Project Name -	Extra Care Home Cleckheaton	Project Reference -	3995	Engineer -	PR
BIM Reference -	CLK-WME-XX-XX-SC-M-57-0002				

57-0002 Amenity MVHR Units

Status	Revision	Issue date	Engineer	Check	Comments
Issued for information	P01	31/01/2025	PR		

Unit Reference	MVHR001
Type	Horizontal MVHR Unit
Manufacturer	TBC
Model Reference	TBC
Design SFP at design volume flow rate (W/l/s)	1.4 Max at 100%
Actual SFP at design volume flow rate (W/s/l) full fresh air	
Location	Ground floor Activities
Qty	1
Handing	TBC

Fan Section	Fan section	
	Supply	Extract
Volume Flow Rate (l/s)	96	96
External Pressure (Pa)	120.0	90.0
Type	Backward curved	Backward curved
Power Supply (V/Ph/Hz)	230/1/50	230/1/50
Starting Current (Amps):		
Running Current (Amps:		
Motor Rating (kW)		
Absorbed Power (kW)		
Total Efficiency (%)		
Inverter Controlled		
Spring AVM's (mm)		

Fan noise	Supply Fan Noise			Extract Fan Noise		
SPL dB(A) @ 1m	Breakout	Discharge	Intake	Breakout	Discharge	Intake
63Hz						
125Hz						
250Hz						
500Hz						
1K Hz						
2K Hz						
4K Hz						
8K Hz						
Overall dBa						

Coils	Coils					
Type	Frost Coil (LTHW)	Cooling Coil (CHW)	Main Heating Coil (LTHW)			
Entering Air Condition (°Cdb/°Cwb)	Not applicable	Not applicable	Not applicable			
Leaving Air Condition (°Cdb/°Cwb)						
Duty (kW)						
Fluid Temp On/Off Coil (°C)						
Fluid Flow Rate (l/s)						
Face Velocity (m/s)						
Droplet Eliminator (Y/N)						
Materials Tube / Finish						
Split Coil						
Max Water side Pressure Drop (kPa)						

Heat Recovery	Heat recovery					
Type	Adiabatic humidifier (in recirc)		PHX		Mixing box	
Air Stream			Fresh air	Recirc		
Winter condition Air On (db °C)			-5.0	22.50		
Winter condition Air On (wb °C)			-5.0	19.00		
Winter condition Air Off (db °C)						
Winter condition Air Off (wb °C)						
Summer condition Air On (db °C)			29	35.00		
Summer condition Air On (wb °C)			20	25.00		
Summer condition Air Off (db °C)						
Summer condition Air Off (wb °C)						
Efficiency if balanced (%)			80%			
Efficiency at design (%)						
Face Velocity (max)						

Filters	Supply deck pre filter	Supply deck main filter		Re-circ deck pre filter		
Type		TBC		TBC		
Grade		F7		F7		
Clean Pressure Drop (Pa)		TBC		TBC		
Dirty Pressure Drop (Pa)		TBC		TBC		
SFP Based on		Mid cleanliness		Mid cleanliness		

Humidifier	
Type	None
Air On	
Air Off	
Evap. Rate (kg/h)	
Heat Input	N/A
Control Method	
Electrical Supply	
Eliminator (Y/N)	

Dampers	

OA Dimensions (mm)	
Shipping Weight and Sections (kg)	
Total Operating Weight (kg)	

Notes	Select a fan capable of 10% more volume at 21% more pressure
	Base the SFP on the design condition with filters at mid condition.
	Provide the air off temperatures at the design conditions.
	Provide full sound spectrum data to aid with the selection of attenuation.
	Provide electrical load information.

