

TABLE OF CONTENTS

CHAPTER 1 SCOPE AND ADMINISTRATION	1-1
Section	
101 Title	1-1
102 Purpose	1-1
103 Applicability and Scope	1-1
104 Application to Existing Mechanical Systems	1-2
105 Alternate Materials and Methods of Construction	1-3
106 Modifications	1-3
107 Tests	1-3
108 Organization and Duties of Code Official	1-3
109 Unsafe Equipment and Hazard Correction Order	1-4
110 Enforcement, Violations and Penalties	1-4
111 Rules of the Code Official	1-6
112 Construction Codes Advisory Board	1-7
113 Permits	1-7
114 Application for Permit	1-7
115 Application Review and Permit Issuance	1-8
116 Inspections	1-10
117 Connection Approval	1-11
118 Fees	1-11
 CHAPTER 2 DEFINITIONS	 2-1
Section	
201 General (IFGC)	2-1
202 General Definitions (IFGC)	2-1
 CHAPTER 3 GENERAL REGULATIONS	 3-1
Section	
301 General (IFGC)	3-1
302 Structural Safety (IFGC)	3-2
303 Appliance Location (IFGC)	3-3
304 Combustion, Ventilation and Dilution Air (IFGS)	3-4
305 Installation (IFGC)	3-9
306 Access and Service Space (IFGC)	3-10
307 Condensate Disposal (IFGC)	3-11
308 Clearance Reduction (IFGS)	3-12
309 Electrical (IFGC)	3-16
310 Electrical Bonding (IFGS)	3-16
 CHAPTER 4 GAS PIPING INSTALLATIONS	 4-1
Section	
401 General (IFGC)	4-1

TABLE OF CONTENTS

402 Pipe Sizing (IFGS) 4-1
403 Piping Materials (IFGS) 4-40
404 Piping System Installation (IFGC) 4-43
405 Piping Bends and Changes in Direction (IFGS) 4-46
406 Inspection, Testing and Purging (IFGS) 4-46
407 Piping Support (IFGC) 4-49
408 Drips and Sloped Piping (IFGC) 4-49
409 Shutoff Valves (IFGC) 4-50
410 Flow Controls (IFGC) 4-51
411 Appliance and Manufactured Home Connections (IFGC) 4-52
412 Liquefied Petroleum Gas Motor Vehicle Fuel-Dispensing Facilities (IFGC) 4-53
413 Compressed Natural Gas Motor Vehicle Fuel-Dispensing Facilities (IFGC) 4-55
414 Supplemental and Standby Gas Supply (IFGC) 4-57
415 Piping Support Intervals (IFGS) 4-57
416 Overpressure Protection Devices (IFGS) 4-57

CHAPTER 5 CHIMNEYS AND VENTS 5-1

Section

501 General (IFGC) 5-1
502 Vents (IFGC) 5-3
503 Venting of Appliances (IFGS) 5-3
504 Sizing of Category I Appliance Venting Systems (IFGS) 5-15
505 Direct-Vent, Integral Vent, Mechanical Vent and Ventilation/Exhaust Hood Venting (IFGC) 5-41
506 Factory-Built Chimneys (IFGC) 5-41

CHAPTER 6 SPECIFIC APPLIANCES 6-1

Section

601 General (IFGC) 6-1
602 Decorative Appliances for Installation in Fireplaces (IFGC) 6-1
603 Log Lighters (IFGC) 6-1
604 Vented Gas Fireplaces (Decorative Appliances) (IFGC) 6-1
605 Vented Gas Fireplace Heaters (IFGC) 6-1
606 Incinerators and Crematories (IFGC) 6-1
607 Commercial-Industrial Incinerators (IFGC) 6-2
608 Vented Wall Furnaces (IFGC) 6-2
609 Floor Furnaces (IFGC) 6-2
610 Duct Furnaces (IFGC) 6-3
611 Nonrecirculating Direct-Fired Industrial Air Heaters (IFGC) 6-3
612 Recirculating Direct-Fired Industrial Air Heaters (IFGC) 6-3
613 Clothes Dryers (IFGC) 6-4
614 Clothes Dryer Exhaust (IFGC) 6-4
615 Sauna Heaters (IFGC) 6-6
616 Engine and Gas Turbine-powered Equipment (IFGC) 6-7
617 Pool and Spa Heaters (IFGC) 6-7
618 Air-Handling Units (IFGC) 6-7

619 Conversion Burners (IFGC)..... 6-8

620 Unit Heaters (IFGC)..... 6-8

621 Unvented Room Heaters (IFGC) 6-9

622 Vented Room Heaters (IFGC) 6-9

623 Cooking Appliances (IFGC) 6-9

624 Water Heaters (IFGC) 6-10

625 Refrigerators (IFGC) 6-10

626 Gas-Fired Toilets (IFGC)..... 6-10

627 Air-Conditioning Appliances (IFGC) 6-10

628 Illuminating Appliances (IFGC) 6-11

629 Small Ceramic Kilns (IFGC)..... 6-11

630 Infrared Radiant Heaters (IFGC) 6-12

631 Boilers (IFGC) 6-12

632 Reserved (IFGC) 6-12

633 Stationary Fuel-cell Power Systems (IFGC) 6-12

634 Gaseous Hydrogen Systems (IFGC) 6-12

635 Outdoor Decorative Appliances (IFGC) 6-12

CHAPTER 7 GASEOUS HYDROGEN SYSTEMS 7-1

Section

701 General (IFGC)..... 7-1

702 General Definitions (IFGC)..... 7-1

703 General Requirements (IFGC)..... 7-1

704 Piping, Use and Handling (IFGC) 7-2

705 Testing of Hydrogen Piping Systems (IFGC) 7-3

706 Location of Gaseous Hydrogen Systems (IFGC)..... 7-5

707 Operation and Maintenance of Gaseous Hydrogen Systems (IFGC)..... 7-5

708 Design of Liquefied Hydrogen Systems Associated with Hydrogen Vaporization Operations (IFGC) 7-5

CHAPTER 8 REFERENCED STANDARDS 8-1

APPENDIX A SIZING AND CAPACITIES OF GAS PIPING (IFGS)..... APPENDIX A-1

Section

A101 General Piping Considerations Appendix A-1

A102 Description of Tables Appendix A-1

A103 Use of Capacity Tables Appendix A-4

A104 Use of Sizing Equations Appendix A-7

A105 Pipe and Tube Diameters Appendix A-7

A106 Examples of Piping System Design and Sizing Appendix A-9

APPENDIX B SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS (IFGS)..... APPENDIX B-1

Section

B101 Examples Using Single-Appliance Venting Tables Appendix B-1

B102 Examples Using Common Venting Tables. Appendix B-4

APPENDIX C EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS (IFGS). APPENDIX C-1

Section

C101 General Appendix C-1

APPENDIX D RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION (IFGS). APPENDIX D-1

Section

D101 General Appendix D-1

D102 Occupant and Inspector Safety Appendix D-2

D103 Gas Piping and Connections Inspections Appendix D-2

D104 Inspections to Be Performed with the Appliance Not Operating Appendix D-3

D105 Inspections to Be Performed with the Appliance Operating Appendix D-4

D106 Appliance-Specific Inspections Appendix D-5

INDEX INDEX-1

