



Steel was used in the construction of the Jubilee field hospital due to the light steel framing (LSF) and speedy construction methodology. Installation of the LSF walls were quick and easy and needed no cutting and chasing.

Jubilee Hospital

LIGHT STEEL FRAME WINNER

At the height of the Covid-19 pandemic, the **innovative use of light steel framing in this field hospital** in Hammanskraal, north of Pretoria, allowed for the addition of a significant number of hospital beds, in order to increase the existing capacity, using this speedy construction methodology.

WR PROJECTS TO BE PROUD OF



INTERESTING FACTS:

- Futurecon had to supply 10 000m² in only ten weeks
- LSF walls allowed quick installation
- A vapour-permeable membrane used to waterproof the outside wall frames

Project brief

Futurecon was awarded the contract for the supply and erection of the light steel frame (LSF) for the internal and external walls, and roofs, clad, lined and insulated, with windows installed.

The project entailed the supply of 10 000m² of hospital wards and associated buildings, housing beds in general wards, as well as in high and intensive care areas.

From 27 July 2020, Futurecon had to complete the project in ten weeks by 27 September 2020, so this meant they had to hand over 1 000m² of hospital buildings per week.

Construction

The foundations were supplied by Concor. Fibre cement boards were used for the external cladding, supplied by the

Etex Group (Marley building systems). OSB (orientated strand board) timber strips were used as a thermal break between the external cladding and the LSF.

A vapour-permeable membrane was installed around the outside of the wall frames to waterproof and draught-proof the buildings, while allowing any vapour in the wall cavities to escape outwards. A 102mm thick Cavitybatts glass wool insulation was installed in the wall cavities, with a 15mm fireproof gypsum board on the inside, to provide a one-hour fire rating.

The services installers (for example, electricians) found installation in the LSF walls very easy and quick, as there was no cutting and chasing of masonry walls required. They were able to carry out their work in tandem with the LSF project teams, speeding up the completion of the final project. Even before this project was finished, inquiries were received to upgrade the existing Jubilee Hospital and to supply hospital buildings in sub-Saharan Africa.

Project team

- Futurecon
- Osmond Lange Architects

Full acknowledgement and thanks go to <https://www.saisc.co.za> for the information in this editorial. WR