

SBC

The Saudi Fuel Gas Code
SBC 1201 - CC
Code & Commentaries



كود البناء السعودي
Saudi Building Code



2024



TABLE OF CONTENTS

CHAPTER 1— SCOPE AND ADMINISTRATION	1
SECTION 101 — SCOPE AND GENERAL REQUIREMENTS	1
SECTION 102 — APPLICABILITY.....	3
SECTION 103 — CODE COMPLIANCE AGENCY.....	6
SECTION 104 — DUTIES AND POWERS OF THE BUILDING OFFICIAL	7
SECTION 105 — APPROVAL	9
SECTION 106 — PERMITS	11
SECTION 107 — CONSTRUCTION DOCUMENTS	15
SECTION 108 — NOTICE OF APPROVAL.....	15
SECTION 109 — FEES	16
SECTION 110 — SERVICE UTILITIES.....	17
SECTION 111 — TEMPORARY EQUIPMENT, SYSTEMS AND USES.....	17
SECTION 112 — INSPECTIONS AND TESTING.....	18
SECTION 113 — MEANS OF APPEAL	21
SECTION 114 — BOARD OF APPEALS.....	22
SECTION 115 — VIOLATIONS	22
SECTION 116 — STOP WORK ORDER.....	24
CHAPTER 2— DEFINITIONS	26
SECTION 201 — GENERAL.....	26
SECTION 202 — GENERAL DEFINITIONS	26
FIGURES OF CHAPTER 2.....	52
CHAPTER 3— GENERAL REGULATIONS.....	65
SECTION 301 — GENERAL.....	65
SECTION 302 — STRUCTURAL SAFETY	70
SECTION 303 — APPLIANCE LOCATION	72
SECTION 304 — COMBUSTION, VENTILATION AND DILUTION AIR	75
SECTION 305 — INSTALLATION	87
SECTION 306 — ACCESS AND SERVICE SPACE	92
SECTION 307 — CONDENSATE DISPOSAL.....	95
SECTION 308 — CLEARANCE REDUCTION	97
SECTION 309 — ELECTRICAL	101
SECTION 310 — ELECTRICAL BONDING	101
TABLES AND FIGURES OF CHAPTER 3	105
CHAPTER 4— AS PIPING INSTALLATIONS	147
SECTION 401 — GENERAL.....	147
SECTION 402 — PIPE SIZING	150
SECTION 403 — PIPING MATERIALS	158
SECTION 404 — PIPING SYSTEM INSTALLATION.....	168
SECTION 405 — PIPING BENDS AND CHANGES IN DIRECTION	177
SECTION 406 — INSPECTION, TESTING AND PURGING	178
SECTION 407 — PIPING SUPPORT.....	186
SECTION 408 — DRIPS AND SLOPED PIPING.....	187
SECTION 409 — SHUTOFF VALVES.....	188
SECTION 410 — FLOW CONTROLS.....	191
SECTION 411 — APPLIANCE AND MANUFACTURED HOME CONNECTIONS.....	195
SECTION 412 — LIQUEFIED PETROLEUM GAS MOTOR VEHICLE FUEL-DISPENSING FACILITIES	199
SECTION 413 — COMPRESSED NATURAL GAS MOTOR VEHICLE FUEL-DISPENSING FACILITIES	201
SECTION 414 — SUPPLEMENTAL AND STANDBY GAS SUPPLY	204
SECTION 415 — PIPING SUPPORT INTERVALS	205
SECTION 416 — OVERPRESSURE PROTECTION DEVICES	205
TABLES AND FIGURES OF CHAPTER 4	208
CHAPTER 5— CHIMNEYS AND VENTS.....	299
SECTION 501 — GENERAL.....	299

