

Proven Indoor Air Quality for Learning Environments Sample Project References





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### **PROJECT REFERENCES**



South Education Center - ID287 Richfield, Minnesota LEED<sup>®</sup> Certified



Bridgewater State University Bridgewater, Massachusetts LEED<sup>®</sup> Silver



Hudson Valley Community College Troy, New York

Project	Engineer	Location
Primary/Secondary Education		
Evergreen Park Elementary	ATSR	Brooklyn Ctr, M
Mississippi Elementary	ATSR	Coon Rapids, M
Roosevelt Middle School	ATSR	Blaine, MN
Johnsonville Elementary	ATSR	Blaine, MN
Morris Bye Elementary	ATSR	Coon Rapids, M
University Elementary	ATSR	Blaine, MN
Centennial Elementary	DLR	Circle Pines, MN
Riverview Elementary	ATSR	Farmington, MN
Alice Smith Elementary Jackson Middle School	EDI-ESG ATSR	Hopkins, MN Champlin, MN
LO Jacob Elementary	ATSR	Coon Rapids, M
PS 32K - Samuel Mills Sprole	Loring	Brooklyn, NY
PS 746K	DVL	Brooklyn, NY
Glen Lake Elementary	EDI-ESG	Minnetonka, M
Coon Rapids Middle School	ATSR	Coon Rapids, M
Zimmerman Elementary	JCI	Zimmerman, MI
South Education Center (ID287)	TSP	Richfield, MN
Adams Elementary	ATSR	Coon Rapids, M
Champlin Elementary	ATSR	Champlin, MN
Eisenhower Elementary	EDI	Hopkins, MN
Hopkins West Jr. High	EDI	Hopkins, MN
Central High School Castle Elementary	DLR DLR	St. Paul, MN St. Paul, MN
Minnewaska East Elementary	EEA	Glenwood, MN
Zumbrota Schools Equipment Package	Strategic Sol.	Zumbrota, MN
Creighton Prep School	DLR	Omaha, NE
Foley Schools	ATSR	Foley, MN
Zumbrota Middle School	Strategic Sol.	Zumbrota, MN
Lowell Elementary	Strategic Sol.	Brainerd, MN
Orono Elementary	KFI	Orono, MN
Orono High School	KFI	Orono, MN
Eisenhower Community Center	EDI	Hopkins MN
Orono Intermediate School	KFI	Orono, MN
Lincoln High School Milaca Schools	DLR Stratogic Sol	Milaca, MN
Meadowbrook Elementary	Strategic Sol. EDI	Golden Valley, I
Webster Elementary	DLR	St. Paul, MN
Princeton High School	EDI	Princeton, MN
PS 101K	Goldman Copeland	Brooklyn, NY
PS 398 - Walter Weaver	Loring	Brooklyn, NY
Little Falls Middle School	Strategic Sol.	Little Falls, MN
Little Falls High School	Strategic Sol.	Little Falls, MN
Bluff View Elementary	Strategic Sol.	Lake City, MN
Lincoln Middle School	Strategic Sol.	Lake City, MN
Lincoln High School Lincoln Little Falls	Strategic Sol.	Lake City, MN
Lincoln Lake City	Strategic Sol. Strategic Sol.	Little Falls, MN Lake City, MN
Northport Elementary	KFI	Brooklyn Ctr, M
Lincoln Elementary	Design Tree	Alexandria, MN
Lincoln Park Middle School	LHB	Duluth, MN
McAuliffe Elementary	Wold A/E	Hastings, MN
Gatewood Elementary	EDI	Minnetonka, M
Hopkins West Jr. High	Dolejs	Minnetonka, M
North Education ID-287	TSP	Plymouth, MN
Burnsville Project A	ATSR	Burnsville, MN
Longfellow Elementary	ATSR	Rochester, MN
Washington Elementary	ATSR Brining Eng	Rochester, MN
Sinclair Lane Elementary School Mason City High School	Brinjac Eng. AKF	Baltimore, MD Mason City, MN
	AIM	mason city, MN

