

Check list for specifying Engineered Wood Products

Verify the following information is clearly shown on the contract documents.

1. Loads

- a. Show all applicable occupancy (live) loads relevant to project Office, Corridor, Storage, etc.. (Show Loads per ICC in general Notes page).
- b. Show dead load of structure – specific to floor and roof.
- c. Snow Drift – Mark as not required, Included in flat roof snow load, or Provide drift diagram.
- d. Other Loads – Axial/Seismic, Parapet brace, Mechanical screen, Towers, Hanging walls, Sprinkler lines greater than 3” shown on plans, details, or in structural notes
- e. Uplift – Note net PSF uplift or an uplift diagram showing the discontinuity.
- f. Mechanical - Coordinate weight & location specifically or Provide a mechanical zone allowance and location (this will provide more flexibility for future mechanical units).
- g. Office Loading – Design for live load of 100 PSF to accommodate future corridors anywhere on the joists (increases cost).
- h. Sprinkler loading – Add 2 PSF to the dead load for an allowance.
- i. Require that all of the loading above is clearly shown on the shop drawing

2. Coordination

- a. Show all shafts, Roof access, Openings, in structure. Note on plan “Joist MFR to design support for openings”.
- b. 2 hour walls & shafts – There are 3 accepted solutions:
 1. Frame single wood wall and provide solid blocking which is the full width of the stud then use face mount hangers to support framing off of the blocking.

2. Use a double wall. The inner wall is the free-standing rated shaft wall. The outer wall is a structural wall for the floor and roof structure.
3. Use a concrete or CMU rated shaft wall and hang floor and roof structure off ledgers

3. Hardware

- a. Beams – Specify beam hanger or show the load required.
- b. Joists – Note hanger per Manufacture.
- c. Make sure the wood plate on the steel beam is thick enough for hanger nailing.

4. Nailing

- a. Nail spacing closer than 3" OC needs to be staggered.
- b. Be sure to specify the correct strap nailing per strap design guide.
- c. If nailing is required closer than 3" OC R-Chord can be used (See SSI Design Manual).

5. Specifying Performance Based Design Criteria

- a. FLOORS
 1. Keep span (inches) / Depth (inches) ratio to 12-15.
 2. Limit LL def. $L/600$ ($<1/2"$) most loading conditions.
 3. Limit LL def $L/480$ for Corridor, Storage, or other highly loaded areas.
 4. Limit TL def $L/240$.
- b. ROOF
 1. LL def $L/360$.
 2. TL def $L/240$.
 3. No camber – For long spans limit total deflection with stiffer joist.

6. Detailing

- a. Web Stiffeners - Note on detail that Web Stiffener as required by Manufacture. Show detail where fillers are req'd such as Hold downs, Straps, Outriggers, etc..
- b. Specify axial transfer that is required at bearing.

- c. Show any braces and their attachments/loading.
- d. Uplift bracing to be designed by MFR.
- e. Web Filler for a hold down up to 10,000 lbs (See SSI manual).
- f. Open web truss shear block for lateral tie (See SSW manual).
- g. Open web truss Skew bearing block may be required.
- h. Design hold down clips at bottom bearing I Joists.
- i. Column interference detail when appropriate.
- j. Make note if product is exposed and the owner would like Architectural grade.