BENTOBUILD

LATTICE SYSTEM INSTALLATION GUIDE

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OVERVIEW

## Introducing the BentoBuild Lattice System

The **BentoBuild Lattice System** is a modular wall mounting system.

The grid-based Lattice System allows for the quick and easy mounting of modules to virtually any wall type. The system combines horizontal ledgers with vertical struts to maximize strength and flexibility.
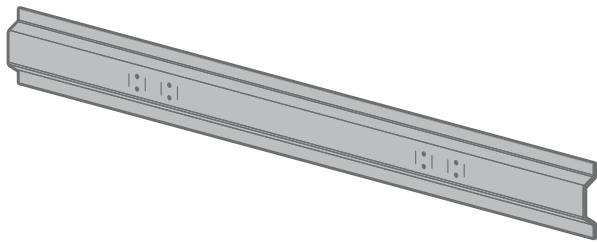
The purpose of this guide is to provide an overview of the Lattice System and steps for assembly. For more detail about installing modules, see the BentoBuild Series 001 Installation Guide.
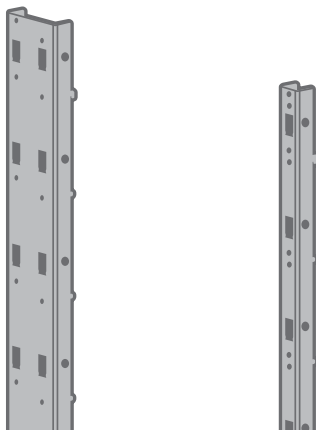
Ledger

Module

Strut

Cleat
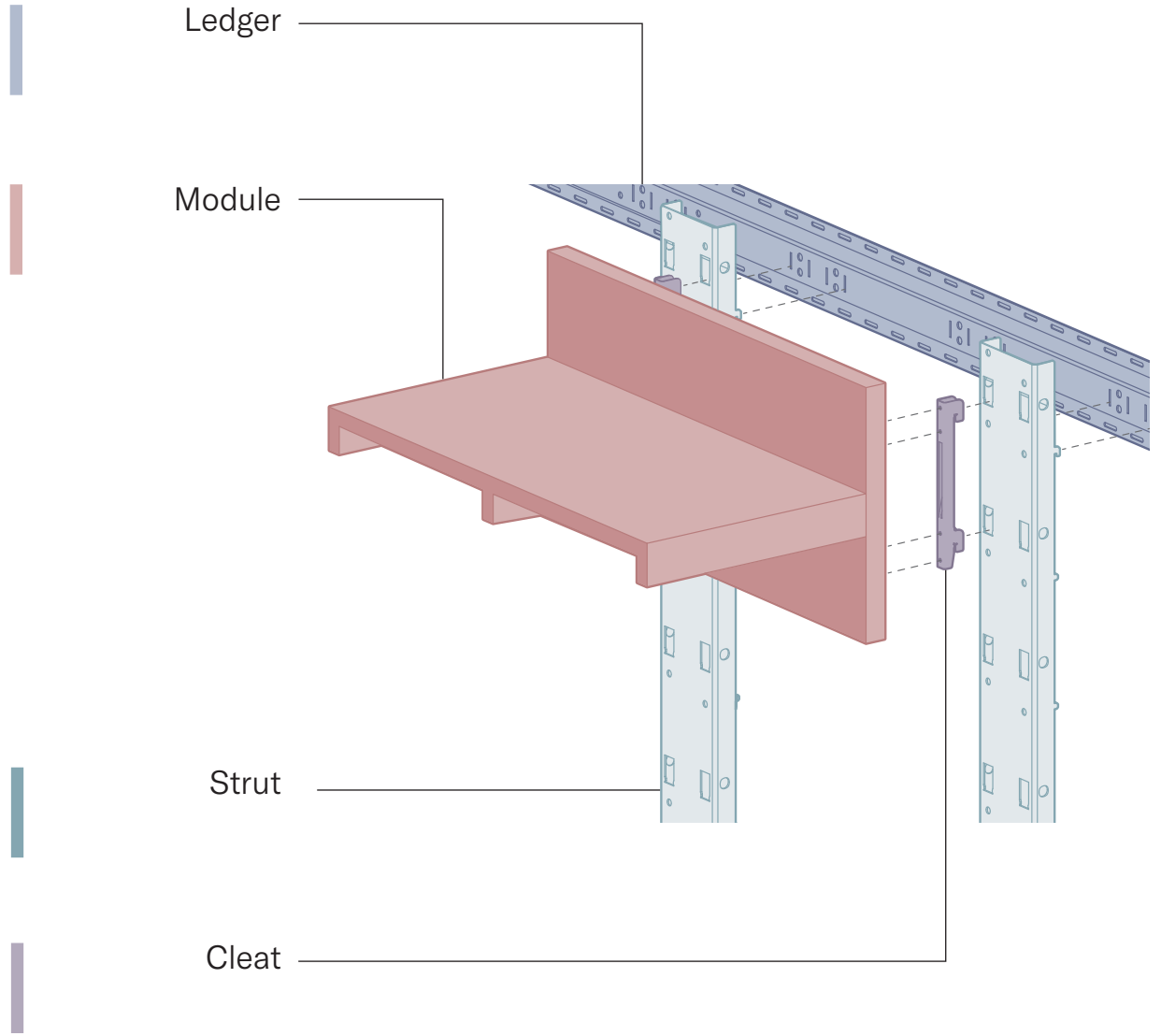
Index of parts
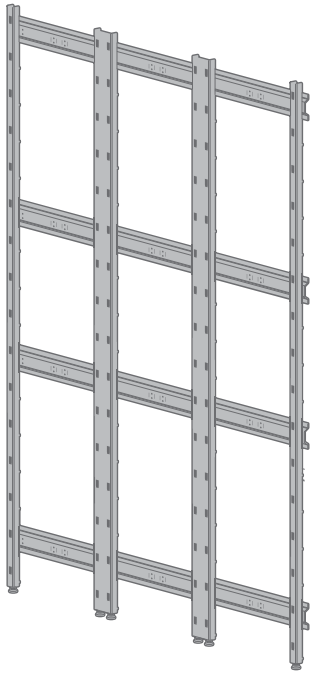
Our **Lattice System** is a system of struts, ledgers, and other components that create a modular mounting grid on a wall.
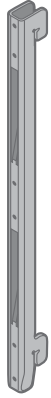
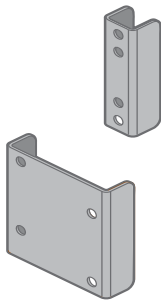**Ledgers** are horizontal pieces that are attached directly to a wall.

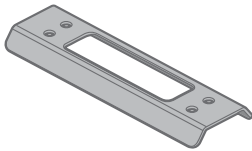**Struts** are vertical pieces that hang off a ledger, which connect to cleats.

Half struts are useful where the Lattice System ends. Wider, full struts are used where modules meet in the middle of the Lattice System assembly.
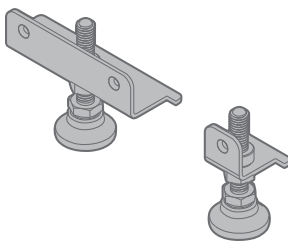
LATTICE INSTALLATION GUIDE

Cleats attach modules to the Lattice System.

Strut connectors join struts together.

Ledger connectors join ledgers together.

Leveling feet attach to the bases of struts, which enable them to stand on a floor surface and support heavy loads.

1 WEIGHT TOLERANCE GUIDELINES

Weight loads

Due to potential differences in wall construction, floor finish, hardware selection, and overall quality of Lattice System installation, Bento cannot specify loading restrictions for the Lattice System.

The Lattice System and associated modules are designed to support reasonable loads over the course of their lifetimes. Avoid overloading and unevenly loading modules. Only use modules for their intended purpose. We do not recommend standing or sitting on any part of the Lattice System, other than parts specifically designed by Bento for that purpose.

Bento is not responsible for the condition or strength of the wall or ensuring the Lattice System is mounted correctly. Similarly, Bento cannot be held liable for any failure to follow the specified guidelines.

Please refer to the BentoBuild Contractor's Guide and Series 001 Installation Guide for details on assembly.

Preferred wall type

The BentoBuild Lattice System can be attached to many different types of wall surfaces but, for ease of installation, we recommend ⅝" gypsum wall board over ½" OSB or plywood on wood or metal studs with a minimum of a level 2 finish wherever the BentoBuild Lattice System will be used.

