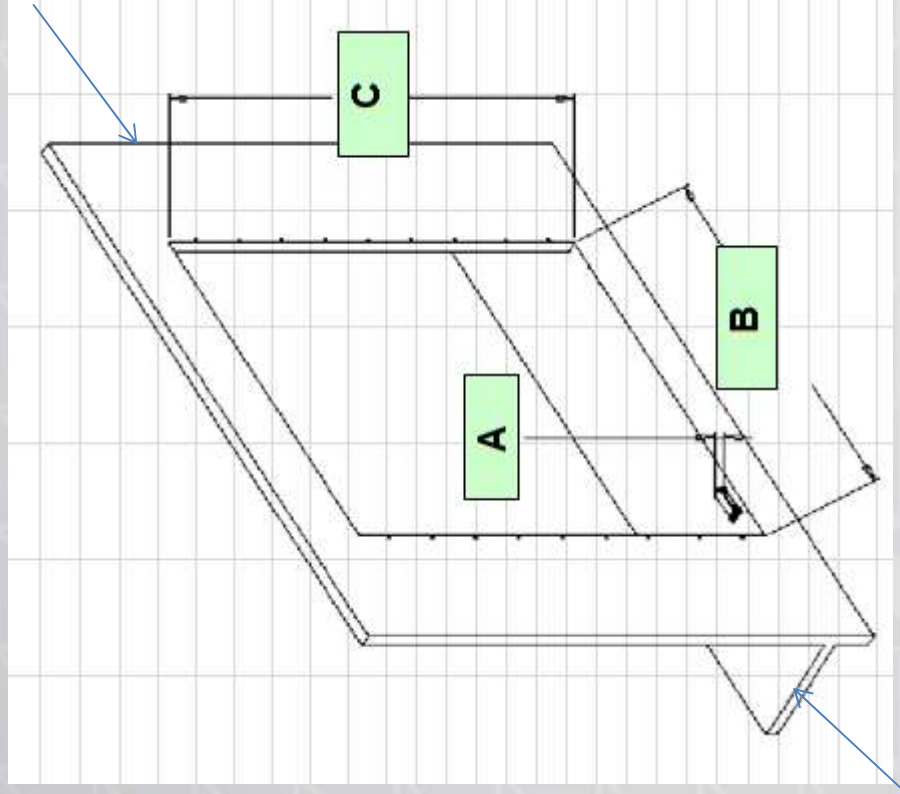




“Example” Bed Slide



Sample Bed Slide with Kit “1478-610” Wall Opening (when using 25mm high floor roller)



Caravan Wall

A. 25mm

Floor Roller Height

B. 2134mm

Length of Raw Opening

C. 1488mm

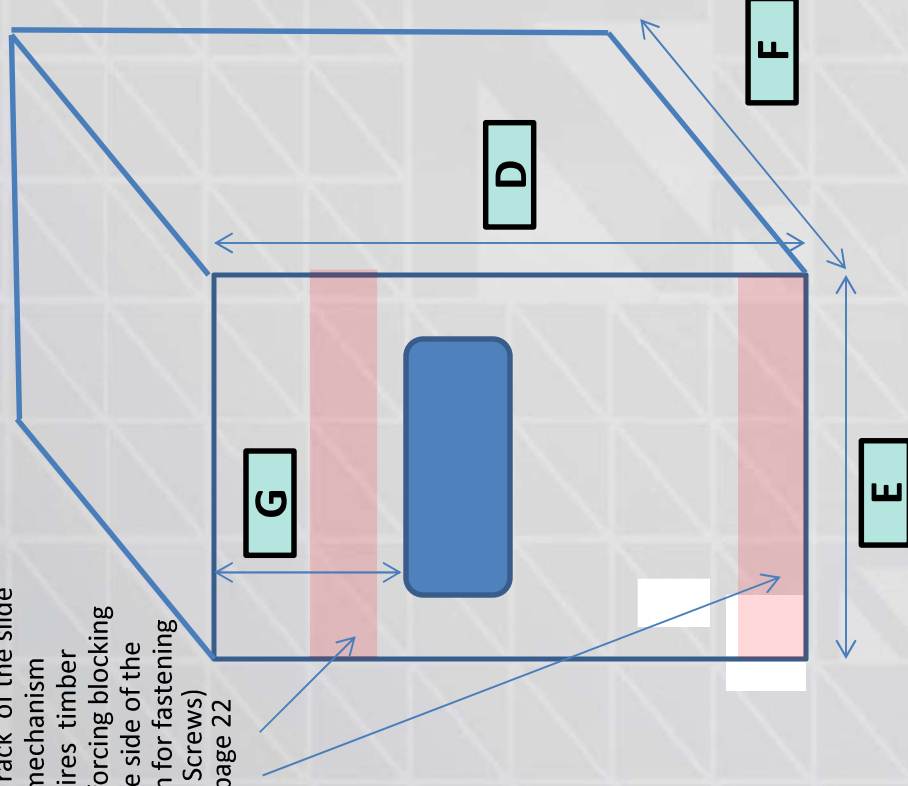
**Height of Raw Opening,
Without lower seal installed**

Caravan Floor (floor line height may vary with construction)

Sample Bed Slide with Kit “1478-610”

Room Box

The top and bottom gear rack of the slide out mechanism requires timber reinforcing blocking in the side of the room for fastening (#10 Screws)
See page 22



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D. 1431mm Height of Slide Out Room

E. 638mm Depth of Slide Out Room,
including back wall

F. 2000mm Length of Slide Out Room

G. 255mm Minimum distance from the
top of the room to the top of the
window



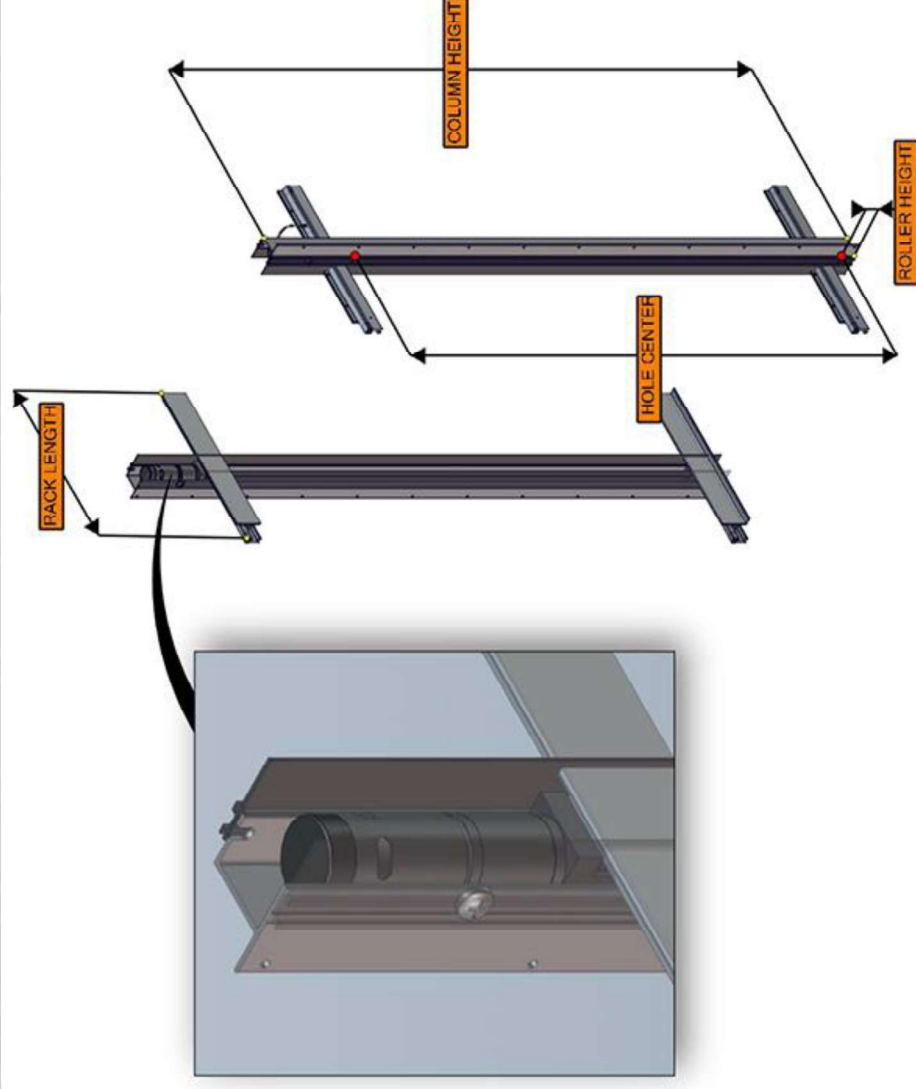
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Slide Room Mechanism

The mechanism consists of two parts that are mounted on each side of the room.

Rack length is the 28mm shorter than the finished room exterior depth.

Column height is 10mm less than raw opening in caravan side wall.



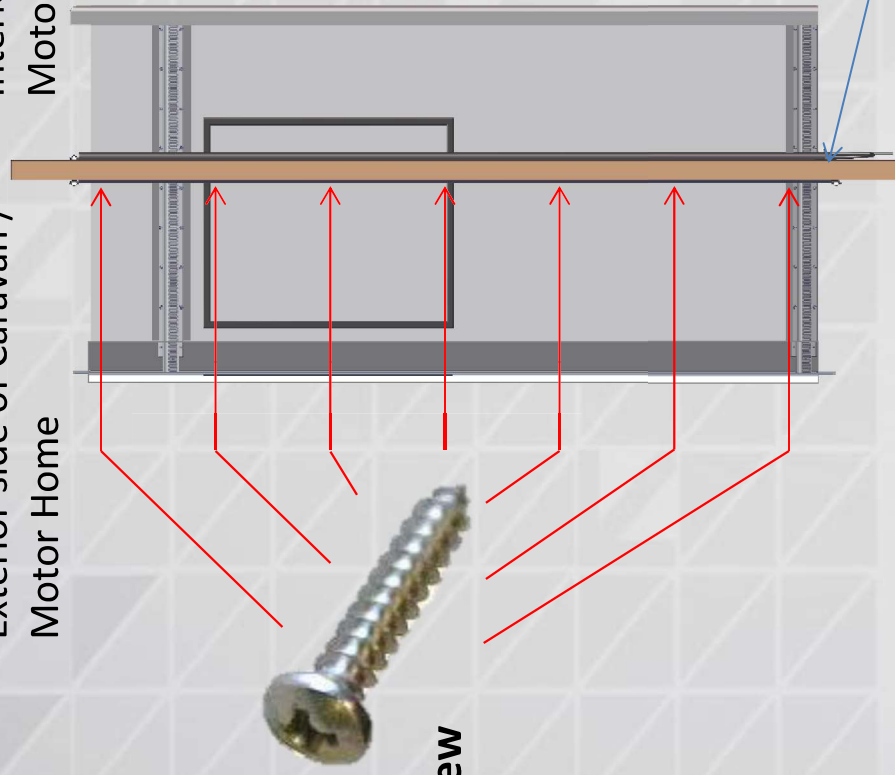


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Slide Room Mechanism Attachment

Exterior side of Caravan /
Motor Home

Interior side of Caravan /
Motor Home



#10 Screw

Once the room is placed in the caravan wall, the In Wall Slide Out Mechanism is attached to the outer caravan wall with #10 pan head screws.

