



Technical Analyses Conclusions

The impacts of using a panelized façade provide benefits for many systems of the building. The panelized façade does have an increased cost of \$800,000, but the system reduces schedule time by approximately 2 months. The smaller structural member sizes, due to lower dead weight, would allow some offsetting cost savings. An owner would need to evaluate positives and negatives of a building being completed more quickly, architectural aesthetics, and cost. For a critical schedule this system is a good solution.

The use of a panelized façade system eliminates the need for a grade beam shelf for first floor masonry load bearing. Without a masonry bearing shelf, the use of earth forms for grade beam concrete can be used to reduce grade beam costs by approximately \$80,000 and accelerate the schedule by approximately 2-3 weeks. This savings helps to offset the increased façade cost also. This solution helps to accelerate the schedule out of the ground when delay can be the most critical.

Although acoustics are very important for learning spaces, I would not recommend the owner adding wall board material to partitions. The STC values are below the acceptable standards but not low enough that they would be critical. The additional cost of approximately \$900 for adding wall board for only 3 walls could turn into a sizeable amount of money if the acoustical analysis was completed for the entire building. The acoustical improvements would be a good consideration if additional budget money became available.