



**Flat Roof,
accessible to
foot traffic**

Grand Mosque extension, Mecca – Saudi Arabia

Architect Dar al Handasah

Construction 2012, ongoing

Application FOAMGLAS® FLOOR BOARD T4+, 50 mm, about 125,000 m², loose laid as inverted roof

Finish Marble tiles

Al-Masjid al-Haram or the Grand Mosque surrounds one of Islam's holiest places, the Kaaba. It is located in the city of Mecca and is the largest mosque in the world.

2011 Saudi Authorities have launched work on a new historic \$10.6-billion expansion, increasing its capacity to more than 2.5 million worshippers. The total area of the existing Haram Mosque is 356,000 m² accommodating 770,000 worshippers.

Moreover, other plans were included to expand the mataf (the circumambulation areas around the Holy Kaaba) and provide air-conditioning for all parts of the Grand Mosque. In 2007,

the entire mosque was fitted with air conditioning so that worshippers could perform their prayers in comfort.

More than 100,000 m² of the new extension will have FOAMGLAS® boards on the roof to ensure an efficient use of the energy. The high compressive strength of the thermal insulation FOAMGLAS® will enable the use of the roof for the pilgrims and is at the same time the most durable insulation with zero degradation of the thermal performance over generations.

FOAMGLAS® can never get wet due to the homogenous and close cell structure which is produced with more than 60% recycling glass.

High compressive strength for highest flexibility

www.foamglas.com

Build up

- 1 Corrugated steel decking
- 2 Reinforced concrete
- 3 Waterproofing membrane
- 4 FOAMGLAS® FLOOR BOARD T4+, 50 mm
- 5 Separating layer
- 6 Cement-sand mortar bedding
- 7 Marble tiles, 40 mm

