

# HVAC

HEATING, VENTILATION & AIR CONDITIONING



Installatörsföretagen



7 professional  
descriptions  
with many  
possibilities

# Find your profession within installation

# HVAC

HEATING, VENTILATION & AIR CONDITIONING

## Content

<b>Introduction</b>	<b>3</b>
<b>HVAC installer</b>	<b>4</b>
<b>Industrial pipework installer</b>	<b>5</b>
<b>Insulation installer</b>	<b>6-7</b>
<b>Sprinkler installer</b>	<b>8-9</b>
<b>Refrigeration &amp; heating pump installer</b>	<b>10</b>
<b>Ventilation installer</b>	<b>11</b>

## You are important and needed.

Access to clean water, electricity, heating, refrigeration, ventilation, alarm and fibre. All this makes our society work. It is also an important tool for our society to be as sustainable, energy-efficient and smart as possible, now and in the future. To cope with this we need more people.

In this brochure we describe the most common professions within **heating, ventilation, sanitation and refrigeration**.

We hope that the information will help you find your path, whether you have previous training and experience of similar work from other countries, or if you are just about to choose what you want to do in the future.

Welcome to the industry for technical installations!

# HVAC installer

## Working with heating and water

Working as an HVAC installer involves fitting pipes so that the heating, water and indoor environment works in a building.

A hot shower, warm floors and a comfortable temperature in an apartment on a cold and rainy day are things that most people like, and as an HVAC installer, it is you who make sure that we can enjoy these things. An HVAC installer installs pipes, heating pumps, boilers, water heaters, radiators and all bathroom related equipment.

The work is in both residential and public buildings such as hospitals, offices and business premises. As an HVAC installer, you can work in servicing and you usually work alone at a site and have a company vehicle with the tools and parts that you need to perform the job.

If you work in construction, you are involved from the beginning and build from scratch and may often

work alongside several other working professions, such as carpenters and painters. The profession requires that you are able to work independently, are responsible and like to socialise.

Regardless of where the work tasks are performed, an HVAC installer must work using their heads and their hands. The profession is a traditional craft that has developed with new technologies, e.g. computers are often used in heating and refrigeration plants.

Besides being able to master the new technology, an HVAC installer must be able to decipher drawings, master all the relevant materials and think creatively to find the best solutions. And of course also be handy enough to implement them.

### Read more about HVAC installers

**Obtain certification (validate) for your skills:**  
[vvsyn.se/validering](https://vvsyn.se/validering)

**More information about the profession:**  
[vvsyn.se/yrkesbeskrivningar](https://vvsyn.se/yrkesbeskrivningar)



PHOTO: JOHNER

## Working with pipes in factories

# Industrial pipework installer

Working as an industrial pipework installer involves constructing and fixing pipes in a factory. The factory may produce paper, medicine, paint, plastic etc.

An Industrial pipework installer works in major industries that have piping systems that transport liquids and gases, which are part of the manufacturing process that takes place in the industry. This could be, for example, paper mills, chemical industries or pharmaceutical industries. The pipes can be used for district heating, district cooling, oil, radioactive substances or various types of gases and acids. Of course, such pipes must never leak, so it is important that the installation of the pipes is done correctly for the production to be safe and efficient.

The profession requires that you are responsible and thorough and, of course, that you are a specialist in

installing large pipes and welding. As an industrial pipework installer you must know the basics of the construction, installation and function of systems in industrial facilities, be able to decipher drawings and be familiar with HVAC technology. As an industrial pipework installer, you often work in different teams so there are no solo jobs, even if you work as a specialist.

Your workplaces vary, for example, one week you may be working at a paper mill and the next week at a chemicals facility. As a superhero you are ready to jump in where necessary, for repairs and service and to work on new industrial constructions.



PHOTO: JOHNER

### Read more about industrial pipework installers

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[vvsyn.se/validering](https://vvsyn.se/validering)

**More information about the profession:**  
[vvsyn.se/yrkesbeskrivningar](https://vvsyn.se/yrkesbeskrivningar)

## Insulate pipes

When working as an insulation installer you insulate pipes, cisterns, ventilation ducts and boilers.

Most agree that the environment and energy saving are important factors. As an insulation installer, you are one of those who can not only talk about these factors but also act on them. Insulation of pipes, cisterns and boilers makes it possible to save energy and to transport liquids without losing heat or cold.

For example, in a residential building, the pipes from a heating boiler to all apartments are insulated. Insulation is also used to shut out noise in, for

example, industrial facilities. Lines and pipes that transport hazardous fire and explosion content are also insulated to minimise the risk of accidents.

Technical insulation includes two specialisations, HVAC insulation and sheet metal insulation. No matter what specialisation you choose, you must have good knowledge of geometry and be able to implement it practically as well, using both your head and your hands.

### Read more about insulation installers

**Obtain certification (validate) for your skills:**  
[vvsyn.se/validering](http://vvsyn.se/validering)

**More information about the profession:**  
[vvsyn.se/yrkesbeskrivningar](http://vvsyn.se/yrkesbeskrivningar)





# There are two types of insulation installer:

## HVAC insulation installers

### Insulates hot and cold pipes

As an HVAC insulation installer you work to insulate cold and hot pipes and ventilation ducts in residential and public buildings. This occurs in both new constructions and in the refurbishment of buildings.

An HVAC insulation installer often works on a construction site where the work is done alongside other professionals, such as HVAC installers.

## Sheet metal insulator

### Insulates with sheet metal

A sheet metal insulator often works in industries to insulate pipes, boilers, cisterns and containers. The insulation is usually clad with sheet metal to protect against the elements and impacts.

