

Cooper B-Line Expansion

Highland, Illinois

General Contractor

Korte & Luitjohan Contractors, Inc.

Architect

M² Architecture Studio

Cooper Industries Incorporated retained the architectural services of M² Architecture Studio to design a two-story office addition and partial interior renovation to their existing Cooper B-Line headquarters facility in Highland, Illinois.

Cooper B-Line is a leading manufacturer of quality support systems and enclosures for the mechanical, electrical and telecommunications industries. Cooper B-Line's products are used in a variety of settings for the commercial, industrial, utility and OEM markets.

Headquartered in Highland, Illinois, Cooper B-Line has manufacturing facilities located throughout the United States with more than one million square feet of manufacturing space. In addition, Cooper B-Line employs approximately 1,200 people nationwide.

The project program consisted of the need for additional private and open office space, conference rooms, restrooms, accommodations for training and a product display area. The Client also had very specific goals in mind for a centralized break room, or "hub," that would be filled with natural light and serve as a gathering place shared by both office and shop employees. The design team responded with a two-story space with clerestory glass, incorporating Cooper B-Line products as unique design elements and creating an internal crossroads with a relaxed and casual atmosphere. While meeting the Client's programmatic needs, of equal importance to Cooper B-Line was the fit of the newly created spaces into the existing building material vocabulary of brick, concrete masonry units and metal panels. The new addition fits seamlessly into the existing context blurring the line between old and new.

The site for the new facility posed other challenges for the design team and the contractor. Nestled between existing two-story pre-engineered metal buildings on two sides and a lower, single-story office building on a third side, resolving the rooflines became an aesthetic concern, and aligning the new second floor construction with the existing second floor became a functional concern. A system of metal bar



Photos Courtesy of Teri Allison



joists and lightweight hollow-core concrete floor planks was devised to allow the floors to align at the same elevation while not sacrificing precious ceiling space in the rooms on the first floor. The parapet of the new building was aligned with the existing roofline providing necessary plenum space above the ceilings on the second floor for all necessary services.

Cooper B-Line selected Korte & Luitjohan Contractors, Inc. as the general contractor based on their qualifications and cost. The M² and Korte & Luitjohan team worked together to plan and schedule the project and

resolve field issues inherent to an "infill" project. Korte & Luitjohan completed the project under budget and three weeks ahead of the eight-month contract schedule.

Manufacturers

DIV. 7: Roofing: Firestone.

DIV. 8: Curtainwall: Vistawall; **Window:** Insulite.

DIV. 9: Flooring: Patcraft carpet; **Polymer Floor Coating:** Stonhard.

DIV. 14: Elevators: KONE.

Extended Product Information

Polymer Floor Coating: Stonhard.
See advertisement on page 47.

INDUSTRIAL ID090940

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General Contractor

Korte & Luitjohan Contractors, Inc.
12052 Highland Road, Highland, IL 62249
www.korteluitjohan.com

Architect

M² Architecture Studio
1232 Washington Avenue, #230, St. Louis, MO 63103

Construction Team

Structural Engineer:

Ameristructure, Inc.
128 South Virginia, Eureka, MO 63025

Cost Estimator:

Korte & Luitjohan Contractors, Inc.
12052 Highland Road, Highland, IL 62249

Electrical & Mechanical Engineer:

BRiC Partnerships, LLC
100 E. Washington, #220, Belleville, IL 62220



Project General Description

Location: Highland, Illinois

Date Bid: Oct 2007

Construction Period: Nov 2007 to July 2008

Total Square Feet: 15,290 **Site:** 1.5 acres.

Number of Buildings: One.

Building Size: First floor, 8,590; second floor, 6,700; total, 15,290 square feet.

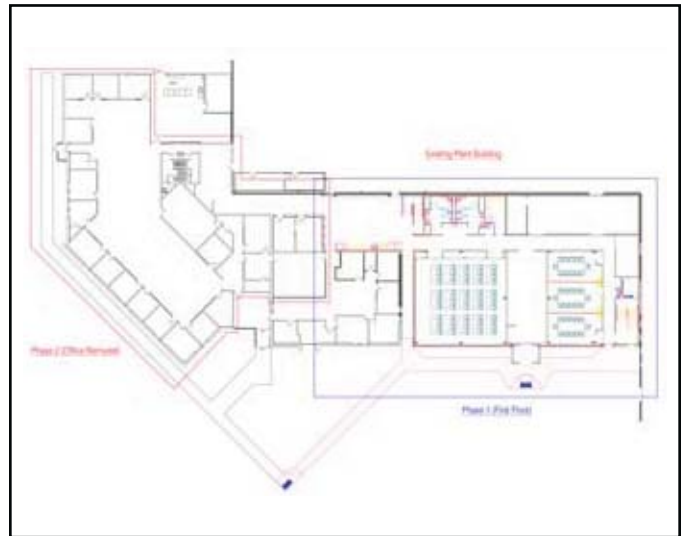
Building Height: First floor, 10'; second floor, 11'6"; floor to floor, 11'4"; total, 24'4".

Basic Construction Type: Addition/Renovation.

Foundation: Cast-in-place, reinforced.

Exterior Walls: CMU, brick. **Roof:** Metal, membrane.

Floors: Concrete. **Interior Walls:** CMU, metal stud drywall.



C.S.I. Divisions

		COST	% OF COST	SQ.FT. COST
1.	1.	22,000	1.12	1.44
		181,000	9.25	11.84
3.	3.	246,100	12.58	16.10
4.	4.	137,150	7.01	8.97
5.	5.	193,200	9.87	12.64
6.	6.	53,005	2.71	3.47
7.	7.	139,300	7.12	9.11
8.	8.	109,850	5.61	7.18
9.	9.	260,550	13.31	17.04
10.	10.	34,500	1.76	2.26
14.	14.	81,900	4.18	5.36
15.	21.	35,900	1.84	2.35
15.	22.	131,700	6.73	8.61
15.	23.	189,000	9.66	12.36
16.	26.	141,900	7.25	9.27
	TOTAL BUILDING COSTS	1,957,055	100.00	\$128.00
2.	2.	23,900		
2.	31.	5,800		
2.	32.	80,300		
2.	33.	18,500		
	TOTAL	2,085,555		

SPECIFICATIONS

Bonds & insurance.
—
Forming & accessories, cast-in-place, reinforcing, topping (concrete cubic yards foundation: 106cy; cubic yards walls: 44cy; cubic yards floor: 191cy).
Unit.
—
Rough carpentry, architectural woodwork.
Flashing & sheetmetal, TPO roofing, metal roofing, insulation, firestopping.
Doors & frames, entrances, storefronts, & curtain walls, hardware, glazing.
Plaster & gypsum board, ceilings, flooring, wall finishes, painting & coating, acoustic treatment.
Toilet partitions, operable partitions.
Elevators (1).
—
Piping & pumps, equipment, fixtures.
Equipment, controls, insulator, balance, rough in.
Medium-voltage distribution, lighting.
—
—
Sidewalks, pavement.
Water, sanitary.
(Excluding architectural and engineering fees)

UPDATED ESTIMATE TO OCTOBER 2009: \$137.14 PER SQUARE FOOT

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