

Width

2.5

2.5

2.5

2.5

2.5

2.5

Width

Width

3.5

3.5

Width

2.5

Depth

Depth

Depth

9.25

9.25

Depth

Depth

Skew | Slope

14

3.5 11.875

Qty

Qty

Qty

Qty

Qty

Qty

LinFt

Plies

Plies

Plies

Plies

Plies

Plies

Beam/Girder

fasteners

12 10dx1 1/2

Pcs

10

10

Pcs

Pcs

Pcs

Pcs

13

Pcs

Varies

Length

10-0-0

4-0-0

30-0-0

26-0-0

22-0-0

20-0-0

18-0-0

18-0-0

18-0-0

18-0-0

Length

Length

12-0-0

10-0-0

8-0-0

22-0-0

Length

Length

12-0-0

Length !

19-0-0

Revised

Supported Member

fasteners

14-0-0

2nd Floor

I Joist (Flush)

J8

Label Description

FB8 | LPI 20Plus

FB3 LPI 20Plus

J7 LPI 20Plus

J2 LPI 20Plus

J4 LPI 20Plus

J3 LPI 20Plus

J10 LPI 20Plus

J9 LPI 20Plus

J5 LPI 20Plus

J11 LPI 20Plus

J1 LPI 20Plus

Label Description

LVL/LSL (Dropped)

Label Description

DB4-B LP-LSL 1.55E

DB1-A LP-LSL 1.55E

HD2-A LP-LSL 1.55E

HD1-A LP-LSL 1.55E

Beam By Others (Dropped) Label Description

Label | Description

Label Description

B1 LPI 20 Plus

LP APA Rated OSB

.125 X 14

Label Pcs Description

22 | IUS2.56/14 (Min)

DB3 DB2 Rim Board

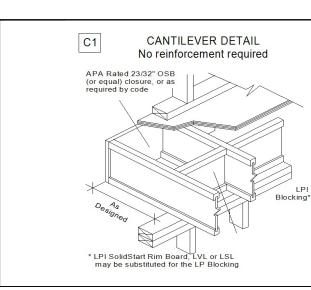
Blocking

FB2-A LP-LSL 1.55E

FB6-A LP-LVL 2900Fb-2.0E

LVL/LSL (Flush)

LPI 20Plus





2160 Satellite Blvd., Suite 450 Duluth, GA 30097 888-613-5078





| Deal | lar |
|------|--------------------------|
| | |
| 84 L | umber-Fayetteville #2307 |
| Deal | ler Address |
| 620 | Belt Road |
| Faye | etteville, NC 28301 |
| (910 |) 867-9185 |
| Proj | ect |
| CL3 | 187 GL CP |
| Crea | ited |
| Janu | ary 22, 2015 |
| Layo | out Name |
| CL3 | 187 GL CP |
| Desc | cription |
| Cavi | ness Land |
| CL3 | 187 GL CP |
| Desi | gner |
| Kyle | · Militzer |
| | |

| March 26, 2020 | |
|-------------------|-----------------------|
| 2nd Floor | |
| Design Method | ASD (USA |
| Building Code | IRC 201 |
| Floor | |
| Loads | |
| Live | 4 |
| Dead | 1 |
| Deflection Joist | |
| LL Span L/ | 48 |
| TL Span L/ | 24 |
| LL Cant 2L/ | 36 |
| TL Cant 2L/ | 36 |
| Deflection Girder | |
| LL Span L/ | 36 |
| TL Span L/ | 24 |
| LL Cant 2L/ | 36 |
| TL Cant 2L/ | 36 |
| Decking | |
| Decking | OS |
| | 23/32 APA Rated Sturd |
| | I-Floo |
| Fastener | Nailed & Glue |
| L <u>egend</u> | |

3.5" Non-Brg Wall Wall Partition Wall (Non-Load-Bearing) Wall Opening LP APA Rated OSB 1.125 X 14 LPI 20Plus 14 LP-LSL 1.55E 3.5 X 9.25

