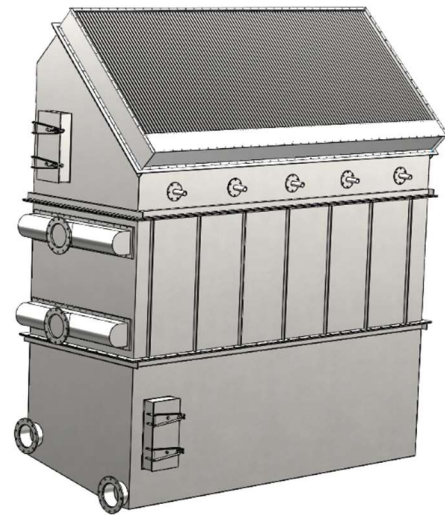


Standard Industrial Indirect Air to Water Heat Recovery Unit

VentilationComponents.com's indirect air to water heat recovery units are durable and cost effective.



Application

- Indirect air to water heat recovery and condensate collection from humid air stream
- Built to service airflows up to 200,000cfm and 220°F at the inlet

Features

- Flanged inlet and outlet connections
- Eliminator blades for mist removal
- Flanged drain and high level overflow
- Removable cleaning shower heads
- Access ports for upper and lower plenums

Benefits

- Heat recovery rate is predictable with calculable payback period
- The heated water can be used for a variety of processes, such as heating building make up air or pre heating process air
- Compact design and modular construction
- Simple, reliable, and easy to maintain
- Heavy duty construction

Function

- Hot air enters the bottom section and flows upwards through the air to water heat exchanger, where the water inside the exchanger flows in a counter flow serpentine pattern
- The air is cooled and moisture condenses out
- Droplets approaching the outlet are separated from the airstream with the eliminator blade section
- Intermittent cleaning showers help keep the heat exchanger clean

Options

Nominal capacity

Nominal capacities up to 200,000cfm are available and are built to suit each unique application.

Flange bolt patterns

The flange bolt pattern follows our standard. Different patterns are available upon request.

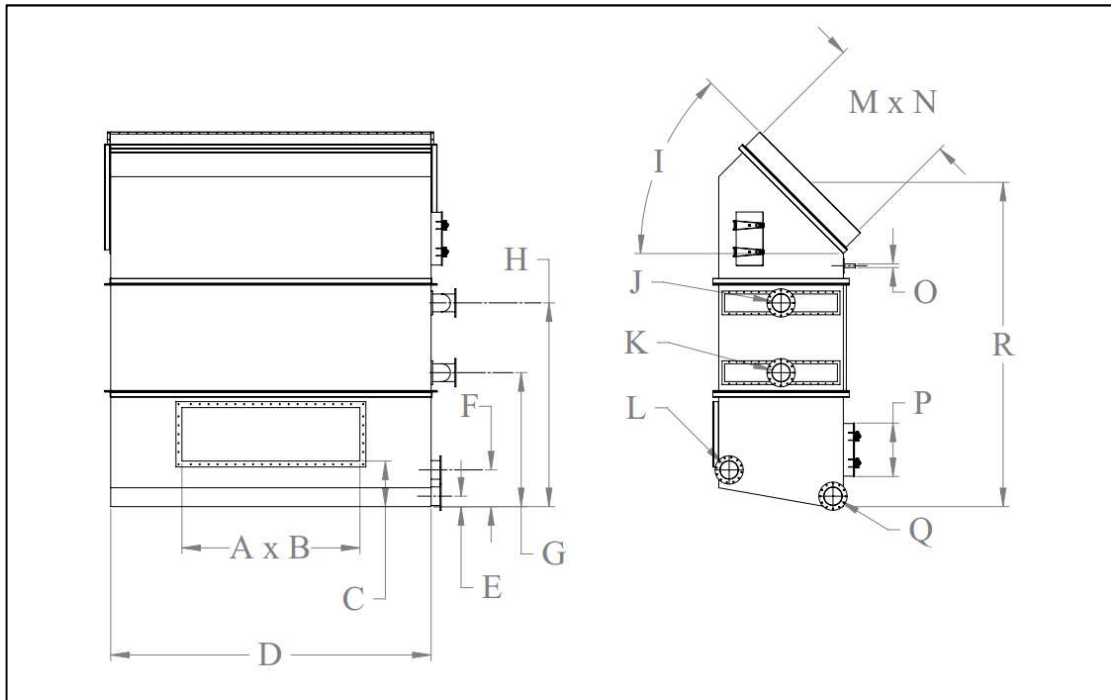
Materials

The materials are application dependent.

