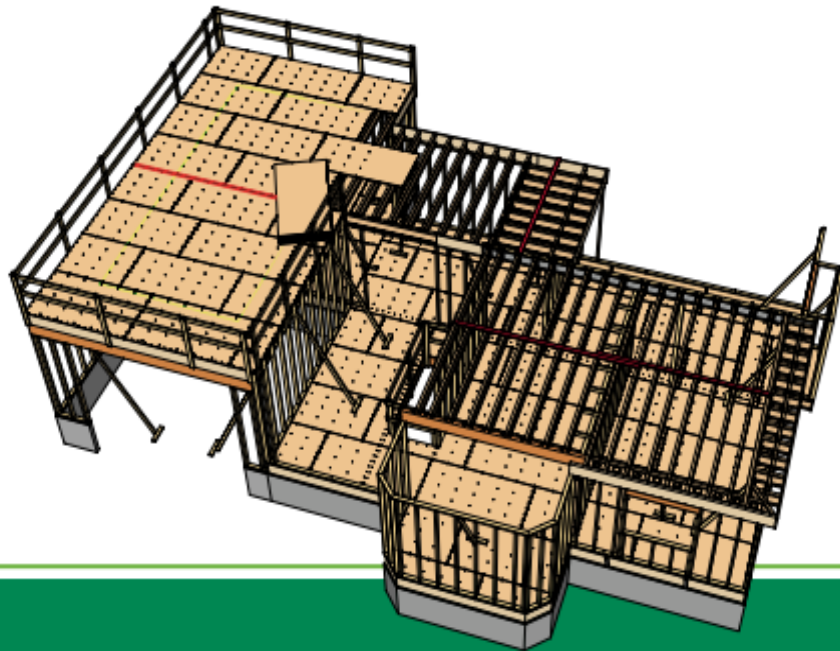




FLOOR FRAMING STANDARDS

A Framers's Guide to the INSTALLATION PROCESS



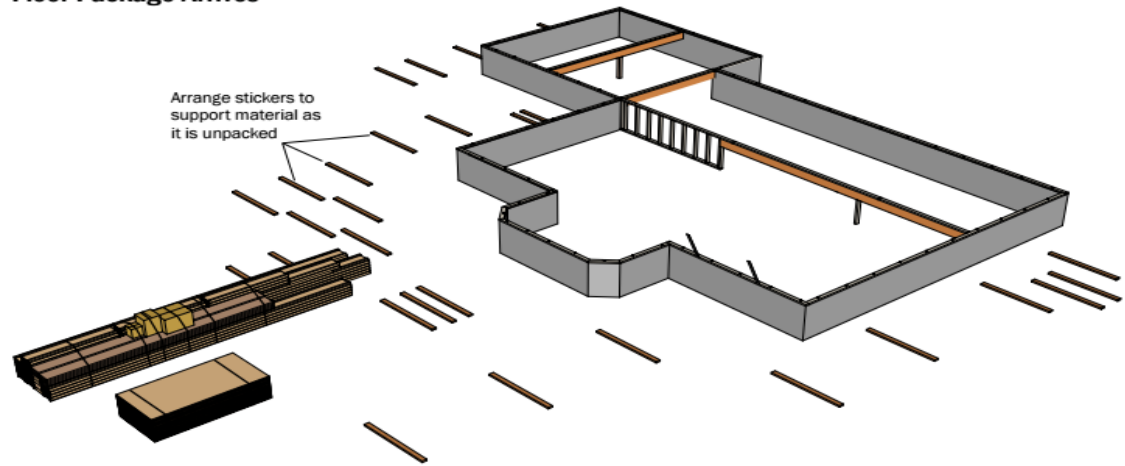
Stay Safe! Wear Personal Protective Equipment (PPE)



WARNING: Drilling, sawing, sanding or machining wood products generates wood dust. The paint and/or coatings on this product may contain titanium dioxide. Wood dust and titanium dioxide are substances known to the State of California to cause cancer. For more information on Proposition 65, visit [wy.com/inform](http://www.wy.com/inform).

Wood dust is classified as an irritant. Refer to MSDS sheets available from Weyerhaeuser.

Floor Package Arrives



WARNING: JOISTS ARE UNSTABLE UNTIL BRACED Laterally

BRACING INCLUDES: Blocking, Hangers, Rim Board, Sheathing, Rim Joist, Strut Lines

Lack of proper bracing during construction can result in serious accidents. Observe the following guidelines:

1. Properly install all blocking, hangers, rim boards, and rim joists at TJR joist end supports.
2. Establish a permanent deck (sheathing), fastened to the first 4 feet of joists at the end of the bay or braced end wall.
3. Safety bracing of 1x4 (minimum) must be nailed to a braced end wall or sheathed area and to each joist.
4. Sheathing must be completely attached to each TJR joist before additional loads can be placed on the system.
5. Ends of cantilevers require safety bracing on both the top and bottom flanges.
6. The flanges must remain straight within 1/4" from true alignment.

This guide is intended for the products shown in dry-use conditions.

Le Débar à Arriver AVERTISSEMENT L'Installation

- Les solives non contreventées latéralement sont instables. Voir le guide d'installation avant le pose des solives TJR.
- Ne pas circuler sur les solives TJR avant qu'elles ne soient adéquatement contreventées. Risque de blessures.
- Ne pas employer des matériaux sur des solives avant d'avoir installé les sous-plancher. Les entrepôts temporairement au-dessus des joists et murs.

La Seguridad Antes de ADVERTENCIA Por Favor las Condiciones

- Las vigas son inestables hasta que sean reforzadas lateralmente. Ver la guía de instalación antes de instalar las vigas TJR.
- No camine sobre las vigas hasta que sean apuntaladas.
- No ponga materiales de construcción sobre las vigas TJR antes de instalar el toping. Ponga materiales únicamente sobre vigas o muros.

