Document 00821

WAGE SCALE FOR BUILDING CONSTRUCTION

1.01 Contractor and its Subcontractors must pay the general prevailing wage rates for building construction for each craft or type of worker or mechanic employed in the execution of any building construction or repair under the Contract in accordance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91 and 2006-168, and 2009-247 all as amended from time to time. City Council has determined the prevailing wage rate in the locality in which the work is being performed, which is set forth in Exhibit "A".

1.02 In bidding, Contractor warrants and represents that it has carefully examined the classifications for each craft or type of worker needed to execute the Contract and determined that such classifications in Exhibit "A" include all necessary categories to perform the work under the Contract.

1.03 If Contractor believes that an additional classification for a particular craft or type of worker is necessary to perform work under the Contract, it must submit with its bid a request to the Contract Compliance Division of the Mayor's Office of Business Opportunity ("OBO") to use an additional labor classification not listed in Exhibit "A" and specify the proposed new classification. OBO shall determine whether a proposed classification is already covered in Exhibit "A", and, if it is, specify which classification is appropriate. OBO’s decision is conclusive. If OBO decides that a new classification is necessary, it will determine the appropriate prevailing wage rate for any resurveyed, amended, new, or additional craft or type of worker not covered by Exhibit "A". Such determination must be decided in accordance with procedures established by OBO, and in compliance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91, 2006-168, and 2009-247 subject to City Council approval.

1.04 Contractor must not use any labor classification not covered by Exhibit "A" until such classification is established and approved for use by OBO.

A Contractor or Subcontractor who violates Chapter 2258 of the Texas Government Code must pay to the City, $60 per each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates set forth in Exhibit "A".

1.05 The City may withhold money required to be withheld under Chapter 2258 of the Texas Government Code from the final payment to Contractor or earlier payments if City Council makes a determination that there is good cause to believe that Contractor has not complied with these provisions and Chapter 2258 of the Government Code, in which case the City may withhold the money at any time subsequent to the finding by City Council.

1.06 Contractor and Subcontractors must keep records specifying:

(1) the name and classification of each worker employed under the Contract; and

(2) the actual per diem wages paid to each worker, and the applicable hourly rate.

The records must be open at all reasonable hours for inspection by the officers and agents of the City.

1.07 The prevailing wage rate does not prohibit the payment of more than the rates stated.

1.08 The hourly cost of salary for non-exempt workers for labor in excess of 40 hours per worker per week, shall be calculated at 1.5 times the worker's base pay, plus 1.0 times fringe benefits, for the applicable craft and level.

1.09 The wage scale for building construction is to be applied to work on a building including an area within 5 feet of the exterior wall.

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EXHIBIT "A"