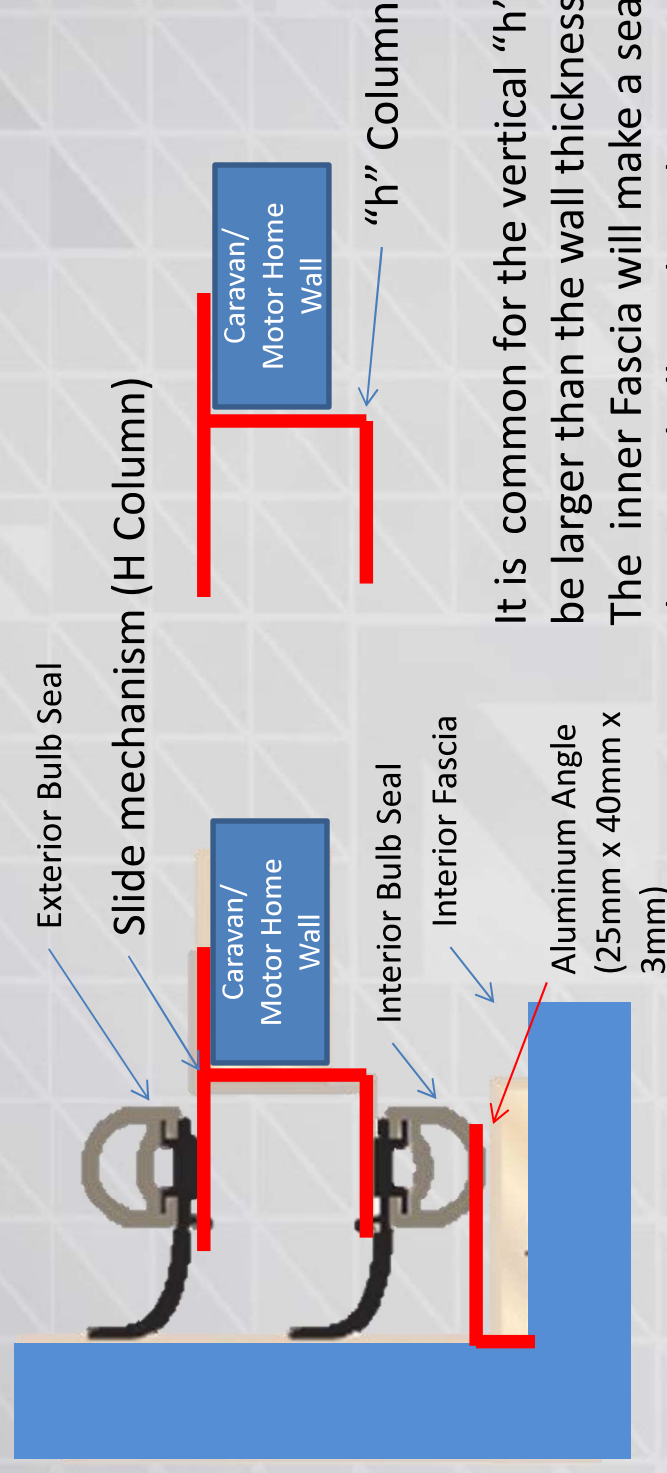
Motor Home /
Caravan Wall

Wall Thickness

Relationship of interior fascia to room opening.



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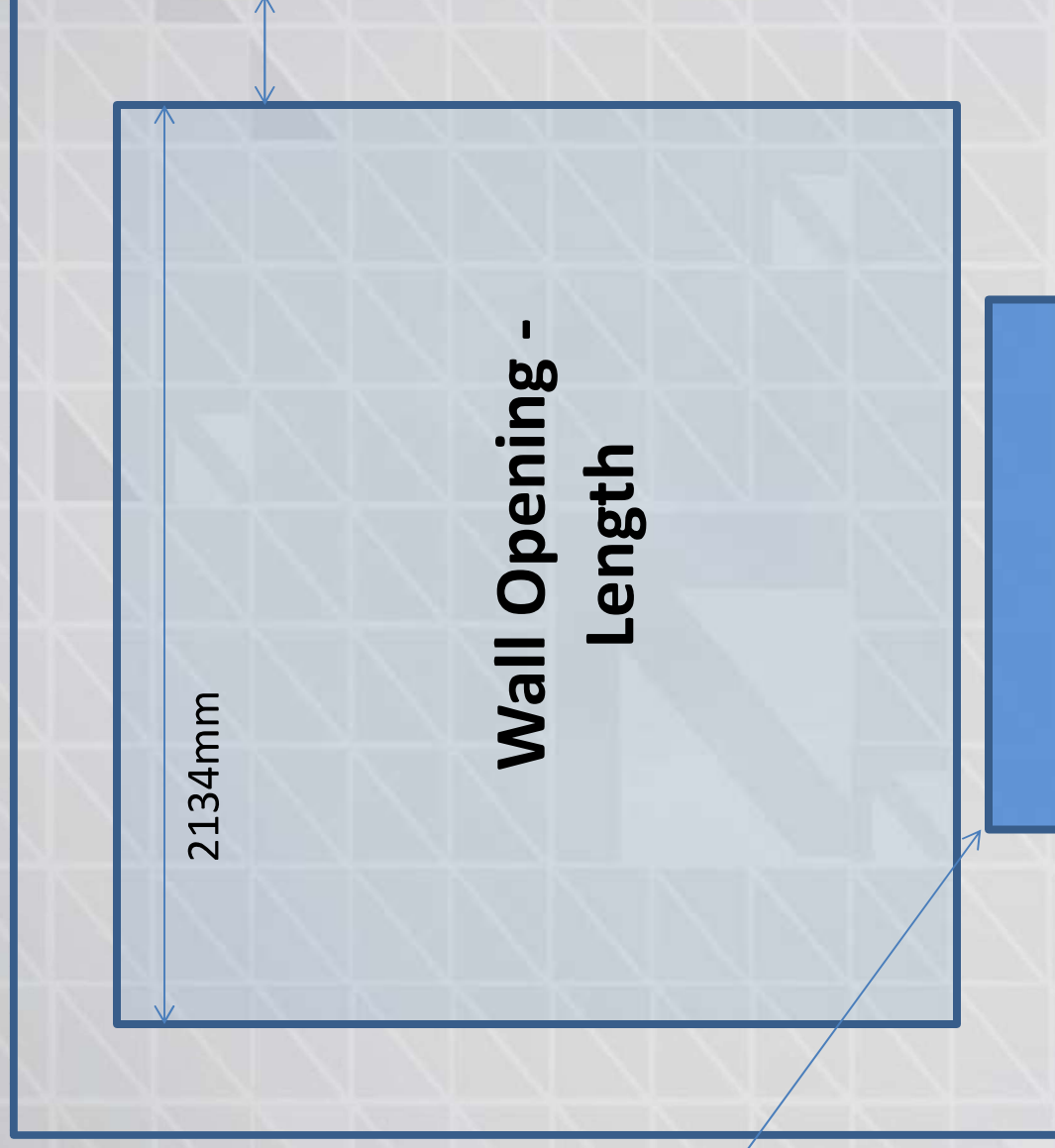
It is common for the vertical "h" column to be larger than the wall thickness (50mm). The inner Fascia will make a seal against the inner bulb seal on the vertical surfaces.

Note: The upper and lower horizontal surface of the caravan/motor home opening must be built out to 50mm to match the "h" column.



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If installing
above the
wheel box
you must
leave a
clearance of
25mm
between the
top of the
wheel box
and the raw
opening



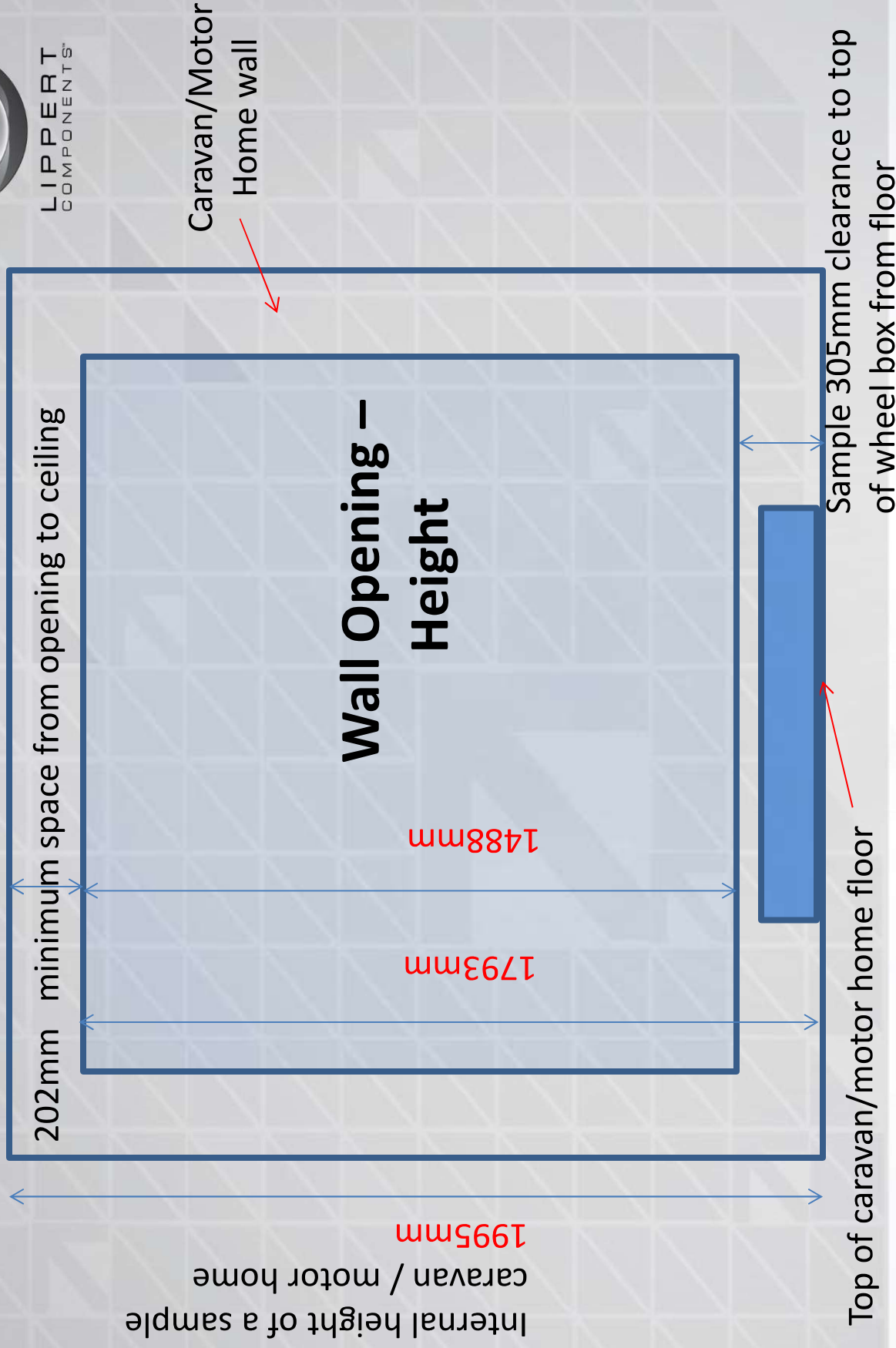
Minimum 111mm
Clearance to
nearest corner or
obstacle. (e.g.
cabinet or interior
wall)

Top of caravan/motor home floor

Sample room Opening with Kit "1478-610"
1488mm x maximum 2134mm



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There is always a designed gap between the caravan wall and the slide room (box) that is 67mm on each side, 32mm at the top, and 25mm at the bottom

