

# Manual Jeep Hard Top Hoist

(Jk/JL 2&4 Door)

## Contents:

- (4) Strap Guides
- (2) 20' Cam Buckle Straps
- (4) 1/4" Eye Lag Screws

## Tools/Material Required:

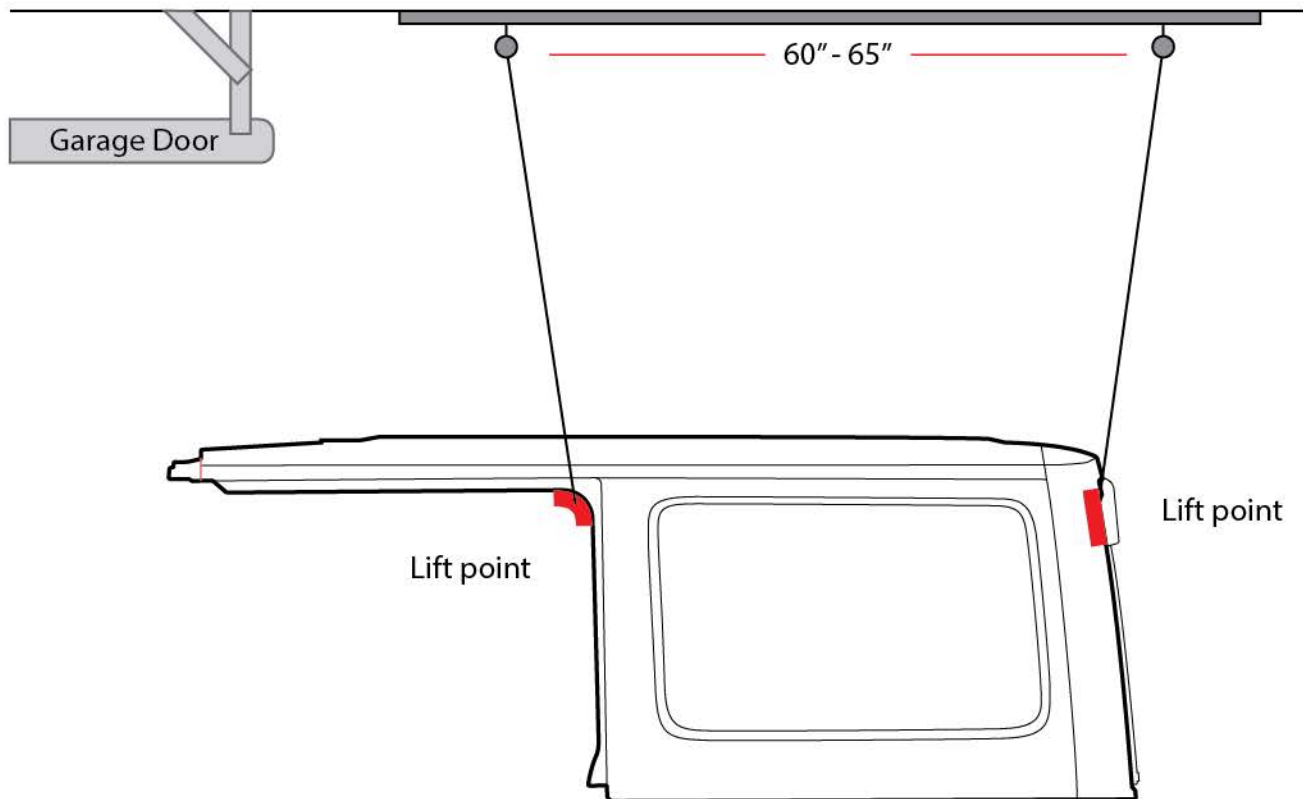
- Tape Measure
- Stepladder
- Stud Finder
- Pencil
- Plumb Line
- Safety Glasses
- Painters Tape
- Towel, Blanket, or other Soft Barrier
- Drill
- 3/16", 13/64", & 5/16" Drill Bits
- 7/16" Socket/Wrench
- (8-10) 5/16" x 4" Lag Bolts and Washers
- (2) Pine Boards (grade 2) 2" x 6" x 6'

**WARNING!: Follow the instructions to avoid accidents, damage, physical injury or death.**

- **Please read the entire manual before beginning the installation.**
- **Do not raise or lower hoist with anyone standing underneath.**

## Step 1: Hoist Location

- A.** Pull your Jeep into the garage. Keep the garage door open and pull the Jeep far enough back that the hard top lift points clear the door/garage door opener. Make sure you leave yourself enough room behind the jeep to safely operate the hoist.



The Eye Lag Screws will sit approximately 60" - 65" apart, the top will need to be centered in between the front and rear Eye Lag Screws to prevent and swinging when lifted.

