

CERTIFICATE OF INSTALLATION		CF2R-MCH-21-H
Duct Location		(Page 1 of 1)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City	Zip Code

A. Note: *Submit one Installation Certificate for each duct system that must demonstrate compliance in the dwelling.*

1.	Enter the Duct System Name or Identification/Tag:
2.	Enter the Duct System Location or Area Served:

DUCT LOCATION COMPLIANCE CREDITS

Credit is available when all or part of the HVAC system is in conditioned space. Procedures for field verification and diagnostic testing for this group of compliance credits are described in Reference Residential Appendix RA3.1.4.1.

B. LESS THAN 12 LINEAR FEET OF DUCT OUTSIDE OF CONDITIONED SPACE COMPLIANCE CREDIT. *A detailed duct design is not required for compliance with this measure. HERS verification is required for compliance with this measure as specified in Reference Residential Appendix RA3.1.4.1.2.*

1	Less than 12 linear feet of supply duct outside of conditioned space. This includes the air handler and plenum.
<input type="checkbox"/> Yes	By checking the yes box the installer certifies that the requirements in the above box have been met.

C. SUPPLY DUCTS LOCATED IN CONDITIONED SPACE COMPLIANCE CREDIT. *A detailed duct design is not required for compliance with this measure. HERS verification is NOT required for compliance with this measure.*

<ul style="list-style-type: none"> • Ducts are located within the conditioned space of the building. • Duct system has passed the required Duct Leakage Test. 	
1	<input type="checkbox"/> Yes By checking the yes box the installer certifies that the requirements in the above box have been met.

D. ALL DUCTS LOCATED IN CONDITIONED SPACE. *HERS verification is required for compliance with this measure as specified in Reference Residential Appendix RA3.1.4.3.8.*

1.	I have completed a visual inspection and determined there are no ducts outside of the pressure/thermal boundary.
2.	Duct leakage to outside was 25 CFM or less when pressurizing the building according to RA3.1.4.3.8
<input type="checkbox"/> Yes	By checking the yes box the installer certifies that the requirements in the above box have been met.

A. Enter the duct system name and area served by this HVAC system

B. LESS THAN 12 LINEAR FEET OF DUCT OUTSIDE OF CONDITIONED SPACE COMPLIANCE

CREDIT. When this credit is taken there must not be more than 12 linear feet of the HVAC system outside of the conditioned space. The 12 feet include ducting, equipment and/or plenums. In order to be considered inside conditioned space the ducts must be either run through the conditioned space or located within a drop that is separated from the attic and outside both thermally and with an air barrier. Verification must be done before the ducts are covered by any building products.

C. SUPPLY DUCTS LOCATED IN CONDITIONED SPACE COMPLIANCE CREDIT

ALL the supply ducts must be in conditioned space. In order to be considered inside conditioned space the ducts must be either run through the conditioned space or located within a drop that is separated from the attic and outside both thermally and with an air barrier. Verification must be done before the ducts are covered by any building products.

D. ALL DUCTS LOCATED IN CONDITIONED SPACE

To determine whether ducts are enclosed entirely in directly conditioned space, a rater must field verify by using the protocols of RA3.1.4.3.8. This can include ducts located in the floor joist area between conditioned floors.

RA3.1.4.3.8 utilizes a duct leakage to outside test procedure to help ensure that the ducts are within the pressure boundary of the space being served by the duct system. Passing the test alone is not enough to establish that the ducts are entirely within conditioned space. The test procedure is in addition to a basic visual inspection of the ducts to ensure that no portion of the duct system is obviously outside of the apparent pressure/thermal boundary. Once this has been established, the leakage to outside test verifies that the pressure boundary is intact and preventing leakage from escaping to the outside.

Applying this procedure to multi-family dwelling units poses a unique situation. In this case leakage to “outside” means conditioned air leaking from the ducts to anywhere outside of the pressure boundary of the space being served by the duct system, including adjacent dwelling units. Duct leakage to adjacent dwelling units is not desirable and should be eliminated. When performing the leakage to outside test, it is only necessary to pressurize the dwelling unit served by the duct system being tested.