



Installation Docs



OUR SERVICES

Marine Air Flow manufacture ventilation systems for use in both the marine industry and commercial plant & equipment rooms.

Our products are Australian made and are packaged and shipped world wide. Our easy to install systems include:

- Moisture and dust reducing air intake grilles
- AC & DC Fans
- Air Dampers
- Air-On-Demand (auto fan speed controllers)

OUR MISSION

We aim to produce quality, reliable engine room ventilation equipment for our clients, that is developed using innovative technologies & sustainable systems. We will be proud to contribute to the economic and social health of our local & global clients & community.

By continuously striving for excellence we will offer our clients long term solutions that deliver beyond expectations.

OUR STORY

Marine Air Flow International was established in 2005 with the primary purpose of engineering a product to enable better engine room operating conditions. The added advantage of promoting a safer working environment for all those working in the marine industry, and the ability to support greater environmental operational practices is also of high importance to us.

We are a business that knows first hand the problems experienced in an engine room environment and how best to combat the issue of salt and water induction into this operating space.

Our products are Australian made and are packaged and shipped world-wide from our factory on the Gold Coast, Queensland.

OUR SUSTAINABILITY

We are very proud of our how green we as a company, and how green our products are.

- Our factory is also our home so we have eliminated the dreaded daily "commute"
- We have solar power that generates more than we can use

Engine room ventilation systems that work when it matters!



Installation Docs

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All installations can be downloaded from
<https://www.marineairflow.com/installation-information>



MAFI
Marine Air Flow International

**PURPOSE:**

The purpose of this document is to provide our AC High Vol Fan installation instructions so you can fit your MAFI product correctly & ensure its effectiveness.

RESPONSIBILITY:

It is the owner / and or ship repairer's responsibility to correctly install the MAFI products. Any alterations or deviations should be carefully considered. MAFI would appreciate all deviations to be referenced, made aware & noted for future reference.

WARRANTY:

For the AC high volume engine room fan to be covered under the full 3 year warranty, the vessel needs to have MAFI intake separator grilles installed to ensure the protection of the fan and engine room.

TOOLS, GUAGES & FIXTURES:

The installation kit provided contains the following items:

- Coloured Silicone Sealant
- M6 drill tap kit
- Coloured nylon isolation bushes
- M6 Stainless steel fixings
- Stainless steel metal self-tapping screws
- Isolation foam tape
- Fixing Template

VESSEL PREPARATION:

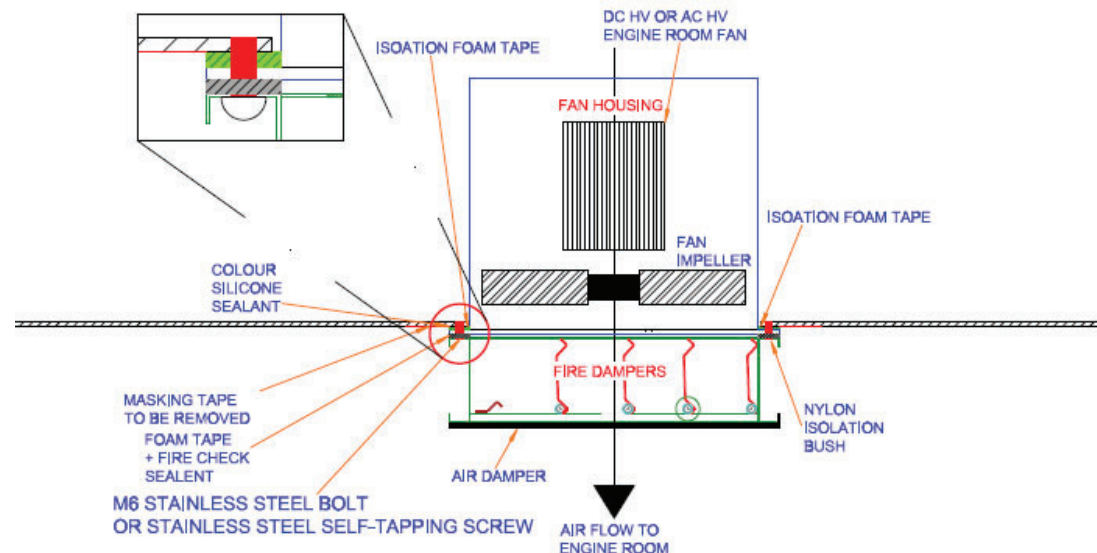
Confirm orientation and dry fit the air damper.

NB: Pay special attention to the coverage area along with checking clearances and that all surfaces are flat, allowing full contact. It is critical that there is a minimum contact coverage of 90%.