CITY OF HOUSTON, TEXAS
LABOR CLASSIFICATIONS AND PREVAILING WAGE RATES
FOR
BUILDING CONSTRUCTION
2011

Worker Classification	Ratio	Base Rate	Fringe Benefit	Wage Total
Asbestos Worker/Insulator *	Ratio 1/1 - Apprentice	$20.63	$8.30	$28.93
Asbestos Abatement Worker (ceilings, walls ,floors only)	Ratio 1/1 - Apprentice	$14.00	$0.00	$14.00
Boilermaker *	Ratio 5/1 - Apprentice	$27.20	$16.88	$44.08
Brick Layer * (see Mason Tender Brick)	Ratio 1/3 - Apprentice	$18.00	$0.00	$18.00
Carpenter * (including acoustical ceiling work)	Ratio 2/1 - Apprentice	$21.00	$6.43	$27.43
Cement Mason/Concrete Finisher *	Ratio 1/3 - Apprentice	$12.83	$0.00	$12.83
Drywall Finisher/Taper *	Ratio 1/3 - Helper $8.54	$12.13	$1.01	$13.14
Drywall Hanger, * incl. metal studs installation	Ratio 1/3 - Helper $9.46	$12.96	$1.59	$14.55
Electrician *	Ratio 3/2 - Apprentice	$27.65	$7.70	$35.35
Elevator Mechanic *	Ratio 1/1 - Apprentice	$36.20	$21.98	$58.18
Formbuilder/Formsetter *	Ratio 1/3 - Helper $7.67	$11.82	$0.00	$11.82
Glazier *	Ratio 1/3 - Helper $11.51	$14.92	$2.78	$17.70
Insulator * (Batt and Foam)	Ratio 1/3 - Helper $6.50	$10.00	$0.00	$10.00
Ironworker *(Reinforcing)	Ratio 1/3 - Helper $7.83	$12.06	$0.00	$12.06
Ironworker *(Structural)	Ratio 1/3 - Helper $10.19	$15.68	$0.00	$15.68
Lather *	Ratio 1/3 - Helper $13.38	$16.90	$3.61	$20.51
Painter * (Brush, Roller, and Spray)	Ratio 1/3 - Helper $7.42	$11.17	$0.00	$11.17
Pipe Fitter *(HVAC Pipe only)	Ratio 1/3 - Apprentice	$28.42	$9.97	$38.39
Pipe Fitter *(Excluding HVAC)	Ratio 1/1 - Apprentice	$19.20	$8.23	$27.43
Plasterer *	Ratio 1/3 - Apprentice	$19.42	$1.00	$20.42
Plumber *	Ratio 3/2 - Apprentice	$28.79	$9.40	$38.19
Roofer *	Ratio 1/3 - Helper $7.85	$11.51	$0.57	$12.08
Sheet Metal Worker *(incl. HVAC duct and system install.)	Ratio 2/1 - Apprentice	$25.37	$9.96	$35.33
Sprinkler Fitter * (Fire sprinklers)	Ratio 1/1 - Apprentice	$25.40	$15.85	$41.25
Tile Finisher *	Ratio 1/3 - Helper $8.08	$12.00	$0.43	$12.43
Tile Setter *	Ratio 1/3 - Helper $10.91	$15.70	$1.09	$16.79
Truck Driver		$10.78	$1.57	$12.35
Laborers:				
Common Laborer		$9.29	$0.00	$9.29
Mason Tender (Brick)		$10.13	$0.00	$10.13
Mason Tender (Cement)		$9.86	$0.00	$9.86
Pipe Layer		$12.35	$0.00	$12.35
Plaster Tender (Plasterer's helper)		$12.90	$2.51	$15.41
Power Equipment Operator:				
Asphalt Paver		$13.50	$0.25	$13.75
Backhoe – Power Equipment Operator		$12.54	$0.00	$12.54
Crane – Power Equipment Operator		$17.95	$3.56	$21.51
Forklift – Power Equipment Operator		$15.46	$5.15	$20.61
Slab and Wall Saw – Power Equipment Operator		$15.54	$3.83	$19.37
Welders - Receive rate prescribed for craft performing operation in which welding is incidental				
*** When Apprentices are shown, Helpers cannot be utilized**				

Ordinance No. 2009-247 passed March 25, 2009

Building Construction Prevailing Wages
Classification Definitions

Adoption: February 1, 2011

Asbestos Worker/Insulator * - Ratio 1/1 Apprentice
(Including application of all insulating materials, protective coverings, coatings and finishing to all type of mechanical systems). Applies insulating material to exposed surfaces of structures, such as air ducts, hot and cold pipes, storage tanks, and cold storage rooms: Reads blueprints and selects required insulation material (in sheet, tubular, or roll form), such as fiberglass, foam rubber, styrofoam, cork, or urethane, based on material's heat retaining or excluding characteristics. Brushes adhesives on or attaches metal adhesive-backed pins to flat surfaces as necessary to facilitate application of insulation material. Measures and cuts insulation material to specified size and shape for covering flat or round surfaces, using tape measure, knife, or scissors. Fits, wraps, or attaches required insulation material around or to structure, following blueprint specifications. Covers or seals insulation with preformed plastic covers, canvas strips, sealant, or tape to secure insulation to structure, according to type of insulation used and structure covered, using staple gun, trowel, paintbrush, or caulking gun.

Asbestos Abatement Worker * (Ceilings, Floors, & Walls only)
Ratio 1/3 Apprentice
Removes asbestos from ceilings, walls, beams, boilers, and other structures, following hazardous waste handling guidelines: Assembles scaffolding and seals off work area, using plastic sheeting and duct tape. Positions mobile decontamination unit or portable showers at entrance of work area. Builds connecting walkway between mobile unit or portable showers and work area, using hand tools, lumber, nails, plastic sheeting, and duct tape. Positions portable air evacuation and filtration system inside work area. Sprays chemical solution over asbestos covered surfaces, using tank with attached hose and nozzle, to soften asbestos. Cuts and scrapes asbestos from surfaces, using knife and scraper. Shovels asbestos into plastic disposal bags and seals bags, using duct tape. Cleans work area of loose asbestos, using vacuum, broom, and dustpan. Places asbestos in disposal bags and seals bags, using duct tape. Dismantles scaffolding and temporary walkway, using hand tools, and places plastic sheeting and disposal bags into transport bags. Seals bags, using duct tape, and loads bags into truck.

