

# MASTERSPEC®

## TABLE OF CONTENTS

MECHANICAL/ELECTRICAL LIBRARY  
Outline Expanded (Basic and Supplemental)

MasterFormat 1995 Version

Issue Date	Sect. No.	SECTION TITLE	SECTION DESCRIPTION
------------	-----------	---------------	---------------------

Copyright 2006 The American Institute of Architects (AIA)

Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

### DIVISION 1 - GENERAL REQUIREMENTS

11/02	01100	SUMMARY	Summary of the Work, Work phases, products ordered in advance, Owner-furnished products, use of premises, and work restrictions.
11/02	01125	SUMMARY OF MULTIPLE CONTRACTS	Responsibilities of each contract for the Work, coordination, and temporary facilities and controls.
11/02	01210	ALLOWANCES	Provisions for allowances.
11/02	01230	ALTERNATES	Provisions for alternates.
11/02	01250	CONTRACT MODIFICATION PROCEDURES	Procedural requirements for changing the Contract.
11/02	01270	UNIT PRICES	Provisions for unit prices.
11/02	01290	PAYMENT PROCEDURES	Administrative requirements for payment.
8/04	01310	PROJECT MANAGEMENT AND COORDINATION	Administrative requirements for project meetings and coordination.
11/02	01320	CONSTRUCTION PROGRESS DOCUMENTATION	Contractor's Construction Schedule, Submittals Schedule, and reports.
11/02	01322	PHOTOGRAPHIC DOCUMENTATION	Construction photographs and videotapes.
11/02	01330	SUBMITTAL PROCEDURES	Procedures for submitting Action, Informational, and Delegated-Design Submittals.
5/02	01351	SPECIAL PROCEDURES FOR HISTORIC TREATMENT	Storage, temporary protection, and procedures.
U 5/06	01352	LEED REQUIREMENTS	General requirements and procedures for LEED prerequisites and credits.
11/02	01400	QUALITY REQUIREMENTS	Quality-assurance and -control requirements and special inspections.
11/05	01420	REFERENCES	Common definitions and terms; and acronyms and trade names of associations, government agencies, and other entities referenced in MASTERSPEC.
11/02	01500	TEMPORARY FACILITIES AND CONTROLS	Temporary utilities and facilities for support, security, and protection.
2/03	01524	CONSTRUCTION WASTE MANAGEMENT	Salvaging, recycling, and disposing of construction waste.
11/02	01600	PRODUCT REQUIREMENTS	Administrative and procedural requirements for product selection and handling, warranties, and product substitutions.
11/02	01700	EXECUTION REQUIREMENTS	Field engineering, progress cleaning, and general requirements for product installation.
11/02	01731	CUTTING AND PATCHING	Special procedures.
11/02	01732	SELECTIVE DEMOLITION	Demolition and removal of selected portions of buildings and site elements.
11/02	01770	CLOSEOUT PROCEDURES	Administrative and procedural requirements for Contract closeout.
11/02	01781	PROJECT RECORD DOCUMENTS	Record Drawings, Specifications, and Product Data.
11/02	01782	OPERATION AND MAINTENANCE DATA	Emergency, operation, and maintenance manuals for products and equipment.
12/05	01810	GENERAL COMMISSIONING REQUIREMENTS	Administrative requirements and procedures for commissioning all systems.
U 6/06	01815	COMMISSIONING OF HVAC	Administrative requirements and procedures for commissioning HVAC systems.
11/02	01820	DEMONSTRATION AND TRAINING	Administrative and procedural requirements for instructing Owner's personnel.

### DIVISION 2 - SITE CONSTRUCTION

6/04	02080	PIPED UTILITIES - BASIC MATERIALS AND METHODS	Basic piping materials and methods.
12/01	02085	INTERCEPTORS	Grease, oil, and sediment interceptors for sewerage systems outside the building.
5/04	02221	BUILDING DEMOLITION	Complete structure removal.
11/01	02230	SITE CLEARING	Clearing and grubbing, and topsoil removal.
8/05	02240	DEWATERING	Construction dewatering and groundwater controls.
2/02	02300	EARTHWORK	Excavating, filling, and grading.

