

CASE STUDY

Flexible Solar Panels,
Dubai Mosque
UAE



PROJECT OVERVIEW

Meaglesun, a Dubai based solar installation company needed a solution to safely hang solar pannels on the dome of the Mosque roof. A bespoke solution was required to maintain aesthetics and provide a safe, secure installation - Gripple worked with Meaglesun to develop the following innovative solution.

Project Summary

Building type	Mosque
Contractor	Meaglesun
Application	Solar
Services	Flexible Solar Panels

Featured Products

PV Bracing Kit 4



Catenary Kit



Catenary Bracket



Torq Tensioning Tool



Wire cutters



Cross Connector



PROJECT DETAILS

Meaglesun, a premium Dubai based solar solutions provider, faced an unusual challenge with their prestigious Dubai Mosque project. The requirement was to install solar panels to the dome of a mosque: this unusual requirement needed an alternative solution.

With previous experience of Gripple on their MEP projects, Meaglesun knew the flexibility of Gripple products and approached Gripple for a design solution for this unusual project. This complex installation was required by the Minister of Energy's office; it was an essential requirement that this system be installed in such a way.

The main challenges came in creating a feasible way to safely secure the flexible solar panels to the dome, without penetrating the delicate roof membrane. Gripple's

technical team designed a creative solution, developing a nest framework. This consisted of a main loop, that sat on top of the dome. From this nest, 30 vertical support wires were hung and fixed to 30 ballast blocks sat at the base of the dome. Wires then looped through the catenary brackets and fixed to the ballast blocks. Each wire was then tensioned using a Dynamic and Tensioning Tool. 4 x horizontal wires were then installed, which would then support the flexible modules. These horizontal wires ran around the circumference of the dome and secured using a cross-connector to the vertical wires.

With no other solutions on the market, Gripple was the first choice for Meaglesun.



“Gripple offered an easy and comprehensive solution to a quite difficult installation with the least amount of time required.”

- Umesh Mohankumar, Project Engineer, Meaglesun -

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