

RED\$ed far the purpose of distributing supply air to a room, space or area.

Revise as follows:

CONDITIONED SPACE. An area, room or space that is enclosed within the *building thermal envelope* and is directly or indirectly heated or cooled. Spaces are indirectly heated or cooled where they communicate through openings with conditioned spaces, where they are separated from conditioned spaces by uninsulated walls, floors or ceilings, or by partitions, doors, windows, or skylights.

TABLE R402.5.1.1 AIR BARRIER, AIR SEALING AND INSULATION INSTALLATION^a

Portions of table not shown remain unchanged.

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
Shafts, penetrations	<p>Duct Duct and flue shafts to exterior or unconditioned space shall be sealed.</p> <p>Utility penetrations of the air barrier shall be caulked, gasketed or otherwise sealed and shall allow for expansion, contraction of materials and mechanical vibration.</p>	<p>Insulation shall be fitted tightly around utilities passing through shafts and penetrations in the building thermal envelope to maintain required <i>R</i>-value.</p>
Recessed lighting	<p>Recessed light fixtures installed in the building thermal envelope shall be air sealed in accordance with Section R402.5.5.</p>	<p>Recessed light fixtures installed in the building thermal envelope shall be airtight and IC rated, and shall be buried in or surrounded with bi ()Tj 0.06Tc 0.P <</MCID 101 >>BDC -0.</p>

3. *Ductwork* located in

	<u>Duct systems serving more than 1,000 ft² of conditioned floor area</u>		<u>Duct systems serving less than or equal to 1,000 ft² or less of conditioned floor area</u>
	cfm/100 ft ² (LPM/9.29 m ²)		cfm (LPM)
	Number of ducted returns ^a		
	< 3	4	Any
<u>Space conditioning equipment is not installed^{b, c}</u>	<u>3 (85)</u>	<u>4 (113-3)</u>	<u>30 (850 849-5)</u>
All components of the <u>duct system</u> are installed	<u>4 (113-3)</u>	<u>6 (170)</u>	<u>40 (11332-7)</u>
<u>Space conditioning equipment is not installed, but the ductwork is located entirely in conditioned space^{cd}</u>	<u>6 (170)</u>	<u>8(227)</u>	<u>60 (1699)</u>
All components of the <u>duct system</u> are installed and entirely located in <u>conditioned space^e</u>	<u>8 (2276-6)</u>	<u>12(340)</u>	<u>80 2265-4)</u>

a. A ducted return is a duct made of sheet metal or flexible duct that connects one or more return grilles to the return-side inlet of the air-handling unit. Any other approach method to convey air from return or transfer grille(s) to the air-handling unit does not constitute a ducted return for the purpose of determining maximum total duct system leakage allowance.

b. Where the space conditioning equipment is not installed, duct system testing shall be permitted and shall include the measured leakage from both the supply and return ductwork. Duct system testing shall not be performed if the return ductwork is not installed. Duct system testing is permitted where space conditioning equipment is not installed, provided the return ductwork is installed, and the measured leakage from the supply and return ductwork is included.

c. For duct systems to be considered inside a conditioned space, where the ductwork is located in ventilated attic spaces or unvented attics with vapor diffusion ports, duct system leakage to outside shall must comply with Item 2.1 of Section R403.3.2. be measured in accordance with ANSI/RESNET/ICC 380 or ASTM E1554 and shall be less than or equal to 1.5 cubic feet per minute (42.5 L/min) per 100 square feet (9.29 m²) of conditioned floor area served by the duct system.

d. Prior to certificate of occupancy, where the air-handling unit is not verified as being located in unconditioned space, the duct system shall be tested in accordance with Item 2.1 of Section R403.3.2. be measured in accordance with ANSI/RESNET/ICC 380 or ASTM E1554 and shall be less than or equal to 1.5 cubic feet per minute (42.5 L/min) per 100 square feet (9.29 m²) of conditioned floor area served by the duct system.



SECTION R405 SIMULATED BUILDING PERFORMANCE

Revise as follows:

R405.3.2.1 Compliance report for permit application. A compliance report submitted with the application for building permit shall include the following:

1. Building street address, or other *building site* identification.
2. The name of the individual performing the analysis and generating the compliance report.
3. The name and version of the compliance software tool.
4. Documentation of all inputs entered into the software used to produce the results for the reference design and/or the rated home.
5. A certificate indicating that the proposed design complies with Section R405.3. The certificate shall document the building components' energy specifications that are included in the calculation including: component-level insulation $R_{ci} \geq 0.034 \text{ Ts/T2Td}$ ()maalc-c(l)-20u.1 (es)TJ0 Tc 0 T

TABLE R405.4.2(1) SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS

Portions of table not shown remain unchanged.

**BUILDING
COMPONENT**

STANDARD REFERENCE DES/48 9t Td[(D)10.5 ((i8)-2.w 3.3 0 Td()Tj731EMC ET/P A/CID 5 BDC q97.84 687.7230944 25.56 63m



provides thermal storage such as enclosed water columns, rock beds, or phase-change containers. A thermal storage element shall be in the same room as fenestration that faces within 15 degrees (0.26 rad) of true south, or shall be connected to such a room with pipes or ducts that allow the element to be actively charged.

- d. For a proposed design with multiple heating, cooling or water heating systems using different fuel types, the applicable standard reference design system capacities and fuel types shall be weighted in accordance with their respective loads as calculated by accepted engineering practice for each equipment and fuel type present.
- e. For a proposed design without a proposed heating system, a heating system having the prevailing federal minimum efficiency shall be assumed for both the standard reference design and proposed design.
- f. For a proposed design home without a proposed cooling system, an electric air conditioner having the prevailing federal minimum efficiency shall be assumed for both the standard reference design and the proposed design.
- g. For a proposed design the following assumptions shall be made for both the proposed design and standard reference design.

Fuel Type: Same as the predominant heating fuel type Rated

Storage Volume: 40 Gallons

where:

Common wall area is the area of walls shared with an adjoining dwelling unit.

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- i. The factor for the compactness of the hot water distribution system is the ratio of the area of the rectangle that bounds the source of hot water and the fixtures that it serves (the "hot water rectangle") divided by the floor area of the dwelling.

1. Sources of hot water include

TABLE R405.4.2(2) DEFAULT DISTRIBUTION SYSTEM EFFICIENCIES

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