

MagnaStack

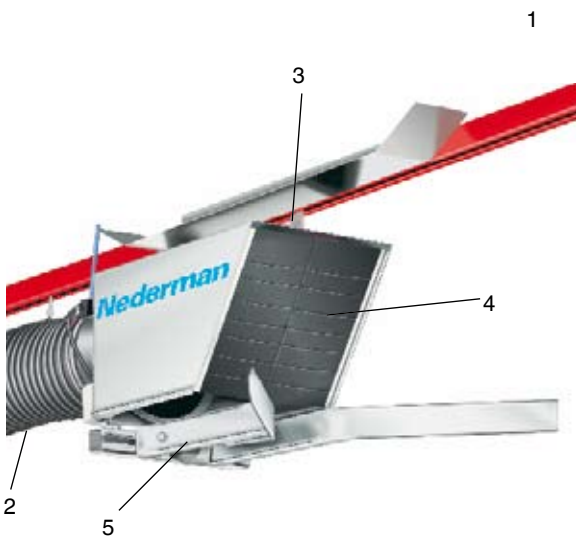
Exhaust extraction system for emergency vehicles with vertical stacks



MagnaStack is a fully automatic exhaust extraction system. The extraction unit designed as a hood enclosure automatically connects with the vertical exhaust stack as the vehicle is backed in to the parking bay. Guide arms position the laterally adjustable hood to the stack. The stack is locked to the hood with an electro-magnet.

As the vehicle moves towards the exit, the horizontal hose and extraction hood follow smoothly along the guide track. At the doorway the electric power is automatically switched off, instantly releasing the electro-magnet and the exhaust stack from the hood.

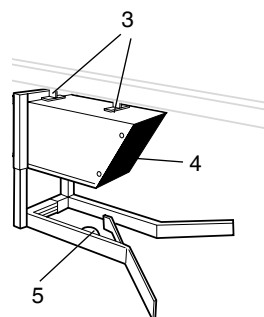
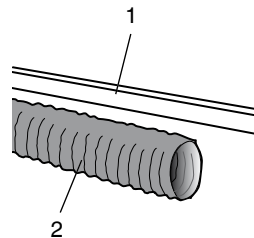
- Capacity: 1 vehicle per system
- Exhaust pipes: vertical stacks
- Normal exit speed: up to 15 km/h, 10 mph
- For reverse-in vehicles



An electro-magnet locks the hood to the exhaust stack.

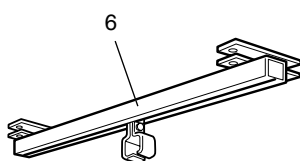
Guide arms automatically position the hood onto the exhaust stack as the vehicle is backed into its bay.

1. Track
2. Exhaust hose
3. Trolley
4. Extraction hood
5. Electro-magnet



Complete horizontal exhaust unit	
Guide track with horizontal hose Ø160 mm (6")	
Lenght m / ft	Part no
3.0 / 10	20804263
6.0 / 20	20804363
9.0 / 30	20804463
10.0 / 33	20812663
12.0 / 40	20804563
15.0 / 50	20804663

Extraction unit (pos 3, 4, and 5)	
Type	Part no
Complete extraction hood	20805163



Suspension devices (pos 6)						
Guide track	20804263 3 m	20804363 6 m	20804463 9 m	20812663 10 m	20804563 12 m	20804663 15 m
Suspension device 20371306	2	2	2	2	2	2
Suspension device 20371307	-	-	1	1	2	2

Technical specification

Track

Material	Steel with anti-corrosive paint
Operational length	max 13 m (43'')
Weight kg/m	4,5 kg/m

Suspension devices

Material	Steel with anti-corrosive paint
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Horizontal Exhaust hose

Diameter	Ø 160 mm (6'')
Temp. resistance	- 35 to +125° C cont, short term: +150° C
Material	Neoprene with steel helix, compressible 1:5

Trolley

8 wheels with bearings, attached to the hood	
Weight	12 kg

Extraction Hood

Material	Galvanized sheet metal
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Electro magnet

Voltage	24 V DC
Effect	5 VA

Disconnection

Electro-magnetic switch

Transformer

Prim. voltage	100-230 V 1-phase AC
Sec. voltage	24 V DC
Effect	5 VA

IP Class

Internal Protection	IP 67
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Total weight

Track incl horizontal hose	4.5 kg/m
Complete extraction unit	12 kg

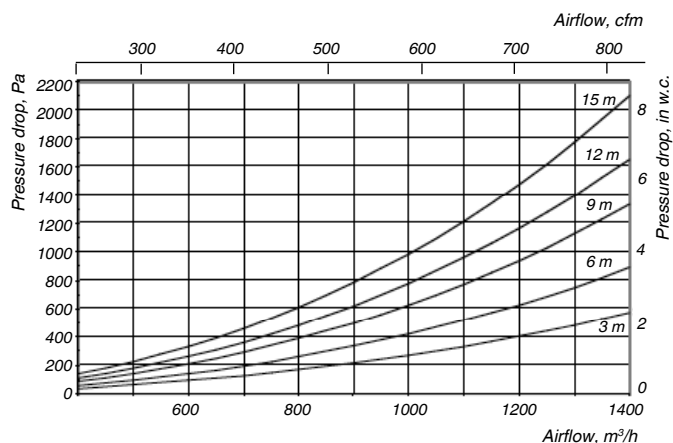
Environmental information

Recycling level	100 %
Energy consumption	4 W per extraction unit.

Accessories

General accessories	Part no.
Auto start /stop radio transmitter for vehicle	20801369
Auto start /stop radio receiver	20802669

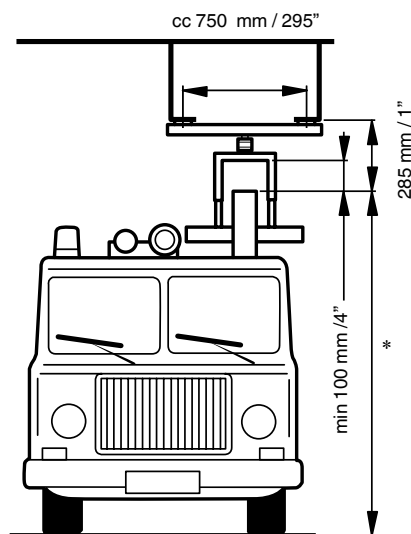
Pressure drop



Airflow recommendation:

800 - 1200 m³/h
(470 - 705 cfm)

Installation/mounting



* Determined by height of tail pipe

Mounting height: 3-4 m (10-13')

Mounting force, vertical: 4500 N

Mounting force, horizontal: 4500 N

Distance between suspension brackets: 3.0 m (10')

Nederman

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