

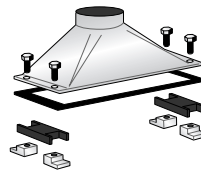
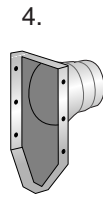
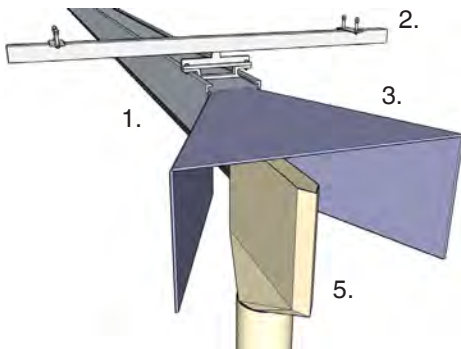
Vertical Stack System – VSS

Exhaust extraction systems for emergency vehicles



Vertical Stack is a fully automatic exhaust extraction system for vehicles with top exhaust pipes. The vehicle either drives backwards into the parking bay or drives through. The extraction unit is designed as a rail with a funnel in one or both ends. The funnel guides a stack adaptor, mounted on the exhaust pipe, into the rail. The sliding suspension provides automatic sideways positioning of the rail.

- Capacity – one vehicle per system
- Normal exit speed: up to 10 km/h, 5 mph
- For existing or new fire stations
- For back in or drive through vehicles



1. ALU 250 Rail
2. Sliding suspension
3. Funnel
4. Connection kit to duct system
5. Stack adaptor

Pos	ALU 250 rail kit	Part no.	Desired Rail length*					
			25" / 7.5 m	33" / 10 m	41" / 12.5 m	49" / 15 m	57" / 17.5 m	66" / 20 m
Quantity of each part no.								
1	Alu 250 Rail 2,5 m	815064	1		1		1	
1	Alu 250 5,0	815164	1	2	2	3	3	4
1	Rubbermoulding 10,0 m pair/m.	373427	1	1				
1	Rubbermoulding 15,0 m pair/m.	373429			1	1		
1	Rubbermoulding 20,0 m pair/m.	373431					1	1
1	Joining kit	815964	1	1	2	2	3	3
2	Sliding suspension kit incl bracket and safety wire	815264	3	4	5	6	6	7

Pos	Funnel and connections for Back In or Drive Through	Part no.	Back-In ←	Back-In ←	Back-In ←	Back-In ←	Back-In ←	Drive-Through ↔	Back-In ←	Drive-Through ↔
3	Funnel inlet/outlet kit	815364	1	1	1	1	1	2	1	2
4	End connection kit incl. hose	815464	1	1	1	1				
4	Top connection kit incl. hose	815564	-	-	-	-	2			2

Pos	Stack adaptor kit	Part no.
5	Stack adaptor 5"/125 mm	815664
5	Stack adaptor 6"/150 mm	815764
5	Stack adaptor 7"/175 mm	815864

* For other rail lengths, please contact KOMSA ITALIA S.R.L.