What needs insulating usually differs from job to job, so having a creative streak facilitates the work.



PHOTO: COLOURBOX

# Sprinkler installer

## Installing sprinklers

Working as a sprinkler installer involves installing sprinklers and commissioning them.

Sprinkler installers install and deploy sprinkler systems that protect properties in the event of fires. The work takes place in a variety of interesting workplaces. Sprinkler installers also perform service and maintenance work on sprinkler installations.

Often, you will need to discuss the work with the construction company's site management and go through drawings or, on some projects, also study CAD models on a tablet or smartphone.

You install pipes and sprinklers as well as central equipment such as pumps and valves. During the installation, you monitor changes to drawings and together with ventilation and electricity installers, you find the best solution in a crowded installation.

You set up signage and check that the installation is sealed and that no parts leak water. When the system is ready, you commission it and instruct the customer how it works. A performance-based salary often applies.

As a sprinkler installer, you are a specialist with good knowledge of fire hazards and fire prevention and construct fire-fighting sprinkler systems.

The profession entails installing everything from large diesel-powered sprinkler pumps to pressure switches and thin-walled steel pipes to grooved couplings and sprinklers, using traditional hand tools, groove and threading machines, aerial lifts and other technical aids.

### Read more about sprinkler installers

**Obtain certification (validate) for your skills:**

[vvsyn.se/validering](https://vvsyn.se/validering)

**More information about the profession:**

[vvsyn.se/yrkesbeskrivningar](https://vvsyn.se/yrkesbeskrivningar)



## Service installer sprinkler

A service installer works independently in facilities, and travels between different customers in a company vehicle. Service installers work with problem solving, servicing, maintenance and inspection of sprinkler installations. Normally, service installers also perform smaller installations and rebuild systems.

This is what a typical working day of a service installer might look like: a system that the installation

company has a service contract on is leaking, the service installer goes there and investigates. If a pipe is ruptured, it must be replaced and the installation must be checked so it's completely sealed. This may be a service that has to be carried out on the central equipment of a system, that is, servicing valves and filling in service protocols and planning for the next service together with the facility manager.



PHOTO: COLOURBOX

PHOTO: JOHNER



# Refrigeration and heating pump installer

## Installing and servicing refrigeration and heating pump installations

When you work as a refrigeration and heating pump installer, you install and service refrigeration and heating pump systems in both properties, as well as industrial and sports facilities.

This is a varied and technically qualified profession requiring certification. As an installer you are employed at a refrigeration and heating pump company, which also has certification requirements. Refrigeration and heat pump installers primarily work with new installations of refrigeration and heat pumps –

- everything from private heat pumps in single family homes to larger property heat pumps in multi-occupancy buildings or in commercial properties.
- air conditioning units, commercial refrigeration, including freezer and refrigeration plants within the food
- industry
- ice rinks

The material is ordered from wholesalers and other specialist suppliers, who provide everything from refrigerant coolers to

displacement computer coolers, heat pumps and thin cooling copper pipes and plastic pipes.

Both simple and advanced systems are installed using traditional hand tools and welders for brazing of cooling pipes for refrigerants and with other technical aids. Nowadays, several installation systems are often included in a building, together with common control and regulation systems with associated computer technical equipment.

The installer often works in pairs or larger teams depending on the size of the facility. The profession requires good teamwork, hands-on practicality, understanding of the cooling process, component knowledge and the ability to decipher drawings.

### Read more about refrigeration and heat pump installers

**Obtain certification (validate) for your skills:**  
[skvp.se](http://skvp.se)

**More information about the profession:**  
[Skvp.se/yrke-o-karriar/utbildningsprogram](http://Skvp.se/yrke-o-karriar/utbildningsprogram)



PHOTO: COLOURBOX

## Installing ventilation

When working as a ventilation installer, you install ventilation systems in houses. You install ducts, fans and units.

## Ventilation installer

A ventilation installer installs ventilation systems in buildings, thus creating a healthy and energy efficient indoor climate.

The job consists of, among other things, the installation of ducts, fans and units. Repairs and maintenance are usually required, as well as functional checks of ventilation units in various properties and facilities. Ventilation is an area where development is advancing rapidly and the opportunities for specialisation, diversification and further development are very large.

Ventilation systems are now more technical and include everything from aesthetic design to fire protection.

The job is varied and social. The job consists of a variety of tasks with freedom under responsibility. You get to meet lots of people and collaborate with different professional groups during a varied work week.

There is, in principle, always a shortage of ventilation installers, which means that trained ventilation installers have very good chances of getting a good job.



PHOTO: COLOURBOX

### Read more about ventilation installers

[www.svenskventilation.se/jobb-utbildning/ventilationsyrken/ventilationsmontor/](http://www.svenskventilation.se/jobb-utbildning/ventilationsyrken/ventilationsmontor/)

[www.framtid.se/yrke/ventilationsmontor](http://www.framtid.se/yrke/ventilationsmontor)

### Read more about all the professions:

- [www.installatorsforetagen.se/yrken](http://www.installatorsforetagen.se/yrken)
- [www.vvsyrken.se](http://www.vvsyrken.se)

The 3600 members of Installatörsföretagen (Company of Installers) are contractors, employers and companies active within the technical installations industry. It is our members who, with their 50,000 employees, install, optimise and check heating, ventilation, water, electrical and telecommunications technology. We also represent electrical power contractors who secure the infrastructure for Sweden's electricity supply.

Installatörsföretagen is an industry and employer organisation. We are part of the Swedish business community.

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