PART 0 DESIGN STANDARDS

0.01 GENERAL DESIGN GUIDELINES

A. Inspection by Owner's Testing Agency does not relieve A/E of contract responsibilities.

B. Roof loads shall be as described in standards Section 00400.

C. Coordinate joist finishes to assure they are compatible with subsequent treatments (i.e. spray or trowel applied fireproofing).

D. Detail bridging anchorage at masonry walls and other bridging terminations.

E. Detail sloped bearing conditions so that bearing plates and joist bearing ends do not require shims or other remedial actions.

PART 1 GENERAL

A. Meet the latest recommendations and requirements of the Steel Joist Institute (SJI) and American Institute of Steel Construction (AISC).

1.02 SPECIAL PERMITTING REQUIREMENTS

A. Hotwork requirements are identified in the General Conditions of the Contract for Construction.

PART 2 PRODUCTS

2.01 MATERIALS

A. Open-web steel joists

B. All components including fasteners and hardware by a single manufacturer

C. Primer

1. Steel joists and bridging shall be provided with a shop-applied coat of red oxide paint.
2. The following shall not have shop-applied primer, or shall have primer removed prior to final connections.
   a) Steel joists receiving fireproofing
   b) Any component of steel joists to be welded

D. Extended ends: Where suspended ceiling is scheduled, extend joist bottom chord to within 6" of wall or column.

PART 3 EXECUTION

3.01 GENERAL

A. Field modifications are prohibited, except repair of damaged materials.

B. Damaged materials

1. Joists shall be judged damaged when they have any twist, warp, kink or other deformation of the joist components.
2. Joists shall be judged damaged when deck installation results in burn-through or other reduction in the cross sectional area of any member of the joist.
3. Damaged materials shall be replaced or repaired as determined appropriate by the A/E.
   a) Any proposed repair by the Contractor shall be certified by the manufacturer to perform structurally in a manner equal to original manufacture .
   b) Repair design shall be submitted to the A/E and Owner for review prior to executing repairs in the field.
   c) When repairs are complete, manufacturer shall deliver to the A/E and the Owner through the Contractor, a certification stamped by a registered engineer and signed by the

manufacturer's duly authorized representative stating that repairs have been appropriately engineered and executed so that the repaired joist will perform equal to an undamaged member.

3.02 TOLERANCES

A. Specify acceptable tolerances in fabrication and installation of joists including tolerances related to bearing plate contact, joist camber, joist warp or twist, etc.

3.03 TESTING AND INSPECTIONS

A. Notification: Contractor shall work with the Owner to schedule Owner's inspections and testing.

B. Owner will provide testing and inspection services through Owner's testing agent for Owner's information.

C. Contractor shall provide additional testing to assure compliance with the contract documents, at Contractor's expense.

D. Test and inspection reports shall be distributed to the Contractor, Owner and A/E as soon as results are available.

END OF SECTION 05200