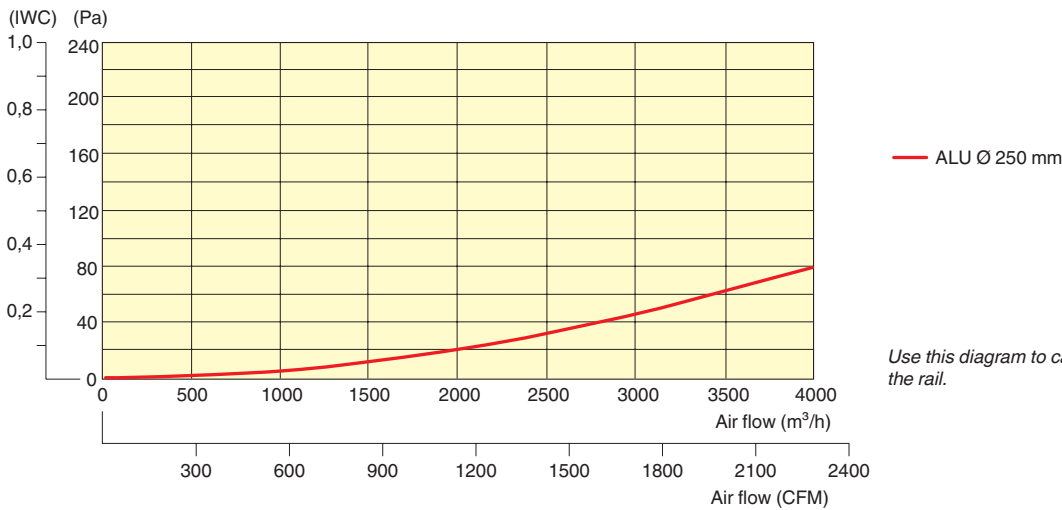
Technical Data

Exhaust Rail	
Material	Aluminium
Sealing lips	EPDM rubber
Cross section area	480 cm ² / 72 in ²
Weight	16 kg/m (11 lb/ft) incl sealing lips
Heat resistance	150°C / 302°F
Stack adaptor	
Material	Stainless steel
Funnel	
Material	Galvanized steel
Suspension devices	
Material	Steel

Environmental data

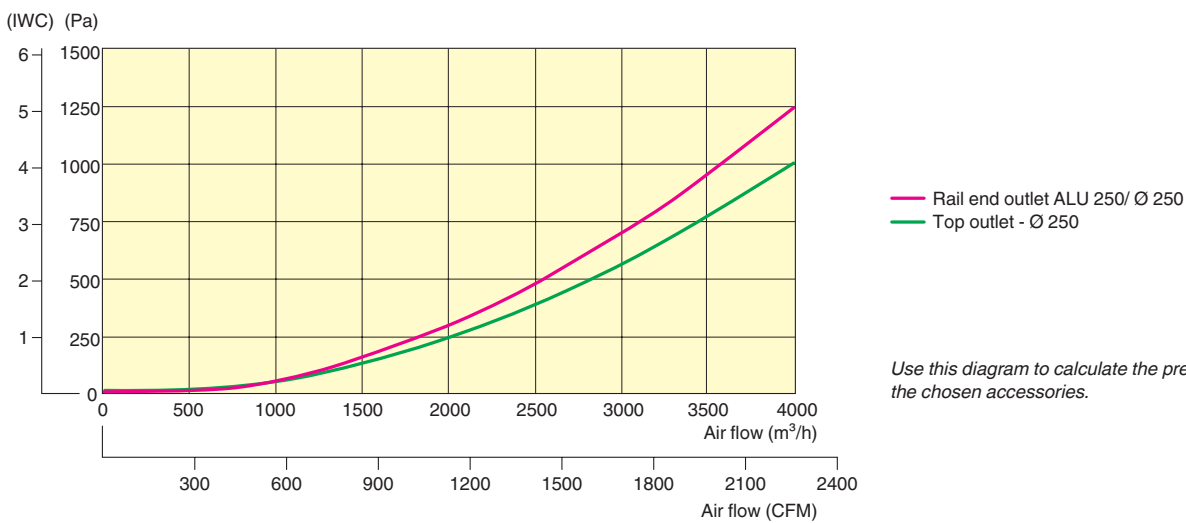
Sound level	The product, excluding fan, does not generate any sound.
Recycling level	100 %
Energy consumption	The product, excluding fan, does not consume any energy.

Pressure drop rail



Use this diagram to calculate the pressure drop of the rail.

Pressure drop



Use this diagram to calculate the pressure drop of the chosen accessories.