Project Name -	Extra Care Home Cleckheaton	Project Reference -	3995	Engineer -	PR
BIM Reference -	CLK-WME-XX-XX-SC-M-57-0001				

57-0002 Amenity MVHR Units

Status	Revision	Issue date	Engineer	Check	Comments
Issued for information	P01	31/01/2025	PR		

Unit Reference	MVHR002A
Type	Horizontal MVHR Unit
Manufacturer	TBC
Model Reference	TBC
Design SFP at design volume flow rate (W/l/s)	1.4 Max at 100%
Actual SFP at design volume flow rate (W/s/l) full fresh air	
Location	Ground floor Dining
Qty	1
Handing	TBC

Fan Section	Fan section	
	Supply	Extract
Normal Mode Volume Flow Rate (l/s)	288	288
Normal Mode External Pressure (Pa)	134.0	88.0
Type	Backward curved	Backward curved
Power Supply (V/Ph/Hz)	230/1/50	230/1/50
Starting Current (Amps):		
Running Current (Amps:		
Motor Rating (kW)		
Absorbed Power (kW)		
Total Efficiency (%)		
Inverter Controlled		
Spring AVM's (mm)		

Fan noise	Supply Fan Noise			Extract Fan Noise		
SPL dB(A) @ 1m	Breakout	Discharge	Intake	Breakout	Discharge	Intake
63Hz						
125Hz						
250Hz						
500Hz						
1K Hz						
2K Hz						
4K Hz						
8K Hz						
Overall dBa						

Coils	Coils					
Type	Frost Coil (LTHW)	Cooling Coil (CHW)	Main Heating Coil (LTHW)			
Entering Air Condition (°Cdb/°Cwb)	Not applicable	Not applicable	Not applicable			
Leaving Air Condition (°Cdb/°Cwb)						
Duty (kW)						
Fluid Temp On/Off Coil (°C)						
Fluid Flow Rate (l/s)						
Face Velocity (m/s)						
Droplet Eliminator (Y/N)						
Materials Tube / Finish						
Split Coil						
Max Water side Pressure Drop (kPa)						

Heat Recovery	Heat recovery					
Type	Adiabatic humidifier (in recirc)		PHX		Mixing box	
Air Stream			Fresh air	Recirc		
Winter condition Air On (db °C)			-5.0	22.50		
Winter condition Air On (wb °C)			-5.0	19.00		
Winter condition Air Off (db °C)						
Winter condition Air Off (wb °C)						
Summer condition Air On (db °C)			29	35.00		
Summer condition Air On (wb °C)			20	25.00		
Summer condition Air Off (db °C)						
Summer condition Air Off (wb °C)						
Efficiency if balanced (%)			80%			
Efficiency at design (%)						
Face Velocity (max)						

Filters	Supply deck pre filter	Supply deck main filter		Re-circ deck pre filter		
Type		TBC		TBC		
Grade		F7		F7		
Clean Pressure Drop (Pa)		TBC		TBC		
Dirty Pressure Drop (Pa)		TBC		TBC		
SFP Based on		Mid cleanliness		Mid cleanliness		

Humidifier	
Type	None
Air On	
Air Off	
Evap. Rate (kg/h)	
Heat Input	N/A
Control Method	
Electrical Supply	
Eliminator (Y/N)	

Dampers	

OA Dimensions (mm)	
Shipping Weight and Sections (kg)	
Total Operating Weight (kg)	

Notes	This performance schedule is to be read in conjunction with the project mechanical specification documents
	Provide the air off temperatures at the design conditions.
	Provide full sound spectrum data to aid with the selection of attenuation.
	Provide electrical load information.

Project Name -	Extra Care Home Cleckheaton	Project Reference -	3995	Engineer -	PR
BIM Reference -	CLK-WME-XX-XX-SC-M-57-0001				

57-0002 Amenity MVHR Units

Status	Revision	Issue date	Engineer	Check	Comments
Issued for information	P01	31/01/2025	PR		

Unit Reference	MVHR002B
Type	Horizontal MVHR Unit
Manufacturer	TBC
Model Reference	TBC
Design SFP at design volume flow rate (W/l/s)	1.4 Max at 100%
Actual SFP at design volume flow rate (W/s/l) full fresh air	
Location	Ground floor Dining
Qty	1
Handing	TBC

Fan Section	Fan section	
	Supply	Extract
Normal Mode Volume Flow Rate (l/s)	288	288
Normal Mode External Pressure (Pa)	150.0	88.0
Type	Backward curved	Backward curved
Power Supply (V/Ph/Hz)	230/1/50	230/1/50
Starting Current (Amps):		
Running Current (Amps:		
Motor Rating (kW)		
Absorbed Power (kW)		
Total Efficiency (%)		
Inverter Controlled		
Spring AVM's (mm)		

