



DUST
COLLECTING
SYSTEMS

Owner's manual for installation,
use and maintenance



MAXIRAIL™

This manual is property of the owner. Leave with the unit when set-up and start-up are complete.
AQC Dust Collecting Systems inc. reserves the right to change design and specifications without prior notice.

INDEX

1	Introduction	3
2	Information on the MAXIRAIL sliding suction rail	3
3	Presentation	4
3.1	Each 10' (3m) MAXIRAIL sliding suction segment rail include	4
4	Model numbers	5
4.1	Rail components	5
4.2	Complementary component for ducting connexion	5
5	Normal use	6
6	Operation and purpose	6
7	Components	6
8	Installation	7
8.1	Inspection of goods	7
8.2	Location	7
9	Assembly and installation	8
9.1	Mounting of MAXIRAIL sliding suction rail	8
10	Start up	9
11	Maintenance and inspection	10
12	Troubleshooting	11
13	Warranty	12
14	Limitation of liability	13
15	Applicability	13
16	Governing law	13

1 INTRODUCTION

This present manual refers to the MAXIRAIL sliding suction rail. It includes important information concerning the installation, use and maintenance of your system. Read this manual thoroughly and apply the directives and procedures. Staff and personnel using the system will have to trained on safety measures and maintenance instructions.



WARNING!

The use MAXIRAIL sliding suction rail require proper installation and handling. Contact A.Q.C. Inc. if you have any doubt in regard to the use of the sliding suction rail.
Not following directives and procedures could cause injuries or property damages.

2 INFORMATION ON THE MAXIRAIL SLIDING SUCTION RAIL

Model: _____ Serial number: _____

Delivery date: _____ Date of installation: _____

Name of customer: _____

Address: _____

Accessories: _____

Other: _____

3 PRESENTATION

MAXIRAIL sliding suction rail is designed to extend the working area of local extraction devices. They make it possible to reach areas where impurities are being created with, for example, a self-supporting arm, flexible hoses, hose reels etc. Due to a wide range of reaches, the rails are especially useful for the extraction of dust or gases from hard to reach areas.

Note: the device is not appropriate to work in an aggressive environment.

3.1 Each 10' (3m) MAXIRAIL sliding suction segment rail include:

- Rubber lips for proper air seal (also called zippers)
- Two (2) support brackets for ceiling or wall installation
- Sliding trolley
- Internal structure reinforcing rods
- Two (2) sliding rails for trolley
- Joiner (if multiple segments are ordered)
- End cap with or without outlet (if segment is end section)

The MAXIRAIL sliding suction rail is shipped in segments of 10' (3m) ready for field assembly.

4 MODEL NUMBERS

4.1 Rail components

Description	Model numbers
10 feet single section (including 2 end covers (one at each end) and 2 rail supports) (no trolley)	MS-MRA-10
10 feet end section (including 1 end cover, 1 joiner and 2 rail supports) (no trolley)	MS-MRA-11
10 feet additional section (including 2 joiners and 2 rail supports, no end covers) (no trolley)	MS-MRA-13
Trolley (with 6" connexion flange)	MS-MRA-14-6
Trolley (with 5" connexion flange)	MS-MRA-14-5
Trolley (with 4" connexion flange)	MS-MRA-14-4
Trolley (for MaxiReel)	MS-MRA-14H
Rail support	MS-MRA-15
Wall rail support	MS-MRA-16
End cover	MS-MRA-00-07
End cover with 6" connection sleeve	MS-MRA-00-07-06

4.2 Complementary component for ducting connexion

Description	Part No.
Slide gate (6 inch) with "T" fitting	MS-MRA-SG6

5 NORMAL USE

The MAXIRAIL sliding suction rail is designed to remove dust and smoke from the air resulting from a fabrication process. Each MAXIRAIL sliding suction rail is built as per the criteria and information supplied by the customer for a specific application and should not serve any other purpose without the approval of A.Q.C. Inc.

6 OPERATION AND PURPOSE

MAXIRAIL sliding suction rail is designed to exhaust and remove gas and dust pollutants from working area. It can be fitted with MAXAIR self-supporting fume arms (except for 8" diameter) or for exhausting vehicle engine fumes by means of MAXIREEL or MAXIDROP systems. The rail is not designed for use with corrosive, caustic and explosive gases.

