

Cantelmi E-COMMERCE

Bethlehem, Pennsylvania

Architect

4/4 Architecture



Photo Courtesy: Ryan Fisher

The Cantelmi Hardware project turned a tight urban lot into a functional, aesthetic two-story multi-purpose space.

The Cantelmi Hardware project in South Bethlehem demonstrates how thoughtful design can modernize a business while respecting its history and supporting the surrounding community. Led by principal architect Gary Lader of 4/4 Architecture and constructed by SAGE Design-Build, this project turned a tight urban lot into a functional, aesthetic two-story multi-purpose space, making a historic family business more efficient and future-ready.

For Patrick Cantelmi, expanding his business wasn't just about adding more space, it was about enhancing how the company operated while respecting its deep roots. Founded in the 1920s, Cantelmi Hardware has been a cornerstone of South Bethlehem for generations. Until the recent expansion, the company operated out of a cramped and inefficient space — a far cry from the streamlined, modern facility it occupies today. "We've been part



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of this community for almost 100 years, and the new building has transformed how we run our business,” Cantelmi said.

This project showcases a strong commitment to sustainability. Located within an existing urban neighborhood, the building leverages pre-existing utilities and infrastructure, reducing the environmental impact of new development. Transforming this underutilized lot into a functional space exemplifies sustainable land use.

A key feature is the rain screen façade — or “perfect wall system” — comprised of aluminum panels, continuous insulation, and 10-inch CMU. This design ensures energy efficiency, durability, and minimal material use. The compact, two-story footprint optimizes space compared to sprawling warehouses, reducing the environmental impact.

The building’s adaptability enhances its value. While currently a single-tenant space, the second floor is designed to accommodate a future tenant, with two egress stairs and a service elevator enabling flexibility and accessibility. High windows on the first floor allow natural light while accommodating pallet storage. Operable windows provide fresh air, creating a healthier, more pleasant workspace. By balancing utility, comfort, and flexibility, the building is primed for diverse future uses, ensuring its longevity and relevance in the community.

Unlike most warehouses built far from city centers, the Cantelmi E-COMMERCE warehouse remains rooted in South Bethlehem’s walkable, urban environment. At one point, 80 percent of the staff walked to work, a testament to the community-centric location.

“This is one of the few warehouses where staff can walk to work, run errands over lunch, enjoy happy hour at a brewery, and eat dinner at a restaurant — all without needing a car,” Cantelmi said. “That, in addition to other perks, makes a big difference to those who can — and who want to — apply here.” The connection to the local environment is a critical part of the project’s design philosophy.

As with any construction project, the Cantelmi E-COMMERCE warehouse came with its share of challenges, and the team’s

ability to adapt and learn was key to its success. “The project site — a mix of overgrown land and parking lot — presented opportunities for creativity,” Lader said.

One significant challenge emerged during the demolition phase. SAGE Design-Build’s Construction Superintendent, Jeremy Temos, and his crew were ripping up the parking lot when they made an unexpected discovery. “Whatever buildings were there had been demolished, and the debris was buried and paved over,” Temos said. “We didn’t expect to find that much material under the surface. We had to adapt, clear the site, and fill it to keep the project on track.” In total, SAGE removed 14 tri-axle truckloads worth of building materials.

The parcel’s unique shape and tight, urban location dictated many of the design decisions, such as the recessed corner entrance, the decision to build upward with a cantilevered second floor, and the strategic placement of the windows.

For Cantelmi Hardware, the warehouse not only solved immediate operational needs but also reinforced its place within the South Bethlehem community. The expanded warehouse allows Cantelmi’s team to store inventory more efficiently, providing more reliable service to customers and supporting the local economy.

To Cantelmi, the building represents the continuation of a family legacy and the evolution of his business. “We’ve been here for nearly 100 years, and now, with this building, we’re set for the future,” he says. “It’s a great example of how you can grow while staying connected to your roots.”

Product Information

Aluminum Panels: ATAS International;
Fiber Cement Board: Nichiha Roofing; Carlisle SynTec Systems
Window, Entrances & Storefronts: Kawneer
Elevators: OTIS HydroFit 5010
Lighting: Lithonia; Baron; Pathway Lighting

Architect

4/4 Architecture
414 W. Broad Street
Bethlehem, PA 18018

Project

Structural Engineer

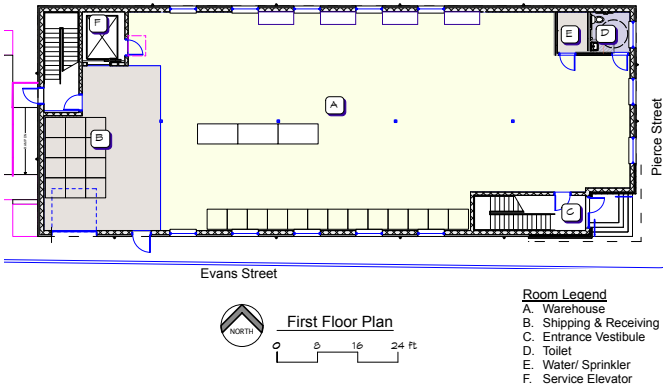
Base Engineering
1010 N. Quebec Street, Ste. 3
Allentown, PA 18109

