

SPECIALISED SOLUTIONS

Marshall-Tufflex's Specialised Solutions team was set up with the specific aim of working with clients to find a way around their installation challenges. This dedicated team addresses some of the difficult cable management problems encountered by designers, consulting engineers and contractors and, with the help of the in-house Design Office, fabricates versatile design solutions that combine functionality, style and safety.

HEATHROW AIRPORT TERMINAL 5

Product: Stainless steel floor boxes

The Heathrow Airport T5 project required bespoke stainless steel floor boxes delivering access to data and power supply systems vital for the safe and effective running of the airport and visually compatible with the floor finishes of the terminal building.

Several hundred of these access units were built to sit flush with the floor and designed to comply with Health and Safety legislation for pedestrian traffic.



Working closely with SPIE Matthew Hall and BAA, Marshall-Tufflex collaborated to produce rectangular, round and square floor boxes in various sizes. Many of the boxes have lockable lids and all are fabricated in heavy duty stainless steel to take higher point load than standard floor boxes, enabling them to cope with wheeled traffic and protect the cables within. The boxes accommodate Cat 6 cabling with provision for Cat 7 and Cat 7a systems.

BBC BROADCASTING HOUSE

Product: Power distribution units

The BBC's massive project of redevelopment to Broadcasting House in central London houses 5,000 people, delivering news nationally and globally as well as national radio and music services, creating one of the largest live newsrooms in the world and using the latest broadcast technology.

The project utilises Marshall-Tufflex's MT32 prefabricated wiring system, eliminating hard-wiring on site and permitting much faster installation times. It is delivered to site in cable management 'bays' complete with pre-wired cable sets marked with circuitry and ready to feed into distribution boards.

The system is installed into the initial fit-out of the Central Apparatus Area and Local Apparatus Rooms throughout the new 12-storey building, including three basement levels.



The 'bays' are installed above ceiling height and constructed from a combination of Marshall-Tufflex's PVC-U Maxi Trunking and Mono 10 with specialised Cee-Norm sockets. The complexity of the vast amounts of circuitry has necessitated the building of extra large containment units with the necessary headroom – some as much as 18 metres long with a 150mm x 150mm high containment capacity. A large number of sockets and cables in relatively short spaces have also been addressed by this cable management solution.

"We met what was a complex and very quick programme on time. The standard of Marshall-Tufflex's pre-manufactured units was good and helped us to reach timescales when under pressure."

Phoenix Electrical Co Ltd

CAMBRIDGE UNIVERSITY

Product: Light Oak trunking to meet Historic England approval

Cambridge University's historic Fitzwilliam Museum required a skirting trunking system that would be a good match to the light oak floor. The building and its galleries are Grade 1 listed so the specification also had to meet with Historic England's approval.

"Marshall-Tufflex's Sterling Profile 3 in Light Oak was the closest match," said Darren Potter, Chief Technician of Facilities at the Fitzwilliam Museum. "We chose Sterling Profile 3 as it had square edges rather than bevelled ones, making it easier for us to fit the trunking flush into the skirting void behind the wall," said Darren.

The museum also used the MT32 prefabricated modular wiring system as they regularly need to change temporary exhibitions each requiring a different display layout with corresponding power supplies. MT32 now allows them to quickly reconfigure the power supplies and removes the need for trailing extension leads.



NEWQUAY SCHOOL

Product: Curved trunking



Architectural practice, The Bazeley Partnership, designed a new IT department within the sixth form of Tretharras School in Newquay for Cornwall County Council.

The architects' design included curved cable containment wrapped around a central workstation as the focal point of the room.

CCC's senior electrical engineer, David Shuff, turned to Marshall-Tufflex for a solution that could cope with the curved external and internal bends, all at dado level.

Marshall-Tufflex recommended its multi-compartment PVC-U perimeter cable management system, Sterling Profile 1, of which 40 metres was pre-curved to order.

"With the nature of this circular design, the trunking was a key element. Only Sterling could give us scope to achieve the architect's vision, and the end result has met everyone's expectations."

Cornwall County Council

WOODWATER HOUSE

Product: Horizontal PowerPoles

Marshall-Tufflex provided a spectacular solution for Michelmores Solicitors' striking glass building in Exeter.

Series 2 PowerPoles in aluminium were specified to blend in with existing steel columns, manufactured with special bends and suspended horizontally around the building to carry power and low voltage lighting in a way that sympathised perfectly with the existing steel work.

TES Projects Ltd, contractors for the installation commented: "The system suits the purpose really well, it carries segregated fire alarm and door entry cabling and it all looks really good."



UNIVERSITY OF WARWICK

Product: Special paint finish for aluminium trunking



Elegance 110 and Bench trunking both in aluminium were supplied with custom paint finishes in RAL 7035 Light Grey and RAL 7016 Anthracite Grey to match new benches at the University of Warwick's School of Engineering.

The colour matching greatly enhanced the overall appearance of the project of two refurbished teaching laboratories, where power and data connections to laboratory workbenches were situated for computers and test equipment.

"Apart from the look and functionality, we also required a quick turnaround, and Marshall-Tufflex was able to supply the trunking within a very tight timescale – a major factor in enabling us to complete the project on time."