Air volume per arm:

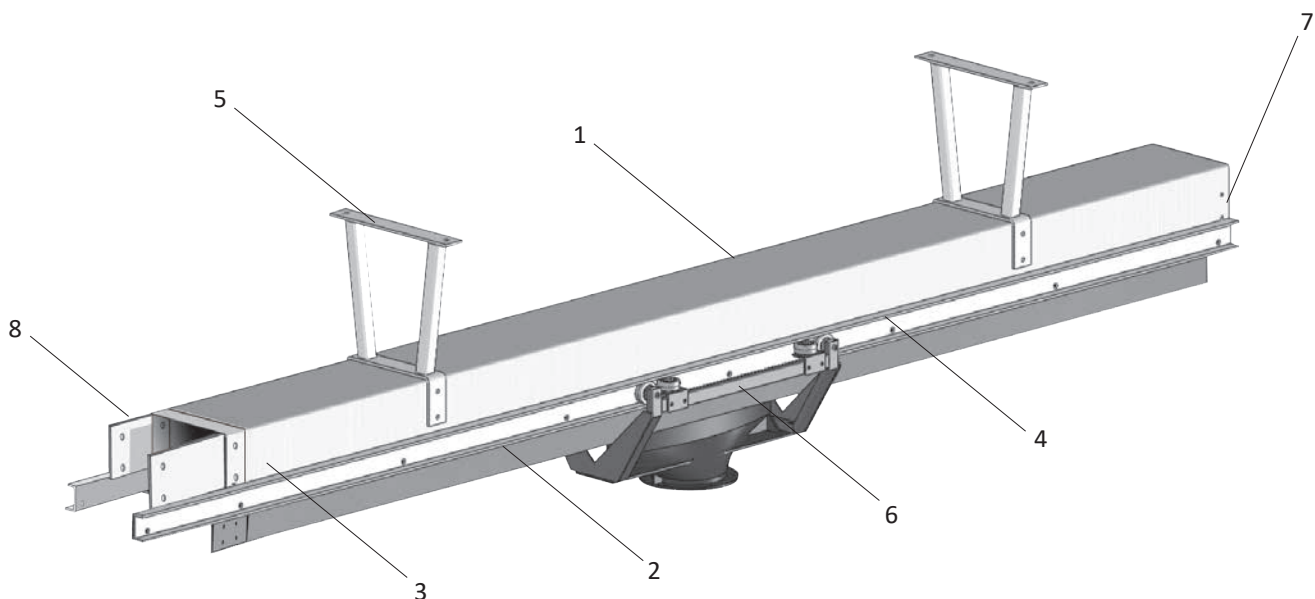
4"- 400 to 500 CFM

5"- 500 to 600 CFM

6"- 600 to 700 CFM

7 COMPONENTS

1. Aluminum rail (10' segment)
2. Rubber lips (zipper)
3. Internal structure reinforcing rods (not shown)
4. Two (2) U channels sliding rails for trolley
5. Two (2) support brackets for ceiling or wall
6. Sliding trolley
7. End cap with or without outlet (if segment is end section)
8. Joiner with fasteners



8 INSTALLATION



WARNING!

Installation of equipment must be performed as per local building laws and regulations. Structure must meet proper weight support of equipment.

MAXIRAIL sliding suction rail may be used in conjunction with fume arms, hose reels and extension swing booms. Refer to appropriate use and installation design in drawings below.

8.1 Inspection of goods

The MAXIRAIL sliding suction rail are shipped partly assembled and will require field assembly. Proceed with a visual inspection upon receiving the material and check for any apparent damage that may have happened during freight. Generally, shipment includes rail segment(s), support bracket, trolley and options if ordered. Report damages to carrier immediately. Failure to do so will void future claims.

8.2 Location

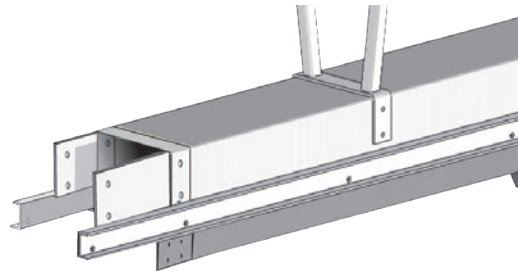
1. The area where the rail will be installed should be able to sustain the weight of such along with the accessories, ducting, fan or any optional equipment.
2. Installer should ensure area around the rail will be free of obstacles such as beams, lighting fixtures, overhead cranes, etc.
3. Installation height of support brackets (wall or ceiling mounted) should be selected according to optional equipment included with rail and engineer or customer's specifications.
4. For safety purpose, a team of two (2) employees should be assigned to the installation.

9 ASSEMBLY AND INSTALLATION

9.1 Mounting of MAXIRAIL sliding suction rail

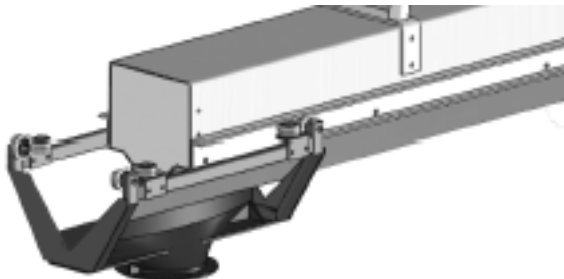
Note: when multiple rail sections are ordered, two (2) rail sections will be equipped with trolley stoppers and end caps identified as MS-MRA-11. One end section should be installed first and the other end section installed last.

1. Each 10' (3m) segment includes two (2) support brackets. Each bracket should be approximately 25" (625mm) from each end of the rail.
2. Bolt or weld each support bracket to the support structure.
3. Position MS-MRA-11 rail end section into bottom part of support bracket.
4. Drill holes into the rail matching the existing holes of the support brackets (fasteners supplied).

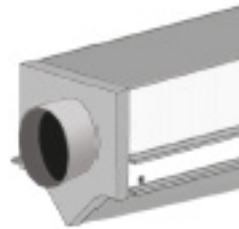


5. Install fasteners to support rail with support brackets. Installer may reach bolt or nut inside the rail by inserting his arm between the rubber lips.
6. Install additional rail section(s) identified as MS-MRA-13 by sliding the rail over the joiner. Note: holes for joiners into rail are drilled at the factory. However, final adjustment for proper U channels alignment may be required. Using C clamps, it is recommended to clamp both channels on each rail together before drilling holes for joiners. This procedure will ensure trolley moves smoothly from one rail to the next.
7. Install final MS-MRA-11 rail end section into bottom part of support bracket.
8. Remove either end cap to install sliding trolley(s) onto rail sections.

DO NOT INSTALL OPTIONAL EQUIPMENT ON TROLLEY NOW. Replace end cap on rail section after installing the trolley(s).



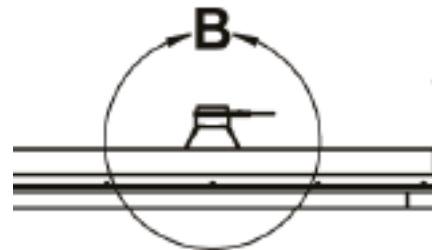
9. Depending on weight of optional equipment to be installed on trolley, bracing of the complete rail section may be required. It is advised to test the "swaying or coasting" of the rail. Push and pull the rail section and check for stability. If movement of rail (left or right, front or back) exceeds 0.5" (12 mm), brace complete rail sections to appropriate support structure.



10. Exhaust to main ducting system depends on length of complete rail system. Rail end exhaust connection (as shown below) is appropriate for rails up to 20' (6.5 m) long.

Exhaust rail system over 20' (6.5 m) long should have top mounted T fitting(s) with slide gates to obtain proper air balancement. One (1) T fitting per 30' (9m) of rail is recommended. Air balancement should be performed when complete system with optional equipment on trolley is installed.

11. Install optional equipment (ex: MAXAIR fume arm, MAXIDROP hose drop system) on trolley. Refer to appropriate optional equipment instruction manual for details.
12. Check rail stability by pushing and pulling on the complete rail section. Refer to step 9 in this section.



10 START UP

Note: all slide gates on T fittings or end connection should be fully opened before turning on the exhaust fan.

1. Turn fan on.
2. Check vacuum at fume arm hood or hose drop nozzle.
3. Check proper seal on rail rubber lips.

Note: it is normal to have a 2"- 4" (50-100 mm) gap on rubber lips, front and back of the sliding trolley. If rubber lips gap is more than 3" front and back of the trolley, adjust negative pressure by slightly shutting the air balancing slide gates.

4. Move trolley on rail to ensure easy travel.
5. Lock slide gate(s) after air balancing procedure.

11 MAINTENANCE AND INSPECTION

The chart indicated below shows different inspections and the frequency at which they should be performed.

Frequency of inspections	Components	Procedures
Daily	Trolley	Move trolley on rail to ensure it moves smoothly and freely.
	Optional equipment on trolley	Ensure optional equipment operates as per usage. Refer to optional equipment instruction manual for details and servicing.
Monthly	Rubber lips	Ensure rubber lips seal is identical as original start-up.
Yearly	Support brackets	Test rigidity of support brackets onto structure.
		Ensure the whole rail assembly does not sway or coast more than 0.5' (12mm).

12 TROUBLESHOOTING

Problem	Probable cause	Solution
Reduced airflow	Inproper air balancing	Perform balancing test and adjust.
	Gap on rubber lips	Negative static pressure not adequate. Check fan airflow capacity.
	Debris in rail or ducting	Remove debris from rail or duct.
Trolley hard to move	Negative static pressure too high. Rubber lips jamming the trolley	Perform balancing test and adjust.
	Obstacles on trolley U channels	Clear channels of obstacles or debris.
	Defective trolley casters	Grease or replace trolley casters.

