



Image courtesy of Rhondda Cynon Taf Council

HOURS SAVED
720 HOURS

EMBODIED CO₂ SAVED
5,466 KG

MATERIAL WEIGHT SAVED
2,408 KG

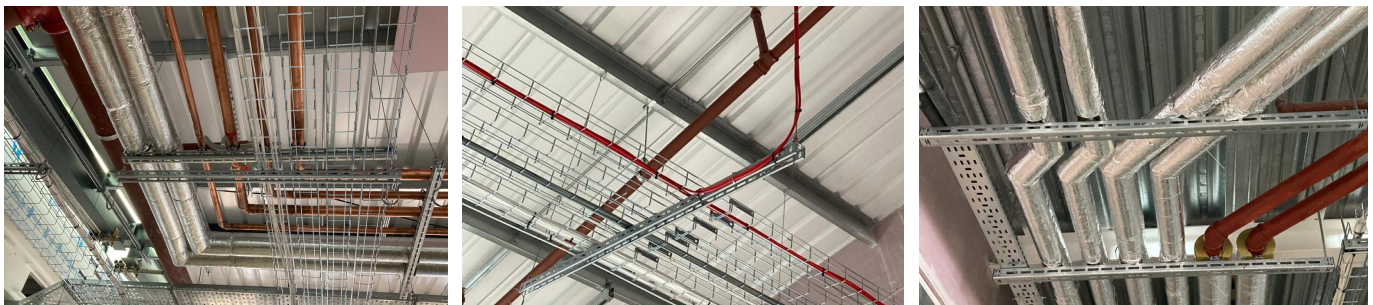
This new two-storey school is located in Rhydyfelin near Pontypridd in Wales. Upon completion in January 2024, the school will have places for 540 pupils. Gripplle's [Fast Trak](#) M&E trapeze bracket system, [QT Compact Clamps](#), [Universal Brackets](#) and various other accessories were used on-site to suspend electrical containment and pipework services.

Project Summary

Main Contractor	ISG
Subcontractor	Whitehead Building Services
Building Type	Education
Services	Electrical Containment / Pipework

Featured Products

<p>Fast Trak</p>	<p>Trapeze Plus FR</p>	<p>QT Compact Clamps</p>
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"We would normally use traditional rod and channel and cut everything down on-site. On this project, we used Gripplle's Fast Trak, Universal Bracket and Trapeze Plus FR products to assist us with programme requirements. Their systems also carry fire ratings and eliminated hot works and plant hire for cutting which gave us additional cost savings."

- Site Supervisor, Whitehead Building Services -

SAVING SUMMARY

	Gripplle solution	Traditional method
Overview	Fast Trak, Trapeze Plus FR, Universal Brackets, QT Compact Clamps, Universal Clamps, Cable Basket Clips, Cable Tray Clips and Concrete Screws	Channel, pipe rings, threaded rod and channel nuts
Installation Time	260 hours	980 hours
Total Material Weight	1,965 kg	4,373 kg
Total Embodied CO ₂	4,462 kg	9,928 kg
Total Labour Cost*	£7,800	£29,400

*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.circularecology.com/embodied-energy-and-carbon-footprint-database.html

*Figure based on one installer working for eight hours a day at £30 per hour



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PROJECT DETAILS

The new school is being constructed on the site of the existing Heol y Celyn Primary School in Rhydyfelin, Wales. Rhondda Cynon Taf Council appointed ISG as main contractor to deliver the scheme in time for the 2024/25 academic year. This development is one of the council's major investment projects currently being progressed via Welsh Government's Sustainable Learning for Communities Programme and is part of a £75.6m investment across the Greater Pontypridd area. The new two-story, 540-pupil school will have 20 classrooms and is net zero carbon in operation. A number of innovative technologies have been included within the building's design.

GripplE's rapid trapeze bracket solution, Fast Trak, was selected by M&E subcontractor, Whitehead Building Services, to suspend electrical containment and pipework on-site. Fast Trak is a versatile, pre-fabricated, off-site solution that vastly simplifies the installation of building services. The four-sided bracket provides a suspension point on every face which is ideal for the installation of combined bracketry and multi-tiered configuration to accommodate additional building services.

Fast Trak is made up of a pre-fabricated slotted channel, whilst a patented 'Track' and 'Cartridge' allows you to safely install a complete trapeze bracket up to six times faster than traditional systems.

In conjunction with Universal Brackets, Trapeze Plus FR wire rope kits were also utilised throughout to suspend cable baskets. Trapeze Plus FR kits are independently tested and offer fully compliant, fire-resistant suspension systems which are suitable for a range of applications. Adjustments can be made completely tool-free, allowing installers to save time and labour and allow for changes during installation. Whitehead Building Services opted to use Fast Trak and Trapeze Plus FR as they required a quicker M&E installation method than traditional systems and all suspensions needed to be F60 fire rated.

GripplE Cable Basket Clips, Cable Tray Clips and QT Compact Clamps were also used on this project - all these accessories easily slot into GripplE brackets during installation by turning them ninety degrees. GripplE QT Compact Clamps are suitable for pipe diameters ranging from 15 mm (1/2") to 89 mm (3 1/2") allowing contractors to stock one clamp size instead of having to store various pipe rings on-site.

GripplE's in-house UK Technical Services team provided Whitehead with an installation design service which consisted of numerous 2D bracket detail drawings to further assist with their installation. Whitehead have used GripplE products on various projects to reduce carbon emissions and save time on the installation of building services.