Ledger

Studs
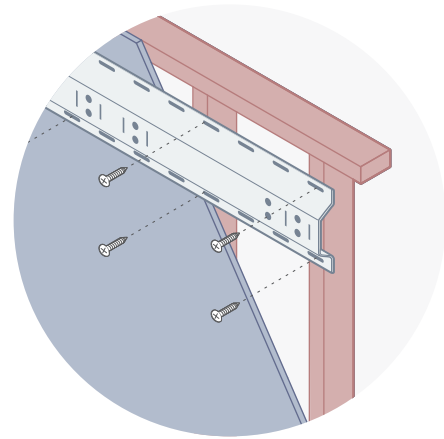
½" OSB or Plywood

⅝" Gypsum wall board

LATTICE INSTALLATION GUIDE
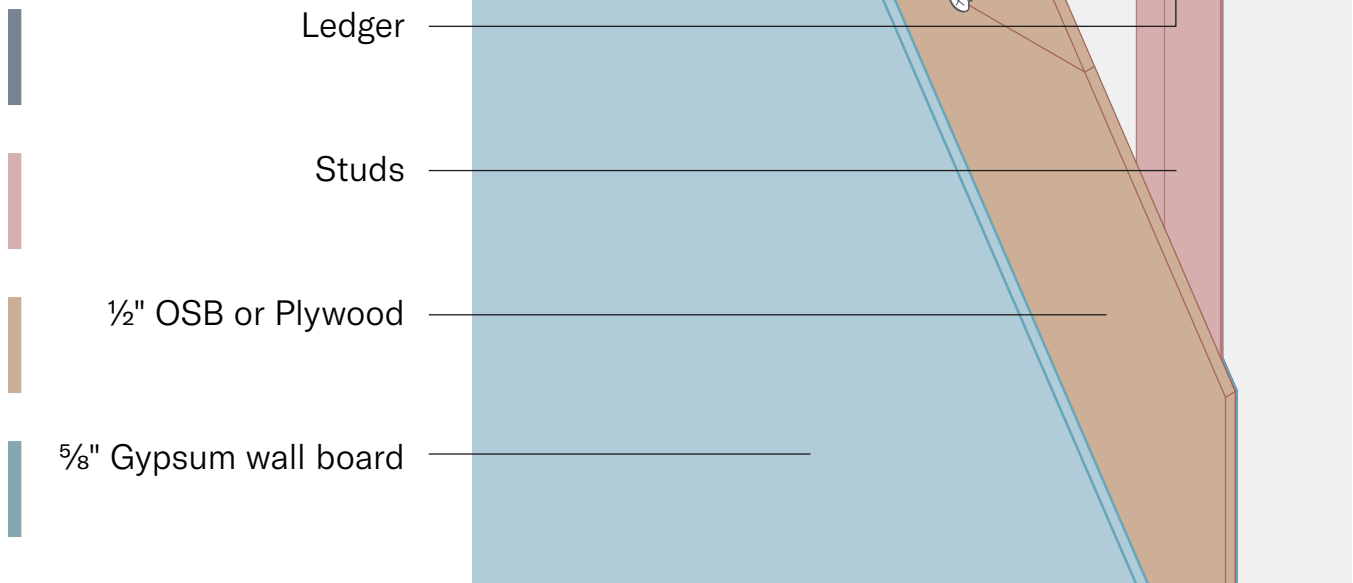
Other wall types
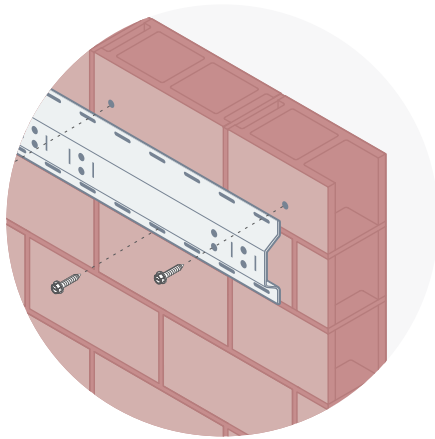
Solid wall

For masonry walls use ³⁄₁₆" x 1-¼" Hex Tapcon concrete screws. These should be placed in a zig zag pattern top to bottom with roughly 12" spacing. Pre-drill pilot holes with ⁵⁄₁₆" masonry bit using hammer drill. Screw concrete screws through ledger into pilot holes.

Wood or metal stud wall

Locate wall studs using a stud finder. Studs are typically 16" on center, measure 17 ¾" from the edge of the wall then mark every 16" from there to find the center of the studs. Fasten the ledgers to every available stud using 8 1-½" drywall screws and a drill.
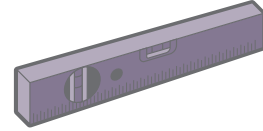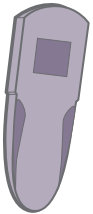
2 GETTING STARTED

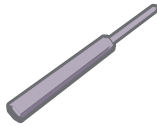## List of tools

$\frac{5}{32}$" hex key
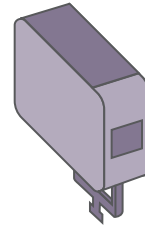
Drill w/ driver

Bubble level

Stud finder

Screwdriver

Laser level
(optional)

Box of appropriate
fasteners for wall type

Locating your assembly

The BentoBuild Lattice System is designed using a 6"
vertical and 12" horizontal grid, and all modules are
sized in 6" vertical and 12" horizontal increments. Our
Lattice System is typically designed to start 5 ½" off the
ground or 3 ½" for ADA applications. Lattice Systems
may be placed at other heights but countertop locations
will not be at code required heights.

The top ledger should be placed 2" lower than the top
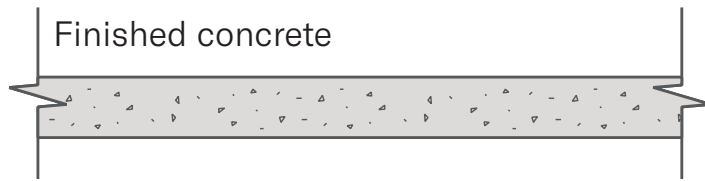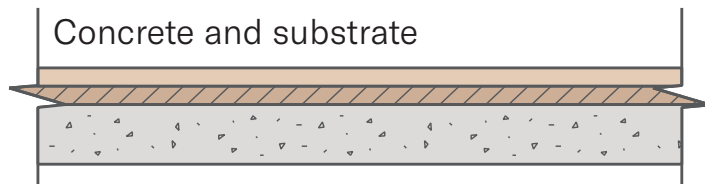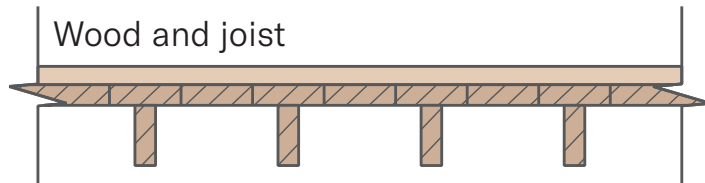of grid.

**Lattice assembly**   →   **Module assembly**
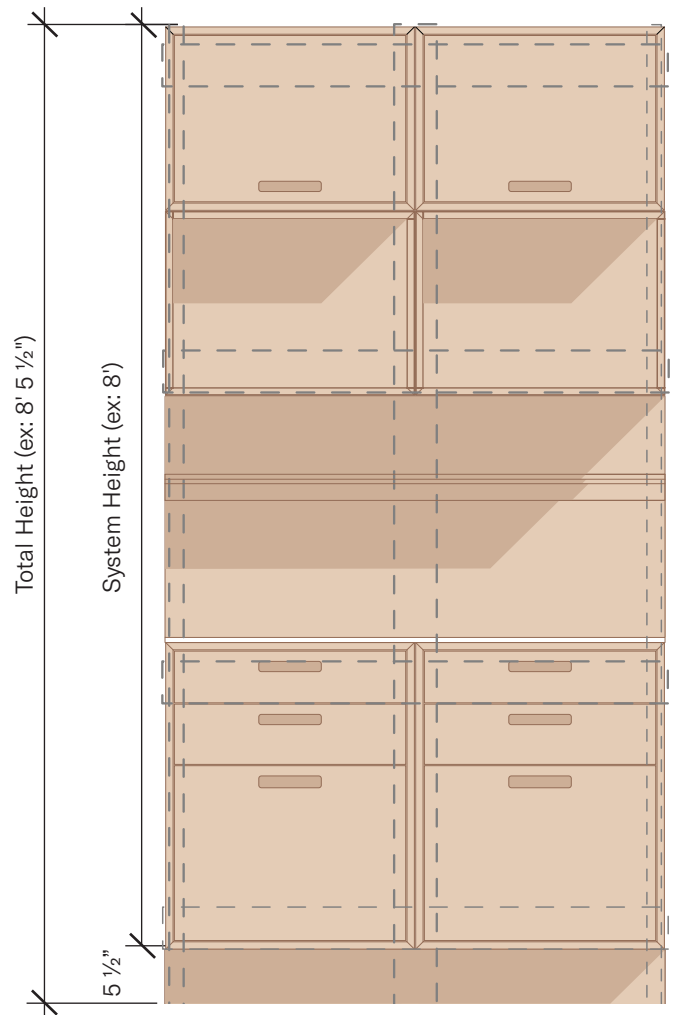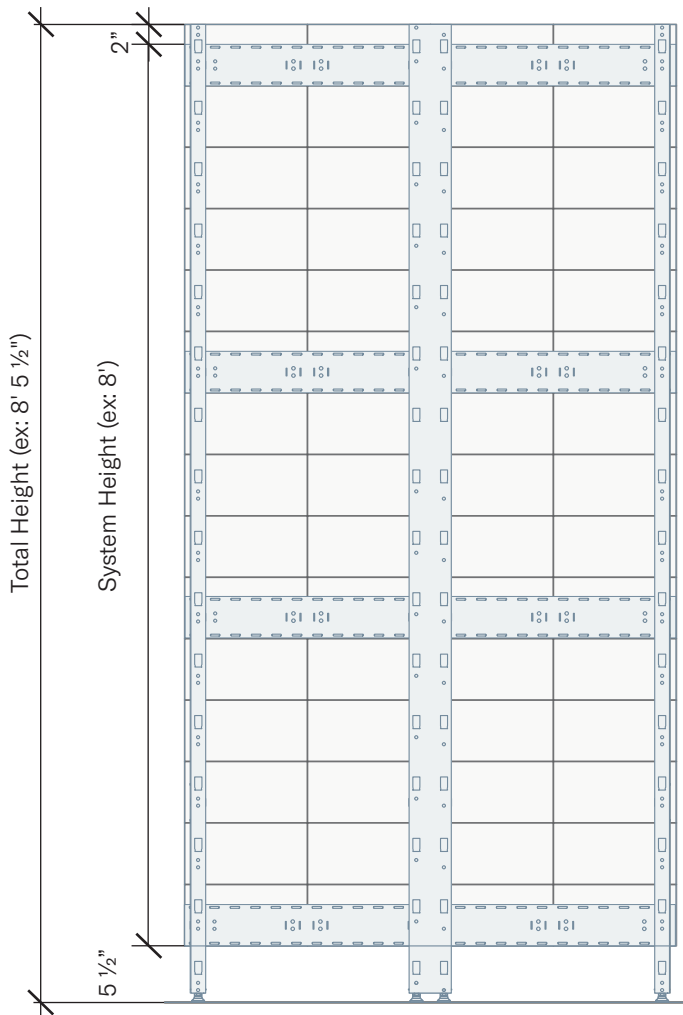
2.1 Confirm floor surface

First, confirm current floor surface is the final, finished surface. If the floor is not finished, take any height created by additional flooring material or finishing into account.

Wood and joist

Concrete and substrate

Finished concrete

2.2 Check floor is level

Use a bubble level to gauge if floor is level prior to installation.
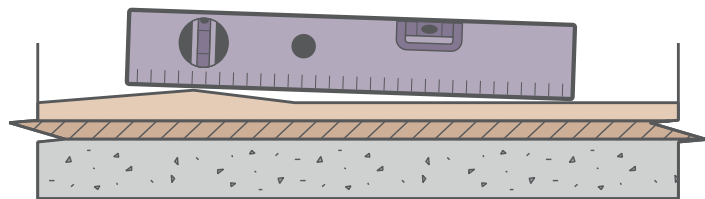
2.3 Mark Lattice System height

Using a bubble level, find the highest point of floor within the width of the Lattice System.

Next, based on provided drawing, mark the overall height of your system. Ensure your mark is level.
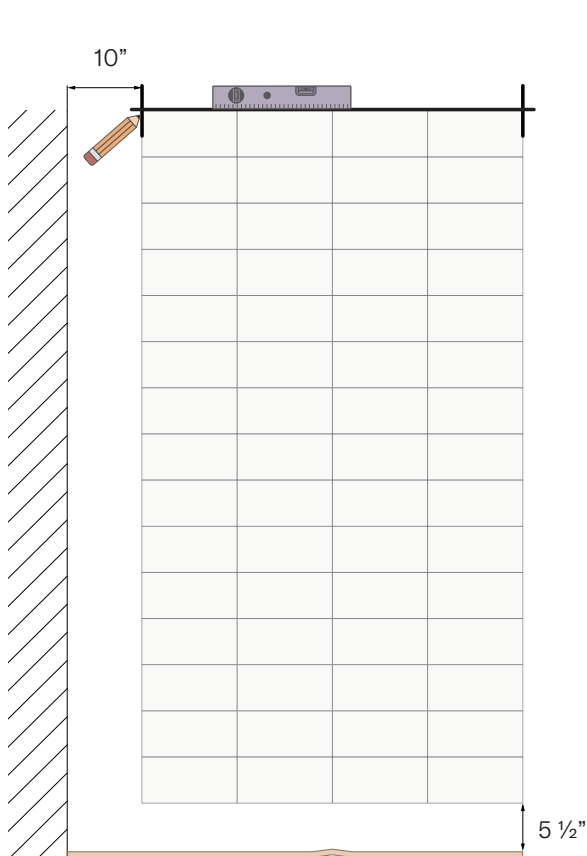
Total Height (ex: 8' 5 ½")

Highest point on the floor
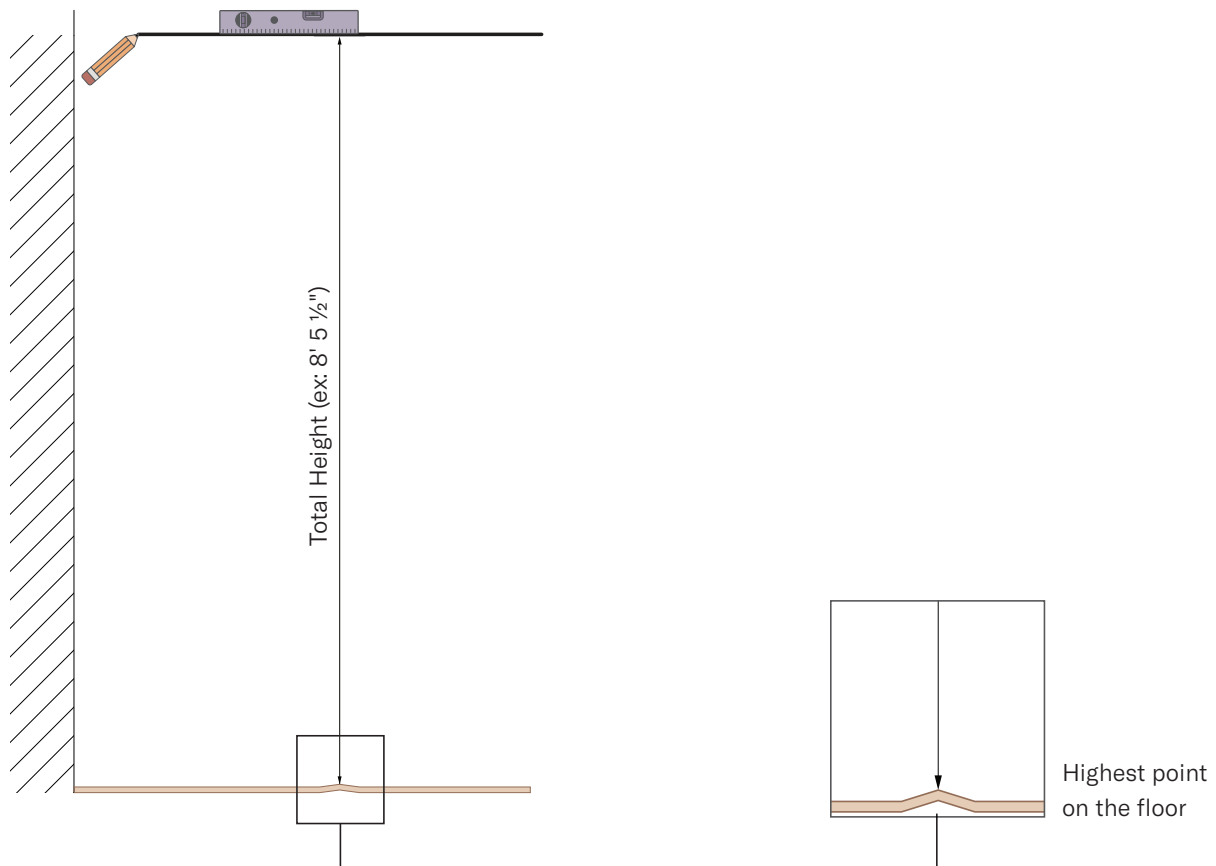
2.4 Mark Lattice System width

2.5 Find studs

Based on provided drawing, mark out total width of the Lattice System at distance from specified wall.

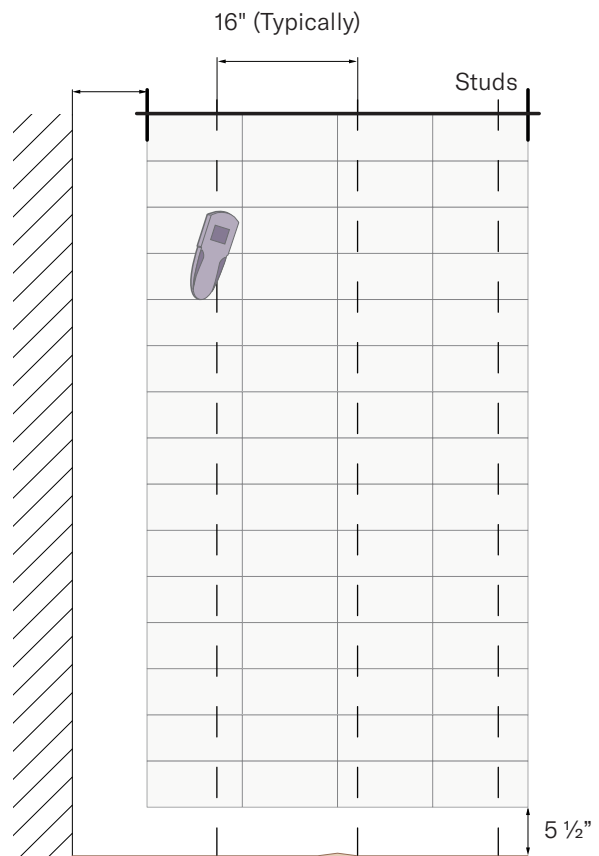Locate and mark out all the studs using a stud finder.