TABLE OF CONTENTS

SECTION 502 — VENTS	305
SECTION 503 — VENTING OF APPLIANCES	308
SECTION 504 — SIZING OF CATEGORY I APPLIANCE VENTING SYSTEMS	337
SECTION 505 — DIRECT-VENT, INTEGRAL VENT, MECHANICAL VENT AND VENTILATION/EXHAUST HOOD VENTING ...	357
SECTION 506 — FACTORY-BUILT CHIMNEYS	358
TABLES AND FIGURES OF CHAPTER 5.....	360
CHAPTER 6— SPECIFIC APPLIANCES.....	442
SECTION 601 — GENERAL.....	442
SECTION 602 — DECORATIVE APPLIANCES FOR INSTALLATION IN FIREPLACES	442
SECTION 603 — LOG LIGHTERS.....	444
SECTION 604 — VENTED GAS FIREPLACES (DECORATIVE APPLIANCES).....	444
SECTION 605 — VENTED GAS FIREPLACE HEATERS.....	445
SECTION 606 — INCINERATORS AND CREMATORIES	445
SECTION 607 — COMMERCIAL-INDUSTRIAL INCINERATORS	445
SECTION 608 — VENTED WALL FURNACES.....	446
SECTION 609 — FLOOR FURNACES.....	446
SECTION 610 — DUCT FURNACES.....	448
SECTION 611 — NONRECIRCULATING DIRECT-FIRED INDUSTRIAL AIR HEATERS	448
SECTION 612 — RECIRCULATING DIRECT-FIRED INDUSTRIAL AIR HEATERS.....	450
SECTION 613 — CLOTHES DRYERS	451
SECTION 614 — CLOTHES DRYER EXHAUST	451
SECTION 615 — SAUNA HEATERS.....	460
SECTION 616 — ENGINE AND GAS TURBINE-POWERED EQUIPMENT.....	461
SECTION 617 — POOL AND SPA HEATERS	462
SECTION 618 — FORCED-AIR WARM-AIR FURNACES	462
SECTION 619 — CONVERSION BURNERS.....	464
SECTION 620 — UNIT HEATERS	464
SECTION 621 — UNVENTED ROOM HEATERS	465
SECTION 622 — VENTED ROOM HEATERS.....	467
SECTION 623 — COOKING APPLIANCES.....	467
SECTION 624 — WATER HEATERS	469
SECTION 625 — REFRIGERATORS	469
SECTION 626 — GAS-FIRED TOILETS	469
SECTION 627 — AIR-CONDITIONING APPLIANCES	470
SECTION 628 — ILLUMINATING APPLIANCES	472
SECTION 629 — SMALL CERAMIC KILNS	472
SECTION 630 — INFRARED RADIANT HEATERS	472
SECTION 631 — BOILERS	473
SECTION 632 — EQUIPMENT INSTALLED IN EXISTING UNLISTED BOILERS	474
SECTION 633 — STATIONARY FUEL-CELL POWER SYSTEMS	474
SECTION 634 — GASEOUS HYDROGEN SYSTEMS	474
SECTION 635 — OUTDOOR DECORATIVE APPLIANCES.....	474
TABLES AND FIGURES OF CHAPTER 6.....	475
CHAPTER 7— GASEOUS HYDROGEN SYSTEMS	504
SECTION 701 — GENERAL.....	504
SECTION 702 — GENERAL DEFINITIONS	505
SECTION 703 — GENERAL REQUIREMENTS	505
SECTION 704 — PIPING, USE AND HANDLING	507
SECTION 705 — TESTING OF HYDROGEN PIPING SYSTEMS.....	510
SECTION 706 — LOCATION OF GASEOUS HYDROGEN SYSTEMS	513
SECTION 707 — OPERATION AND MAINTENANCE OF GASEOUS HYDROGEN SYSTEMS	513
SECTION 708 — DESIGN OF LIQUEFIED HYDROGEN SYSTEMS ASSOCIATED WITH HYDROGEN VAPORIZATION OPERATIONS	514
FIGURES OF CHAPTER 7.....	515
CHAPTER 8— REFERENCED STANDARDS	518



TABLE OF CONTENTS

APPENDIX A— Sizing and Capacities of Gas Piping	525
SECTION A101— General piping considerations	525
SECTION A102— Description of tables	525
SECTION A103— Use of capacity tables	526
SECTION A104— Use of sizing equations	529
SECTION A105— Pipe and tube diameters	529
SECTION A106— Examples of piping system design and sizing	529
Tables and Figures of Appendix A.....	533
APPENDIX B— Sizing of Venting Systems Serving Appliances Equippedwith Draft Hoods, Category I Appliances and Appliances Listed for Use with Type B Vents	539
SECTION B101— EXAMPLES USING SINGLE APPLIANCE VENTING TABLES.....	539
SECTION B102— EXAMPLES USING COMMON VENTING TABLES	540
Tables and Figures of Appendix B.....	543
APPENDIX C— Exit Terminals of Mechanical Draft and Direct Vent Venting Systems	554
SECTION C101 GENERAL	554
APPENDIX D— Recommended Procedure for Safety Inspection of an Existing Appliance Installation	555
SECTION D101— General	555
SECTION D102— Occupant and Inspector Safety.....	556
SECTION D103— Gas Piping and Connection Inspections	556
SECTION D104— Inspections to be performed with the Appliance Not Operating	556
SECTION D105— Inspections to be performed with the Appliance Operating	558
SECTION D106— Appliance-Specific Inspections.....	559
Tables of Appendix D	561
APPENDIX E— Board Of Appeals	562
SECTION E101— GENERAL.....	562

