

#### **CERTIFICATE OF INSTALLATION**

This Certificate of Installation documents the installation of mechanical features, materials, components, and manufactured devices required to demonstrate compliance with Title 24, Part 6 per §10-103(a)3 for nonresidential, hotel/motel and high-rise residential occupancies.

Proj	ect Name:			Enforcement Agency:							
Dwe	elling Address:			Permit Number:							
City	and Zip Code:			Date Permit Issued:							
A. G	ENERAL INFORMATIO	N									
01	Project Location (city):		02	Zip Code:							
03	Date of Permit Set used for construction:	-1	04	Name of Permit Set used for construction:							
05	Authority Having Jurisdiction:		06	Building Permit #:							
07	Date of As-built Set:		08	Name of As-built Set:							
B. IN	. INSTALLER SCOPE										

This table indicates construction systems and materials documented on this Certificate of Installation.

		01		
Dry System (Airside) Equipment	Ventilation (including DOAS, ERV and HRV)		System Controls	Ductwork
Boiler	Pumps		Terminal Box Controls	Piping
Chiller	Fans and Air Economizers		Heat Rejection Equipment (cooling towers, condensers, waterside economizers)	Electric Resistance Heating



#### **C. COMPLIANCE RESULTS**

This table indicates whether the as-built conditions documented in this form are equal or better than what was documented on the permitted Certificate of Compliance. If the installation is not equal or better, Section 10-103(a)2B requires the Certificate of Compliance form to be revised accordingly to demonstrate compliance.

	unigry to demonstrate comprisince.
01	INSTALLED FEATURES EXACTLY MATCH DESIGN ON PERMITTED CERTIFICATE OF COMPLIANCE
	Documented as-built conditions should be verified by inspector from Authority Having Jurisdiction to comply.
	The Certificate of Compliance should be revised to confirm as-built conditions comply and this Certificate of Installation updated accordingly.
D. EXC	CEPTIONAL CONDITIONS
This to	able is auto-filled with uneditable comments because of field conditions noted by the installer that may impact mechanical controls
requir	rements documented on the Certificate of Compliance.
F INIS	STALLER NOTES
_	
I nis to	able includes remarks made by the installer to the Authority Having Jurisdiction.



#### **F. INSTALLATION DETAILS**

The following tables indicate performance requirements as documented on the permitted Certificate of Compliance for all systems and components included in Table B. Installer Scope. Also indicated are the as-built conditions documented by the installer/documentation author.

**Dry System Equipment Schedule** 

01		02	03	04	05	06	07	08	09	10	11	12	13	14
				Heating Mode					Cooling Mode					
Name or Ite	m Tag	Model #	Equipment Type	Rated Output (kBtu/h)	Supplemental Heating Output (kBtu/h)	Efficiency	Efficiency Unit	Refrigerant Loop Heat Recovery	Rated Output (kBtu/h)	Efficiency	Efficiency Unit	Efficiency	Efficiency Unit	Equipment Compliance
Per C of C														
As-built Conditions														

**Dual Fuel Heat Pump Equipment Schedule** 

01		02	03	04	05	06	07	08	09	10	11	12	13
			Heating Mode				Cooling Mode						
Name or Ite	em Tag	Model #	System Category	Size Category (Btu/h)	Efficiency	Efficiency Unit	System Category	Size Category (Btu/h)	Efficiency	Efficiency Unit	Efficiency	Efficiency Unit	Equipment Compliance
Per C of C													
As-built Conditions													



### **DX DOAS Schedule**

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Model #	Equipment Type	Energy Recovery Rating Condition		Efficiency Unit		Efficiency	Efficiency Unit	Equipment Compliance	
Per C of C										
As-built Conditions						ISMRE		ISCOP		

**Boiler Efficiency and Controls** 

01	02	03	04	05	06	07	08	09	10	11
Tag/Plan Detail			Quantity	Rated Input (Btu/h)	Rated Efficiency	Efficiency . Unit	Con	Controls		Equipment
ID	Model #	Equipment Type					Isolation Valve	Temperature Reset	Supply Temperature	Compliance
Per C of C										
As-built										
Conditions										

**Chiller & Air to Water Heat Pump Efficiency and Controls** 

01		02	03	04	05	06	07	08	09	10	11	12
Tag/Plan Detail ID					Size	Rated	Efficiency	Rated	Efficiency	Controls		Equipment
		Model#	Equipment Type	Quantity	(tons)	Efficiency #1	Unit #1	Efficiency #2	Unit #2	Isolation Valve	Temperature Reset	Compliance
Per C of C												
As-built												
Conditions												



# **Mechanical Heat Recovery**

01		02	03
Name or Item Tag		Simultaneous Mechanical Heat Recovery	Heat Recovery Systems Shall: - Transferring the lesser of the following from spaces in cooling to spaces in heating:
Per C of C			<ul> <li>- 25% of the peak heat rejection of the cooling system</li> <li>- 25% of design capacity of all service water heating systems + design capacity of all space heating systems</li> </ul>
As-built Conditions			<ul> <li>- Heat or preheat the service water heating to the smaller of:</li> <li>- 30% of the peak heat rejection of the cooling system; or</li> <li>- 30% of design capacity of all service water heating systems</li> </ul>

# Heat Rejection Equipment (Cooling Towers, Condensers, Waterside Economizers) Efficiency and Controls

01	02	03	04	05	06	07	08	09	10	11	12
			Quantity	Rated Performance	Performance Unit			Controls			
Tag/Plan Detail ID	Model #	Equipment Type				Fan Speed Control	Tower Flow Turndown	Fan Control in Multiple Cell Equipment	Economizer Control	Condenser Water Temp. Reset	Equipment Compliance
Per C of C											
As-built											
Conditions											

# **Electric Resistance Heating**

01	02	03	04	05	
Name or Tag ID	Model #	Equipment Description	Output Capacity (kW)	Equipment Compliance	
Per C of C As-built Conditions					



**Pumps** 

01	02	03	04	05	06	07	08	09
		Quantity	Horsepower (HP)		Contro			
Name or Tag ID	Type			Variable Flow	Hydronic Heat	VSD on	Differential	Equipment Compliance
			(1117	Controls	Pump Isolation	Pumps > 5HP	Pressure Sensor	
Per C of C								
As-built								
Conditions								

### **Fans and Air Economizers**

01	02	03	04	05	06
Name or Tag ID	Quantity	Fan Function	Economizer	Fan Electrical Input Power (W)	System Compliance
Per C of C					
As-built					
Conditions					

**Dedicated Outdoor Air System (DOAS)** 

01		02	03	04	05	06	07	08	09	10	11
System N	ame	Quantity	Delivered Directly To The Space	Fan System Power (kW)	Fan System Airflow (CFM)	Watts/CFM	DOAS Fan Control	Multi-Zone DOAS with Cooling	Economizer	Multifamily DOAS	System Compliance
Per C of C		_					>=3				
As-built							speeds				
Conditions							5,000.0				

**Exhaust Air Heat Recovery** 

01	02	03	04	05	06	07
Fan System Name	Required?	Type of Heat Recovery Rating	Required Recovery Ratio	Installed Recovery Ratio	Energy Recovery Bypass	System Compliance



**Dwelling Unit Fan Efficacy & Energy/Heat Recovery** 

01	02	03	04	05	06	07
Fan System N or Item Ta	System Airflow (cfm)	Input Power (kW)	Watts/CFM	Energy/Heat Recovery Ventilation	Sensible Recovery/Effectiveness	System Compliance
Per C of C						
As-built						
Conditions						

**System Controls** 

System co.										
01		02 03 04 05 06 07 08		08	09	10				
System Na	ame	Thermostats	Shut-Off Controls	Isolation Zone Controls	Demand Response	Supply Air Temp. Reset	Window Interlocks	Direct Digital Control (DDC)	Heat Pump Defrost	System Compliance
Per C of C										
As-built Conditions										

Nonresidential, Hotel/Motel and Multifamily Common Use Ventilation Systems

01		02	03		04				
System Na	ame	System Design OA CFM Airflow	System Design Transfer Air CFM	Air Filtration					
05		06	07	08		09			
Space Na	ime	Exhaust Ventilation	Occupant Sensor Co	ontrols	Demand Control Ventilation	System Compliance			
Per C of C									
As-built Conditions									



**Multifamily Dwelling Unit Ventilation Systems** 

01	01 02		03	04	05	06
Space Name		Supply Air CFM	Exhaust CFM	Local Exhaust	Air Filtration	Space Compliance
Per C of C						
As-built Conditions						

#### **Terminal Box Controls**

01	02	03	04	05	06	07	08	09
			D	esign	Reheated, Recooled,	Reheated, Recooled, Mixed Air Compliance		
Zone/System/VAV Box Name or Item Tag	Zonal Control Strategy	Peak Primary Airflow CFM	Primary Air in Deadband CFM	Reheated Recooled Mixed Airflow CFM	Outside Air CFM	1st Stage Modulates <95°F and Maintains DB Rate?	2nd Stage Modulates from DB Flow to Heating Max Flow?	Zone/ Box/ System Compliance
Per C of C As-built Conditions								

#### **Ducts**

The following duct systems require duct leakage testing by a certified Mechanical Acceptance Test Technician or a HERS Rater.