Installation Doc

1. Pencil mark the fixing holes with the fixing template in position. Take care to ensure the coating in the pre-drilled fixing holes is not damaged.
2. Mask tape around the fan flange perimeter +2mm all around neatly.
3. Drill and tap or pre drill holes ready for self-tapping screws.
4. Unbolt the packing bolts from air damper to AC high volume engine room fan.
5. Scotch-brite key the hull fixing surface and clean all debris with isopropyl solution or similar.
6. Scotch-brite key the fan flange fixing surface and clean all debris with isopropyl solution or similar.
7. Place the Isolation foam tape on the fan flange.
8. Use the provided sealant between the hull surface and the mounting flange surface generously.
9. Install the M6 stainless steel bolts or stainless steel self-tapping screws with the nylon isolation bushes through the air damper and fan, tensioning fasteners evenly around perimeter. NB: Do not tighten excessively. (Please see drawings details)
10. After tightening the fixings, a small bead of coloured sealant will form all round. Clean excess sealant off with soapy water (dishwashing detergent mixed with water) and bog application card (supplied in kit).
11. Remove the masking tape and ensure all excess sealant is cleaned up neatly.





PURPOSE:

The purpose of this document is to provide our air damper installation instructions so you can fit your MAFI product correctly & ensure its effectiveness.

RESPONSIBILITY:

It is the owner / and or ship repairer's responsibility to correctly install the MAFI products. Any alterations or deviations should be carefully considered.

MAFI would appreciate all deviations to be referenced, made aware & noted for future reference.

TOOLS, GUAGES & FIXTURES:

The installation kit provided contains the following items:

- Fire check Sealant
- Glue-in kit
- Air damper activation kit
- M6 stainless steel bolts
- Self-tapping stainless steel screws
- Coloured isolation bushes
- Isolation foam tape

VESSEL PREPARATION:

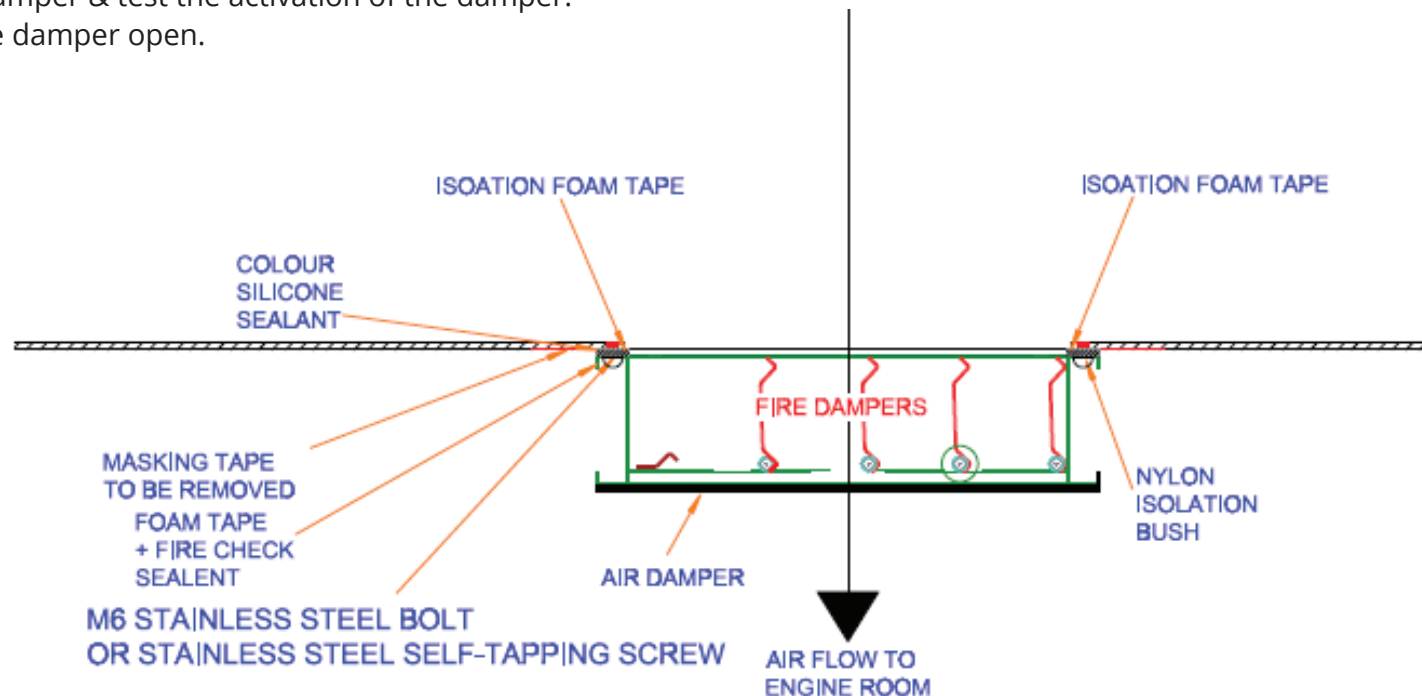
Confirm orientation and dry fit the air damper.