Notes:

Make note of the extents of your system based on provided drawings. Make sure there are no conflicts that would prevent successful installation of the Lattice System.
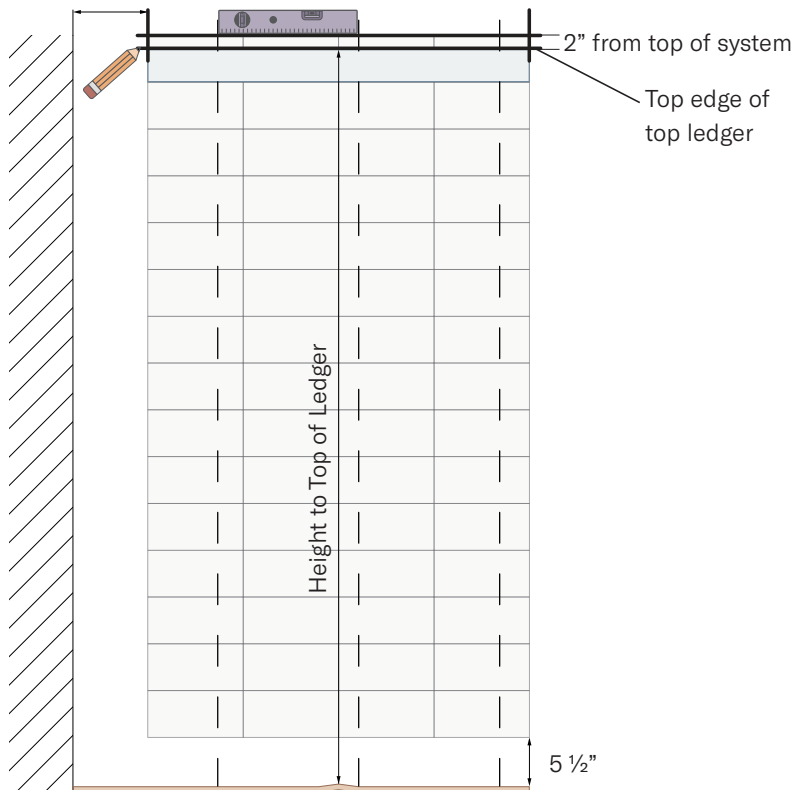
2.6 Mark top ledger height

The top edge of the highest ledger should be placed 2" lower than the top of your system. Use a laser level, if possible, for added accuracy.
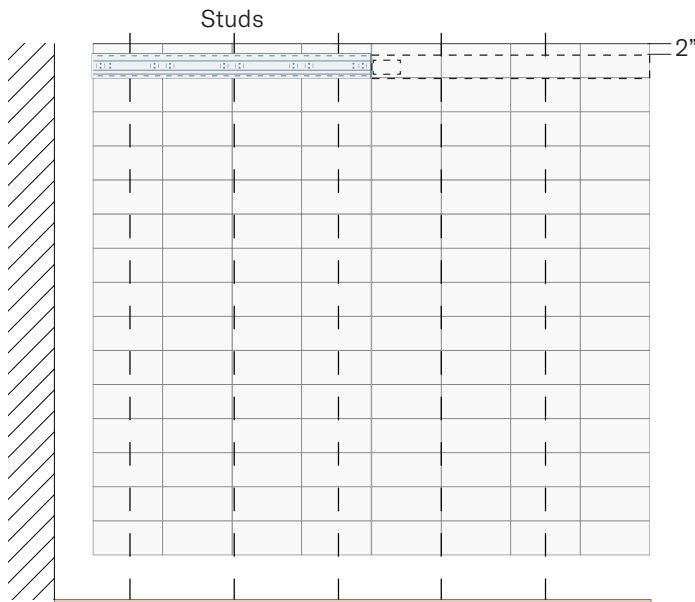

2" from top of system

Top edge of top ledger

Height to Top of Ledger
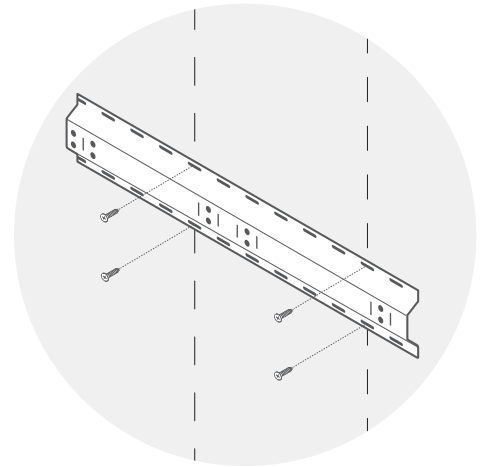
5 ½"

3   CONNECT

3.1 Secure top ledger

A. Loosely fasten top ledger into the wall using 4 screws in marked studs.

B. **Note:**

If necessary, use ledger connectors to continue attaching additional ledgers until all ledgers have been attached as per provided drawing.
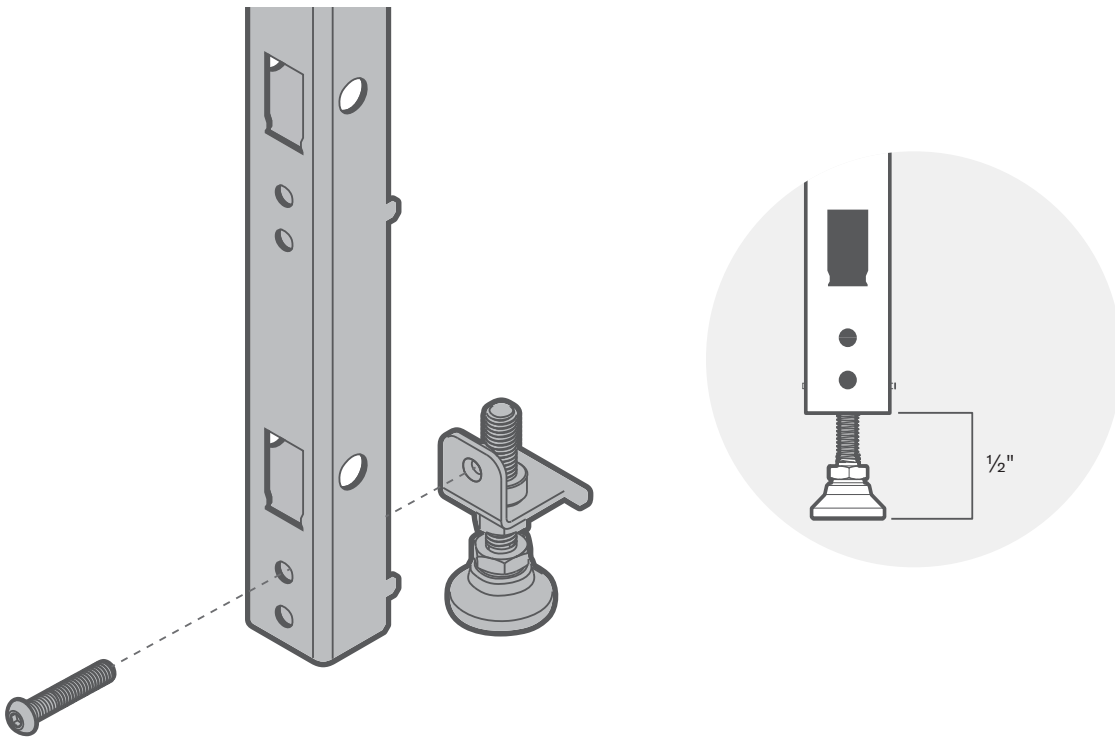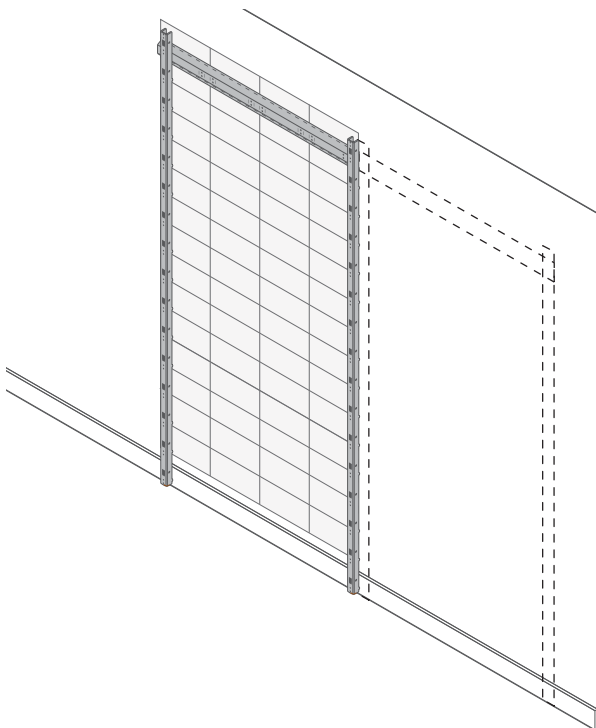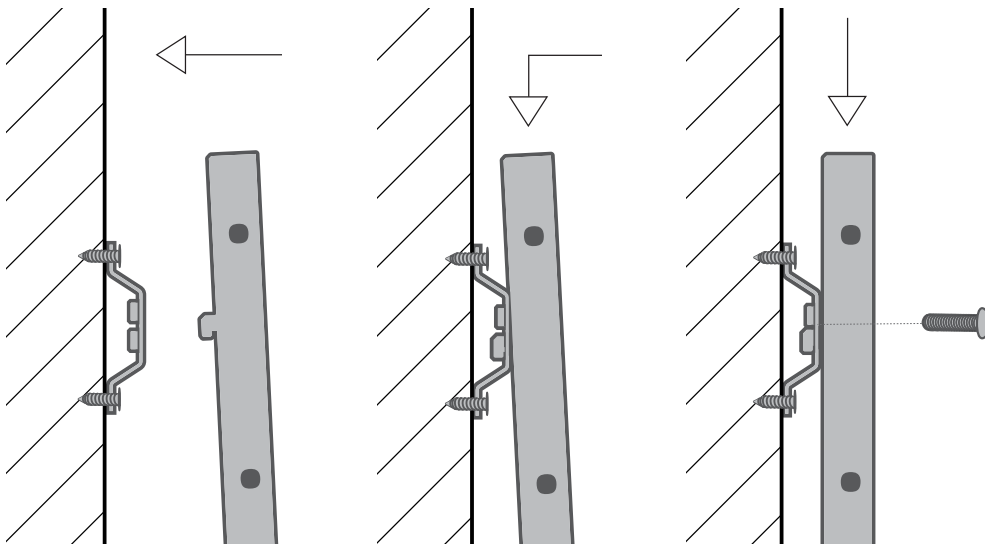
A.