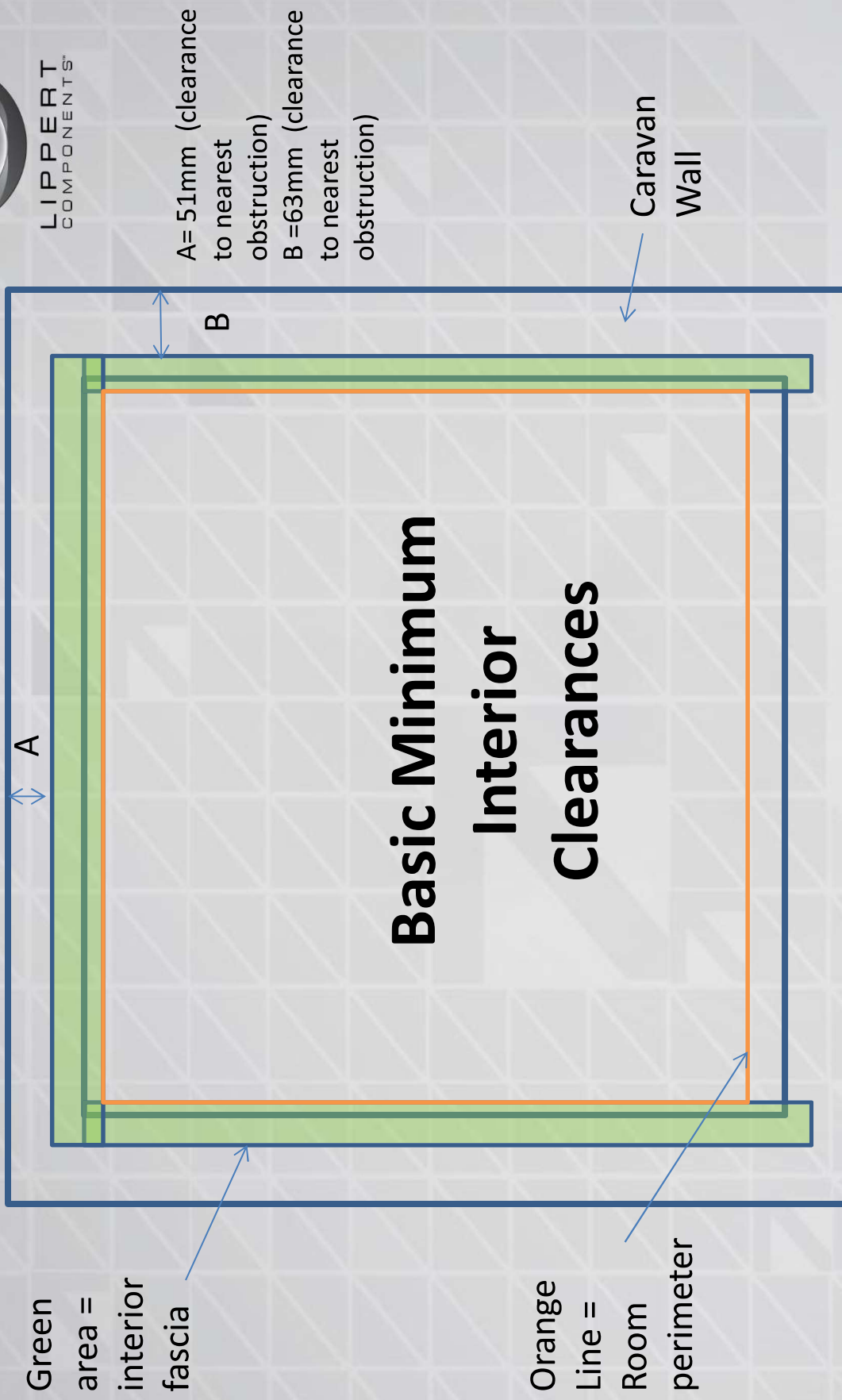


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14





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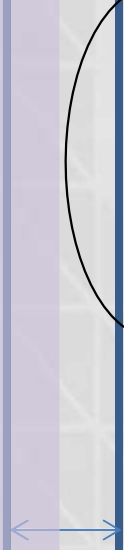


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The
exterior "T"
molding
extends
beyond the
perimeter
of the
opening

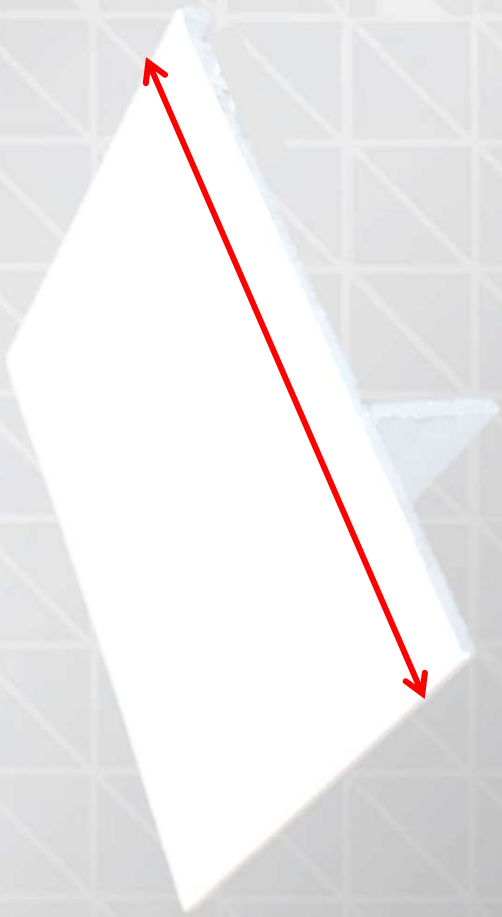
Wall Opening – Height (Exterior View)

Sample 300mm wheel housing

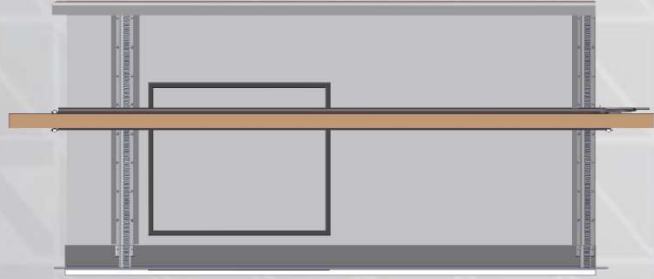




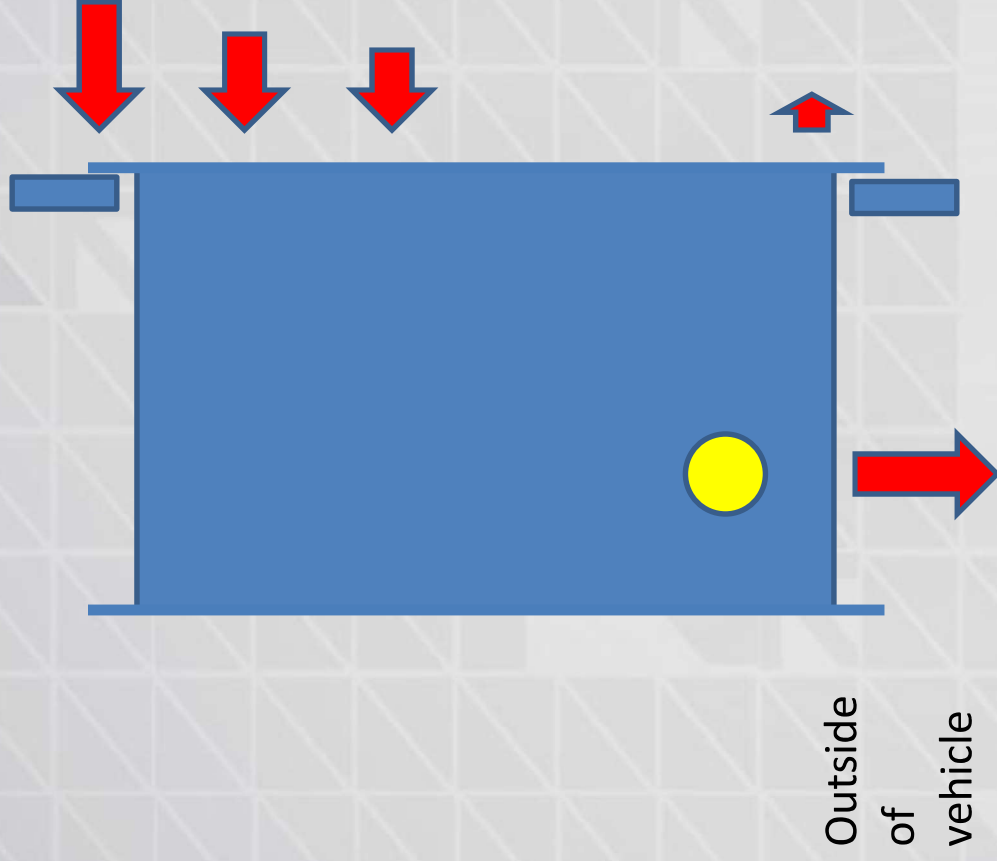
17



T molding 115mm



Slide Room impact on wall



Forces that result with a fully extended room explain why the wall structure is important.



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Slide Out Wall Construction



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A = 25mm x 76mm x 1.6mm; Filled Aluminum Tube

B = 25mm x 76mm x 1.6mm Filled Aluminum Tube

(must extend past H column and butt to stud A)

C = 25mm x 25mm x 1.6mm Filled Aluminum Tube every 500mm

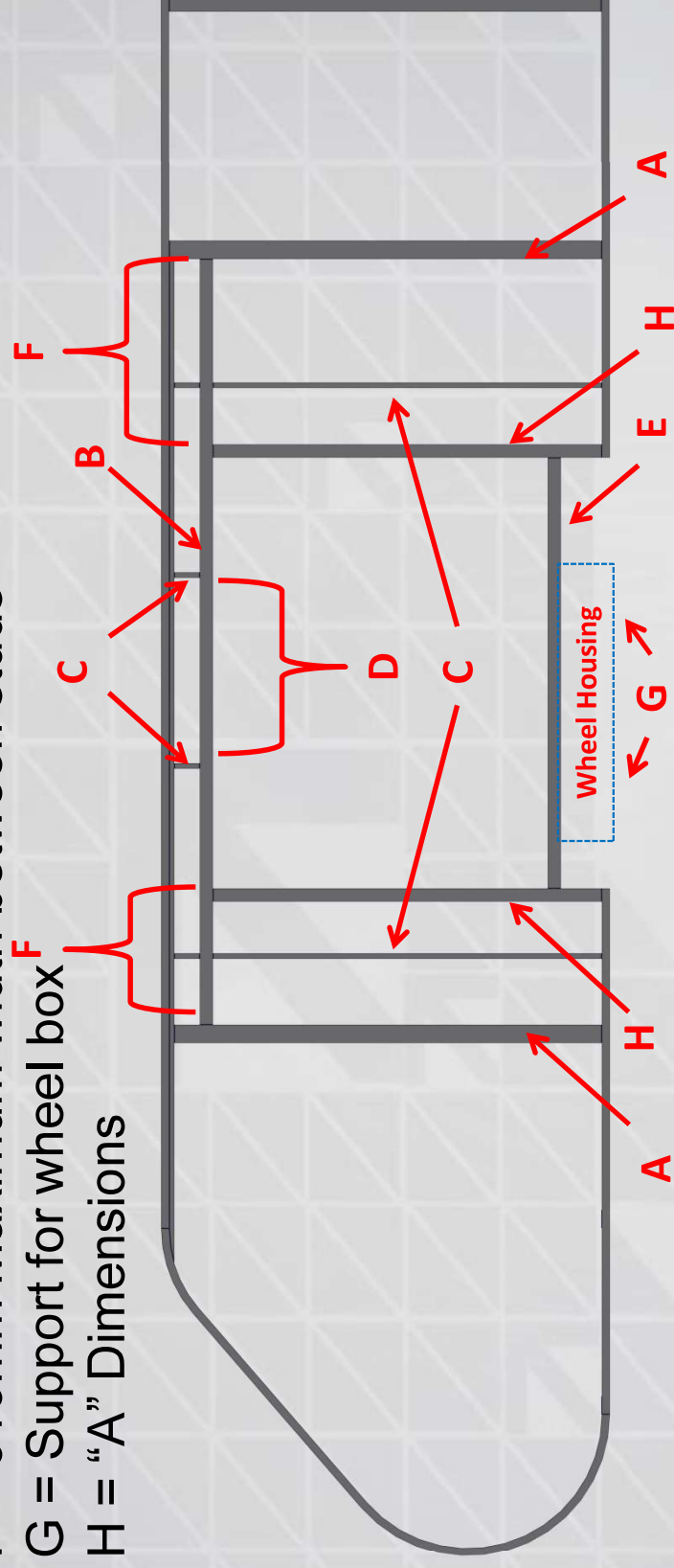
D = 500mm

E = 25mm x 76mm x 1.6mm Filled Aluminum Tube

F = 610mm Maximum width between studs

G = Support for wheel box

H = "A" Dimensions





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Slide Room Dimensions

External room width is 134mm
less than room opening.