NB: Pay special attention to the coverage area along with checking clearances and that all surfaces are flat, allowing full contact. It is critical that there is a minimum contact coverage of 90%.



Installation Doc

1. Pencil mark the fixing holes with the supplied template in position.
2. Mask tape around the perimeter +2mm all around neatly.
3. Drill & tap referenced fixing holes for M6 supplied bolts or pre drill holes for supplied self-tapping screws.
4. Scotch-brite key the hull fixing surface & clean all debris with isopropyl solution or similar.
5. Use the provided fire check sealant between the hull surface and the mounting flange surface generously.
6. Install the fasteners, tensioning fasteners evenly around perimeter (NB: Please check the isolation foam tape is fitted where & as per the drawing). Do not tighten excessively.
7. After tightening the fixings, a small bead of fire check sealant will form all round. Clean excess sealant off with soapy water (dishwashing detergent mixed with water) and bog application card (supplied in kit.)
8. Remove the masking tape & ensure all excess sealant is cleaned up neatly.
9. Run conduit & activation cable from the damper to the activation point outside of the engine room.
10. Tension up the damper & test the activation of the damper.
11. Once tested leave damper open.





PURPOSE:

The purpose of this document is to provide our AC High Vol Fans and Damper combination installation instructions to fit your MAFI product & insure its effectiveness. **This is for A flow fans only.**

RESPONSIBILITY:

It is the owner / and or ship repairer's responsibility to correctly install the MAFI products. Any alteration or deviations should be carefully considered.

MAFI would appreciate all deviations to be referenced, made aware & noted for future reference.

WARRANTY:

For the AC high volume engine room fan to be covered under the full 3 year warranty, the vessel needs to have MAFI intake separator grilles installed to ensure the protection of the fan and engine room.

TOOLS, GUAGES & FIXTURES:

The installation kit provided contains the following items:

- Coloured Silicone Sealant
- M6 drill tap kit
- Coloured nylon isolation bushes
- M6 Stainless steel fixings
- Stainless steel metal self-tapping screws
- Isolation foam tape
- Fixing Template

VESSEL PREPARATION:

Confirm orientation and dry fit the AC high volume engine room fan.
NB: Pay special attention to the coverage area and also check clearances. Check that all surfaces are flat, allowing full contact.
It is critical that there is a minimum contact coverage of 90%.

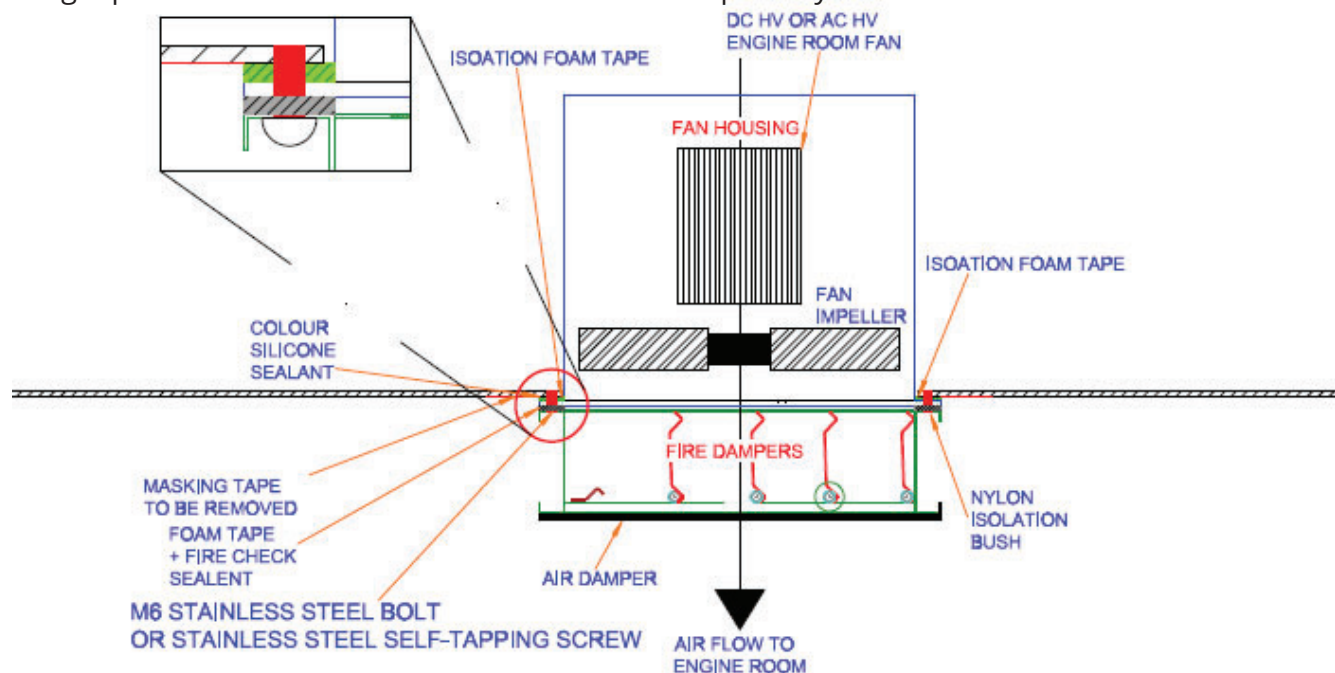
MAFI also recommends the AC high volume engine room fan to be set as supply NOT extraction for best result with regard to the engine temperature.