Fan noise	Supply Fan Noise			Extract Fan Noise		
SPL dB(A) @ 1m	Breakout	Discharge	Intake	Breakout	Discharge	Intake
63Hz						
125Hz						
250Hz						
500Hz						
1K Hz						
2K Hz						
4K Hz						
8K Hz						
Overall dBa						

Coils	Coils					
Type	Frost Coil (LTHW)	Cooling Coil (CHW)	Main Heating Coil (LTHW)			
Entering Air Condition (°Cdb/°Cwb)	Not applicable	Not applicable	Not applicable			
Leaving Air Condition (°Cdb/°Cwb)						
Duty (kW)						
Fluid Temp On/Off Coil (°C)						
Fluid Flow Rate (l/s)						
Face Velocity (m/s)						
Droplet Eliminator (Y/N)						
Materials Tube / Finish						
Split Coil						
Max Water side Pressure Drop (kPa)						

Heat Recovery	Heat recovery					
Type	Adiabatic humidifier (in recirc)		PHX		Mixing box	
Air Stream			Fresh air	Recirc		
Winter condition Air On (db °C)			-5.0	22.50		
Winter condition Air On (wb °C)			-5.0	19.00		
Winter condition Air Off (db °C)						
Winter condition Air Off (wb °C)						
Summer condition Air On (db °C)			29	35.00		
Summer condition Air On (wb °C)			20	25.00		
Summer condition Air Off (db °C)						
Summer condition Air Off (wb °C)						
Efficiency if balanced (%)			80%			
Efficiency at design (%)						
Face Velocity (max)						

Filters	Supply deck pre filter	Supply deck main filter		Re-circ deck pre filter		
Type		TBC		TBC		
Grade		F7		F7		
Clean Pressure Drop (Pa)		TBC		TBC		
Dirty Pressure Drop (Pa)		TBC		TBC		
SFP Based on		Mid cleanliness		Mid cleanliness		

Humidifier	
Type	None
Air On	
Air Off	
Evap. Rate (kg/h)	
Heat Input	N/A
Control Method	
Electrical Supply	
Eliminator (Y/N)	

Dampers	

OA Dimensions (mm)	
Shipping Weight and Sections (kg)	
Total Operating Weight (kg)	

Notes	This performance schedule is to be read in conjunction with the project mechanical specification documents
	Provide the air off temperatures at the design conditions.
	Provide full sound spectrum data to aid with the selection of attenuation.
	Provide electrical load information.

Project Name -	Extra Care Home Cleckheaton	Project Reference -	3995	Engineer -	PR
BIM Reference -	CLK-WME-XX-XX-SC-M-57-0001				

57-0002 Amenity MVHR Units

Status	Revision	Issue date	Engineer	Check	Comments
Issued for information	P01	31/01/2025	PR		

Unit Reference	MVHR003
Type	Horizontal MVHR Unit
Manufacturer	TBC
Model Reference	TBC
Design SFP at design volume flow rate (W/l/s)	1.4 Max at 100%
Actual SFP at design volume flow rate (W/s/l) full fresh air	
Location	Ground Floor Lounge
Qty	1
Handing	TBC

Fan Section	Fan section	
	Supply	Extract
Normal Mode Volume Flow Rate (l/s)	324	324
Normal Mode External Pressure (Pa)	140.0	95.0
Type	Backward curved	Backward curved
Power Supply (V/Ph/Hz)	230/1/50	230/1/50
Starting Current (Amps):		
Running Current (Amps:		
Motor Rating (kW)		
Absorbed Power (kW)		
Total Efficiency (%)		
Inverter Controlled		
Spring AVM's (mm)		

Fan noise	Supply Fan Noise			Extract Fan Noise		
SPL dB(A) @ 1m	Breakout	Discharge	Intake	Breakout	Discharge	Intake
63Hz						
125Hz						
250Hz						
500Hz						
1K Hz						
2K Hz						
4K Hz						
8K Hz						
Overall dBa						

Coils	Coils					
Type	Frost Coil (LTHW)	Cooling Coil (CHW)	Main Heating Coil (LTHW)			
Entering Air Condition (°Cdb/°Cwb)	Not applicable	Not applicable	Not applicable			
Leaving Air Condition (°Cdb/°Cwb)						
Duty (kW)						
Fluid Temp On/Off Coil (°C)						
Fluid Flow Rate (l/s)						
Face Velocity (m/s)						
Droplet Eliminator (Y/N)						
Materials Tube / Finish						
Split Coil						
Max Water side Pressure Drop (kPa)						