External room Height is 57mm
less than opening when using
25mm floor rollers.

Rollers

150mm to 300mm max

600mm to 900mm max

Rollers placed
150mm to
300mm from
wall and every
600mm to
900mm there
after. Allow
for **5** rollers



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**Slide out fully
extended**

It is recommended to add a slope to the room roof. This aids in directing water away in the extended position. 6mm is sufficient as this also effects the length of the top wiper and the friction on the room.

Furniture Fit

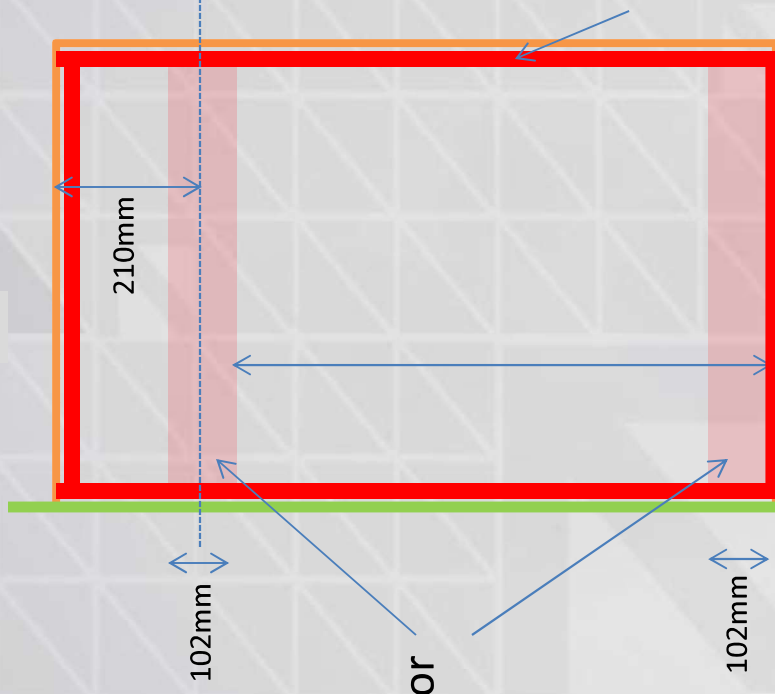
Wheel Housing

Slide out Room Side wall Construction



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Slide out rack needs
substantial blocking
for screws to secure
into.



Internal blocking for
slide out rack
attachment,
102mm wide

Frame the side walls;
25mm x 25mm x
1.6mm Aluminum

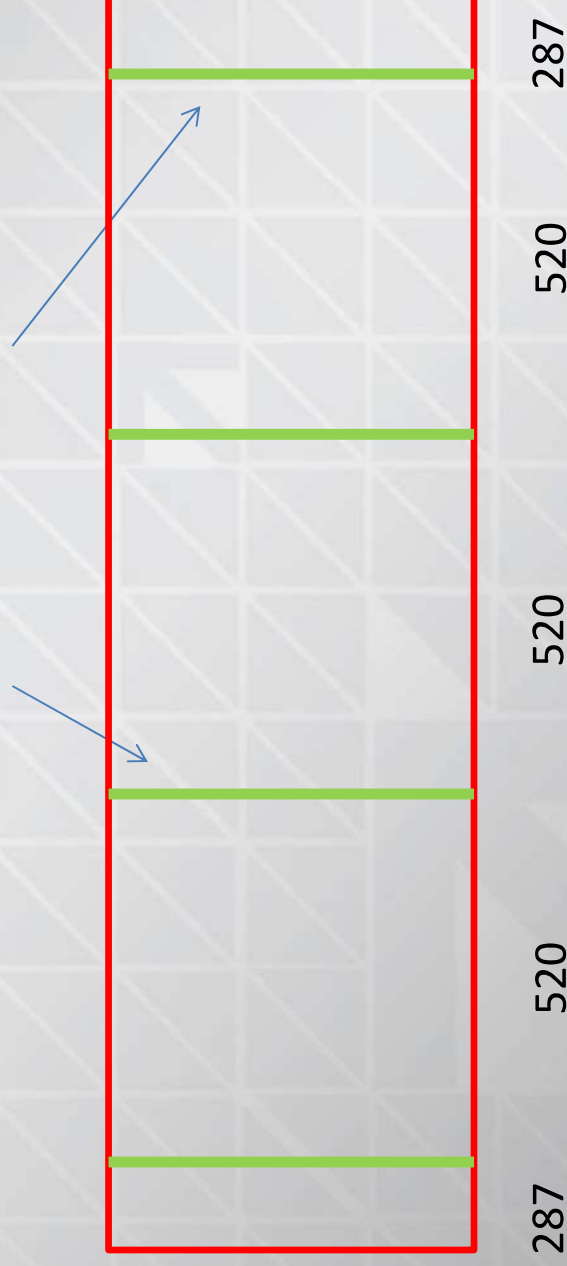


Slide out Room - Slide Floor Construction



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Green lines represent framing in the slide room floor. Framing must align with slide out floor rollers to prevent sagging or warping.

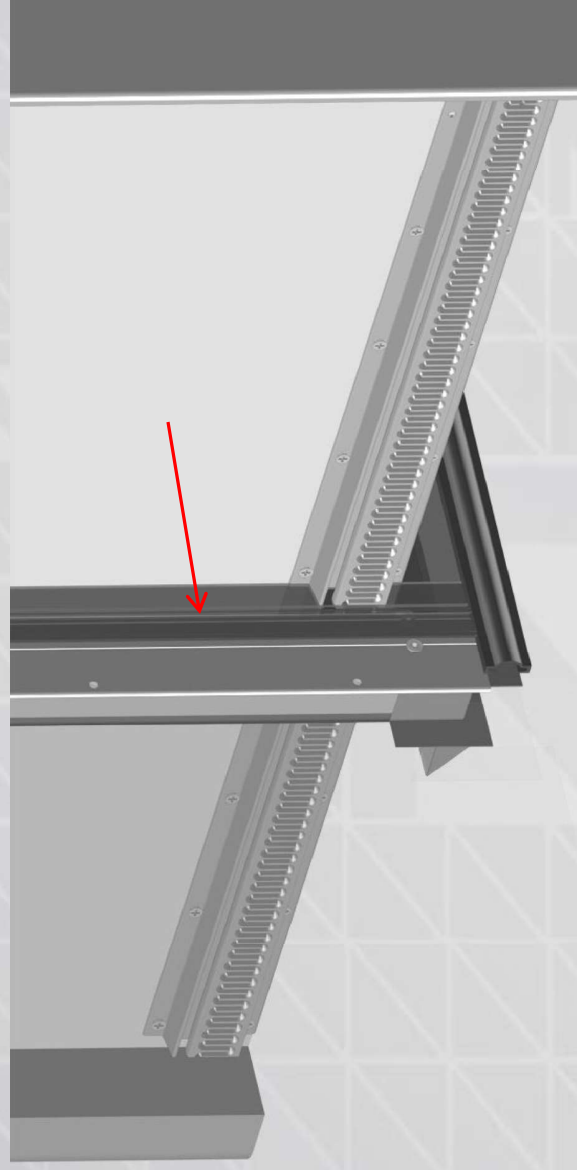


Example: Use 4 Floor Rollers for a room 2134mm in length



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Vertical Seal

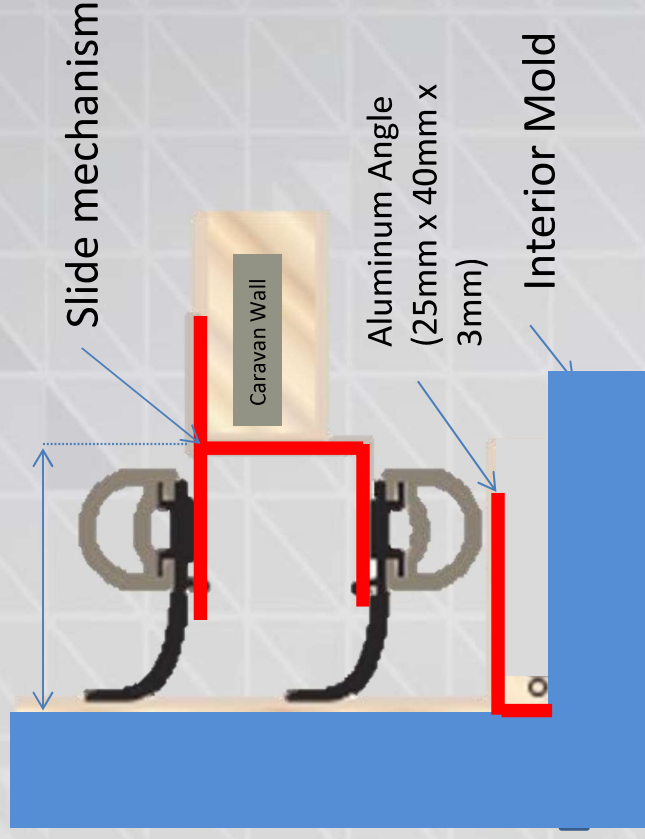
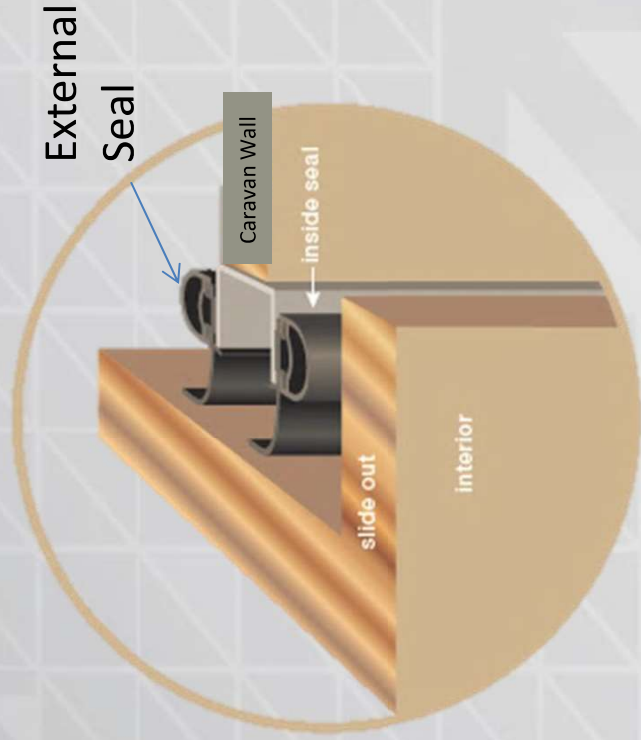


Vertical wiper is pre-assembled onto the “h” column.
Wiper is included inside and outside.
Track included for “D” seal or screw cover.