N = NEW U = UPDATE R = REVISION

# MASTERSPEC®

## TABLE OF CONTENTS

MECHANICAL/ELECTRICAL LIBRARY  
Outline Expanded (Basic and Supplemental)

MasterFormat 1995 Version

Issue Date	Sect. No.	SECTION TITLE	SECTION DESCRIPTION
------------	-----------	---------------	---------------------

Copyright 2006 The American Institute of Architects (AIA)  
Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

	3/04 02510	WATER DISTRIBUTION	Utility service, domestic, and fire-protection water.
N	6/06 02515	FACILITY FIRE-SUPPRESSION WATER-SERVICE PIPING	Fire suppression piping and specialties outside the building.
	3/04 02525	WATER SUPPLY WELLS	Drilled and driven wells and well pumps.
	12/01 02530	SANITARY SEWERAGE	Sanitary sewerage and underground structures outside the building.
	3/04 02532	PACKAGED SEWAGE PUMPING STATIONS	Pump, compressor, tank, and controls.
	12/02 02540	SEPTIC TANK SYSTEMS	Tank, distribution box, and drainage pipe.
	3/02 02551	HYDRONIC DISTRIBUTION	Underground piping outside the building.
	3/03 02552	GROUND-LOOP, HEAT-PUMP PIPING	Horizontal and vertical, direct-buried, ground-loop piping.
	3/02 02555	STEAM DISTRIBUTION	Underground piping outside the building.
	12/03 02584	UNDERGROUND DUCTS AND UTILITY STRUCTURES	Manholes, handholes, and underground ducts.
	3/03 02620	SUBDRAINAGE	Drainage for foundations, underslabs, plaza decks, retaining walls, and landscaped areas.
	12/01 02630	STORM DRAINAGE	Gravity and forced storm piping and underground structures.
	8/05 02741	ASPHALT PAVING	Paving, overlays, and surface treatments.
	2/02 02751	CEMENT CONCRETE PAVEMENT	General applications.
	12/05 02810	IRRIGATION SYSTEMS	Heads, pipes, and controls.
	8/02 02821	CHAIN-LINK FENCES AND GATES	Standard chain-link fencing systems.
<b>DIVISION 3 - CONCRETE</b>			
	8/02 03300	CAST-IN-PLACE CONCRETE	General building and structural applications.
	8/02 03301	CAST-IN-PLACE CONCRETE (LIMITED APPLICATIONS)	Limited applications for smaller projects.
<b>DIVISION 5 - METALS</b>			
	2/02 05500	METAL FABRICATIONS	Iron and steel items (not sheet metal).
<b>DIVISION 6 - WOOD AND PLASTICS</b>			
	11/03 06100	ROUGH CARPENTRY	Wood framing, furring, grounds, nailers, and blocking.
<b>DIVISION 7 - THERMAL AND MOISTURE PROTECTION</b>			
	11/05 07620	SHEET METAL FLASHING AND TRIM	Custom-fabricated roof and wall flashings and roof-drainage systems, and manufactured through-wall flashing and reglets.
	11/02 07720	ROOF ACCESSORIES	Roof curbs, equipment supports, roof hatches, heat and smoke vents, gravity ventilators, roof supports, and roof walkways.
	11/02 07841	THROUGH-PENETRATION FIRESTOP SYSTEMS	Through-penetration firestop systems.
	5/01 07920	JOINT SEALANTS	Elastomeric, nonelastomeric, and preformed sealants.
<b>DIVISION 8 - DOORS AND WINDOWS</b>			
	2/04 08311	ACCESS DOORS AND FRAMES	Wall, ceiling, and floor units.
<b>DIVISION 9 - FINISHES</b>			
	2/04 09911	EXTERIOR PAINTING	Exterior painting.
	2/04 09912	INTERIOR PAINTING	Interior painting.
	11/03 09960	HIGH-PERFORMANCE COATINGS	Specialty coatings for use on exterior and interior substrates.
	11/03 09975	HIGH-TEMPERATURE-RESISTANT COATINGS	Coatings for use on steel substrates subject to high temperatures.
<b>DIVISION 10 - SPECIALTIES</b>			
	8/05 10200	LOUVERS AND VENTS	Fixed and adjustable louvers; wall vents.
	5/05 10522	FIRE EXTINGUISHER CABINETS	Fire-protection cabinets and security fire-protection cabinets.
	5/05 10523	FIRE EXTINGUISHERS	Portable and wheeled fire extinguishers.
<b>DIVISION 13 - SPECIAL CONSTRUCTION</b>			

N = NEW U = UPDATE R = REVISION

# MASTERSPEC®

## TABLE OF CONTENTS

MECHANICAL/ELECTRICAL LIBRARY  
Outline Expanded (Basic and Supplemental)

MasterFormat 1995 Version

Issue Date	Sect. No.	SECTION TITLE	SECTION DESCRIPTION
------------	-----------	---------------	---------------------

Copyright 2006 The American Institute of Architects (AIA)  
Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