- B.** Mark the approximate location of the rear edge of the hard top on the floor of your garage with painters tape or chalk. Remove your Jeep from the garage.
- C.** With help, remove your hard top and set it in the location marked on the floor. Use cardboard, a towel, or any other soft barrier to avoid scratching your top.

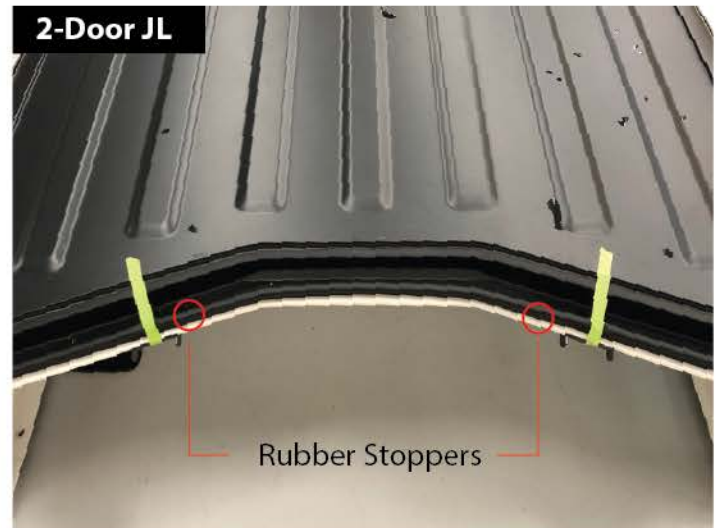
## Step 2: Installation of Mounting Boards

- A. Install the front and rear guides in their proper location, use painters tape to temporarily secure them to the top. Reference the images below to identify the strap guide locations for your Jeep.



2-Door JK front strap guides align on the **INSIDE** of the rubber stopper. Each guide is labeled with a part number to identify RH & LH sides.

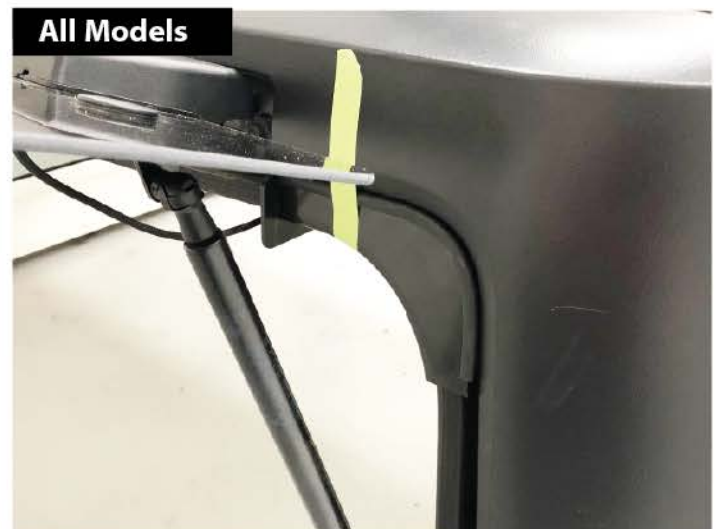
NOTE: If you need to widen the distance between the guides due to rafter location, switch the RH & LH guides and move them to the **OUTSIDE** of the rubber stopper.



2-Door JL front strap guides align on the **OUTSIDE** of the rubber stoppers. Each guide is labeled with a part number to identify RH & LH sides.



4-Door JK/JL front strap guides align in the top rear corners of the passenger door frames. Each guide is labeled with a part number to identify RH & LH sides.



All models use the same rear strap guides, which align over the rear window frame. Each guide is labeled with a part number to identify RH & LH sides.

**B.** Using a plumb line, transfer the location of each guide to the ceiling.

NOTE: You can make a plumb line using string and a large washer or nut. There needs to be enough weight that the line will hang straight from the ceiling.

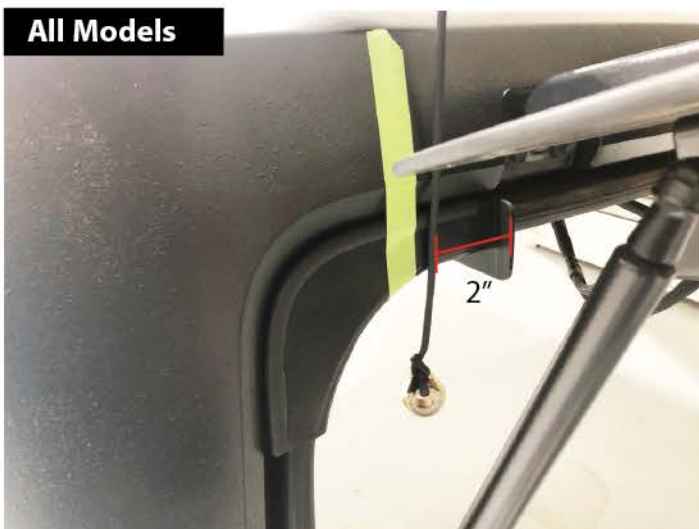
See images below for approximate plumb line transfer locations.



