

TABLE OF CONTENTS

CHAPTER 1	ADMINISTRATION	1
Section		
101	Title	1
102	Purpose	1
103	Applicability and Scope	1
104	Application to Existing Mechanical Systems	2
105	Alternate Materials and Methods of Construction	3
106	Modifications	3
107	Tests	3
108	Organization and Duties of Code Official	3
109	Means of Appeal	4
110	Temporary Equipment, Systems and Uses	5
111	Rules of the Code Official	5
112	Construction Codes Advisory Board	5
113	Permits	5
114	Application for Permit	6
115	Application Review and Permit Issuance	7
116	Inspections	9
117	Connection Approval	10
118	Refrigeration Licenses	10
119	Operating Permits for Refrigeration Systems	10
120	Fees	10
CHAPTER 2	DEFINITIONS	11
Section		
201	General	11
202	General Definitions	11
CHAPTER 3	GENERAL REGULATIONS	27
Section		
301	General	27
302	Protection of Structure	28
303	Equipment and Appliance Location	29
304	Installation	30
305	Piping Support	32
306	Access and Service Space	33
307	Condensate Disposal	35
308	Clearance Reduction	37
309	Temperature Control	38
310	Explosion Control	38
311	Smoke and Heat Vents	38
312	Heating and Cooling Load Calculations	38

TABLE OF CONTENTS

CHAPTER 4 VENTILATION39

Section

401 General 39

402 Natural Ventilation. 40

403 Mechanical Ventilation 40

404 Enclosed Parking Garages, Loading Docks and Motor Vehicle Repair Garages 53

405 Systems Control 53

406 Ventilation of Uninhabited Spaces. 54

407 Ambulatory Care Facilities and Group I-2 Occupancies 54

CHAPTER 5 EXHAUST SYSTEMS.55

Section

501 General 55

502 Required Systems. 57

503 Motors and Fans 64

504 Clothes Dryer Exhaust 64

505 Domestic Cooking Exhaust Equipment 67

506 Commercial Kitchen Hood Ventilation System Ducts and Exhaust Equipment 68

507 Commercial Kitchen Hoods 74

508 Commercial Kitchen Makeup Air 79

509 Fire Suppression Systems. 80

510 Hazardous Exhaust Systems. 80

511 Dust, Stock and Refuse Conveying Systems 83

512 Subslab Soil Exhaust Systems 84

513 Smoke Control Systems 84

514 Energy Recovery Ventilation Systems. 89

515 Waste or Linen Chute Venting. 89

CHAPTER 6 DUCT SYSTEMS.91

Section

601 General 91

602 Plenums 93

603 Duct Construction and Installation. 94

604 Insulation 97

605 Air Filters 98

606 Smoke Detection Systems Control. 99

607 Duct and Transfer Openings. 100

CHAPTER 7 COMBUSTION AIR107

Section

701 General 107

702 Appliances Located in Unconfined Spaces 108

703 Appliances Located in Confined Spaces 108

704 Combustion Air for Commercial and Industrial Installations 110

705 Louvers and Grilles 110

706 Special Conditions 111

CHAPTER 8 CHIMNEYS AND VENTS 113

Section

801 General 113

802 Vents 114

803 Connectors 115

804 Direct-Vent, Integral Vent and Mechanical Draft Systems 118

805 Factory-Built Chimneys 119

806 Metal Chimneys 119

CHAPTER 9 SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT 121

Section

901 General 121

902 Masonry Fireplaces 121

903 Factory-Built Fireplaces 121

904 Pellet Fuel-Burning Appliances 121

905 Fireplace Stoves and Room Heaters 121

906 Factory-Built Barbecue Appliances 122

907 Incinerators and Crematories 122

908 Cooling Towers, Evaporative Condensers and Fluid Coolers 122

909 Vented Wall Furnaces 122

910 Floor Furnaces 123

911 Duct Furnaces 123

912 Infrared Radiant Heaters 123

913 Clothes Dryers 123

914 Sauna Heaters 124

915 Engine and Gas Turbine-Powered Equipment and Appliances 124

916 Pool and Spa Heaters 124

917 Cooking Appliances 124

918 Air Handling Units 125

919 Conversion Burners 125

920 Unit Heaters 125

921 Vented Room Heaters 125

922 Kerosene and Oil-Fired Stoves 125

923 Small Ceramic Kilns 125

924 Stationary Fuel Cell Power Systems 126

925 Masonry Heaters 126

926 Gaseous Hydrogen Systems 126

927 Radiant Heating Systems 126

928 Evaporative Cooling Equipment 126

929 High-Volume Large-Diameter Fans 127

CHAPTER 10 BOILERS, WATER HEATERS AND PRESSURE VESSELS

Not adopted in Seattle 129

CHAPTER 11 REFRIGERATION.....	131
Section	
1101 General.....	131
1102 System Requirements.....	131
1103 Refrigeration System Classification.....	133
1104 System Application Requirements.....	138
1105 Machinery Room, General Requirements.....	139
1106 Machinery Room, Special Requirements.....	141
1107 Refrigerant Piping.....	142
1108 Field Test.....	144
1109 Periodic Testing.....	145
CHAPTER 12 HYDRONIC PIPING.....	147
Section	
1201 General.....	147
1202 Material.....	147
1203 Joints and Connections.....	148
1204 Pipe Insulation.....	150
1205 Valves.....	150
1206 Piping Installation.....	151
1207 Transfer Fluid.....	151
1208 Tests.....	151
1209 Embedded Piping.....	152
1210 Plastic Pipe Ground-Source Heat Pump Loop Systems.....	152
CHAPTER 13 FUEL OIL PIPING AND STORAGE.....	157
Section	
1301 General.....	157
1302 Material.....	157
1303 Joints and Connections.....	158
1304 Piping Support.....	158
1305 Fuel Oil System Installation.....	158
1306 Oil Gauging.....	159
1307 Fuel Oil Valves.....	159
1308 Testing.....	160
CHAPTER 14 SOLAR THERMAL SYSTEMS.....	161
Section	
1401 General.....	161
1402 Design and Installation.....	161
1403 Heat Transfer Fluids.....	163
1404 Labeling.....	164

CHAPTER 15 REFERENCED STANDARDS.....	165
Section	
B101 Mechanical Work, Other than Gas Piping Systems.....	181
B102 Fee for Reinspection.....	181
B103 Temporary Operation Inspection Fee.....	181
B104 Self-Contained Units Less than 2 Tons.....	181
INDEX.....	183

