

Chelsea Group “In the LEED” at World Trade Center #7

The Plan:

Obtaining LEED certification required the joint effort of the team led by Tishman Construction and a consortium of experts through Chrisner Group that included Chelsea Group, Ltd. The Chelsea team refined the draft Construction Indoor Air Quality (IAQ) Management Plan that Tishman initiated for the new World Trade Center #7, the first building to be constructed on the site after the September 11, 2001, tragedy.

The project was registered with the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification for Core & Shell construction, and represented the contractor's first foray into the green building program. Tishman recognized that Chelsea Group could assist them in developing a plan meeting the specific requirements for LEED certification.



Chelsea Group Intervention:

In accordance with the LEED criteria, Chelsea Group helped orient the Construction IAQ Management Plan to meet elements of the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) *IAQ Guideline for Occupied Buildings under Construction*.

HVAC EQUIPMENT PROTECTION



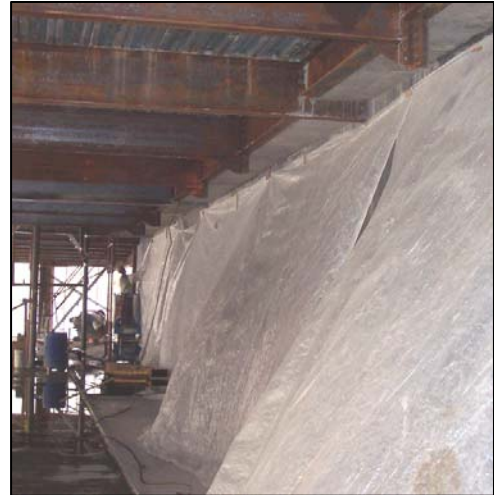
Chelsea Group detailed the steps to be taken in the delivery, storage, and protection of HVAC equipment installed in the project. This aspect of the plan involved such actions as keeping delivered equipment wrapped and off the floor for protection against water damage. Filtration requirements and operation of the HVAC system during construction was addressed as part of this plan.

Immediate results: New HVAC equipment was successfully protected from the elements and installed in pristine condition. Chelsea Group's steps in the protection of the HVAC system allowed the units to operate effectively as needed during construction.

PATHWAY INTERRUPTION

Chelsea Group required that all wet processes be conducted in a manner that did not impact adjacent spaces already constructed. In this case, before spray-on fireproofing was applied in one area, plastic sheeting was installed to segregate that space from the remainder of the construction area. Environmentally safe products were also utilized during the construction process. Local exhaust and air cleaning was also required in appropriate situations.

Immediate results: Areas in which construction was complete were kept clean and free of contamination from adjacent ongoing construction.



SOURCE CONTROL

Potential sources for airborne contaminants needed to be minimized. Chelsea Group specified clean-burning stationary equipment fueled by ultra-low-sulfur diesel fuel. Construction spaces having high levels of volatile organic compounds required local exhaust and air cleaning.

Immediate results: These guidelines minimized pollutants introduced to the spaces during construction.

HOUSEKEEPING



Chelsea Group required that all work areas be cleaned at the end of each shift to minimize dust and debris build-up during the construction phase of the project. All areas were required to be thoroughly cleaned prior to closing up inaccessible areas such as wall and ceiling cavities. Spill control was formalized to assure prompt clean-up procedures, maintaining a safe and clean work environment.

Immediate results: Housekeeping was a regular, ongoing task, rather than a significant, difficult-to-accomplish final step in the process. As a result, future occupants will be protected from potential contaminants that might have otherwise been trapped in the completed building.

SCHEDULING

The Construction IAQ Management Plan recommended that material deliveries take place as the materials were to be used. If this were not possible, materials were to be stored in dry, clean storage areas, properly protected against weather conditions. In addition, temperature and humidity conditions were monitored in all areas where construction materials were stored to document proper environmental controls.

Immediate results: Because of carefully scheduled deliveries and proper storage, loss due to damage of construction materials was minimized, providing a cost savings for the contractor.

Final Results:

The Construction IAQ Management Plan was written into the contractual obligations of all sub-contractors and was integrated into the construction process. The result was a cohesive project that ensured proper IAQ during the entire term of the construction. The joint effort of Chelsea Group and Tishman produced a plan that enabled the team to secure the LEED Credit necessary for certification.