Center plumb line along the edge of the front strap guides, as shown.



Align plumb line against the outer most edge on the front strap guides, 1.5" from the edge.



Align plumb line along the outer most edge of the rear strap guide, 2" from the inner edge.

- C. Once you have the 4 strap guide locations marked on the ceiling, use a straight edge to draw a line between the front locations, then the rear.

**(For 2-Door)** Using a square, and the line that was just drawn between the strap guide locations, move the front locations forward 12", and the rear locations back 12". Spreading out these locations will allow for smoother strap operation. Front and rear locations should be approximately 60" - 65" apart. Clearly mark the new locations, these represent the location of the Eye Lag Screws.

**(For 4-Door)** Using a square, and the line that was just drawn between the strap guide locations, move the front locations forward 7.5", and the rear locations back 7.5". Spreading out these locations will allow for smoother strap operation. Front and rear locations should be approximately 55" apart. Clearly mark the new locations, these represent the location of the Eye Lag Screws.

- D. With the Eye Lag Screw locations marked, use a stud finder to locate the rafters in the surrounding area of each Eye Lag Screw and mark the centerlines.
- E. For the next step you will need the mounting boards. It is suggested you start with a (2) 2" x 6" x 6' pine boards and trim as necessary to fit your application. (Mounting boards not included)

**(For garages with rafters perpendicular to the Jeep)** With help, hold the mounting board against the ceiling, making sure the Eye Lag Screw locations fall within the footprint of the board, and translate the rafter centerline marks onto the mounting board. Pre-drill 5/16" holes in the center of the board at each centerline mark. There will be a total of 4 mounting boards, one supporting each Eye Lag Screw. Make sure each board spans at least 2 rafters to ensure safe operation. **See Diagram 1-3**

**(For garages with rafters parallel to the Jeep)** With help, hold the mounting board against the ceiling, making sure the Eye Lag Screw locations fall within the footprint of the board, and translate the rafter centerline marks onto the mounting board. Pre-drill 5/16" holes in the center of the board at each centerline mark. There will be a total of 2 mounting boards, (1) supporting the front Eye Lag Screw locations and (1) supporting the rear Eye Lag Screw locations. Make sure each board spans at least 3 rafters to ensure safe operation. **See Diagram 4-6**

- F. With help, place the mounting boards back against the ceiling and mark the pre-drilled locations with a pencil. Use a 13/64" bit to pre-drill the rafters.
- G. Install the mounting boards to the ceiling using 5/16" x 4" lag bolts and washers. (Lag bolts and washers not included)

### Step 3: Installation of Eye Lag Screw

- A. With the mounting boards installed, relocate the Eye Lag Screw locations by remeasuring the distances from the front and rear line drawn in Step 2c.
- B. Pre-drill the 4 marked locations with a 3/16" drill bit and install the Eye Lag Screws. Turn the screw until the face of the mounting board is flush with the end of the Eye Lag Screw threads. .



**Screw in Eye Lag Screw until the end of the threads are flush with the face of the board, as shown. Do not over/under-tighten this screw, this will compromised the integrity of the hoist and may cause injury or death.**

### Step 4: Strap Guides and Routing

- A. Place your top back onto your Jeep and pull it back into the garage. It's a good idea to use a parking aid to ensure you park in the same location every time.
- B. Hang the cam buckle sections on the rear hooks with the buckle mechanism facing the rear.
- C. Hang the long strap sections on each of the front hooks and route them over the strap guides and through the cam buckle mechanism. You may need to wait until you have some tension on the straps before inserting the strap guides so they don't fall out.

NOTE: For the 2 - Door hard tops, you will need to lift the front edge of the hard top a couple inches in order to insert the strap guide and feed the hook/strap through between the hard top and roll bar.

## Step 5: Lifting & Lowering Hardtop

Note: Cam buckle mechanisms are designed to only allow strap movement in one direction, unless the user releases the buckle manually. When releasing the buckle, always have one hand on the loose end of the strap applying medium-light pressure, this will allow the hard top to lower slowly under full control. If your doors are installed, it is helpful to prop your doors open to prevent any damage on the edge of the door when the hard top is removed/installed.

- A.** With the strap guides in place and the hard top bolts removed from the Jeep, pull downward on one of the straps while applying upward pressure on the rear window frame. Applying upward pressure will make lifting the top much easier. Lift each side a few inches at a time until you have enough room to pull the Jeep out from under the top.
- B.** To lower the top, hold the loose end of the strap and depress the buckle slowly until you feel the strap start to move. As long as you keep light pressure on the loose end of the strap, the top will lower slowly and under control. Lower each side a few inches at a time until the top rests lightly on the body of the Jeep. Before releasing the full weight of the top, make sure the locating pins are properly lined up and the top is sitting correctly. Once the hardtop is lined up properly, you may release the full weight of the top, remove the guides, and reinstall the hard top bolts.



