

Software Instructions

Selecting an Oxygen8 Ventum Unit

selection.oxygen8.ca

Step 1: Create New Project

O X Y G E N 8 **1**

My Jobs

New Job

Users

My Account

Resources

Resources Admin

Log out

4

Save

Close

Schedule

Project Information

Job Name:	<input type="text"/>
Basis of Design:	NA
Reference #:	<input type="text"/>
Revision #:	0
Created Date:	2021-08-05
Revised Date:	2021-08-05
Company Name:	Oxygen8
Contact Name:	Dorothy Bootle
Application:	Office
Application Other:	<input type="text"/>
UoM:	Imperial Units

Project Location

Country:	Select
Province / State:	NA
City:	NA
ASHRAE Design Conditions:	1% / 99%

Outdoor Air Design Conditions

Altitude (ft):	0
Summer Outdoor Air DB (F):	95
Summer Outdoor Air WB (F):	78
Summer Outdoor Air RH (%):	47.3
Winter Outdoor Air DB (F):	35
Winter Outdoor Air WB (F):	33
Winter Outdoor Air RH (%):	81.9

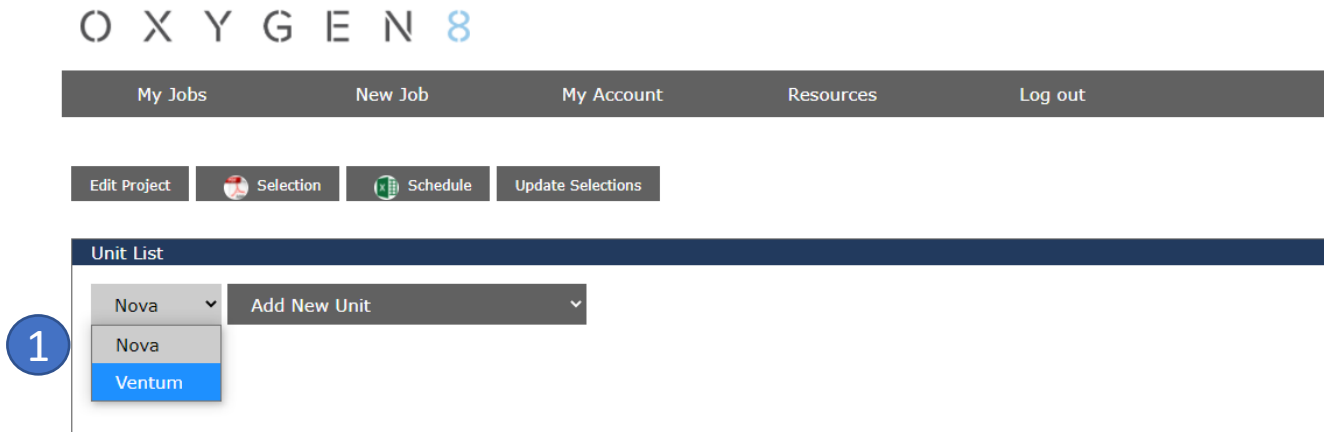
Return Air Design Conditions

Summer Return Air DB (F):	75
Summer Return Air WB (F):	63
Summer Return Air RH (%):	51.17
Winter Return Air DB (F):	70
Winter Return Air WB (F):	58
Winter Return Air RH (%):	47.88

Option to use ASHRAE Standard Temperature Data by City or Manually Input Design Conditions