	12/02	13100	LIGHTNING PROTECTION	Protection for buildings and site components.
	12/02	13110	CATHODIC PROTECTION	Passive protection for steel and iron pipes and tanks.
	6/04	13210	ELEVATED WATER-STORAGE TANKS	Above-ground water storage.
	6/04	13220	SURFACE WATER-STORAGE TANKS	Surface-mounted water storage.
	3/03	13710	PERIMETER SECURITY	Detection devices, controls, and alarms on the site perimeter.
	3/03	13720	INTRUSION DETECTION	Detection devices, controls, and alarms.
	9/02	13730	SECURITY ACCESS	Computer controlled, with interface to other facility management systems.
	3/02	13760	VIDEO SURVEILLANCE	Cameras, monitors, and control equipment.
	6/01	13810	CLOCK AND PROGRAM CONTROL	Electronic, with master control, analog and digital clocks, and signals.
	9/04	13832	PLC ELECTRONIC DETENTION MONITORING AND CONTROL SYSTEMS	Monitoring and control of doors, gates, and related items for detention facilities.
	9/03	13845	LIGHTING CONTROLS	Wired, programmable and manual lighting controls.
	9/05	13852	DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM	Systems with addressable initiating devices and conventional or addressable notification appliances.
	9/05	13853	ZONED (DC LOOP) FIRE-ALARM SYSTEM	Small systems for buildings relying on zoned fire-alarm concept.
	3/01	13921	ELECTRIC-DRIVE, CENTRIFUGAL FIRE PUMPS	End-suction and in-line, centrifugal, split case.
	3/01	13922	DIESEL-DRIVE, CENTRIFUGAL FIRE PUMPS	End-suction, centrifugal, split case.
	3/01	13926	ELECTRIC-DRIVE, VERTICAL-TURBINE FIRE PUMPS	Vertical-turbine pumps, controllers, and accessories.
	3/01	13927	DIESEL-DRIVE, VERTICAL-TURBINE FIRE PUMPS	Vertical-turbine pumps, controllers, and accessories.
N	6/06	13930	WET-PIPE FIRE-SUPPRESSION SPRINKLERS	Piping, specialties, valves, and sprinklers for wet-pipe sprinkler systems.
N	6/06	13935	DRY-PIPE FIRE-SUPPRESSION SPRINKLERS	Piping, specialties, valves, and sprinklers for dry-pipe and preaction sprinkler systems.
	9/02	13955	FOAM FIRE EXTINGUISHING	Fixed, low-expansion, AFFF systems for flammable-liquid fires.
	9/02	13967	CLEAN-AGENT EXTINGUISHING SYSTEMS	Substitute for Halon 1301 systems.
N	6/06	13974	FIRE-SUPPRESSION STANDPIPES	Piping, specialties, valves, hose valves, and hose stations.
<b>DIVISION 15 - MECHANICAL</b>				
	6/05	15051	COMMON WORK RESULTS FOR FIRE SUPPRESSION	Common piping and equipment, materials, and installations.
	6/05	15052	COMMON WORK RESULTS FOR PLUMBING	Common piping and equipment, materials, and installations.
	6/05	15053	COMMON WORK RESULTS FOR HVAC	Common piping and equipment, materials, and installations.
	6/05	15056	COMMON MOTOR REQUIREMENTS FOR FIRE SUPPRESSION EQUIPMENT	Universal default values for small and medium, ac motors.
	6/05	15057	COMMON MOTOR REQUIREMENTS FOR PLUMBING EQUIPMENT	Universal default values for small and medium, ac motors.
	6/05	15058	COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT	Universal default values for small and medium, ac motors.
	6/05	15061	HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT	Single and multiple hangers, framing systems, and stands and supports.
	6/05	15062	HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT	Single and multiple hangers, framing systems, and stands and supports.
	12/04	15072	VIBRATION AND SEISMIC CONTROLS FOR FIRE-SUPPRESSION PIPING AND EQUIPMENT	Vibration isolation devices and seismic restraints.
	12/04	15073	VIBRATION AND SEISMIC CONTROLS FOR PLUMBING PIPING AND EQUIPMENT	Vibration isolation devices and seismic restraints.
	12/04	15074	VIBRATION AND SEISMIC CONTROLS FOR HVAC PIPING AND EQUIPMENT	Vibration isolation devices and seismic restraints.
	6/05	15076	IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT	Labels, stencils, and tags.

