

# INDEX

## A

<b>ACCESS HATCHES</b> .....	402.2.3
<b>ADDITIONS AND ALTERATIONS</b>	
Defined .....	202
Requirements .....	101.4.3
<b>ADMINISTRATION</b> .....	Chapter 1
<b>AIR ECONOMIZERS</b>	
Defined .....	202
Requirements .....	503.3.1, 503.4.1, 503.4.5.3
<b>AIR INFILTRATION</b>	
Defined .....	202
Requirements .....	402.4.1, 402.4.2, 502.4.6
<b>AIR LEAKAGE</b> .....	402.4.2, 402.4.4, Table 405.5.2(1), 502.4, 503.2.7.1.3
<b>AIR SEALING</b> .....	402.4.2
Testing option .....	402.4.2.1
Visual inspection .....	402.4.2.2
<b>AIR SYSTEM BALANCING</b> .....	503.2.9.1
<b>ALTERNATE MATERIALS</b> .....	102
<b>APPROVED</b>	
Defined .....	202
<b>AUTOMATIC</b>	
Defined .....	202

## B

<b>BALANCING</b> .....	503.2.9.1, 503.2.9.2
<b>BALLASTS</b> .....	505.1, 505.3
<b>BASEMENT WALLS</b>	
Defined .....	202
Requirements .....	303.2.1, Table 402.1.1, Table 402.1.3, 402.2.6, Table 405.5.2(1), Table 502.1.2, Table 502.2(1), 502.2.2.2, 502.2.4
<b>BELOW-GRADE WALLS (see BASEMENT WALLS)</b>	
<b>BI-LEVEL SWITCHING</b> .....	505.2.2.1
<b>BOILERS</b> .....	Table 503.2.3(5), 503.4.3, 503.4.3.5, 504.2, Table 504.2
<b>BUILDING ENVELOPE</b>	
Air tightness .....	402.4.2
Compliance documentation .....	103.2, 401.3
Defined .....	202
Exemption .....	101.5.2
Requirements .....	102.1.1, 402, 502
Performance method .....	Table 405.5.2(1), 506.3

## C

<b>CAULKING AND WEATHERSTRIPPING</b> .....	402.4.1, 502.4.1, 502.4.3
--	------------------------------

<b>CERTIFICATE</b> .....	401.3
<b>CHANGE OF OCCUPANCY</b> .....	101.4.4
<b>CIRCULATING PUMPS</b> .....	503.4.3.3, 504.6
<b>CIRCULATING SYSTEMS</b> .....	403.4, 503.4.3.3, 503.4.3.5, 504.6, 504.7.2
<b>CLIMATE ZONES</b> .....	301, Figure 301.1, Table 301.1
By state or territory .....	Figure 301.1, Table 301.1
International climate zones ..	301.3, Table 301.3(1), Table 301.3(2)
Warm humid .....	301.2, Table 301.2, 301.3.1
<b>COEFFICIENT OF PERFORMANCE (COP)</b> .....	Table 503.2.3(2), Table 503.2.3(7)
<b>COMMERCIAL BUILDINGS</b> .....	Compliance 101.2, 101.4.6, 101.5, Chapter 5, 501.1
Defined .....	202
Total building performance .....	506
<b>COMMISSIONING OF HVAC SYSTEMS</b> .....	503.2.9
Manuals .....	503.2.9.3
<b>COMPLIANCE AND ENFORCEMENT</b> .....	101.5
<b>CONDITIONED FLOOR AREA</b>	
Defined .....	202
<b>CONDITIONED SPACE</b>	
Defined .....	202
<b>CONSTRUCTION DOCUMENTS</b> .....	103
<b>CONTROLS</b>	
Capabilities .....	503.2.2, 503.2.4.1, 503.2.4.3.1, 503.2.4.3.2, 503.2.5, 503.4.3.4, 503.4.3.5, 503.4.4, 504.3
Economizers .....	503.3.1, 503.4.1
Energy recovery systems .....	503.2.6
Fan speed .....	503.4.4
Heat pump .....	403.1.1, 503.2.4.1.1, 503.4.3.3
Heating and cooling .....	403.1, 503.2.2, 503.2.4, 503.4.5
Hot water system .....	504.6
Humidity .....	503.2.4.1, 503.2.6, 503.4.5
Hydronic systems .....	503.2.9.2, 503.3.2, 503.4.3
Lighting .....	505.2, 505.6.1, 505.6.2
Off hour .....	503.2.4.3
Service water heating .....	403.4, 504.3, 504.6
Shutoff dampers .....	403.5, 503.2.4.4, 503.4.5
Temperature .....	503.2.4.1, 503.2.4.2, 503.2.4.3.1, 503.4.3, 504.3
Variable air volume systems .....	503.4.2, 503.4.5
Ventilation .....	503.2.5
<b>COOLING SYSTEMS</b>	
Hot gas bypass limitation .....	503.4.7
<b>COOLING WITH OUTDOOR AIR</b> .....	503.3.1, 503.4.1

