

DETROIT DISTRICT'S LITTLE CAESARS ARENA

Sports and Entertainment Chimney System

THE CHALLENGE

In April 2017 The Detroit Red Wings played their final game at Joe Louis Arena. Zetterberg scored in his 1,000th game and hockey legends paraded through the stadium for the last time. The Red Wings will launch their 2017 season at their new home in September: [Little Caesars Arena](#) in the 45-block Detroit District. The Arena is part of a \$650 million mixed-use development that has already landed over \$300 million in contracts for local Detroit businesses and \$500 million for state businesses.

The Contractor, Limbach — along with Hellmuth, Obata & Kassabaum (HOK); Hasegawa, Kitagawa & Sigma Automotive (HKS); Naramore, Bain, Brady & Johanson (NBBJ); and Smith Seckman Reid (SSR, a mechanical engineering firm out of Tennessee) — needed to common vent six Cleaver-Brooks Clearfire® commercial condensing appliances through a parking garage spanning more than 150 ft. They engaged Reps at Mechanical Resource Group and ENERVEX Michigan to design a Listed, fully integrated commercial venting and [draft control system](#) that would safely vent the six appliances to the outside while achieving desired efficiency.

THE SOLUTION

The teams installed a PowerStack EPS1 [Chimney System](#) with six 16" connectors and one 36" diameter common stack. A TDF-620 [Power Venter inline fan](#) was added to maintain perfect draft in the chimney system and properly vent the Cleaver-Brooks appliances to the outside.

Six 16" [Modulating Overdraft Dampers](#) (MODS) were used

JOB PROFILE

Location:

- Detroit, MI

Completion:

- July 2017

Owner:

- Little Caesars Arena

Architect:

- [HOK](#) with [HKS](#) and [NBBJ](#)

Engineer:

- Smith Seckman Reid ([SSR](#))

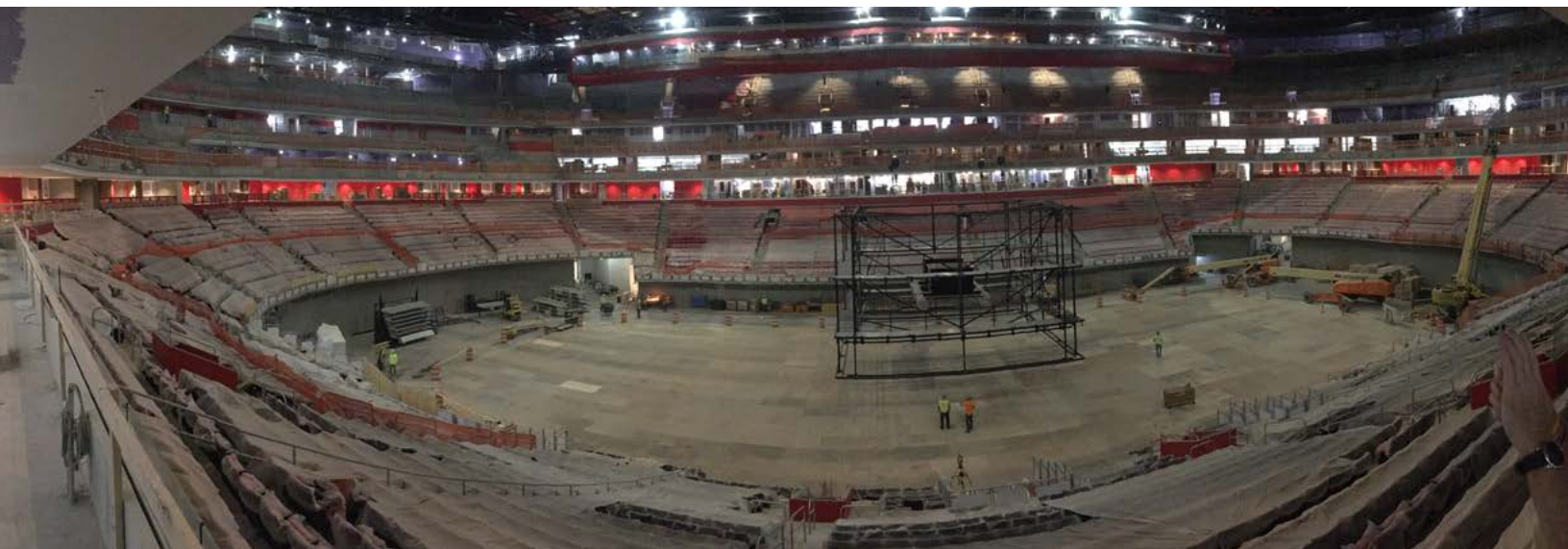
Contractor:

- [Limbach Engineering](#) (GC), [Ventcon](#) (Installer)

ENERVEX Rep:

- ENERVEX Michigan and Mechanical Resource Group

to balance out the connectors and prevent any backdraft when the appliances are not in use. Also included were seven EBC30 [Modulating Controllers](#), one for the fan and six for the MODS, to monitor and maintain pressure in the system.



Construction underway at Little Caesars Arena



ENERVEX's TDF-620 Power Venter inline fan



EBC30 Controllers are used for the Modulating Overdraft Dampers

THE RESULT

The integrated chimney system, fan and damper controls ensure that the Arena's commercial condensing appliances will experience perfect draft and operate at stated efficiency ratings at all times. It will save substantial energy costs, look great, and ensure safe operation when the much-anticipated Arena opens its doors.

ENERVEX was selected based on our many years of expertise designing chimney systems that deliver perfect draft and stated efficiency ratings. Due to the complex nature of this job, having a [complete venting solution](#) through a single source saves time and frustration by reducing the potential for finger pointing that goes on in typical multiple-supplier projects. This is our value to engineers, contractors and building owners... To solve issues quickly and create high-quality products for accelerated return on investment.

[Want to see a sneak preview of Little Caesars Arena?](#)

You can also view real-time progress of construction from day to day on the [Detroit District's Live Web Cam](#).

ENERVEX products installed:

- EPS1 PowerStack [Chimney System](#) (six 16" connectors and one 36" common stack)
- Six 16" [Modulating Over-Draft Dampers](#) (MODS)
- TDF-620 [Power Venter](#) inline fan
- Seven EBC30 [Modulating Controllers](#)

"ENERVEX is a great product! Your stacks are high quality along with an installation design that is superior to all its competition!"

- Scott Smith
Ventcon