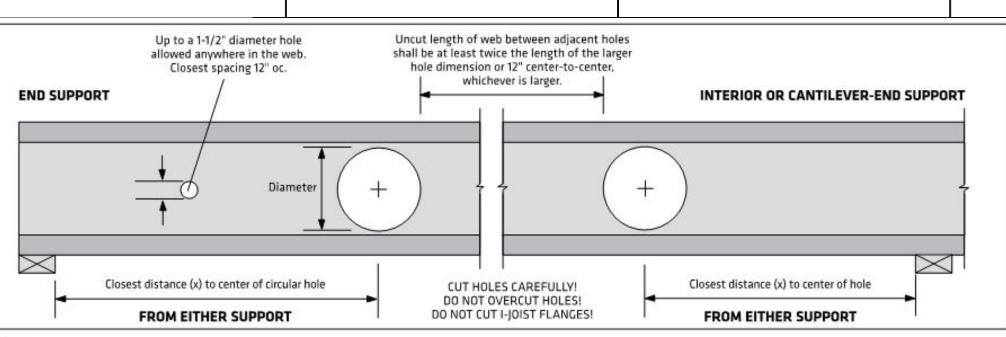
(Dropped) LP-LSL 1.55E 3.5 X 11.875

LP-LSL 1.55E 3.5 X 14 LP-LVL 2900Fb-2.0E 1.75 X 18

1.5 X 9.25 (Dropped)



SCALE: 1/4'' = 1'



TO USE:

- Select the required series and depth.
- 2. Determine the support condition for the nearest bearing: end support or interior support (including cantilever-end supports). 3. Select the row corresponding to the required Clear Span. For spans between those listed, use the next largest value.
- 4 Select the column corresponding to the required hole diameter. For diameters between those listed, use the next largest value.
- 5. The intersection of the Clear Span row and Hole Diameter column gives the minimum distance from the inside face of bearing to the center of a circular hole.
- 6. Double check the distance to the other support, using the appropriate support condition.

| Depth | Clear | | Dista | nce from | end Su | pport | | Distance from Interior or Cantilever-End Su | | | | | |
|-------|--------------|-------|-------|----------|--------|--------|---------|---|--------|--------|---------|--------|--------|
| | Span (ft) | | | Hole Di | ameter | 71100 | | | | Hole D | iameter | | |
| | | 2" | 4" | 6" | 8" | 10" | 12" | 2" | 4" | 6" | 8" | 10" | 12" |
| | 14' | 1'-0" | 1'-0" | 1'-0" | 1'-0" | 2'-2" | - | 1'-0" | 1'-0" | 1'-5" | 2'-7" | 3'-9" | - |
| 14" | 18' | 1'-0" | 1'-0" | 1'-9" | 3'-1" | 4'-6" | - | 1'-8" | 2'-10" | 3'-11" | 5'-1" | 6'-3" | - |
| | 22' | 1'-5" | 2'-9" | 4'-1" | 5'-6" | 7'-0" | - | 4'-2" | 5'-4" | 6'-5" | 7'-7" | 8'-9" | - |
| | 26' | 3'-8" | 5'-0" | 6'-5" | 8'-0" | 9'-8" | - | 6'-8" | 7'-10" | 8'-11" | 10'-1" | 11'-4" | - |
| | 18' | 1'-0" | 1'-0" | 1'-4" | 2'-5" | 3'-7" | 4'-11" | 1'-6" | 2'-6" | 3'-6" | 4'-6" | 5'-6" | 6'-6" |
| 16" | 22' | 1'-4" | 2'-5" | 3'-6" | 4'-9" | 6'-1" | 7'-5" | 4'-0" | 5'-0" | 6'-0" | 7'-0" | 8'-0" | 9'-0" |
| | 26' | 3'-6" | 4'-8" | 5'-11" | 7'-2" | 8'-7" | 10'-1" | 6'-6" | 7'-6" | 8'-6" | 9'-6" | 10'-6" | 11'-9" |
| | 30' | 5'-9" | 7'-0" | 8'-4" | 9'-9" | 11'-3" | 12'-10" | 9'-0" | 10'-0" | 11'-0" | 12'-0" | 13'-2" | 14'-8" |

DESIGN ASSUMPTIONS:

- The hole locations listed above are valid for floor joists supporting only uniform loads. The total uniform load shall not exceed 130 plf (e.g., 40 psf Live Load and 25 psf Dead Load spaced 24" oc).
- Hole location is measured from the inside face of bearing to the center of a circular hole, from the closest support.
- Clear Span has not been verified for these joists and is shown for informational purposes only! Verify that the joist selected will work for the span and loading conditions needed before checking hole location.
- 4. The maximum hole depth for circular holes is the I-joist Depth less 4", except the maximum hole depth is 6" for 9-1/2" LPI joists, and 8" for 11-7/8" LPI joists.
- Holes cannot be located in the span where designated "-", without further analysis by a design professional.