**CRAWL SPACE WALLS**

Defined .....202  
 Requirements..... 303.2.1, Table 402.1.1,  
 Table 402.1.3, 402.2.8, Table 405.5.2(1)

**D**

**DAYLIGHT ZONE CONTROL**..... 505.2.2.3  
**DEADBAND** ..... 503.2.4.2, 503.4.3.2, 403.4.3.3  
**DEFINITIONS**..... Chapter 2  
**DEGREE DAY COOLING** ..... Table 301.3(2)  
**DEGREE DAY HEATING** ..... Table 301.3(2)  
**DEMAND CONTROL VENTILATION (DCV)** . . 503.2.5.1  
**DESIGN CONDITIONS** ..... Chapter 3, 302  
**DUAL DUCT VAV**..... 503.4.5.2, 503.4.5.3  
**DUCTS**  
 Defined .....202  
 Insulation ..... 103.2, 401.3, 403.2, 503.2.7,  
 503.2.7.1.2, 503.2.7.1.3  
 Sealing ..... 103.2, 503.2.7,  
 503.2.7.1.2, 503.2.7.1.3  
**DWELLING UNIT**  
 Defined .....202

**E**

**ECONOMIZER**  
 Air ..... 503.3.1, 503.4.1  
 Defined .....202  
 Requirements ..... 503.3.1, 503.4.1, 503.4.5.3  
 Water.....503.4.1  
**ELECTRICAL METERS** ..... 505.7  
**ELECTRICAL POWER AND LIGHTING**..... 404, 505  
**ENERGY ANALYSIS, ANNUAL**  
 Defined .....202  
 Documentation ..... 405.4, 506.4  
 Requirements..... 405.3, 506  
**ENERGY EFFICIENCY RATIO (EER)** ..... 503.2.3,  
 503.3.1, 503.4.1  
**ENERGY RECOVERY VENTILATION SYSTEMS**  
 Defined .....202  
 Requirements..... Table 405.5.2(1),  
 503.2.1, 503.2.6  
**ENERGY SIMULATION TOOL**  
 Defined .....202  
 Requirements/use ..... 101.5.1, 405, 506,  
 506.2.1, 506.5.3, 506.5.4  
**ENVELOPE, BUILDING THERMAL**  
 Defined .....202  
**ENVELOPE DESIGN PROCEDURES**..... 402, 502  
**EQUIPMENT EFFICIENCIES** . . . . 103.2, 401.3, 503.2.3,  
 503.3.1, 503.4.1, 504.2

**EQUIPMENT PERFORMANCE**

**REQUIREMENTS** ..... 503.2.3  
 Boilers ..... Table 503.2.3(5)  
 Condensing units ..... Table 503.2.3(6)  
 Economizer exception..... Table 503.3.1(2)  
 Packaged terminal air conditioners  
 and heat pump..... Table 503.2.3(3)  
 Unitary air conditioners and  
 condensing units ..... Table 503.2.3(1)  
 Unitary and applied heat pumps... Table 503.2.3(2)  
 Warm air duct furnaces and  
 unit heaters ..... Table 503.2.3(4)  
 Warm air furnaces ..... Table 503.2.3(4)  
 Warm air furnaces/air-conditioning  
 units ..... Table 503.2.3(4)  
 Water chilling packages, standard . Table 503.2.3(7)  
 Water heating..... 504.2  
**EXEMPT BUILDINGS** ..... 101.5.2  
**EXISTING BUILDINGS** ..... 101.4.1  
**EXTERIOR LIGHTING** ..... 505.6  
**EXTERIOR SHADING**..... Table 502.3, 502.3.2  
**EXTERIOR WALLS**  
 Defined .....202  
 Thermal performance ..... 402, 402.1.1,  
 Table 405.5.2(1), 502, 502.2.2

**F**

**FAN FLOOR HORSEPOWER** ..... 503.2.10.1  
**FENESTRATION** ..... 303.1.3, 402.3, 402.4.2,  
 502.3, 502.4  
 Defined .....202  
 Rating and labeling ..... 303.1.3, 402.1.1,  
 402.6, 502.1.1  
**FIREPLACES**..... 402.4.3  
**FURNACE EFFICIENCY** ..... Table 405.5.2(1),  
 Table 503.2.3(4)