Boilermaker * - Ratio 5/1 Apprentice
Assembles, analyzes defects in, and repairs boilers, pressure vessels, tanks, and vats in field, following blueprints and using hand tools and portable power tools and equipment: Locates and marks reference points for columns or plates on foundation, using master straightedge, squares, transit, and measuring tape, and applying knowledge of geometry. Attaches rigging or signals crane operator to lift parts to specified position. Aligns structures or plate sections to assemble boiler frame, tanks, or vats, using plumb bobs, levels, wedges, dogs, or turnbuckles. Hammers, flame cuts, files, or grinds irregular edges of sections or structural parts to facilitate fitting edges together. Bolts or arc-welds structures and sections together. Positions drums and headers into supports and bolts or welds supports to frame. Aligns water tubes and connects and expands ends to drums and headers, using tube expander. Bells, beads with power hammer, or welds tube ends to ensure leak proof joints. Bolts or welds casing sections, uptakes, stacks, baffles, and such fabricated parts as chutes, air heaters, fan stands, feeding tube, catwalks, ladders, coal hoppers, and safety hatch to frame, using wrench. Installs manholes, hand holes, valves, gauges, and feed water connection in

drums to complete assembly of water tube boilers. Assists in testing assembled vessels by pumping water or gas under specified pressure into vessel and observing instruments for evidence of leakage. Repairs boilers or tanks in field by unbolting or flame cutting defective sections or tubes, straightening plates, using torch or jacks, installing new tubes, fitting and welding new sections and replacing worn lugs on bolts. May rivet and caulk sections of vessels, using pneumatic riveting and caulking hammers.

Bricklayer * (See Mason Tender) - Ratio 1/3 Apprentice
Lays building materials, such as brick, structural tile, and concrete cinder, glass, gypsum, and terra cotta block (except stone) to construct or repair walls, partitions, arches, sewers, and other structures: Measures distance from reference points and marks guidelines on working surface to lay out work. Spreads soft bed (layer) of mortar that serves as base and binder for block, using trowel. Applies mortar to end of block and positions block in mortar bed. Taps block with trowel to level, align, and embed in mortar, allowing specified thickness of joint. Removes excess mortar from face of block, using trowel. Finishes mortar between brick with pointing tool or trowel. Breaks bricks to fit spaces too small for whole brick, using edge of trowel or brick hammer. Determines vertical and horizontal alignment of courses, using plumb bob, gauge line (tightly stretched cord), and level. Fastens brick or terra cotta veneer to face of structures, with tie wires embedded in mortar between bricks, or in anchor holes in veneer brick. May weld metal parts to steel structural members. May apply plaster to walls and ceiling, using trowel, to complete repair work.

Carpenter * (Including Acoustical Ceiling Work) - Ratio 2/1 Apprentice
Constructs, erects, installs, and repairs structures and fixtures of wood, plywood, and wallboard, using carpenter's hand tools and power tools, and conforming to local building codes: Studies blueprints, sketches, or building plans for information pertaining to type of material required, such as lumber or fiberboard, and dimensions of structure or fixture to be fabricated. Selects specified type of lumber or other materials. Prepares layout, using rule, framing square, and calipers. Marks cutting and assembly lines on materials, using pencil, chalk, and marking gauge. Shapes materials to prescribed measurements, using saws, chisels, and planes. Assembles cut and shaped materials and fastens them together with nails, dowel pins, or glue. Verifies trueness of structure with plumb bob and carpenter's level. Erects framework for structures and lays subflooring. Builds stairs and lays out and installs partitions and cabinetwork. Covers sub floor with building paper to keep out moisture and lays hardwood, parquet, and wood-strip-block floors by nailing floors to sub floor or cementing them to mastic or asphalt base. Applies shock-absorbing, sound-deadening, and decorative paneling to ceilings and walls. Fits and installs prefabricated window frames, doors, doorframes, weather stripping, interior and exterior trim, and finish hardware, such as locks, letter drops, and kick plates. Constructs forms and chutes for pouring concrete. Erects scaffolding and ladders for assembling structures above ground level. May weld metal parts to steel structural members.

Cement Mason/Concrete Finisher *(See Concrete Mason/Concrete Finisher) - Ratio 1/3 Apprentice
Finisher; concrete floater Smoothes and finishes surfaces of poured concrete floors, walls, sidewalks, or curbs to specified textures, using hand tools or power tools, including floats, trowels, and screeds: Signals concrete deliverer to position truck to facilitate pouring concrete. Moves discharge chute of truck to direct concrete into forms. Spreads concrete into inaccessible sections of forms, using rake or shovel. Levels concrete to specified depth and workable consistency, using hand held screed and floats to bring water to surface and produce soft topping. Smoothes, and shapes surfaces of freshly poured concrete, using straightedge and float or power screed. Finishes concrete surfaces, using power trowel, or wets and rubs concrete with abrasive stone to impart finish. Removes rough or defective spots from concrete surfaces, using power grinder or chisel and hammer, and patches holes with fresh concrete or epoxy compound. Molds expansion joints and edges, using edging tools, jointers, and straightedge. May sprinkle colored stone chips, powdered steel, or coloring powder on concrete to produce prescribed finish. May produce rough concrete surface, using broom. May mix cement, using hoe or concrete-mixing machine. May direct sub grade work, mixing of concrete, and setting of forms.

