

SHAPING FUTURES

Santa Ana Unified School District
Valley High School Culinary Arts
and AutoTech CTE



Tilden-Coil
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Shaping Futures at SAUSD's Valley High School

Valley High School in Santa Ana, CA is known for its strong academic programs, dedicated faculty, and vibrant student community. With a focus on preparing students for success in college and beyond, Valley High School offers courses and extracurricular activities that help students excel both inside and outside of the classroom..



SAUSD Valley HS Culinary Arts and Automotive CTE Building Quick Facts

Architect: Baker Nowicki Design Studio

Delivery: CM Multi-Prime

Size: 17,900 sf

Completion: November 2023

"When we began work in 2018, planning what would become the Culinary Arts & Automotive Engineering facilities at Valley High School, we had no idea how complex and sophisticated they'd become. Fortunately, we worked with a team of experts from Tilden-Coil Constructors that guided development of future-ready, innovative, and leading-edge spaces that prepare our students for high demand jobs and rewarding career opportunities."

– Jeremy Cogan, AICP Director of Planning and Design, Facilities Division SAUSD

The Construction of Valley High School's New Culinary and Automotive CTE Building

Santa Ana Unified School District's Valley High School introduced a state-of-the-art Culinary and Automotive Career and Technical Education (CTE) building to its campus. The landmark project, completed in November 2023 by Tilden-Coil Constructors, emphasizes the district's commitment to providing cutting-edge educational facilities for their students. Spanning over 17,000 sq ft, this space comprises 7,300 sq ft dedicated to the Culinary Arts Program and 10,600 sq ft for the



Unique Challenges and Solutions

Tilden-Coil Constructors faced unique challenges when tasked with building this facility. The project required careful planning, innovative problem-solving, and strong partnerships to overcome obstacles.

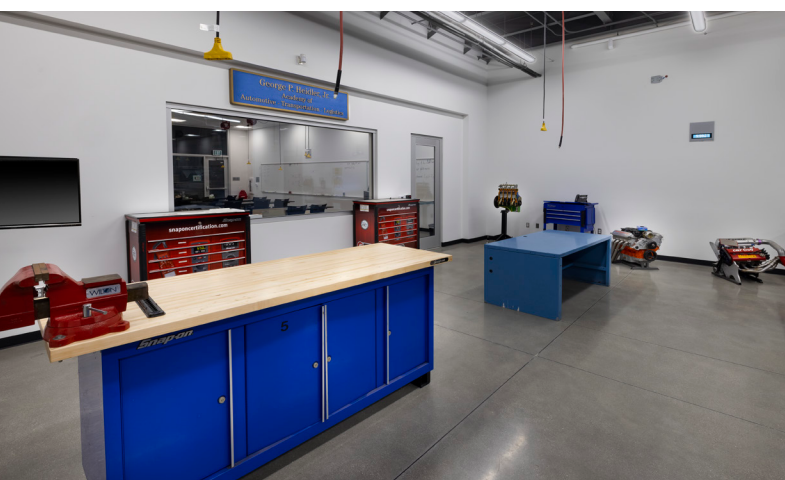


At the beginning of the project, the construction team encountered significant hurdles with the site preparation and ground water challenges. The site's shallow groundwater table and unexpected water seepage during early construction threatened to derail the timing of the project. In response, the team innovatively employed rock columns as a foundation system, a decision that not only managed costs effectively but also maintained structural integrity. This adaptive solution showcased the team's ability to think creatively under pressure.

The approval process with the Division of the State Architect (DSA) presented another major challenge, particularly regarding the revised design of the rammed aggregate piers. The team had to validate the design's performance through extensive testing and calculations, demonstrating their technical expertise and commitment to quality and safety.

The construction required the demolition of two existing structures, including Building 14. This process demanded meticulous logistical planning to maintain student access pathways and coordinate work around school schedules. The discovery that Building 14 powered neighboring occupied buildings necessitated the provision of new power and gas services. Additionally, relocating an outdoor Musco lighting pole to create a necessary fire lane was required during the demolition process.

Budget constraints and equipment procurement, especially for the culinary side of the project, were challenging. The construction management team had to employ strategic planning and resource management to navigate these financial challenges. Constant communication with the district proved to be critical. Despite initial delays due to funding issues, careful budget oversight and allocation of resources allowed the project to stay close to its original budget.





Coordination with suppliers, particularly for the automotive equipment from Snap-on and cutting-edge culinary equipment, demanded detailed planning and direct engagement. The project team worked closely with the district to secure the necessary products. Thankfully, SAUSD had built a strong relationship with Santa Ana College and partnered with them to successfully acquire the culinary equipment.

Building Information Modeling (BIM) Coordination

The use of Building Information Modeling (BIM) proved crucial in managing the project's complexities. BIM coordination encompassed numerous components, including site utilities, stud framing, MEPF systems, steel, concrete, and equipment installation. The high ceilings and large steel beams presented challenges, particularly with overhead systems, requiring extensive coordination among trades.

Above the kitchens, supports for exhaust hoods and tie-in points for plumbing and electrical systems were meticulously planned to ensure smooth installation. The sloped plumbing systems required careful routing around the steel structure. Additionally, coordinating fire sprinkler systems in the roof required precise planning to avoid obstructions.

Communication and Partnerships

Throughout the project, effective communication was paramount. The construction team employed group texts and regular updates to minimize disruptions to school operations, reflecting their strong commitment to serving the district's needs.

The success of the project hinged on the power of partnerships. The collaboration between Tilden-Coil, Baker Nowicki Design Studio, Santa Ana Unified School District, and the prime contractors was instrumental in overcoming the unique challenges faced. The combined expertise and cooperation among these partners portrayed the power of strategic partnerships throughout this complex construction project.



The new Culinary Arts and Autotech CTE facility aligns with Valley High School's mission to provide a positive student-centered environment with the support of academics and community partnerships. It reflects the school's vision, where students are architects of their well-being and learning while persisting towards their life goals and achieving their full potential as future-ready, global citizens.

The construction of Valley High School's new Culinary and Automotive CTE building is a testament to innovation, collaboration, and dedication. By overcoming numerous challenges and leveraging advanced technical solutions, Tilden-Coil Constructors delivered a state-of-the-art facility that will serve as a cornerstone for student education and career readiness, setting a new standard for future CTE initiatives and enriching the educational landscape at Valley High School.

Go Falcons!



Partners

Great accomplishments require great partnerships! Tilden-Coil recognizes those exceptional prime contractors who played a major role in completing this project:

- AMPCO Contracting, Inc.
- JCE Equipment
- KAR Construction, Inc.
- Schroeder Iron Corporation
- New Star Construction Services, Inc.
- Danny Letner, Inc. dba Letner
- Roofing Company
- Whitehead Construction, Inc.
- Glazing Concepts, Inc.
- Sierra Lathing Co., Inc.
- CG Acoustics, Inc.
- Rivco Coatings Inc
- Premier Culinary Solutions
- Apex Fire Protection, Inc.
- Rivera Equipment dba Valley
- Industrial Mechanical West-Tech
- Mechanical
- Daniel's Electrical Construction Company Inc.
- JRH Construction Company, Inc.
- Rivera Equipment dba Valley Industrial Mechanical





*“The Valley CTE Project is driven by a dedication to empowering our community through cutting-edge education. By linking classroom knowledge to real-world skills, we’re not only shaping careers but also **paving the way for future success.**”*

– Christopher Lea Maintenance and Operations SAUSD



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