B.
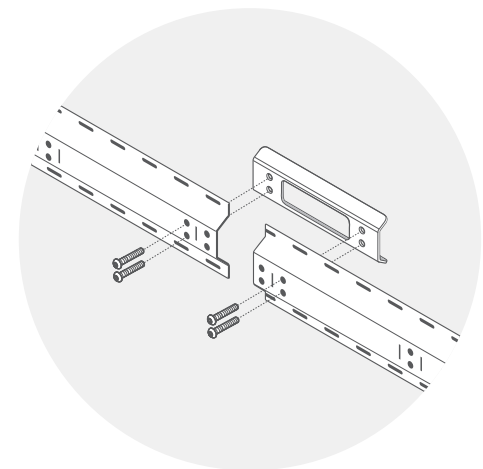
3.2 Attach leveling feet

Attach leveling feet to the two half struts.
Make sure distance from the bottom of
each foot to base of strut is preset to ½".

3.3 Hang half struts

Hang one half strut at either end of
Lattice System using hooks. Secure to
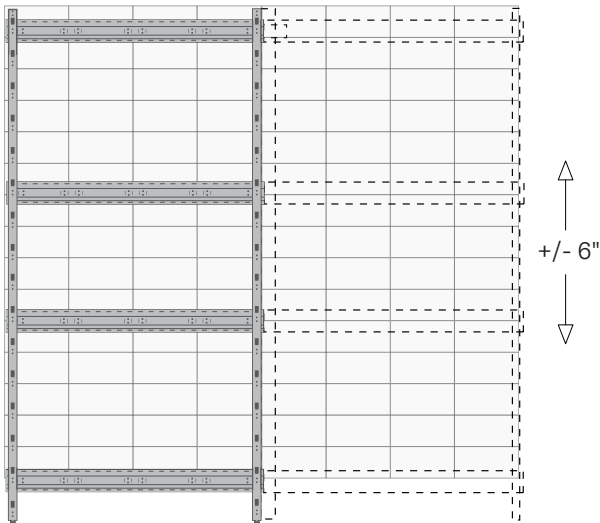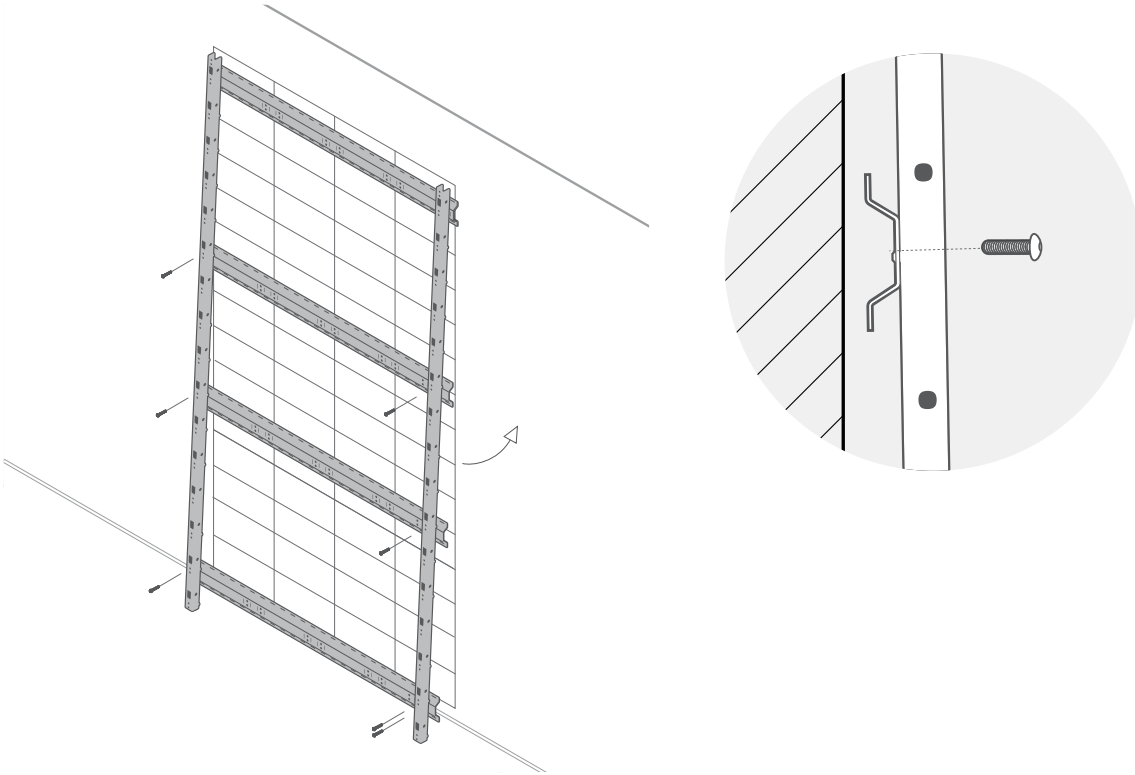ledger with hardware provided and lightly
tighten.

Note:

If using ledger connectors, hang full
strut at intersection of ledgers.

3.4 Attach remaining ledgers

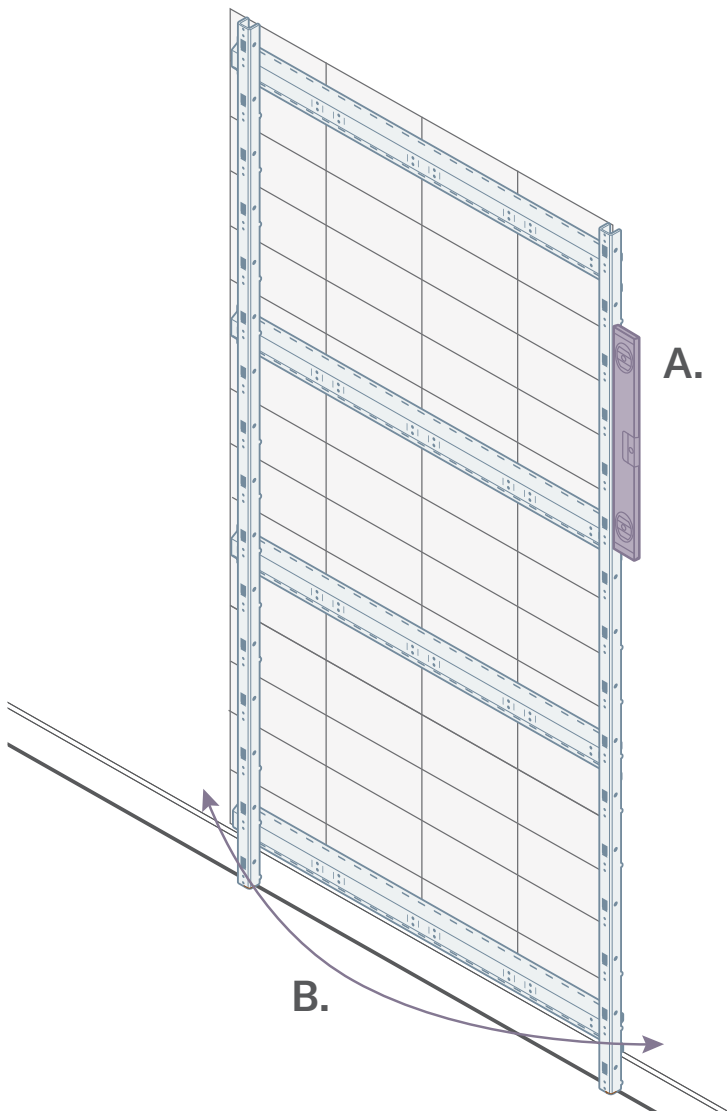Attach remaining ledgers, screwing them into the half struts.

