

Last Update: July 1, 2009

A. Item to Be Included In the Submittals:

1. The name of metal building manufacturer is to be submitted with the bid.
2. Metal building manufacturer's proof of AISC Certification Category MB is to be submitted with the Materials and Subcontractor Questionnaire.
3. Contractor's Certificate certifying that the Contractor complies with specified requirements and is a manufacturer's currently authorized dealer of the system to be furnished shall be submitted with the Materials and Subcontractor Questionnaire.
4. Letter of Design Certification shall be submitted with the shop drawings. Letter of Design Certification shall include:
 - a. Signature of Registered Professional Engineer licensed in the State of Indiana
 - b. Building dimensions
 - c. Design criteria
 - d. Governing building codes including year
 - e. Procedures used
 - f. Design dead, live, snow, seismic, collateral, wind, and concentrated loads; live load reductions; load combinations; methods of load application; and load path.

B. Design Criteria

1. A minimum collateral load of 10 PSF shall be applied to the entire structure to account for the weight of additional materials, systems, and/or equipment.
2. Collateral load shall not be included when considering load combination of (Dead + Wind Uplift)
3. Additional framing considerations shall be made for anticipated concentrated loads that would induce stresses in structural members greater than those stresses induced by design collateral load or cause localized buckling of members.
4. Lateral bracing of compression flange of purlins and girts shall be provided to prevent lateral torsional buckling. Lateral bracing shall be provided at quarter points of span as a minimum requirement. Standing seam roof panels shall not be considered adequate lateral bracing.
5. Wall panels shall not be considered as diaphragms or shear walls in design.
6. The live load deflection of roof elements not supporting ceilings shall not exceed $L/180$, where L is the span of the element considered. The live load deflection of roof elements supporting plaster ceilings shall not exceed $L/360$, nor exceed $L/240$ for roof elements supporting other ceilings.
7. Lateral deflections, or drift, at the roof level in relation to the slab-on-grade shall be calculated based on a 50-year mean recurrence interval and shall not exceed $H/125$ for buildings with exterior metal panel walls, nor exceed $H/500$ for buildings with masonry or concrete exterior walls. For masonry walls with steel stud backup wall lateral drift shall not exceed $H/600$.
8. Maximum deflection for wall and roof panels under full dead and live and/or wind loads shall not exceed $L/180$.
9. All column bases shall be assumed to be pinned connections.
10. Lateral thrust on footings shall be resisted by reinforced concrete ties that connect opposite column footings. Ties may be poured monolithically with slab-on-grade as a thickened strip or

may be separate and below slab. Hairpins into slab-on-grade is not acceptable as a sole means of developing a tension tie between opposite footings.

11. Frost Wall: The building foundation shall include a continuous perimeter reinforced concrete frost wall which is founded at or below the minimum frost depth prescribed by the building code. Concrete block shall not be acceptable for foundation walls.
12. Standard Hillside washer detail for diagonal frame bracing connections is not acceptable. An alternate detail shall be designed by Engineer of Record and approved by Owner.
13. Maximum span for light gage steel purlins shall be 30'-0".
14. Minimum 16 gage steel to be used for steel stud backup walls of masonry/steel stud walls.
15. Minimum slope for a mechanically seamed metal roof shall be 1:12.
16. Minimum slope for a manual snap-in seamed roof shall be 3:12.
17. Aluminum roofing and siding shall not be acceptable unless approved by Owner.
18. All non-standard flashing and trim details shall be designed and detailed by Architect of Record.
19. Wall & Roof Finish: All exterior metal wall panels and visible roof panels shall have a Kynar finish. A Galvalume finish shall be acceptable on low slope, non-visible roofs.
20. Insulation: In addition to the "hourglass" installation of roof and wall insulation, the Architect of Record shall provide details for additional insulation as required to meet building code. Methods including thermal blocks and proprietary systems (e.g. Simple Saver, Sky-Web Systems, etc.) shall be reviewed by Owner.