Drywall Finisher/Taper - Ratio 1/3 Helpers
Wallboard and plasterboard; sheetrock taper; taper and bedder; taper and floater Seals joints between plasterboard or other wallboards to prepare wall surface for painting or papering; Mixes sealing compound by hand or with portable electric mixer, and spreads compound over joints between boards, using trowel, broad knife, or spatula. Presses paper tape over joint to embed tape into compound and seal joint, or tapes joint, using mechanical applicator that spreads compound and embeds tape in one operation. Spreads and smoothes cementing material over tape, using trowel or floating machine to blend joint with wall surface. Sands rough spots after cement has dried. Fills cracks and holes in walls and ceiling with sealing compound. Installs metal molding at corners in lieu of sealant and tape. Usually works as member of crew. May apply texturing compound and primer to walls and ceiling preparatory to final finishing, using brushes, roller, or spray gun. May countersink nails or screws below surface of wall prior to applying sealing compound, using hammer or screwdriver.

Drywall Hanger (Includes Installing Metal Studs) - Ratio 1/3 Helpers
Dry-wall installer; gypsum dry-wall systems installer Plans gypsum drywall installations, erects metal framing and furring channels for fastening drywall, and installs drywall to cover walls, ceilings, soffits, shafts, and movable partitions in residential, commercial, and industrial buildings: Reads blueprints and other specifications to determine method of installation, work procedures, and material, tool, and work aid requirements. Lays out reference lines and points for use in computing location and position of metal framing and furring channels and marks position for erecting metalwork, using chalk line. Measures, marks, and cuts metal runners, studs, and furring channels to specified size, using tape measure, straightedge and hand and portable power cutting tools. Secures metal framing to walls and furring channels to ceilings, using hand and portable power tools. Measures and marks cutting lines on drywall, using square, tape measure, and marking devices. Scribes cutting lines on drywall, using straightedge and utility knife and breaks board along cut lines. Fits and fastens board into specified position on wall, using screws, hand tools, portable power tools, or adhesive. Cuts openings into board for electrical outlets, vents, or fixtures, using keyhole saw or other cutting tools. Measures, cuts, assembles, and installs metal framing and decorative trim for windows, doorways, and vents. Fits, aligns, and hangs doors and installs hardware, such as locks and kick plates

Electrician * (Including Pulling Wire and Low Voltage Wiring and Installation of Fire Alarms, Security Systems, Telephones, and Computers.) - Ratio 3/2 Apprentice
Plans layout, installs, and repairs wiring, electrical fixtures, apparatus, and control equipment: Plans new or modified installations to minimize waste of materials, provide access for future maintenance, and avoid unsightly, hazardous, and unreliable wiring, consistent with specifications and local electrical codes. Prepares sketches showing location of wiring and equipment, or follows diagrams or blueprints, ensuring that concealed wiring is installed before completion of future walls, ceilings, and flooring. Measures, cuts, bends, threads, assembles, and installs electrical conduit, using tools, such as hacksaw, pipe threader, and conduit bender. Pulls wiring through conduit. Splices wires by stripping insulation from terminal leads, using knife or pliers, twisting or soldering wires together, and applying tape or terminal caps. Connects wiring to lighting fixtures and power equipment, using hand tools. Installs control and distribution apparatus, such as switches, relays, and circuit-breaker panels, fastening in place with screws or bolts, using hand tools and power tools. Connects power cables to equipment, such as electric range or motor, and installs grounding leads. Tests continuity of circuit to ensure electrical compatibility and safety of components, using testing instruments, such as ohmmeter, battery and buzzer, and oscilloscope. Observes functioning of installed equipment or system to detect hazards and need for adjustments, relocation, or replacement.