Heat Recovery	Heat recovery					
Type	Adiabatic humidifier (in recirc)		PHX		Mixing box	
Air Stream			Fresh air	Recirc		
Winter condition Air On (db °C)			-5.0	22.50		
Winter condition Air On (wb °C)			-5.0	19.00		
Winter condition Air Off (db °C)						
Winter condition Air Off (wb °C)						
Summer condition Air On (db °C)			29	35.00		
Summer condition Air On (wb °C)			20	25.00		
Summer condition Air Off (db °C)						
Summer condition Air Off (wb °C)						
Efficiency if balanced (%)			80%			
Efficiency at design (%)						
Face Velocity (max)						

Filters	Supply deck pre filter	Supply deck main filter		Re-circ deck pre filter		
Type		TBC		TBC		
Grade		F7		F7		
Clean Pressure Drop (Pa)		TBC		TBC		
Dirty Pressure Drop (Pa)		TBC		TBC		
SFP Based on		Mid cleanliness		Mid cleanliness		

Humidifier	
Type	None
Air On	
Air Off	
Evap. Rate (kg/h)	
Heat Input	N/A
Control Method	
Electrical Supply	
Eliminator (Y/N)	

Dampers	

OA Dimensions (mm)	
Shipping Weight and Sections (kg)	
Total Operating Weight (kg)	

Notes	This performance schedule is to be read in conjunction with the project mechanical specification documents
	Provide the air off temperatures at the design conditions.
	Provide full sound spectrum data to aid with the selection of attenuation.
	Provide electrical load information.

Project Name -	Extra Care Home Cleckheaton	Project Reference -	3995	Engineer -	PR
BIM Reference -	CLK-WME-XX-XX-SC-M-57-0001				

57-0002 Amenity MVHR Units

Status	Revision	Issue date	Engineer	Check	Comments
Issued for information	P01	31/01/2025	PR		

Unit Reference	MVHR004
Type	Horizontal MVHR Unit
Manufacturer	TBC
Model Reference	TBC
Design SFP at design volume flow rate (W/l/s)	1.4 Max at 100%
Actual SFP at design volume flow rate (W/s/l) full fresh air	
Location	First Floor Staff Room
Qty	1
Handing	TBC

Fan Section	Fan section	
	Supply	Extract
Normal Mode Volume Flow Rate (l/s)	192	214
Normal Mode External Pressure (Pa)	106.0	145.0
Type	Backward curved	Backward curved
Power Supply (V/Ph/Hz)	230/1/50	230/1/50
Starting Current (Amps):		
Running Current (Amps:		
Motor Rating (kW)		
Absorbed Power (kW)		
Total Efficiency (%)		
Inverter Controlled		
Spring AVM's (mm)		

Fan noise	Supply Fan Noise			Extract Fan Noise		
SPL dB(A) @ 1m	Breakout	Discharge	Intake	Breakout	Discharge	Intake
63Hz						
125Hz						
250Hz						
500Hz						
1K Hz						
2K Hz						
4K Hz						
8K Hz						
Overall dBa						

Coils	Coils					
Type	Frost Coil (LTHW)	Cooling Coil (CHW)	Main Heating Coil (LTHW)			
Entering Air Condition (°Cdb/°Cwb)	Not applicable	Not applicable	Not applicable			
Leaving Air Condition (°Cdb/°Cwb)						
Duty (kW)						
Fluid Temp On/Off Coil (°C)						
Fluid Flow Rate (l/s)						
Face Velocity (m/s)						
Droplet Eliminator (Y/N)						
Materials Tube / Finish						
Split Coil						
Max Water side Pressure Drop (kPa)						

Heat Recovery	Heat recovery					
Type	Adiabatic humidifier (in recirc)		PHX		Mixing box	
Air Stream			Fresh air	Recirc		
Winter condition Air On (db °C)			-5.0	22.50		
Winter condition Air On (wb °C)			-5.0	19.00		
Winter condition Air Off (db °C)						
Winter condition Air Off (wb °C)						
Summer condition Air On (db °C)			29	35.00		
Summer condition Air On (wb °C)			20	25.00		
Summer condition Air Off (db °C)						
Summer condition Air Off (wb °C)						
Efficiency if balanced (%)			80%			
Efficiency at design (%)						
Face Velocity (max)						