[woodbyway.com](http://www.woodbyway.com) 1.888.453.8358

Weyerhaeuser

STAGE MATERIALS

Joist Identification

TJR 110 Joists

TJR 210 Joists

TJR 230 Joists

TJR 360 Joists

TJR 560 Joists

Top Mount Face Mount

NOTE: Blocking may be shipped as short lengths

Microlam® LVL

TimberStrand® LSL

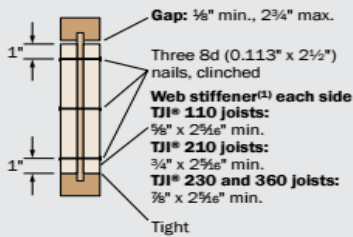
Parallam® PSL

| Product | Length | Quantity | Notes |
|---------|------------|----------|-------|
| TJR 110 | 11' 7 1/2" | 1 | 1x12 |
| TJR 210 | 11' 7 1/2" | 1 | 1x12 |
| TJR 230 | 11' 7 1/2" | 1 | 1x12 |
| TJR 360 | 11' 7 1/2" | 1 | 1x12 |
| TJR 560 | 11' 7 1/2" | 1 | 1x12 |
| TS1 | 11' 7 1/2" | 1 | 1x12 |
| TS2 | 11' 7 1/2" | 1 | 1x12 |
| TS3 | 11' 7 1/2" | 1 | 1x12 |
| TS4 | 11' 7 1/2" | 1 | 1x12 |
| TS5 | 11' 7 1/2" | 1 | 1x12 |
| TS6 | 11' 7 1/2" | 1 | 1x12 |
| TS7 | 11' 7 1/2" | 1 | 1x12 |
| TS8 | 11' 7 1/2" | 1 | 1x12 |
| TS9 | 11' 7 1/2" | 1 | 1x12 |
| TS10 | 11' 7 1/2" | 1 | 1x12 |
| TS11 | 11' 7 1/2" | 1 | 1x12 |
| TS12 | 11' 7 1/2" | 1 | 1x12 |
| TS13 | 11' 7 1/2" | 1 | 1x12 |
| TS14 | 11' 7 1/2" | 1 | 1x12 |
| TS15 | 11' 7 1/2" | 1 | 1x12 |
| TS16 | 11' 7 1/2" | 1 | 1x12 |
| TS17 | 11' 7 1/2" | 1 | 1x12 |
| TS18 | 11' 7 1/2" | 1 | 1x12 |
| TS19 | 11' 7 1/2" | 1 | 1x12 |
| TS20 | 11' 7 1/2" | 1 | 1x12 |
| TS21 | 11' 7 1/2" | 1 | 1x12 |
| TS22 | 11' 7 1/2" | 1 | 1x12 |
| TS23 | 11' 7 1/2" | 1 | 1x12 |
| TS24 | 11' 7 1/2" | 1 | 1x12 |
| TS25 | 11' 7 1/2" | 1 | 1x12 |
| TS26 | 11' 7 1/2" | 1 | 1x12 |
| TS27 | 11' 7 1/2" | 1 | 1x12 |
| TS28 | 11' 7 1/2" | 1 | 1x12 |
| TS29 | 11' 7 1/2" | 1 | 1x12 |
| TS30 | 11' 7 1/2" | 1 | 1x12 |
| TS31 | 11' 7 1/2" | 1 | 1x12 |
| TS32 | 11' 7 1/2" | 1 | 1x12 |
| TS33 | 11' 7 1/2" | 1 | 1x12 |
| TS34 | 11' 7 1/2" | 1 | 1x12 |
| TS35 | 11' 7 1/2" | 1 | 1x12 |
| TS36 | 11' 7 1/2" | 1 | 1x12 |
| TS37 | 11' 7 1/2" | 1 | 1x12 |
| TS38 | 11' 7 1/2" | 1 | 1x12 |
| TS39 | 11' 7 1/2" | 1 | 1x12 |
| TS40 | 11' 7 1/2" | 1 | 1x12 |
| TS41 | 11' 7 1/2" | 1 | 1x12 |
| TS42 | 11' 7 1/2" | 1 | 1x12 |
| TS43 | 11' 7 1/2" | 1 | 1x12 |
| TS44 | 11' 7 1/2" | 1 | 1x12 |
| TS45 | 11' 7 1/2" | 1 | 1x12 |
| TS46 | 11' 7 1/2" | 1 | 1x12 |
| TS47 | 11' 7 1/2" | 1 | 1x12 |
| TS48 | 11' 7 1/2" | 1 | 1x12 |
| TS49 | 11' 7 1/2" | 1 | 1x12 |
| TS50 | 11' 7 1/2" | 1 | 1x12 |
| TS51 | 11' 7 1/2" | 1 | 1x12 |
| TS52 | 11' 7 1/2" | 1 | 1x12 |
| TS53 | 11' 7 1/2" | 1 | 1x12 |
| TS54 | 11' 7 1/2" | 1 | 1x12 |
| TS55 | 11' 7 1/2" | 1 | 1x12 |
| TS56 | 11' 7 1/2" | 1 | 1x12 |
| TS57 | 11' 7 1/2" | 1 | 1x12 |
| TS58 | 11' 7 1/2" | 1 | 1x12 |
| TS59 | 11' 7 1/2" | 1 | 1x12 |
| TS60 | 11' 7 1/2" | 1 | 1x12 |
| TS61 | 11' 7 1/2" | 1 | 1x12 |
| TS62 | 11' 7 1/2" | 1 | 1x12 |
| TS63 | 11' 7 1/2" | 1 | 1x12 |
| TS64 | 11' 7 1/2" | 1 | 1x12 |
| TS65 | 11' 7 1/2" | 1 | 1x12 |
| TS66 | 11' 7 1/2" | 1 | 1x12 |
| TS67 | 11' 7 1/2" | 1 | 1x12 |
| TS68 | 11' 7 1/2" | 1 | 1x12 |
| TS69 | 11' 7 1/2" | 1 | 1x12 |
| TS70 | 11' 7 1/2" | 1 | 1x12 |
| TS71 | 11' 7 1/2" | 1 | 1x12 |
| TS72 | 11' 7 1/2" | 1 | 1x12 |
| TS73 | 11' 7 1/2" | 1 | 1x12 |
| TS74 | 11' 7 1/2" | 1 | 1x12 |
| TS75 | 11' 7 1/2" | 1 | 1x12 |
| TS76 | 11' 7 1/2" | 1 | 1x12 |
| TS77 | 11' 7 1/2" | 1 | 1x12 |
| TS78 | 11' 7 1/2" | 1 | 1x12 |
| TS79 | 11' 7 1/2" | 1 | 1x12 |
| TS80 | 11' 7 1/2" | 1 | 1x12 |
| TS81 | 11' 7 1/2" | 1 | 1x12 |
| TS82 | 11' 7 1/2" | 1 | 1x12 |
| TS83 | 11' 7 1/2" | 1 | 1x12 |
| TS84 | 11' 7 1/2" | 1 | 1x12 |
| TS85 | 11' 7 1/2" | 1 | 1x12 |
| TS86 | 11' 7 1/2" | 1 | 1x12 |
| TS87 | 11' 7 1/2" | 1 | 1x12 |
| TS88 | 11' 7 1/2" | 1 | 1x12 |
| TS89 | 11' 7 1/2" | 1 | 1x12 |
| TS90 | 11' 7 1/2" | 1 | 1x12 |
| TS91 | 11' 7 1/2" | 1 | 1x12 |
| TS92 | 11' 7 1/2" | 1 | 1x12 |
| TS93 | 11' 7 1/2" | 1 | 1x12 |
| TS94 | 11' 7 1/2" | 1 | 1x12 |
| TS95 | 11' 7 1/2" | 1 | 1x12 |
| TS96 | 11' 7 1/2" | 1 | 1x12 |
| TS97 | 11' 7 1/2" | 1 | 1x12 |
| TS98 | 11' 7 1/2" | 1 | 1x12 |
| TS99 | 11' 7 1/2" | 1 | 1x12 |
| TS100 | 11' 7 1/2" | 1 | 1x12 |

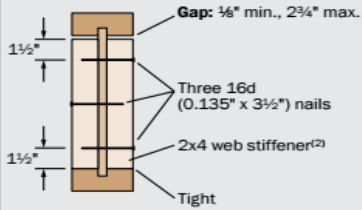
See architect or engineer plans for dimensions and special details