**G**

**GUESTROOMS (see SLEEPING UNIT)**  
**GLAZING AREA**  
 Requirements . . . 402.3.3, 402.3.5, Table 404.5.2(1)

**H**

**HEAT PUMP** ..... 403.1.1, Tables 503.2.3(2, 3),  
 503.2.4.1.1, 503.4.3.3  
**HEAT TRAPS**..... 504.4, 504.5  
 Defined .....202  
**HEATING AND COOLING LOADS** . . . . 302.1, 403.1.2,  
 503.2.1, 503.2.2, 503.2.3, 503.2.4.1.1,  
 503.2.4.3, 503.3.1, 503.4.2  
**HEATING OUTSIDE A BUILDING** ..... 503.2.11  
**HISTORIC BUILDINGS** ..... 101.4.2

**HOT WATER** . . . . . 504.2  
 Annual energy performance . . . . . 405.1  
 Piping insulation . . . . . 403.4, 503.2.8, 504.5  
 System controls . . . . . 503.4.6, 504.3, 504.6  
**HUMIDISTAT**  
 Defined . . . . . 202  
 Requirements . . . . . 503.2.4.1, 503.2.6, 503.4.5  
**HYDRONIC HEAT PUMP SYSTEMS** . . . . . 503.4.3.3  
**HYDRONIC SYSTEM BALANCING** . . . . . 503.2.9.2

**I**

**IDENTIFICATION (MATERIALS, EQUIPMENT AND SYSTEM)** . . . . . 303.1  
**INDIRECTLY CONDITIONED SPACE (see CONDITIONED SPACE)**  
**INFILTRATION, AIR LEAKAGE** . . . . . 402.4,  
 Table 405.5.2(1), 502.4  
 Defined . . . . . 202  
**INSPECTIONS** . . . . . 104  
**INSULATION**  
 Identification . . . . . 303.1  
 Installation . . . . . 303.1.1, 303.1.1.1, 303.1.2, 303.2  
 Product rating . . . . . 303.1.4  
 Requirements . . . . . 402.1.1, 402.2, 502.1, 502.2  
**INSULATING SHEATHING**  
 Defined . . . . . 202  
 Requirements . . . . . Table 402.1.1, 402.1.2,  
 Table 502.2(1), 502.2.3  
**INTEGRATED PART LOAD VALUE (IPLV)** . . . . . Tables 503.2.3 (1, 2, 6 and 7),  
 503.4.1, 506.3.1  
**INTERIOR LIGHTING POWER** . . . . . 505.5, 505.5.2

**L**

**LABELED**  
 Defined . . . . . 202  
 Requirements . . . . . 303.1.3, 303.3, 402.4.2, 402.4.3,  
 502.4.1, 502.4.7, 503.2.7, 505.5.1.2  
**LIGHTING POWER**  
 Design procedures . . . . . 505.5.2  
 Exterior connected . . . . . 505.6, 506.2.8  
 Interior connected . . . . . 505.5, Table 505.5.2, 506.4.7  
 Manufacturer's information . . . . . 102.2, 102.3, 505.1.3  
**LIGHTING SYSTEMS** . . . . . 404, 505  
 Controls, additional . . . . . 505.2.2  
 Controls, exterior . . . . . 505.2.4  
 Controls, interior . . . . . 505.2.1  
 Guestrooms/sleeping units . . . . . 505.2.3  
 Line voltage . . . . . 505.5.1.4  
 Merchandise, (highlight specific) . . . . . Table 505.5.2

Plug-in busway . . . . . 505.5.1.4  
 Recessed . . . . . 502.4.8  
 Track . . . . . 505.5.1.4  
**LISTED**  
 Defined . . . . . 202  
**LOADING DOCK WEATHERSEALS** . . . . . 502.4.6  
**LOW ENERGY BUILDINGS** . . . . . 101.5.2  
**LOW-VOLTAGE LIGHTING**  
 Defined . . . . . 202  
 Requirements . . . . . 505.5.1.2  
**LUMINAIRE**  
 Controls . . . . . 505.2.2.1, 505.2.3  
 Sealed . . . . . 402.4.3, 502.4.7  
 Tandem wiring . . . . . 505.3  
 Wattage . . . . . 505.5.1, 505.6.1