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ingineer	Location	КСР
TSR	Brooklyn Ctr, MN	MMS
TSR	<b>u</b>	
TSR	Coon Rapids, MN Blaine, MN	MMS
TSR	•	MMS
TSR	Blaine, MN	MMS
TSR	Coon Rapids, MN	MMS
LR	Blaine, MN	MMS
TSR	Circle Pines, MN Farmington, MN	MMS MMS
DI-ESG	Hopkins, MN	MMS
TSR	Champlin, MN	MMS
TSR	Coon Rapids, MN	MMS
oring	Brooklyn, NY	NYTS
VL	Brooklyn, NY	NYTS
DI-ESG	Minnetonka, MN	MMS
TSR	Coon Rapids, MN	MMS
CI	Zimmerman, MN	MMS
SP	Richfield, MN	MMS
TSR	Coon Rapids, MN	MMS
TSR	Champlin, MN	MMS
DI	Hopkins, MN	MMS
DI	Hopkins, MN	MMS
LR	St. Paul, MN	MMS
LR	St. Paul, MN	MMS
EA	Glenwood, MN	MMS
trategic Sol.	Zumbrota, MN	MMS
LR	Omaha, NE	Mech Sales
TSR	Foley, MN	MMS
trategic Sol.	Zumbrota, MN	MMS
trategic Sol.	Brainerd, MN	MMS
FI	Orono, MN	MMS
FI	Orono, MN	MMS
DI	Hopkins MN	MMS
FI	Orono, MN	MMS
LR	Milaca MN	MMS MMS
trategic Sol. DI	Milaca, MN Golden Valley, MN	MMS
LR	St. Paul, MN	MMS
DI	Princeton, MN	MMS
oldman Copeland	Brooklyn, NY	NYTS
oring	Brooklyn, NY	NYTS
trategic Sol.	Little Falls, MN	MMS
trategic Sol.	Little Falls, MN	MMS
trategic Sol.	Lake City, MN	MMS
trategic Sol.	Lake City, MN	MMS
trategic Sol.	Lake City, MN	MMS
trategic Sol.	Little Falls, MN	MMS
trategic Sol.	Lake City, MN	MMS
FI _	Brooklyn Ctr, MN	MMS
esign Tree	Alexandria, MN	MMS
	Duluth, MN	MMS
old A/E	Hastings, MN	MMS
DI	Minnetonka, MN Minnetonka, MN	MMS MMS
olejs SP	Plymouth, MN	MMS
TSR	Burnsville, MN	MMS
TSR	Rochester, MN	MMS
TSR	Rochester, MN	MMS
rinjac Eng.	Baltimore, MD	Hobbs & Assoc.
KF	Mason City, MN	MMS
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#### **PROJECT REFERENCES**

### Project

#### Primary/Secondary Education

Hastings Middle School **Rice Lake High School Dresser Elementary** Four Rivers Education Center Commodore John Barry Elementary Kelly Middle School Summit Elementary Fremont Middle School Louisville High School Northpoint Elementary Adams Elementary School St. David's Center Marion Savage Elementary Northport Elementary School Mason City Schools Phase 5 Lakeview Elementary Sunset Terrace Elementary Parker Elementary Forest Lake High School Payne Tech School Franklin Middle School New Hope Learning Center Folwell Elementary Jefferson Elementary **RLCC Elementary Oklee Schools** PS62R Elementary School Bay View Middle School Waddell Elementary School Valley View Middle School Prairie Winds Middle School Tremper High School Mosinee High & Middle School Hewitt-Texas School Lewis F. Cole Middle School Hoover Elementary Rochester Beloit Todd Elementary School Beloit Merrill Elementary School Hastings Middle School Richfield Dual Language School DC Everest Junior High School **Kingsland Public Schools** Bamber Valley Elementary School Maynard Elementary School Salmon River CSD Stillson Elementary School DCE - Weston Elementary School DCE - Evergreen Elementary School CBP - Math & Environmental Science ATS&R DCE - Riverside Elementary School Crooked Lake Elementary School Mora High School Otsego Middle School Fisher School Franklin Elementary School Houston Schools MacArthur Elementary School Southland High School Christina Huddleston Elementary

Wold A/E DLR KFI Strategic Sol. **CSA** Group Bemis Assoc. Fanning/Howey Fanning/Howey Wold A/E ATSR Gilbert ATSR KFI AKF KFT Nexus Solutions Wold A/E ATSR French & Perrillo **MBN & ATSR** KFI ATSR ATSR DLR DLR AKF ATSR Bemis Assoc. Wold A/E Dolejs Assoc. Nexus Solns Nexus Solns Nexus Solns Becht Engineering Dunham Nexus Solns Nexus Solns Wold A/E Wold A/E Nexus Solns Hallberg Eng ISG ISG F/S Engineering ATS&R Nexus Solutions Nexus Solutions Nexus Solutions ATS&R CMTA Wold CMTA EDI-Dolejs EDI-Dolejs Buro-Happold ISG DLR Group