Filters	Supply deck pre filter	Supply deck main filter		Re-circ deck pre filter		
Type		TBC		TBC		
Grade		F7		F7		
Clean Pressure Drop (Pa)		TBC		TBC		
Dirty Pressure Drop (Pa)		TBC		TBC		
SFP Based on		Mid cleanliness		Mid cleanliness		

Humidifier	
Type	None
Air On	
Air Off	
Evap. Rate (kg/h)	
Heat Input	N/A
Control Method	
Electrical Supply	
Eliminator (Y/N)	

Dampers	

OA Dimensions (mm)	
Shipping Weight and Sections (kg)	
Total Operating Weight (kg)	

Notes	This performance schedule is to be read in conjunction with the project mechanical specification documents
	Provide the air off temperatures at the design conditions.
	Provide full sound spectrum data to aid with the selection of attenuation.
	Provide electrical load information.

Project Name -	Extra Care Home Cleckheaton	Project Reference -	3995	Engineer -	PR
BIM Reference -	CLK-WME-XX-XX-SC-M-57-0001				

57-0002 Amenity MVHR Units

Status	Revision	Issue date	Engineer	Check	Comments
Issued for information	P01	31/01/2025	PR		

Unit Reference	MVHR005
Type	Vertical Wall Mounted MVHR Unit
Manufacturer	TBC
Model Reference	TBC
Design SFP at design volume flow rate (W/l/s)	1.4 Max at 100%
Actual SFP at design volume flow rate (W/s/l) full fresh air	
Location	First Floor Seating Area
Qty	1
Handing	TBC

Fan Section	Fan section	
	Supply	Extract
Normal Mode Volume Flow Rate (l/s)	48	48
Normal Mode External Pressure (Pa)	127.0	123.0
Type	Backward curved	Backward curved
Power Supply (V/Ph/Hz)	230/1/50	230/1/50
Starting Current (Amps):		
Running Current (Amps:		
Motor Rating (kW)		
Absorbed Power (kW)		
Total Efficiency (%)		
Inverter Controlled		
Spring AVM's (mm)		

Fan noise	Supply Fan Noise			Extract Fan Noise		
SPL dB(A) @ 1m	Breakout	Discharge	Intake	Breakout	Discharge	Intake
63Hz						
125Hz						
250Hz						
500Hz						
1K Hz						
2K Hz						
4K Hz						
8K Hz						
Overall dBa						

Coils	Coils					
Type	Frost Coil (LTHW)	Cooling Coil (CHW)	Main Heating Coil (LTHW)			
Entering Air Condition (°Cdb/°Cwb)	Not applicable	Not applicable	Not applicable			
Leaving Air Condition (°Cdb/°Cwb)						
Duty (kW)						
Fluid Temp On/Off Coil (°C)						
Fluid Flow Rate (l/s)						
Face Velocity (m/s)						
Droplet Eliminator (Y/N)						
Materials Tube / Finish						
Split Coil						
Max Water side Pressure Drop (kPa)						

Heat Recovery	Heat recovery					
Type	Adiabatic humidifier (in recirc)		PHX		Mixing box	
Air Stream			Fresh air	Recirc		
Winter condition Air On (db °C)			-5.0	22.50		
Winter condition Air On (wb °C)			-5.0	19.00		
Winter condition Air Off (db °C)						
Winter condition Air Off (wb °C)						
Summer condition Air On (db °C)			29	35.00		
Summer condition Air On (wb °C)			20	25.00		
Summer condition Air Off (db °C)						
Summer condition Air Off (wb °C)						
Efficiency if balanced (%)			80%			
Efficiency at design (%)						
Face Velocity (max)						

Filters	Supply deck pre filter	Supply deck main filter		Re-circ deck pre filter		
Type		TBC		TBC		
Grade		F7		F7		
Clean Pressure Drop (Pa)		TBC		TBC		
Dirty Pressure Drop (Pa)		TBC		TBC		
SFP Based on		Mid cleanliness		Mid cleanliness		

Humidifier	
Type	None
Air On	
Air Off	
Evap. Rate (kg/h)	
Heat Input	N/A
Control Method	
Electrical Supply	
Eliminator (Y/N)	

Dampers	

OA Dimensions (mm)	
Shipping Weight and Sections (kg)	
Total Operating Weight (kg)	

Notes	This performance schedule is to be read in conjunction with the project mechanical specification documents
	Provide the air off temperatures at the design conditions.
	Provide full sound spectrum data to aid with the selection of attenuation.
	Provide electrical load information.