N = NEW U = UPDATE R = REVISION

# MASTERSPEC®

## TABLE OF CONTENTS

MECHANICAL/ELECTRICAL LIBRARY  
Outline Expanded (Basic and Supplemental)

MasterFormat 1995 Version

Issue Date	Sect. No.	SECTION TITLE	SECTION DESCRIPTION
------------	-----------	---------------	---------------------

Copyright 2006 The American Institute of Architects (AIA)

Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

	6/05 15077	IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT	Labels, stencils, and tags.
	3/05 15081	FIRE-SUPPRESSION SYSTEMS INSULATION	Equipment and pipe insulation.
	3/05 15082	PLUMBING INSULATION	Equipment and pipe insulation.
	3/05 15083	HVAC INSULATION	Duct, equipment, and pipe insulation.
	9/05 15111	GENERAL-DUTY VALVES FOR PLUMBING PIPING	Gate, globe, check, butterfly, & ball valves common to multiple systems.
	9/05 15112	GENERAL-DUTY VALVES FOR HVAC PIPING	Gate, globe, check, butterfly, & ball valves common to multiple systems.
	3/05 15123	EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING	Expansion joints and loops.
	3/05 15124	EXPANSION FITTINGS AND LOOPS FOR HVAC PIPING	Expansion joints and loops.
	3/05 15126	METERS AND GAGES FOR PLUMBING PIPING	Temperature, pressure, and flow.
	3/05 15127	METERS AND GAGES FOR HVAC PIPING	Temperature, pressure, and flow.
U	6/06 15140	DOMESTIC WATER PIPING	Potable-water distribution within the building.
	12/03 15145	DOMESTIC WATER PIPING SPECIALTIES	Specialties, valves, and fittings for domestic water piping.
	12/02 15150	SANITARY WASTE AND VENT PIPING	Soil, waste, and vent piping within the building.
	6/05 15155	SANITARY WASTE PIPING SPECIALTIES	Floor, trench, and channel drains; interceptors; and piping specialties.
	12/02 15160	STORM DRAINAGE PIPING	Stormwater piping within the building.
	6/05 15165	STORM DRAINAGE PIPING SPECIALTIES	Storm drains, roof drains, catch basins, and piping specialties.
	6/04 15181	HYDRONIC PIPING	Hot-, chilled-, and condenser-water piping.
	6/04 15182	STEAM AND CONDENSATE PIPING	LP and HP piping and specialties.
	6/04 15183	REFRIGERANT PIPING	Piping, specialties, and refrigerant.
	6/02 15185	HYDRONIC PUMPS	Base mounted and inline; close coupled and separately coupled.
	6/02 15186	STEAM CONDENSATE PUMPS	Electric-driven and pressure-powered; single and duplex pumps with receivers.
	3/04 15189	HVAC WATER TREATMENT	Steam boiler feedwater and hot-, chilled-, and condenser-water treatment.
	3/05 15192	FACILITY FUEL-OIL PIPING	Transfer and storage equipment and piping.
	3/05 15195	FACILITY NATURAL-GAS PIPING	Natural gas piping and specialties.
	3/05 15196	FACILITY LIQUEFIED-PETROLEUM GAS PIPING	LP gas piping, specialties, and storage equipment.
	9/04 15211	GENERAL-SERVICE COMPRESSED-AIR PIPING	Nonmedical piping, equipment, and accessories.
	12/04 15214	COMPRESSED-AIR PIPING FOR LABORATORY AND HEALTHCARE FACILITIES	Piping for nonmedical laboratory air, medical air, dental air, instrument air, and medical laboratory air.
	12/04 15215	VACUUM PIPING FOR LABORATORY AND HEALTHCARE FACILITIES	Piping for laboratory vacuum, medical surgical vacuum, waste anesthetic gas, dental vacuum, oral evacuation, and healthcare laboratory vacuum.
	12/04 15216	GAS PIPING FOR LABORATORY AND HEALTHCARE FACILITIES	Piping for CO <sub>2</sub> , helium, NO <sub>2</sub> , and O <sub>2</sub> .
	3/02 15222	PROCESSED-WATER PIPING	Pipe, fittings, and specialties for deionized, distilled, and reverse osmosis water.
	6/05 15223	CHEMICAL-WASTE SYSTEMS FOR LABORATORY AND HEALTHCARE FACILITIES	Single- and double-wall piping and specialties, neutralization tanks, and leak detection.
	3/05 15251	GENERAL-SERVICE PACKAGED AIR COMPRESSORS AND RECEIVERS	Nonmedical air compressors, filters, and dryers.
	3/05 15253	COMPRESSED-AIR EQUIPMENT FOR LABORATORY AND HEALTHCARE FACILITIES	Compressors, filters, and dryers.
	3/05 15254	VACUUM EQUIPMENT FOR LABORATORY AND HEALTHCARE FACILITIES	Vacuum pumps and oral evacuation equipment.
	9/03 15410	PLUMBING FIXTURES	Fixtures, carriers, faucets, and trim.
	9/03 15411	MEDICAL PLUMBING FIXTURES	Plumbing fixtures for healthcare facilities.
	12/03 15412	EMERGENCY PLUMBING FIXTURES	Individual and combination emergency eyewash and shower units.