Web Stiffeners

TJI® 110, 210, 230, 360 Joists

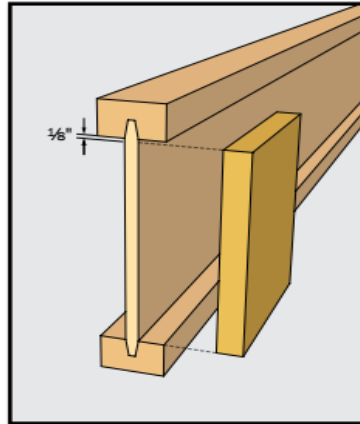


TJI® 560 Joists

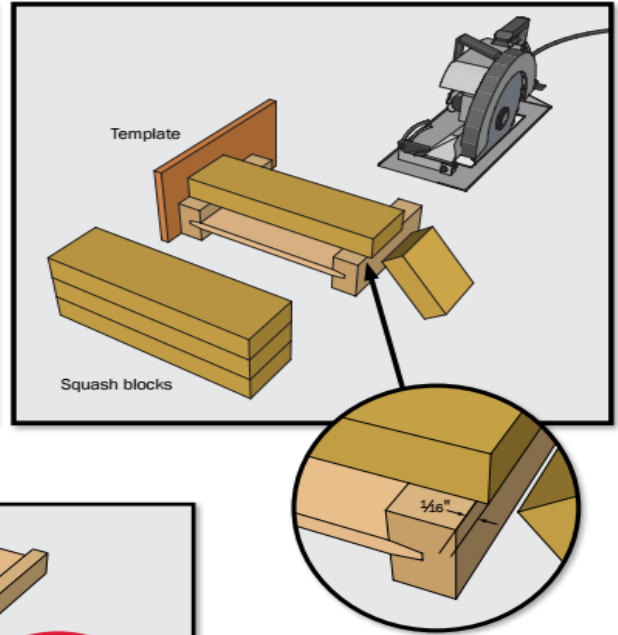


(1) PS1 or PS2 sheathing, face grain vertical
(2) Construction grade or better

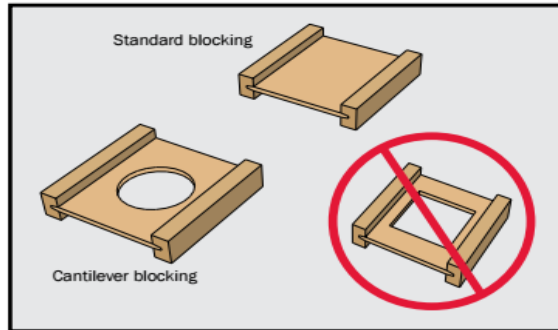
Cutting Web Stiffeners



Cutting Squash Blocks



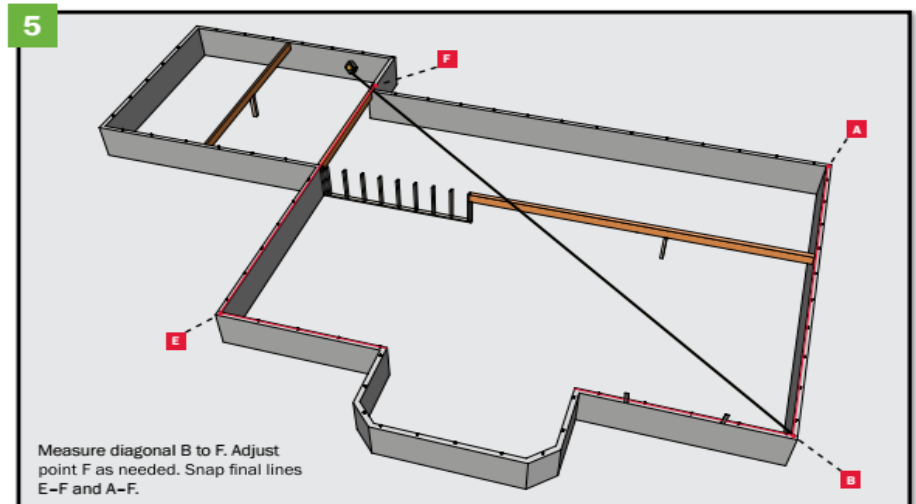
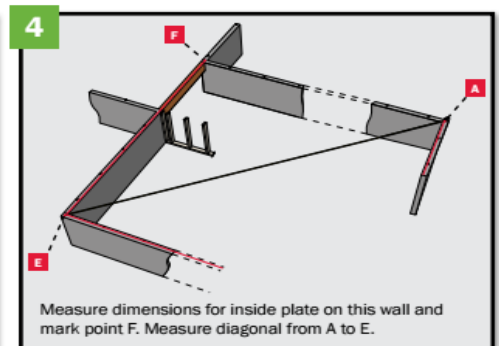
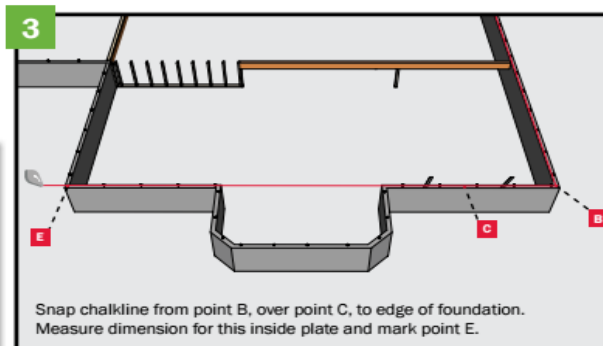
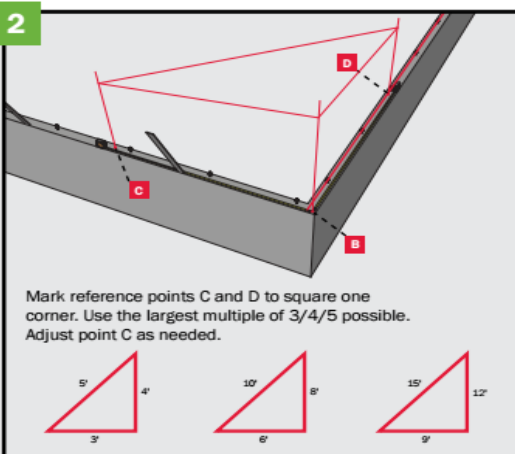
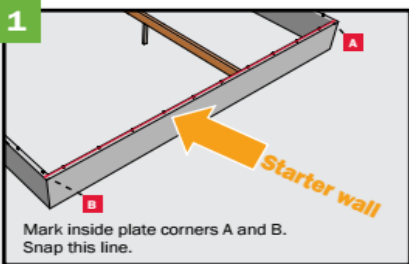
Cutting Blocking Panels



SQUARE AND SNAP LINE FOR SILL PLATE

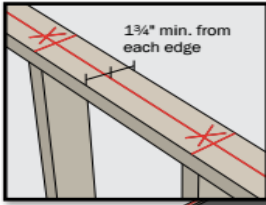


Architect/Engineer Plan

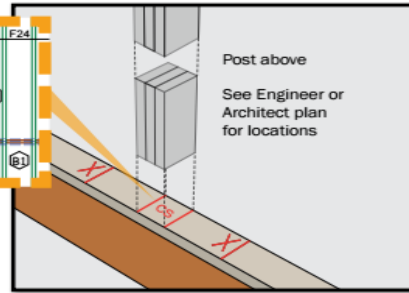
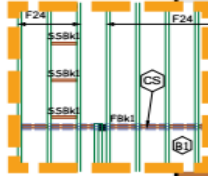


See architect or engineer plans for dimensions and special details

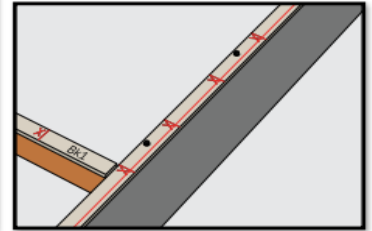
Snap Line at Butted Joist



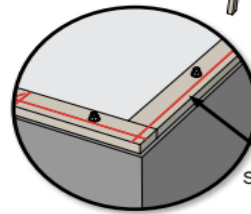
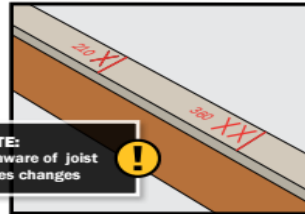
Layout Squash Blocks