+/- 6"

Note:

If using ledger connectors, connect to full struts to support additional ledgers at each intersection.
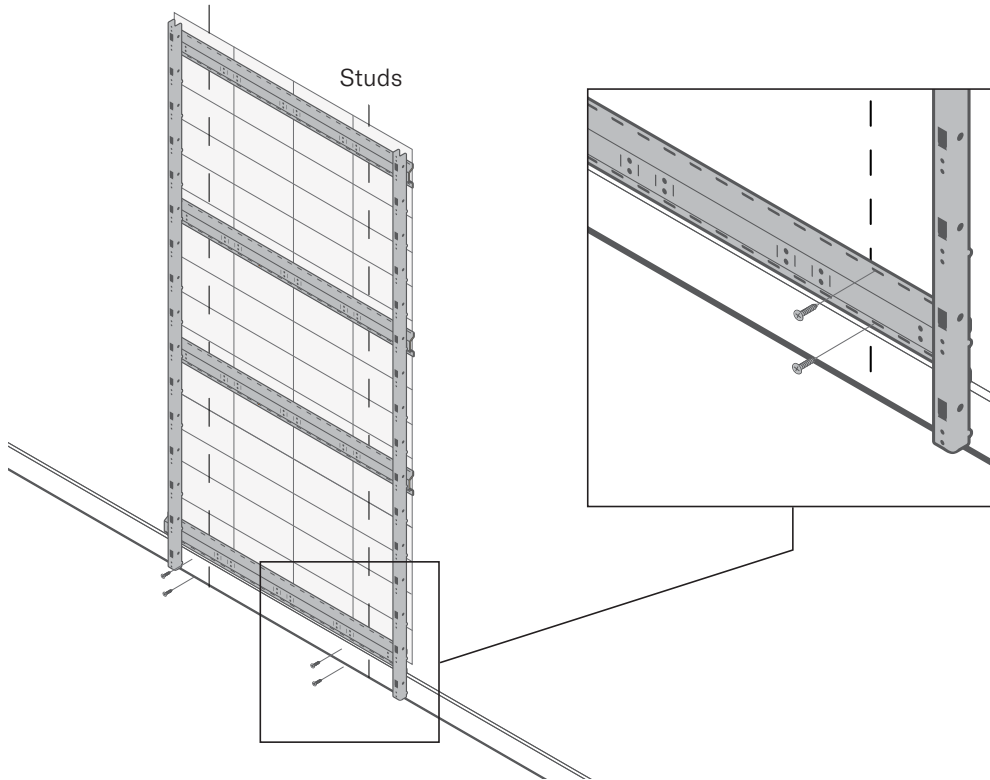
4 POSITION

4.1 Level all directions

A. Check if Lattice System is square using a bubble level along side of strut.

B. If Lattice System is not square, sway struts from side to side until square.

A.

B.

4.2 Fasten bottom ledger

Loosely fasten bottom ledger to the wall
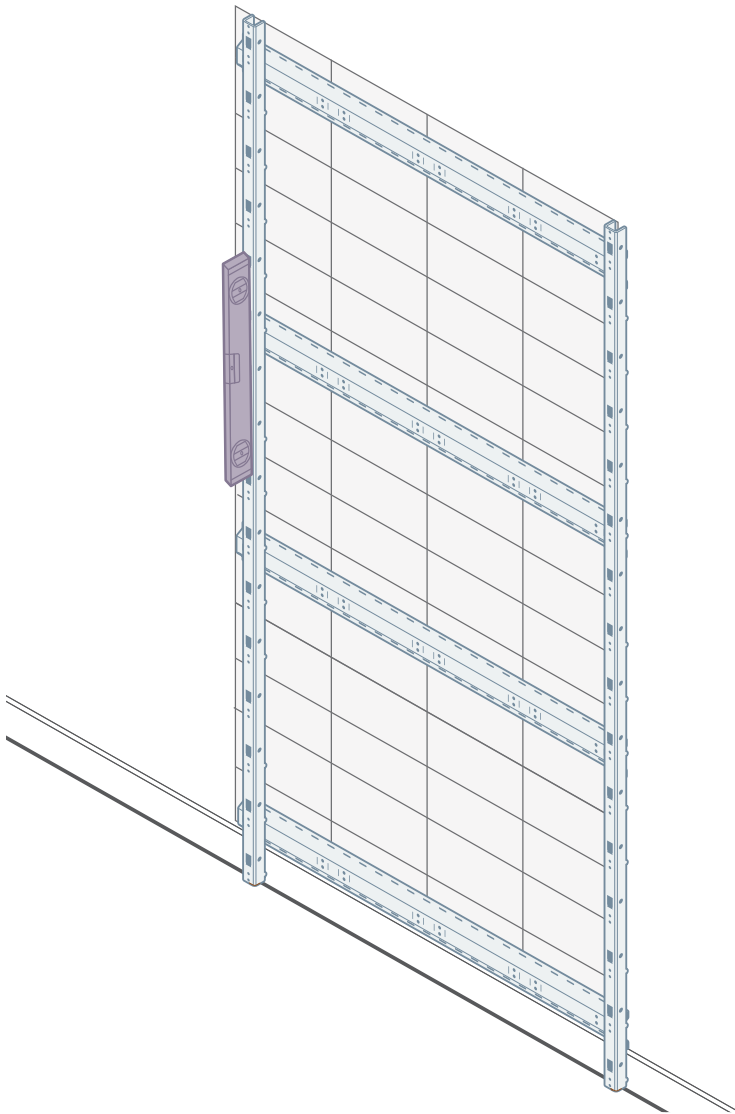with positioning screws, as close to the
strut locations as possible.

Studs

4.3 Check if struts are plumb

Check if struts are plumb using bubble level on front face of struts.

Note:

If Lattice System is not plumb, insert shims until plumb.

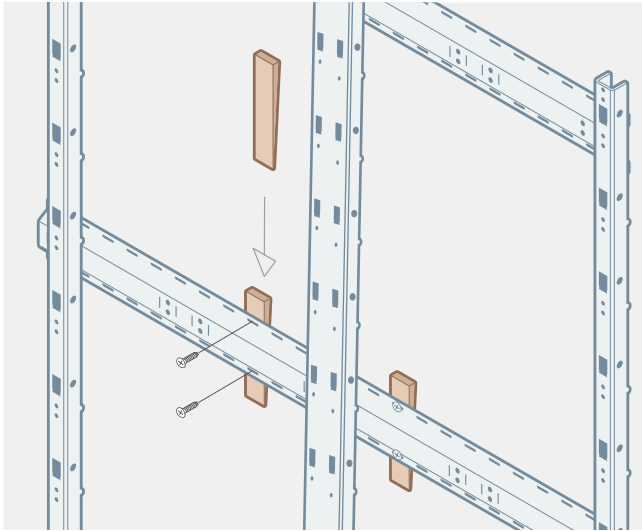**Refer to pg. 24, "Shimming", for further intructions on shimming.**

Shimming

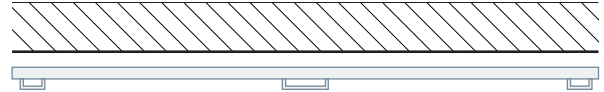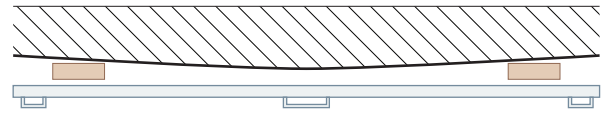⚠ If any strut is out of alignment, add shims behind ledgers near affected Struts.
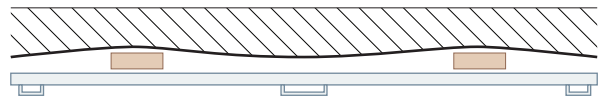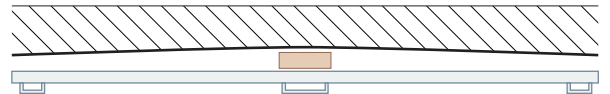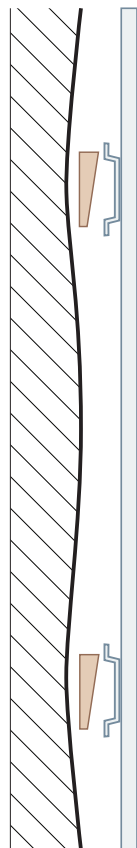
Inserting shims

Section of shimmed wall

Ideal wall (no shims)

Uneven walls (shims)
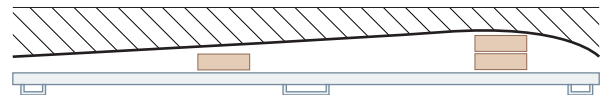
4.4 Fasten remaining struts