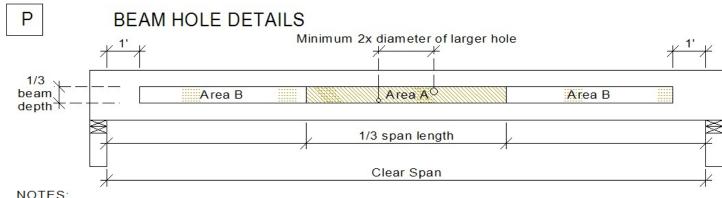
NOTES:

- 1. Holes may be placed anywhere within the depth of the joist. A minimum 1/4" clear distance is required between the hole and the flanges.
- Round holes up to 1-1/2" diameter may be placed anywhere in the web. Perforated "knockouts" may be neglected when
- locating web holes. Holes larger than 1-1/2" are not permitted in
- cantilevers without special engineering. Multiple holes shall have a clear separation along the length of the joist of at least twice the length

of the larger adjacent hole, or a minimum of 12"

- center-to-center, whichever is greater. Multiple holes may be spaced closer provided they fit within the boundary of an acceptable larger hole. Example: two 3" round holes aligned parallel to the joist length may be spaced 2" apart (clear distance) provided that a 3" high by 8" long rectangle or an 8" diameter round hole are acceptable for the joist depth at that location and
- 7. For conditions not covered in this table, use LP's design software or contact your local LP® SolidStart® Engineered Wood Products distributor for more information.

completely encompass the holes.



- 1. These guidelines apply to uniformly loaded beams selected from the Quick Reference Tables or the Uniform Load Tables or designed with LP's design/specification software only. For all other applications, such as beams with concentrated loads, please contact your LP® SolidStart® Engineered Wood Products distributor for assistance.
- 2. Round holes can be drilled anywhere in "Area A" provided that: no more than four holes are cut, with the minimum spacing described in the diagram. The maximum hole size is 1-1/2" for depths up to 9-1/4," and 2" for depths greater than 9-1/4."
- Rectangular holes are NOT allowed.
- 4. DO NOT drill holes in cantilevers without prior approval from the project designer.
- 5. Other hole sizes and configurations MAY be possible with further engineering analysis. For more information, contact your LP SolidStart Engineered Wood Products distributor.
- 6. Up to three 3/4" holes may be drilled in "Area B" to accommodate wiring and/or water lines. These holes shall be at least 12" apart. The holes shall be located in the middle third of the depth, or a minimum of 3" from the bottom and top of the
- beam. For beams shallower than 9-1/4", locate holes at mid-depth. Protect plumbing holes from moisture.

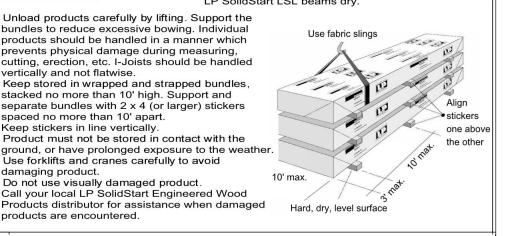
Important Notes WARNING: Failure to follow proper procedures for handling, storage and installation could result in unsatisfactory performance, unsafe structures and possible collapse. These instructions are offered as a guide to good practice in the handling, storage and installation of LP® SolidStart® I-Joists, LP SolidStart LVL & LP SolidStart LSL beams. They are, however, solely general recommendations and, in some instances, other or additional precautions may be desirable. In all cases, the procedures used should be as specified by the architect/engineer responsible for the entire building.

- This is not intended as a manual for selecting products and assumes that components and details have been specified correctly. • Consult the LP SolidStart I-Joist, LP SolidStart LVL & LP SolidStart LSL brochures or contact your LP SolidStart products distributor for assistance. • All rim joists, blocking, connections and temporary bracing must be installed before
- No loads other than the weight of the erectors are to be imposed on the structure before it is permanently sheathed. · After sheathing, do not overload joists with construction materials exceeding design loads. • LP SolidStart I-Joists, LP SolidStart LVL & LP SolidStart LSL beams must be used under dry, covered and well ventilated interior conditions in which the equivalent moisture
- Keep LP SolidStart I-Joists, LP SolidStart LVL & LP SolidStart LSL beams dry. Unload products carefully by lifting. Support the bundles to reduce excessive bowing. Individual products should be handled in a manner which prevents physical damage during measuring, cutting, erection, etc. I-Joists should be handled vertically and not flatwise. Keep stored in wrapped and strapped bundles stacked no more than 10' high. Support and separate bundles with 2 x 4 (or larger) stickers spaced no more than 10' apart. Keep stickers in line vertically. Product must not be stored in contact with the ground, or have prolonged exposure to the weather. Use forklifts and cranes carefully to avoid damaging product.