Push up on rear window frame while pulling down on the strap.



Once you have the top lifted about an inch, grab the bottom edge of the top and lift upward while pulling the strap.

2 - Door (JK) Mounting Board Layout - PERPENDICULAR RAFTERS

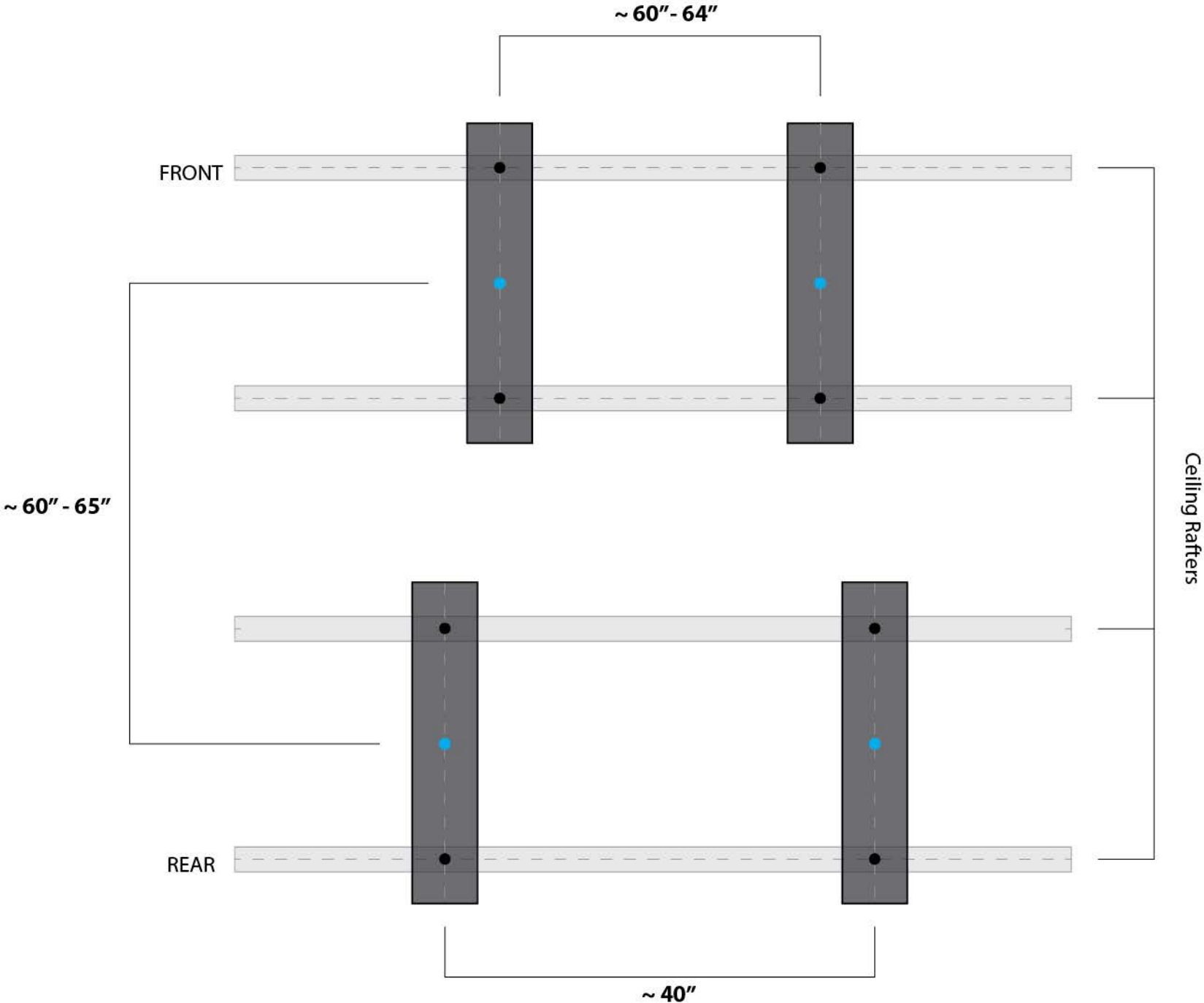


Diagram 1



2 - Door (JL) Mounting Board Layout - PERPENDICULAR RAFTERS

