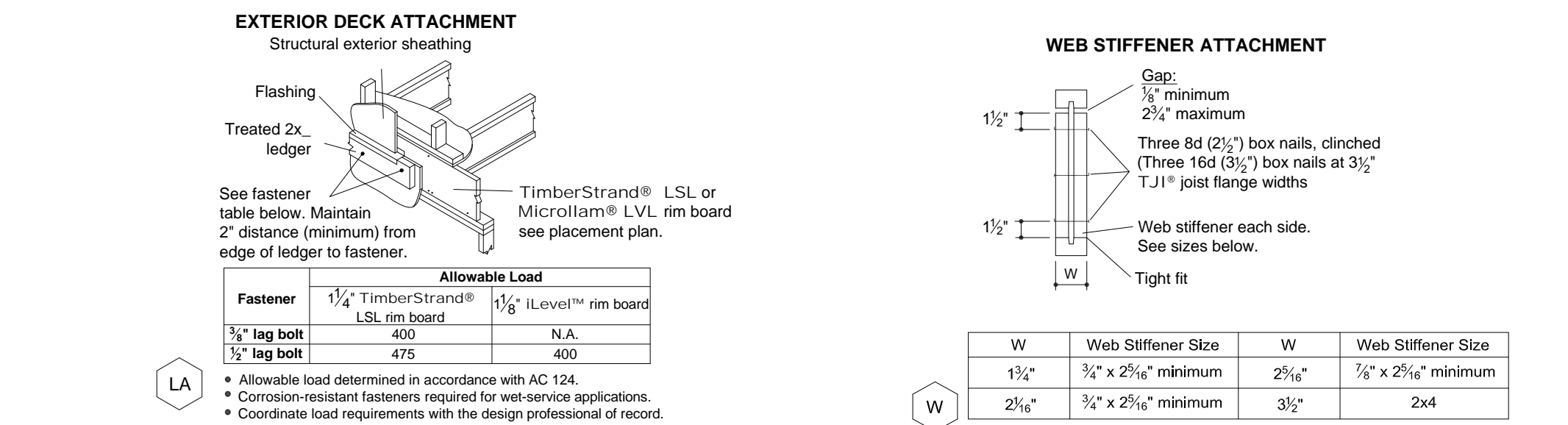