Vertical Seal



Relationship of interior fascia to room opening.



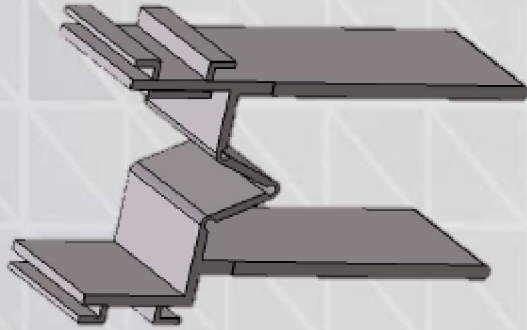
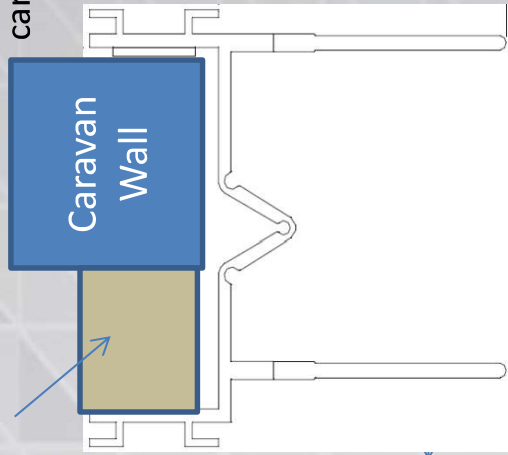
The room must be a total of 134mm more narrow than the opening to allow for the mechanism and the seals to work correctly



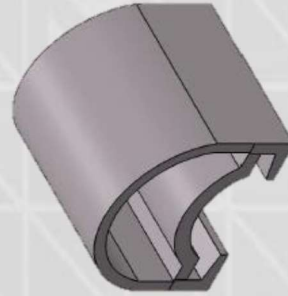
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Exterior
of
caravan

This space must
be filled with
timber



Double Wiper

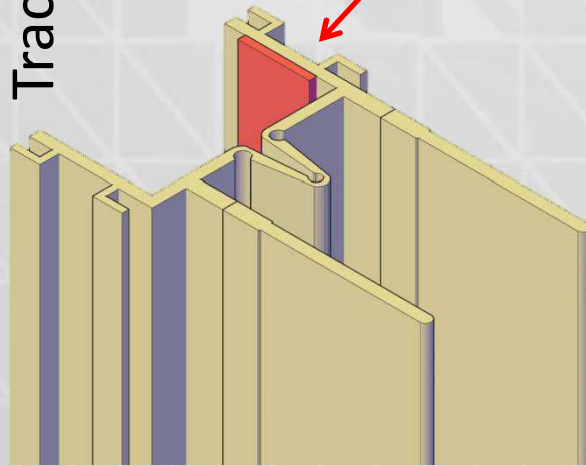


"D" Seal

Upper Seal

Inner
Track

Outer
Track

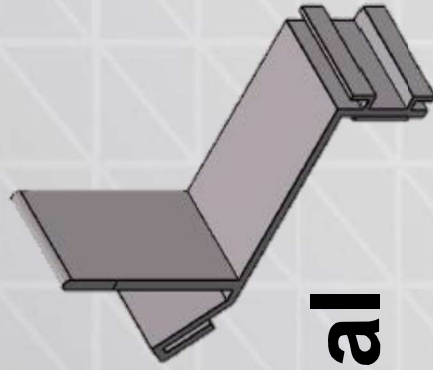




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Lower Seal

Designed to channel
moister out.
Single piece, co-
extruded lower
tray



Attached
Eternabond
Adhesive/sealant

Ridged corner
cup

Ridged tray
Soft Wiper

57mm

Bulb seal Track

Caravan Wall

Place Aluminum
block support to
width of seal



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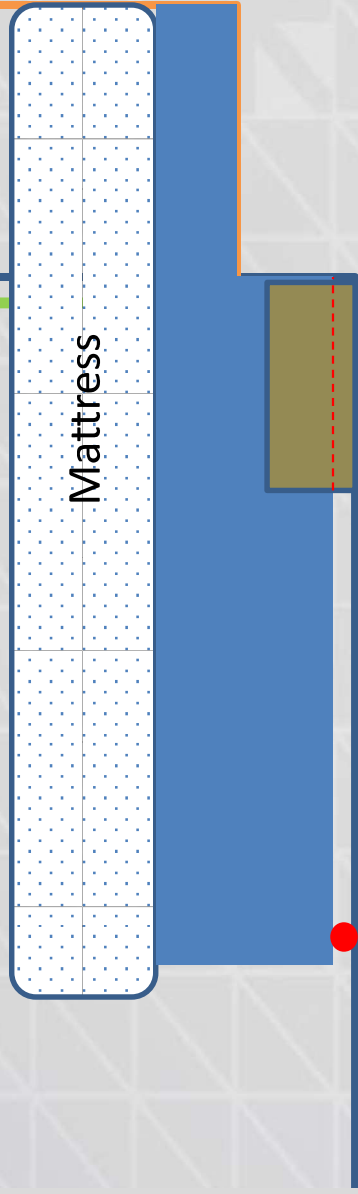






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**Bedroom
Slide out fully
extended**



Rollers mounted to
floor of coach and
used to prevent
sagging of furniture.



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**Bedroom
Slide out fully
retracted**

Mattress

Wheel
Housing





35





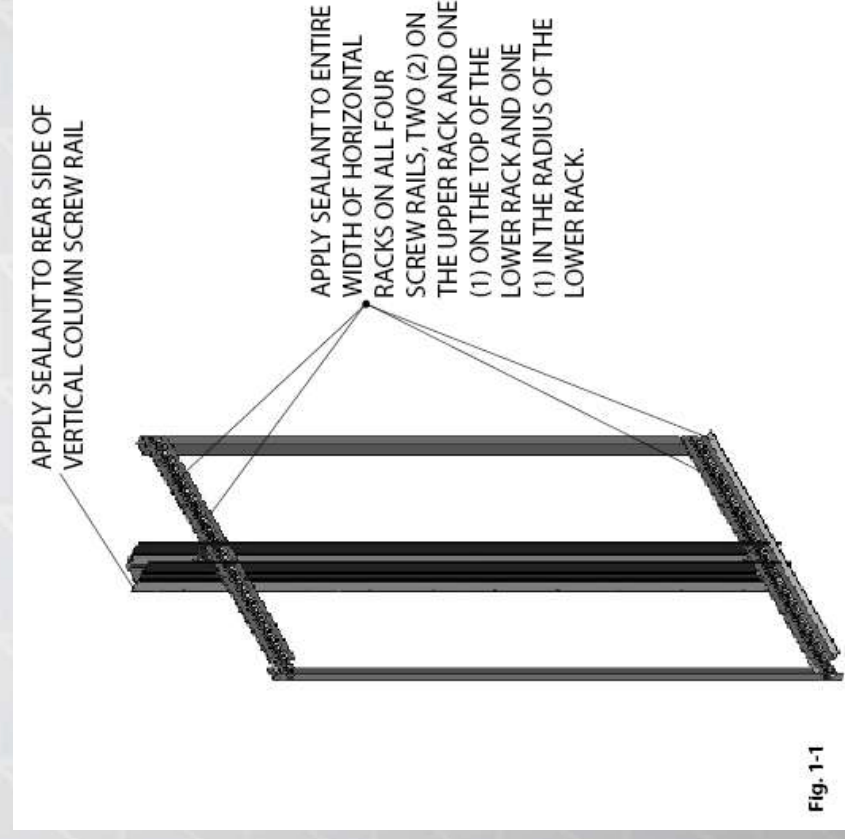
➤ The Lippert In-Wall Slide Out System

“Basic Installation”



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➤ Installing the Slide Mechanism to the Room

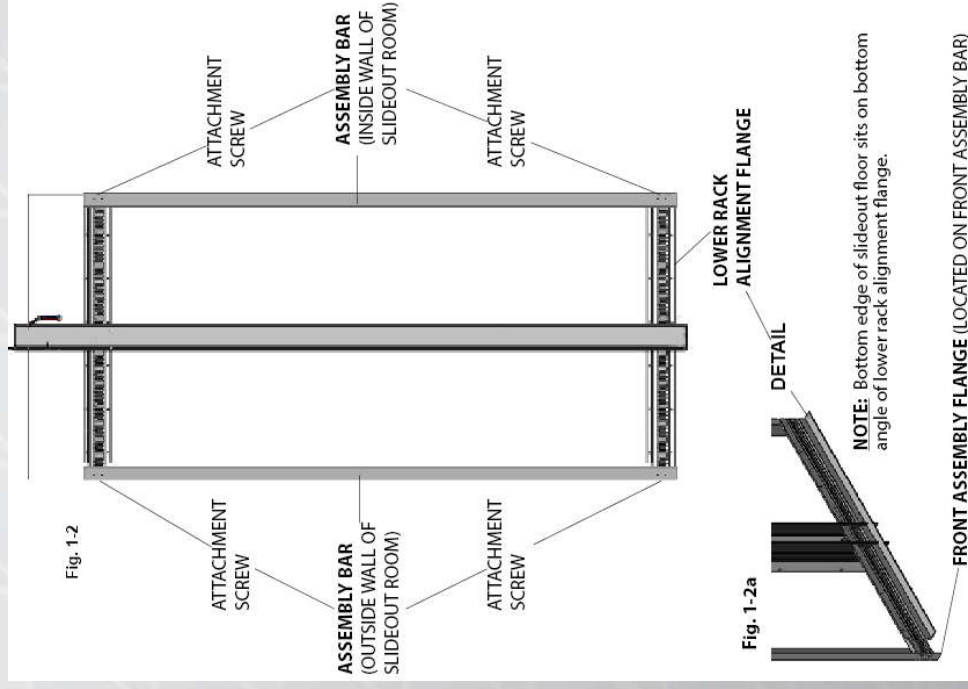


Step 1-1 (Prepare Mechanism)

Prepare the slide mechanism for installation to the room by first applying a sealant (foam, caulk, butyl, etc.) along the vertical columns.

Systems are delivered with closed cell foam already in place on gear racks..

