

# MASTERSPEC®

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Outline Basic

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### 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.
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.
3/04	02510	WATER DISTRIBUTION	Utility service, domestic, and fire-protection water.

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N	6/06	02515	FACILITY FIRE-SUPPRESSION WATER-SERVICE PIPING	Fire suppression piping and specialties outside the building.
	12/01	02530	SANITARY SEWERAGE	Sanitary sewerage and underground structures outside the building.
	3/03	02552	GROUND-LOOP, HEAT-PUMP PIPING	Horizontal and vertical, direct-buried, ground-loop piping.
	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.
<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>				
	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.

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N 6/06 13974 FIRE-SUPPRESSION STANDPIPES

Piping, specialties, valves, hose valves, and hose stations.

### DIVISION 15 - MECHANICAL

N 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.

N 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.

N 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.

6/05 15077 IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

Labels, stencils, and tags.

N 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.

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	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.
	3/05 15251	GENERAL-SERVICE PACKAGED AIR COMPRESSORS AND RECEIVERS	Nonmedical air compressors, filters, and dryers.
	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.
	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 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.
	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.
	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.

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	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.
	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 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.
N	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 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.

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6/03	15900	HVAC INSTRUMENTATION AND CONTROLS	Electric, electronic, pneumatic, and DDC equipment and devices.
6/03	15940	SEQUENCE OF OPERATION	Control sequences for HVAC systems.
6/01	15950	TESTING, ADJUSTING, AND BALANCING	HVAC systems.

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