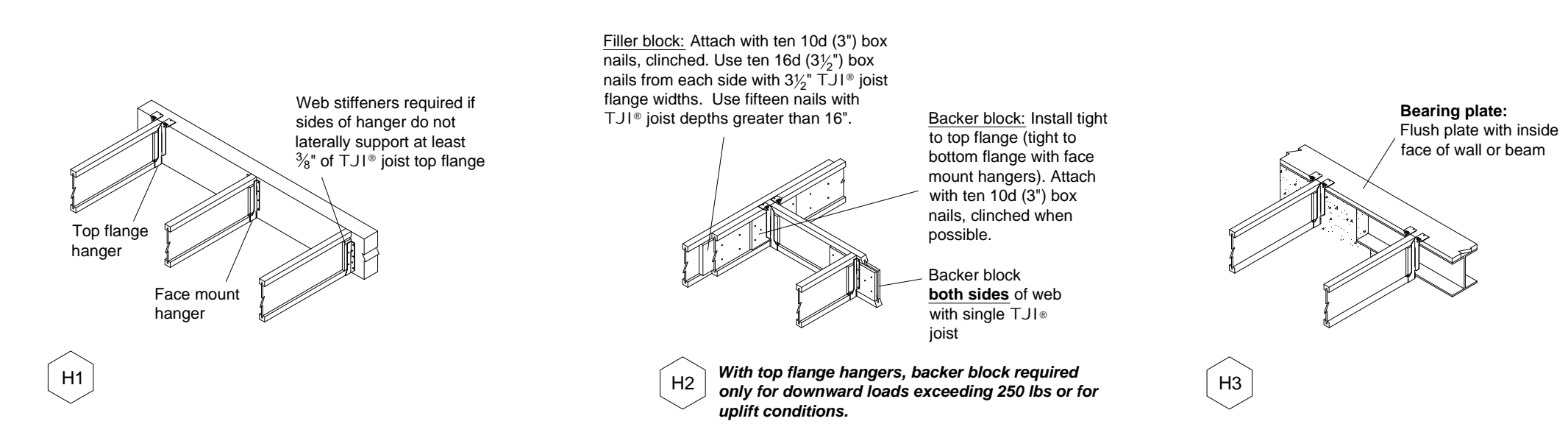
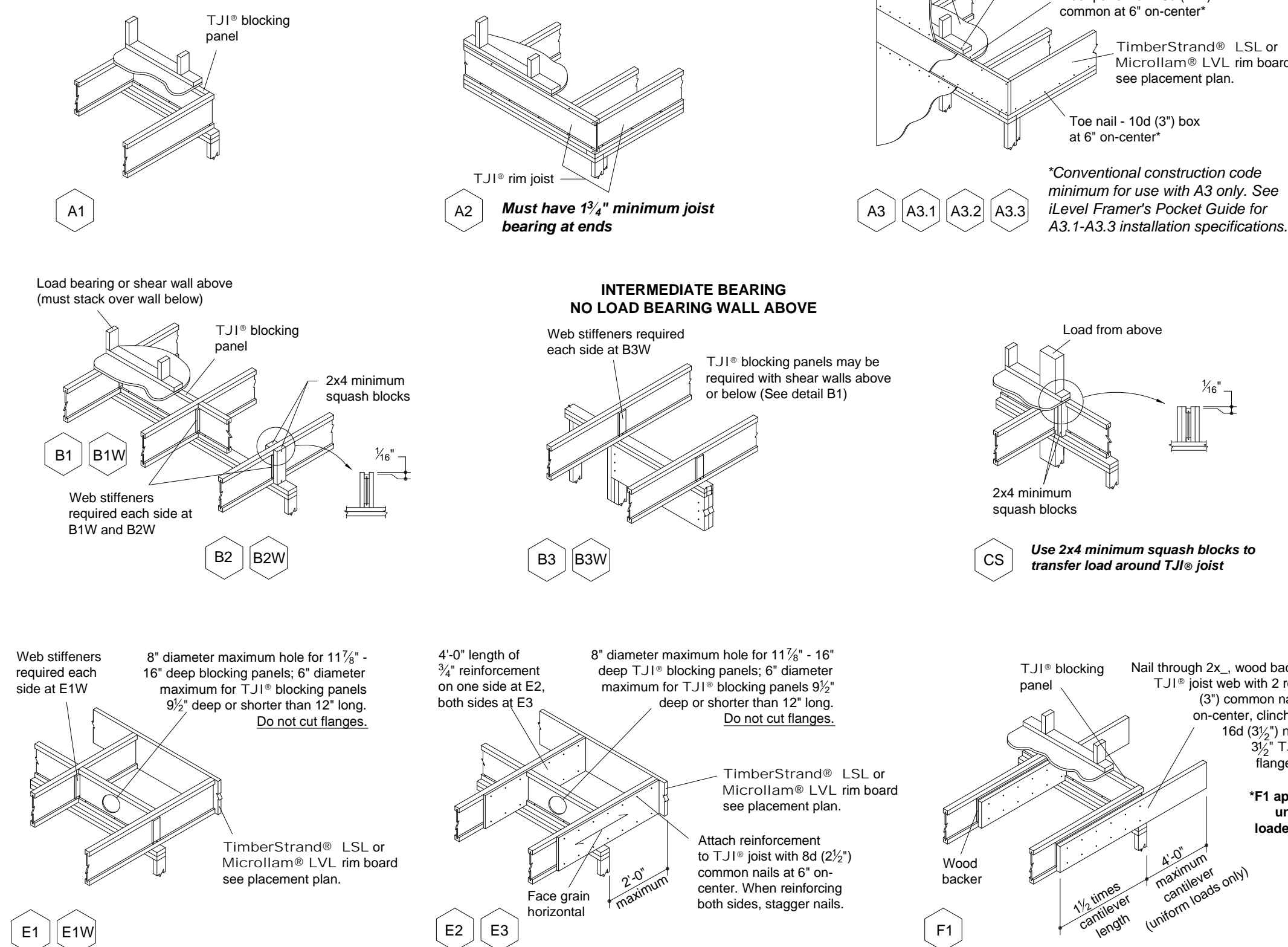