**M**

**MAINTENANCE INFORMATION** . . . . . 102.3  
**MANUALS** . . . . . 101.5.1, 102.3, 503.2.9.3  
**MASS**  
 Wall . . . . . 402.1.3, 402.2.3, Table 405.5.2(1), 502.2.3  
 Floor . . . . . 502.2.5  
**MATERIALS AND EQUIPMENT** . . . . . 303  
**MECHANICAL SYSTEMS AND EQUIPMENT** . . . . . 403, 405.1, 503  
**MECHANICAL VENTILATION** . . . . . 403.5,  
 Table 405.5.2(1), 503.1, 503.2.5  
**METERS, ELECTRICAL** . . . . . 505.7  
**MOTOR NAMEPLATE HORSEPOWER** . . . . . 503.2.10.2  
**MULTIPLE DWELLING UNITS** . . . . . 403.7  
**MULTIPLE ZONE SYSTEMS** . . . . . 503.4.5

**N**

**NONCIRCULATING SYSTEMS** . . . . . 504.4, 504.5  
**NONDEPLETABLE/RENEWABLE ENERGY SOURCES**  
 Requirements . . . . . 506.2.4

**O**

**OCCUPANCY**  
 Requirements . . . . . 101.4.4, 101.4.5, 101.5, 503.2.9,  
 503.4.5, 504.3, 506.2.5, 506.4.7  
**OCCUPANCY SENSORS** . . . . . 503.2.4.3.2, 505.2.2  
**OFF-HOUR, CONTROLS** . . . . . 503.2.4.3  
**OPAQUE AREAS** . . . . . 402.3.4, 502,  
 Table 502.2(1), 502.2.7  
**ORIENTATION** . . . . . Table 404.5.2(1), 503.2.4.1, 506.4.4  
**OVERHANG, PROJECTION FACTOR** . . . . . 502.3.2

**P**

**PACKAGED TERMINAL AIR CONDITIONER (PTAC)**  
 Requirements . . . . . Table 503.2.3(3), 503.3

**PACKAGED TERMINAL HEAT PUMP**  
 Requirements . . . . . Table 503.2.3(3), 503.3

**PARALLEL PATH CALCULATION** . . . . . 402.2.5

**PERFORMANCE ANALYSIS** . . . . . 405, 506

**PHOTOCELL** . . . . . 505.2.4

**PIPE INSULATION** . . . . . 403.3, 403.4, 503.2.8, 504.5

**PLANS AND SPECIFICATIONS** . . . . . 103

**POOL COVERS** . . . . . 403.9.3, 504.7.3

**POOLS** . . . . . 403.9, 504.7

**PROJECTION FACTOR** . . . . . 502.3.2

**PROPOSED DESIGN**  
 Defined . . . . . 202  
 Requirements . . . . . 405, 506

**PUMPING SYSTEMS** . . . . . 403.4, 503.2.9.2, 503.4.3, 504.6, 504.7.2

**R**

**R-VALUE**  
 Defined . . . . . 202  
 Computation . . . . . 402.1.2

**RECOOLING** . . . . . 503.4.5

**REFERENCED STANDARDS** . . . . . 107, Chapter 6

**REHEATING** . . . . . 503.4.5, 503.4.6

**RENEWABLE/NONDEPLETABLE ENERGY SOURCES** . . . . . 506.2.4

**REPAIR**  
 Requirements . . . . . 101.4.3  
 Defined . . . . . 202

**RESET CONTROL** . . . . . 503.4.3.4

**RESIDENTIAL BUILDINGS**  
 Compliance . . . . . 101.2, 101.5  
 Defined . . . . . 202  
 Requirements . . . . . Chapter 4  
 Simulated performance alternative . . . . . 405

**ROOF ASSEMBLY**  
 Defined . . . . . 202  
 Requirements . . . . . 101.4.3, 303.1.1.1, 402.2.2, Table 405.5.2(1), 502.2.1, 502.5