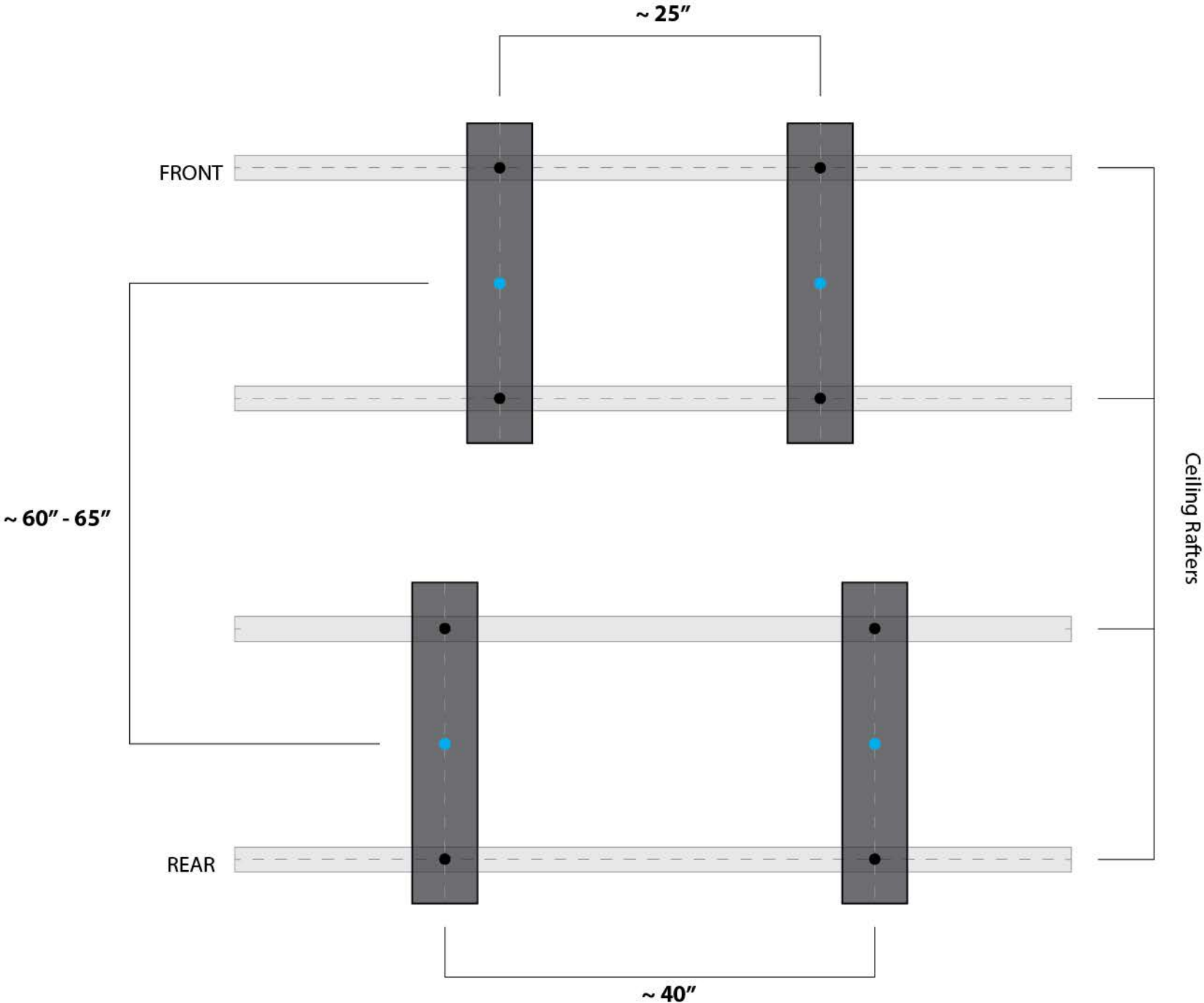


Diagram 2

4 - Door (JK/JL) Mounting Board Layout - PERPENDICULAR RAFTERS

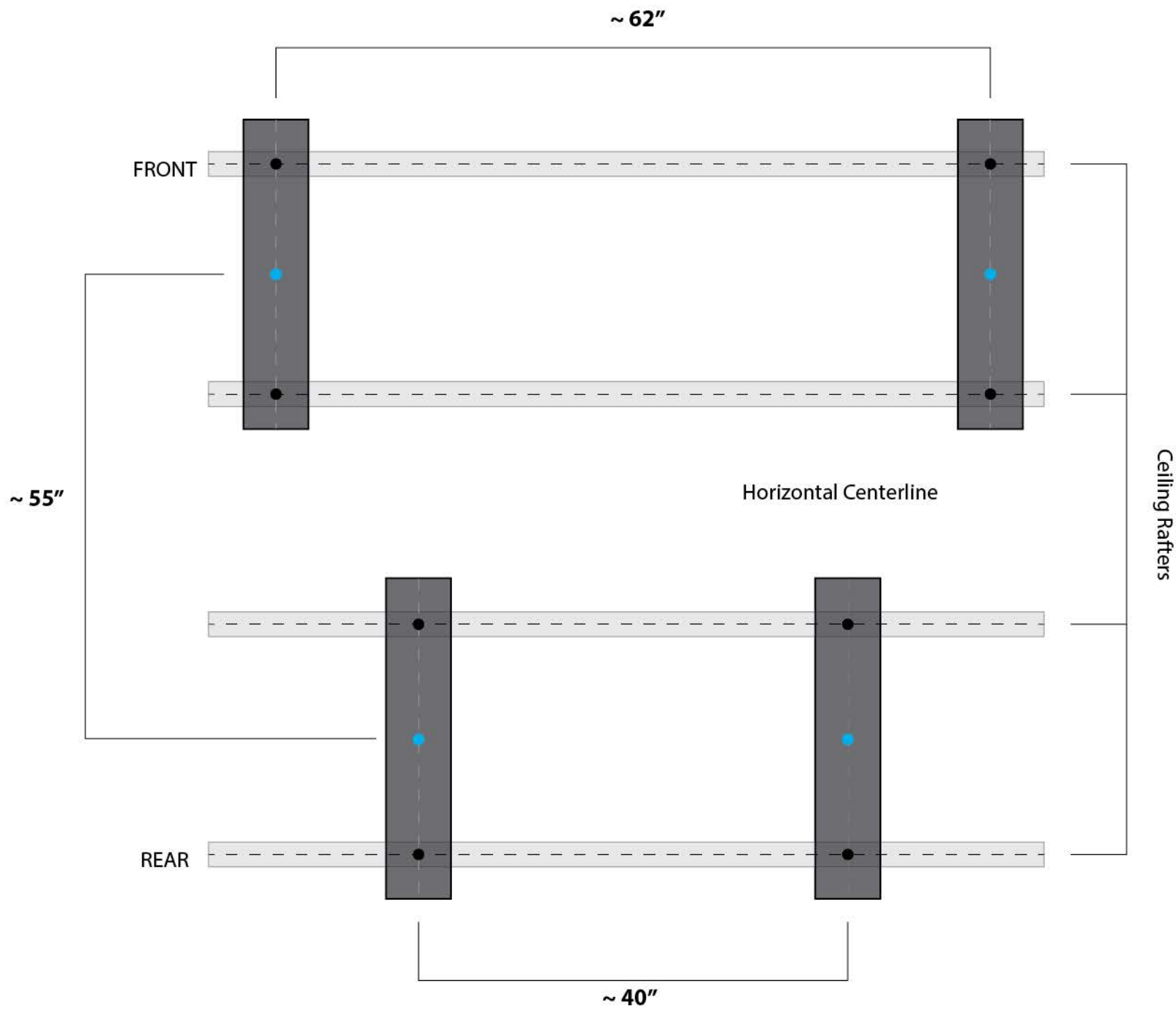