AC High Vol Fan & Damper (A Flow)

Installation Doc

1. Pencil mark the fixing holes with the fixing template in position. Take care to ensure the coating in the pre-drilled fixing holes is not damaged.
2. Mask tape around the fan flange perimeter +2mm all around neatly.
3. Drill and tap or pre drill holes ready for self-tapping screws.
4. Unbolt the packing bolts from air damper to AC high volume engine room fan
5. Scotch-brite key the hull fixing surface and clean all debris with isopropyl solution or similar.
6. Scotch-brite key the fan flange fixing surface and clean all debris with isopropyl solution or similar.
7. Place the Isolation foam tape on the fan flange.
8. Use the provided sealant between the hull surface and the mounting flange surface generously.
9. Install the M6 stainless steel bolts or stainless steel self-tapping screws with the nylon isolation bushes through the air damper and fan, tensioning fasteners evenly around perimeter. NB: Do not tighten excessively. (Please see drawings details)
10. After tightening the fixings, a small bead of coloured sealant will form all round. Clean excess sealant off with soapy water (dishwashing detergent mixed with water) and bog application card (supplied in kit.)
11. Remove the masking tape and ensure all excess sealant is cleaned up neatly.





PURPOSE:

The purpose of this document is to provide our AC High Vol Fans and Damper combination installation instructions to fit your MAFI product & insure its effectiveness. **This is for B flow fans only.**

RESPONSIBILITY:

It is the owner / and or ship repairer's responsibility to correctly install the MAFI products. Any alteration or deviations should be carefully considered.

MAFI would appreciate all deviations to be referenced, made aware & noted for future reference.

WARRANTY:

For the AC high volume engine room fan to be covered under the full 3 year warranty, the vessel needs to have MAFI intake separator grilles installed to ensure the protection of the fan and engine room.

TOOLS, GUAGES & FIXTURES:

The installation kit provided contains the following items:

- Coloured Silicone Sealant
- M6 drill tap kit
- Coloured nylon isolation bushes
- M6 Stainless steel fixings
- Stainless steel metal self-tapping screws
- Isolation foam tape
- Fixing Template

VESSEL PREPARATION:

Confirm orientation and dry fit the AC high volume engine room fan.
NB: Pay special attention to the coverage area and also check clearances. Check that all surfaces are flat, allowing full contact.
It is critical that there is a minimum contact coverage of 90%.

