

PROJECT PROFILE

Michigan Technological University John MacInnes Ice Arena - Tailored DuctSox Design Ensures Comfort While Preserving Structure

OVERVIEW

Michigan Technological University's John MacInnes Ice Arena needed a solution to deliver 60,000 CFM of conditioned air without compromising the ice surface or the building structure. Vyron provided a custom DuctSox fabric duct system that achieved precise airflow, reduced installation time, and maintained the arena's clean aesthetic. The result is a comfortable environment for fans and players alike!

CHALLENGE

- Deliver 60,000 CFM of conditioned air to the arena.
- Achieve 40+ ft air throw without disrupting the ice surface.
- Route ductwork through existing roof trusses with minimal visual impact.
- Secure ducting to the structure without major modifications.

SOLUTION

- Installed 54" DuctSox fabric ducts to distribute 60,000 CFM efficiently.
- Used Verona porous fabric to prevent condensation and dust buildup.
- Engineered orifice placement for precise throw while protecting the ice.
- Leveraged lightweight design to avoid structural modifications.
- Applied internal hoop system to keep ducts taut and clear of trusses.

RESULTS

Comfort Without Compromise

Vyron's tailored DuctSox solution enhanced air distribution and delivered a comfortable viewing environment for spectators, all while preserving the arena's structural and visual integrity. The lightweight design also reduced installation time, allowing the project to be completed on schedule with minimal disruption.

AT A GLANCE

Contractor: Northern Heating & Plumbing, INC

Engineer: Peter Basso Associates

Vyron Engineer: Jeremiah Merchak

Location: Houghton, Michigan

Application: Commercial

Products: DuctSox Fabric Ductwork
Tamco Control Dampers, Greenheck Volume Dampers, Greenheck Low Profile Fabra Hoods & Greenheck Curbs

Benefits

- Even Air Distribution
- Lightweight Design
- Fast Installation
- Clean & Low Maintenance



FUN FACT!

With 60,000 CFM, the system circulates the equivalent of 30,000 hockey pucks worth of air every minute, keeping the ice perfectly protected.