Elevator Mechanic * - Ratio 1/1 Apprentice
FOOTNOTES: a. - Employer contributes 8% of basic hourly rate for over 5 years' service and 6% of basic hourly rate for 6 months to 5 years' service as Vacation Pay Credit. Paid Holidays: New Year's Day; Memorial Day; Independence Day Labor Day; Thanksgiving Day; Friday after Thanksgiving Day; Christmas Day

Erector; elevator installer; elevator mechanic Assembles and installs electric and hydraulic freight and passenger elevators, escalators, and dumbwaiters, determining layout and electrical connections from blueprints: Studies blueprints and lays out location of framework, counterbalance rails, motor pump, cylinder, and plunger foundations. Drills holes in concrete or structural steel members with portable electric drill. Secures anchor bolts or welds brackets to support rails and framework, and verifies alignment with plumb bob and level. Cuts prefabricated sections of framework, rails, and other elevator components to specified dimensions, using acetylene torch, power saw, and disk grinder. Installs cables, counterweights, pumps, motor foundations, escalator drives, guide rails, elevator cars, and control panels, using hand tools. Connects electrical wiring to control panels and electric motors. Installs safety and control devices. Positions electric motor and equipment on top of elevator shaft, using hoists and cable slings.

Formbuilder/Formsetter - Ratio 1/3 Helpers
Constructs built-in-place or prefabricated wooden forms, according to specifications, for molding concrete structures: Studies blueprints and diagrams to determine type and dimension of forms to be constructed. Saws lumber to blueprint dimensions, using handsaw or power saw, and nails lumber together to make form panels. Erects built-in-place forms or assembles and installs prefabricated forms on construction site according to blueprint specifications, using hand tools, plumb rule, and level. Inserts spreaders and tie rods between opposite faces of form to maintain specified dimensions. Anchors and braces forms to fixed objects, using nails, bolts, anchor rods, steel cables, planks, and timbers.

Glazier - Ratio 1/3 Helpers
Installs glass in windows, skylights, store fronts, and display cases, or on surfaces, such as building fronts, interior walls, ceilings, and tabletops: Marks outline or pattern on glass, and cuts glass, using glasscutter. Breaks off excess glass by hand or with notched tool. Fastens glass panes into wood sash with glaziers points, and spreads and smoothes putty around edge of panes with knife to seal joints. Installs mirrors or structural glass on building fronts, walls, ceilings, or tables, using mastic, screws, or decorative molding. Bolts metal hinges, handles, locks, and other hardware to prefabricated glass doors. Sets glass doors into frame and fits hinges. May install metal window and doorframes into which glass panels are to be fitted. May press plastic adhesive film to glass or spray glass with tinting solution to prevent light glare. May install stained glass windows.

Insulator (Batt and Foam) - Ratio 1/3 Helpers
Applies batt and form insulation to walls, ceilings and other surfaces according to manufacturers specifications and blue print instructions. May use sealants such as cement plaster or asphalt compound to seal insulation; may spread concrete over floor slabs to form wearing floor: brushes adhesives, cuts insulating materials to specified shape to cover surfaces; uses tape or other sealants to adhere insulation to surfaces. May use staple gun, towel, paintbrushes and caulking guns.

Ironworker (Reinforcing) - Ratio 1/3 Helpers
Positions and secures steel bars in concrete forms to reinforce concrete; places rods in forms, spacing and fastening together with wire and pliers. Cuts bars using hacksaw, bar cutters or acetylene torch. Bends steel rods with hand tools or rod bending machine; reinforces concrete with wire mesh; welds reinforcing bars together.

Ironworker (Structural) - Ratio 1/3 Helpers
Erector; ironworker; steel erector; structural-iron erector; structural-iron worker; structural steel erector Performs any combination of following duties to raise, place, and unite girders, columns, and other structural-steel members to form completed structures or structure frameworks, working as member of crew: Sets up hoisting equipment for raising and placing structural-steel members. Fastens steel members to cable of hoist, using chain, cable, or rope. Signals worker operating hoisting equipment to lift and place steel member. Guides member, using tab line (rope) or rides on member in order to guide it into position. Pulls, pushes, or pries steel members into approximate position while member is supported by hoisting device. Forces members into final position, using turnbuckles, crowbars, jacks, and hand tools. Aligns rivet holes in member with corresponding holes in previously placed member by driving drift pins or handle of wrench through holes. Verifies vertical and horizontal alignment of members, using plumb bob and level.

Lather - Ratio 1/3 Helpers
Fastens wooden, metal, or rockboard lath to walls, ceilings, and partitions of buildings to provide supporting base for plaster, fireproofing, or acoustical material, using hand tools and portable power tools: Erects horizontal metal framework to which laths are fastened, using nails, bolts, and studgun. Drills holes in floor and ceiling, using portable electric tool, and drives ends of wooden or metal studs into holes to provide anchor for furring or rockboard lath. Wires horizontal strips to furring to stiffen framework. Cuts lath to fit openings and projections, using hand tools or portable power tools. Wires, nails, clips, or staples lath to framework, ceiling joists, and flat concrete surfaces. Bends metal lath to fit corners, or attaches preformed corner reinforcements. Wires plasterer's channels to overhead structural framework to provide support for plaster or acoustical ceiling tile.

