

# HANOVER HIGH SCHOOL HANOVER, MASSACHUSETTS

## KEY PARAMETERS

- Type of Facility – New Construction (NC)
- Function – Education K-12
- Area – 3 stories, 157,000 square feet
- Project Completed – 2012

**Challenge:** MERV13 green building design. The new \$40 million 800-student capacity high school project involved demolition of the current school and construction of new classrooms, labs, fitness center, multipurpose rooms, teacher planning centers, band and chorus rooms, auditorium, library, gymnasium, locker rooms, cafeteria, kitchen, administrative offices, and lobby. The project is on a 25-acre site abutting wetlands. Responding to master plan developed through inclusive community visioning workshops, the school meets [MA-CHPS](#) sustainability standards. The three-story academic building is organized around a "town square" cafeteria, which serves as a central student hub during the day and public meeting area for evening use. Classrooms and labs are arranged in clusters, with specialized labs for science, math and world languages.



The school also features a three-part design-build suite, in which the glass-walled design lab overlooks separate robotics/engineering and wood fabrication labs, allowing students to move seamlessly from one space to another as their projects require.

**Solution:** Dynamic V8 Air Cleaning Systems. Thirty eight Dynamic V8s were installed in fan coil units.



**Results:** The Dynamic V8 Air Cleaning Systems achieve MERV13 minimum efficiency while operating with significantly lower static pressure resistance than conventional passive filters. Because of the exceptional dust holding capacity inherent in the V8, replacement media will not require changing for several years.

According to Dom Puniello, the HVAC design engineer, "We selected the Dynamic V8 to meet the project's high efficiency MERV 13 filtration requirement due to its low pressure drop that reduces fan horsepower and reduces operating and maintenance costs significantly."

## TEAM

- Owner – Town of Hanover, MA
- Architects – HMFH Architects
- Engineers – Garcia, Galuska, DeSousa Consulting Engineers, Inc.
- General Contractor – Callahan, Inc.

## MECHANICAL SYSTEMS

- HVAC – Chilled Beams, Daikin
- Controls – Delta Controls DDC

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