

Structural Steel

1. Specifications will clearly state the responsibility for the design of steel connections. The responsible party must seal the connection designs.
2. Certified (AWS D1.1) welders will be used on structural work.
3. Consultant should consider use of twist-off Legume bolts and load indicator washers for field structural connections.
4. Pre-engineered metal building roof purlins will be adequately braced on the compression flange to resist all design loads. Purlin slide clips commonly used with standing seam systems will not be considered an effective brace for the purlin. Separate purlin bracing such as threaded rods or sag angles must be provided in addition to the slide clips.

Testing

1. Consultant will specify inspection and testing requirements and will include procedures for evaluation of test data. *For UMSL and UMKC projects, the contractor will retain the services of a structural steel testing firm. For MU and MoS&T projects, the University will retain the services of an independent testing firm to test all steel connections.* Contractor will be responsible for scheduling tests. Contractor will be required to notify the Owner's representative a minimum of 48 hours prior to the time testing is needed.
2. Test results will be specified to be sent directly to the contractor, architect, and the Owner's representative.

Miscellaneous Metals

1. At exterior guardrails and handrails that are not a significant part of a building's architecture, construction will *consist of fully welded hot dipped galvanized steel pipe.* Infill panels will consist of vertical balusters. Support posts will be set in sleeves oversized 1", *and cast into the walk.* *On MU projects, railings will be painted black with high gloss enamel paint. Non-shrink non-metallic grout will be used and will slope to drain. Verify with PM. (core vs. sleeve vs surface mount w/ anchor).*

2. Specifications will require a mock up panel for all welded railings, grilles, and similar architectural metal elements.

END OF SECTION