

HIGH PERFORMANCE GUIDELINES LESSONS LEARNED

Design and Specifications are easy:

Developing specifications to maximize High Performance Guidelines for components such as site planning, storm water management and construction materials is neither time consuming, nor expensive. Monitoring compliance from the contractor and construction community in general can be extremely time consuming and expensive.

Commissioning Services are necessary:

Having a comprehensive building commissioning program is virtually a requirement to insure maximum compliance. It is also necessary for certification. Services for project commissioning are above and beyond basic architectural services and should be compensated accordingly.

The Construction Industry is not Programmed for Recycling:

Achieving maximum recycling of salvaged construction and demolition debris depends on both the integrity and competence of the waste management subcontractor, the supervisory diligence of the construction superintendent and project manager. It also requires the soils and materials testing engineering consultant engaged by the Owner to be innovative, creative and to think “outside the box”.

Low-Bid driven projects in the public domain are much less likely to have the desired mix of subcontractors and project supervision to accomplish the desired recycling goals and objectives.

The construction industry in general is still prone to “tossing it in the dumpster and hauling it to the landfill.” The industry is only just beginning to realize the value of recycling initiatives. Regrettably, there is not enough “carrot” in the market to insure compliance. It is necessary to mandate compliance and constantly monitor performance. This can become an overwhelming burden on the architect’s project manager without the assistance of a commissioning consultant.

Consulting Engineers and Building Inspectors have issues:

Soils Engineers need to be carefully selected if construction debris is going to be used on site. Recycling goals of 75% quickly dissolve if the Soils Engineer will not accept ground up construction debris as back fill material.

Building Inspectors often have issues with the cross-connect technology necessary to use rain water for flushing toilets and other innovative sustainable initiatives.

Owners Follow-up is Key:

Many of the High Performance Guidelines require significant owner follow-up and staff training on an on-going basis. This can be difficult to accomplish without personnel dedicated to this purpose. This training, monitoring and maintenance follow-up often gets lost in the day to day duties. The base line data required to certification is also difficult to obtain.

It can be difficult to Train Educators:

Lights in classrooms are double switched to meet the energy code and allow 50% of the light to be used when daylight conditions allow for it. In addition, at Apex, the lights on the window wall are switched at the window wall to discourage use.

At no time during any post occupancy field visits has the Architect observed anything other than 100% light use in occupied classrooms, media center and cafeteria spaces even though significant daylight enhancements are included in the building design.

It would appear the only way to effectively manage the lighting is with light sensing technology and not behavior modification.