Description of Appendices

This thesis has three appendices, designated as A, B and C. All three of the appendices contain detailed information primarily made up of plotted and tabulated test results. The following is a description of the contents of each appendix.

Appendix A contains the plotted load-deflection curves recorded for each connection test. Each plot is identified using one of the two Specimen Identification Systems described in Section 3.1.1. The range of each plot expresses the load applied to the specimen (i.e., the resistance afforded by the specimen) in pounds. The domain expresses the displacement (or slip) measured in inches. Note that not all of these plots are on the same scale. Scales were chosen on a set-wise basis to best express the data. Thus, all of the plots from a given set have the same scale. The elastic secant and the 5% offset line are also shown on each plot.

Appendix B presents tabulated program output from the data analysis program written specifically for analysis of raw data generated in this study. Tabulated values for all connection tests are included here, organized by set. On each page, there is a short description in the blank area outside of the table, identifying the connection set to which the data on that page belongs. Parameters tabulated in Appendix B include the load, displacement, and energy up to: 1) 5% offset yield, 2) first local maximum, 3) ultimate load (capacity), and 4) failure. Additional parameters presented are the equivalent energy yield, stiffness, ductility ratio, and whether or not failure was observed during the test (recorded as “Yes” or “No”). In cases where no first local maximum was observed, the values given in the corresponding columns are the same as those in the columns under “Ultimate.” In connections where failure was not observed, the values given in the columns under “Failure” are simply the final loads (and corresponding displacements and energy) recorded during the test.

Appendix C presents a tabulated comparison of connection resistance values obtained from test results to those calculated using equations for the yield model. The embedment strength of each member of each connection, as well as the average plastic moment of the dowel type used in the connection, are presented in these tables. Also included here are the moisture content and specific gravity of each member.