

Sustainable Ventilation Systems



Nordic Geo Support focuses on sustainable solutions. The patented ventilation ducting from Mecanicaad considerably reduces energy and transport costs as well as being reusable for the next project or phase of a project.

The NordicGEO ventilation system offers:

- Large savings CO2 savings in transportation and energy use
- Reduction of power consumption used by vent systems by up to 50%
- Easily transportable underground
- Quick and easy to install
- Reusable
- Accurate and precision manufacture to the size required
- Easily adaptable for push and push/pull vent systems
- Robust and flexible
- Connects directly to vent fans, ensuring high performance and air quality
- The duct resists negative pressures and does not create recirculation issues

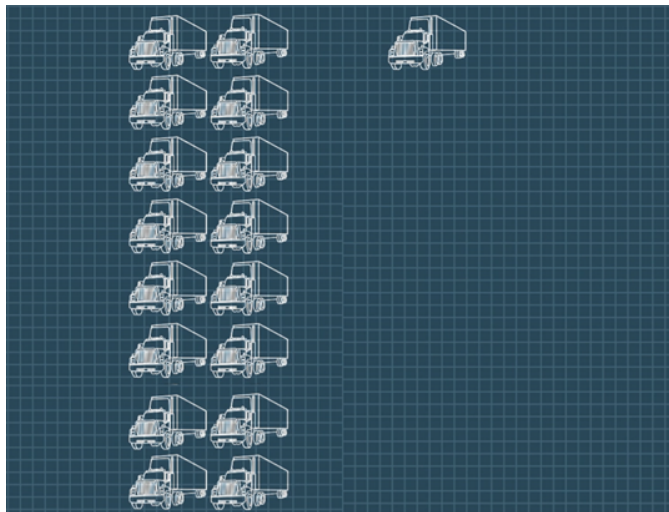


Transportation Savings

Savings from factory to site

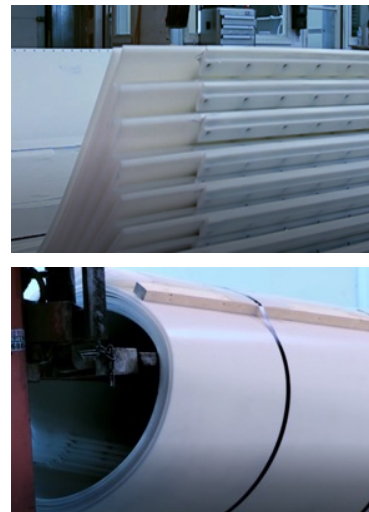
Steel or Fiberglass prefabricated ducting
1.2 M Diameter
60 M long
Requirement: Up to 16 trucks

NordicGEO Vent
1.2 M Diameter
975 M long
Requirement: 1 truck



Savings Underground

1 Crate = 20 Ducts



This reduces:

- CO2 Footprint
- Transport costs
- Underground storage space



Real Energy Savings

- Drag or friction, measured by the drag factor ('K' factor), creates increased turbulence in airflow.
- This can also increase the energy needed to push air through the ducting.
- A plastic surface reduces drag through the duct.

Drag factor for different options

Technology	K factor
NordicGEO Vent	0,0010 kg/ m ³
Steel	0,0022 kg/ m ³
Fibreglass	0,0024 kg/ m ³
Layflat	0,0037 kg/ m ³

Savings of energy of up to 50%



Actual Efficiency Ratio Performance Tests
For a 420 m length

Technology	Fan Requirement
NordicGEO Vent	500 Hp
Steel/Fiberglass	1250 Hp

NordicGEO Vent Operational Savings
using 0,039€ / kwh

Technology	Fan Requirement
Steel/Fiberglass	126 000€ per annum
Layflat	250 000€ per annum

Weight Saving

- Light weight allows easy assembly and installation
- Can be moved easily and readily
- Reduces the need for heavy lifting equipment in tight spaces
- Reduce time and money



Comparative Weight

Technology	Weight
NordicGEO Vent	30Kg
Steel	72 Kg

Duct 1,2m diameter x 2,5 m long

Fast, efficient installation