Based on provided drawings, fasten remaining struts to ledgers with hardware provided and lightly tighten.
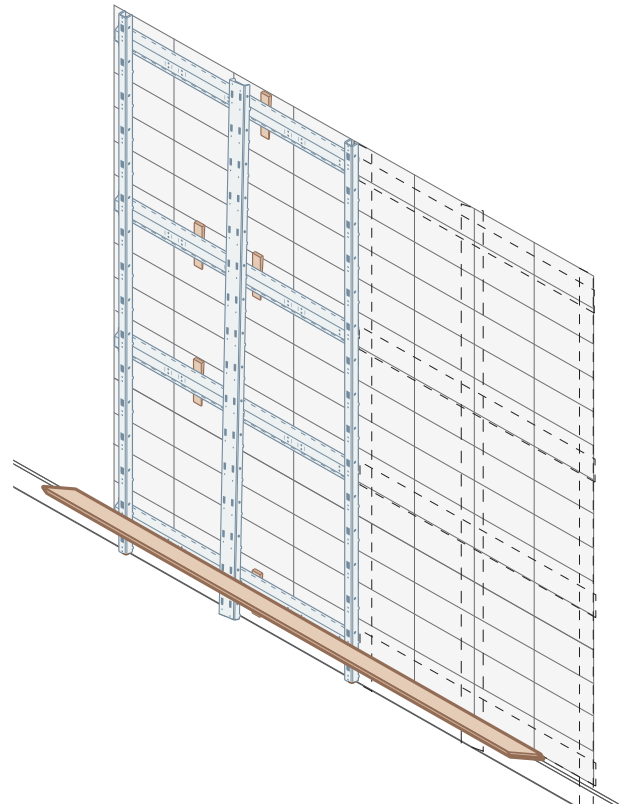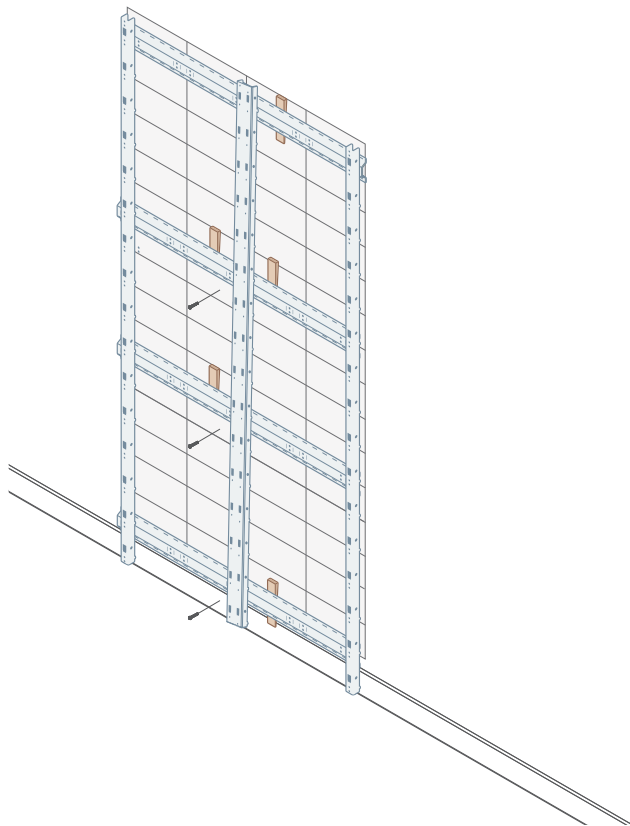
Note:

If you added full struts, rearrange or remove to match provided drawings.

4.5 Align struts

Using a strut or long straight edge for reference, check if front faces of all struts are planar. Add shims to all ledgers if not planar.

Refer to pg. 24, "Shimming", for further intructions on shimming.
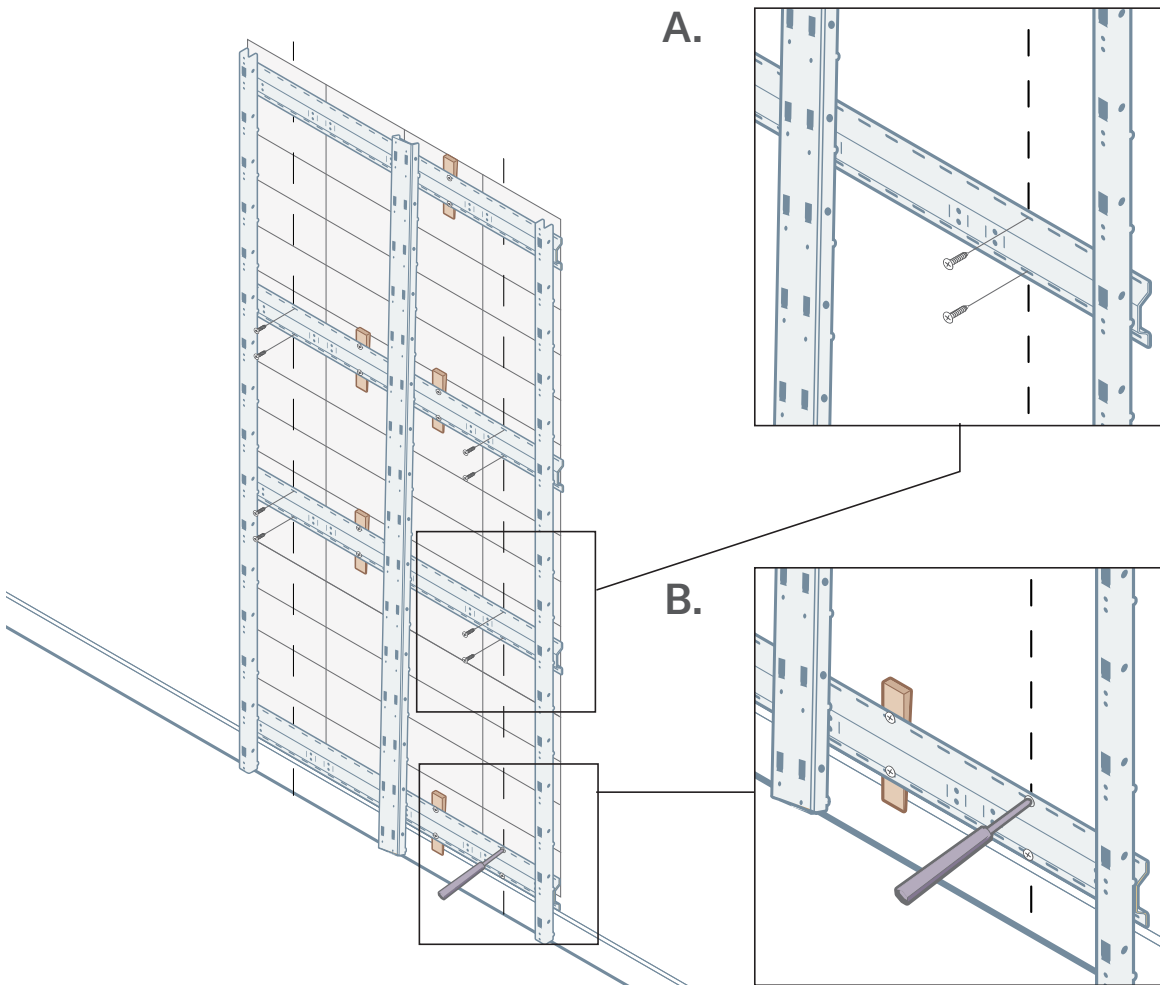
5 SECURE AND TIGHTEN

5.1 Screw in remaining ledgers

A. Screw remaining ledgers into wall at stud locations every 16" through upper and lower slots of ledger.
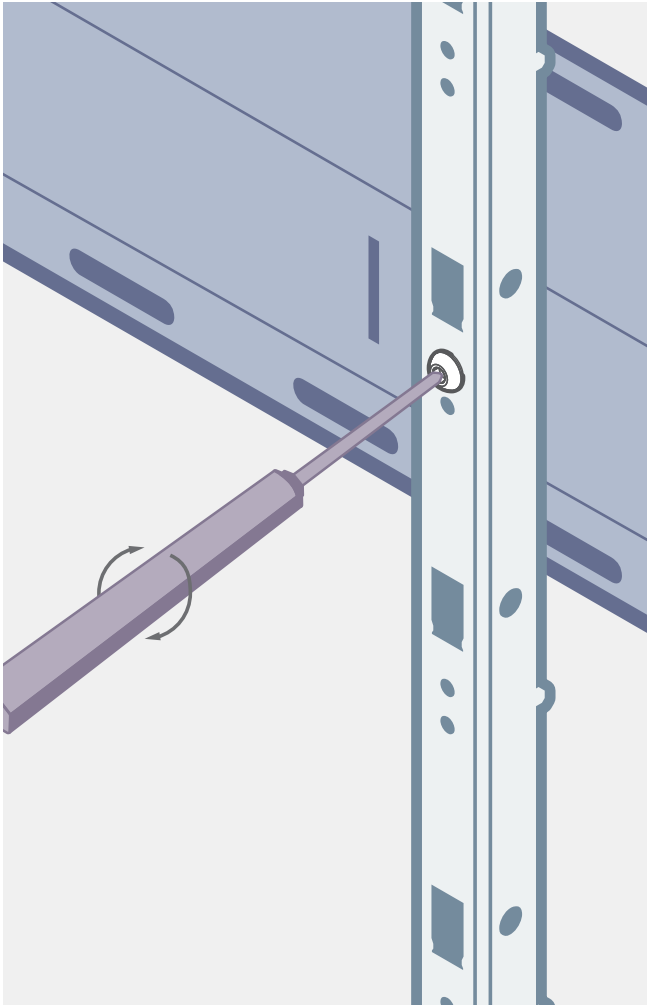
B.

Note:

Tightly fasten top and bottom ledgers to wall. Refer to Steps 3.1 and 4.2.