Painter (Brush, Roller, and Spray) - Ratio 1/3 Helpers
Applies coats of paint, varnish, stain, enamel, or lacquer to decorate and protect interior or exterior surfaces, trimmings, and fixtures of buildings and other structures: Reads work order or receives instructions from supervisor or homeowner regarding painting. Smoothes surfaces, using sandpaper, brushes, or steel wool, and removes old paint from surfaces, using paint remover, scraper, wire brush, or blowtorch to prepare surfaces for painting. Fills nail holes, cracks, and joints with caulk, putty, plaster, or other filler, using caulking gun and putty knife. Selects premixed paints, or mixes required portions of pigment, oil, and thinning and drying substances to prepare paint that matches specified colors. Removes fixtures, such as pictures and electric switchcovers, from walls prior to painting, using screwdriver. Spreads dropcloths over floors and room furnishings, and covers surfaces, such as baseboards, doorframes, and windows with masking tape and paper to protect surfaces during painting. Paints surfaces, using brushes, spray gun, or paint rollers. Simulates wood grain, marble, brick, or tile effects. Applies paint with cloth, brush, sponge, or fingers to create special effects. Erects scaffolding or sets up ladders to perform tasks above ground level.

Pipe fitter * (HVAC Pipe Only) - Ratio 1/3 Apprentice
Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and air conditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following

specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks. May weld pipe supports to structural steel members. May observe production machines in assigned area of manufacturing facility to detect machinery malfunctions. May operate machinery to verify repair. May modify programs of automated machinery, such as robots and conveyors, to change motion and speed of machine, using teach pendant, control panel, or keyboard and display screen of robot controller and programmable controller. May be designated Steam Fitter (construction) when installing piping systems that must withstand high pressure.

Pipe Fitter * (Excluding HVAC) – Ratio 1/1 See Journeyman / Apprentice schedule
Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe-threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and air conditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks.

Plasterer * See Plaster Tender - Ratio 1/3 Apprentice
Applies coats of plaster to interior walls, ceilings, and partitions of buildings, to produce finished surface, according to blueprints, architect's drawings, or oral instructions, using hand tools and portable power tools: Directs workers to mix plaster to desired consistency and to erect scaffolds. Spreads plaster over lath or masonry base, using trowel, and smoothes plaster with darby and float to attain uniform thickness. Applies scratch, brown, or finish coats of plaster to wood, metal, or board lath successively. Roughens undercoat with scratcher (wire or metal scraper) to provide bond for succeeding coats of plaster.

Plumber * (Excluding HVAC Pipe) - Ratio 3/2 Apprentice
Assembles, installs, and repairs pipes, fittings, and fixtures of heating, water, and drainage systems, according to specifications and plumbing codes: Studies building plans and working drawings to determine work aids required and sequence of installations. Inspects structure to ascertain obstructions to be avoided to prevent weakening of structure resulting from installation of pipe. Locates and marks position of pipe and pipe connections and passage holes for pipes in walls and floors, using ruler, spirit level, and plumb bob. Cuts openings in walls and floors to accommodate pipe and pipe fittings, using hand tools and power tools. Cuts and threads pipe, using pipe cutters, cutting torch, and pipe-threading machine. Bends pipe to required angle by use of pipe-bending machine or by placing pipe over block and bending it by hand. Assembles and installs valves, pipe fittings, and pipes composed of metals, such as iron, steel, brass, and lead, and nonmetals, such as glass, vitrified clay, and plastic, using hand tools and power tools. Joins pipes by use of screws, bolts, fittings, solder, plastic solvent, and caulks joints. Fills pipe system with water or air and reads pressure gauges to determine whether system is leaking. Installs and repairs plumbing fixtures, such as sinks, commodes, bathtubs, water heaters, hot water tanks, garbage disposal units, dishwashers,

and water softeners. Repairs and maintains plumbing by replacing washers in leaky faucets, mending burst pipes, and opening clogged drains.

Roofer - Ratio 1/3 Helpers
Covers roofs with roofing materials other than sheet metal, such as composition shingles or sheets, wood shingles, or asphalt and gravel, to waterproof roofs: Cuts roofing paper to size, using knife, and nails or staples it to roof in overlapping strips to form base for roofing materials. Installs gutters and downs spouts. Aligns roofing material with edge of roof, and overlaps successive layers, gauging distance of overlap with chalkline, gauge on shingling hatchet, or by lines on shingles. Fastens composition shingles or sheets to roof with asphalt, cement, or nails. Punches holes in slate, tile, terra cotta, or wooden shingles, using punch and hammer. Cuts strips of flashing and fits them into angles formed by walls, vents, and intersecting roof surfaces. When applying asphalt or tar and gravel to roof, mops or pours hot asphalt or tar onto roof base. Applies alternate layers of hot asphalt or tar and roofing paper until roof covering is as specified. Applies gravel or pebbles over top layer, using rake or stiff bristled broom.