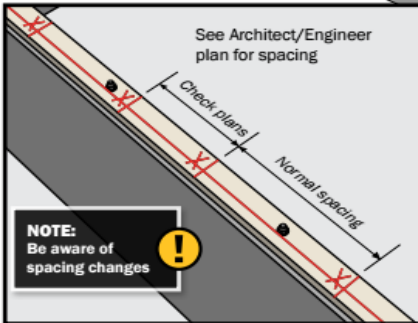
Layout Blocking Panels



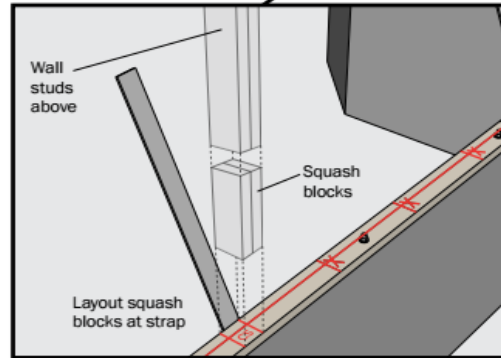
Layout Joists



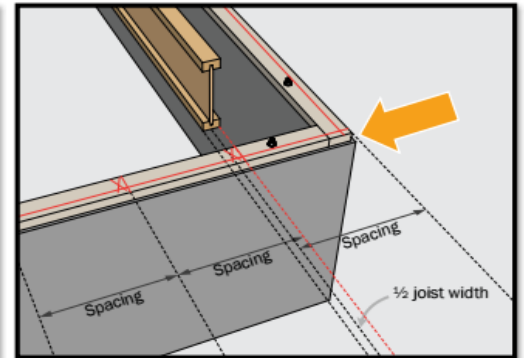
Plumbing/Mechanical Offsets



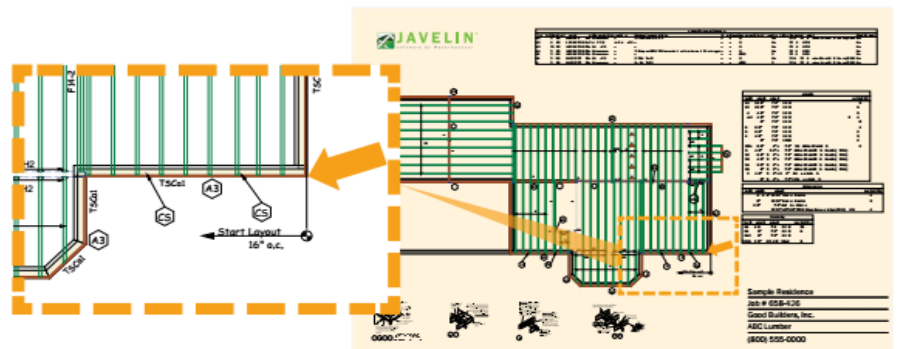
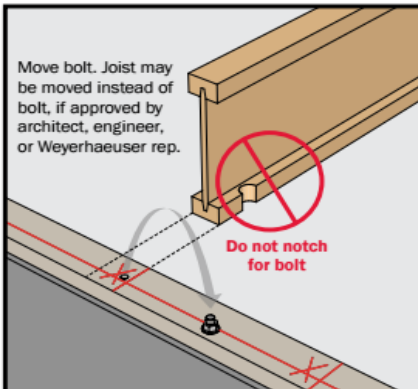
Squash Blocks at Strap



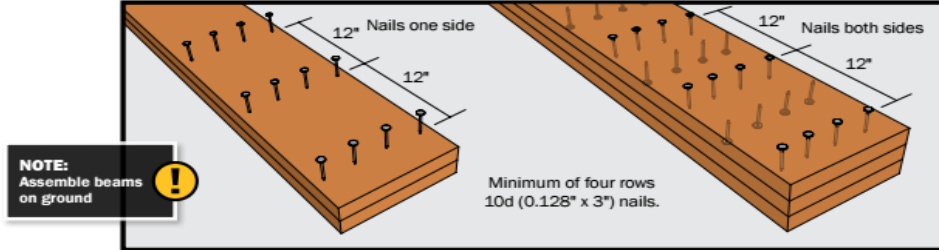
Normal Joist Spacing



Bolt at Joist Location



Fastening Per Engineer's Specifications (Top Loaded Beams ONLY)



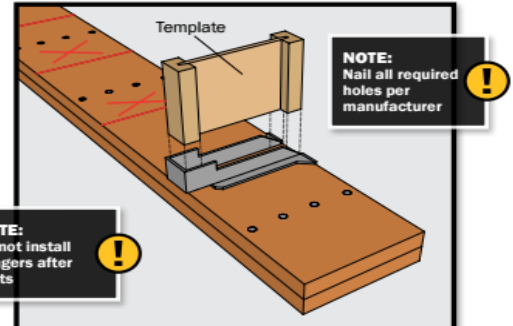
NOTE:
Assemble beams
on ground

Minimum of four rows
10d (0.128\" x 3\") nails.

NOTE:
Use galvanized nails to
connect products to treated
lumber sill plates. Not
required with StrandGuard®
TimberStrand® LSL sill plates.

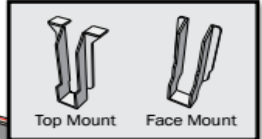
NOTE:
See Engineer's plans
or layout plans for
special fastening of
side-loaded beams!

Hangar Installation



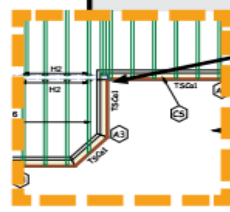
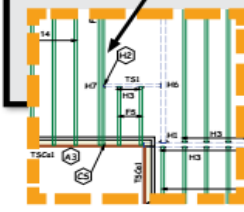
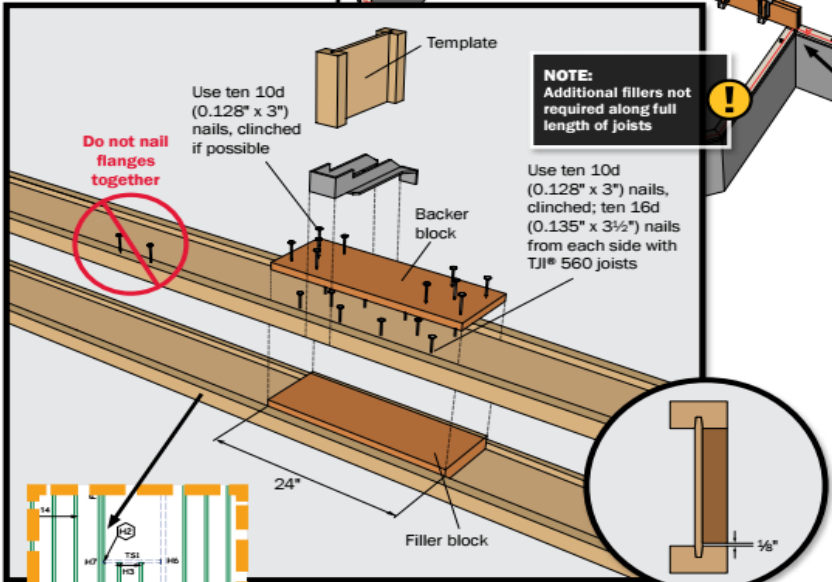
NOTE:
Do not install
hangers after
joists

| Plan Label | Qty | Manuf. | Product | Face/Supporter Nails | Top Nails |
|------------|-----|--------|----------|----------------------|-----------|
| H2 | 27 | SST | HU2, L/9 | 14- 10d common | - |
| H3 | 2 | SST | HU2, L/9 | 14- 10d common | - |



CAUTION:
Beams are heavy. Use
appropriate equipment
when lifting/placing beams
to avoid injury.