Diagram 3

2 - Door (JK) Mounting Board Layout - PARALLEL RAFTERS

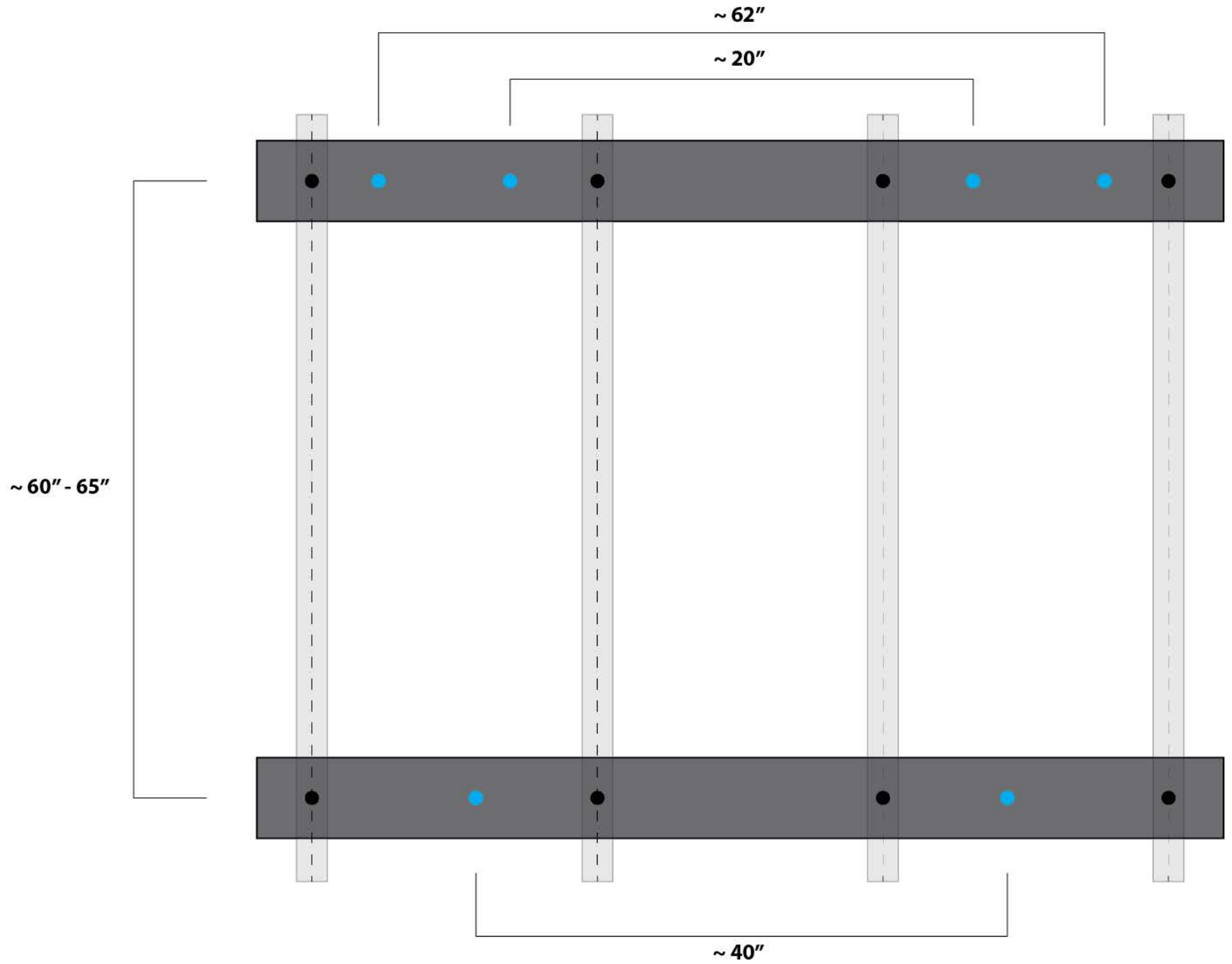


Diagram 4

2 - Door (JL) Mounting Board Layout - PARALLEL RAFTERS

