Lab 3 – Evaluation of Bond Strength

Objectives:

The objectives of this laboratory are to have students observe bond characteristics of different types of mortar and two test procedures.

- Test prisms in four-point bending
- Test prisms in bond wrench test apparatus
- Compare different bond strength test methods
- Compare different mortar bond strengths
- Compare measured bond strengths to Masonry Standards Joint Committee (MSJC) values for design

Students should notice the variability of materials validating the need for nominal strength values oriented around the lower bound. The lab also validates the need for resistance factors and permits students to see variations in strength both above and below the nominal values.