

# **Dutypoint case study:**Baltimore Tower

**Location:** Canary Wharf, London



# MEETING THE CHALLENGE OF RISING PRESSURE

Working on a high-rise luxury residential tower development in the heart of London's Docklands, established mechanical and electrical contractors Ampsail Ltd, sought the help of pump system manufacturer Dutypoint. Lloyd Preston, Dutypoint Divisional Manager, explains how they worked together to design a cost-effective, bespoke solution to deliver the complex water pressure demands of the building.

Ampsail, working with M&E consultants Mendick Waring and award-winning property development company Galliard Homes, were designing the mechanical system for the new 'landmark for luxury living', Baltimore Tower, a 44 storey development that rises prominently in Canary Wharf's skyline.



Dutypoint was invited to join a discussion with the design engineer working on the Baltimore Tower development. Given the contractor's familiarity with Dutypoint through previous projects, the team was asked to use their specialist expertise to help them design the tower's water pressure boosting system.

Dutypoint VMV3 Ultra-Compact Variable Speed Cold Water Booster Set

#### **INDUSTRY SECTOR**

Construction

#### **PROJECT TYPE**

Luxury residential

## **CLIENT**

Ampsail Ltd

#### **ARCHITECT**

Skidmore Owings & Merrill

# **MAIN CONTRACTOR**

O'Shea/Galliard Homes

### **PROJECT VALUE**

£142 million

### **PROGRAMME**

36 months

# **COMPLETION**

Early 2017

## **PRODUCT SUPPLIED**

VMV3 Ultra-Compact Variable Speed Cold Water Booster Set

#### PRIMARY CHALLENGE

With 44 storeys between the lower basement level and the penthouse suites, maintaining good water pressure throughout the building would be a significant task.

The original specification suggested using six pump sets to provide sufficient water pressure throughout the building. Yet thanks to Dutypoint's expert technical knowledge, the team instead suggested a mains cold water system with three booster sets. This solution would be capable of delivering high pressure to the top floor more than 130 metres above ground level.

To achieve this, one of the three booster sets had to be PN25 rated, meaning it would be able to withstand operational pressures of up to 25 bar, but the associated pipework, valves and fittings would also need to mirror this capability. The intricacies of specifying high-pressure pipes and fittings is something that Dutypoint understands and was able to work directly with pump manufacturer, Xylem and Mendick Waring to create the bespoke solution required.

#### **PROJECT MANAGEMENT**

The expertise within Dutypoint's technical team coupled with its comprehensive product knowledge and an understanding of complex water management issues, meant that Ampsail was able to enhance the value proposition of the project by increasing efficiency whilst reducing overall costs. This was made possible because they were able to achieve the requisite pressure using half the number of booster systems.



One of the bespoke booster sets at Baltimore Tower

The financial and operational benefits of working with a company with such a breadth of technical know-how and the ability to specify bespoke pumping systems to achieve the high specification at a reduced capital cost are clear. The benefits were immediate, and far reaching, because Dutypoint's specialist experience in projects of this nature enabled the most efficient and cost effective solution to be delivered.

#### RELATED PRODUCT

## VMV3 Ultra-Compact Variable Speed Cold Water Booster Set

The WRAS approved VMV is a versatile, high-performance booster set constructed with premium components and a strict adherence to quality standards.

The modular design of the VMV range has been specially developed to allow consultants and contractors to tailor the set to the installation. The modular pipe work design and multiple control panel locations create a huge number of permutations; for example the four-pump VMV4 has 15,876 possible layout combinations. As each set is assembled to order, specifiers can tailor a booster set to the precise project requirements. The VMV can be delivered for on-site assembly if required.

VMV Booster sets are available in this range with two to eight pumps and are WRAS approved with a choice of Lowara, Grundfos, Ebara and Wilo pumps.

