

## REVIEW GUIDELINES FOR DESIGN OF JOINTS

1. How is the total movement need calculated? (Temp, shrinkage, other)
2. How is the temperature range determined?
3. How is skew dealt with?
4. What types of joints are specified by designers?
  - Small movements (<2")
  - Moderate movements (2" to 4")
  - Large movements (>4")
5. Is a Qualified Products List used to prequalify acceptable joints?
6. What considerations are made to make the joints watertight, or handle the water?
7. What considerations are made for construction tolerances of the joints?
8. Does the type of bearings used and direction of permitted movement taken into account?
9. Are manufacturers of modular or steel finger joints required to be certified under AISC Quality Certification Program, Category 3, Major Steel Bridges?
10. How are maintenance and replacement of joint parts accounted for in design and selection of joints?
11. Is fatigue of large joints considered? If so, how?
12. How has the State's experience with the performance of joints affected their current design procedures?

13. What does the State see is the greatest deficiency in the design of joints? How can that be improved?
14. Does the State use warranties in specifying joints? If so, what is their experience to date?