For shimming top and bottom ledgers, refer to pg. 24, "Shimming", for further intructions on shimming.
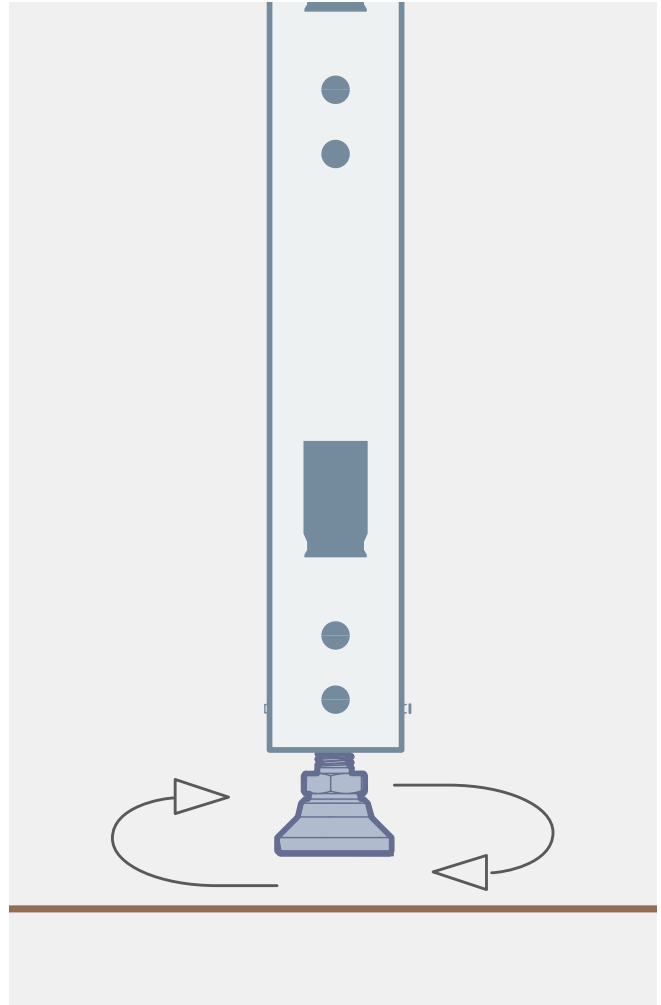
A.

B.

5.2 Tighten hardware

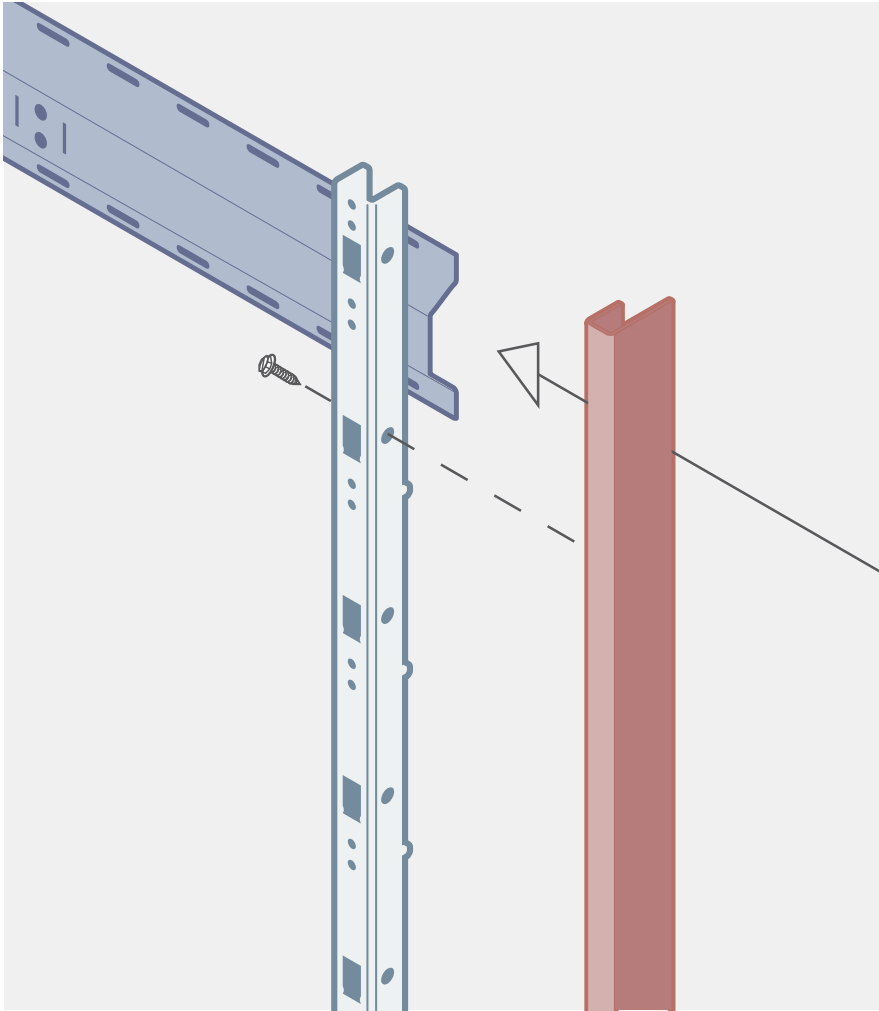Make sure all remaining hardware is in place. Tighten struts to ledgers.
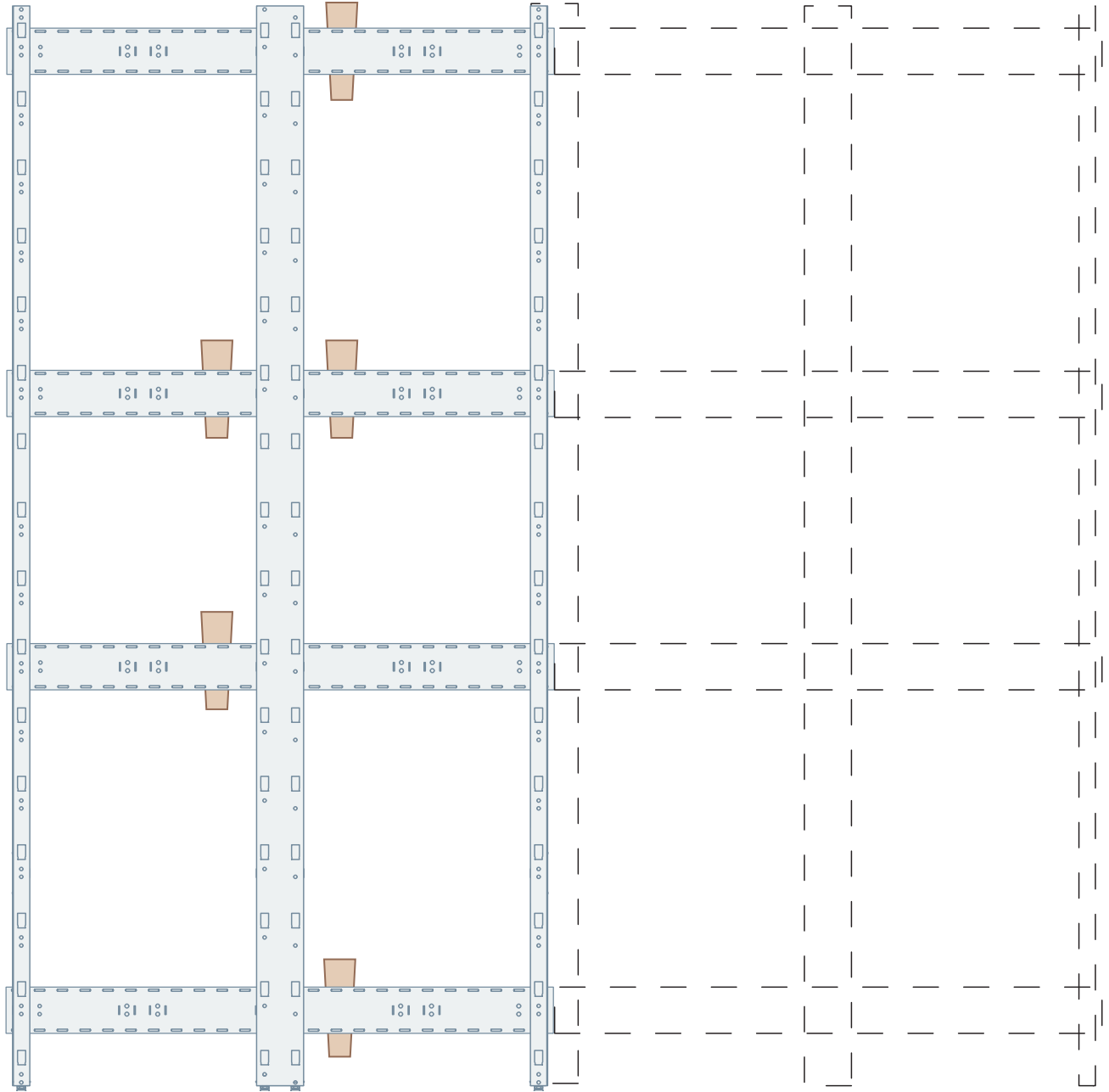

5.3 Lower leveling feet

Lower leveling feet down to the floor.

5.4 Attach side facias

Attach side facias to half struts using corresponding hardware.

Further reading

Please move on to the BentoBuild Series 001 Installation Guide to continue the installation of your system.

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