Building Double TJI® Joist to Support Header (Detail H2)



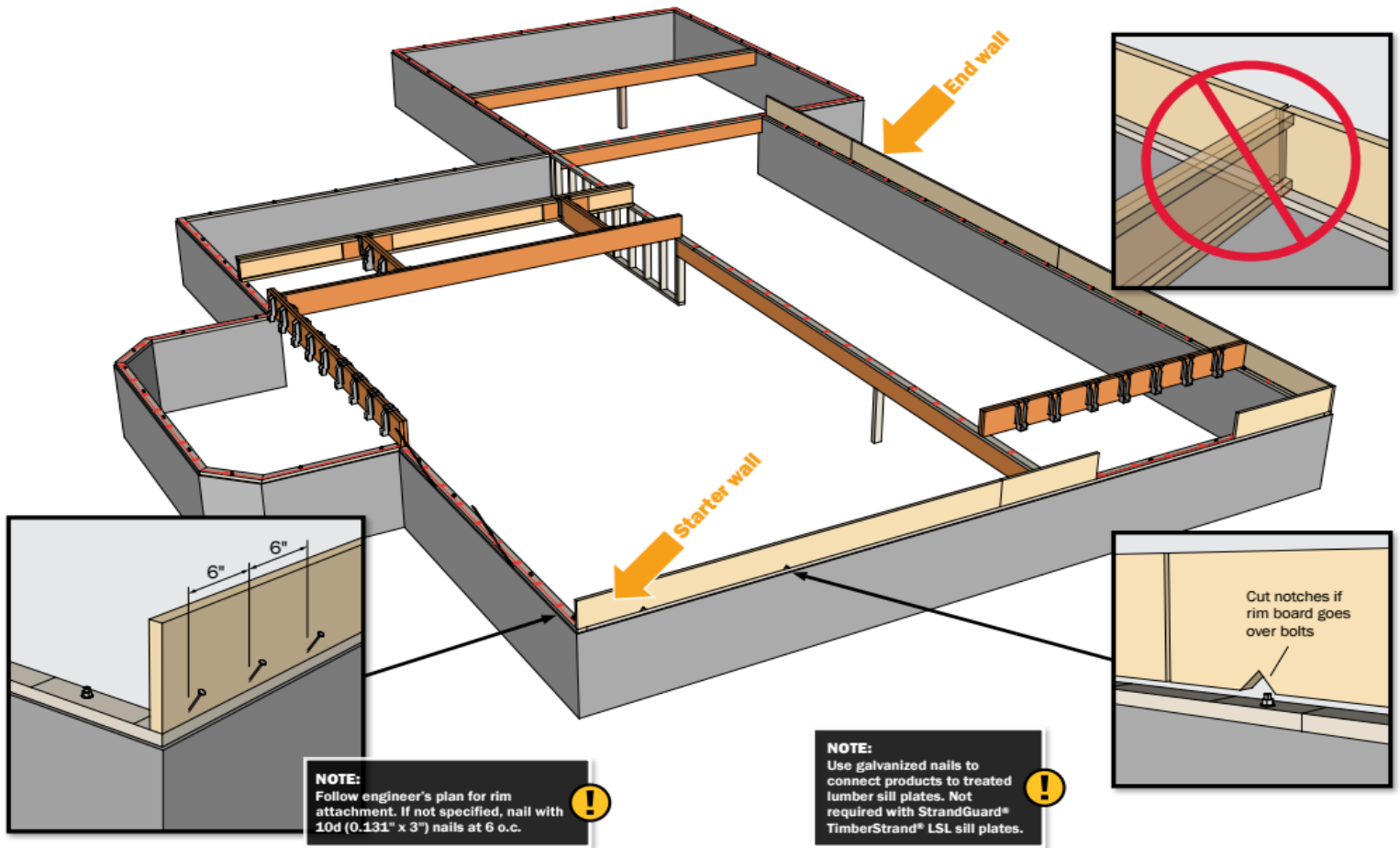
Install backer blocks tight to top
flange (tight to bottom flange
with face mount hangers) with
1/8\" min. gap

JAVELIN

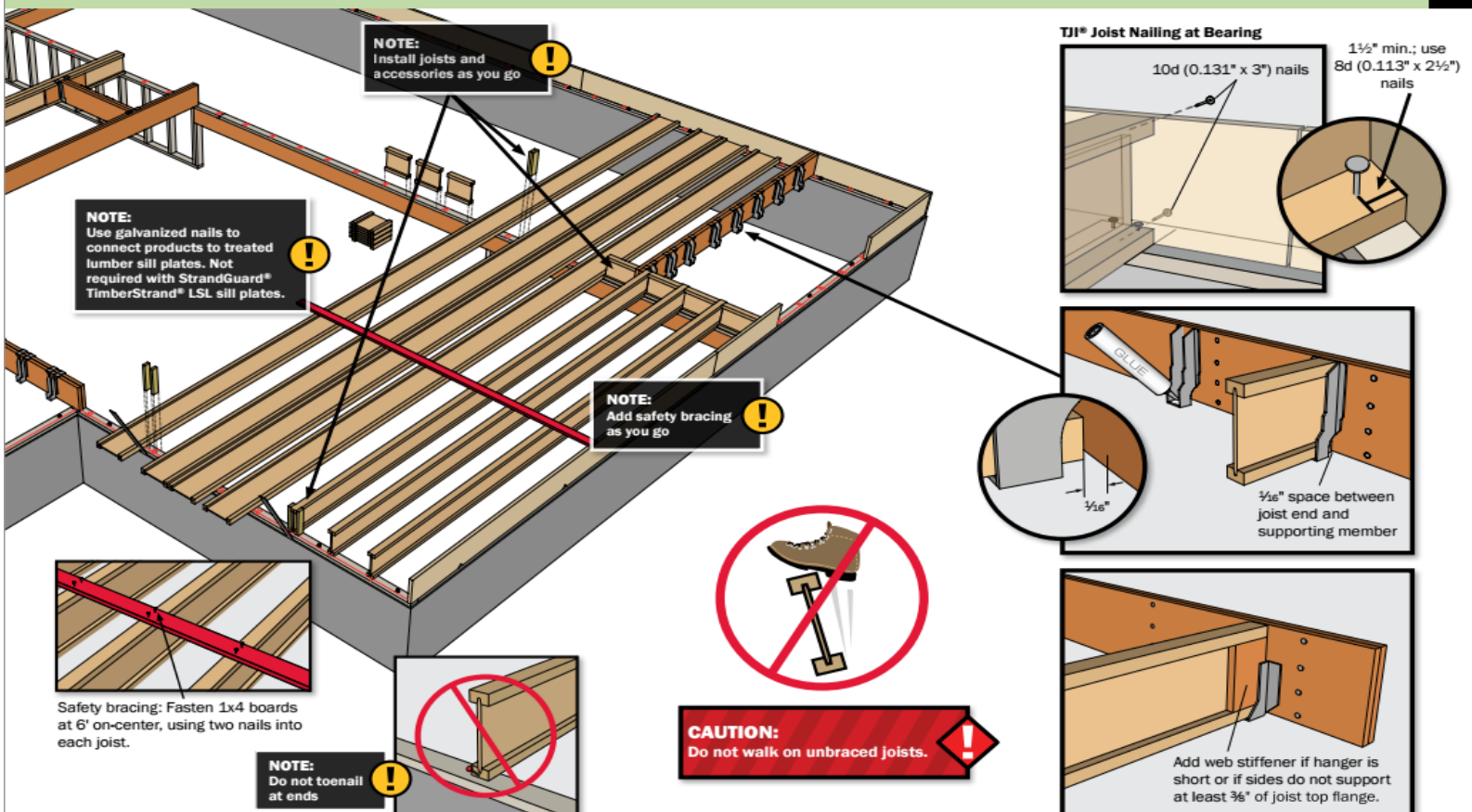
Sample Residence
Job # 658-402
Good Builders, Inc.
ABC Lumber
(800) 555-0000