Recovered Energy

The amount of recovered energy to expect is application dependent and is provided during the ordering stage.

Data and dimensions

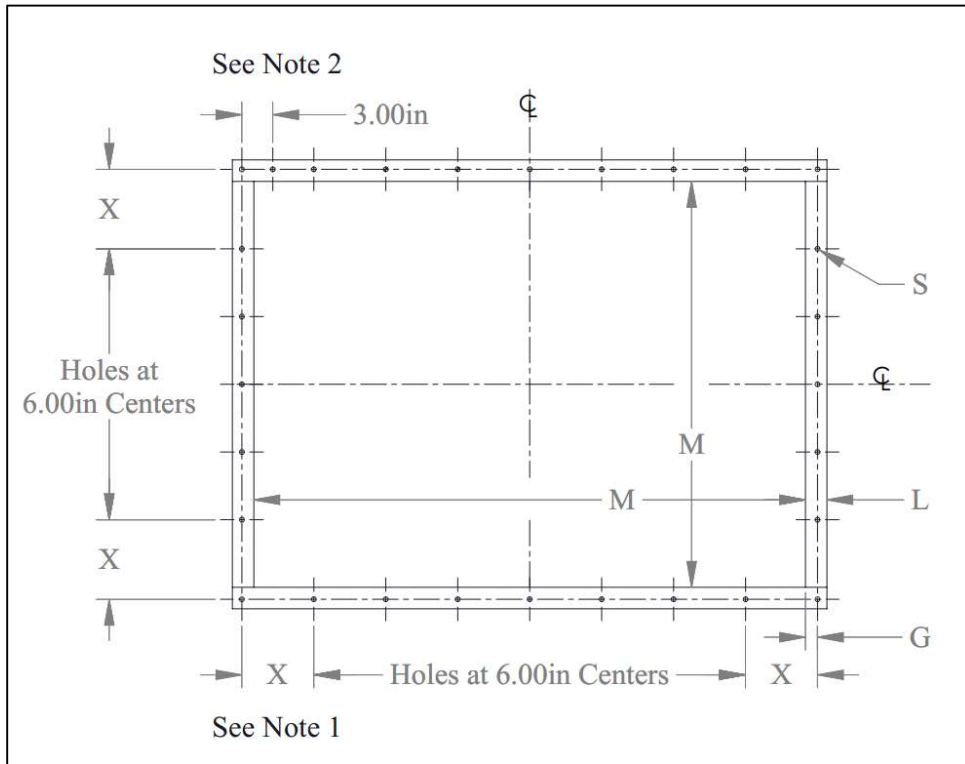


Item Number	Nominal Capacity	Air Temperature at Inlet	Mass Flow of Air at Inlet	Humidity Ratio at Inlet	Air Temperature at Outlet	Energy Recovered	"A x B" Inlet Size	"C" Inlet Height	"D" Width	"E" Drain Height	"F" Overflow Height	"G" Heat Exchanger Water Outlet Height	"H" Heat Exchanger Water Inlet Height	"I" Outlet Angle	"J" Heat Exchanger Water Outlet Size	"K" Heat Exchanger Water Inlet Size	"L" Overflow Size	"L" Shower Water Pipe Size	"M x N" Outlet Size	"O" Shower Water Pipe Size	"P" Access Door Size	"Q" Drain Size	"R" Outlet Height
HR-02-ALL	cfm	°F	B/min	dimensionless	°F	kilowatts	inches	inches	inches	inches	inches	inches	nominal pipe	degrees	nominal pipe	nominal pipe	nominal pipe	nominal pipe	inches	nominal pipe	inches	nominal pipe	inches
Application dependent																							

Notes

1. 3D model files and general arrangement drawings with installation details available upon order.

