## AIR-CONDITIONING/HEATING CONTRACTORS

Category: Casual and Artisan Contractors

SIC CODE: 1711 Plumbing, Heating, Air-Conditioning

NAICS CODE: 238220 Plumbing, Heating, and Air-Conditioning Contractors

Suggested ISO General Liability Code: 91111, 95647, 95648, 91250

Suggested Workers Compensation Codes: 5537 8720, 3726, 5183

**Description of operations:** Air-conditioning/heating contractors install, service, maintain, and repair air-conditioning units in residential, commercial, or industrial buildings, including related duct and vent work. Many air-conditioning/heating contractors service air filtration and ventilation systems, and some may work on heating units involving alternate fuel sources. Air-conditioning units are normally electric-powered, but are "charged" with different coolants, some of which may be quite hazardous. Units may be installed indoors, outdoors next to buildings, or on rooftops. There may be installation of anti-theft cages or other security devices. The contractor could provide 24 hour emergency service.

**Property exposures** at the contractor's own location are generally limited to an office and storage for supplies, equipment, and vehicles. The fire exposure is generally light unless there are repair operations involving welding or brazing on premises. If the contractor constructs piping on premises, the potential for fire or explosion increases due to sparks and flames produced by the welding process. Tanks of gases must be stored and handled properly. There should be basic controls such as chained storage of the tanks in a cool area and the separation of welding operations away from combustibles, either in a separate room or with flash/welding curtains. Many air-conditioning contractors keep products or parts on premises, increasing the exposure to fire, smoke, water damage, breakage, theft and vandalism. Parts that include copper or brass can be targeted by thieves. Appropriate security controls should be taken including alarms, lighting, and physical barriers prohibiting access after-hours.

Inland marine exposures include accounts receivable if the contractor offers credit to customers, contractors' equipment and tools, including ladders and scaffolding, goods in transit, installation floater, and valuable papers and records for customers' and suppliers' information. There may be computers for tracking inventory, goods in transit, or installation exposures, Backup copies of all data should be stored off premises. Contractors' machinery, tools, or building materials left at job sites are exposed to loss by theft, vandalism, damage from wind and weather, and damage by employees of other contractors. Contractors may lease, rent or borrow equipment, or may lease out, rent or loan their owned equipment to others, which poses additional risk as the operator may be unfamiliar with operation of the borrowed item. Since an accident may trigger both the equipment and installation coverages, as well as possible third-party liability, many contractors prefer to hire a crane or helicopter with a licensed operator to lift air-conditioning units to roof tops for installation or retrofit. The lease contract should specify responsibilities for providing insurance. Units which are dropped into place by helicopters could be damaged from drops and falls. Goods in transit consists of tools and equipment as well as products purchased by the customer for installation at the job site. Air-conditioning units can be of high value and susceptible to damage in transit, requiring

expertise in loading to prevent load shift or overturn. There is an installation floater exposure when the units to be installed are delivered to the site in advance of the installation.

Crime exposure is primarily from employee dishonesty, including theft of customers' goods by the contractor's employee. Background checks, including criminal history, should be performed on all employees providing services to customers or handling money. There must be a separation of duties between persons handling deposits and disbursements and reconciling bank statements. If customers pay the plumber at the job site, receipts should be provided. There may be some copper components on premises that could present a theft exposure because copper is valuable when sold at a scrap metal yard. Parts and even entire units are targeted and sold as scrap metal. Precautions should be taken when units are delivered to new construction sites. While in transit the vehicle should be attended at all times.

Premises liability exposures at the contractor's office are generally limited due to lack of public access. If there are retail sales, the exposure increases as customers may slip, trip, or fall. Outdoor storage may present vandalism and attractive nuisance hazards. Off-site exposures are extensive. The area of operation should be restricted by barriers and proper signage to protect the public from slips and falls over tools, power cords, air conditioning systems, and scrap. During installation, electrical voltage must be turned off at the job site in order to reduce the risk of electrical burns or electrocution to others entering the area and turned back on after work stops. Disruption of electrical service to other homes or businesses in the vicinity should be minimized. Installing air conditioning can be invasive and require work throughout a home or business, resulting in a high potential for property damage. Welding presents potential for burns or setting the property of others on fire if not conducted safely. If there is work at heights, falling tools or supplies may cause bodily injury or property damage if dropped from ladders, scaffolding, cranes, or helicopters. The use of subcontractors as well as any contractual liability exposures should be examined.

Personal injury exposures include assault and battery and invasion of privacy. Background checks should be conducted for any employee who will have regular contact with customers.

Completed operations liability exposures can be severe due to improper wiring or grounding. When an air-conditioner malfunctions, it may be difficult to determine the cause since it may be due to faulty system design, faulty manufacture, or faulty installation. Significant completed operations exposures may be present in system installations at medical facilities and locations requiring refrigeration of goods. Quality control, including work order documentation, and employee training, background, and experience is important.

**Environmental liability exposures** can be high if the contractor is responsible for the disposal of old air-conditioning equipment that contain PCB's. Spillage and leaking of pollutants into the air, ground, or water can result in high cleanup costs and fines. Disposal procedures must adhere to all EPA and other regulatory standards. Proper written procedures and documentation of both the transportation and disposal process are important.

**Automobile exposures** are generally limited to transporting workers, equipment and supplies to and from job sites. All drivers must have valid licenses for the vehicles being driven. MVRs must be run on a regular basis. Random drug and alcohol testing should be conducted.

Vehicles must be well maintained with records kept in a central location. Vehicles may have special modifications or built-in equipment such as lifts and hoists. Large air conditioners may be awkward and require special handling and tie-down procedures.

Workers compensation exposures vary based on the size and nature of the job. Cuts, scrapes, puncture wounds, or amputations from working with tools may occur. Injuries can occur from slipping or falling, back injuries such as hernias, strains and sprains from lifting or working from awkward position, cuts from the fabrication and installation of sheet metal for ducts and vents, foreign objects in the eye, hearing impairment from noise, temperature extremes, and auto accidents during transportation to and from job sites. Electrical burns are common; electrocution can occur from the use of high-voltage lines. When work is done on ladders and scaffolds, employees can be injured from falling, being struck by falling objects, or adverse weather conditions. The danger is reduced if there is good maintenance of scaffolds and other equipment, proper use of protective equipment, and strict enforcement of safety practices. The use, misuse, maintenance and transport of large, heavy machinery can result in severe injury. Failure to enforce basic safety procedures, such as power shutoff prior to commencing certain operations, may indicate a morale hazard.

## Coverages to consider but not limited to:

Contractor Professional Liability, Pollution Liability, Business Personal Property, Accounts Receivable, Contractors' Equipment and Tools, Goods in Transit, Installation Floater, Valuable Papers and Records, Employee Dishonesty, General Liability, Employee Benefits Liability, Umbrella/Excess Liability, Automobile Liability and Physical Damage, Hired and Nonownership Auto, Workers Compensation, Building, Business Income with Extra Expense, Equipment Breakdown, Flood, Leasehold Interest, Legal Liability, Computers, Riggers Liability, Cyber Liability, Employment Practices Liability, Stop Gap Liability, Commercial Crime