Housing that combines user-friendliness, convenience and energy savings

Each residential unit of the free-standing villa developments at the Villapark Lavendel in Vlijmen has been fitted with individual heat pumps from Thermia. Residents have noticed how user-friendly and convenient the pumps are, and are happy that they are contributing to a better environment. Ultimately, a heat pump is very different to a central heating boiler.

The Villapark Lavendel in Vlijmen is a unique residential development. It is very centrally located and yet offers the wonderful open feel of rural surroundings. The intimately designed housing complex comprises a series of free-standing buildings, each of which features the curved roofs typical of the Dutch architecture of the 1930s. Some villas are single-family dwellings, while others are divided into several luxury residential units. Crucially, each unit has its own heat pump system.


Villapark Lavendel in Vlijmen

Hak Installatieservice B.V. was responsible for all installations as part of the construction project, and chose heat pumps from Thermia. *"Thirty years from now, in 2050, all Dutch homes will be off gas,"* says Director Gerrit Hak. *"Boilers will disappear, and heat pumps will replace them. This development can already be seen in the number of heat pump applications,"* he continues. *"We have been working with heat pumps since 2004, and have installed over two hundred so far."*

This project used the Thermia Comfort Optimum heat pump supplied by 2FlexSystems. *"The Thermia Comfort Optimum is the perfect climate system for a pleasant indoor climate throughout the year,"* says Fred Trompetter from 2FlexSystems. *"The combination of a heat pump and a passive cooling system provides heating in winter, cooling in summer, and hot water all year round. You simply select the desired house temperature, and the Thermia Comfort Optimum takes care of the rest."*

Cost savings

Although a heat pump requires greater investment than a gas boiler, it provides constant energy cost savings. *"I regard the investment as part of the purchase price, so I don't really notice it,"* says local resident Jan Lansdaal. *"And I can see that my energy costs are falling - I checked the numbers on the internet,"* he continues. *"My costs have dropped by around 15% compared to when I used gas."* His neighbor, Lars Mulder, has also noticed savings: *"I've kept a close eye on it,"* he says. *"Now that I no longer use gas, my electricity consumption is slightly higher, but on the whole I pay less."*

Convenience

Both men praise the convenience of the heat pump. *"The system heats the shower, bath and faucet water, as well as the heating system, as well as providing cooling,"* says Mulder. *"And the underfloor heating means that there are no visible radiators, so it looks good too."* Lansdaal has underfloor heating and cooling in every room: *"Other residents have also had good experiences with*

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says Director Gerrit Hak, Hak Installatieservice B.V.

Villapark Lavendel in Vlijmen

this system," he says. *"Some have installed separate air conditioning systems, but I really think that this system is a step forward. The bathtub quickly fills with water, and the hot water cylinder is topped up no time at all."* Mulder echoes this opinion: *"It's simple and efficient,"* he says. *"You don't have to worry about a thing."*

User-friendliness

Residents have found that not having to worry about adjusting levels takes some getting used to. The way heat pumps function is fundamentally different to boilers. *"People are used to adjusting the thermostat if they want the room to be warmer or colder, but that's not how a heat pump works,"* says Lansdaal. *"You have to give the system time to find the optimum level. It's sometimes difficult to avoid touching it, but the system has to stabilize itself."* When the development opened, a meeting was organized and the system was explained to residents. It proved very useful. *"The most important lesson was that you really shouldn't touch it,"* says Mulder. *"It takes about a year for the system to fully adjust and you only need to make very minor adjustments."*

A clear environmental conscience

Both men see the environmental benefits of the heat pump. *"This is the future,"* says Lansdal. *"It's the next step in preventing climate change."* Mulder is reassured by the sustainable nature of the energy: *"It's nice to know that you can heat the house with an energy source that's always there, deep in the earth,"* he says. Lansdal is keen to highlight the safety benefits: *"It's a lot better than a gas boiler,"* he says. Mulder isn't a fan of boilers either and chooses the word "scary" to describe them. *"When I read that heat pumps were being installed here, it certainly contributed to my decision to buy the house,"* he explains.

Fact Box

Type of building:
Single-family homes

Location: Vlijmen, Netherland

Building characteristics:
- Heating and cooling houses with the area of 200 - 240 m^2

Applied solution:
Thermia Comfort Optimum ground source heat pump with built-in 180 liters hot water cylinder and passive cooling

Thermia Comfort Optimum ground source heat pump

LEADING PARTNER IN HEATING AND RENEWABLE ENERGY IN NETHERLANDS

In the Netherlands, Thermia is represented by 2FlexSystems, an emerging company specialized in creating comfortable, clean and healthy indoor climates with minimum environmental impact, and maximum comfort, convenience and efficiency.

2FlexSystems is naturally committed to sustainability.

Wim Mulders (left) and Fred Trompetter (right) from 2FlexSystems

2FlexSystems

2FlexSystems | Evertsenlaan 2 | 6881 GB | Velp | Tel: +31 (6) 51 27 45 12 | www.2flexsystems.nl | info@2flexsystems.nl