

For All The Right Reasons,



Four SeasonsSM
HEATING • AIR CONDITIONING • PLUMBING

• Since 1971 •

Case Study:

“Commercial Contracts,
Unique Challenges.”

Harvey, Illinois

Four Seasons Heating, A/C & Plumbing
November 2013



CLIENT INFORMATION

Client Name: Sterling Lumber

Project Location: Harvey, Illinois

Project Duration: November 15 - December 17

<http://www.fourseasonsheatingcooling.com/>



THE PROJECT TEAM

Project Manager: Wes Maka, General Manager
Mike Cirar, Operational Manager
Steve Kabat, Mechanical Support and Parts

Installation Specialists: Joe Shotts, Brian Frietag, Randy Szymanek,
Stan Adamczyk, Virgil Johnson, Miguel Rivas

Cambridge Staff: Tom Wollenberg, Engineer

Home Services Staff: Sean Ruttledge
Tom Brennan

PROJECT RESULTS BREAKDOWN

REPLACED

1X



Outdated Carrier Rooftop AC Units at 10 SEER

REPLACED

4X



1960's Air Handlers at 60% AFUE

INSTALLED

1X



Carrier 7.5 ton Package Rooftop AC Unit at 13 SEER

INSTALLED

4X



1.75M BTU Cambridge Air Handlers at 92% AFUE

ENERGY SAVINGS

Savings on Electric Bills

33%

Annually

Savings on Gas Bills

32%

Annually

The Problem at Hand

Providing HVAC support for a standard residential home is one thing, but heating a 500,000 square foot lumber warehouse is another matter entirely. In early November 2013, the Sterling Lumber Company, located in Harvey, Illinois, contacted Four Seasons to address the heating concerns in their warehouse. The building had thus far been heated by six enormous air exchange units over fifty years of age. After a half century of use, these behemoths featured rapidly decreasing energy efficiency, frequent breakdowns, and habitual black smoke emissions. Additionally, the package AC unit devoted to the office portion of the warehouse faced the same problems of high power consumption and regular malfunctions. Due the unreliable heating and cooling systems in place, Sterling Lumber was afflicted with a poor working environment for their employees as the warehouse and office fluctuated in temperature. Clearly, something needed to change.



When Project Manager, Wes Maka, arrived on the scene for his estimate, he determined that even though it was possible for the units to be repaired, the cost of the repairs was almost the same as installing a completely new system. Combine that with the rapidly declining energy efficiency of the old units and replacement became a far better option and the clear choice. From 60% efficiency to 92% efficiency, Sterling Lumber was prepped for significant energy savings.

The Plan

Commercial contracts always come with their own unique challenges. In the case of Sterling Lumber, the four Cambridge air handlers and single Carrier package air conditioner needed to be installed on the roof of the warehouse, some thirty feet off the ground floor. It took two weeks of preparation, planning, and dismantling old units before the new systems were ready to be installed.

The Carrier unit was a cut and dry case. A crane was used to remove the previous rooftop air conditioner and raise the new Carrier unit to its desired location.



The four Cambridge units were a different story. Each was to be housed within shelters atop the roof, indoors, with no entrance wide enough to fit the sizable units. The conventional crane method could not be used in this situation. Instead, the 1,600lb units were lifted into the shelter by a pulley system designed by the Four Seasons team. The units were raised through bombshelter doors within each rooftop shelter, and once inside, a second pulley system moved these units into place.

“This job was likely the highlight of my career with Four Seasons”
- Wes Maka, Project Manager

The new Cambridge units had a much smaller fresh air intake than their predecessors. As a result, new siding, insulation, and louvers needed to be added to the shelters. For this task, the team entrusted our friends over at Four Seasons Home Services. Under Project Manager Wes Maka's direction, Sean Rutledge and Tom Brennan completed the the fresh air intake beautifully by adding R19 level insulation to the new siding and 5 inch studs without hiccups or complications.



Mission Accomplished



Sterling Lumber is now looking forward to drastically lower energy bills and better, more comfortable working conditions for their employees. This contract goes to show that every job is different. Even though complications could arise along the way or even at the outset, Four Seasons will find the best method to fulfill the client's needs and our promise of total customer satisfaction.