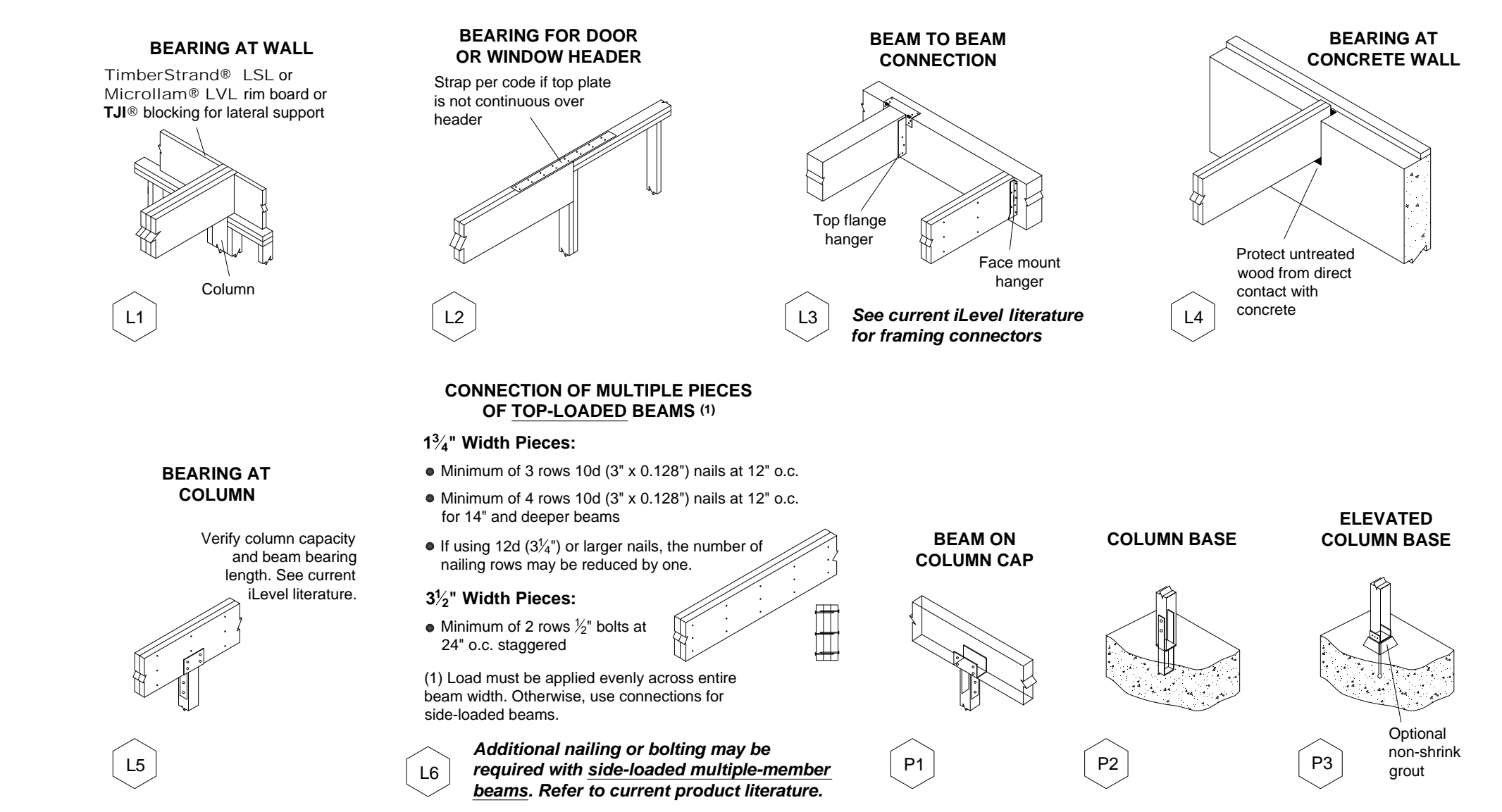