Hastings, MN MMS Rice Lake, WI MMS Dresser, WI MMS Channahon, IL Midwest Applied HC Nye Co. Philadelphia, PA Norwich, CT Norris & Ferraris Winston-Salem, NC Insight Partners Freemont, OH ElitAire Louisville, OH ElitAire Blain, MN MMS Coon Rapids, MN MMS Minnetonka, MN MMS MMS Savage, MN MMS Brooklyn Ctr, MN Mason City, IA Setpoint Lakeville, MN MMS Rochester, MN MMS Elk River, MN MMS Forest Lake, MN MMS Newark, NJ **D&B Bldg Solns** Thief River Falls, MN MMS New Hope, MN MMS Rochester, MN MMS MMS Rochester, MN Plummer, MN MMS Oklee, MN MMS New York, NY NYTS Green Bay, WI MMS Norris & Ferraris Manchester, CT Edina, MN MMS Mankato, MN MMS Kenosha, WI Masters Masters Mosinee, WI Wausau, WI Masters Fort Lee, NJ D&B Bldg Solns Rochester, MN MMS Beloit, WI Masters Beloit, WI Masters Hastings, MN MMS Richfield, MN MMS Schofield, WI Masters Spring Valley, MN MMS Rochester, MN MMS Maynard, IA Setpoint Covington, NY **Guckian Energy** Chippewa Falls, WI MMS Schofield, WI Masters Rothschild, WI Masters Champlin, MN MMS Ringle, WI Masters Andover, MN MMS Mora, MN MMS Otsego, MN MMS Fisher, MN MMS Mankato, MN MMS Houston, MN MMS Binghamton, NY **Guckian Energy** Adams, MN MMS Lakeville, MN MMS

Location

Reps

Engineer





Commodore John Barry Elementary **Philadelphia, Pennsylvania** LEED® Gold



Kelly Middle School Norwich, Connecticut

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## **PROJECT REFERENCES**

#### **RLET**<sup>®</sup> Designed by TROX<sup>®</sup>

Project	Engineer	Location	Rep	
Higher Education				
Lake Superior College	LHB	Duluth, MN	MMS	
University of MN - Morris Building	KFI	Minneapolis, MN	MMS	
University of MN - Akerman Hall	KFI	Minneapolis, MN	MMS	
St. John's Univ - D'Angelo Center	AKF Group	Queens, NY	NYTS	
St. John's Univ- St. John's Hall	AKF Group	Queens, NY	NYTS	
Ocean County College	French & Perillo	Lakewood, NJ	D&B Bldg Sons	
Bridgewater State University -	Vanderweil	Bridgewater, MA	HTS-NE	
Science Building				
Hudson Valley Community College	Vanderweil	Troy, NY	LJ Early	
Massachusetts's Institute of	WSP	Boston, MA	HTS-NE	Ct. John / all minimites
Technology - Math Building				St. John's University
BSU-Hagg-Sauer ALC	CMTA	Bemidji, MN	MMS	D'Angelo Hall
				Queens, New York



One of the most important pieces of equipment in the classrooms at South Education Center are the floor mounted displacement ventilation units. These diffusers utilize fresh OA from the DOAS units which induces room air across the hydronic coil and delivers low velocity supply air to the space via a method known as thermal displacement ventilation. This form of air delivery reduces the amount of minimum OA required to the space by increasing the ventilation effectiveness (ASHRAE 62.1) by nearly 50%. This reduction in minimum required OA greatly reduces the cooling and heating energy required to serve the space. By using water in the zone/classroom to condition the air rather than taking the air back to a central station AHU, the amount of heating and cooling required is also greatly reduced. Displacement ventilation also provides fresh clean air directly to the occupied zone, by carrying the

contaminants off-gassed from people and objects up to the unoccupied space. Once In the unoccupied space, those contaminants are directly exhausted from the zone.

QLCI displacement ventilators possess a combination cooling and heating coil to condition, and heat or cool the room air in that zone. This provides excellent, independent temperature control of each zone. In addition, there are no moving parts or filters in the unit, which greatly reduces maintenance requirements and costs. QLCI units provide the quietest air delivery method available. With no moving parts or fans placed in the classrooms, they are designed The QLCI provided a single product that is under the control of the mechanical contractor while delivering an effective displacement ventilation solution.

> - Paul Dvorak PE, LEED AP, Design Engineer

for quiet operation that meets the critical ANSI 12.60 standards (35 dba). These units provide a space with fresh, clean air, low CO2 levels, and replace traditional noisy mechanical equipment with a quiet and low maintenence alternative. Such benefits result in healthier, distraction free learning environment.

## **INTERESTED IN QLCI FOR YOUR PROJECT?**



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