| Plan Label | Qty | Manuf. | Product | Face/Supporter Nails | Top Nails | Member/Supporter Nails | Saw Slope | Supporting Material | Type | Backer Blks. | Supported Product | Web Stiffeners |
|------------|-----|--------|----------------|----------------------|-----------|------------------------|-----------|---------------------|------|---|-------------------|----------------|
| H1 | 1 | SST | HU2, L/9 | 14- 10d common | - | 20- 10d double shear | - | LSL | No | 3 1/2\" x 11 7/8\" TimberStrand® LSL Beam (1.55E) | No | No |
| H2 | 8 | SST | IT52, 09/11.88 | 2- 10d x 1-1/2 | - | - | - | LSL | No | 11 7/8\" T.J. 210 | No | No |
| H3 | 18 | SST | IUS2, 09/11.88 | 10- 10d x 1-1/2 | - | - | - | LSL | No | 11 7/8\" T.J. 210 | No | No |
| H4 | 1 | SST | IUS2, 09/11.88 | 10- 10d common | - | - | - | LSL | No | 11 7/8\" T.J. 210 | No | No |
| H5 | 3 | SST | IUS2, 09/11.88 | 10- 10d common | - | - | - | LSL | No | 11 7/8\" T.J. 210 | No | No |
| H6 | 1 | SST | MIU1, 8/11 | 20- 10d x 1-1/2 | - | 2- 10d x 1-1/2 | - | LSL | No | 1 3/4\" x 11 7/8\" TimberStrand® LSL Beam (1.55E) | No | No |
| H7 | 1 | SST | MIU1, 8/11 | 20- 10d common | - | 2- 10d x 1-1/2 | - | LSL | No | 1 3/4\" x 11 7/8\" TimberStrand® LSL Beam (1.55E) | No | No |

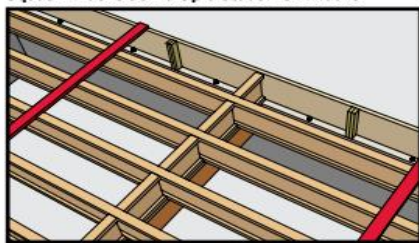
See architect or engineer plans for dimensions and special details



INSTALL JOISTS, ACCESSORIES, AND SAFETY BRACING



Squash Blocks at Multiple Studs from Above

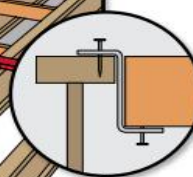


Double Joist Under Shear or Braced Wall

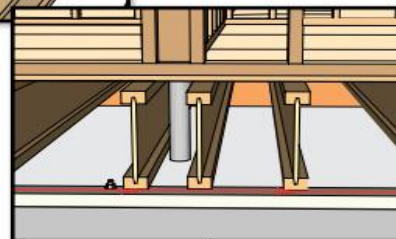


NOTE:
No filler unless specified
by engineer or architect

Joists Under Non-Bearing Wall



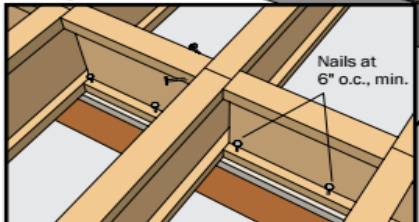
Alternative attachment
of block between joists
at non-bearing walls



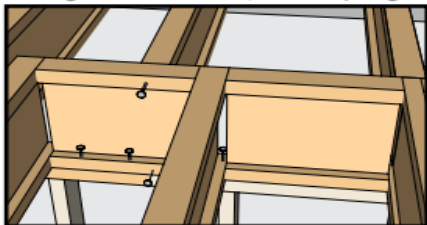
Blocking at End of Beam



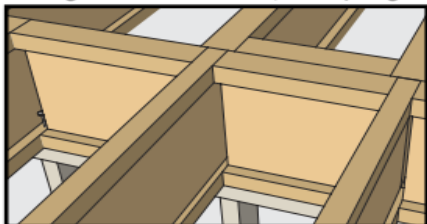
Blocking at Ends of Joists



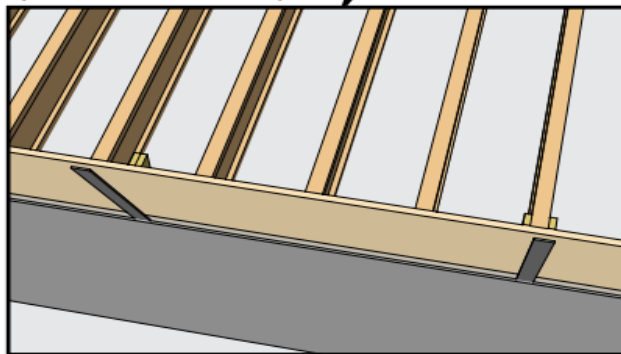
Blocking for Same Joist Series, Different Spacing



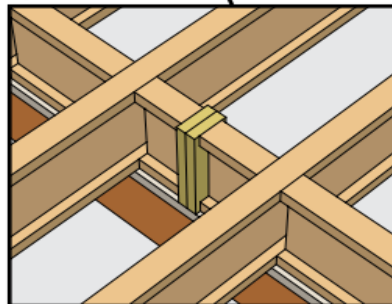
Blocking for Different Joist Series, Same Spacing



Squash Blocks at Foundation Straps

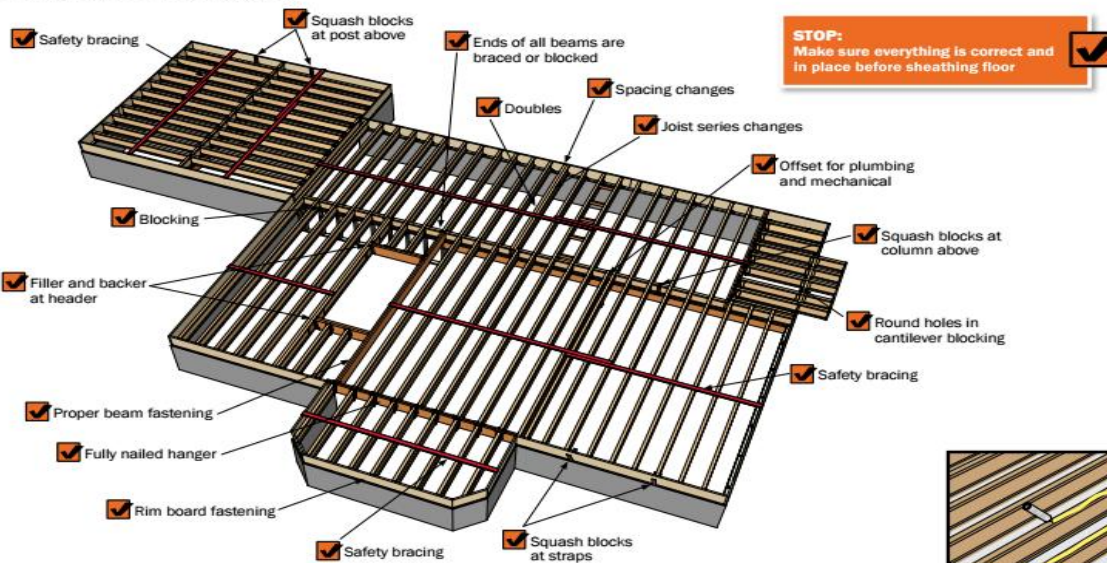


Squash Block at Column



NOTE:
Use galvanized nails to
connect products to treated
lumber sill plates. Not
required with StrandGuard®
TimberStrand® LSL sill plates.

