FORMULAE:

Resisting moment = "RM"

Allowable unit stress times the applicable Section Modulus = (applicable f x S).

Section Modulus (about the axis of bending) = $S = \frac{I}{C_1 \text{ or } C_2}$

QUALITY CONTROL AND INSPECTION:

Material Test Reports

Since all steel employed in the fabrication of trusses is produced in the furnaces and mills of Laclede Steel Company, certified mill test reports showing heat numbers, chemistry, and physical properties for all steel [illegible] will be provided.

Resistance Welding

Truss panel points will be connected by electronically controlled resistance welding providing two times the strength of the connected members at full design load.

Angle chords of carbon and alloy steel to be of weldable grade with contact surfaces cleaned of scale by shot blasting prior to welding.

Welds to be subject to "on-line" testing by measured hydraulic wedge action tester with spot checking of finished panel point welds by testing in vertical double shear to two times design load value.

Any panel point welds indicated to have less than the established factor for weld shear strength will be arc welded, subsequent to testing.

Full design load tests will be effected on full size and full length truss components by hydraulic loading in a test frame with load measurement by electric load cell and center span deflection check.

Load tests with recorded deflection and recovery data will be made on a minimum of one of each identified truss style involved in the panel construction.

Physical Tension Tests

Tension tests on truss components, chord angles, and webs will be performed on selected sample members included in the normal truss fabrication.

Inspection and Access to Plant

Free access to the plant of the truss manufacturer and the