Sheet metal worker * Ratio 2/1 Apprentice (Including Setting HVAC System)(Excluding HVAC Duct) Ratio 3/1 Apprentice
Fabricates, assembles, installs and repairs sheet metal products, including sheet metal roof (also see Roofer). Operates soldering and welding equipment to join together sheet metal parts. Seals seams and joints with sealant. Installs roof sheets, trims, flashing, gutters down spouts and other related items. Performs other related duties.

Sprinkler Fitter (Fire) * - Ratio 1/1 Apprentice
Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe-threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and air conditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks. May weld pipe supports to structural steel members. May observe production machines in assigned area of manufacturing facility to detect machinery malfunctions. May operate machinery to verify repair. May modify programs of automated machinery, such as robots and conveyors, to change motion and speed of machine, using teach pendant, control panel, or keyboard and display screen of robot controller and programmable controller.

Tile Finisher - Ratio 1/3 Helpers
Supplies and mixes construction materials for TILE SETTER (construction) 861.381-054, applies grout, and cleans installed tile: Moves tiles, tile setting tools, and work devices from storage area to installation site manually or using wheelbarrow. Mixes mortar and grout according to standard formulas and request from TILE SETTER (construction), using bucket, water hose, spatula, and portable mixer. Supplies TILE SETTER (construction) with mortar, using wheelbarrow and shovel. Applies grout between joints of installed tile, using grouting trowel. Removes excess grout from tile

joints with wet sponge and scrapes corners and crevices with trowel. Wipes surface of tile after grout has set to remove grout residue and polish tile, using nonabrasive materials. Cleans installation site, mixing and storage areas, and installation machines, tools, and equipment, using water and various cleaning tools. Stores tile setting materials, machines, tools, and equipment. May apply caulk, sealers, acid, steam, or related agents to caulk, seal, or clean installed tile, using various application devices and equipment. May modify mixing, grouting, grinding, and cleaning procedures according to type of installation or material used. May assist TILE SETTER (construction) to position and secure metal lath, wire mesh, or felt paper prior to installation of tile. May cut marked tiles to size, using power saw or tile cutter.

Tile Setter - Ratio 1/3 Helpers
Applies tile to walls, floors, ceilings, and promenade roof decks, following design specifications: Examines blueprints, measures and marks surfaces to be covered, and lays out work. Measures and cuts metal lath to size for walls and ceilings with tin snips. Tacks lath to wall and ceiling surfaces with staple gun or hammer. Spreads plaster base over lath with trowel and levels plaster to specified thickness, using screed. Spreads concrete on sub floor, with trowel and levels it with screed. Spreads mastic or other adhesive base on roof deck, using serrated spreader to form base for promenade tile. Cuts and shapes tile with tile cutters and biters. Positions tile and taps it with trowel handle to affix tile to plaster or adhesive base.

Truck Driver
Drives truck with capacity of more than 3 tons, to transport materials to and from specified destinations: Drives truck to destination, applying knowledge of commercial driving regulations and area roads. Prepares receipts for load picked up. Collects payment for goods delivered and for delivery charges. May maintain truck log, according to state and federal regulations. May maintain telephone or radio contact with supervisor to receive delivery instructions. May load and unload truck. May inspect truck equipment and supplies, such as tires, lights, brakes, gas, oil, and water. May perform emergency roadside repairs, such as changing tires, installing light bulbs, tire chains, and spark plugs. May position blocks and tie rope around items to secure cargo during transit.

Laborers

Common Laborer
Performs any combination of the following tasks in erecting, repairing and wrecking buildings; dig, spread and level dirt and gravel; lift carry and hold building materials, tools and supplies; clean tools, equipment, materials and work areas; mix, pour and spread concrete, asphalt, gravel and other materials; join, wrap and seal sections of pipe; routine non-machine tasks such as removing forms from set concrete, filling expansion joints with asphalt, and placing culverts in trench. May also signal construction equipment operators; measure distances from grade stakes, drive stakes and stretch lines; bolt, nail align and block up under forms; mix and finish poured concrete, erect scaffolding; spread paint or coating to seal surfaces; caulking compounds to seal surfaces; remove projections from concrete, and mount pipe hangers.

Mason Tender Brick (Bricklayer's Helper)

Mason Tender Cement (Concrete Mason's / Concrete Finisher's Helper)

Pipe layer
Lay pipe for storm or sanitation sewers, drains, and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe, or seal joints.

