



Nordson Headquarters **Fact Sheet**

Nordson's new corporate headquarters building is certified to meet Leadership in Energy and Environmental Design (LEED) certification. Developed by the U.S. Green Building Council (USGBC), LEED is an internationally recognized green building certification system that provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. The building has earned a certification level of Silver or Certified and is registered under the latest version of the certification rating system, LEED v3.

Some key sustainability issues addressed at Nordson's new building include:

- Protect Open Space
- Limit Storm Water Generation
- Reduce Heat Island Effects
- Efficient Landscaping Care
- Reduce Water Use
- Optimize Energy Use
- Reduce Construction Waste
- Optimize Indoor Environmental Quality



Key sustainability issues that were considered and the green design features that address them include:

Protect Open Space

Habitat, open space and rural land are being developed at a rate of over 2 million acres per year. Surrounding habitat and open space were protected by the project.

Nordson HQ project features:

- Project work boundary
- Half the site left undisturbed

Limit Storm Water Generation

Excessive storm water generation stresses the local sewer systems resulting in overflows during heavy rain and costing millions of dollars per year.

Nordson HQ project features:

- A parking lot constructed with permeable pavers and a bioswale landscape feature that helps limit storm water generation

Reduce Heat Island Effect

Dark colored roofs and paving in cities and suburban areas trap heat, causing them to be several degrees warmer than surrounding rural areas.

Nordson HQ project features:

- Reflective white roofing materials
- Partial green roof (roof with planted vegetation) incorporated into the design
- Concrete driveway and permeable paver system used for parking lot

Reduce Light Pollution

Excess site lighting can spill into night sky, affecting birds and obstructing views of the stars.

Nordson HQ project features:

- Full cutoff lighting fixtures
- Carefully focused design that limits the amount of light spill from the property

Optimize Natural Lighting and Views

Naturally lit spaces can reduce lighting costs by 50 percent or more. A connection to the exterior improves occupants feeling of wellbeing and happiness.

Nordson HQ project features:

- Care was taken so that all occupants have visual access to the outside and that spaces have natural light

Efficient Landscaping Care

Landscaping uses potable water and demand is typically highest at the times when or in areas where water is least available.

Nordson HQ project features:

- Native landscaping incorporated into the design
- Leaf mulches, which are native to the site, help retain moisture

Alternative Transportation

One gallon of gas not burned is 19.5 pounds of CO2 not released to the atmosphere. Alternative transportation either by bus, bike, or carpool should be encouraged by the project design.

Nordson HQ project features:

- Bike racks
- Building is located on public bus route
- Showers for bicycling commuters
- Preferred parking spaces for carpoolers and low emitting vehicles

Reduce Water Use

Reducing water use reduces load on municipal water systems and saves building owners money.

Nordson HQ project features:

- Use of low flow fixtures throughout the building, resulting in a 32 percent total water savings

Optimize Energy Use

Buildings are responsible for 48 percent of energy consumption in the U.S. If all commercial and industrial buildings reduced energy by 10 percent, it would be equivalent to taking 30 million cars off the road.

Nordson HQ project features:

- Energy modeling during the design process
- Efficient energy systems
- Optimized lighting design
- High performing glass and wall systems
- Anticipated energy savings is 17.5 percent from previous levels

- Care was taken so that all occupants have visual access to the outside and that spaces have natural light

- Approximately 90 percent of construction waste was recycled for this project

- 50 percent of wood used in this project was sustainably harvested according to standards developed by the Forest Stewardship Council (FSC)

Key sustainability issues that were considered and the green design features that address them include:

Commissioning

Commissioning is the process of a third party verifying the installation and performance of building mechanical systems, electrical systems, and controls. On average, commissioned buildings use 10-20 percent less energy.

Nordson HQ project features:

- A comprehensive commissioning plan
- Nordson engaged a commissioning agent
- Regular site visits

Reduce Construction Waste

More than two pounds of construction waste is generated from each square foot of construction. Most of that ends up in landfills.

Nordson HQ project features:

- Approximately 90 percent of construction waste was recycled

Wise Material Selection

Construction materials are often transported long distances, made from virgin materials, and without consideration of the environmental impact of the product.

Nordson HQ project features:

- Many materials have recycled content
- 20 percent of materials are regionally sourced
- 50 percent of wood used in this project was sustainably harvested according to standards developed by the Forest Stewardship Council (FSC)

Demand Control Ventilation

Ventilation systems are designed for maximum occupancy. When the building is not fully occupied, it will bring in more outside air than necessary unless CO2 sensors are installed.

Nordson HQ project features:

- Carbon dioxide sensors
- Building will measure CO2 levels and bring in outside air as required, based on occupancy

Optimize Indoor Environmental Quality

Often contaminants are introduced to the building during the construction process. This may include elements like: formaldehyde from construction materials, volatile organic compounds (VOCs) from sealants and dust from construction.

Nordson HQ project features:

- Ducts were sealed during the construction process
- Filters are regularly replaced
- Materials protected during construction
- After construction, building was “flushed out” with fresh outside air
- Low VOC paints and coatings
- Low VOC adhesives and sealants
- Green Label Plus carpets
- Plywood without added formaldehyde

Optimize Building Air Quality

Indoor air quality is typically worse than outside air quality.

Nordson HQ project features:

- Superior performance filters on HVAC system
- Careful exhausting of janitors closets
- Walk off mats at all main entries to reduce the introduction of contaminants

Comfort & Controllability of Indoor Environment

Often building occupants do not have control of the lights or thermostats in their areas. Giving occupants control increases occupant perception of comfort. Buildings need to be designed to control humidity and air speed as well as temperature in order to optimize occupant comfort.

Nordson HQ project features:

- Thermostats are set up and spaced so that occupants can control their areas
- All workstations have control of their own lighting
- Conference rooms have multiple lighting modes
- HVAC system controls temperature, humidity and air speed to provide comfort

- Buildings are responsible for 48 percent of energy consumption in the U.S. If all commercial and industrial buildings reduced energy by 10 percent, it would be equivalent to taking 30 million cars off the road.

Nordson sustainable practices derive from our Corporate Philosophy, which emphasizes our commitment to creating balanced, long-term benefits for all our constituencies: employees, customers, shareholders and communities. Throughout the organization we conduct business in a way that demonstrates our commitment to continuous improvement and the advancement of sustainable development.