Do not use visually damaged product.

products are encountered.

Handling & Storage



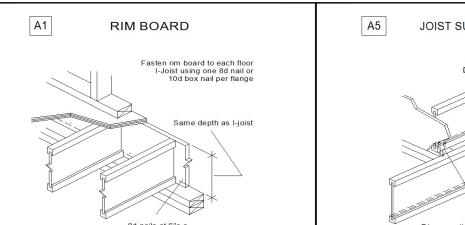
| to plate | | Oquasii biock | under all p | post loads | | | less the degrees |
|---|---|---------------|-------------|-------------|---------|-----|---------------------|
| LOAD BEA 3/4" T&G PLWOOI DECKING GLUED I JOIST 2X | ARING WALL D & NAILED NAIL I JOIST TO BLOCKIN WITH 8d NA @ 3" O.C. | NG —— | | | | | |
| | | | D | 0B5 (2 ply | ·) | | |
| O STA | RT LAYOUT > | HD2- | roof to | russes 1 | by othe | ers | DB4-B (1 ply) |
| les 5'8" | | | |) (|) (|) (|) |

| START L. 24" (| AYOUT > | roof tr | usses by othe | ers | DB4-B (1 ply) | | | | | usses b | | rs | | R1 | |
|--|-----------------|-------------|---------------|-----|---------------|----------|-----------|---------|---------------------------------|--------------|---------|----------|-------------|------------|----|
| 2.8." | | | | | | | | |) (|) (H1- |) (| 4 @ 22'— | | -2 X J10- | |
| | ia. field cut h | (10) J7 @ 3 | 0' | | | | J | oly) | Ocking DB1-A (1 -2 X J1- | here ply) | | ŽI. | R1 | FB3 (1 ply | ,, |
| confirm location of tub drain, shift joist up to 3" to avoid conflict. | 8:3" | B 1 | | | | H | DB2 (2 p | ly) | | J3 | | | | J1 + | |
| this boom is | flugh with to | (10) J11 @ | | | 11/1 | R1 Z- | | | | | 0.18' | | | | |
| this beam is and will dro | op 4" below o | | FB6-A (3 ply) |) | | RI | 2'10" |)" max | | | | | 6'10" R1 | ' | * |
| | | by othe | ers | | | | | DB2 (2 | | of truss | es by o | DB3 (2 | 2 ply) | | |

HD1-A (1 ply)

erectors are allowed on the structure.

content in lumber will not exceed 16%.



Up to a 1-1/2" diameter hole

allowed anywhere in the web.

Closest spacing 12" oc.

Closest distance (x) to center of circular hole

FROM EITHER SUPPORT

Double check the distance to the other support, using the appropriate support condition.

2. Determine the support condition for the nearest bearing: end support or interior support (including cantilever-end supports).

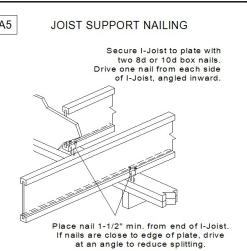
4 Select the column corresponding to the required hole diameter. For diameters between those listed, use the next largest value.

Distance from End Support

Hole Diameter

1'-0" | 1'-0" | 1'-0" |

Select the row corresponding to the required Clear Span. For spans between those listed, use the next largest value.



Uncut length of web between adjacent holes

shall be at least twice the length of the larger

hole dimension or 12" center-to-center,

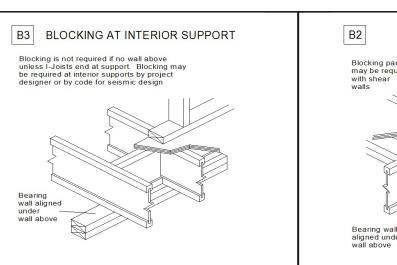
whichever is larger.