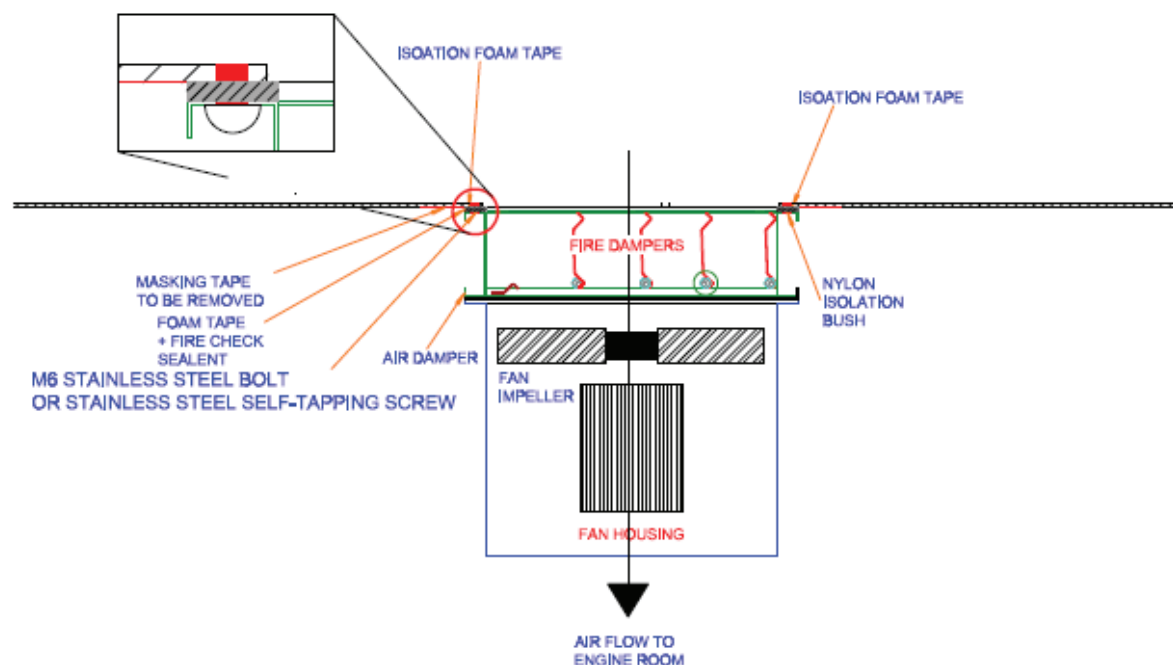
MAFI also recommends the AC high volume engine room fan to be set as supply NOT extraction for best result with regard to the engine temperature.



AC High Vol Fan & Damper (B Flow)

Installation Doc

1. Pencil mark the fixing holes with the fixing template in position. Take care to ensure the coating in the pre-drilled fixing holes is not damaged.
2. Mask tape around the fan flange perimeter +2mm all around neatly.
3. Drill and tap or pre drill holes ready for self-tapping screws.
4. Unbolt the packing bolts from air damper to AC high volume engine room fan
5. Scotch-brite key the hull fixing surface and clean all debris with isopropyl solution or similar.
6. Scotch-brite key the fan flange fixing surface and clean all debris with isopropyl solution or similar.
7. Place the Isolation foam tape on the fan flange.
8. Use the provided sealant between the hull surface and the mounting flange surface generously.
9. Install the M6 stainless steel bolts or stainless steel self-tapping screws with the nylon isolation bushes through the air damper and fan, tensioning fasteners evenly around perimeter. NB: Do not tighten excessively. (Please see drawings details)
10. After tightening the fixings, a small bead of coloured sealant will form all round. Clean excess sealant off with soapy water (dishwashing detergent mixed with water) and bog application card (supplied in kit.)
11. Remove the masking tape and ensure all excess sealant is cleaned up neatly.





PURPOSE:

The purpose of this document is to provide our intake separator grille installation instructions to fit your MAFI product & insure its effectiveness.

RESPONSIBILITY:

It is the owner / and or ship repairer's responsibility to correctly install the MAFI products. Any alteration or deviations should be carefully considered.

MAFI would appreciate all deviations to be referenced, made aware & noted for future reference.

TOOLS, GUAGES & FIXTURES:

The installation kit provided contains the following items:

- Coloured Silicone Sealant
- Glue-in kit

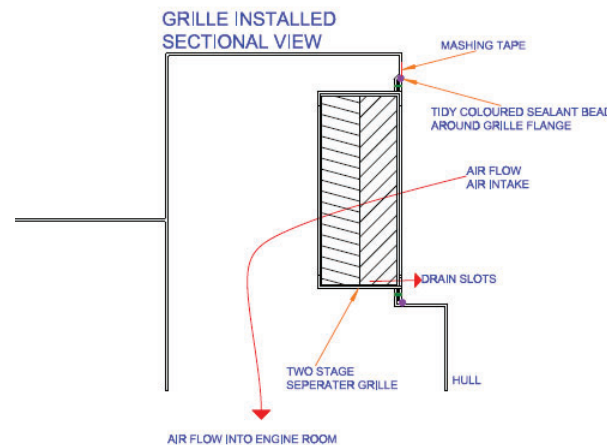
VESSEL PREPARATION:

Confirm port and starboard orientation and dry fit the grille. NB: Pay special attention to the coverage area and also check clearances. Check that all surfaces are flat, allowing full contact.

It is critical that there is a minimum contact coverage of 90%.