GENERAL JOIST ASSEMBLY DETAILS

NOTE: STRUCTURAL DOCUMENTS FOR THIS PROJECT PER THE DESIGN PROFESSIONAL OF RECORD SHALL SUPERCEDE ALL ASSEMBLIES SHOWN IN THIS SECTION, ALSO REFER TO ILEVEL PLACEMENT PLANS (AND MATERIAL SCHEDULES) FOR REQUIRED MATERIAL.

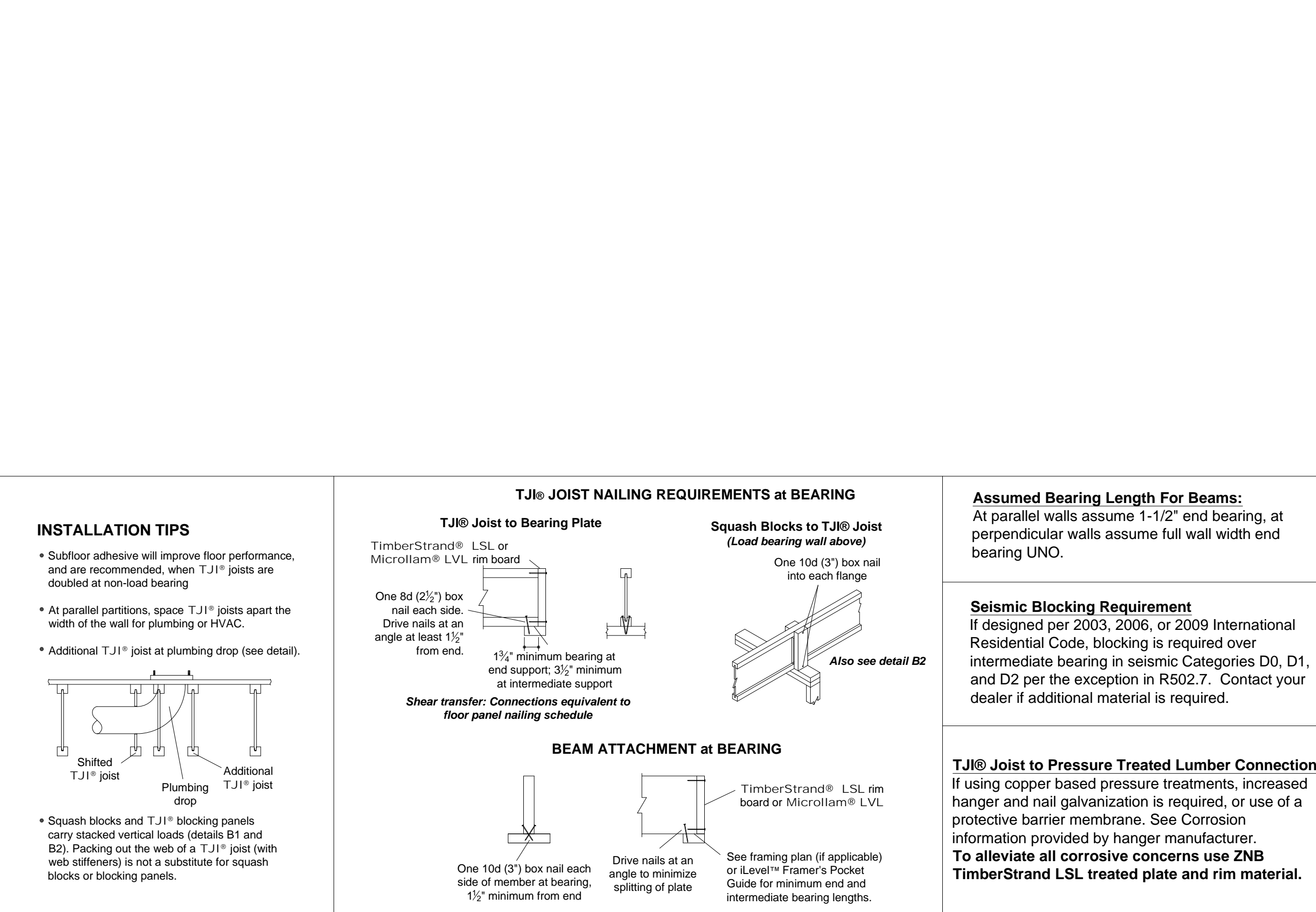


BEAM and COLUMN DETAILS



THINK SAFETY-READ INSTALLATION INFORMATION BEFORE PROCEEDING

JOB SITE SPECIFIC NOTES



FASTENING OF FLOOR PANELS (Refer to Structural for Shear Wall & Attachment Requirements)

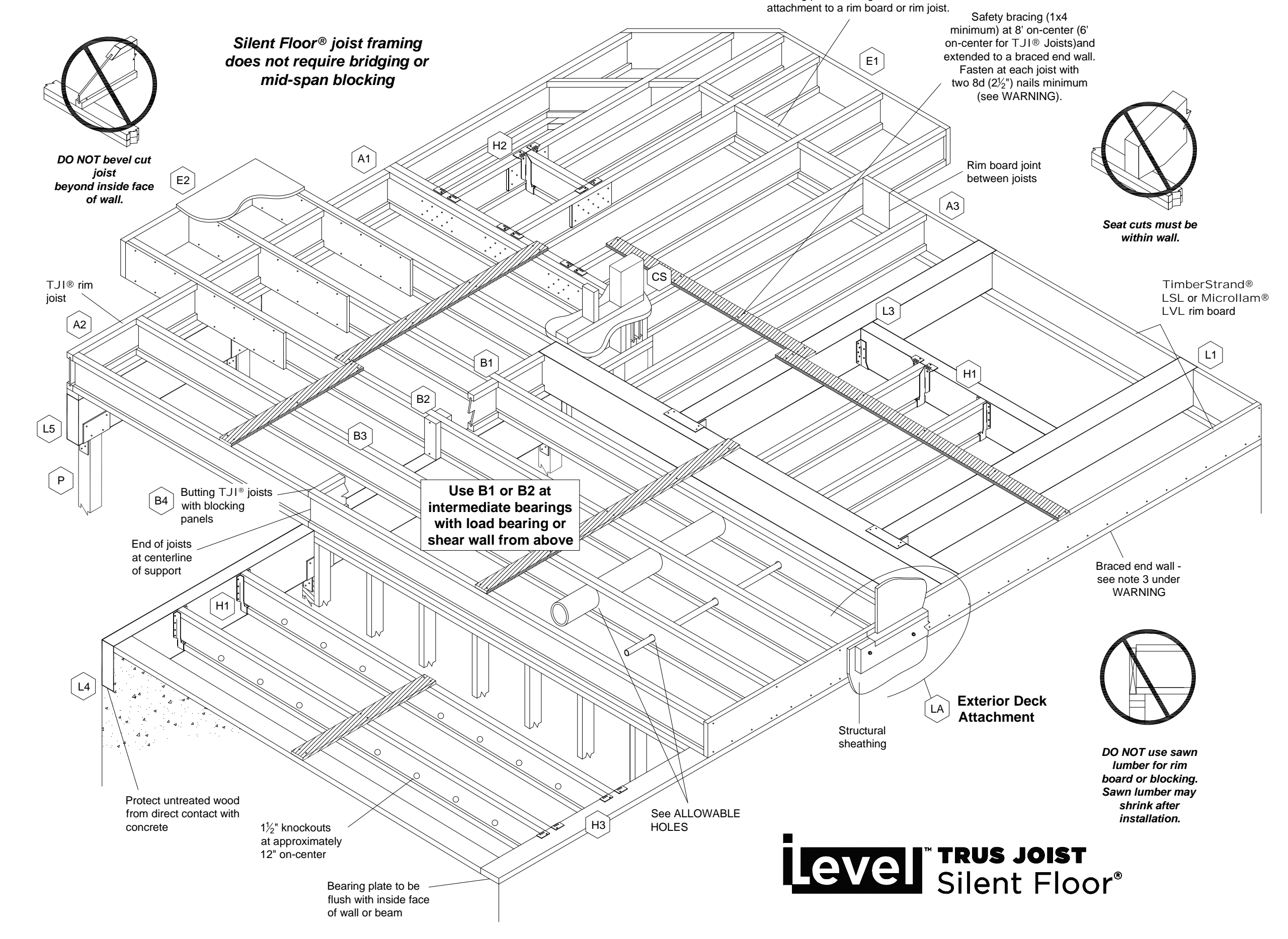
| Nail Size | Closest On-Center Spacing per Row | | Nailing into Narrow Edge (Parallel to Strands) | | | | | |
|-------------------------------|-----------------------------------|----------------------------------|--|-------------------|---------------|---------------|---------------|----|
| | TJ1 (into wide face of flange) | TJ1 (into narrow edge of flange) | Rim Board | TimberStrand® LSL | MicroIam® LVL | Parallam® PSL | Parallam® PSL | |
| 8d (2 1/2") box | 4" | 3" | 6" | 6" | 6" | 4" | 3" | 3" |
| 8d (2 1/2") common | 4" | 3" | 6" | 6" | 6" | 4" | 3" | 3" |
| 10d (3") box | 4" | 3" | 6" | 6" | 6" | 4" | 3" | 3" |
| 12d (3 1/2") box | 4" | 3" | 6" | 6" | 6" | 4" | 3" | 4" |
| 10d (3"), 12d (3 1/2") common | 4" | 4" | 6" | 6" | 6" | 4" | 3" | 4" |
| 16d (3 1/2") common | 6" | 6" | Not Recommended | 16" | 6" (1) | 3 1/2" | 8" | 6" |

