

WORKING WEEKS SAVED

656 WEEKS

EMBODIED CO₂ SAVED*

136 TONNES

EQUIVALENT OF PLANTING

877 TREES

22 Bishopsgate is a 1,275,000 sq. ft commercial development located in the heart of the City of London. The 62 storey tower which stands at 278 metres has the capacity to hold a combined workforce of 12,000 people. Gripple supplied Trapeze Plus FR, Universal Brackets, XP2 (Express) Hangers and Fire Rated Hangers to this prestigious British project.

Project Summary		
Main contractor	Multiplex	
MEP contractor	TClarke London	
Building type	Commercial / Office	
Services	Electrical Containment / HVAC / PAVA	









"We used Gripple products due to their compact and lightweight nature. There was very limited storage space on-site and strict delivery schedules meant that using threaded rod and channel would have been more cumbersome for our team to transport across a busy central London project. The fact that using Gripple also led to a quicker and more aesthetically pleasing install was an added bonus!" (Electrical Engineer, TClarke London)

SAVINGS SUMMARY

	Electrical Services	HVAC	Total Savings
Overview	CAT A fit-out (51 floors) and subsequent CAT B fit-outs	CAT A fit-out (51 floors), subsequent CAT B fit-outs and core works	-
Gripple Products	Trapeze Plus FR, Universal Brackets, Cable Basket Clips, Fire Rated Hangers & Y-Fit Accessories	Express Hangers & Corner Saddles	-
Labour Time Saved (vs Traditional)	19,242 hours	7,030 hours	26,272 hours
Weight Reduction (vs Traditional)	30,406 kg	29,935 kg	60,341 kg
Embodied CO ₂ Saved*	69,022 kg	67,953 kg	136,975 kg
Equivalent of Planting	442 trees	435 trees	877 trees



PROJECT DETAILS

Multiplex were employed as main contractor to build London's newest skyscraper, 22 Bishopsgate. The 62-storey commercial office tower is the second tallest building in the UK (after The Shard). Located on the eastern side of Bishopsgate, the development is situated within close proximity to local transports hubs; Bank Underground Station and Liverpool Street station. The building's main superstructure comprises a steel-framed tower with a central supporting concrete jump-form core. The new development contains 1,275,000 sq. ft. of workspace for various businesses to operate across. It's the first UK tower to contain in excess of 100,000 sq. ft. of integrated amenity and social spaces for up to 12,000 people. The 278 metre tall tower has been constructed to support the people and businesses within. Inside the office tower there is a fresh food market, a 'wellbeing retreat and curated art walk', a basement bike park with 1,699 spaces and London's highest free public viewing gallery. The building also contains the fastest lifts in Europe.

22 Bishopsgate was the largest project in London at the time of construction and space on-site was extremely limited. The MEP contractor, TClarke London, required a compact electrical containment suspension solution which could be transported and stored efficiently. Gripple's lightweight suspension solution, Trapeze Plus FR, was used to suspend electrical containment on-site. These kits have been independently tested by BRE Global and offer a fully compliant, fire-resistant suspension system. Adjustments can be made completely tool-free, allowing

installers to save time and labour and allow for changes during installation. In conjunction with Trapeze Plus FR, Universal Brackets were used to support cable containment on-site. Fire Rated Hanger kits were used for suspending fire alarm speakers (PAVA) on-site. Independently tested by BRE Global, these kits prevent alarm system cables becoming compromised or prematurely collapsing in the event of a fire. Gripple's Fire Rated Hangers feature a stainless steel housing and springs which are corrosion and fire-resistant. They are used to suspend a variety of electrical and mechanical services in high risk applications.

Within the CAT A floors XP2 (Express) Hangers were used to efficiently suspend HVAC services. Express Hangers are tool free suspension kits with keyless release mechanisms for the fast suspension of a variety of building services. For the core HVAC works, XP2 kits and Magnetic Corner Saddles were used to suspend rectangular ductwork on-site. XP2 kits were also used to suspend additional primary spiral ductwork.

Gripple's Technical Services department provided TClarke with an installation design service on this project. TClarke were also supported on-site by the Gripple London team who have an office based locally in the City. Due to their lightweight nature and the reduction in materials used, Gripple products also provide large weight and embodied CO₂ savings. If required, reports can be generated for BREEAM assessors to meet development targets. For more information please contact Gripple Technical Services.







*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

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