Lab 6 – Non-Destructive Evaluation

Lab

- Observation
- Radar
- Infrared Imaging
- Cover Meter
- Flatjack Testing
- Impact Echo

Extras

- Lab Handout
- Photos
- Sample Results
- Sample Lab Report
- Lab Equipment and Materials
- Extra Resources

General Information:

Flatjack testing is a non-destructive way to evaluate the stress condition of in-situ masonry. Mortar joints in a local building are cut out and preloaded. Two methods of testing are utilized: measurement across one cut to evaluate acting stress and between two cuts to evaluate deformation or modulus of elasticity of the masonry wall. Before cutting the wall, original dimensions are taken between gage points. Once the cuts are made, flatjacks are loaded in the cuts and readings between the gage points are taken at various pressures. From this data you can back calculate the stress present in the wall before the cuts were made as well as the modulus of elasticity of the masonry. After data for both tests are obtained, the cuts are repointed with mortar.

Lab Worksheet		