N = NEW U = UPDATE R = REVISION

# MASTERSPEC®

## TABLE OF CONTENTS

MECHANICAL/ELECTRICAL LIBRARY  
Outline Expanded (Basic and Supplemental)

MasterFormat 1995 Version

Issue Date	Sect. No.	SECTION TITLE	SECTION DESCRIPTION
------------	-----------	---------------	---------------------

Copyright 2006 The American Institute of Architects (AIA)

Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

	12/03 15413	SECURITY PLUMBING FIXTURES	Detention facility plumbing fixtures.
	9/03 15415	DRINKING FOUNTAINS AND WATER COOLERS	Electric water coolers and vitreous-china fountains.
	9/01 15441	DOMESTIC WATER PUMPS	In-line and end-suction pumps.
	9/01 15444	PACKAGED BOOSTER PUMPS	Water-pressure boosters.
	9/01 15445	SEWAGE PUMPS	Effluent pumps; automatic, packaged.
	9/01 15446	SUMP PUMPS	Simplex and duplex packaged units.
	6/02 15450	POTABLE-WATER STORAGE TANKS	Water storage; compression and diaphragm.
	6/02 15469	WATER SOFTENERS	Domestic and general use, not treatment.
	3/03 15471	WATER FILTRATION EQUIPMENT	Separators; and bag, cartridge, carbon, sand, and greensand filters.
	12/02 15485	ELECTRIC WATER HEATERS	Household and commercial; tankless, instantaneous, and storage types.
	12/02 15486	FUEL-FIRED WATER HEATERS	Household and commercial; gas and oil fired; instantaneous and storage types.
	12/02 15487	HEAT EXCHANGERS	Steam and hot-water heat exchangers; instantaneous and storage types.
	3/04 15512	CAST-IRON BOILERS	HW and steam; gas and oil fired.
	3/04 15513	CONDENSING BOILERS	Packaged condensing boilers for small applications.
	6/05 15515	WATER-TUBE BOILERS	HW and steam; gas and oil fired.
	3/04 15518	FIRE-TUBE BOILERS	HW and steam; gas and oil fired.
	3/04 15519	ELECTRIC BOILERS	HW and steam; HP and LP.
	6/04 15520	FEEDWATER EQUIPMENT	Condensate and vacuum pumps and receivers.
	6/04 15525	DEAERATORS	Spray, packed column, and package tray.
	12/04 15530	FURNACES	Gas-, electric-, and oil-fired furnaces.
	6/04 15541	GAS-FIRED DUCT HEATERS	Gas- and oil-fired units.
	6/04 15542	GAS-FIRED RADIANT HEATERS	Natural and LP gas units.
	6/04 15543	FUEL-FIRED UNIT HEATERS	Gas- and oil-fired units.
	9/04 15550	BREECHINGS, CHIMNEYS, AND STACKS	Double-wall and refractory-lined breechings and stacks; fabricated breechings.
	9/04 15555	DRAFT CONTROL DEVICES	Induced-draft fans and barometric dampers.
	12/01 15561	DIRECT-FIRED H&V UNITS	Gas-fired indoor and outdoor units.
	12/01 15562	INDIRECT-FIRED H&V UNITS	Gas- and oil-fired indoor and outdoor units.
U	6/06 15621	INDIRECT-FIRED ABSORPTION WATER CHILLERS	Steam and hot-water generated; one and two stage.
	9/00 15622	DIRECT-FIRED ABSORPTION WATER CHILLERS	Natural gas, LP, and oil fired; water cooled; two stage.
U	6/06 15625	CENTRIFUGAL WATER CHILLERS	Hermetic and open; direct and gear drives; water and air cooled.
U	6/06 15626	ROTARY-SCREW WATER CHILLERS	Water-cooled, single- and multiple-compressor units; air-cooled indoor and outdoor units.
	3/05 15627	RECIPROCATING WATER CHILLERS	Water and air cooled.
	3/05 15629	SCROLL WATER CHILLERS	Water and air cooled.
	9/04 15635	REFRIGERANT DETECTION AND ALARM	Monitors, alarms, breathing apparatus, and ventilation equipment interlocks.
	6/05 15640	COOLING TOWERS	Factory-assembled, open- and closed-circuit, induced- and forced-draft, cross- and counter-flow towers.
	12/00 15663	EVAPORATIVE CONDENSERS	Blow through and counterflow.
	3/02 15671	CONDENSING UNITS	Air and water cooled.
	3/02 15672	AIR-COOLED CONDENSERS	Remote forced-air, condenser, and fan units.
	3/03 15710	HYDRONIC AND STEAM HEAT EXCHANGERS	Steam to water and water to water; shell-and-tube and flat-plate types.
U	6/06 15725	MODULAR INDOOR CENTRAL-STATION AIR-HANDLING UNITS	Units consisting of fans, coils, dampers, filters, control devices, and accessories.
U	6/06 15731	PACKAGED TERMINAL AIR CONDITIONERS	Freestanding or through-the-wall; cooling only; heat pump; cooling plus hot-water heating, electric heating, and gas-fired heating.

