

CASE STUDY

Stoke Mandeville Hospital

Aylesbury, UK



Image Courtesy of Hunters

HOURS SAVED*
627 HOURS

EMBODIED CO₂ SAVED
2,561 KG




MATERIAL WEIGHT SAVED
1,128 KG

This healthcare project in Aylesbury sees the creation of a children's emergency department and improved maternity facilities. The site utilised Gripplle [Fast Trak](#) along with [Trunking Clamps](#) and [Cable Basket Clips](#) to suspend electrical containment throughout the development whilst providing significant labour, weight and embodied carbon savings on-site.

Project Summary

Main Contractor	Western Building Systems Ltd
Subcontractor	Allied Building Services
Building Type	Healthcare
Services	Electrical Containment

Featured Products

<p>Fast Trak</p> 	<p>Cable Basket Clips</p> 	<p>Trunking Clamps</p> 
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"Fast Trak certainly helped us on the project, the ability to quickly install and adjust was really beneficial when compared to traditional methods and the savings are significant. We'll definitely look to use it again in the future."

- Electrical Project Manager, Allied Building Services -

SAVING SUMMARY

	Gripplle solution	Traditional method
Overview	Fast Trak, Cable Basket Clips and Trunking Clamps	Channel, threaded rod and channel nuts
Installation Time	148 hours	775 hours
Total Material Weight	1,444 kg	2,572 kg
Total Embodied CO ₂	3,278 kg	5,839 kg
Total Labour Cost	£3,700	£19,375

*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 £25 per hour



Image Courtesy of Hunters



PROJECT DETAILS

This healthcare project at Stoke Mandeville Hospital will see the creation of new 3,500 square metre children's emergency department on the ground floor with a paediatric resuscitation bay and a new overnight observation ward. Not only will the new building provide a dedicated area for children but it will free up much-needed capacity for adult patients in the existing emergency department, reduce overcrowding and improve infection control.

The site utilised GripplE Fast Trak, along with Trunking Clamps and Cable Basket Clips to suspend electrical containment throughout the development whilst providing significant labour, weight and embodied carbon savings.

Back in 2020 the Buckinghamshire Healthcare NHS Trust was the beneficiary of capital funding enabling the extension of these essential facilities. The Coronavirus pandemic highlighted the need to create more spacious facilities to reduce overcrowding. The need to reduce overcrowding meant that time was of the essence on this project. This made GripplE's rapid trapeze system, Fast Trak, an ideal solution.

The innovative Fast Trak system by GripplE is made up of a prefabricated slotted channel,

whilst a patented 'Track' and 'Cartridge' allows you to safely install a complete trapeze bracket up to six times faster than traditional rod and strut. The benefit of Fast Trak's time-saving ability was evident here, saving 627 hours of labour when compared to traditional systems. That is the equivalent of nearly 16 weeks of work!

GripplE Cable Basket Clips and Trunking Clamps help to save time and labour, benefitting from a simple attachment to the bracket. These products are fixed by a simple quarter-turn attachment to GripplE brackets. The Trunking Clamp has a significantly faster installation time than traditional methods when it comes to the secure installation of trunking. Both are tool-free and easy for installers to use.

Before work could get underway a pull test was required to verify the suitability of the substrate before installation. GripplE Area Sales Manager Josh Bloomfield explained the pull-test process: "The tests were performed on the concrete soffit on the 2nd floor in the plant room. The GripplE pull test samples were affixed to the concrete soffit before the Hydrajaws pull test machine was attached and operated. It was great to see a return of 4kN when the sample was fixed into the timber joist through the plasterboard."

