

INSTALLER CERTIFICATION

Part 2 of 3 MECH-5-A

PROJECT NAME	DATE
SITE ADDRESS	PERMIT NUMBER

COPY TO: Building Department, Builder, Building Owner at Occupancy, HERS Provider

VERIFIED DUCT TIGHTNESS BY INSTALLER

The installing contractor must pressure test every new HVAC systems that meet the requirements of Section 144(k) and every retrofit to existing HVAC systems that meet the requirements of section 149 D or E (see Scope of Test under Construction Inspection)

RATED FAN FLOW (applies to all systems)		Measured Values	
1	Cooling capacity or for heating only units heating capacity		
	a) Cooling capacity (for all units but heating only units) in tons		
	b) Heating capacity (for heating only units) kBtu/h		
2	Fan flow calculation		
	a) Cooling capacity in tons [_____ (Line # 1a) x 400 cfm/ton]		
	b) Heating only cap. kBtu/h [_____ (Line # 1b) x (21.7 cfm/kBtu/h)]		
3	Total calculated supply fan flow 2(a) or 2(b) cfm		

NEW CONSTRUCTION OR ENTIRE NEW DUCT SYSTEM ALTERATION:

Duct Pressurization Test Results (CFM @ 25 Pa)			
4	Enter Tested Leakage Flow in CFM:		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
5	Pass if Leakage Percentage 6%: [_____ (Line # 4) / _____ (Line # 3)] x 100	%	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

ALTERATIONS: Pre-existing Duct System with Duct Alteration and/or HVAC Equipment Change-Out

6	Enter Tested Leakage Flow in CFM: Pre-Test of Existing Duct System Prior to Duct System Alteration and/or Equipment Change-Out.		
7	Enter Tested Leakage Flow in CFM: Final Test of New Duct System or Altered Duct System for Duct System Alteration and/or Equipment Change-Out.		

TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out Use one of the following Three Tests or Verification Standards for compliance:

8	Pass if Leakage Percentage 15% [_____ (Line # 7) / _____ (Line # 3)] x 100	%	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
9	Pass if Leakage Reduction Percentage 60% Leakage reduction = [1 - [_____ (Line#7) / _____ (Line#6)]] x 100	%	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
10	Pass if all Accessible Leaks are sealed as confirmed by Visual Inspection and Verification by HERS rater (sampling rate 100%)		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Pass if One of Lines #8 through # 10 pass			<input type="checkbox"/> Pass <input type="checkbox"/> Fail

INSTALLER COMPLIANCE STATEMENT

The building was: Tested at Final Tested at Rough-in

I, the undersigned, verify that the above diagnostic test results and the work I performed associated with the test(s) is in conformance with the requirements for compliance credit. I, the undersigned, also certify that the newly installed or retrofit Air-Distribution System Ducts, Plenums and Fans comply with Mandatory requirements specified in Section 124 of the 2005 Building Energy Efficiency Standards.

Name:			
Company:			
Signature:		Date:	

INSTALLER CERTIFICATION

Part 3 of 3 **MECH-5-A**

HERS Rater:	Telephone:	Sample Group Number:
Certifying Signature:		Sample building Number:
Firm:		HERS Provider:
Copies to: Builder, Building Owner at Occupancy, Building Department (wet signature), HERS Provider		

For new buildings the HERS rater must test and field verify the first individual single zone package space conditioning equipment unit of each building. After the first unit passes the builder shall identify a group of up to seven package units in the building from which one sample will be selected for testing. If this first sampled unit fails the HERS rater must pick another package unit from the group for testing. If the second unit in the group does not pass the HERS rater must test all package units in the group.

For existing buildings the HERS rater must pressure test one out of every seven units a contractor changes. Same rules apply for sampling above.

This page must be filled out by the HERS rater for all tested and sampled buildings. If the installer has not tested every system and provided a MECH-5-A to the HERS rater sampling must not occur.

The unit was: Tested Approved as part of sample testing but was not tested

As the HERS rater providing diagnostic testing and field verification, I certify that the building identified on this form complies with the diagnostic tested compliance requirements as checked on this form. The HERS rater must verify the distribution system on every new TESTED system to make sure that it is fully ducted and correct tape is used before a MECH-5-A may be released.

<input type="checkbox"/> The installer has provided a completed MECH-5-A for every system in the group
<input type="checkbox"/> <u>New</u> distribution systems are fully ducted (i.e., does not use building cavities as plenums or platform returns in lieu of ducts).
<input type="checkbox"/> In new duct systems, where cloth backed, rubber adhesive duct tape is installed, mastic and draw bands are used in combination with cloth backed, rubber adhesive duct tape to seal leaks at duct connections.

RATED FAN FLOW (applies to all systems)		Measured Values	
1	Cooling capacity or for heating only units heating capacity		
	a) Cooling capacity (for all units but heating only units) [_____ tons x 400 cfm/ton]		
	b) Heating capacity (for heating only units) [_____ kBtuh x 21.7 cfm/kBtuh]		
2	Total calculated supply fan flow 1(a) or 1(b) cfm		
NEW CONSTRUCTION OR ENTIRE NEW DUCT SYSTEM ALTERATION:			
3	Duct Pressurization Test Results (CFM @ 25 Pa) Enter Tested Leakage Flow in CFM:		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
4	Pass if Leakage Percentage 6%: [_____ (Line # 3) / _____ (Line # 2)] x 100	%	Pass Fail
ALTERATIONS: Pre-existing Duct System with Duct Alteration and/or HVAC Equipment Change-Out			
5	Enter Tested Leakage Flow in CFM: Final Test of New Duct System or Altered Duct System for Duct System Alteration and/or Equipment Change-Out.		
TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out, Use one of the following Three Tests or Verification Standards for compliance:			
6	Pass if Leakage Percentage 15% [_____ (Line # 5) / _____ (Line # 2)] x 100	%	Pass Fail
7	For systems certified by the installer as reducing leakage, pass if Leakage Reduction 60%. Leakage Reduction = 1 - [_____ (Line # 5 HERS Tested Leakage) / _____ (Line # 6 Installer's Certified Pre-Test Leakage)] x 100	%	Pass Fail
8	Pass if all Accessible Leaks are sealed as confirmed by Visual Inspection and Verification by HERS rater (sampling rate 100%)		Pass Fail
Pass if One of Lines # 6 through # 8 pass			Pass Fail