Learn more about the Acceptance Testing Program on the Energy Commission website here: <a href="https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program">https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program</a>.

Learn more about the ECC Program on the Energy Commission website here: <a href="https://www.energy.ca.gov/programs-and-topics/programs/energy-code-compliance-program">https://www.energy.ca.gov/programs-and-topics/programs/energy-code-compliance-program</a>.

01
U1
<u>*-</u>



### **Pipe Insulation**

Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed.

## Insulation thickness (in) or R-value shall be per the following Title 24, Part 6 Table 120.3-A/160.3-D.

Fluid Operating	Insulation C	onductivity			Nominal Pipe	Diameter (in inc	hes)			
Temperature Range	Conductivity (in Btu·in/h·ft²·	Mean Rating Temperature								
(°F)	°F)	(°F)		< 1	1 to <1.5	1.5 to < 4	4 to < 8	8 and larger		
_	nd Service Water te, Refrigerant, S Water)	pace Heating, Se	-	Minimum Pipe Insulation Required (Thickness in inches or R-value)						
Above 350	0.32-0.34	250	Inches	4.5	5.0	5.0	5.0	5.0		
			R-value	R 37	R 41	R 37	R 27	R 23		
251-350	0.29-0.32	200	Inches	3.0	4.0	4.5	4.5	4.5		
			R-value	R 24	R 34	R 35	R 26	R 22		
201-250	0.27-0.30	150	Inches	2.5	2.5	2.5	3.0	3.0		
			R-value	R 21	R 20	R 17.5	R 17	R 14.5		
141-200	0.25-0.29	125	Inches	1.5	1.5	2.0	2.0	2.0		
			R-value	R 11.5	R 11	R 14	R 11	R 10		
105-140	0.22-0.28	100	Inches	1.0	1.5	1.5	1.5	1.5		
			R-value	R 7.7	R 12.5	R 11	R 9	R 8		



Fluid Operating Temperature	Insulation C		Nominal Pipe Diameter (in inches)							
Range (°F)	Conductivity (in Btu·in/h·ft2· °F)	Mean Rating Temperature (°F)		<1		1 to <1.5		1.5 to < 4	4 to < 8	8 and larger
Space cooling sy	Minimum Pipe Insulation Required (Thickness in inches or R-value) <sup>1</sup>									
40-60	0.21-0.27	75	Inches	Nonres 0.5	Res 0.75	Nonres 0.5	Res 0.75	1.0	1.0	1.0
			R-value	Nonres R 3	Res R 6	Nonres R 3	Res R 5	R 7	R 6	R 5
Below 40	0.20-0.26	50	Inches	1.0	)	1.5		1.5	1.5	1.5
			R-value	R 8.	5	R 14	4	R 12	R 10	R 9



#### G. ACCEPTANCE TESTS & FIELD VERIFICATION

The following Acceptance Tests and ECC Verifications related to the systems or materials documented on this Certificate of Installation have been indicated on the permitted Certificate of Compliance as being required to comply with Title 24, Part 6.

### **Certificates of Acceptance**

Mechanical Acceptance Tests must be completed by a certified Acceptance Testing Technician and Certificate of Acceptance forms completed through an approved Acceptance Test Technician Certification Provider database. The Certificate of Acceptance forms indicated below will be required by the Authority Having Jurisdiction to demonstrate compliance.