➤ Installing the Slide Mechanism to the Room



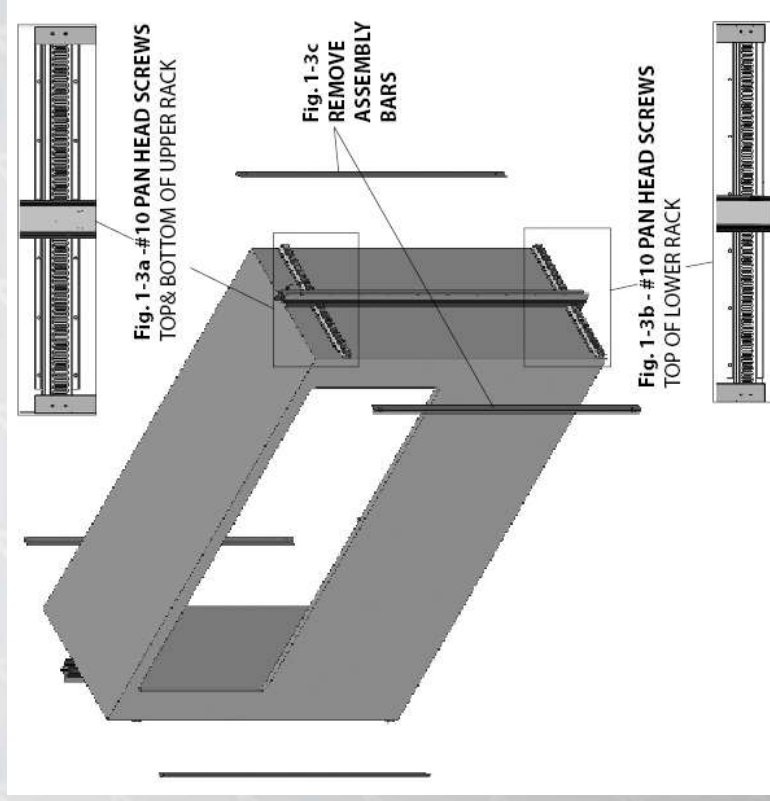
Step 1-2 (Place Mechanism)

Place the left-hand unit against the side wall of the room, **Fig. 1-2**. Hook the lower rack alignment flange on the bottom of the room, **Fig. 1-2a** “NOTE”.

Slide the unit to the rear, placing the alignment flange of the front assembly bar flat to the front of the room.

Always align the room slide unit to the front and bottom of the room.

➤ Installing the Slide Mechanism to the Room



Step 1-3 (Attach Racks)

While maintaining alignment with the bottom and front of room, attach upper, Fig. 1-3a and lower, Fig. 1-3b racks to the side of the room with #10 pan head screws.

Step 1-4 (Remove Bars)

Remove screws attaching front and rear assembly bars to the ends of racks.

Step 1-5 (Repeat on Right Side)

Repeat steps 1 through 4 for attaching the right-hand slide unit to the right-hand side of room.

➤ Installing the Slide Mechanism to the Room



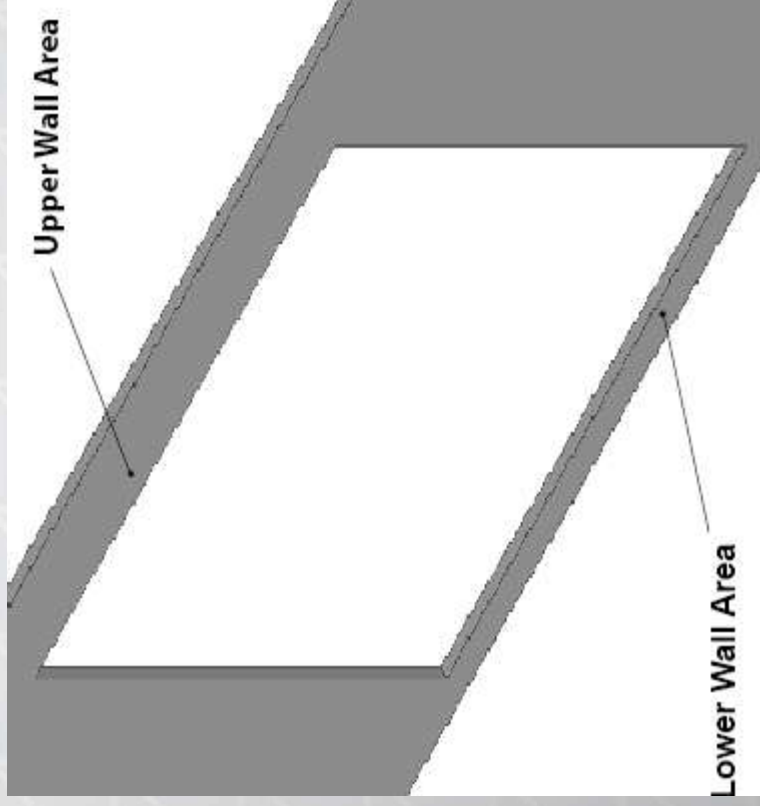
Step 1-6 (Add "T" Molding)

Exterior "T"-molding may be applied at this time.

The room is now ready to install into the wall opening.

➤ Preparing the Wall Opening

➤ Preparing the Wall Opening

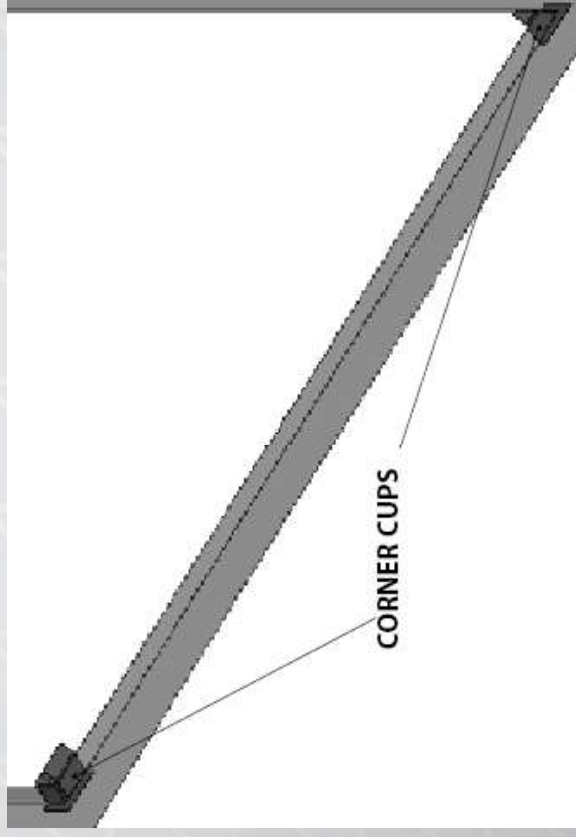


Step 2-1 (Prepare the Wall)

Prepare upper and lower outer wall surfaces using adhesion promoter or 50/50 alcohol/water mix to clean and prep area for complete adhesion of sealant.

➤ Preparing the Wall Opening

➤ Preparing the Wall Opening

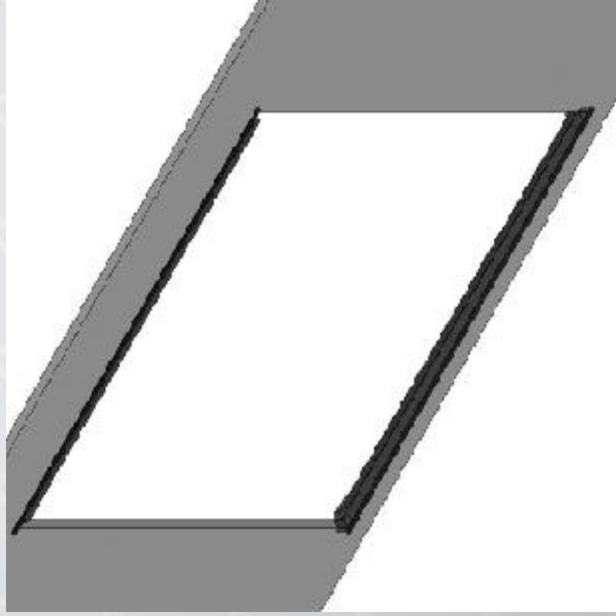


Step 2-2 (Corner Cups)

Set both left and right molded corner cups.

Remove tape liner from Eternabond adhesive.

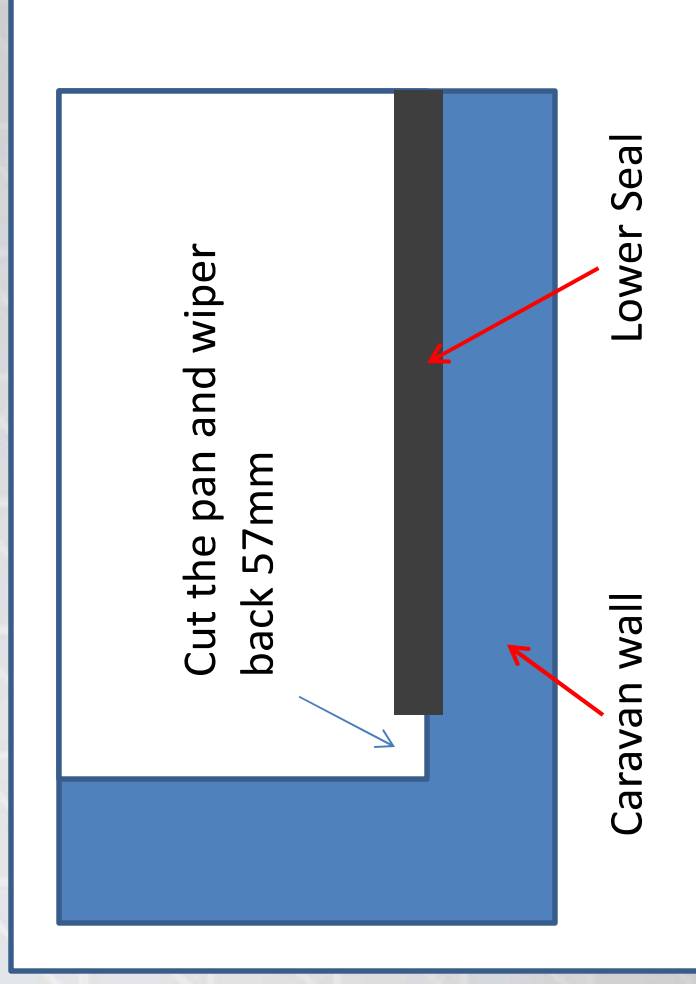
➤ Preparing the Wall Opening



Step 2-3 (Lower Seal)

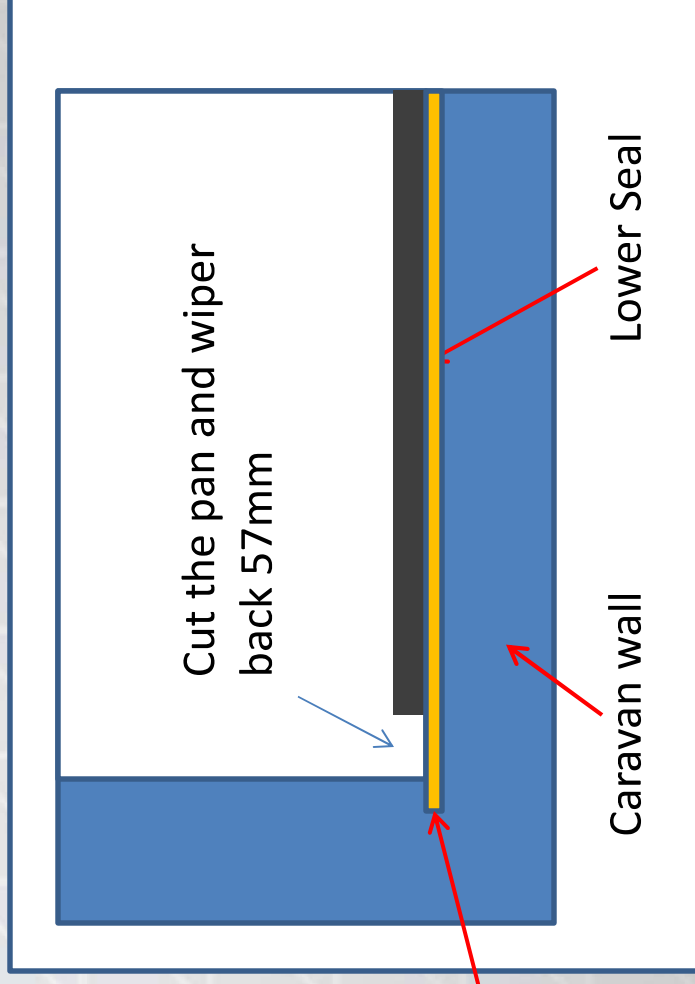
Cut lower wipe seal pan to allow a 57mm (2 1/4") gap from the edge of the wall to the edge of the pan.

