

# CASE STUDY

**Barony Campus,**  
Cumnock, East Ayrshire,  
UK



Photography courtesy of Sheppard Robson

HOURS SAVED  
**10,352 HOURS**

EMBODIED CO<sub>2</sub> SAVED  
**117,087 KG**

MATERIAL WEIGHT SAVED  
**51,579 KG**

Barony Campus is a new £68m education facility in East Ayrshire, Scotland. Gripplle supplied [Trapeze Plus FR](#), [Catenary Kits](#), [C-Clips](#), [Universal Brackets](#), [Standard Hangers](#), [Y-Fit Accessories](#) and [QT Universal Clamps](#) to secure a range of M&E services on-site.

Project Summary		Featured Products			
<b>Main Contractor</b>	Morrison Construction	Catenary Kit		Trapeze Plus FR	
<b>Subcontractor</b>	Castle Building Services	QT Universal Clamp		Universal Bracket	
<b>Services</b>	Pipework, Electrical and HVAC				
<b>Building Type</b>	Education				



“This is the first company I’ve worked for that has introduced me to Gripplle. Their products are far greater than the old system of threaded rod and strut. It’s absolutely fantastic - so easy to install!”  
- [Electrical Chargehand, Castle Building Services](#) -

## SAVING SUMMARY

	Gripplle solution	Traditional method
Overview	<b>Catenary Kits, C-Clips, Trapeze Plus FR, Universal Brackets, Standard Hangers, Y-Fit Accessories, Cable Basket Adaptors and QT Universal Clamps</b>	Channel, threaded rod, channel nuts and pipe rings
Installation time	<b>2,985 hours</b>	13,337 hours
Total material weight	<b>8,182 kg</b>	59,761 kg
Total embodied CO <sub>2</sub>	<b>18,573 kg</b>	135,660 kg

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 Geoffre Hammond. Version: V3.0 = 10 Nov 2019 http://www.circularrecology.com/embodied-energy-and-carbon-footprint-database.html



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## PROJECT DETAILS

Comprising four blocks, the campus houses two new primary schools, two academies and an ASN school. Gripplle worked with Castle Building Services on the project, from initial concept design to delivery. The team utilised BIM to ensure exact product specification, reduce waste and undertake clash detection ahead of installation.

Main contractor for the project, Morrison Construction, built a 23,000m<sup>2</sup> campus across a 20 hectare site. The new education facility caters for over 2,500 students and is Scotland's largest school. The campus has modern sports facilities, including a 400 m four-lane running track with six sprint lanes, two grass pitches, a seven-a-side floodlit synthetic pitch, outdoor basketball court and 13 indoor courts. The local Scottish community also now have access to further recreational spaces including a café, theatre, catering facilities, recording studios and meeting rooms.

For this project, Castle Building Services chose to use Gripplle solutions for the suspension of mechanical and electrical containment as well as the suspension of radiant panels. Gripplle Technical Services, a qualified team of engineering physicists and mechanical engineers, provided Castle Building Services with an installation design service which consisted of numerous 3D BIM objects and 2D bracket detail drawings to assist with design and installation. Gripplle was able to work collaboratively with Castle's Technical BIM team to coordinate the design and placement of M&E bracketry across the campus.

Castle have now used Gripplle products on various projects as a proven method of drastically reducing installation times on-site, while also delivering aesthetically pleasing results. Castle used Gripplle Catenary Kits to suspend cable baskets on-site in instances where longer drop lengths were required. Catenary Kits require no additional channel or structural steels to be installed. They create a secure, overhead span by running high strength wire rope between two fixing points. Gripplle C-Clips allow for suspensions to be placed anywhere along the span, due to its innovative twist on/off functionality.

Castle also opted to use Trapeze Plus FR, Gripplle's certified fire-rated suspension solution which delivered significant time savings for the installation of electrical and mechanical containment within the development. Trapeze Plus FR has been independently tested and is a fully compliant, fire-resistant suspension system which is suitable for a range of applications. Adjustments can be made completely tool-free, allowing contractors to save time and labour and allow for adjustment of height during installation.

In conjunction with Trapeze Plus FR, Universal Brackets and Cable Basket Adaptors were used to efficiently connect Gripplle systems to cable baskets on-site. Gripplle QT Universal Clamps were used for the suspension of pipework and Y-Fit Accessories and Standard Hangers were also used across the development for the suspension of radiant panels among other services.

"Gripplle products are at least 7 or 8 times quicker to install than traditional methods. I would recommend their products to everyone. There's no way I'd go back to using threaded rod now I've seen the benefits of using Gripplle."

- Electrical Chargehand, Castle Building Services -