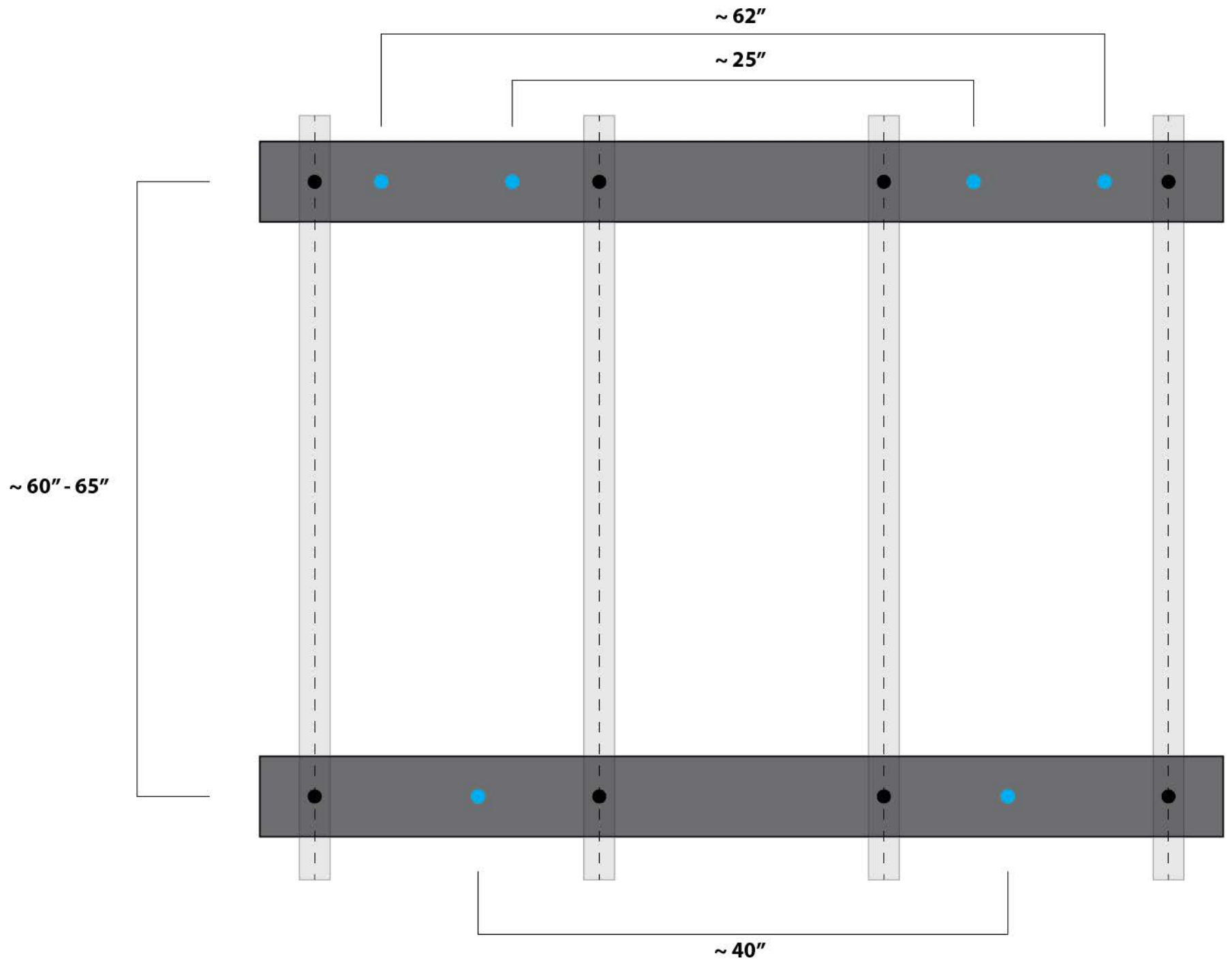


Diagram 5

4 - Door (JK/JL) Mounting Board Layout - PARALLEL RAFTERS

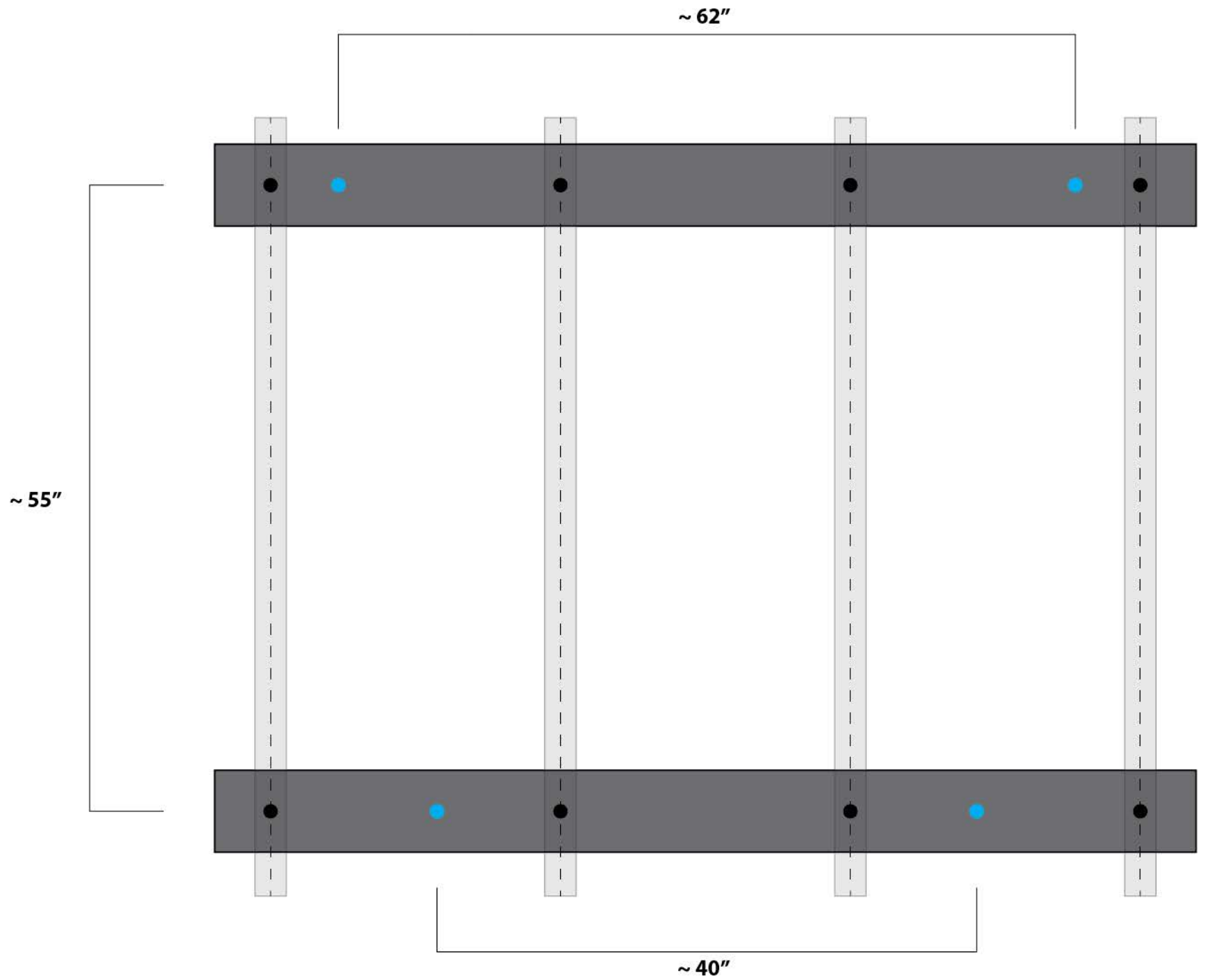


Diagram 6