

COMPETENCY ANALYSIS PROFILE
Residential Air Conditioning Systems Mechanic- Branch 2 – 313D

(All unshaded skill sets must be demonstrated/completed)

SKILL SETS

SKILLS

PROTECT SELF AND OTHERS 6230.0	Identify, interpret, and comply with safety directives 6230.01	Wear, adjust, and maintain personal protective equipment 6230.02	Practise good housekeeping in the workplace 6230.03	Handle and dispose designated substances and refrigerants 6230.04	Follow fire safety procedures 6230.05
	Operate emergency safety equipment 6230.06	Follow first aid procedures 6230.07	Report injuries 6230.08	Lock out equipment for repair or maintenance 6230.09	Work within safe physical limits 6230.10
	Operate material handling equipment 6230.11	Operate worker elevating platforms 6230.12	Handle and transport compressed gases and equipment 6230.13		

PLAN & PREPARE FOR SERVICE. INSTALLATION, OR MAINTENANCE OF RESIDENTIAL AIR CONDITIONING (AC) AND HEAT PUMP(HP) 6231.0	Read and interpret job documentation 6231.01	Calculate residential AC and HP parameters 6231.02	Identify and select AC and HP components and accessories 6231.03	Identify and select hand tools 6231.04	Identify and select power tools 6231.05
	Identify and select electrical measuring devices 6231.06	Identify and select pressure, temperature, and flow measuring devices 6231.07	Identify and select specialty instruments 6231.08	Identify and select installation materials and equipment 6231.09	Coordinate permits, inspections, and sub-trades 6231.10
	Complete planning records 6231.11	Communicate with others 6231.12			

RESIDENTIAL AIR CONDITIONING SYSTEMS MECHANIC- BRANCH 2

SKILL SETS

SKILLS

ASSEMBLE AND INSTALL RESIDENTIAL AIR CON DITIONING (AC) AND HEAT PUMP (HP) 6232.0	Inspect residential equipment at site 6232.01	Perform a site evaluation 6232.02	Coordinate material handling equipment and worker elevating platforms 6232.03	Prepare work site 6232.04	Coordinate mounting and support equipment 6232.05
	Assemble and install residential AC and HP 6232.06	Braze and solder piping 6232.07	Check system for leaks 6232.08	Evacuate and dehydrate system 6232.09	Wire in AC and HP 6232.10
	Complete installation records 6240.11				

COMMISSION RESIDENTIAL AIR CONDITIONING (AC) AND HEAT PUMP(HP) 6233.0	Charge residential system with refrigerant 6233.01	Set and verify electrical, electronic, and automated control systems 6233.02	Check and adjust air flow, water, and glycol levels 6233.03	Verify charging of residential system 6233.04	Verify residential system operating parameters 6233.05
	Start up and commission AC and HP 623306	Complete start-up and commissioning documentation 6233.07			

RESIDENTIAL AIR CONDITIONING SYSTEMS MECHANIC- BRANCH 2

SKILL SETS

SKILLS

SERVICE RESIDENTIAL AIR CONDITIONING (AC) AND HEAT PUMP (HP) 6234.0	Troubleshoot residential AC and HP 6234.01	Replace or repair residential AC and HP accessories and components 6234.02	Replace or repair residential zoning components 6234.03	Clean or replace heat transfer devices, coils, and heat exchangers 6234.04	Replace or repair condensate drains and components 6234.05
	Replace or repair AC and HP compressors 6234.06	Replace or repair the air side of residential equipment 6234.07	Replace or repair fans and motors 6234.08	Check operations and functions of total system 6234.09	Decommission residential AC and HP equipment 6234.10
	Clean up work site 6234.11	Complete servicing records 6234.12			

MAINTAIN RESIDENTIAL AIR CONDITIONING (AC) AND HEAT PUMP(HP) 6235.0	Check residential AC and HP accessories and components 6235.01	Clean or replace filter system and components 6235.02	Adjust and replace heat transfer medium 6235.03	Replace or repair piping 6235.04	Replace or repair AC and HP components 6235.05
	Check system for leakage 6235.06	Repair or replace refrigerant flow and metering devices 6235.07	Clean up work site 6235.08	Complete maintenance records 6235.09	

SERVICE AND/OR MAINTAIN; ELECTRICAL COMPONENTS OF RESIDENTIAL AIR CONDITIONING (AC) AND HEAT PUMP (HP) 6236.0	Troubleshoot electrical components of residential AC and HP 6236.01	Repair or replace operating and safety controls 6236.02	Clean or replace electrical components 6236.03	Re-wire and repair system wiring 6236.04	Clean or replace actuator and damper/zone controls 6236.05
	Test and replace electronic components 6236.06	Test and replace electrical heaters, HRV/ERV and electronic air cleaners 6236.07	Complete electrical servicing or maintenance records 6236.08		

RESIDENTIAL AIR CONDITIONING SYSTEMS MECHANIC- BRANCH 2

SKILL SETS

SKILLS

PERFORM CUSTOMER SERVICE	Determine nature of service or maintenance call	Conduct a site evaluation	Perform a diagnostic inspection	Estimate costs of service or maintenance call	Complete service or maintenance schedule
6237.0	6237.01	6237.02	6237.03	6237.04	6237.05
	Complete job work order	Instruct clients			
	623706	6237.07			