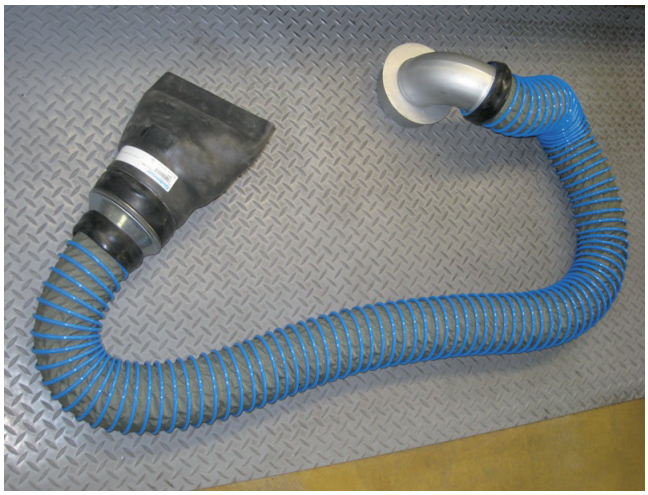
Technical leaflet	Date
98003010 0	2009-05-25

Nederman
IMPROVING YOUR WORKSPACE

In Ground Exhaust Extraction System

For stationary vehicles



On floor

Under floor

In-ground systems are especially suitable for new vehicle repair shops that is still on the planning stage, so there is a possibility to design the in ground pipe work.There are two types of in-ground systems - ”On- floor” system and ”Under- floor” systems.

On- floor” system
In the ”On- floor” system a lid in the floor is opened and a hose kit is attached to the extraction outlet when used. After the work is done, the hose is removed to its storing place and the lid is put back in closed position.

Features:

- Full flexibility to choose among Nederman hoses up to Ø200 (8”) , also high temperature hoses.
- Full flexibility to choose from Nederman nozzles
- No leakage flow in between hose and floor outlet. The whole fan capacity is used for exhaust extraction

“Under-floor” systems
In the “Under floor” system the hose is pulled up from under ground when used and pushed back under ground after the work is done.

NB!
An ”under floor” system must be sized for additional fan capacity since the hose and underfloor pipe doesn’t seal completely. For more information, see pressure drop diagram and technical description in the following pages.

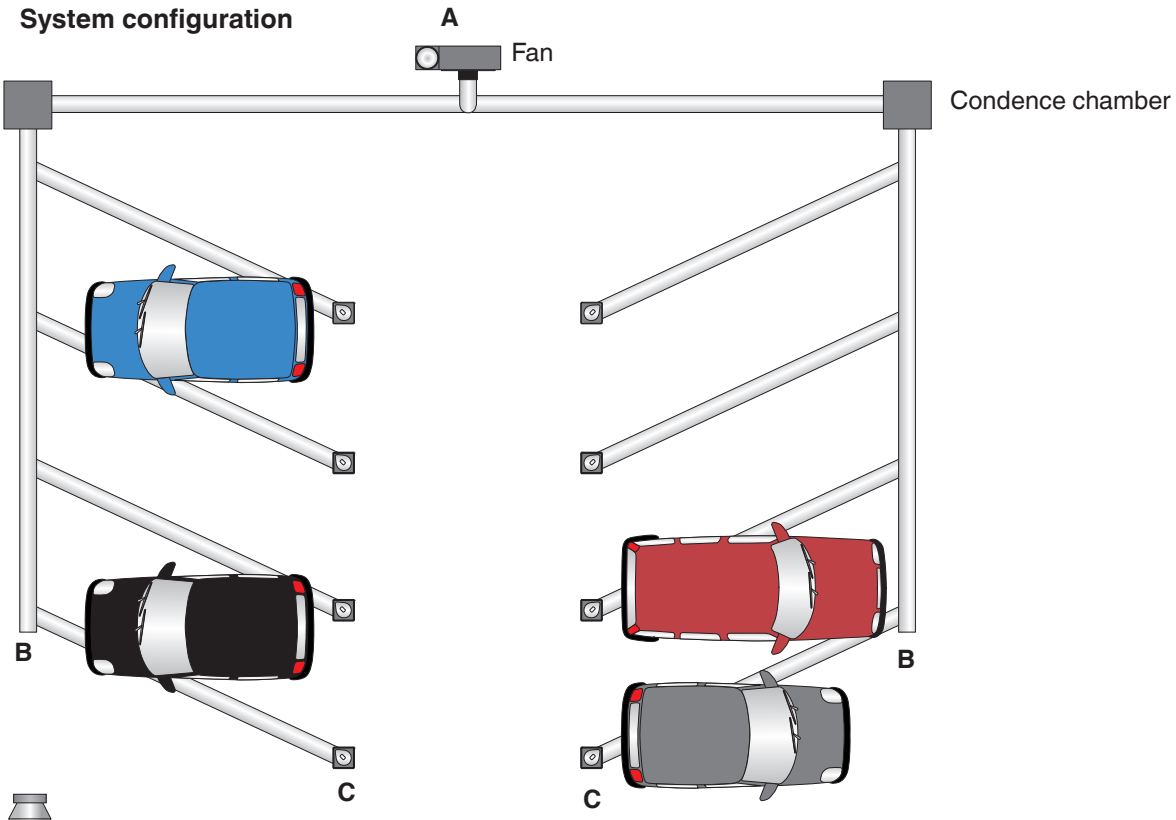
Features:

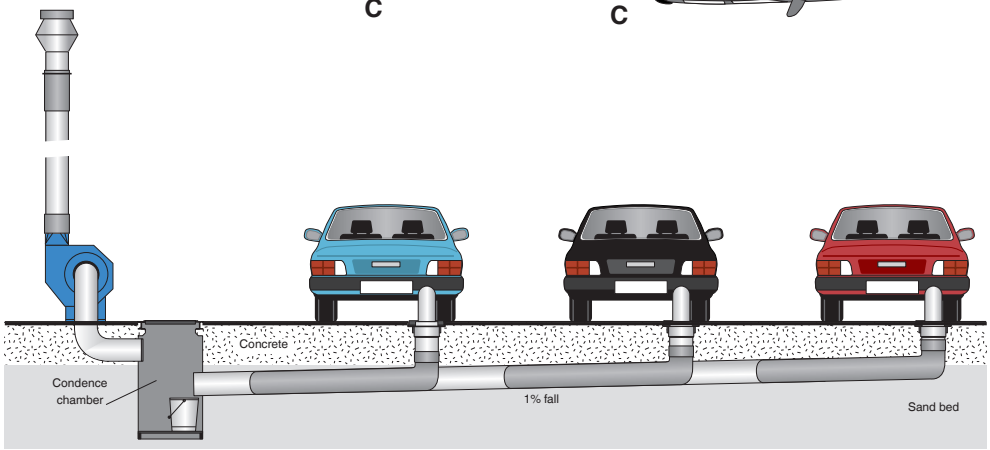
- Out of sight when not used
- Up to Ø100 (4”) hose – for passsenger cars /LCV
- A limited range of hoses and nozzles

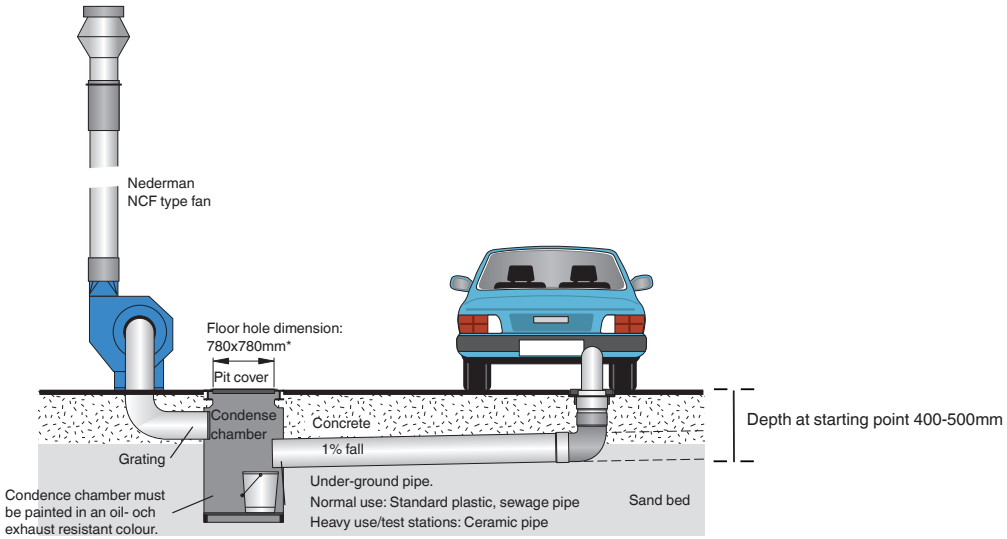
In both systems a condense chamber needs to be planned, in order to collect condensed liquid and possible water from floor.