1. Pencil mark the fixing holes while grille is in required position. Take care to ensure the coating in the pre-drilled fixing holes is not damaged.
2. Mask tape around the grille perimeter +2mm all around neatly.
3. Drill and tap referenced fixing holes.
4. Scotch-brite key the hull fixing surface and clean all debris with isopropyl solution or similar.
5. Use the provided sealant between the hull surface and the mounting flange surface generously.
6. Place the grille into position.
7. Install the M5 nylon fasteners, tensioning fasteners evenly around perimeter. NB: Do not tighten excessively.
8. After tightening the fixings, a small bead of coloured sealant will form all round. Clean excess sealant off with soapy water (dishwashing detergent mixed with water) and bog application card (supplied in kit.)
9. Ensure the grille is held firmly in place while the glue goes off.
10. Remove the masking tape and ensure all excess sealant is cleaned up neatly.





PURPOSE:

The purpose of this document is to provide our intake separator grille installation instructions to fit your MAFI product & insure its effectiveness.

RESPONSIBILITY:

It is the owner / and or ship repairer's responsibility to correctly install the MAFI products. Any alteration or deviations should be carefully considered.

MAFI would appreciate all deviations to be referenced, made aware & noted for future reference.

TOOLS, GAUGES & FIXTURES:

The installation kit provided contains the following items:

- Coloured Silicone Sealant
- Glue-in kit
- M5 drill tap kit
- Stainless steel countersunk screws

VESSEL PREPARATION:

Confirm port and starboard orientation and dry fit the grille. NB: Pay special attention to the coverage area and also check clearances. Check that all surfaces are flat, allowing full contact.

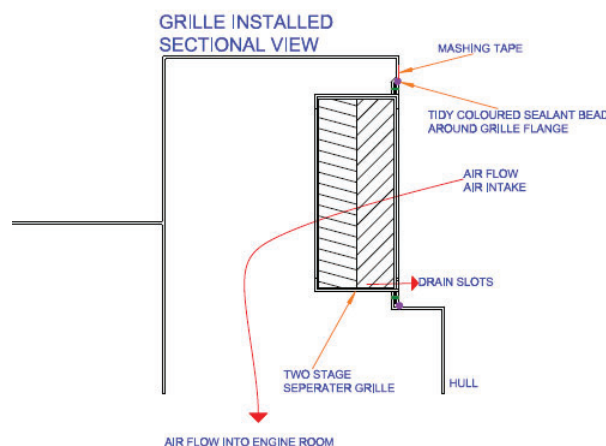
It is critical that there is a minimum contact coverage of 90%.



Air Intake Grilles (Stainless Steel Countersunk Fasteners)

Installation Doc

1. Pencil mark the fixing holes while grille is in required position. Take care to ensure the coating in the pre-drilled fixing holes is not damaged.
2. Mask tape around the grille perimeter +2mm all around neatly.
3. Drill and tap referenced fixing holes.
4. Scotch-brite key the hull fixing surface and clean all debris with isopropyl solution or similar.
5. Use the provided sealant between the hull surface and the mounting flange surface generously.
6. Place the grille into position.
7. Install the stainless steel countersunk screws, tensioning fasteners evenly around perimeter. NB: Do not tighten excessively.
8. After tightening the fixings, a small bead of coloured sealant will form all round. Clean excess sealant off with soapy water (dishwashing detergent mixed with water) and bog application card (supplied in kit.)
9. Remove the masking tape and ensure all excess sealant is cleaned up neatly.





PURPOSE:

The purpose of this document is to provide our intake separator grille installation instructions to fit your MAFI product & insure its effectiveness.

RESPONSIBILITY:

It is the owner / and or ship repairer's responsibility to correctly install the MAFI products. Any alteration or deviations should be carefully considered.

MAFI would appreciate all deviations to be referenced, made aware & noted for future reference.

TOOLS, GUAGES & FIXTURES:

The installation kit provided contains the following items:

- Coloured Silicone Sealant
- Glue-in kit
- M6 drill tap kit
- Stainless Steel bolts

VESSEL PREPARATION:

Confirm port and starboard orientation and dry fit the grille. NB: Pay special attention to the coverage area and also check clearances. Check that all surfaces are flat, allowing full contact.

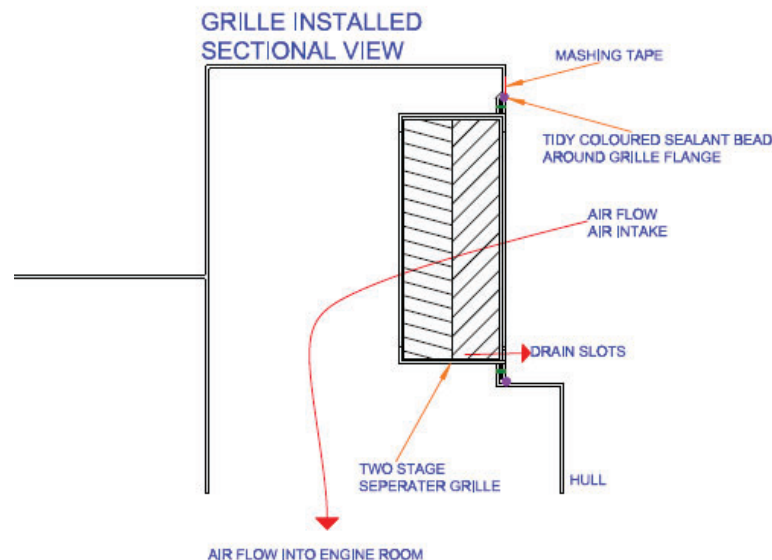
It is critical that there is a minimum contact coverage of 90%.