CUT HOLES CAREFULLY!

DO NOT OVERCUT HOLES!

DO NOT CUT I-JOIST FLANGES!

12"



INTERIOR OR CANTILEVER-END SUPPORT

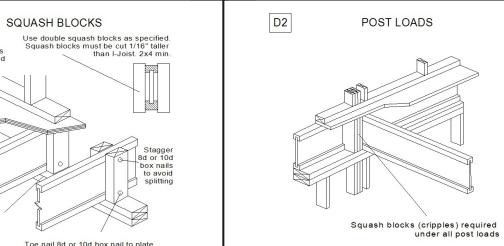
Closest distance (x) to center of hole

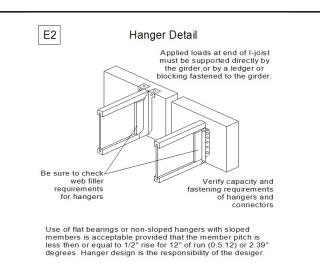
FROM EITHER SUPPORT

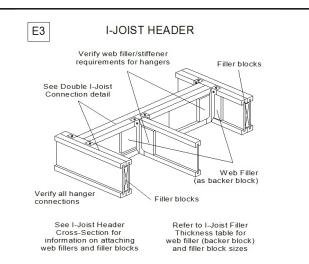
Distance from Interior or Cantilever-End Support

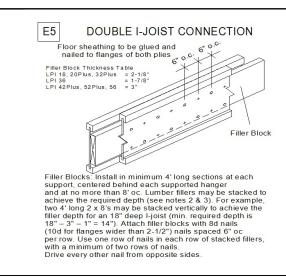
Hole Diameter

1'-0" | 1'-0" | 1'-5" | 2'-7" | 3'-9"









2nd Floor

I Joist (Flush)

J11

LVL/LSL (Flush)

Label Description

FB8 | LPI 20Plus

FB3 LPI 20Plus

J7 LPI 20Plus

J2 LPI 20Plus

J4 LPI 20Plus

J3 LPI 20Plus

J9 LPI 20Plus

J1 LPI 20Plus

Label Description

FB2-A LP-LSL 1.55E

Label |Description

DB4-B LP-LSL 1.55E

DB1-A LP-LSL 1.55E

HD2-A LP-LSL 1.55E

HD1-A LP-LSL 1.55E

Beam By Others (Dropped)

Label Description

Label Description

Label Description

B1 LPI 20 Plus

LP APA Rated OSB

Pcs Description

22 | IUS2.56/14 (Min)

.125 X 14

DB2

Rim Board

Blocking

LVL/LSL (Dropped)

LPI 20Plus

LPI 20Plus

FB6-A LP-LVL 2900Fb-2.0F

Width

2.5

2.5

2.5

2.5

2.5

2.5

3.5

3.5

3.5

Width

2.5

3.5 11.875

9.25

Depth

Depth

Skew | Slope

14

Depth

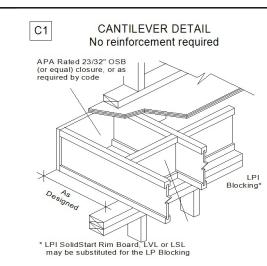
Qty

Qty

Qty

Qty

LinFt



Plies

Plies

Plies

Plies

Plies

Plies

Beam/Girder

fasteners

12 10dx1 1/2

Pcs

10

9

10

Pcs

Pcs

Length

10-0-0

4-0-0

30-0-0

26-0-0

22-0-0

20-0-0

18-0-0

4-0-0

Length

14-0-

22-0-

Length

12-0-0

10-0-0

18-0-0



2160 Satellite Blvd., Suite 450 Duluth, GA 30097 888-613-5078





| Dealer | |
|------------------------------|--|
| 84 Lumber-Fayetteville #2307 | |
| Dealer Address | |
| 620 Belt Road | |
| Fayetteville, NC 28301 | |
| (910) 867-9185 | |
| Project | |
| CL3187 GR CP | |
| Created | |
| January 22, 2015 | |
| Layout Name | |
| CL3187 GR CP | |
| Description | |
| Caviness Land | |
| CL3187 GR CP | |
| Designer | |
| Kyle Militzer | |

| 2nd Floor | |
|-------------------|---------------------|
| Design Method | ASD (US |
| Building Code | IRC 20 |
| Floor | |
| Loads | |
| Live | |
| Dead | |
| Deflection Joist | |
| LL Span L/ | 4 |
| TL Span L/ | 2 |
| LL Cant 2L/ | 3 |
| TL Cant 2L/ | 3 |
| Deflection Girder | |
| LL Span L/ | 3 |
| TL Span L/ | |
| LL Cant 2L/ | 3 |
| TL Cant 2L/ | |
| Decking | |
| Decking | O |
| | 23/32 APA Rated Stu |
| | I-F1 |
| Fastener | Nailed & Glu |

