

TABLE 6.2.4.2B
Minimum Duct Insulation R-Value,^a Combined Heating and Cooling Ducts

Climate Zone			Duct Location						
Envelope Criteria Table	HDD65	CDD50	Exterior	Ventilated Attic	Unvented Attic w/ Backloaded Ceiling	Unvented Attic w/ Roof Insulation ^a	Unconditioned Space ^b	Indirectly Conditioned Space ^c	Buried
B-1	0-900	10801+	R-8	R-6	R-8	R-3.5	R-3.5	none	R-3.5
B-2	0-900	9001-10800	R-6	R-6	R-8	R-3.5	R-3.5	none	R-3.5
B-3	0-900	7201-9000	R-6	R-6	R-6	R-3.5	R-3.5	none	R-3.5
B-4	0-900	0-7200	R-6	R-3.5	R-6	R-3.5	R-1.9	none	R-3.5
B-5	901-1800	7201+	R-6	R-6	R-6	R-3.5	R-3.5	none	R-3.5
B-6	901-1800	5401-7200	R-6	R-6	R-6	R-3.5	R-3.5	none	R-3.5
B-7	901-1800	0-5400	R-3.5	R-3.5	R-6	R-1.9	R-1.9	none	R-1.9
B-8	1801-2700	5401+	R-6	R-6	R-6	R-3.5	R-3.5	none	R-3.5
B-9	1801-2700	0-5400	R-6	R-3.5	R-6	R-1.9	R-1.9	none	R-1.9
B-10	2701-3600	5401+	R-6	R-6	R-6	R-3.5	R-3.5	none	R-3.5
B-11	2701-3600	3601-5400	R-6	R-6	R-6	R-3.5	R-3.5	none	R-1.9
B-12	2701-3600	0-3600	R-3.5	R-3.5	R-3.5	R-1.9	R-1.9	none	R-1.9
B-13	3601-5400	3601+	R-6	R-6	R-6	R-3.5	R-3.5	none	R-3.5
B-14	3601-5400	1801-3600	R-6	R-3.5	R-6	R-1.9	R-3.5	none	R-1.9
B-15	3601-5400	0-1800	R-3.5	R-3.5	R-3.5	R-1.9	R-1.9	none	R-1.9
B-16	5401-7200	3601+	R-6	R-6	R-6	R-3.5	R-3.5	none	R-3.5
B-17	5401-7200	1801-3600	R-6	R-6	R-6	R-1.9	R-3.5	none	R-3.5
B-18	5401-7200	0-1800	R-6	R-3.5	R-3.5	R-1.9	R-3.5	none	R-3.5
B-19	7201-9000	1801+	R-8	R-6	R-6	R-1.9	R-3.5	none	R-3.5
B-20	7201-9000	0-1800	R-6	R-6	R-6	R-1.9	R-3.5	none	R-3.5
B-21	9001-10800	1801+	R-8	R-6	R-6	R-1.9	R-6	none	R-3.5
B-22	9001-10800	0-1800	R-8	R-6	R-6	R-1.9	R-3.5	none	R-3.5
B-23	10801-12600	all	R-8	R-6	R-6	R-1.9	R-6	none	R-6
B-24	12601-16200	all	R-8	R-8	R-8	R-1.9	R-6	none	R-6
B-25	16201-19800	all	R-10	R-8	R-8	R-3.5	R-6	none	R-6
B-26	19801+	all	R-10	R-10	R-8	R-3.5	R-8	R-3.5	R-6

^a Insulation R-values, measured in (h-ft²·°F)/Btu, are for the insulation as installed and do not include film resistance. The required minimum thicknesses do not consider water vapor transmission and possible surface condensation. Where exterior walls are used as plenum walls, wall insulation shall be as required by the most restrictive condition of 6.2.4.2 or Section 5. Insulation resistance measured on a horizontal plane in accordance with ASTM C518 at a mean temperature of 75°F at the installed thickness.

^b Includes crawl spaces, both ventilated and non-ventilated.

^c Includes return air plenums with or without exposed roofs above.