



# Lush Store, Edinburgh



## 'Invisible' air conditioning a Lush comfort solution for Edinburgh

With comfort for its staff and customers a priority, fresh hand-made cosmetics retailer Lush upgraded the in-store air conditioning at its busy 186m<sup>2</sup> shop and spa on Edinburgh's premier shopping street to the latest 'invisible' technology from Daikin.

With a street-level sales floor and basement treatment rooms, the Princes Street Lush branch opposite Edinburgh Castle had no space for the usual outdoor condensing units.

The premises is part of a modern A-grade commercial building at the corner of Castle Street, on the site of the Palace Hotel that was built in 1888 and destroyed by fire in 1991.

Lush project managers, Ashley Basdeo and Rebecca Meara said with temperatures in the basement reaching 37°C and the old ducted air conditioning system serving the sales floor out of action, it was time for a change.

"The old system was concealed by a ceiling and virtually impossible to access the condensing units for maintenance," he says. "When it failed, we needed to find a better solution."

Lush turned to Epta UK – its national service provider and a Daikin D1+ Partner – to engineer a better environment in the Edinburgh store.

Epta's Contract Manager Mark White says the Daikin VRV i-Series provided the best available solution.

Two 20kW systems were installed, to serve two ducted fan coil units, six wall-mounted indoor units and two mini-cassettes which cover the entire premises – including the basement.

### Year of installation

> 2018

### Project requirements

- Air conditioning
- Air curtain
- Air purification
- Control
- Heating
- Hot water
- Refrigeration
- Ventilation

### Installed systems

- > VRV-i condensing unit
- > VRV wall mounted unit
- > VRV mini cassette
- > I-touch controller



Ashley Basdeo says:

“It makes the shop feel like new, and there has been a very good response from staff and customers.”

Because of the original access problems, Lush decided to close the shop for a month to facilitate the air conditioning works and a simultaneous upgrade of store lighting. In line with design in its other stores, ceilings have been removed and everything above the lighting grid – including the usually hidden Daikin VRV i-Series heat exchanger and ducts – has been sprayed black.

The Daikin VRV i-Series was developed to bring the benefits of VRV technology to retail and commercial users at sites where space or planning constraints preclude use of conventional outdoor condensing units. Requiring no more than inlet and outlet grilles – which are easily concealed by architectural details – the i-Series is invisible from the outside.

The i-Series overcomes space problems by separating the compressor and heat exchanger elements of conventional ‘outdoor’ units, so they can be mounted indoors.

The heat exchanger is designed to fit in a typical ceiling void and is ducted to the exterior. At Lush Edinburgh, the inlet and outlet ducts vent to louvres above the storefront, making the installation invisible from the street.

The small-footprint and quiet compressor unit can be fitted in an out-of-the-way position – typically in a cupboard, store room or kitchen. In some instances where space is particularly limited, as in the staff area at Lush Edinburgh, compressors are ceiling-mounted. They are hung from the building rib deck above the drop-in style suspended ceiling. The units are supported on M8 threaded rod and 41 x 41 Unistrut Channel. They are easily accessible for maintenance during store trading hours.

VRV i-Series supports the full range of Daikin VRV ceiling, wall and floor-mounted units.

The systems at Lush Edinburgh are controlled through an i-Touch controller, mounted in the manager’s office.

Lush, based in Poole, Dorset, and London, now has more than 900 branches in 46 countries – more than 100 shops in the UK.

#### Kit List

Code	Description	No of units
SB.RKXY2-T	VRV i-Series condensing unit	2
FXAQ-P	VRV wall mounted fan coil unit	6
FXMQ-P7	VRV ducted fan coil units	2
FXZQ-A	VRV mini cassette	2