Remove liner from 3M tape and install as shown.



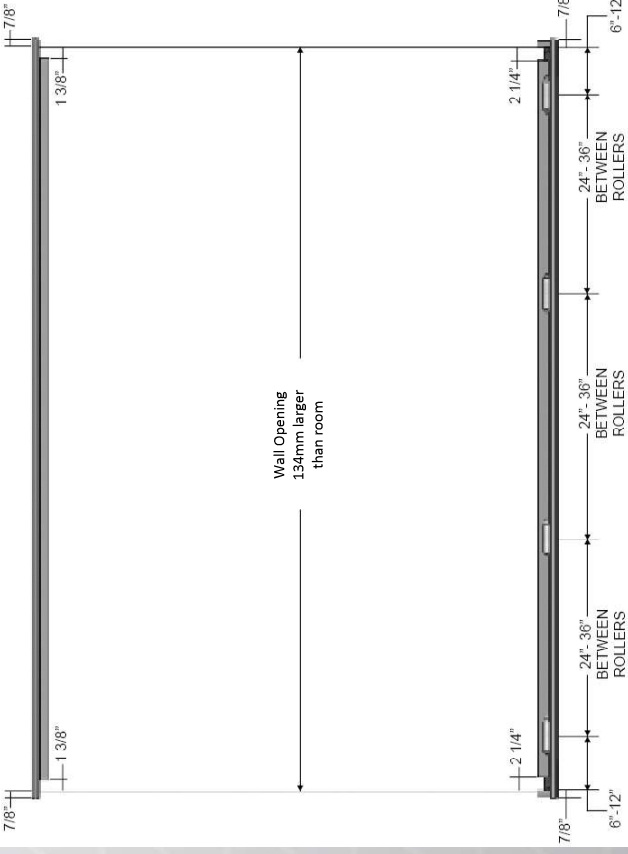
➤ Preparing the Wall Opening

➤ Preparing the Wall Opening



The bulb seal should be allow to extend to the edge of the Column

➤ Preparing the Wall Opening



Cut upper wipe seal to allow a 35mm (1 3/8") gap from the edge of the wall.

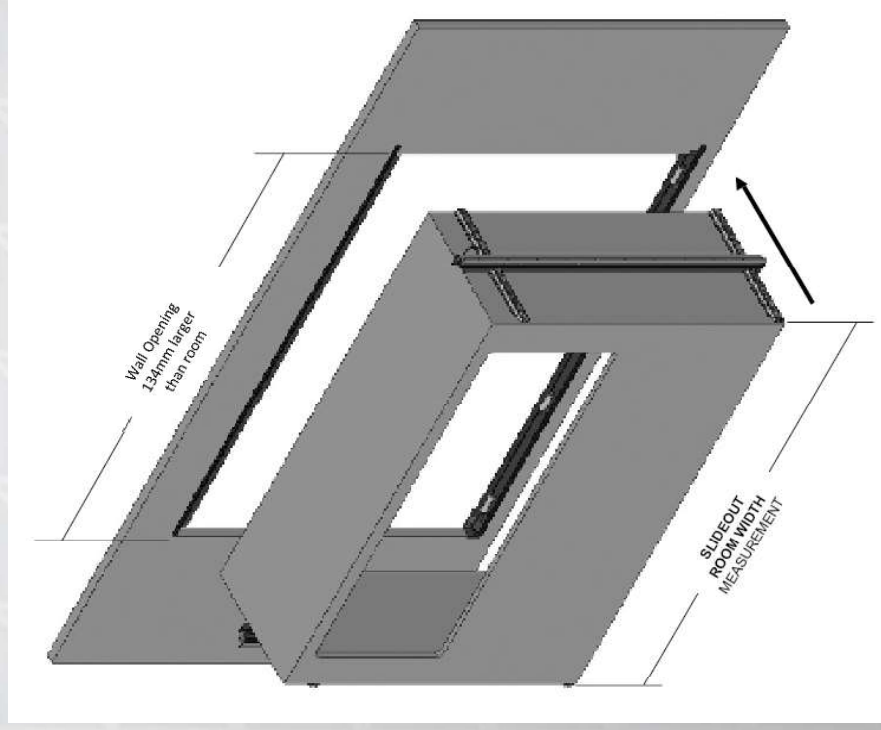
Remove 3M tape line and install with tape to outside of wall. (make sure that you fill the gap between the wall and the seal; page 26)

Step 2-5 (Rollers)

end rollers 150mm – 300mm (6" – 12") from wall opening side wall.

Lippert In-Wall Slide Out System Installation

➤ Installing the Room in the Coach



Step 3-1 (Check Width)

Verify the room width and the wall opening. The wall opening needs to be 134mm wider than the actual room measurement.

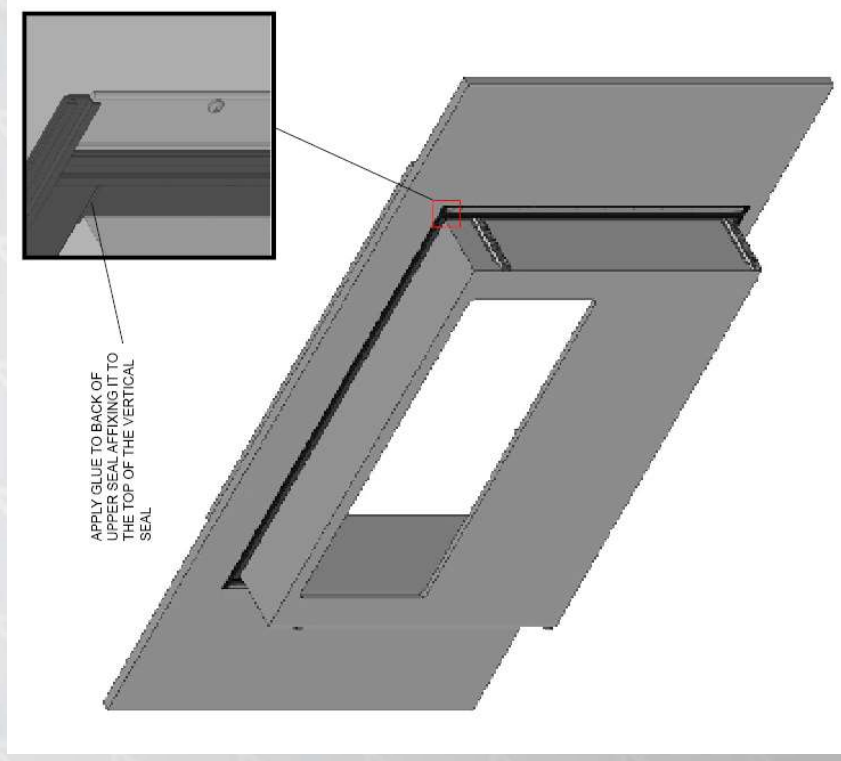
Do not attempt to install the room to the coach if this opening dimension is less than 134mm greater than the room width.

Step 3-2 (Fit Room)

Slide completed room into wall opening, taking care to center support columns within the opening.

At this point the room should be completely supported by the floor rollers.

➤ Installing the Room in the Coach



Step 3-3 (Attach Column)

Attach right- and left-hand support columns to wall of coach with #10 pan head screws. Begin with one screw in the top hole on each side then fill in from the bottom screw upwards.

Step 3-4 (Wire Harness)

Connect the wiring harness to the motors. Wiring must be protected from all moving parts and cleanly stored to prevent wire damage.

Step 3-5 (Arrange Top Seals)

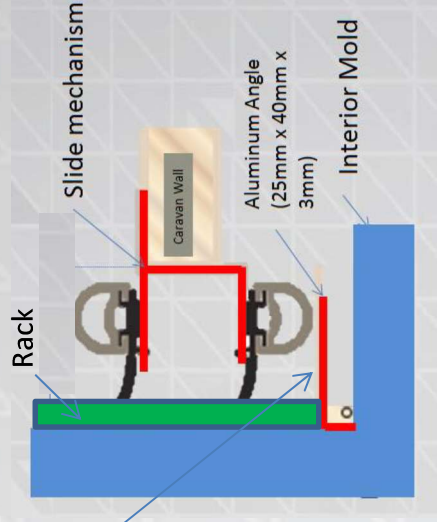
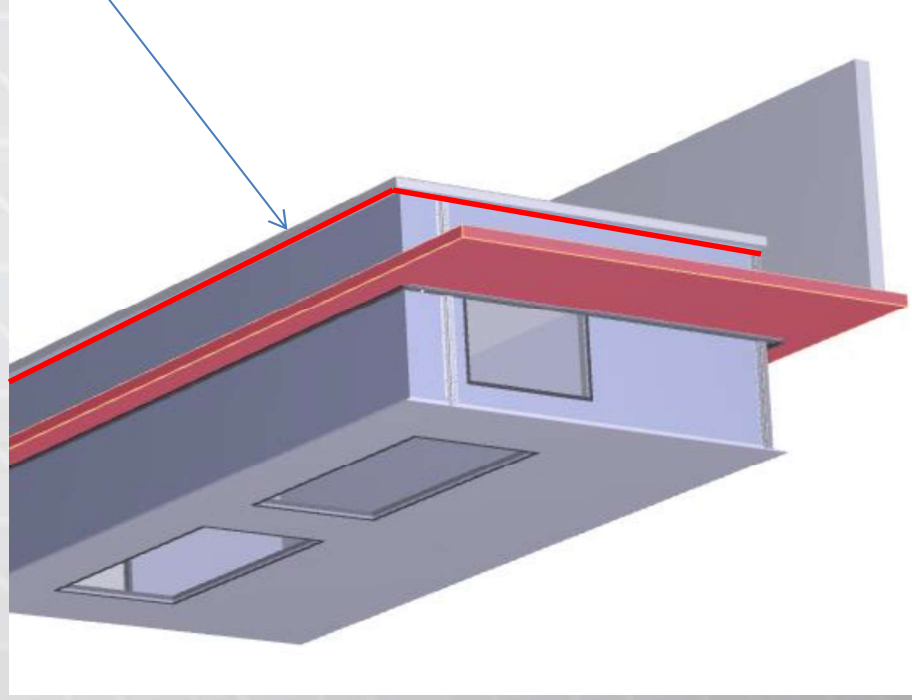
Arrange the top wiper seal so that it lays to the outboard side of vertical seals that are attached to the In-Wall mechanism.

➤ Installing the Room in the Coach

➤ Installing the Room in the Coach

Step 3-6 (Interior Aluminum Angle)

Interior aluminum angle is run fully along each side of the room and across the top. Not the bottom edge.



Fasten the short leg to the room with #10 screws with the short leg extending towards the interior.

Seal the exterior joint between the aluminum angle and the room on the exterior edge. See page 50

Install the interior fascia.

NOTE: Do not attempt to operate the room until all of the interior angle is properly secured to the slide box.

