

**VALVE LEAKAGE TEST**

CEC-NRCA-MCH-08-A (Revised 01/20)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF ACCEPTANCE		NRCA-MCH-08-A
Valve Leakage Test		(Page 1 of 2)
Project Name:	Enforcement Agency:	Permit Number:
Project Address:	City:	Zip Code:
System Name or Identification/Tag:	System Location or Area Served:	

Compliance Results: <input type="checkbox"/> Complies <input type="checkbox"/> Does NOT Comply	Enforcement Agency Use: Checked by/Date
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<b>Intent:</b>	Ensure that control valves serving variable flow systems can withstand the pump pressure over the full range of operation. Submit one Certificate of Acceptance for the system that must demonstrate compliance, attach additional functional tests only (NOT additional construction inspections) for each additional Pump Tag ID.
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**A. Construction Inspection**

Building:	Floor:	Room/Area/Zone:	Control/System:
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Prior to Functional Testing verify and document the following:

1.	Required documentation (check <b>all</b> of the following):	
<input type="checkbox"/>	a.	Valve and piping design drawing as approved by the authority having jurisdiction
<input type="checkbox"/>	b.	Documentation showing the shut-off head pressure for each pump in the system.
2.	Installation inspection (check <b>all</b> of the following):	
<input type="checkbox"/>	a.	Valve and piping arrangements are installed as specified by the design drawings. <a href="#">(NA7.5.7.1(a))</a>

Construction Inspection Compliance Results:  Complies  Does NOT Comply**B. Functional Testing**

Building:	Floor:	Room/Area/Zone:	Control/System: Pump Tag ID:
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Steps:		Results
1	For each of the pumps serving the distribution system, dead head the pumps using the discharge isolation valves at the pumps. Document the following: <a href="#">(NA7.5.7.2 (Step 1))</a>	
a.	Record the differential pressure across the pumps. <a href="#">(NA7.5.7.2 (Step 1a))</a>	Ft. w.c.
b.	From the required documentation in Construction Inspection 1b; record the shut-off head pressure for the Pump Tag ID.	Ft. w.c.
c.	Calculate : $100 \times (1a - 1b) / 1b$ (note: may result in a positive or negative percentage)	%
d.	Verify that Step 1c is between -5% and +5%. <a href="#">(NA7.5.7.2 (Step 1b))</a>	P/F
2	Reopen the pump discharge isolation valves. Automatically close all valves on the systems being tested. If 3-way valves are present, close off the bypass line. Verify and document the following: <a href="#">(NA7.5.7.2 (Step 2))</a>	
a.	Verify that the 2-way valve automatically close. <a href="#">(NA7.5.7.2 (Step 2a))</a>	
b.	Record the pressure differential across the pump. <a href="#">(NA7.5.7.2 (Step 2b))</a>	Ft. w.c.
c.	Calculate : $100 \times (2b - 1b) / 1b$ (note: may result in a positive or negative percentage)	%
d.	Verify that Step 2c is between -5% and +5%. <a href="#">(NA7.5.7.2 (Step 2c))</a>	P/F
3	Restore system to normal operating conditions.	

Functional Testing Compliance Results:  Complies  Does NOT Comply

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**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

1. I certify that this Certificate of Acceptance documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
Address:	ATT Certification Identification (If applicable):
City/State/Zip:	Phone:

**FIELD TECHNICIAN'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 Acceptance is true and correct.		
2. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician).		
3. The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.		
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building.		
Field Technician Name:	Field Technician Signature:	
Field Technician Company Name:	Position with Company (Title):	
Address:	ATT Certification Identification (if applicable):	
City/State/Zip:	Phone:	Date Signed:

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

I certify the following under penalty of perjury, under the laws of the State of California:		
1. I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance.		
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 Acceptance and attest to the declarations in this statement (responsible acceptance person).		
3. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.		
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building.		
5. I will ensure that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy.		
Responsible Acceptance Person Name:	Responsible Acceptance Person Signature:	
Responsible Acceptance Person Company Name:	Position with Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed: