



# CASE STUDY

**The Event Complex  
Aberdeen (TECA)**  
Aberdeen, UK



TRADITIONAL EMBODIED CO<sub>2</sub>  
**128,788 KG**

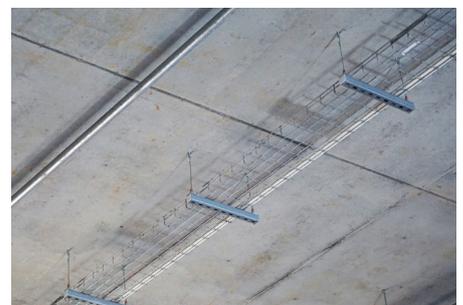
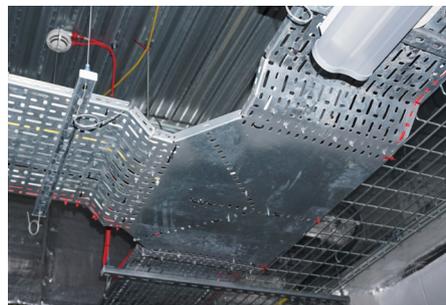
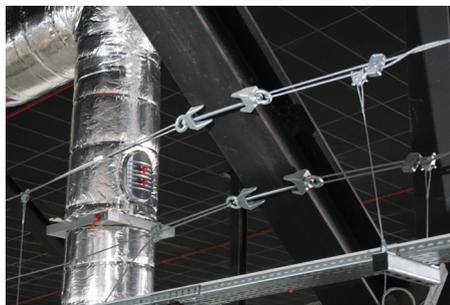
GRIPPLE EMBODIED CO<sub>2</sub>  
**7,957 KG**

EMBODIED CO<sub>2</sub> SAVED  
**94%**

The Event Complex Aberdeen (TECA) in Scotland consists of 48,000 sqm of event space, conference and exhibition facilities and an arena. Gripple supplied **6mm** and **3mm Catenary Kits**, **Standard Hangers**, **Trapeze Plus FR**, **Express Hangers**, **Y-Fit Accessories** and **Beam Clamps** in order to provide lightweight installation solutions to suspend electrical containment on-site.

Project Summary	
<b>Main contractor</b>	Robertson Construction Group
<b>Subcontractor</b>	FES Ltd
<b>Building type</b>	Commercial
<b>Services</b>	Electrical Containment

Featured Products			
Catenary Kit	Standard Hanger	Trapeze Plus FR	Express Hanger



“For anyone who has not used the Gripple team and their products before, I would strongly recommend them. The service and support provided throughout the process has been excellent.”

- (Project Manager - FES Ltd) -

## REDUCTION SUMMARY

	Gripple solution	Traditional method
Overview	<b>6mm and 3mm Catenary Kits, Standard Hangers, Trapeze Plus FR, Express Hangers, Y-Fit Accessories and Beam Clamps</b>	Channel, threaded rod & channel nuts
Material length	<b>87,064 m</b>	<b>87,064 m</b>
Material weight	<b>3,505 kg</b>	<b>56,735 kg</b>
Embodied CO <sub>2</sub>	<b>7,957 kg</b>	<b>128,788 kg</b>
Total weight	<b>11,462 kg</b>	<b>185,523 kg</b>
<b>Total weight saved</b>	<b>174,061 kg (94%)</b>	

Data taken from the following sources:  
BSRIA guide 'The Inventory of Carbon & Energy'. Channel based on typical weight and Embodied Carbon value for recycled ROW construction.  
Threaded Rod Weight Taken from DIN975 Document 'http://www.dinstock.com/useruploads/files/threaded\_rods\_din975.pdf'  
Embodied CO2 Constant Multiplier (kg CO2/ kg material) Taken From ICE (Inventory of Carbon and Energy) Document  
Author: Dr. Craig Jones & Professor Geoffro Hammond. Version: V3.0 = 10 Nov 2019 http://www.circularrecology.com/embodied-energy-and-carbon-footprint-database.html

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## PROJECT DETAILS

Within the main event space at TECA, the building structure and roofing detail made traditional methods of installation difficult for the installation of the electrical containment services.

After carrying out an assessment of using traditional methods of installation at TECA, it emerged that the combination of a working height of between 16 and 20 metres, along with the heavy weights and physical size of metal channel and strut meant that a lightweight alternative was required.

Due to the unique architecture of the building, suspending from a direct vertical access point was not possible using traditional methods. The Gripple Catenary system was chosen to overcome this, by creating secure, overhead spans by running two high strength wire rope between two fixing points.

Other non-height restricted electrical services were suspended using Gripple Express No. 2 Hangers and No. 2 Standard Hangers with Y-Fit Accessories, which were supplied in ready to use kits for ease and speed of installation.

Gripple products, combined with pre-fabricated bracketry from MEF Ltd, made the installation of electrical services for FES electricians more efficient than traditional systems.

Gripple solutions helped to improve on-site health and safety, by reducing time spent working at height. The project also benefitted from a full installation design service undertaken by Gripple's Technical Services team, which comprised of installation design drawings being submitted along with Catenary tension analysis for this project.

"Gripple solutions have been an ideal solution for the areas within TECA, and Gripple products are now at the forefront of FES electrician's minds when planning and executing our electrical installations."

- (Project Manager - FES Ltd) -