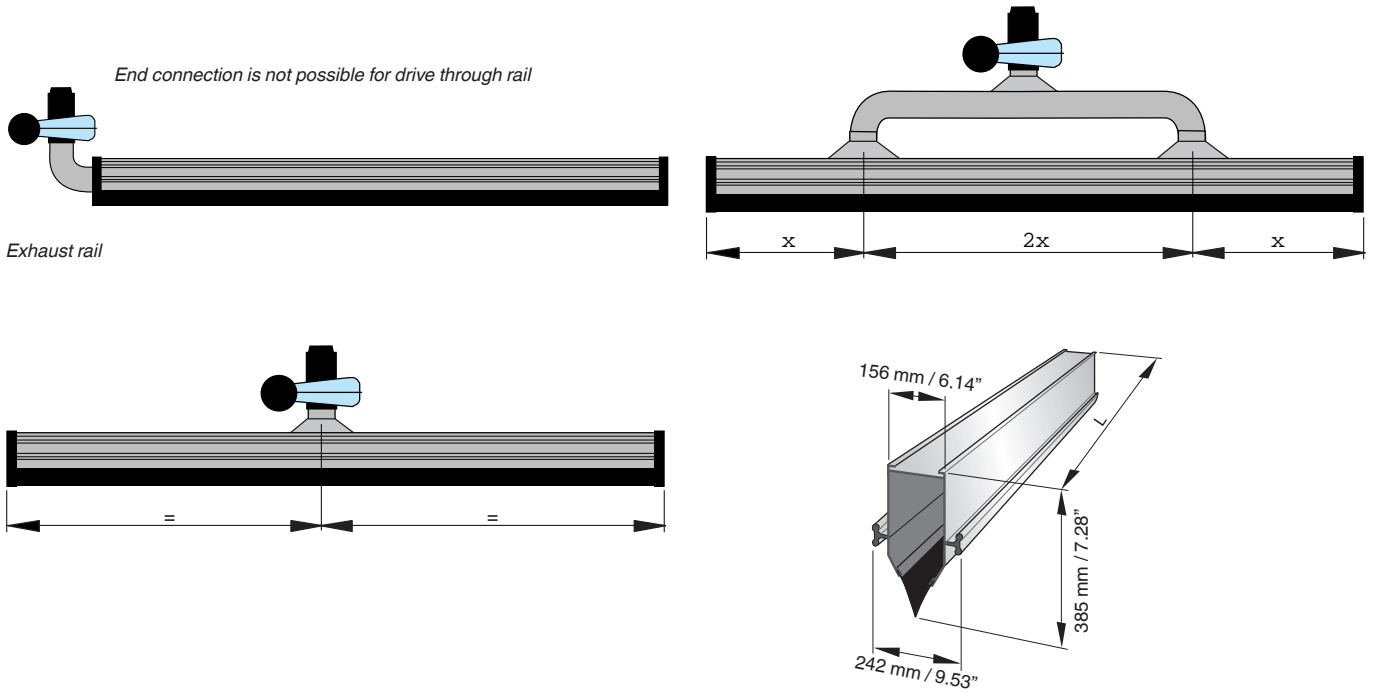
Recommended air flow for engines running at normal speed:
 Crash Truck: 1700 - 2000 m³/h (1000-1200 cfm)

Please note that the pressure drop diagram only apply to the Rail kit, extraction unit and connectors. To calculate the fan needed, you must include the pressure drop from the duct system as well.

Accessories

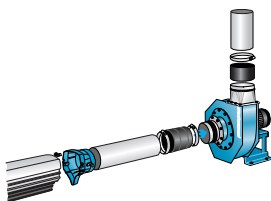
Accessories	Part no.
Auto start/stop radio transmitter for vehicle	000313
Auto start/stop radio receiver	000314

Dimensions

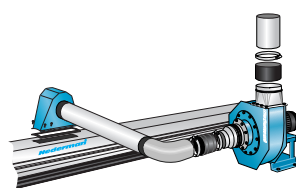


Fan connection alternatives

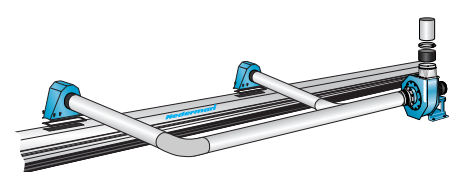
Depending on the length of rail there are different connection alternatives and suitable fans to choose. The fan should be placed outdoors to give negative pressure in all the indoor channels. The negative pressure should not exceed 2000 Pa / 10" w.g.



Side connection up to 1200 m³/h (707 cfm)
The end cover without lid can be used to connect the ducting to the fan. Connection Ø 160 mm (6,4 ") in sheet metal, is available.



Top connection up to 2400 m³/h (1414 cfm)
A connection cone (accessory) is mounted on top of the rail. Connection Ø 200 mm (8"). A hole for the cone, size 85 x 450 mm (3.3" x 17.7"), must be made in the rail.



For more than 2400 m³/h (1414 cfm)
Top connection with two or more cones (option). Connection Ø 200 mm (8").