

## Willard Elementary School

### GREEN CASE STUDY

**CLIENT:** 

Concord Public Schools

REPRESENTATIVE OFFICE:

Northeast Air Solutions

ARCHITECT/DESIGNER:

Office of Michael Rosenfeld, Inc (OMA)

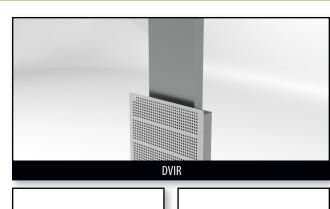
LOCATION:

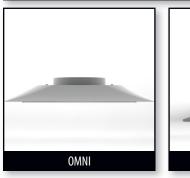
Concord, Massachusetts

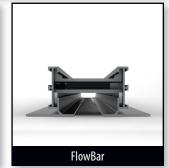
#### ABOUT THE PROJECT

The new Willard Elementary School, which opened its doors for the first time this year, is a state-of-the-art building designed by the Office of Michael Rosenfeld, Inc (OMA) Architects. This award winning, full-service architectural firm listened to and incorporated many design elements from the clients to create a new education facility for young minds to grow and prosper.

The students, faculty and staff wanted their new building to be something that their previous one wasn't - to be an energy efficient and safe structure that everyone would be proud of. OMA created a green learning environment for all students, grades K-5 to learn from. The students have created and produced podcasts and brochures that highlight additional sustainable features. Touch screens monitor the elementary school's energy consumption. The library, located in the heart of the school, benefits from an abundance of natural light. The natural light is able to









penetrate deep into the building by light shelves that are located in the classroom.

#### THE TITUS SOLUTION

When designing and building an energy efficient facility, the HVAC systems are extremely important and cannot be overlooked. OMA not only relied on utilizing diffusers and grilles, but wanted to create a unique HVAC system that would have all other elementary facilites green with envy. Displacement Ventilation, a unique method of air distribution, was selected and Titus had the perfect product - DVIR.

The DVIR is a rectangular displacement diffuser with a unidirectional discharge designed for flush mount applications. It provides air distribution by supplying a large volume of air at a low velocity to the occupied zone. Adjustable air nozzles inside the unit can create different airflow patterns in the space to optimize occupant comfort.

The DVIR displacement unit wasn't the only Titus product used in the elementary school. Williard Elementary also has several other high performance grilles and diffusers to provide a total air distribution solution. The OMNI diffuser can be seen in various locations as well as the FlowBar.







The OMNI is an architecturally pleasing unit that delivers a uniform 360 degree horizontal air pattern. The FlowBar architectural linear diffuser system maximizes engineering performance without sacrificing aesthetic considerations of the designer. FlowBar's outstanding performance allows higher air flows than conventional linear diffusers and produces lower noise levels.

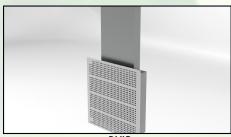
### THE END RESULT

Willard Elementary School is a remarkable achievement in Green Building design and cooperation. The Concord, Massachusetts community received a unique school that has energy efficient technology both inside and out while creating the perfect learning environment for their children to grow and develop.



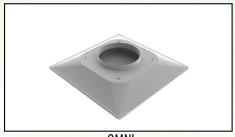


# **Titus Products List**



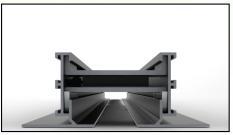
The DVIR is a rectangular displacement diffuser with a 1-way discharge designed for flush mount applications.





The OMNI diffuser is a ceiling diffuser that gives a uniform 360 degree horizontal air pattern without excessive noise or pressure drop.

OMNI



FlowBar

The FlowBar linear diffuser delivers higher airflow with lower noise levels.