13 WARRANTY

- 13.1 **Coverage:** Aireau Quality Control Inc. or its designated affiliate (the "Seller") selling the product (the "Product"), warrants that the Product sold by Seller will be free from defects in material and workmanship for a period of 12 months from the date of its installation or 14 months from the date of shipment by Seller, whichever date is earlier (the "Warranty Period").
- 13.2 **Exceptions:** This warranty does not apply to any Product or portion thereof that: (i) has been used in a manner not in compliance with Seller's or manufacturer's documentation and instructions, (ii) has had changes, alterations or repairs made by a person other than a person authorized by Seller, (iii) has been improperly installed or used or has been installed or used contrary to applicable codes, standards, laws and regulations, (iv) has been subjected to improper storage, accident, neglect, misuse or abuse, (v) has been damaged during shipping, (vi) has been subject to damages resulting from normal wear and tear, (vii) has not been used with appropriate fire protection systems or explosion venting when required or (viii) has not been installed by a licensed contractor with experience in fire and explosion hazards and applicable codes, laws and regulations. For greater certainty, this warranty does not apply to filters sold as part of, or for use with, the Product. Unless specifically accepted otherwise in writing by Seller, Seller does not warrant that electrical equipment will comply with any laws or regulations of the customer's jurisdiction.
- 13.3 **Claims:** To benefit from this warranty, customer must notify Seller in writing of the Product defect, which notice shall include a reasonable description of the defect, within 10 days from the date such defect is discovered or ought to have been discovered.
- 13.4 **Remedy:** During the Warranty Period and subject to the terms herein, Seller will, at its option, either: (i) repair or replace the Product or any defective parts or components (except for filters) with Product, parts or components (except filters) free from defect or (ii) credit or refund the purchase price of the Product. If Seller so requests, customer must return the defective Product to Seller's place of business determined by Seller. Shipping, installation, removal and re-installation costs will be solely borne by the customer. **The foregoing shall be customer's sole and exclusive remedy for any defect in the product, its parts and components and for any breach of the warranty herein.**
- 13.5 **Disclaimer:** Except as set forth in this section 1, each of seller, its affiliates and their directors, officers, subcontractors and representatives (the "seller parties") disclaims all representations and warranties, whether written, oral, express, implied, statutory, or otherwise, including all implied warranties of merchantability, quality, fitness for a particular purpose, non-infringement, and warranties arising from a course of dealing, course of performance, usage, or trade practice and customer hereby expressly waives any right related thereto. Without limitation to the foregoing and except as expressly set out herein, the seller parties do not represent or warrant that: (a) the use of the product will be timely, uninterrupted or operate in combination with any other hardware, software, system or data or (b) the product will meet customer's intended use, requirements or expectations.

14 LIMITATION OF LIABILITY

- 14.1 **Limitation of Liability:** Notwithstanding anything to the contrary, in no event will the seller parties' liability arising out of, or related to, the product or its parts and components, whether pursuant to contractual or extracontractual liability, tort or under any other theory of liability, exceed the price paid to seller for the product giving rise to such liability.
- 14.2 **Exclusion of Consequential and Similar Damages:** Notwithstanding anything to the contrary, in no event will the seller parties be liable for any indirect, punitive, special, exemplary, incidental, consequential or other similar damages of any type or kind (including loss of revenue, profits, use or other economic advantage, damages due to product failure, work stoppage or delays in delivery) arising out of, or in any way connected to, the product or its use, breach of contract, tort (including negligence), strict liability, product liability, or otherwise, regardless of cause, even if the seller parties had previously been advised of the possibility of such damages or could have reasonably foreseen them.
- 14.3 **Fire and Explosion and Acceptance of Risk:** Customer acknowledges that improper installation or use of the Product may result in fire or explosion. To minimize such risks, proper installation, operation, and maintenance of the Product in accordance with all applicable codes, standards, laws and regulations is critical. Prior to installation and use, customer shall ensure that the Product meets the applicable codes, laws and regulations, including those related to the addition of appropriate fire protection systems or explosion venting. Installation shall be performed by a licensed contractor with experience in fire and explosion and applicable codes, laws and regulations.

15 APPLICABILITY

- 15.1 The terms herein constitute the only warranty given by Seller with respect to the Product. No other terms and conditions, whether included on a purchase order or in any other document, shall apply or bind the Seller with respect to the Product warranty and all such terms and conditions and documents are expressly disclaimed.

16 GOVERNING LAW

- 16.1 These warranty terms will be governed by and construed under the laws in force in the Province of Ontario, Canada, excluding its conflict of law rules.