Final Check Before Subfloor



CAUTION: Do not walk on unbraced joists.

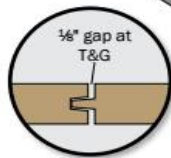
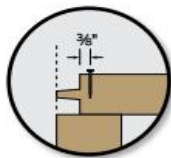
NOTE: Apply only enough adhesive to set one or two panels at a time

NOTE: Stagger panels by two joists, minimum

NOTE: Fasten per engineer's specifications. Minimum nailing is 6" o.c. at edge and 12" o.c. in field. Fully nail each panel as it's laid.

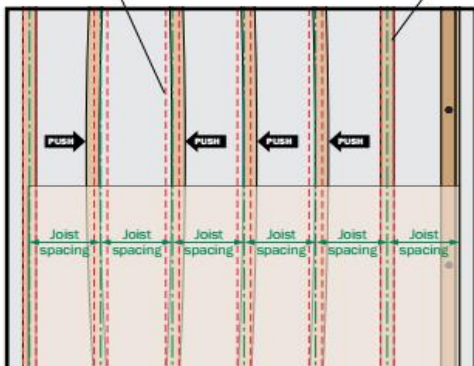
Drop panel into place. Avoid shifting.

Do not force together



Push or pull joists into line before nailing off

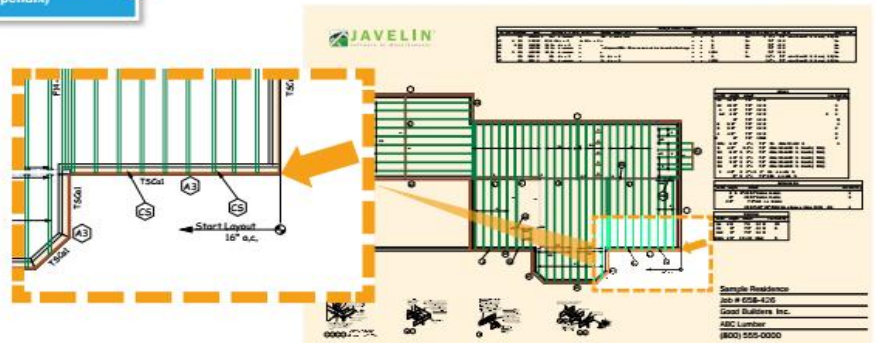
Good alignment



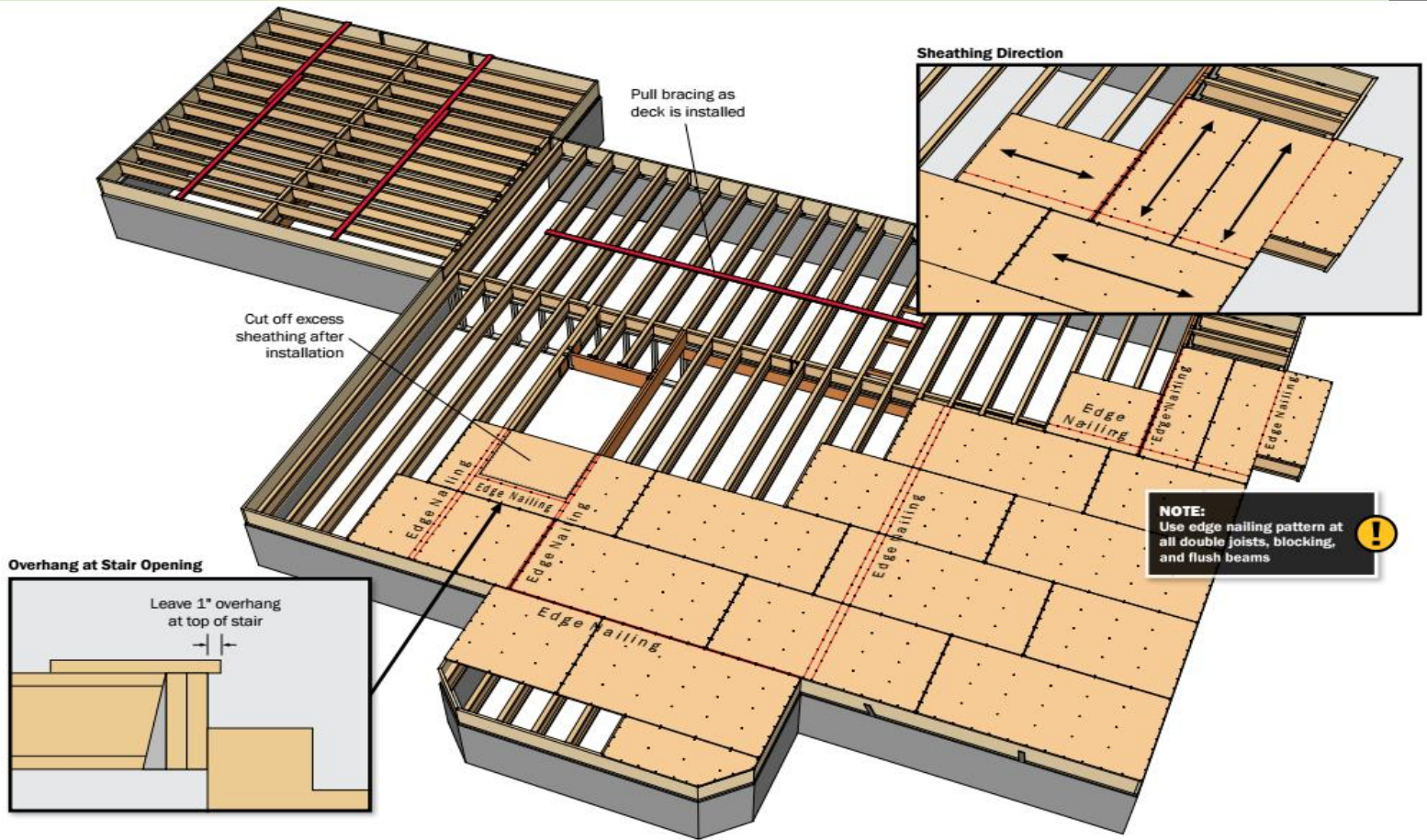
NOTE: Check nailing criteria (see Appendix)