(1) Can be reduced to 4" on-center with maximum nail penetration of 1 1/2" into the narrow edge.
 * Recommended nailing is 12" on-center in field and 6" on-center along panel edge. Nailing requirements on engineered drawings supersede recommendations listed above.
 † Nailing rows must be offset at least 1" and staggered.
 ‡ 14 ga. staples may be substituted for 8d (2 1/2") nails if minimum penetration of 1" into the TJ1 joist or rim board is achieved.

FILLER and BACKER BLOCK SIZES

| Depth | 110 | | 210 | | 230 or 360 | | 560 | |
|--------------------------------|-------------------|----------------|----------------------|-----------------------|----------------------|-----------------------|------------------------------|-------------------|
| | 9 1/2" or 11 1/2" | 14" | 9 1/2" or 14" | 14" or 16" | 9 1/2" or 14" or 16" | 14" or 16" or 20" | 11 1/2" or 14" or 16" or 20" | 14" or 16" or 20" |
| Filler Block (Detail H2) | 2x6 | 2x8 | 2x6 + 3/4" sheathing | 2x6 + 3/4" sheathing | 2x6 + 3/4" sheathing | 2x6 + 3/4" sheathing | Two 2x6 | Two 2x12 |
| Cantilever Filler (Detail E4) | 2x6 | 2x10 | 2x6 + 3/4" sheathing | 2x10 + 3/4" sheathing | 2x6 + 3/4" sheathing | 2x10 + 3/4" sheathing | Not applicable | Not applicable |
| Backer Block (Detail F1 or H2) | 3/4" or 1 1/2" | 3/4" or 1 1/2" | 3/4" or 1 1/2" | 3/4" or 1 1/2" | 1" Net | 2x6 | 2x8 | 2x12 |

* If necessary, increase filler and backer block height for face mount hangers. Maintain 1/2" gap at top of joint; see detail W. Filler and backer block lengths should accommodate required nailing without splitting (1/2" minimum for backer blocks and 2x4 minimum for filler blocks).