Plaster Tender (Plaster's Helper)
Tends machine that pumps plaster or stucco through spraygun for application to ceilings, walls, and partitions of buildings: Starts and stops machine on signals from PLASTERER (construction). Fills

hopper of machine with plaster. Turns valves to regulate pump and compressor. Assists in erecting scaffolds.

Power Equipment Operator:

Asphalt Paver (operator)
Operator; bituminous-paving-machine operator; blacktop-paver operator; blacktop spreader; mechanical-spreader operator; paving-machine operator, asphalt or bituminous Operates machine that spreads and levels hot-mix bituminous paving material on sub grade of highways and streets: Bolts extensions to screed to adjust width, using wrenches. Lights burners to heat screed. Starts engine and controls paving machine to push dump truck and maintain constant flow of asphalt into hopper. Observes distribution of paving material along screed and controls direction of screed to eliminate voids at curbs and joints. Turns valves to regulate temperature of asphalt flowing from hopper when asphalt begins to harden on screed.

Backhoe (operator)
Operates power-driven machine, equipped with movable shovel, to excavate or move coal, dirt, rock, sand, and other materials: Receives written or oral instructions from supervisor regarding material to move or excavate. Pushes levers and depresses pedals to move machine, to lower and push shovel into stockpiled material, to lower and dig shovel into surface of ground, and to lift, swing, and dump contents of shovel into truck, car, or onto conveyor, hopper, or stockpile. Observes markings on ground, hand signals, or grade stakes to remove material, when operating machine at excavation site.

Crane (operator)
Operates electric-, diesel-, gasoline-, or steam-powered guy-derrick or stiff-leg derrick (mast supported by fixed legs or tripod), to move products, equipment, or materials to and from quarries, storage areas, and processes, or to load and unload trucks or railroad cars: Pushes and pulls levers and depresses pedals to raise, lower, and rotate boom and to raise and lower load line in response to signals.

Forklift (operator)
Drives gasoline-, liquefied gas-, or electric-powered industrial truck equipped with lifting devices, such as forklift, boom, scoop, lift beam and swivel-hook, fork-grapple, clamps, elevating platform, or trailer hitch, to push, pull, lift, stack, tier, or move products, equipment, or materials in warehouse, storage yard, or factory: Moves levers and presses pedals to drive truck and control movement of lifting apparatus. Positions forks, lifting platform, or other lifting device under, over, or around loaded pallets, skids, boxes, products, or materials or hooks tow trucks to trailer hitch, and transports load to designated area. Unloads and stacks material by raising and lowering lifting device.

Slab & Wall Saw (operator)

Apprentices
Apprentices may be used in any of the crafts listed above where noted, if they are currently certified in a program recognized by the Bureau of Apprenticeship and Training, U.S. Department of Labor, providing the proper ratio between journeyman and apprentice is observed. Apprentice certification certificates must be supplied with the first weekly payroll upon which the apprentice's name appears.

Helper (65% of the journeyman classification)
(Must not exceed 3 helpers to 1 journeyman)
A Helper is a semi-skilled worker (rather than a skilled journeyman) who works under the direction of and assists a journeyman. Under the journeyman's direction and supervision, the helper performs a variety of duties to assist the journeyman such as preparing, carrying, and furnishing equipment,

supplies and maintaining them in order; cleaning and preparing work areas; lifting, positioning, and holding materials or tools; and other related semi-skilled tasks as directed by the journeyman. A helper may use the tools of the trade at and under the direction of the journeyman. The particular duties performed by a helper vary according to area practice. The journeyman must work in close proximity to the location of the helpers work area. The helpers wage rate shall be calculated at no less than 65% of the prevailing wage for that journeyman's classification.

Helper who assists more than one journeyman craft should be listed with the notation indicating each journeyman craft classification they assist.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Pipe fitters * Apprentice Schedule (Excluding HVAC Pipe)

Journeyman	Indentured Apprentice	Apprentice Applicant	Total
1	1	0	1 to 1
3	2	1	3 to 3
5	3	2	5 to 5
8	4	3	8 to 7
12	5	4	12 to 9
16	6	5	16 to 11
20	7	6	20 to 13
25	8	7	25 to 15
30	9	8	30 to 17
40	10	9	40 to 19
50	11	10	50 to 21

NOTE: Continue after 50 Journeyman — ONE (1) Indentured Apprentice and one (1) Apprentice Applicant for every ten (10) Journeyman

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*** When Apprentices are shown, Helpers cannot be utilized**

If there are questions as to the classification of a worker, contact the Contract Compliance Officer in writing with a description of the work the worker will be performing. After review the Contract Compliance Officer will respond in writing with the classification and wage rate to be paid the worker in question.

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