Project Name -	Extra Care Home Cleckheaton	Project Reference -	3995	Engineer -	PR
BIM Reference -	CLK-WME-XX-XX-SC-M-57-0001				

57-0002 Amenity MVHR Units

Status	Revision	Issue date	Engineer	Check	Comments
Issued for information	P01	31/01/2025	PR		

Unit Reference	MVHR006
Type	Vertical Wall Mounted MVHR Unit
Manufacturer	TBC
Model Reference	TBC
Design SFP at design volume flow rate (W/l/s)	1.4 Max at 100%
Actual SFP at design volume flow rate (W/s/l) full fresh air	
Location	First Floor Seating Area
Qty	1
Handing	TBC

Fan Section	Fan section	
	Supply	Extract
Normal Mode Volume Flow Rate (l/s)	60	60
Normal Mode External Pressure (Pa)	127.0	123.0
Type	Backward curved	Backward curved
Power Supply (V/Ph/Hz)	230/1/50	230/1/50
Starting Current (Amps):		
Running Current (Amps:		
Motor Rating (kW)		
Absorbed Power (kW)		
Total Efficiency (%)		
Inverter Controlled		
Spring AVM's (mm)		

Fan noise	Supply Fan Noise			Extract Fan Noise		
SPL dB(A) @ 1m	Breakout	Discharge	Intake	Breakout	Discharge	Intake
63Hz						
125Hz						
250Hz						
500Hz						
1K Hz						
2K Hz						
4K Hz						
8K Hz						
Overall dBa						

Coils	Coils					
Type	Frost Coil (LTHW)	Cooling Coil (CHW)	Main Heating Coil (LTHW)			
Entering Air Condition (°Cdb/°Cwb)	Not applicable	Not applicable	Not applicable			
Leaving Air Condition (°Cdb/°Cwb)						
Duty (kW)						
Fluid Temp On/Off Coil (°C)						
Fluid Flow Rate (l/s)						
Face Velocity (m/s)						
Droplet Eliminator (Y/N)						
Materials Tube / Finish						
Split Coil						
Max Water side Pressure Drop (kPa)						

Heat Recovery	Heat recovery					
Type	Adiabatic humidifier (in recirc)		PHX		Mixing box	
Air Stream			Fresh air	Recirc		
Winter condition Air On (db °C)			-5.0	22.50		
Winter condition Air On (wb °C)			-5.0	19.00		
Winter condition Air Off (db °C)						
Winter condition Air Off (wb °C)						
Summer condition Air On (db °C)			29	35.00		
Summer condition Air On (wb °C)			20	25.00		
Summer condition Air Off (db °C)						
Summer condition Air Off (wb °C)						
Efficiency if balanced (%)			80%			
Efficiency at design (%)						
Face Velocity (max)						

Filters	Supply deck pre filter	Supply deck main filter		Re-circ deck pre filter		
Type		TBC		TBC		
Grade		F7		F7		
Clean Pressure Drop (Pa)		TBC		TBC		
Dirty Pressure Drop (Pa)		TBC		TBC		
SFP Based on		Mid cleanliness		Mid cleanliness		

Humidifier	
Type	None
Air On	
Air Off	
Evap. Rate (kg/h)	
Heat Input	N/A
Control Method	
Electrical Supply	
Eliminator (Y/N)	

Dampers	

OA Dimensions (mm)	
Shipping Weight and Sections (kg)	
Total Operating Weight (kg)	

Notes	Select a fan capable of 10% more volume at 21% more pressure
	Base the SFP on the design condition with filters at mid condition.
	Provide the air off temperatures at the design conditions.
	Provide full sound spectrum data to aid with the selection of attenuation.
	Provide electrical load information.