



Martini Hospital, Groningen, The Netherlands

The new gold standard for flexible hospital design

The new €153 million Martini Hospital was designed by renowned architects BURGER GRUNSTRA with flexibility and uniformity in mind. The architects believe flexibility is one of the most important factors in the constantly evolving healthcare sector where rapid developments in medical technology make it difficult to predict the future. In using this approach in their design, they hope to have created a hospital that will last for the next forty years and can easily adapt itself to an unknown future.

The complex consists of a newly renovated 6 storey building covering approximately 38,000 sqm and a newly constructed building which covers approximately 58,000 sqm and houses a total of 580 beds over 96,000 sqm.

The need for flexibility in design was also a major consideration for the hospital when assessing their in-building wireless coverage needs. The Martini Hospital was legally obliged by the local government Safety Region to have C2000 TETRA coverage inside the building. The hospital decided to take the opportunity to also gain coverage for a mix of services both now and in the future. The project was awarded to Zinwave, in partnership with Radio Access B.V., a leading system integrator based in The Netherlands who installed the Zinwave 3000 DAS through to commissioning.

The Zinwave 3000 DAS was selected for the project as it has the only wideband active Distributed Antenna System (DAS) that can carry any mix of services between 150MHz and 2700MHz on one hardware layer, making it easier and more cost effective for a multi-service project with future service additions planned. The system comprises of 16 Hubs and 121 Remote Units currently carrying a service mix of C2000 TETRA and Clarity Private GSM1800. In the future the Martini Hospital plans to extend to a further 2 floors in the old building and will also look at the possibility of adding in GSM 900, GSM1800 for Vodafone, T-Mobile and KPN and 3G UMTS.

The facility at a glance

- Design based on modular, building block approach
- Each building block is 60 x 16m
- Blocks allow departments to be easily converted for multi-use functionality
- All floor layouts are based on an efficient 300mm grid
- Extensions can be hung on facade to enlarge departments
- The elevations have also been designed to allow for flexible wall positions

Services

- Clarity Private GSM
- C2000 TETRA
- GSM 900 - future addition
- GSM 1800 - future addition
- 3G UMTS - future addition