Form/Title	Systems to be Field Verified
NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units.	
Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities	
overlap.	
NRCA-MCH-03-A - Must be submitted for Constant Volume Single Zone HVAC.	
NRCA-MCH-04-A - Must be submitted for Air Distribution Duct Leakage.	
NRCA-MCH-05-A - Must be submitted for Air Economizer, DOAS, HRV and ERV Controls.	
NRCA-MCH-06-A - Must be submitted for Demand Control Ventilation.	
NRCA-MCH-07-A - Must be submitted for Supply Fan Variable Flow Controls.	
NRCA-MCH-08-A - Must be submitted for Valve Leakage Test.	
NRCA-MCH-09-A - Must be submitted for Supply Water Temperature Reset Controls.	
NRCA-MCH-10-A - Must be submitted for Hydronic System Variable Flow Controls.	
NRCA-MCH-11-A - Must be submitted for Automatic Demand Shed Controls.	
NRCA-MCH-12-A-FDD-F - Must be submitted for Packaged Direct Expansion Units.	
NRCA-MCH-13-A-FDD - Must be submitted for Air Handling Units and Zone Terminal Units.	
NRCA-MCH-14-A - Must be submitted for Distributed Energy Storage DX-AC Systems.	
NRCA-MCH-15-A - Must be submitted for Thermal Energy Storage.	
NRCA-MCH-16-A - Must be submitted for Supply Air Temperature Reset Controls.	
NRCA-MCH-17-A - Must be submitted for Condenser Water.	
NRCA-MCH-18-A - Must be submitted for Energy Management Control Systems.	
NRCA-MCH-19-A - Must be submitted for Occupancy Sensor Controls.	
NRCA-MCH-20-H - Must be submitted for Multifamily Ventilation.	
NRCA-MCH-21-H - Must be submitted for Multifamily Envelope.	
NRCA-MCH-22-A - Must be submitted for Multifamily Duct Leakage.	
NRCA-MCH-23-A - Must be submitted for Multifamily HRV/ERV Verification.	
NRCA-MCH-24-A - Cooling Tower Conductivity Controls	



#### **Certificates of Verification**

ECC verifications must be completed by an ECC Rater and NRCV forms completed through an approved ECC Provider database. The Certificate of Verification forms indicated below will be required by the Authority Having Jurisdiction to demonstrate compliance.

Form/Title	Systems to be Field Verified
NRCV-MCH-24 Enclosure Air Leakage Test	
NRCV-MCH-27 High-rise Residential	
NRCV-MCH-32 Local Mechanical Exhaust	
There are no ECC verifications indicated on the permitted Certificate of Compliance related to the systems or materials documented on this Certificate of Installation.	

A copy of this Certificate of Installation should be distributed to the certified Acceptance Test Technician(s) who will perform the acceptance test(s). Title 24, Part 6 Section 10-103(a)3F also requires this Certificate of Installation be posted or made available to the Authority Having Jurisdiction for all applicable inspections.



#### DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Installation documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
Address:	CEA/AEA/ECC Certification Identification (If applicable):
City/State/Zip:	Phone:

#### RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- 1. The information provided on this Certificate of Installation is true and correct.
- 2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation and attest to the declarations in this statement (responsible builder/installer), otherwise I am an authorized representative of the responsible builder/installer.
- 3. The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to the requirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency.
- 4. I reviewed a copy of the Certificate of Compliance approved by the enforcement agency that identifies the specific requirements for the scope of construction or installation identified on this Certificate of Installation, and I have ensured that the requirements that apply to the construction or installation have been met.
- 5. I understand that a completed signed copy of this Certificate of Installation shall be made available with the building permit(s) issued for the building and shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement.
- 6. I understand that a completed signed copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Responsible Person Scope		
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	NRCI-MCH-E
Mechanical Systems	(Page 1 of 7)

#### A. General Information

- 1. This field is filled out automatically.
- 2. Enter the zip code of the construction project.
- 3. Enter the Date of Permit Set used for construction.
- 4. Enter the Name of Permit Set used for construction.
- 5. Enter the Authority Having Jurisdiction.
- 6. Enter the Building Permit #.
- 7. Enter the Date of As-Built Set.
- 8. Enter the Name of As-Built Set.

### **B. Project Scope**

1. Select all applicable equipment, systems and materials documented.

# **C. Compliance Results**

Results in this table are automatically calculated from data input and calculations in Tables F.

### **D. Exceptional Conditions**

1. This table is auto filled with uneditable comments because of selections made or data entered in tables throughout the form.