3.5" Non-Brg Wall Wall Partition Wall (Non-Load-Bearing) Wall Opening LPI 20Plus 14

(Dropped)





| 1 | 8-0-0 | Dealer | | | | |
|---------|-----------|------------------------------|--|--|--|--|
| 1 | 22-0-0 | 84 Lumber-Fayetteville #2307 | | | | |
| | 22 0 0 | Dealer Address | | | | |
| Pcs | Length | 620 Belt Road | | | | |
| 2 | 14-0-0 | Fayetteville, NC 28301 | | | | |
| 2 | 10-0-0 | (910) 867-9185 | | | | |
| 4 | 8-0-0 | Project | | | | |
| Pcs | Length | CL3187 GR CP | | | | |
| 13 | 12-0-0 | Created | | | | |
| 13 | 12 0 0 | January 22, 2015 | | | | |
| | | Layout Name | | | | |
| Pcs | Length | CL3187 GR CP | | | | |
| Varies | 19-0-0 | Description | | | | |
| Support | ed Member | Caviness Land | | | | |
| fas | teners | CL3187 GR CP | | | | |
| | | Designer | | | | |
| | | Kyle Militzer | | | | |
| | | Revised | | | | |
| | | March 26, 2020 | | | | |
| | | | | | | |

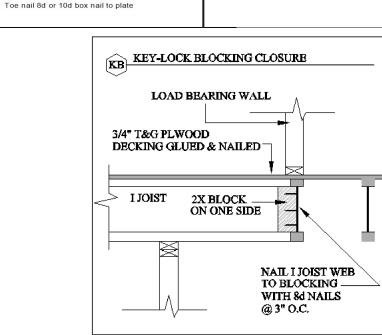
LP APA Rated OSB 1.125 X 14 LP-LSL 1.55E 3.5 X 9.25

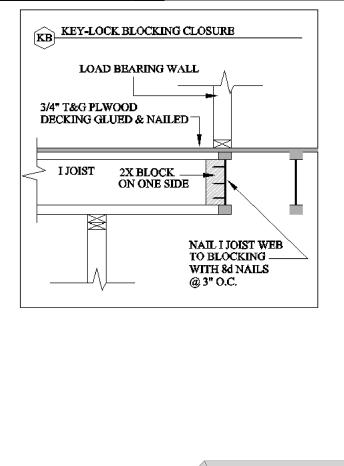
LP-LSL 1.55E 3.5 X 11.875 LP-LSL 1.55E 3.5 X 14