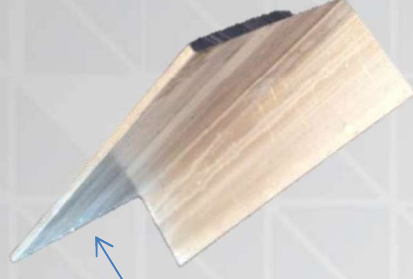
➤ Installing the Room in the Coach



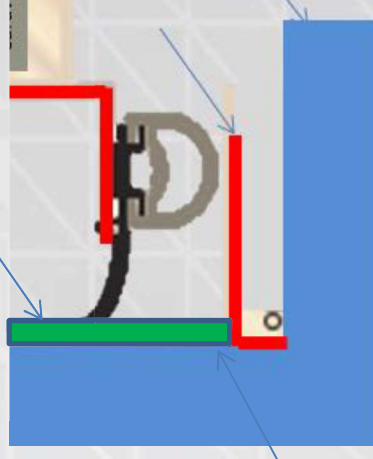
Long Leg

Aluminum angle
40mm x 25mm x 3mm is
added to interior side of
the room

Rack butts up
to angle

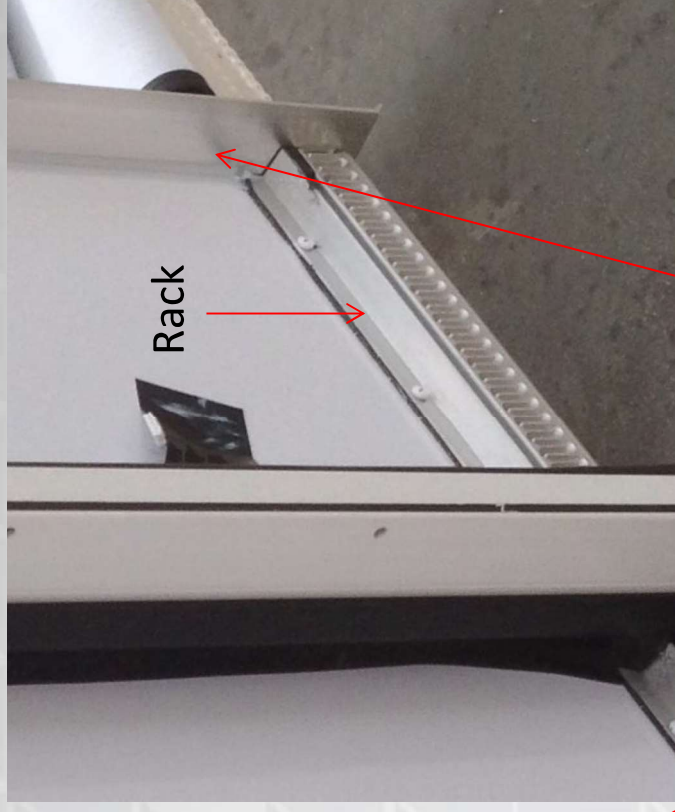


Rack



Lippert In-Wall Slide Out
System Installation

➤ Installing the Room in the Coach



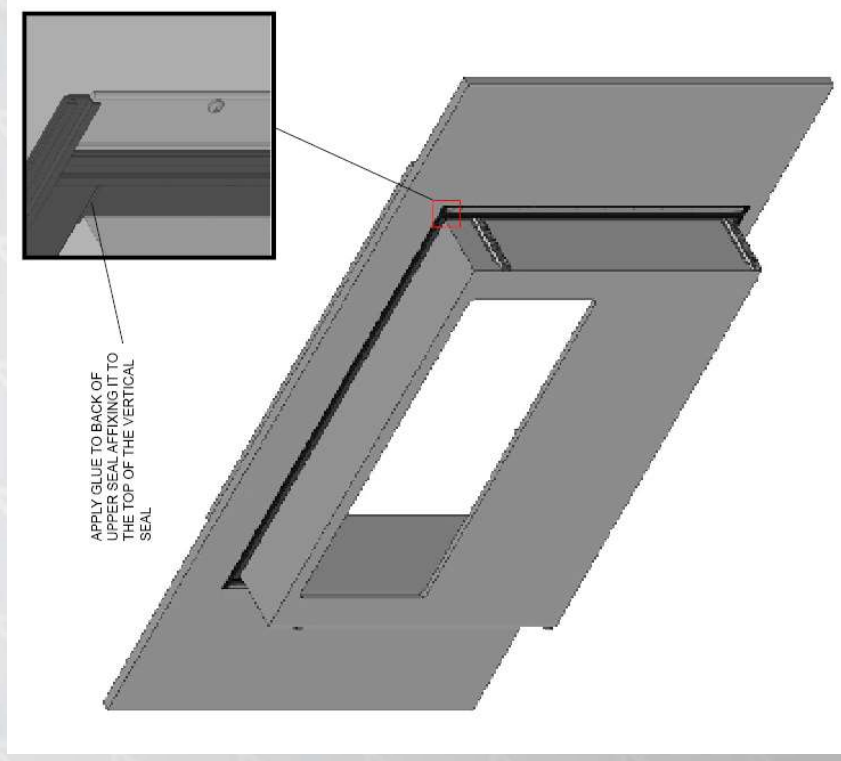
Long Leg

Rack butts up
to angle

Angle shown
on top of
room

Aluminum angle
40mm x 25mm x 3mm

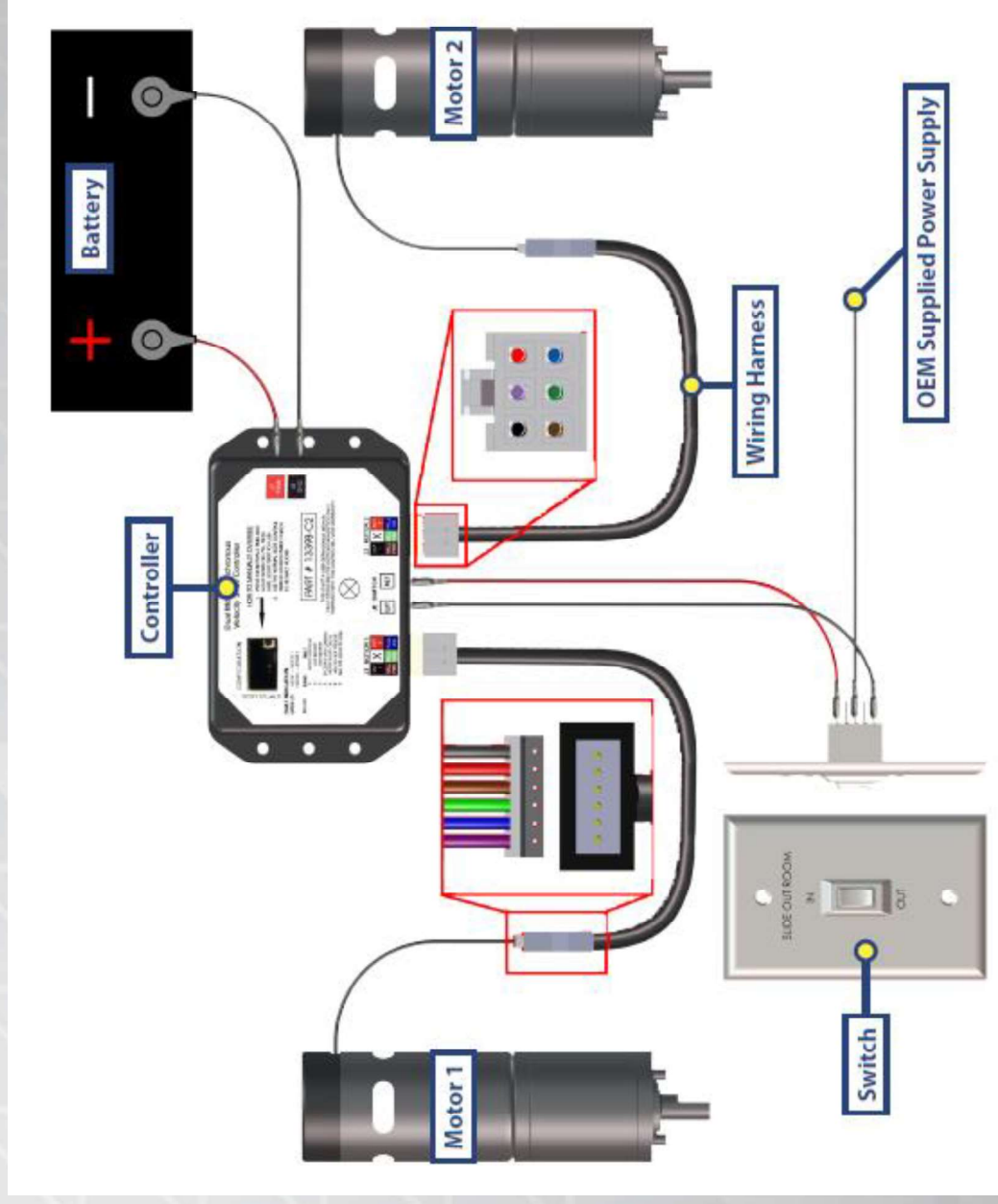
➤ Installing the Room in the Coach



Step 3-6 (Arrange Top Seals)

Arrange the top wiper seal so that it lays to the outboard side of vertical seals that are attached to the In-Wall mechanism.

➤ Installing the Room in the Coach



Lippert In-Wall Slide Out System Installation

➤ Start-Up and Final Inspection

➤ Start-Up and Final Inspection

Step 4-1: (Inspect)

Visually inspect both the inside fascia and the exterior “T”-molding and verify they are securely fastened.

Step 4-2 (Inspect)

Visually inspect all of the connections at the control board and verify that all of the connection are securely attached.

NOTE: Control panel must be mounted with the face visible allowing the indicator lights, switch mode button and stall force calibration accessible for resetting and trouble shooting purposes.

CAUTION!

System must be wired using 10 gauge wire minimum. Power to the slideout controller is to be protected by the customer supplied 30A fuse.

Step 4-3: (Inspect)

Visually inspect all of the rack mounting screws to verify they are tight and flush against the racks.



Lippert In-Wall Slide Out
System Installation

➤ Startup and Final Inspection

➤ Start-Up and Final Inspection

Step 4-4: (Set Electronics)

Homing the slide box for the first time:

- a) Using the wall switch, press the “IN” button.
- b) Quickly verify that both motors are moving in the same direction, if not stop immediately and remedy problem.
- c) Allow the room to power all of the way in and continue pressing the “IN” button until both sides have completely stopped and the motors turn off by themselves.
- d) Let off the “IN” wall switch and check the red and green LED lights on the circuit board and confirm that both are on (they will both turn off automatically after one minute).
- e) If only one of the LEDs is on, go back to the wall switch, press the “OUT” button for one second and release and repeat step (a) until both LEDs are on.

Step 4-5: (Inspect)

Using the wall switch, extend the room all of the way out until it stops. Conduct the following inspections:

- a) Verify the room did full stroke and that the interior seals are evenly compressed.
- b) Verify the vertical wipe seals are in uniform contact with the side walls of the slide box.
- c) Verify the upper and lower wipe seals are in uniform contact with the floor and ceiling.
- d) Verify that all of the floor rollers are in constant contact with the slide box floor.
- e) Verify the lower wipe seal is of proper length and is clear of all of the rollers.
- f) Verify the exterior top wipe seal is overlapped and glued at each corner to the vertical wipe seal.

Step 4-6: (Check)

Connect an amp meter to the incoming power to the control board and extend and retract the room. The slide should operate at a consistent amp load through out it's entire stroke. Unusually high amps, or amp spikes during the stroke are a sure sign of a troubled installation.