#### **E. Installer Notes**

1. Enter any notes or comments for the AHJ.

#### F. INSTALLATION DETAILS

### **Dry System Equipment Schedule**

- 1. This field is filled out automatically.
- 2. Enter the model # of the equipment being installed.
- 3. Select: True or False.
- 4. Enter the heating mode Rated Output of the equipment in kBtu/h.
- 5. Enter the Supplemental Heating Output of the equipment in kBtu/h.
- 6. Enter the efficiency of the equipment while in heating mode.
- 7. This field is filled out automatically.
- 8. Enter the cooling mode Rated Output of the equipment in kBtu/h.
- 9. Enter the efficiency of the equipment while in cooling mode.

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	NRCI-MCH-E
Mechanical Systems	(Page 2 of 7)

- 10. This field is filled out automatically.
- 11. If a second efficiency is required, enter the efficiency of the equipment while in cooling mode.
- 12. This field is filled out automatically.
- 13. This field is calculated automatically.

### **Heat Pump Equipment Schedule**

- 1. This field is filled out automatically.
- 2. Enter the model # of the equipment being installed.
- 3. Select: True or False.
- 4. Select: True or False.
- 5. Enter the efficiency of the heat pump while in heating mode.
- 6. This field is filled out automatically.
- 7. Select: True or False.
- 8. Select: True or False.
- 9. Enter the efficiency of the heat pump while in cooling mode.
- 10. This field is filled out automatically.
- 11. If a second efficiency is required, enter the efficiency of the heat pump while in cooling mode.
- 12. This field is filled out automatically.
- 13. This field is calculated automatically.

### **DX DOAS Schedule**

- 1. This field is filled out automatically.
- 2. Enter the model # of the equipment being installed.
- 3. Select: True or False.
- 4. Select: True or False.
- 5. Select: True or False.
- 6. Enter the ISMRE efficiency of the DOAS equipment.
- 7. This field is static text showing the efficiency unit is ISMRE.
- 8. Enter the ISCOP efficiency of the DOAS equipment.
- 9. This field is static text showing the efficiency unit is ISCOP.
- 10. This field is calculated automatically.

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	NRCI-MCH-E
Mechanical Systems	(Page 3 of 7)

#### **Boiler**

- 1. This field is filled out automatically.
- 2. Enter the model # of the equipment being installed.
- 3. Select: True or False.
- 4. Enter the quantity of identical equipment being installed.
- 5. Enter the Rated Input of the boiler in Btu/h.
- 6. Enter the Rated Efficiency of the equipment.
- 7. This field is automatically filled out.
- 8. Isolation Valve: Select from Dropdown.
- 9. Temperature Reset Controls: Select from Dropdown.
- 10. This field is calculated automatically.

#### Chiller

- 1. This field is filled out automatically.
- 2. Enter the model # of the equipment being installed.
- 3. Select: True or False.
- 4. Enter the quantity of identical equipment being installed.
- 5. Select: True or False.
- 6. Enter the efficiency while in cooling mode.
- 7. This field is filled out automatically.
- 8. If a second efficiency is required, enter the efficiency while in cooling mode.
- 9. This field is filled out automatically.
- 10. Isolation Valve: Select from Dropdown.
- 11. Temperature Reset Controls: Select from Dropdown.
- 12. This field is calculated automatically.

# Heat Rejection Equipment (Cooling Towers, Condensers, Waterside Economizers) Efficiency and Controls

- 1. This field is filled out automatically.
- 2. Enter the model # of the equipment being installed.
- 3. Select: True or False
- 4. Enter the quantity of identical equipment being installed.
- 5. Enter the Rated Performance of the equipment being installed.
- 6. This field is filled out automatically.

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	NRCI-MCH-E
Mechanical Systems	(Page 4 of 7)

- 7. Fan Speed Control: Select from Dropdown.
- 8. Tower Flow Turndown: Select from Dropdown.
- 9. Fan Control in Multiple Cell Equipment: Select from Dropdown.
- 10. Economizer Control: Select from Dropdown.
- 11. Condenser Water Temperature Reset: Select from Dropdown.
- 12. This field is calculated automatically.

### **Electric Resistance Heating**

- 1. This field is filled out automatically.
- 2. Enter the model # of the equipment being installed.
- 3. This field is filled out automatically.
- 4. Enter the Output Capacity in kW.
- 5. This field is calculated automatically.

