

Proven Indoor Air Quality for Learning Environments Sample Project References





South Education Center - ID287 **Richfield, Minnesota** LEED® Certified



Bridgewater State University
Bridgewater, Massachusetts
LEED® Silver



Hudson Valley Community College **Troy, New York**

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



Location **Project** Engineer Reps

Primary/Secondary Education

Hastings Middle School Rice Lake High School **Dresser Elementary** Four Rivers Education Center 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 Franklin Elementary 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

Franklin Elementary School

MacArthur Elementary School

Christina Huddleston Elementary

Southland High School

Houston Schools

Commodore John Barry Elementary 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 **ISG** Maynard Elementary School **ISG** 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 ATS&R Mora High School **CMTA** Otsego Middle School Wold Fisher School **CMTA**

Wold A/E DLR KFI Strategic Sol. **CSA Group** Bemis Assoc. Fanning/Howey Fanning/Howey Wold A/E **ATSR** Gilbert **ATSR** KFI AKR KFT **Nexus Solutions** Wold A/E

ATSR ATSR 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

EDI-Dolejs

EDI-Doleis

DLR Group

ISG

Buro-Happold

Fort Lee, NJ Rochester, MN Beloit, WI Nexus Solns Beloit, WI Wold A/E Hastings, MN Wold A/E Richfield, MN Nexus Solns Schofield, WI Hallberg Eng Spring Valley, MN Rochester, MN Maynard, IA F/S Engineering Covington, NY ATS&R **Nexus Solutions** Schofield, WI **Nexus Solutions** Rothschild, WI Champlin, MN **Nexus Solutions**

Chippewa Falls, WI Ringle, WI Andover, MN Mora, MN Otsego, MN Fisher, MN Mankato, MN

Houston, MN Binghamton, NY Adams, MN

MMS MMS MMS Midwest Applied

Hastings, MN

Rice Lake, WI

Channahon, IL

Philadelphia, PA

Winston-Salem, NC

Dresser, WI

Norwich, CT

Freemont, OH

Louisville, OH

Blain, MN

Savage, MN

Mason City, IA

Lakeville, MN

Rochester, MN

Elk River, MN

Anoka, MN

New Hope, MN

Rochester, MN

Rochester, MN

Plummer, MN

New York, NY

Green Bay, WI

Oklee, MN

Edina, MN

Mankato, MN

Kenosha, WI

Mosinee, WI

Wausau, WI

HC Nye Co. **AERCON Corp Carson Solutions** ElitAire ElitAire

MMS Coon Rapids, MN MMS Minnetonka, MN MMS MMS MMS Brooklyn Ctr, MN Setpoint MMS

MMS MMS Forest Lake, MN MMS MMS Thief River Falls, MN MMS

> MMS MMS MMS MMS MMS NYTS MMS

Manchester, CT **AERCON Corp** MMS MMS

Masters

Masters Masters GBS, Ltd. MMS

Masters Masters MMS MMS

Masters MMS MMS Setpoint

Guckian Energy MMS Masters Masters MMS

Masters MMS MMS MMS MMS MMS

MMS **Guckian Energy** MMS Lakeville, MN MMS

Summit Elementary School Winston-Salem, North Carolina



Commodore John Barry Elementary Philadelphia, Pennsylvania LEED® Gold



Kelly Middle School Norwich, Connecticut



Project				
Higher Education				
Lake Superior College University of MN - Morris Building University of MN - Akerman Hall St. John's Univ - D'Angelo Center St. John's Univ- St. John's Hall Ocean County College				
Bridgewater State University - Science Building				
Hudson Valley Community College Massachusetts's Institute of Technology - Math Building				

BSU-Hagg-Sauer ALC

Engineer	Location	Rep
LHB	Duluth, MN	MMS
KFI	Minneapolis, MN	MMS
KFI	Minneapolis, MN	MMS
AKF Group	Queens, NY	NYTS
AKF Group	Queens, NY	NYTS
French & Perillo	Lakewood, NJ	GBS, Ltd.
Vanderweil	Bridgewater, MA	Trumbull-Campbell
Vanderweil	Troy, NY	LJ Early
WSP	Boston, MA	Trumbull-Campbell
CMTA	Bemidji, MN	MMS



St. John's University 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 guietest 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?