Mechanical & Plumbing Engineer

Barry Isett
5420 Crackersport Road
Allentown, PA 18104

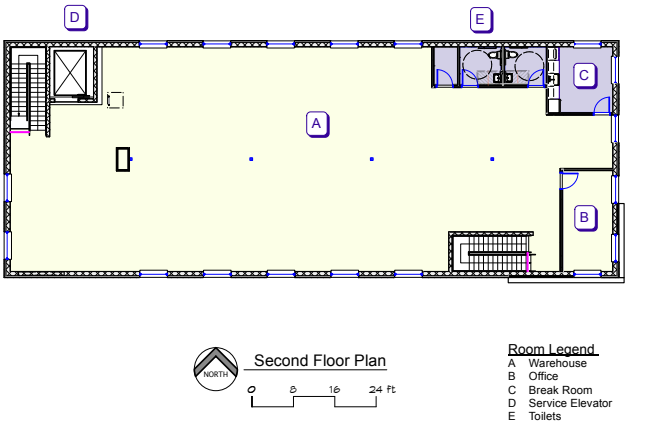
General Contractor:

SAGE Design Build, Inc.
5740 Lower Macungie Road, Ste. A
Macungie, PA 18062



Project General Description

Location: -Bethlehem, Pennsylvania
Date Bid: May 2022
Construction Period: Sep 2022 to May 2023
Site: 0.1487 acre.
Total Square Feet: 9,397.
Building Square Feet: First floor, 5,381; second floor, 5,456; total, 9,397 square feet.
Building Height: First floor, 15'9"; second floor, 15'4"; total, 31'1".
Number of Buildings: One.
Basic Construction Type: New/Steel Frame.
Foundation: Slab-on-grade.
Exterior Walls: CMU, aluminum panel continuous insulation rain screen.
Roof: Metal, membrane.
Floors: Concrete slab on metal deck.
Interior Walls: CMU, metal stud drywall.



DIVISION	COST	% OF COST	SQ.FT. COST	SPECIFICATIONS
GENERAL REQUIREMENTS	391,947	17.80	41.71	—
CONCRETE	131,527	5.97	14.00	Forming & accessories, reinforcing, cast-in-place.
MASONRY	333,443	15.14	35.48	Unit.
METALS	323,890	14.71	34.47	Structural steel, joists, decking, fabrications.
WOOD, PLASTICS & COMPOSITES	11,750	0.53	1.25	Finish carpentry.
THERMAL & MOISTURE PROTECTION	309,691	14.06	32.96	Thermal protection, weather barriers, roofing & siding panels, membrane roofing, flashing & sheet metal, roof & wall specialties & accessories, joint protection.
OPENINGS	103,210	4.69	10.98	Doors & frames, specialty doors & frames, entrances, storefronts, & curtain walls.
FINISHES	96,608	4.39	10.28	Plaster & gypsum board, flooring, painting & coating.
SPECIALTIES	3,846	0.17	0.41	Information, interior, safety.
CONVEYING SYSTEMS	104,500	4.75	11.12	Elevators (1).
FIRE SUPPRESSION	37,950	1.72	4.04	Water-based fire-suppression systems.
PLUMBING	51,970	2.36	5.53	Piping & pumps, equipment, fixtures.
HVAC	118,335	5.37	12.59	Piping & pumps, air distribution.
ELECTRICAL	183,624	8.34	19.54	Medium-voltage distribution, low-voltage, transmission, lighting.
TOTAL BUILDING COSTS	2,202,291	100%	\$234.36	
EXISTING CONDITIONS	44,967			Contaminated site material removal.
EARTHWORK	80,034			Site clearing, earth moving.
EXTERIOR IMPROVEMENTS	74,142			Bases, bollards, & paving, improvements, planting.
UTILITIES	54,394			Water, sanitary sewerage.
TOTAL PROJECT COST	2,455,828			
UPDATED ESTIMATE TO JUNE 2025: \$307.07 PER SQUARE FOOT				

Regional Cost Trends								
This project, updated to June 2025 in the selected cities of the United States.								
EASTERN U.S.	Sq.Ft. Cost	Total Cost	CENTRAL U.S.	Sq.Ft. Cost	Total Cost	WESTERN U.S.	Sq.Ft. Cost	Total Cost
Atlanta, GA	\$252.88	\$2,376,320	Dallas, TX	\$252.88	\$2,376,320	Los Angeles, CA	\$361.26	\$3,394,743
Pittsburgh, PA	\$307.07	\$2,885,532	Kansas City, KS	\$313.09	\$2,942,111	Las Vegas, NV	\$346.21	\$3,253,296
New York, NY	\$415.45	\$3,903,955	Chicago, IL	\$358.25	\$3,366,454	Seattle, WA	\$346.21	\$3,253,296

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