ALLOWABLE HOLES - TJ1® Joists

NOTE: CONTACT ILEVEL FOR VERIFICATION OF ALLOWABLE HOLES INTO ILEVEL PRODUCTS.

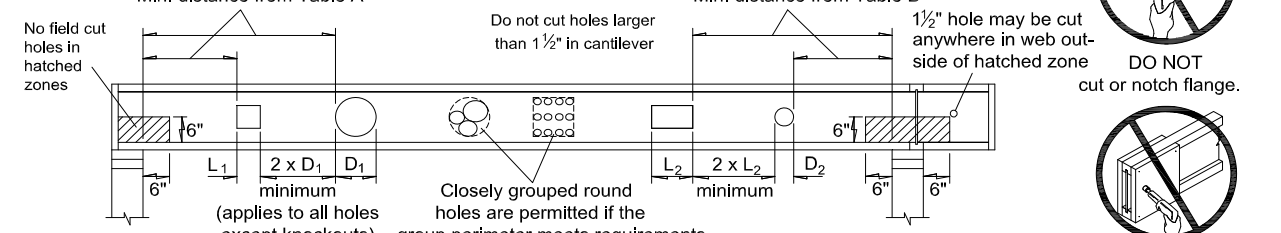


Table A - End Support

Minimum distance from edge of hole to inside face of nearest end support

| DEPTH | TJ1® | ROUND HOLE SIZE | | | | | | | | | | SQUARE OR RECTANGULAR HOLE SIZE | | | | | | | | | | | | | |
|---------|------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| | | 2" | 3" | 4" | 5" | 6" | 7" | 8" | 9" | 10" | 11" | 12" | 2" | 3" | 4" | 5" | 6" | 7" | 8" | 9" | 10" | 11" | 12" | | |
| 9 1/2" | 110 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 210 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 230 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 360 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| 11 1/2" | 110 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 210 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 230 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 360 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| 14" | 110 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 210 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 230 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 360 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| 16" | 110 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 210 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 230 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 360 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| 18" | 110 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 210 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 230 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 360 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |

Table B - Intermediate or Cantilever Support

Minimum distance from edge of hole to inside face of nearest intermediate or cantilever support

| DEPTH | TJ1® | ROUND HOLE SIZE | | | | | | | | | | SQUARE OR RECTANGULAR HOLE SIZE | | | | | | | | | | | | | |
|---------|------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| | | 2" | 3" | 4" | 5" | 6" | 7" | 8" | 9" | 10" | 11" | 12" | 2" | 3" | 4" | 5" | 6" | 7" | 8" | 9" | 10" | 11" | 12" | | |
| 9 1/2" | 110 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 210 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 230 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 360 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| 11 1/2" | 110 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 210 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 230 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 360 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| 14" | 110 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 210 | 1 1/2" | 1 1/2" | 2 1/2" | 2 1/2" | 3 1/2" | 3 1/2" | 4 1/2" | 4 1/2" | 5 1/2" | 5 1/2" | 6 1/2" | 6 1/2" | 7 1/2" | 7 1/2" | 8 1/2" | 8 1/2" | 9 1/2" | 9 1/2" | 10 1/2" | 10 1/2" | 11 1/2" | 11 1/2" | 12 1/2" | 12 1/2" |
| | 230 | 1 1/2" | 1 1/2" | | | | | | | | | | | | | | | | | | | | | | |

