CONCLUSIONS

ETABS is the latest release of the ETABS series of computer programs. Since development, ETABS has been used widely for structural analysis. The ongoing usage of the program coupled with continuing program upgrades are strong indicators that most program bugs have been identified and corrected.

Additionally, the verification process conducted as described in this document demonstrates that the program features tested are operating reliably and with accuracy consistent with current computer technology capabilities.

MESHING OF AREA ELEMENTS

It is important to adequately mesh area elements to obtain satisfactory results. The art of creating area element models includes determining what constitutes an adequate mesh. In general, meshes should always be two or more elements wide. Rectangular elements give the best results and the aspect ratio should not be excessive. A tighter mesh may be needed in areas where the stress is high or the stress is changing quickly.

When reviewing results, the following process can help determine if the mesh is adequate. Pick a joint in a high stress area that has several different area elements connected to it. Review the stress reported for that joint for each of the area elements. If the stresses are similar, the mesh likely is adequate. Otherwise, additional meshing is required. If you choose to view the stresses graphically when using this process, be sure to turn off the stress averaging feature when displaying the stresses.