

Green Construction Best Practices

The following is an outline of green construction best practices for the office and jobsite.

Education

Green Best Practices. A detailed account of all actions a contractor can take to ensure a green project is successful. This document allows a contractor to make decisions early and anticipate potential pitfalls.

Training. Provide training courses to employees on the LEED AP exam as well as “Managing the LEED Process” and ongoing Field Training.

Footprint. Significantly reduce impact of operations.

Health & Safety. Build on a strong safety record by making the link between health and safety.

Ongoing Education of Key Subcontractors. Helping subcontractors to become LEED APs, create libraries of green products and employ green building methods.

Project-specific Communication. Needs to be clear and consistent. Start with a kick-off meeting, continue with LEED task list and regular meetings to clarify credits.

Design Assistance

Culture - Early Collaboration and Guarantees.

- **Budgets.** Help to create realistic budgets based on green techniques and products.
- **Schedule.** Anticipate long-lead-time materials; leave ample room for building to flush out.
- **Pre-Pre Construction.** Active participation in design charrettes.
- **Commissioning.** Manage from the beginning.

Experience.

- A wide range of project experience allows for more sound solutions to unique problems.
- Understanding of local markets, codes, ordinances, incentives and rules is key to getting an accurate view of what can be built and how long it will take.

Research/Technology.

- Knowledge of structural and mechanical systems offers added input to engineering plans.
- Material availability, accurate lead times, performance and location/extraction (FCS, slag, furniture)
- Three “R”s: incorporate Reduce, Reuse, Recycle throughout design where material allocation in established.

Process Management

Commitment. Commitment to the LEED Checklist and/or Green Goals should be as firm as the commitment to cost/schedule.

Project Responsibilities.

- Clearly identify roles for Owner, Architect, Consultants and other responsible entities.
- Set deadlines for documentation.
- Review responsibilities to cover all the bases.

Contractor-specific Responsibilities.

- **Waste Diversion:** Create a site-specific Diversion Plan. Plan to go far beyond local minimum.
- **IAQ:** Create and implement site-specific IAQ Plan.
- **Low-emitting Materials:** Verify against specifications and approve submittals.
- **Local/Regional Materials:** Help design team with local sources of materials.
- **FSC Wood:** Find short lead-time, reasonably priced products.

Documentation.

- Protocol: Web-based management.
- Content: Checklist, Procurement/ Submittal Log, LEED Material Tracking Sheet, Diversion Tracking Sheet.

Review. Status review of LEED/Green Goals weekly, separate from OAC meeting.

LEED Checklist. Review and assign Credit-By-Credit Action Plan. Incorporate all credits into master schedule.

Contractor-specific Implementation.

- **Waste Diversion.** Implement a waste diversion plan and train subcontractors.
- **IAQ.** Assign actions to the jobsite EAQ checklist.
- **Low-emitting Materials.** 1) review materials with approved submittals and specs; 2) watch for, and verify, compliance of miscellaneous materials.

Jobsite Kick-off Meeting.

- Incorporate Green Goals into discussion of safety, submittals and other important items.
- Signed agreement stating acknowledgment of Green Goals.

Merge Green and Safety.

- Make Green message an important part of weekly Tool Box Talks.
- Train new laborers and subcontractors when on site.
- Educate Inspectors.

Quality Control

- Eye for durability.
- Peer reviews.
- Post occupancy evaluations.
- EOR/Consultant Accountability Surveys.

From Tip to Tail

Energy and Resource Use.

- Keeping tabs on our operation footprint.
- Monitor construction energy use.
- Take leadership role in commissioning.

Occupant Health.

- Carefully address employee health and safety.
- Plan for long-term health of tenant.
- Accurate O&M Manuals and Training.

Completion. Follow-through on ALL tasks.

Advocacy

Advocacy through associations and research. Effective organizations such as Emerging Builders, USGBC, CSI, DBIA, PCI, BOMA, BC3 and local chambers of commerce are all places to take roles in advancing policy.

Marketing/Communication.

- Promoting the green message through personal marketing approach.
- Associations with local colleges such as Stanford and UC Berkeley serve to focus research and other collaborative efforts.
- The green message attached to recruiting efforts.

Owner/Designer/Consultant Relationships.

- Continually asking building partners if there is a greener way.
- Exchange ideas and “lessons learned.”

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LOW IMPACT
HIGH PERFORMANCE
BUILDING