Safety belt and safety hook to pull up the hose and to prevent the hose to be sucked into the under-floor system.

System configuration





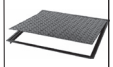


System components overview

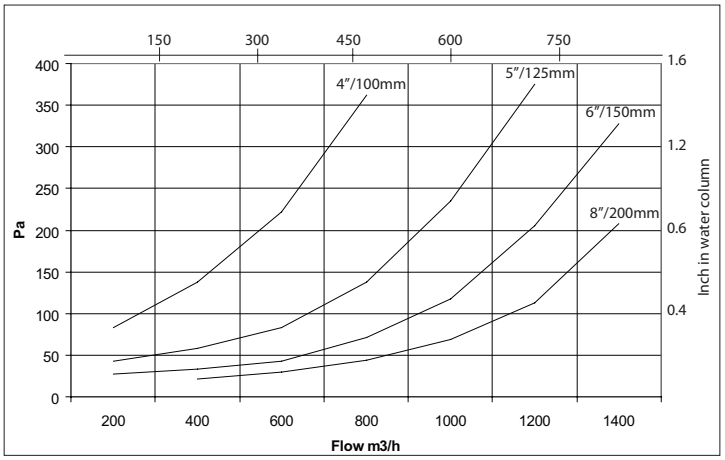
Application	Pipe Ø	Hose Ø	Floor plate	45° in-ground connection	Hose kits*	Vertical in-ground connection	Grid	Outlet bend	Hose& nozzle** Standard range	Pit cover
Under-floor	150	175	20346649	20346652	20346678	n.a.	n.a.	n.a.	n.a.	20346676
	150	100	20346649	20346652	20346679	n.a.	n.a.	n.a.	n.a.	20346676
On-floor	150	100	20346649	n.a.	n.a.	20346653	20346666	20346668	Free choice	20346676
	150	125	20346649	n.a.	n.a.	20346653	20346666	20346669	Free choice	20346676
	150	150	20346649	n.a.	n.a.	20346653	20346666	20346670	Free choice	20346676
	200	100	20346650	n.a.	n.a.	20346655	20346667	20346671	Free choice	20346676
	200	125	20346650	n.a.	n.a.	20346655	20346667	20346672	Free choice	20346676
	200	150	20346650	n.a.	n.a.	20346655	20346667	20346673	Free choice	20346676
	200	200	20346650	n.a.	n.a.	20346655	20346667	20346674	Free choice	20346676

* Hose kits for "Under-floor" system includes safety belt and safety hook.

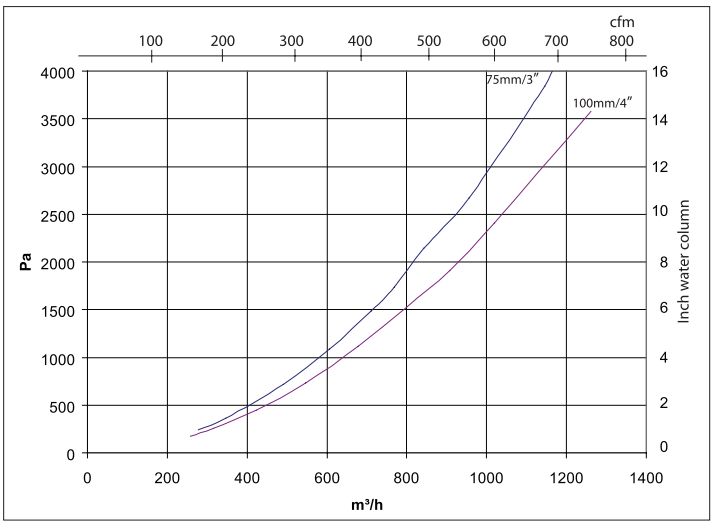
** 2.5m Hoses & nozzles for "On-floor" systen can be selected in the Nederman Product catalogue.