Jonathan Meadows, Senior Electrical Technician at the School of Engineering

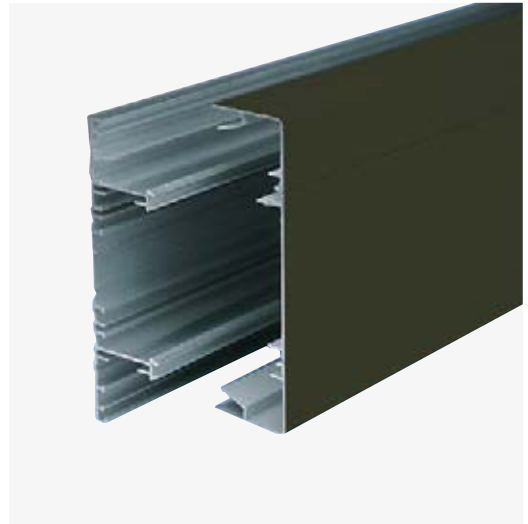
BIRMINGHAM UNIVERSITY

Product: Sterling Profile 3003 aluminium – matt black

Marshall-Tufflex has supplied Birmingham University's School of Physics and Astronomy with an unusual trunking for the laboratories housing a study into the behaviour of cold atoms.

To aid the study into quantum phenomena by exploiting cold atom gases as a unique window into the quantum world, the laboratory is fitted out with matt black trunking. This acts as a safety measure because the work utilises high powered lasers. Should a laser beam escape, a matt black trunking will absorb the light.

The aluminium Sterling Profile 3003 feeds power and data at dado height around the laboratories and has also been installed on overhead canopies sited above work benches.



ST ALOYSIUS COLLEGE, HIGHGATE

Product: MT32 and specially curved Odyssey trunking

Marshall-Tufflex provided an MT32 prefabricated modular perimeter wiring system and Cat 6 compliant Odyssey trunking in specially curved lengths to allow for fixing to the corresponding architecturally curved walls of the library building.

MT32 and Odyssey trunking provided economic and fast-fit installations at St Aloysius College, Highgate, one of eight secondary schools to undergo complete rebuilding or substantial refurbishment within Islington's Building Schools for the Future (BSF) initiative.

Balfour Beatty Engineering Services selected Marshall-Tufflex's MT32 contained within Odyssey's contemporary curved dado trunking system and Tom Counihan, electrical engineer for BBES, explained why:



"We compared plug and play systems but liked the fact that MT32 is extremely neat and provides significant installation time reductions. Odyssey appealed because it is CAT 6 compliant, easy to install and because it is the most aesthetically pleasing of the containment systems we have looked at – and we have looked at quite a few! The client is happy with it and we are happy with it. As a result of the effectiveness of both systems, we are taking them through other schools within the BSF initiative."

Balfour Beatty Engineering Services

Pre-formed trunking



PVC-U trunking systems can be pre-curved to order for installation on curved walls and curved furniture.

Please contact the Technical Team on +44 (0)1424 856688 for a bespoke quotation.

Please note minimum bend radius is required

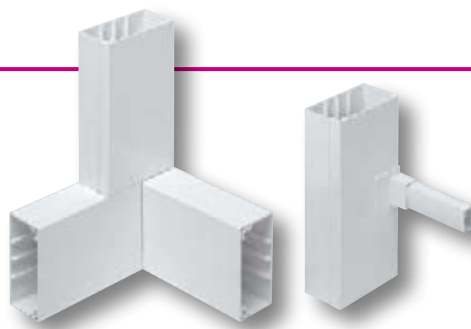
Series 2 PowerPost suspended



Ceiling-mounted units supplying various services are available as fixed items.

Combination bend

A combination internal bend to flat angle and adaptor to mini trunking. These can be made to order for most PVC-U trunking.



135°/45° bends

135°/45° bends in a variety of profiles can be fabricated to order. Other angles can also be produced upon request.

PVC trunking reducer

A section of trunking which has been reduced in depth so that it can pass behind radiators or pipes.



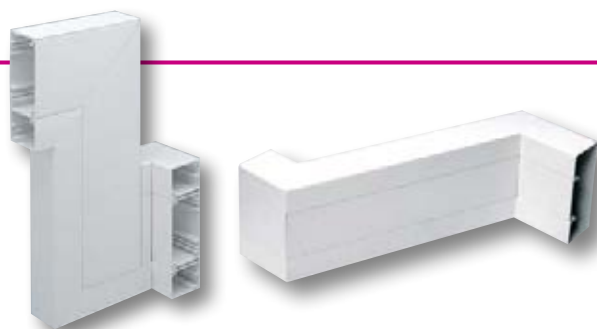
Fabricated connections

Fabricated units for joining or interconnecting two different sizes or models of PVC-U trunking.



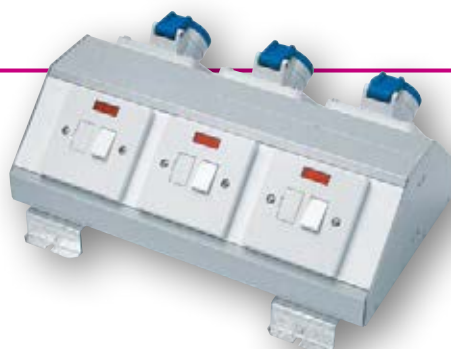
Profile sets

Pre-fabricated sets for negotiating columns, window bays and non-standard corners.



Multi-service pods

IEC 60309 industrial sockets on back to back aluminium bench trunking with 25mm raised brackets to raise units above any floor level water collection.



Pre-wired units

Pre-wired modules with standard UK accessories can be built to order and are supplied fully assembled and tested in-house.