Air Intake Grilles (M6 Fasteners)

Installation Doc

1. Pencil mark the fixing holes while grille is in required position. Take care to ensure the coating in the pre-drilled fixing holes is not damaged.
2. Mask tape around the grille perimeter +2mm all around neatly.
3. Drill and tap referenced fixing holes.
4. Scotch-brite key the hull fixing surface and clean all debris with isopropyl solution or similar.
5. Use the provided sealant between the hull surface and the mounting flange surface generously.
6. Place the grille into position.
7. Install the M6 stainless steel fasteners, tensioning fasteners evenly around perimeter. NB: Do not tighten excessively.
8. After tightening the fixings, a small bead of coloured sealant will form all round. Clean excess sealant off with soapy water (dishwashing detergent mixed with water) and bog application card (supplied in kit.)
9. Remove the masking tape and ensure all excess sealant is cleaned up neatly.





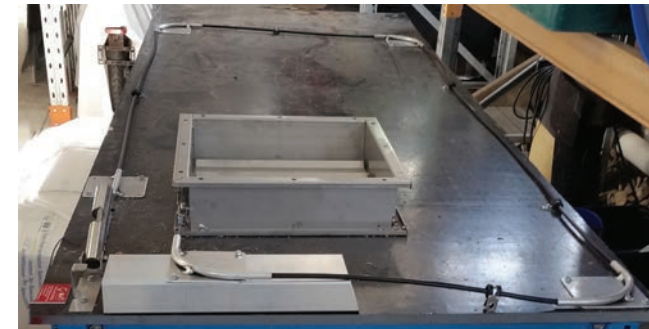
Activation Installation

Follow these steps for installation for automatic air damper activation

- Find suitable place for activation handle/ outside of engine room
- Install handle with supplied stainless steel tech screw's- note direction of cable run required



- Run conduit and pull cable from the damper to handle
- At every bend use one of the supplied radius 90 degree brackets
- At any long straight use the straight bracket
- At every meter there needs to be a bracket or p clamp to avoid distortion of the conduit and cable
- Use a bracket at each end of cable (at handle end and at damper end)





AC High Volume Engine Room Fans

Activation Installation

- Ensure the cable is flat coming out of the damper as shown in picture with a spacer block
- Cut conduit and cable to length required
- Tie off pull cable to handle
- Use supplied small d shackle on damper end



- Ensure to allow sufficient clearance for the travel at full open position





PURPOSE:

The purpose of this document is to provide our Compact Fan installation instructions so you can fit your MAFI product correctly & ensure its effectiveness.

RESPONSIBILITY:

It is the owner / and or ship repairer's responsibility to correctly install the MAFI products. Any alterations or deviations should be carefully considered. MAFI would appreciate all deviations to be referenced, made aware & noted for future reference.

WARRANTY:

For the Compact engine room fan to be covered under the full 3 year warranty, the vessel needs to have MAFI intake separator grilles installed to ensure the protection of the fan and engine room.

TOOLS, GUAGES & FIXTURES:

Because of the variety of situations where our Compact Fans can be installed, no fixings are supplied with these fans.

They also do not require a drill template as the fans are light weight and easy to mark drill holes while being held in position.

VESSEL PREPARATION:

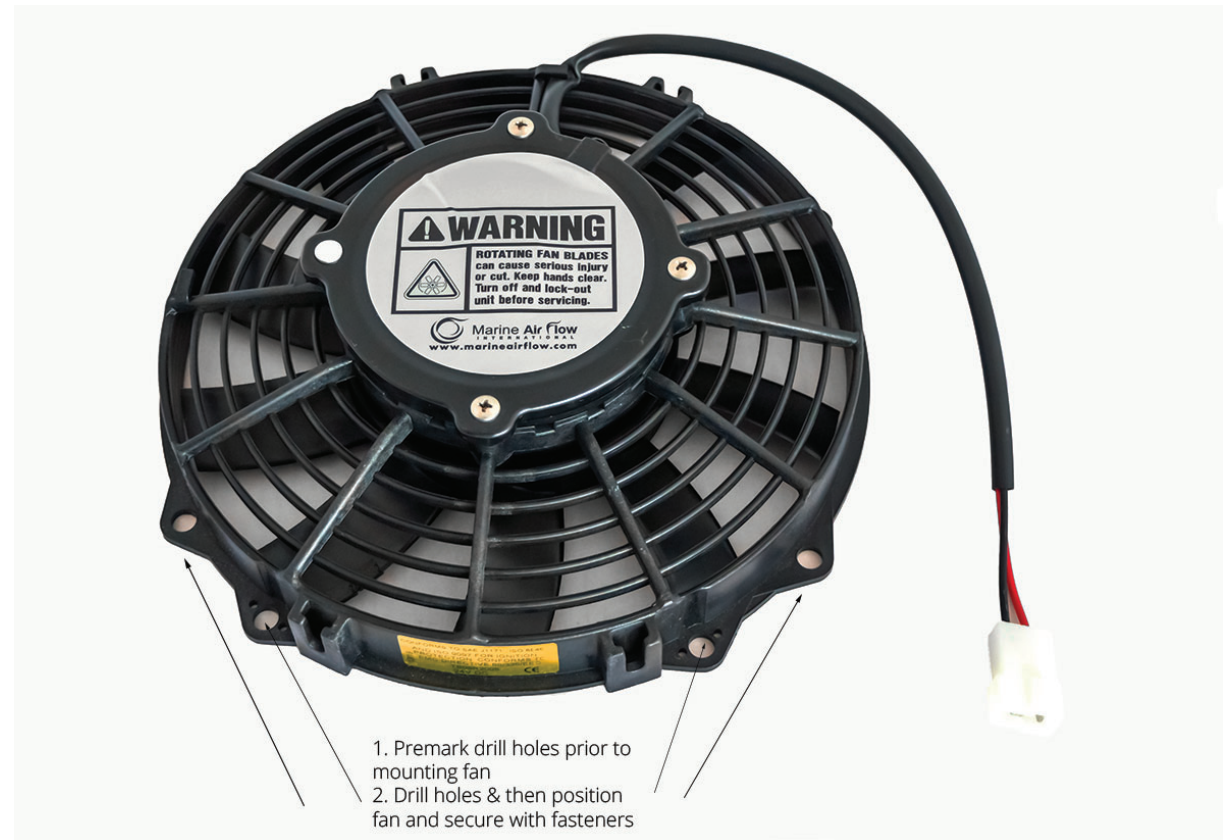
Confirm orientation and dry fit the fan.

NB: Pay special attention to the coverage area along with checking clearances and that all surfaces are flat, allowing full contact.



1. Pencil mark the fixing holes with the fan in place
2. Pre drill holes ready for self-tapping screws
3. Line the fan up with the screws and insert screws and fix into place. If you are using a mounting bracket, mark the screw positions prior to attaching the fan to the bracket for easier handling.
4. Ensure that all swarf and drilling debri is cleaned away
5. Connect the electrical supply and test the fan

Fan Size	9 Inch	12 Inch
Air Vol	250 L/sec	700 L/sec
12 Volt	8 amps	19 amps
24 Volt	4 amps	9 amps





How To Change Compact Fan From Puller To Pusher

- Step 1: Disconnect the power supply.
Place the DC compact Fan on its back - (Step 1 Photo)
- Step 2: Place two flat blade screwdrivers underneath the clip - (Step 2 Photo)
Lift the screwdrivers up over the pin and push the clip off.
Once the clip is removed, pull the impeller off the pin/shaft
- Step 3: Flip the impeller over and line the key way back up - (Step 3 Photo).
You will note that the impeller will now say "Pusher" and not "Puller"
Push down firmly to engage the impeller onto the key way.
- Step 4: Place the clip back into position and clip it back on - (Step 4 Photo)
- Step 5: Reverse the polarity.
- Step 6: Reconnect power and test.

Step 1



Step 2



Step 3



Key Way

Step 4





CONTACT

Should you run into any challenges during your installation, please don't hesitate to contact us using the options below.

Mark: +61 428 301 700
Brad: +61 400 714 803

office@marineairflow.com
info@marineairflow.com

Our Factory Hours are below, however if you call outside these hours please leave a message that its an installation challenge and we will return your call as a prioity.

OUR MISSION

We aim to produce quality, reliable engine room ventilation equipment for our clients, that is developed using innovative technologies & sustainable systems. We are proud to contribute to the economic and social health of our local & global clients & community.

By continuously striving for excellence we will offer our clients long term solutions that deliver beyond expectations.

FACTORY HOURS:

**Monday thru Thursday 6am to 4:30pm
(Aust Eastern Standard Time)**

Engine room ventilation systems that work when it mat-

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