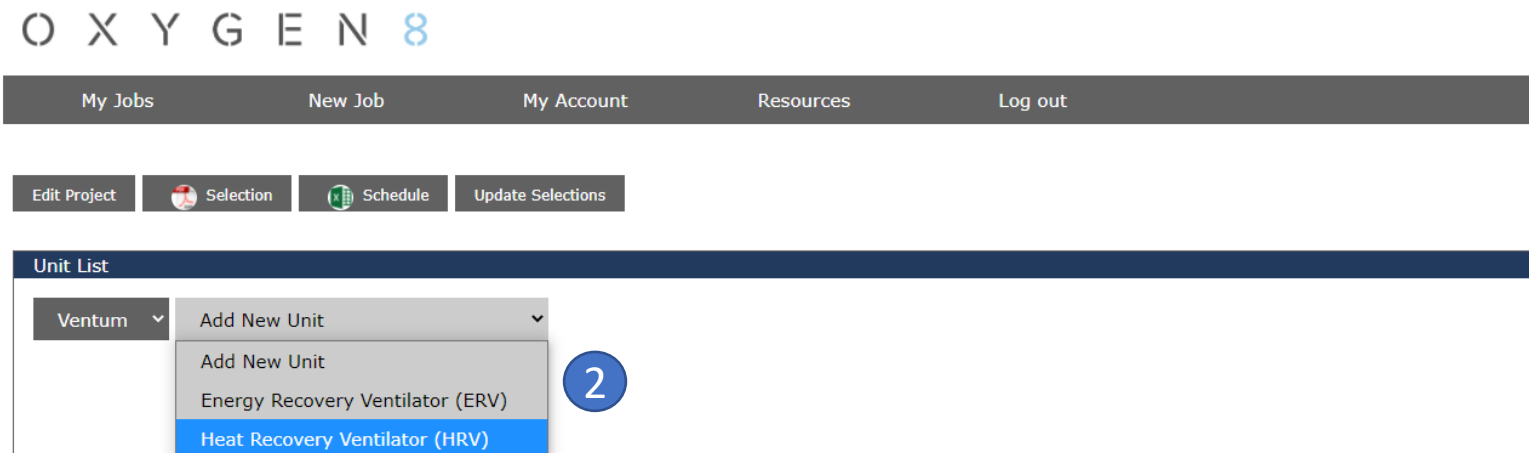
Click "Save" to be taken to unit selection & schedule page.

Step 2: Select Ventum



Version 1.0.0.2

Step 3: Select ERV or HRV



Version 1.0.0.2

ERV: sensible & latent recovery

HRV: sensible recovery only

Step 4: Input Unit Info, Air Flow Data, select Ventum Unit

O X Y G E N 8

My Jobs

New Job

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Edit Project

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Close

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 Selection

 Selection

Unit Info

Layout

Drawing

Selection

Unit Info

1

Tag*:	HRV-1
Quantity:	1
Location:	Indoor
Orientation:	Horizontal
Unit Type:	Heat Recovery Ventilator (HRV)
Controls Preference:	Constant Volume

Air Flow Data

2

Supply Air (CFM):	325
Exhaust Air (CFM):	325
Supply Air ESP (inH2O):	0.75
Exhaust Air ESP (inH2O):	0.75

3

Bypass for Economizer:	<input type="checkbox"/>
Unit Model:	H05IN-HRV - (325 - 600 CFM)
Unit Voltage:	208V/1ph/60Hz

Components

OA Filter:	2" 85% MERV-13 (standard)
RA Filter:	2" 30% MERV-8 (standard)
<small>Preheat required. Winter OA DB below is 15 degF and RA RH is above 40%</small>	
Preheat:	Electric Heater
Heat Exchanger:	ERV Crossflow
Cooling:	NA
Heating:	NA

OA Filter PD (in w.g.):	0.5
RA Filter PD (in w.g.):	0.5

Dampers & Actuator:	NA
Elec. Heater Voltage:	208V/3ph/60Hz
Elec. Heater Installation:	In Casing - Field Mounted and Wired

Step 5: Add Accessories – CWC & HWC

O X Y G E N 8

My Jobs

New Job

My Account

Resources

Log out

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Job: Ventum Demo / Reference #:

Edit Project

Save

Close

Schedule



Selection



Selection

Unit Info

Layout

Drawing

Selection

Unit Info

Tag*:
Quantity:
Location:
Orientation:
Unit Type:
Controls Preference:

Air Flow Data

Supply Air (CFM):
Exhaust Air (CFM):
Supply Air ESP (inH2O):
Exhaust Air ESP (inH2O):

Bypass for Economizer:
Unit Model:
Unit Voltage:

Components

OA Filter:
RA Filter:
Preheat required. Winter OA DB below is 15 degF and RA RH is above 40%
Preheat:
Heat Exchanger:
Cooling:
Heating:

OA Filter PD (in w.g.):
RA Filter PD (in w.g.):
Dehumidification:

Dampers & Actuator:
Elec. Heater Voltage:
Elec. Heater Installation:
Include Valves & Actuator:

Setpoints

Cooling LAT Setpoint DB (F):
Cooling LAT Setpoint WB (F):
Heating LAT Setpoint DB (F):

Cooling Fluid Design Conditions

Cooling Fluid Type:
Cooling Fluid %:
Cooling Fluid Ent Temp (F):
Cooling Fluid Lvg Temp (F):

Heating Fluid Design Conditions

Heating Fluid Type:
Heating Fluid %:
Heating Fluid Ent Temp (F):
Heating Fluid Lvg Temp (F):

Click "Save" when done before moving on to next tab.