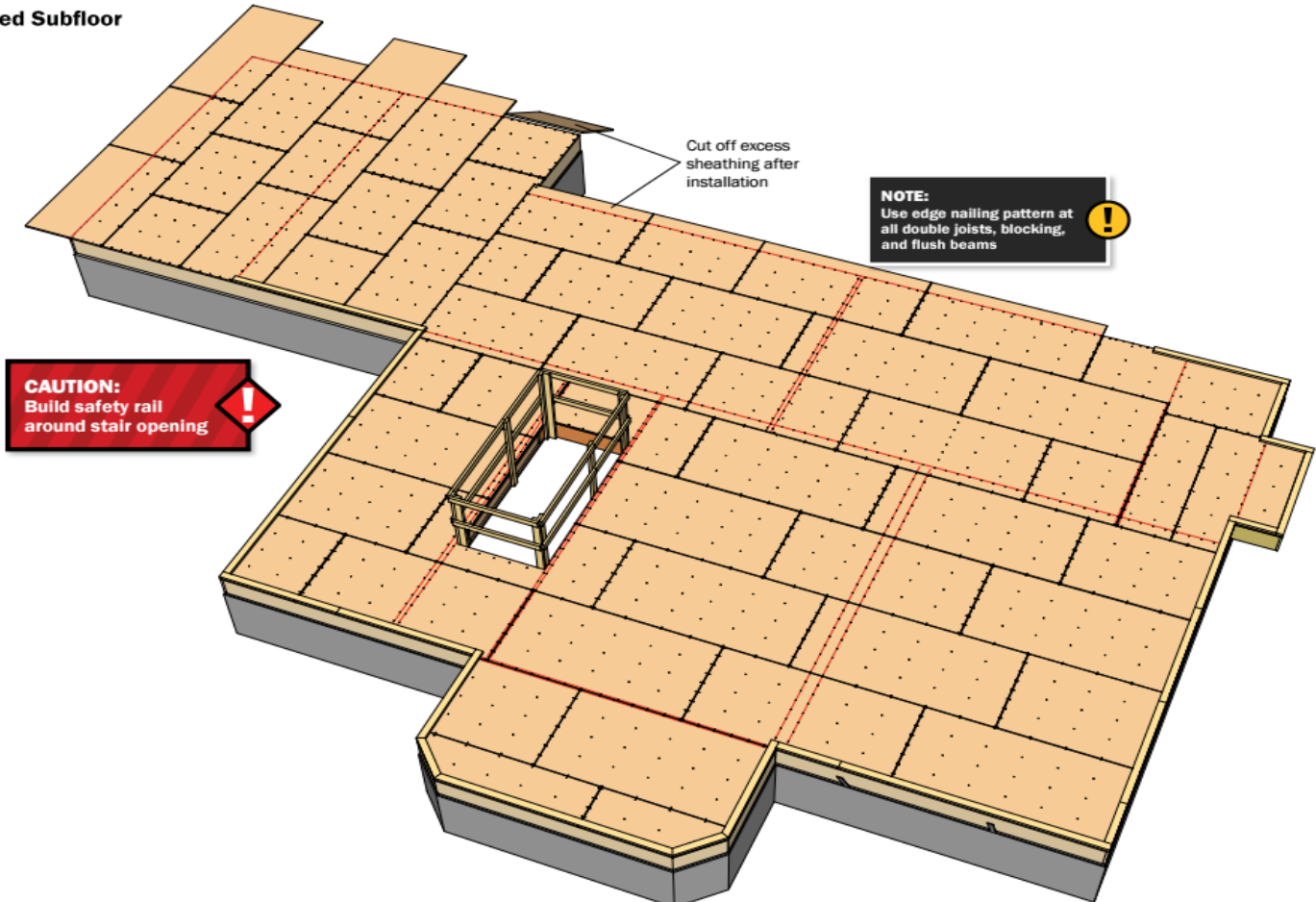
NOTE: Make sure the first sheet is perfectly square at edges



See architect or engineer plans for dimensions and special details

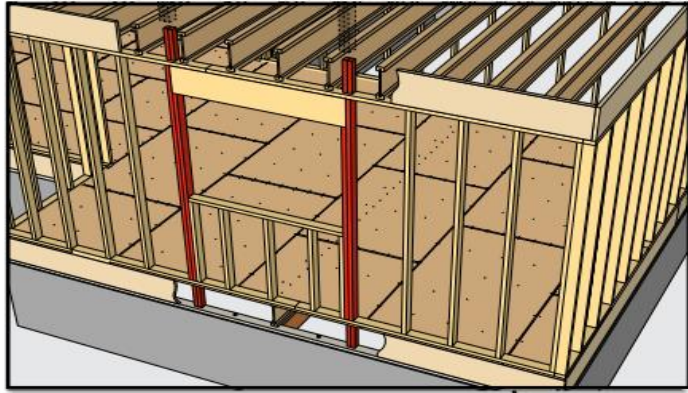


Finished Subfloor

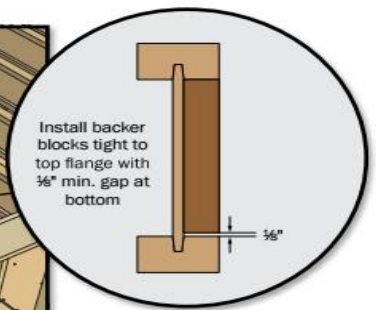
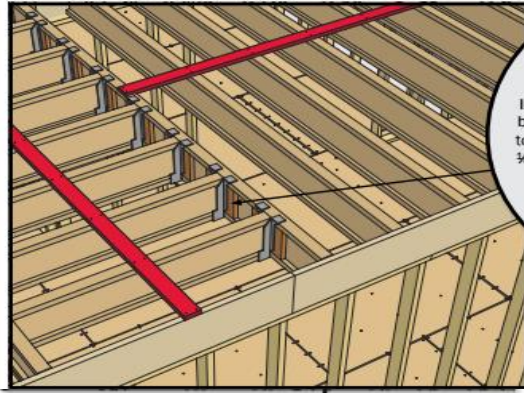


See architect or engineer plans for dimensions and special details

Transfer Continuous Loads to Foundation



Top Flange Hangers



CAUTION:
Stack sheathing
over wall directly
supported by
foundation

Draft-stop blocking
between garage wall
and living space

Overhang plate
on steel beam
1/8" min., 1/4" max.

Tall walls not
shown
(for clarity)

Tall walls not
shown
(for clarity)

Brick Ledge Cantilever with Blocks
(when specified on plans)

Brick Ledge Cantilever
with Face Mount Hangers

Six 10d
(0.125" x 3")
nails

NOTE:
See engineer's plans
or layout plans for
connection type

See architect or engineer plans for dimensions and special details

CAUTION:
Spray paint line,
6' from edge

NOTE:
Have monitor
present



Tall walls not shown
(for clarity)

CAUTION:
Build safety rails around
all edges and openings

Tall walls not shown
(for clarity)

APPENDIX: NAIL CHART

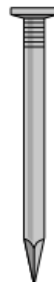
Please refer to the following chart for all nail sizes and applications in this guide

| Application | Nail Direction | Nail Quantity and Specifications |
|---------------------------------------|----------------|---|
| Joist to plate | Face nail | (1) 8d (0.113" x 2½") each side |
| Rim to TJI® 110 joist | Face/end nail | (1) 10d (0.131" x 3") per flange |
| Rim to TJI® 210–560 joists | Face/end nail | (1) 16d (0.135" x 3½") per flange |
| TJI® 560 rim to TJI® 560 joist | Toe nail | (2) 10d (0.128" x 3") per flange |
| Backer blocks | Face nail | (10) 10d (0.128" x 3") |
| Filler blocks for TJI® 110–360 joists | Face nail | (10) 10d (0.128" x 3") |
| Filler blocks for TJI® 560 joist | Face nail | (10) 16d (0.135" x 3½") each side |
| Rim to plate (minimum) | Toe nail | (1) 10d (0.131" x 3") at 6" o.c. |
| Weyerhaeuser Edge Gold™ panels 2⅜" | Face nail | 6d (0.120" x 2") deformed nail |
| Weyerhaeuser Edge Gold™ panels 7/8" | Face nail | 8d (0.131" x 2½") nail or 8d (0.120" x 2½") deformed nail |

N10
(0.148" x 1½")



N8
(0.131" x 1½")



Common Hanger Nail Sizes

See architect or engineer plans for dimensions and special details



Have a damaged joist or beam?

File a damage report online for prompt service from your regional technical office. Scan the QR code with your smartphone or go to **woodbywy.com/support**.