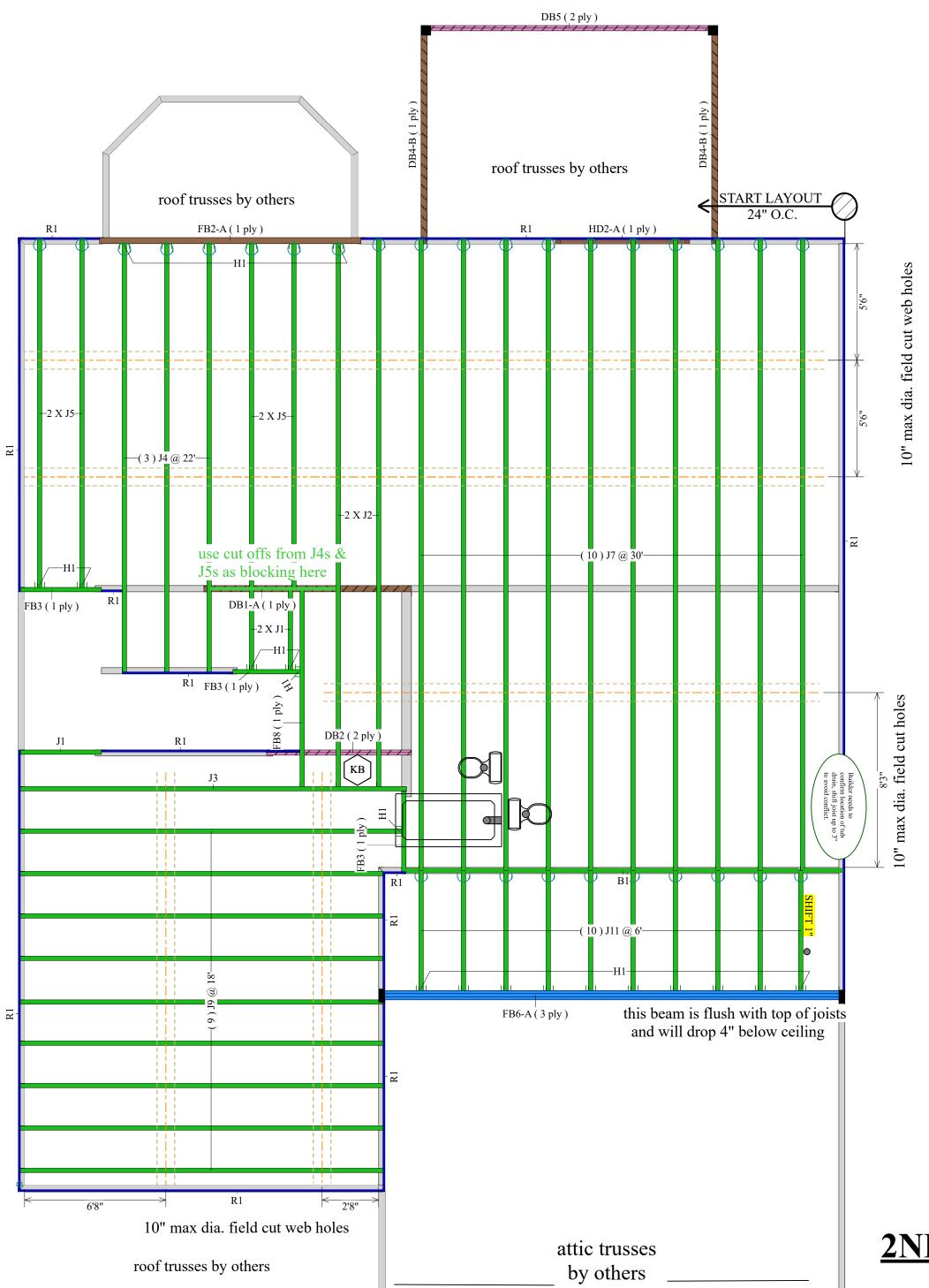
LP-LVL 2900Fb-2.0E 1.75 X 18 1.5 X 9.25 (Dropped)

2ND FLOOR FRAMING

SCALE: 1/4'' = 1'







HD1-A (1 ply)

DB2 (2 ply)

DB3 (2 ply)

14'

Clear

Span

Select the required series and depth.

END SUPPORT

TO USE:

Depth

22' 5'-6" 4'-2" | 5'-4" | 6'-5" 5'-0" 6'-5" 8'-0" 9'-8" 6'-8" | 7'-10" | 8'-11" | 10'-1" | 11'-4" 18' 3'-7" 4'-11" 1'-6" 2'-5" 3'-6" 4'-9" 6'-1" 7'-5" 4'-0" 22' 5'-11" 7'-2" 8'-7" 10'-1" 26' 6'-6" 5'-9" | 7'-0" | 8'-4" | 9'-9" | 11'-3" | 12'-10" | 9'-0" | 10'-0" | 11'-0" | 12'-0" | 13'-2" | 14'-8'

10"

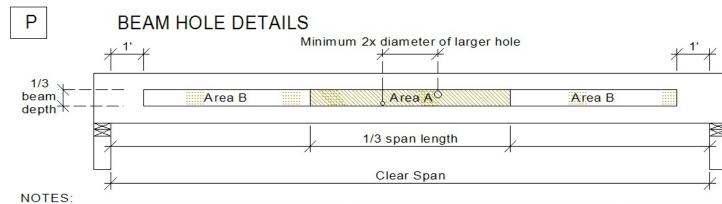
5. The intersection of the Clear Span row and Hole Diameter column gives the minimum distance from the inside face of bearing to the center of a circular hole.