N = NEW U = UPDATE R = REVISION

# MASTERSPEC®

## TABLE OF CONTENTS

MECHANICAL/ELECTRICAL LIBRARY  
Outline Expanded (Basic and Supplemental)

MasterFormat 1995 Version

Issue Date	Sect. No.	SECTION TITLE	SECTION DESCRIPTION
------------	-----------	---------------	---------------------

Copyright 2006 The American Institute of Architects (AIA)  
Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

	12/04 15732	PACKAGED, OUTDOOR, CENTRAL-STATION AIR-HANDLING UNITS	Packaged, rooftop HVAC.
	9/01 15733	ROOFTOP REPLACEMENT-AIR UNITS	Makeup-air heating and cooling units.
U	6/06 15734	COMPUTER-ROOM AIR-CONDITIONERS	Floor- and ceiling-mounted console; water and air cooled; electric, hot-water, and steam heat.
	6/05 15735	SELF-CONTAINED AIR-CONDITIONERS	Packaged cooling, heating, filters, and controls; cabinet suitable for exposed installations.
	6/02 15738	SPLIT-SYSTEM AIR-CONDITIONING UNITS	Air-distribution equipment separate from refrigeration equipment; cabinet suitable for exposed installations.
	3/03 15745	WATER-SOURCE HEAT PUMPS	Concealed horizontal and vertical units; vertical-stack, rooftop, exposed-console units; and unit ventilators.
	12/03 15752	HUMIDIFIERS	Steam and evaporative types.
	12/00 15755	DEHUMIDIFICATION UNITS	Heat wheels, heat pipes, and dessicant-type dehumidification equipment.
	12/03 15761	AIR COILS	Water, steam, refrigerant, and electric heat-transfer coils.
	6/05 15762	UNIT HEATERS	Cabinet and propeller unit heaters, and wall and ceiling heaters.
	6/03 15763	FAN-COIL UNITS	Hot water, steam, and electric heating; chilled or DX cooling.
	9/03 15764	CONVECTION HEATING UNITS	Hot water, steam, and electric baseboard and finned-tube radiators and convectors.
	6/03 15768	UNIT VENTILATORS	Hot water, steam, and electric heating; chilled or DX cooling.
	9/03 15769	RADIANT HEATING AND COOLING UNITS	Electric and hot water radiant heaters and heating and cooling panels.
	6/04 15772	RADIANT HEATING PIPING	Embedded pipe and fittings.
	6/05 15774	RADIANT-HEATING ELECTRIC CABLES	Electric cables for ceilings and floors, snow and ice melting, and freezer-floor frost prevention.
	6/05 15776	RADIANT-HEATING ELECTRIC PANELS	Factory-fabricated panels.
	6/05 15777	HEAT TRACING FOR FIRE-SUPPRESSION PIPING	Electric cables for freeze protection.
	6/05 15778	HEAT TRACING FOR PLUMBING PIPING	Electric cables for freeze protection and temperature maintenance.
	6/05 15779	HEAT TRACING FOR HVAC PIPING	Electric cables for freeze protection.
U	6/06 15785	AIR-TO-AIR ENERGY RECOVERY EQUIPMENT	Heat exchangers and packaged units.
U	6/06 15815	METAL DUCTS	Rectangular and round, single- and double-wall ducts, including hangers and supports.
U	6/06 15816	NONMETAL DUCTS	Fibrous-glass, PVC, and FRP ducts, hangers, and supports.
U	6/06 15817	HVAC CASINGS	Factory and field fabricated; single and double wall.
U	6/06 15820	DUCT ACCESSORIES	Volume dampers, fire and smoke dampers, vanes, duct silencers, and hardware.
	9/02 15834	AIR CURTAINS	Fans over entrances with and without heating.
	9/03 15836	AXIAL FANS	Tubeaxial and vaneaxial fans.
	9/03 15837	CENTRIFUGAL FANS	BI & FC indoor type; tubular and in-line units.
	9/03 15838	POWER VENTILATORS	Roof, wall, and ceiling-mounting ventilators.
	12/00 15840	AIR TERMINAL UNITS	Constant- and variable-volume units.
	3/06 15855	DIFFUSERS, REGISTERS, AND GRILLES	Round, rectangular, perforated, and linear diffusers; fixed and adjustable registers and grilles.
	9/01 15856	INTAKE AND RELIEF VENTILATORS	Unpowered ventilators and louver penthouses.
	9/02 15861	AIR FILTERS	Disposable, extended surface, roll, activated carbon, HEPA, and electronic.
	9/04 15870	COMMERCIAL KITCHEN HOODS	Type I and Type II, Standard and Listed hoods.
	9/01 15890	AIR DUCT CLEANING	Cleaning ducts, plenums, and air outlets and inlets.
	6/03 15900	HVAC INSTRUMENTATION AND CONTROLS	Electric, electronic, pneumatic, and DDC equipment and devices.

