

Semiconductor Exhaust Challenge Solved: The Duravent Group Design Team Delivers Vital System for Tech Giant

Location: Durham, NC

Application: Diesel Driven Fire Pump Exhausts (nine fire pumps)

Industry: Advanced Manufacturing

The Challenge

In the late stages of construction for a major semiconductor manufacturing facility, a critical oversight came to light: the engine exhaust systems, specifically for nine large fire pump units, had not been accounted for in the original plan. All other contracts had been awarded, and the site was well into buildout. Fire pumps, which are vital to supporting the facility's sprinkler system during emergencies, required dedicated exhaust runs - nine in total (600+ feet of exhaust piping) - to handle the added load. This new scope introduced complex challenges. The mechanical contractor needed to navigate a tightly packed, utility-heavy space filled with sprinkler piping and structural supports. With little room for error and no time to spare, they needed a partner who could move quickly, engineer a compliant and installable solution, and deliver accurate materials without impacting the broader construction schedule.

CASE study

The Solution

The Duravent Group's Commercial Design Team served as a trusted strategic partner, collaborating closely with their local representative, Weeks Williams DeVore Inc., and the mechanical contractor to meet the project's demanding requirements. Together, they formed a cohesive team to solve the late-stage design challenge and deliver a codecompliant exhaust solution for the fire pumps.

"The Duravent Group Commercial Design Team really excelled on this project.

The design engineer, customer service team, Southeast RSM, and Vice

President of Commercial Sales all worked together with Weeks Williams DeVore

Inc. and the mechanical contractor to deliver this sizable order for IPS-C2.

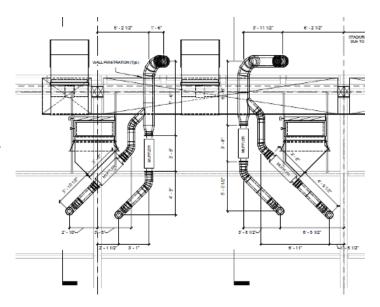
Communication was clear, all delivery dates were met, and all product was

received in good condition."

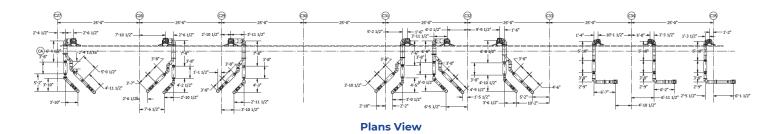
- Weeks Williams DeVore Inc.

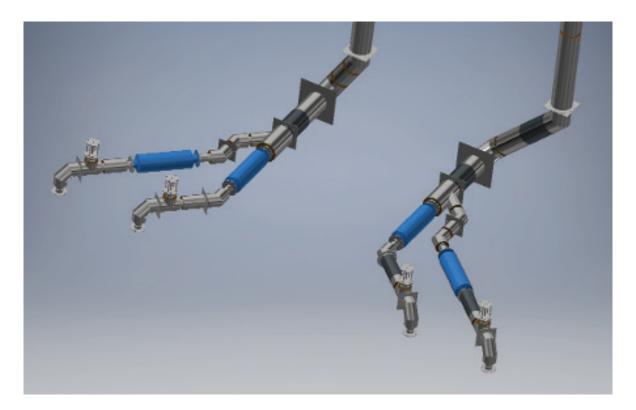
With the construction site already active and space at a premium, the design team initiated remote layout reviews and planning sessions to assess site constraints. They performed precise vent sizing and system calculations to meet performance and code requirements while optimizing the layout for tight clearances and support access.

To facilitate a smooth installation, the team delivered detailed, clearly labeled submittal and installation drawings, helping drive fast approvals and eliminating confusion in the field. As construction conditions shifted, the Duravent Group remained agile, quickly issuing drawing revisions and adapting support placements to meet real-time needs. Coordinated logistics ensured that every component arrived in full, on time, and ready for installation.



CASE study





Throughout the process, Weeks Williams DeVore's in-depth knowledge of the Selkirk product line helped streamline communication between the design team and the contractor, ensuring everyone remained aligned and responsive.

"Our knowledge of the Selkirk system made collaboration smooth and efficient. The team's responsiveness and technical clarity helped us meet tight deadlines without sacrificing quality."

- Weeks Williams DeVore Inc.

CASE study

The Results



Nine exhaust systems delivered on time, on budget, to spec.



Seamless installation with all parts labeled and organized.



No delays or reworkdriven by clear documentation and strong partnership.

All nine exhaust systems were delivered on time, to spec, and within budget, allowing the project to remain on schedule and meet key milestones. Despite the constrained installation area, the system was installed smoothly with no disruption. Every component arrived labeled and accounted for, simplifying staging and minimizing onsite confusion. Clear documentation and rapid response times prevented costly delays and rework, saving time, money and labor.

This result underscores the strength of the partnership among the Duravent Group, Weeks Williams DeVore Inc., and the mechanical contractor, grounded in shared expertise, proactive communication, and a commitment to getting it right the first time.

"You can rely on the Duravent Group to provide exceptional design and documentation for the quality products they represent. With just a basic knowledge of the products and how they are applied by the requesting rep, the design process goes very smoothly with a high rate of success."

Weeks Williams DeVore Inc.

See what our Design Team can do for you! visit www.duraventgroup.com/commerical





