



# Fabrication team use design and product expertise to deliver complex project

PRODUCT:

**Fabricated Akatherm HDPE Soil and Waste with loose Studor PAPA and AAVs**

SOLUTION:

**Waste drainage and ventilation**

PROJECT:

**576 high-rise apartments**

## The Challenge

An open pitch was launched to find the right people to deliver a complex project of 576 high-rise apartments.

Aliaxis has a long-standing relationship with the appointed building services contractor offering fabrication solutions, and its Specification Team, with the support of the Technical Department, provided clear design and fabrication drawings for the project, allowing the client to tender.

A large-scale project, Phase One delivered four blocks of residential apartments aimed at providing much-needed housing.

The apartment bathrooms, kitchens and WCs were of a modular pod design, which presented a different dynamic, with the need to design the fabrications to meet the requirements of off-site pod construction.



## The Solution

As well as technical expertise, Aliaxis offers a bespoke design service, efficiency of scale and project capability. Its exceptional air emittance solution, Studor, with its active drainage ventilation (ADV) system of P.A.P.A and Maxi/Mini Air Admittance Valves, was ideal for this project as it controls air movement within a drainage system; attenuating and balancing positive and negative pressures.

Aliaxis has huge expertise in this area thanks to its R&D work at its Training and Research Centre, located in the world's tallest drainage testing installation, The National Lift Tower, in Northampton.

**Craig Norman, Aliaxis UK Proposition Development Director, said:**

“Due to our experience, we can go to a customer and provide solid solutions as they can rely on our extensive design and product knowledge.”

Working closely with the building services contractor, Aliaxis's Technical Service and Commercial Teams designed and fabricated a complete soil and waste solution with Marley/Akatherm HDPE pipe and fittings, with Studor ADV, including P.A.P.A - Positive Air Pressure Attenuator, on all four blocks, ensuring the elimination of drainage transient pressures and smells with a maintenance-free drainage system. A full-performance system from Aliaxis also comes with a 15-year warranty.

Using architect drawings, Aliaxis used its design capabilities to establish whether the building needed single or double stacks - the use of Studor can help to remove a stack providing cost and installation benefits. The project was all bespoke by requirement. Much of the design work covered connection to the pods, which could be intricate and challenging.

## The Activation

Four residential blocks were built in Phase One. As of February 2025, all four are complete with work beginning on Phase Two to deliver a fifth block, which will see 1,500 stacks installed. Construction is due to finish in 2026.

In total, Aliaxis provided more than 2,000 soil stacks and a host of loose product material for Phase One. Between 500 and 600 soil stacks were utilised per building, averaging 40 stacks per floor. Air Admittance Valves (AAVs) were also installed to support Active Drainage Ventilation (ADV).

With the support of Aliaxis' production and supply chain, all products were provided by floor and building, to meet client needs, with no waste on site nor over supply. Open delivery schedules were used to ensure the client was provided with a clear indication of output.

A delivery schedule was created and agreed with the client. Each delivery was 'out of the box', with everything crated and labelled so that the client knew everything they required was in that delivery.

Aliaxis delivers its products in its own stillages to site with an approved appointed transportation company, so the items are not double-handled and do not go through a pallet network.

## The Conclusion

The Aliaxis fabrication team saw the successful delivery of more than 2,000 fabricated stacks with ADV for Phase One of the project, providing extensive design support for a complex modular project. Open delivery schedules were utilised to reduce waste and prevent over supply.

**Charlotte Thatcher, Aliaxis Design Engineer, said:**

“Delivering a project of this scale demands more than just expertise, it requires synergy, precision, and trust. With our partners and a shared vision, we're not just building homes, we're shaping the future of urban living.”

This was a bespoke project providing delivery of fabricated stacks with ADV. For more information, please contact our Technical Support Team [technical.advice@alixis.com](mailto:technical.advice@alixis.com)