### **Pumps**

- 1. This field is filled out automatically.
- 2. This field is filled out automatically.
- 3. Enter the quantity of identical equipment being installed.
- 4. Enter the Horsepower of the pump.
- 5. Variable Flow Controls: Select from Dropdown.
- 6. Hydronic Heat Pump Isolation Control: Select from Dropdown.
- 7. Variable Speed Drive on pumps greater than 5 horsepower: Select from Dropdown.
- 8. Differential Pressure Sensor Control: Select from Dropdown.
- 9. This field is calculated automatically.

#### **Fans and Air Economizers**

- 1. This field is filled out automatically.
- 2. Enter the quantity of identical equipment being installed.
- 3. Fan Function: Select from Dropdown.
- 4. Economizer: Select from Dropdown.
- 5. Enter the Electrical Input Power of the fan in Watts.
- 6. This field is calculated automatically.

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	NRCI-MCH-E
Mechanical Systems	(Page 5 of 7)

### **Dedicated Outdoor Air Systems (DOAS)**

- 1. This field is filled out automatically.
- 2. Enter the quantity of identical equipment being installed.
- 3. Delivered Directly to the Space: Select from Dropdown.
- 4. Enter the fan system power in kilowatts.
- 5. Enter the fan system airflow in cubic feet per minute.
- 6. This field is calculated automatically.
- 7. This field is static text that says less than or equal to 3 speeds.
- 8. Multizone DOAS with cooling: Select from Dropdown.
- 9. Select: Yes or No.
- 10. Multifamily DOAS: Select from Dropdown.
- 11. This field is calculated automatically.

### **System Controls**

- 1. This field is filled out automatically.
- 2. Thermostat Controls: Select from Dropdown.
- 3. Shut-off Controls: Select from Dropdown.
- 4. Isolation Zone Controls: Select from Dropdown.
- 5. Demand Response Controls: Select from Dropdown.
- 6. Supply Air Temperature Reset Controls: Select from Dropdown.
- 7. Window Interlock Controls: Select from Dropdown.
- 8. Direct Digital Controls: Select from Dropdown.
- 9. This field is calculated automatically.

### Nonresidential, Hotel/Motel and Multifamily Common User Ventilation Systems

- 1. This field is filled out automatically.
- 2. Enter System Designed Outside Air Airflow in cubic feet per minute.
- 3. Enter System Designed Transfer Air Airflow in cubic feet per minute.
- 4. Air Filtration: Select from Dropdown.
- 5. This field is filled out automatically.
- 6. Enter Exhaust Ventilation for the space.
- 7. Occupant Sensor Controls: Select from Dropdown.
- 8. Demand Control Ventilation: Select from Dropdown.

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	NRCI-MCH-E
Mechanical Systems	(Page 6 of 7)

9. This field is calculated automatically.

### **Multifamily Dwelling Unit Ventilation Systems**

- 1. This field is filled out automatically.
- 2. Enter System Designed Outside Air Airflow in cubic feet per minute.
- 3. Enter System Designed Supply Air Airflow in cubic feet per minute.
- 4. Enter Exhaust Air Airflow in cubic feet per minute.
- 5. Local Exhaust: Select from Dropdown.
- 6. Air Filtration: Select from Dropdown.
- 7. This field is calculated automatically.

#### **Terminal Box Controls**

- 1. This field is filled out automatically.
- 2. Zonal Control Strategy: Select from Dropdown.
- 3. Enter the Peak Primary Airflow for the zone or system in cubic feet per minute.
- 4. Enter the Primary Air in Deadband Airflow for the zone or system in cubic feet per minute.
- 5. Enter the Reheated, Recooled or Mixed Airflow for the zone or system in cubic feet per minute.
- 6. Enter the Outside Air Airflow for the zone or system in cubic feet per minute.
- 7. Confirm the first stage modulates and maintains the drybulb rate.
- 8. Confirm the second stage modulates from drybulb flow to heating max flow.
- 9. This field is calculated automatically.

#### **Ducts**

1. This field is filled out automatically.

# **Pipe Insulation**

1. This table includes required pipe insulation values from Part 6 and does not require user entry.

### **G.** Acceptance Tests and Field Verification

1. This field is filled out automatically.

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	NRCI-MCH-E
Mechanical Systems	(Page 7 of 7)

#### **Documentation Declaration Statements**

- 1. The person who prepared the NRCI will sign and complete the fields for their name, company (if applicable), address, phone number, certification information (if applicable), date and signature.
- 2. The person who is assuming responsibility for the project being built to comply with Title 24, Part 6, will complete the fields for their name, company (if applicable), address, phone number, license number (if applicable), date and signature.