N = NEW U = UPDATE R = REVISION

# MASTERSPEC<sup>®</sup>

## TABLE OF CONTENTS

MECHANICAL/ELECTRICAL LIBRARY  
Outline Expanded (Basic and Supplemental)

MasterFormat 1995 Version

Issue Date	Sect. No.	SECTION TITLE	SECTION DESCRIPTION
------------	-----------	---------------	---------------------

Copyright 2006 The American Institute of Architects (AIA)  
Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

6/03	15940	SEQUENCE OF OPERATION	Control sequences for HVAC systems.
6/01	15950	TESTING, ADJUSTING, AND BALANCING	HVAC systems.
<b>DIVISION 16 - ELECTRICAL</b>			
3/05	16051	COMMON WORK RESULTS FOR ELECTRICAL	Materials and methods common to multiple electrical systems.
3/05	16052	COMMON WORK RESULTS FOR COMMUNICATIONS	Materials and methods common to multiple communication systems.
3/05	16053	COMMON WORK RESULTS FOR ELECTRONIC SAFETY AND SECURITY	Materials and methods common to multiple electronic safety and security systems.
6/04	16055	OVERCURRENT PROTECTIVE DEVICE COORDINATION	Fault-current and protective device coordination studies.
9/03	16060	GROUNDING AND BONDING	Methods and materials for grounding systems and equipment.
12/04	16073	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS	Hangers, supports, and concrete bases.
12/04	16074	VIBRATION AND SEISMIC CONTROLS FOR ELECTRICAL SYSTEMS	Vibration isolation devices and seismic restraints.
9/02	16075	ELECTRICAL IDENTIFICATION	Labels, markers, tags, ties, tape, bands, and signs.
3/04	16120	CONDUCTORS AND CABLES	Electrical power distribution (600 V and less).
3/04	16122	UNDERCARPET CABLES	Power and communication cables.
3/06	16123	CONTROL-VOLTAGE ELECTRICAL POWER CABLES	UTP, optical fiber, and low-voltage control circuit conductors and cables.
6/03	16124	MEDIUM-VOLTAGE CABLES	Cable, splices, and terminations.
6/04	16130	RACEWAYS AND BOXES	Pull, junction, outlet, and cabinets.
12/04	16138	UNDERFLOOR RACEWAYS FOR ELECTRICAL SYSTEMS	Ducts, boxes, fittings, and accessories.
6/04	16139	CABLE TRAYS	Ladder, trough, solid-bottom, and channel types.
6/04	16140	WIRING DEVICES	Switches, receptacles, lighting-control devices, and plates.
9/04	16145	LIGHTING CONTROL DEVICES	Time switches, photoelectric relays, occupancy sensors, and multipole lighting controls.
9/02	16211	ELECTRICITY METERING	Energy and demand metering by utility or Owner.
12/03	16215	ELECTRICAL POWER MONITORING AND CONTROL	Remote and local monitoring, metering, and control of individual circuits.
12/03	16231	PACKAGED ENGINE GENERATORS	Diesel- and gas-engine-driven types.
9/02	16264	STATIC UNINTERRUPTIBLE POWER SUPPLY	Units rated 5 to 750 kVA for systems (600 V and less).
6/04	16265	CENTRAL BATTERY INVERTERS	AC & DC output types.
6/02	16269	VARIABLE FREQUENCY CONTROLLERS	Solid-state, pulse-width modulated.
6/03	16271	MEDIUM-VOLTAGE TRANSFORMERS	Transformers (2.4 to 35 kV).
9/02	16280	POWER FACTOR CORRECTION CAPACITORS	Capacitors for 600 V and less.
9/02	16289	TRANSIENT VOLTAGE SUPPRESSION	TVSS for low-voltage power, control, and communication equipment.
12/02	16315	OVERHEAD ELECTRICAL DISTRIBUTION	Medium and secondary voltage (up to 35 kV).
12/02	16341	MEDIUM-VOLTAGE SWITCHGEAR	Metal-enclosed interrupter and metal-clad CB type switchgear (up to 34 kV class).
6/03	16361	SECONDARY UNIT SUBSTATIONS	Indoor and outdoor units; with liquid-filled or dry-type transformers.
3/06	16410	ENCLOSED SWITCHES AND CIRCUIT BREAKERS	Fusible, nonfusible, receptacle, shunt trip, and molded-case switches; molded-case circuit breakers; enclosures.
12/03	16415	TRANSFER SWITCHES	Automatic, nonautomatic, and bypass/isolation.
6/02	16420	ENCLOSED CONTROLLERS	Manual, magnetic, and solid state.
3/03	16430	SWITCHGEAR	Metal-enclosed, circuit-breaker type; 1000V and less.
3/03	16435	PARALLELING SWITCHGEAR	Low-voltage type, 1000V and less; medium-voltage type, 5 to 15 kV; for multiple generator operation.
12/05	16441	SWITCHBOARDS	Service and distribution switchboards, 600V and less.
12/05	16442	PANELBOARDS	Distribution, branch circuit, and TVSS panel boards and load centers.