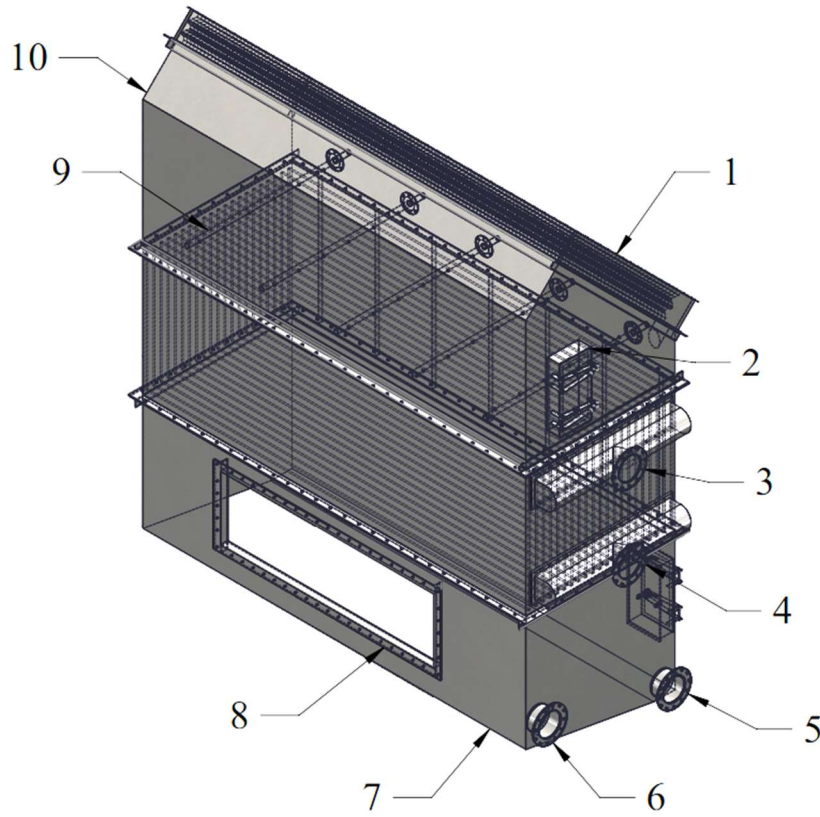
Standard rectangular flange details



"M" Largest Dimension Width or Height		"L" Flange Leg	"G" Gauge	"S" Hole Diameter	Bolt Size
M _{LOWER}	M _{UPPER}				
inches	inches	inches	inches	inches	inches
0	31.00	1.50	0.875	0.500	3/8
31.01	39.00	2.00	1.125	0.500	3/8
39.01	78.00	2.50	1.375	0.625	1/2
78.01	101.00	3.00	1.750	0.625	1/2
101.01	120.00	4.00	2.250	0.625	1/2

Notes

1. "X" is minimum 2.50in and maximum 8.50in.
2. If "X" is greater than 6.00in, add an extra hole 3.00in from corner hole.
3. Holes always land on centerlines and corners.



Parts list

Number	Quantity	Description
1	1	Outlet on eliminator blades section
2	Varies	Access door
3	1	Heat exchanger water inlet
4	1	heat exchanger water outlet
5	1	Drain
6	1	Over flow drain
7	1	Sump section
8	1	Inlet
9	Varies	Shower water pipe
10	1	Upper plenum

Notes

1. All hardware provided. For most sizes, the unit is delivered split for shipping purposes.

How to order

To fully specify the HR-02 Indirect Air to Water Heat Recovery Unit, make a selection from the code boxes below.

Example: HR-02-C-C-C-C-C-S, shown below, is an indirect air to water heat recovery unit with our standard flange bolt patterns. The customer has provided a document that details the application for the heat recovery unit to suit.

1	2	3	4	5	6	7	8
HR	02	C	C	C	C	C	S
Specifications							
Please provide a drawing for our approval of an indirect air to water heat recovery unit that suits the application detailed in the attached document.							

1	Equipment type						
HR	Heat Recovery Unit						
2	Equipment sub-type						
02	Indirect Air to Water Heat Recovery Unit						
3	Air temperature at inlet						
C	Customer Specified						
4	Mass flow of air at inlet						
C	Customer Specified						
5	Humidity ratio at inlet						
C	Customer Specified						
6	Desired outlet temperature						
C	Customer Specified						
7	Materials						
C	Customer Specified						
8	Flange bolt pattern						
S	Standard			C	Customer Specified Flange Bolt Pattern		

Many types of customizations are available upon request.

Note: There are various factors which should be considered when selecting a heat recovery unit for a specific application. Some of these factors are outside of the scope of this data sheet. If you have any questions regarding the application, compatibility, or use of this heat recovery unit, contact VentilationComponents.com for more information.

Contact@VentilationComponents.com