Step 5: Add Accessories – DX Coils with Heat Pump & Dehumidification Options

O X Y G E N 8

My Jobs New Job My Account Resources Log out

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Job: Ventum Demo / Reference :

Edit Project **Save** Close Schedule Selection Selection

Unit Info

Layout

Drawing

Selection

Unit Info

Tag*:
Quantity:
Location:
Orientation:
Unit Type:
Controls Preference:

Air Flow Data

Supply Air (CFM):
Exhaust Air (CFM):
Supply Air ESP (inH2O):
Exhaust Air ESP (inH2O):

Bypass for Economizer:
Unit Model:
Unit Voltage:

Components

OA Filter:
RA Filter:
Preheat required. Winter OA DB below is 15 degF and RA RH is above 40%
Preheat:
Heat Exchanger:
Cooling: 1
Heating:

OA Filter PD (in w.g.):
RA Filter PD (in w.g.):
Heat Pump: 2
Dehumidification:
Reheat:

Dampers & Actuator: 3
Elec. Heater Voltage:
Elec. Heater Installation:
Include Valves & Actuator:

Setpoints

Cooling LAT Setpoint DB (F):
Cooling LAT Setpoint WB (F):
Heating LAT Setpoint DB (F): 4
Dehum. Reheat Setpoint DB (F):

Heating Fluid Design Conditions

Heating Fluid Type:
Heating Fluid %:
Heating Fluid Ent Temp (F):
Heating Fluid Lvg Temp (F):

Click "Save" when done before moving on to next tab.

Step 6 (optional): Select Handing & Supply Air Fan Location

O X Y G E N 8

Job

Edit Project Save Close Schedule Selection Selection

Unit Info **Layout** Drawing Selection

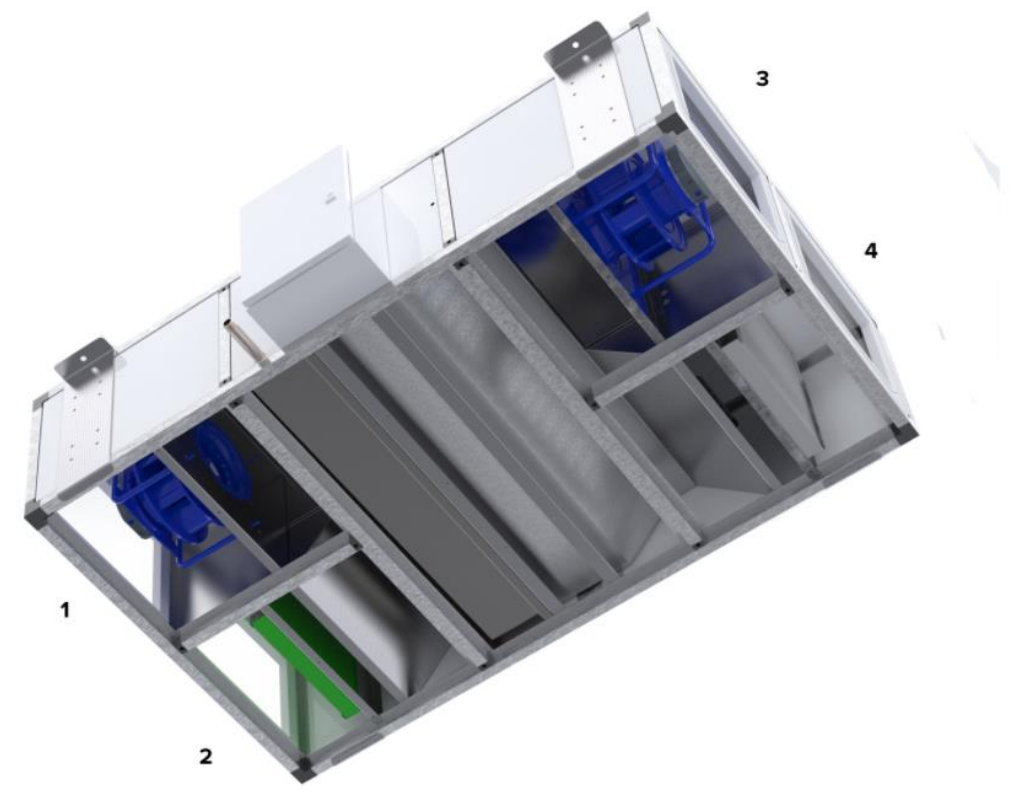
Control Panel Placement: **2**

Supply Air Opening: **3**

Exhaust Air Opening:

Outdoor Air Opening:

Return Air Opening:



Step 7 (optional): Review Drawing

O X Y G E N 8

NOMENCLATURE:

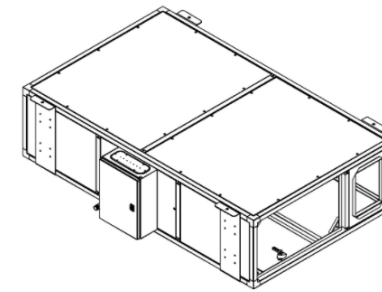
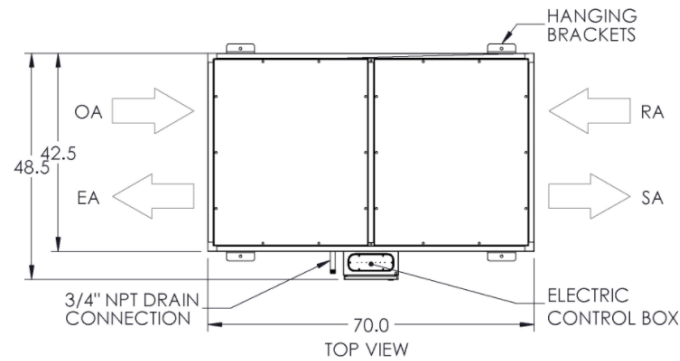
- SA - SUPPLY AIR
- RA - RETURN AIR
- OA - OUTDOOR AIR
- EA - EXHAUST AIR

NOTES:

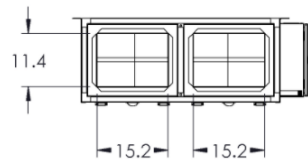
36" OF CLEARANCE MUST BE MAINTAINED PERPENDICULAR TO THE ELECTRICAL BOX AS PER THE NATIONAL ELECTRIC CODE (NEC).

UNIT DIMENSIONS SHOWN ARE IN INCHES

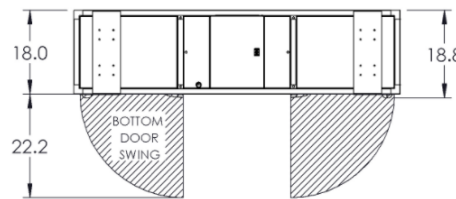
OVERALL UNIT DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



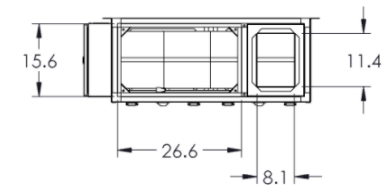
ISO VIEW



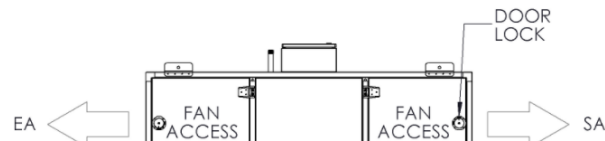
LEFT VIEW



FRONT VIEW



RIGHT VIEW



Step 8: Run Selection

O X Y G E N 8

My Jobs New Job My Account Resources Log out

Edit Project Save Close Schedule **Selection** Selection

Unit Info Layout Drawing **Selection**

Summary

Unit Details

Unit Tag:	HRV-1	Orientation:	Horizontal
Model:	H05IN-HRV - (325 - 600 CFM)	ESP SA / RA (inH2O):	0.75 / 0.75
Qty:	1	Filters OA / RA:	2" 85% MERV-13 / 2" 30% MERV-8
Location:	Indoor	Controls Preference:	Constant Volume
Altitude (ft):	0	Dampers & Actuator:	NA

Electrical Requirements

Total Number of Connections Required: 2

Unit

Voltage:	208V/1ph/60Hz
Range:	207 - 253V
FLA:	5.29
MCA:	5.91
RFS:	15A

Preheat Electric Heater

Std. Coil:	3
Controls:	SCR
Voltage:	208V/3ph/60Hz
Range:	187.2 - 218.4V
FLA:	22.24
MCA:	28
RFS:	35A

W Controller

Voltage:	230/1/60Hz
Range:	208-253V
RFS:	15A
Qty:	0

Electric Preheat

Actual

Outdoor Air (CFM):	325
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For Selections & Quotes Please Contact:

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