DESIGN ASSUMPTIONS:

- The hole locations listed above are valid for floor joists supporting only uniform loads. The total uniform load shall not exceed 130 plf (e.g., 40 psf Live Load and 25 psf Dead Load spaced 24" oc).
- Hole location is measured from the inside face of bearing to the center of a circular hole, from the closest support.
- Clear Span has not been verified for these joists and is shown for informational purposes only! Verify that the joist selected will work for the span and loading conditions needed before checking hole location.
- 4. The maximum hole depth for circular holes is the I-joist Depth less 4", except the maximum hole depth is 6" for 9-1/2" LPI joists, and 8" for 11-7/8" LPI joists.
- Holes cannot be located in the span where designated "-", without further analysis by a design professional.

4"

- Holes may be placed anywhere within the depth of the joist. A minimum 1/4" clear distance is required between the hole and the flanges.
- Round holes up to 1-1/2" diameter may be placed anywhere in the web.
- Perforated "knockouts" may be neglected when locating web holes.
- 4. Holes larger than 1-1/2" are not permitted in cantilevers without special engineering. Multiple holes shall have a clear separation along the length of the joist of at least twice the length of the larger adjacent hole, or a minimum of 12"
- center-to-center, whichever is greater. Multiple holes may be spaced closer provided they fit within the boundary of an acceptable larger hole. Example: two 3" round holes aligned parallel to the joist length may be spaced 2" apart (clear distance) provided that a 3" high by 8" long rectangle or an 8" diameter round hole are acceptable for the joist depth at that location and completely encompass the holes.
- For conditions not covered in this table, use LP's design software or contact your local LP® SolidStart® Engineered Wood Products distributor for more information.



- 1. These guidelines apply to uniformly loaded beams selected from the Quick Reference Tables or the Uniform Load Tables or designed with LP's design/specification software only. For all other applications, such as beams with concentrated loads, please contact your LP® SolidStart® Engineered Wood Products distributor for assistance.
- 2. Round holes can be drilled anywhere in "Area A" provided that: no more than four holes are cut, with the minimum spacing described in the diagram. The maximum hole size is 1-1/2" for depths up to 9-1/4," and 2" for depths greater than 9-1/4."
- 4. DO NOT drill holes in cantilevers without prior approval from the project designer. 5. Other hole sizes and configurations MAY be possible with further engineering analysis. For more information, contact your
- LP SolidStart Engineered Wood Products distributor. 6. Up to three 3/4" holes may be drilled in "Area B" to accommodate wiring and/or water lines. These holes shall be at least
- 12" apart. The holes shall be located in the middle third of the depth, or a minimum of 3" from the bottom and top of the beam. For beams shallower than 9-1/4", locate holes at mid-depth.
- Protect plumbing holes from moisture.

Rectangular holes are NOT allowed.

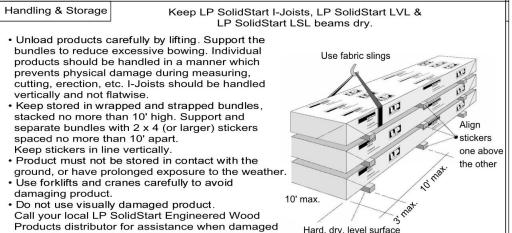
mportant Notes | WARNING: Failure to follow proper procedures for handling, storage and nstallation could result in unsatisfactory performance, unsafe structures and possible collapse.

They are, however, solely general recommendations and, in some instances, other or additional precautions may be desirable. In all cases, the procedures used should be as specified by the architect/engineer responsible for the entire building. • This is not intended as a manual for selecting products and assumes that components

These instructions are offered as a guide to good practice in the handling, storage and

installation of LP® SolidStart® I-Joists, LP SolidStart LVL & LP SolidStart LSL beams,

- Consult the LP SolidStart I-Joist, LP SolidStart LVL & LP SolidStart LSL brochures or contact your LP SolidStart products distributor for assistance • All rim joists, blocking, connections and temporary bracing must be installed before erectors are allowed on the structure. · No loads other than the weight of the erectors are to be imposed on the structure
- before it is permanently sheathed. · After sheathing, do not overload joists with construction materials exceeding design loads • LP SolidStart I-Joists, LP SolidStart LVL & LP SolidStart LSL beams must be used under dry, covered and well ventilated interior conditions in which the equivalent moisture content in lumber will not exceed 16%.



Hard, dry, level surface

and details have been specified correctly.

products are encountered.