N = NEW U = UPDATE R = REVISION

# MASTERSPEC®

## TABLE OF CONTENTS

MECHANICAL/ELECTRICAL LIBRARY  
Outline Expanded (Basic and Supplemental)

MasterFormat 1995 Version

Issue Date	Sect. No.	SECTION TITLE	SECTION DESCRIPTION
Copyright 2006 The American Institute of Architects (AIA) Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA			
6/02	16443	MOTOR-CONTROL CENTERS	Conventional, modular, freestanding (600 V).
9/04	16450	ENCLOSED BUS ASSEMBLIES	Plug in & feeder (600 V or less).
9/04	16461	LOW-VOLTAGE TRANSFORMERS	General purpose and specialty dry type.
9/04	16470	POWER DISTRIBUTION UNITS	Voltage regulators, static electronic voltage regulators, and power distribution units.
3/06	16491	FUSES	Cartridge type (600 V and less); plug type (125 V and less); fuse adapters; spare-fuse cabinet.
6/03	16511	INTERIOR LIGHTING	Normal and emergency lighting.
6/03	16521	EXTERIOR LIGHTING	Exterior luminaires including poles and standards.
6/03	16526	SPORTS LIGHTING	Outdoor lighting for sports fields.
3/06	16555	STAGE LIGHTING	Dimmer racks; control console and devices; distribution components; lighting fixtures.
12/04	16571	CENTRAL DIMMING CONTROLS	Control network and stations, dimmer cabinets, and dimmers.
12/04	16572	MODULAR DIMMING CONTROLS	Manual modular and integrated, multipreset modular dimming controls.
3/05	16714	COMMUNICATIONS EQUIPMENT ROOM FITTINGS	Telecommunications mounting equipment, service pathways, and grounding.
3/05	16716	COMMUNICATIONS BACKBONE CABLING	Pathways, cables, connecting hardware, and cable identification systems.
3/05	16717	COMMUNICATIONS HORIZONTAL CABLING	Pathways, cables, MUTOAs, connecting hardware, and identification and administration systems.
3/05	16718	CONDUCTORS AND CABLES FOR ELECTRONIC SAFETY AND SECURITY	Cables, connecting hardware, and identification systems.
12/05	16722	INTERCOMMUNICATIONS AND PROGRAM SYSTEMS	Manually-switched and microprocessor-switched systems.
12/05	16723	EDUCATIONAL INTERCOMMUNICATIONS AND PROGRAM SYSTEMS	Manually and microprocessor-switched systems.
6/02	16725	NURSE CALL	Basic visual and audiovisual patient-nurse communication equipment.
12/05	16726	PUBLIC ADDRESS AND MASS NOTIFICATION SYSTEMS	Equipment, cabling, and raceways.
6/02	16727	SOUND-MASKING EQUIPMENT	Equipment and accessories for acoustical privacy.
3/02	16785	MASTER ANTENNA TELEVISION SYSTEM	MATV with options for off-air antennas, CATV, or broadcast satellite service.

N = NEW U = UPDATE R = REVISION