

# CASE STUDY

**Yelvertoft Solar Farm**  
Northampton, UK



STEEL SAVING  
**94%**

TOTAL STEEL WEIGHT SAVED  
**OVER 12,000 KG**

EMBODIED CARBON SAVED  
**27,215 KG**

Our innovative lightweight solar bracing kits have been selected for the 49.9 MW Yelvertoft Solar Farm in Northampton, UK.

Gripple supplied the bracing kits in six metre lengths to the frame manufacturer Solarport, which were supplied as a complete system for this large project to be installed by the EPC (Engineering Procurement Construction) Bouygues Energies & Services.

A total of 2,200 Gripple Bracing Kits were installed in total across site at regular intervals with 4 out of 6 frames in each table featuring bracing.

Project Summary	
Main Contractor / EPC	Bouygues Energies & Services
Project Size	49.9 MW
Total Braces Installed	2,200
Racking System	Solarport

Featured Products	
<b>Gripple Solar Bracing Kit</b> 4 mm wire (6 m length) 45° eyelet fixing	

“Using the Gripple Bracing Kits has provided significant time and cost savings overall compared to traditional rigid bracing solutions.”

*Ross Tupper, Site Supervisor for Bouygues Energies & Services*

As with many sites, frame bracing was installed to protect against external forces such as wind, snow or minor seismic events.

Ross Tupper, Site Supervisor for Bouygues Energies & Services, explains: “Using the Gripple Bracing Kits as part of the Solarport system has provided significant time and cost savings overall compared to traditional rigid bracing solutions. The fast-paced nature of these projects, means we need solutions that are quick and safe to install. The installation was much easier with the Gripple kits. They are flexible and can be adjusted on-site and the Dynamic wire joiner included allows you to join and tension the brace much quicker than using a turnbuckle or manual joiner.

As the system is lightweight, it can be easily installed by one person, whereas using traditional steel section bracing methods is a more labour intensive process.”

By using Gripple’s Solar Bracing kits, Bouygues Energies & Services was able to install 3 MW worth of bracing support in a typical working day, saving a significant amount of time on the project.

Using the Gripple Solar bracing kits also helped minimise issues moving heavy materials on-site, the lightweight kits could be moved by hand eliminating the need for heavy materials handling plant, in turn helping reduce project embodied carbon emissions.



Glenn Bills, Solar Business Development Director at Gripplle, explains: “We were delighted to be able to provide our lightweight, low carbon solar bracing solutions to Bouygues Energies & Services on this project. By using our wire bracing kits, Bouygues Energies & Services was able to reduce the need for excess heavy plant to move traditional steelwork around the site, resulting in both carbon and cost savings. Our kits can be transported to site in a van or truck and moved easily by hand or on a typical flat bed vehicle, which made handling much easier, as well as reducing carbon emissions.”

A typical Gripplle 6 m wire rope bracing kit weighs 0.37 kg whereas a traditional 6 m steel section kit weighs over 16 times that at 6 kg, using much more material and making it far heavier to load and transport. Utilising Gripplle’s Solar bracing kits therefore means significant material savings can be made, as part of helping solar sites to minimise their carbon footprint.

The steel savings per Gripplle brace have been calculated at 94% with the total steel saved over the whole project

reaching 12,000 kg. Gripplle’s Solar Bracing Kits also provide embodied carbon savings at 12.79 kg per kit which led to a total of 27,215 kg embodied carbon being saved on this project.

Gripplle’s Solar Bracing Kits are made from wire rope and act as a direct alternative to heavy steel bracing. The kits are simple and easy to install on-site, using just hand tools and with minimal training, resulting in major cost and labour-saving benefits for contractors and installers.

The kits include Gripplle’s innovative Dynamic wire joiner which has been developed using tried and tested technology and allows contractors to join wire in seconds.

Tension can then be easily applied using the Gripplle Torq Tool, making the system much faster to install than traditional wire joining techniques like U-bolts or turnbuckles.

Gripplle’s solutions help create greener, more aesthetically pleasing environments, as well as deliver major reductions in packaging, vehicle movements and embodied carbon.