**S**

**SCOPE** . . . . . 101.2

**SCREW LAMP HOLDERS**  
 Defined . . . . . 202  
 Requirements . . . . . 505.5.1.1

**SEASONAL ENERGY EFFICIENCY RATIO (SEER)** . . . . . 405.6.1, 503.2.3

**SERVICE WATER HEATING**  
 Defined . . . . . 202

Requirements . . . . . 401.3, 403.4, 405.1, 501.2, 503.4.6, 504

**SETBACK THERMOSTAT** . . . . . 503.2.4.3.1

**SHADING** . . . . . 502.3.2  
 Projection factor . . . . . 502.3.2

**SHEATHING, INSULATING (see INSULATING SHEATHING)**

**SHGC (see SOLAR HEAT GAIN COEFFICIENT)**

**SHUTOFF DAMPERS** . . . . . 403.5, 502.4.4, 503.2.4.4

**SIMULATED PERFORMANCE ALTERNATIVE** . . . . . 405, 506

**SIMULATION TOOL (see ENERGY SIMULATION TOOL)**

**SINGLE ZONE** . . . . . 405.6.1, 503.3

**SIZING**  
 Equipment and system . . . . . 403.6, 405.6.1, 503.2.2

**SKYLIGHTS** . . . . . 102.1.3, 402.3, 402.3.5, 402.4.1, 402.4.2, 402.6, Table 405.5.2(1), 502.1.1, 502.3.2  
 Defined . . . . . 202  
 Maximum exempt area . . . . . 502.3.1

**SLAB-EDGE INSULATION** . . . . . 303.2.1, 401.3, Table 402.1.1, 402.2.7, 502.2.6

**SLEEPING UNIT** . . . . . 505.2.2.1, 505.2.2.2, 505.2.3

**SNOW MELT SYSTEM CONTROLS** . . 403.8, 503.2.4.5

**SOLAR HEAT GAIN COEFFICIENT (SHGC)** . . . . . 102.1.3, 104.2, 401.3, Table 402.1.1, 402.1.4, 402.3.2, 402.3.3, 402.3.6, 402.6, 405.6.1, Table 502.3, 502.3.2  
 Defined . . . . . 202

**STANDARD REFERENCE DESIGN**  
 Defined . . . . . 202  
 Requirements . . . . . 405, 506

**STANDARDS, REFERENCED** . . . . . 107, Chapter 6

**STEEL FRAMING** . . . . . 402.2.4, Table 502.2(2)

**STOREFRONT** . . . . . 202, Table 502.3, 502.4.2

**SUNROOM** . . . . . 402.2.10, 402.3.5, Table 405.5.2(1)  
 Defined . . . . . 202

**SUPPLY AIR TEMPERATURE RESET CONTROLS** . . . . . 503.4.5.4

**SUSPENDED CEILINGS** . . . . . 502.2.1

**SWIMMING POOLS** . . . . . 504.7

**T**

**TANDEM WIRING** . . . . . 505.3

**TERMITE INFESTATION** . . . . . 402.2.7

**THERMAL ISOLATION** . . . . . 402.2.10, 402.3.5, Table 405.5.2(1)  
 Defined . . . . . 202

**THERMAL MASS (see MASS)**

**THERMAL RESISTANCE (see R-VALUE)**

**THERMAL TRANSMITTANCE**  
 (see U-FACTOR)  
**TOTAL BUILDING PERFORMANCE**  
 Commercial . . . . .506  
 Residential . . . . .405  
**TOWNHOUSE (see RESIDENTIAL BUILDINGS)**

**U**

**U-FACTOR**  
 Defined . . . . .202  
 Alternative . . . . .402.1.3, 402.1.4, 502.1.2

**V**

**VAPOR RETARDER** . . . . .402.2.9  
**VARIABLE AIR VOLUME SYSTEMS (VAV)** . . 503.2.6,  
 503.2.9.2, 503.4.2, 503.4.5  
**VENTILATION** . . . . .402.5, 403.5, Table 405.5.2(1),  
 503.2.5  
 Defined . . . . .202  
**VESTIBULES** . . . . .502.4.7

**W**

**WALL**  
 Above grade, defined . . . . .202  
 Basement, defined . . . . .202  
 Crawlspace, defined . . . . .202  
 Exterior, defined . . . . .202  
**WALLS (see EXTERIOR WALLS AND ENVELOPE,  
 BUILDING THERMAL)**  
**WALLS ADJACENT TO UNCONDITIONED  
 SPACE (see BUILDING THERMAL ENVELOPE)**  
**WATER ECONOMIZER** . . . . .503.4.1  
 Defined . . . . .202  
**WATER HEATING** . . . . .401.3, 504  
**WINDOW AREA**  
 (see FENESTRATION and GLAZING AREA)  
**WINDOW PROJECTION FACTOR**  
 Requirements . . . . .502.3.2  
**WIRING, TANDEM** . . . . .505.3

**Z**

**ZONE (see also CLIMATE ZONES)**  
 Defined . . . . .202  
 Requirements . . . . .405.6.1, 503.2.4, 503.3,  
 503.4.3.4, 503.4.5  
**ZONE ISOLATION** . . . . .503.4.5