All	True under floor		On floor					All
	 DN150	 DN 75 DN100	 DN150 DN200	 DN150 DN200	 DN150 DN200			

Pressure drop in 2.5m/8.2" hose and elbow



Pressure drop in 3m 150mm Under-floor pipe + 2.5m hose kit



Accessories for On-floor systems

Hoses and nozzles from Nederman standard range (see separate leaflets)

Pressure drop diagram On-floor system

Pressure drop is for the hose kit, connected to point C in configuration drawing page 2.

Pressure drop diagram Under-floor system

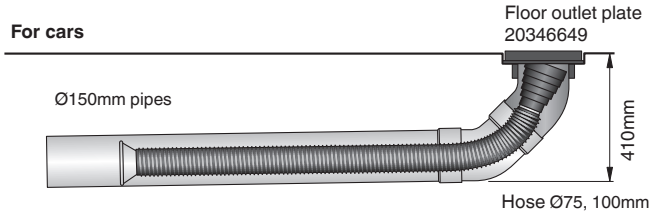
Under-floor system must be compensated for approx. 50% leakage between hose and under-floor pipe. Eg. If you need 300m³/h, you go in at 600m³/h and read 900 Pa (for 4" hose). This is the pressure drop from B to C incl. hose kit in configuration page 2.

Technical description

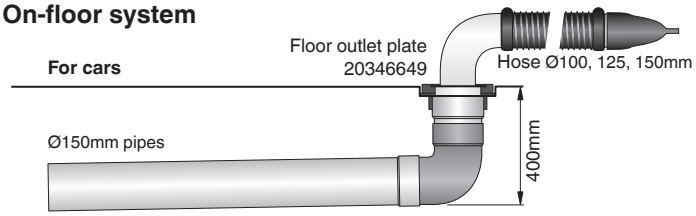
Design data

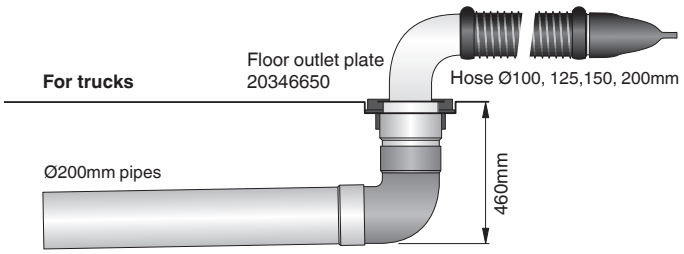
Heat resistance: 150°C continously and 170°C intermittent.

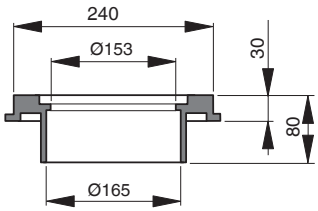
Under-floor system

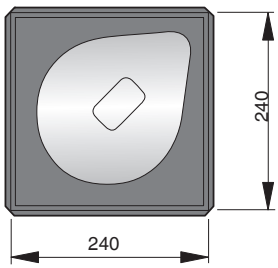


On-floor system

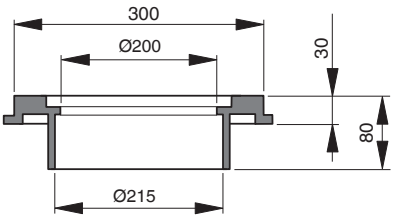


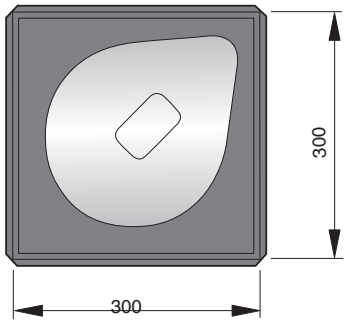






Floor outlet plate
20346649





Floor outlet plate
20346650

Environmental data

Sound level	The product, excluding fan, does not generate any sound.
Recycling level	100 %
Energy consumption	The product, excluding fan, does not consume any energy.