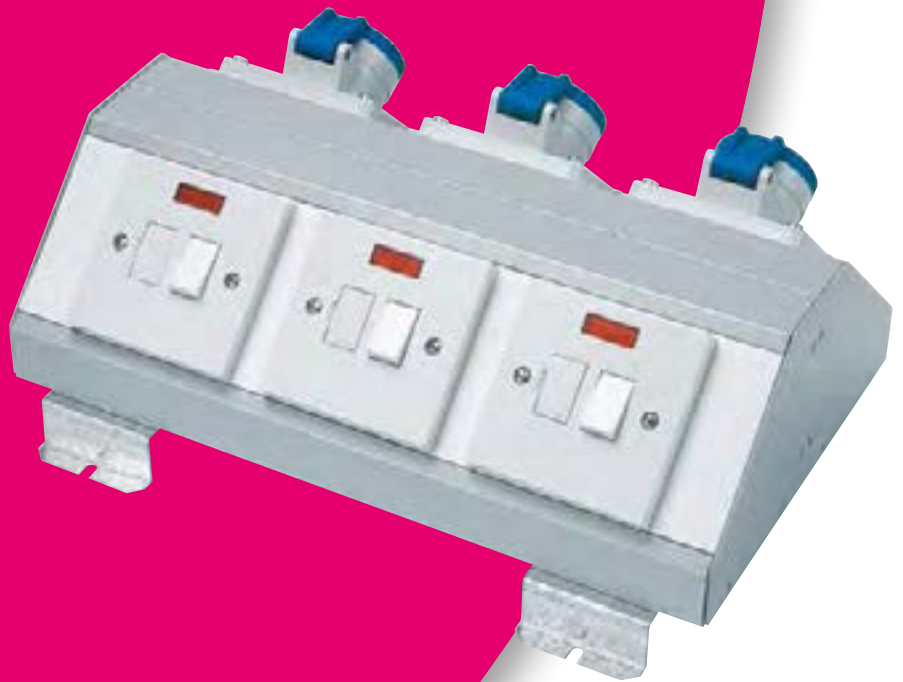


Specialised applications

www.marshall-tufflex.com

Marshall-Tufflex's Specialised Application 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

Heathrow

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

Product: Power distribution units

BBC

SPECIALISED APPLICATIONS

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

Marks & Spencer

Product: Universal charging racks

M&S

The requirement to streamline the re-charging of Marks & Spencer's staff communication handsets in stores throughout the UK, involved the development of a wall-mounted system that delivers power to a large number of chargers.

The customised system not only allows M&S staff to locate handsets in the charging rack quickly and easily, it also eradicates unsightly and potentially hazardous wires and 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."



Freeman Hospital

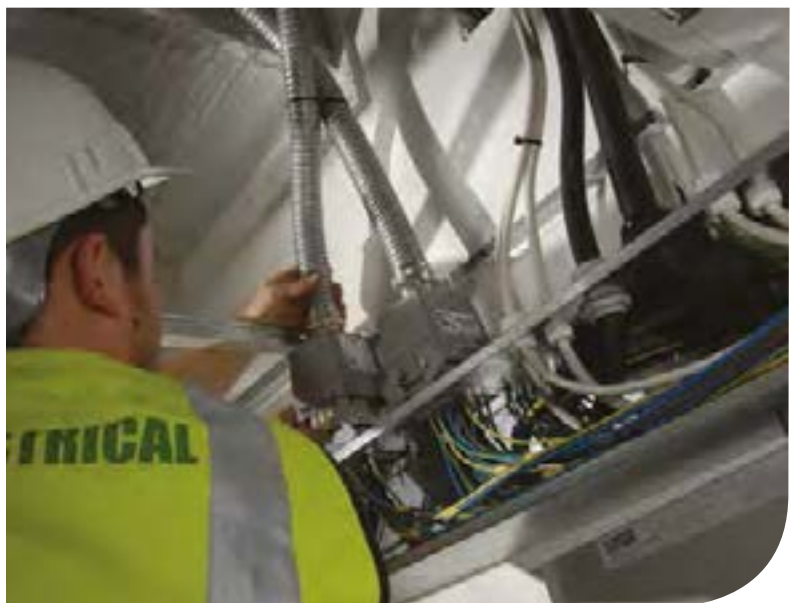
Product: MT32 Home run

Milton Keynes-based contractor, Hobbs Electrical, used Marshall-Tufflex's MT32 Prefabricated modular wiring system home run for the fit-out of a new modular build operating theatre at the Freeman Hospital in Newcastle.

The MT32 home run takes power distribution and lighting systems from the hospital's distribution boards to a mastering unit in a local position in the new theatre.

The pre-wired, pre-tested home run is supplied with 9 circuits for power and light. It can also accommodate up to 10 circuits with a maximum of 32 cores and can be configured for any combination of power and lighting and for conductor sizes from 1.5mm² to 10mm².

The MT32 home run distributes power from the main board and is simply bolted into place and connected up via a male HARTING plug, which makes the connection from the distribution board to the home run and into the theatre's mastering unit, from where MT32's 32Amp underfloor distribution system takes power out to all areas of the new operating theatre.



"We wanted a plug-in power connection system because they are far quicker to install and can be disassembled when the building is decommissioned. We have been really impressed with MT32 and now plan to use it across most, if not all, of our contracts".

Hobbs Electrical Services

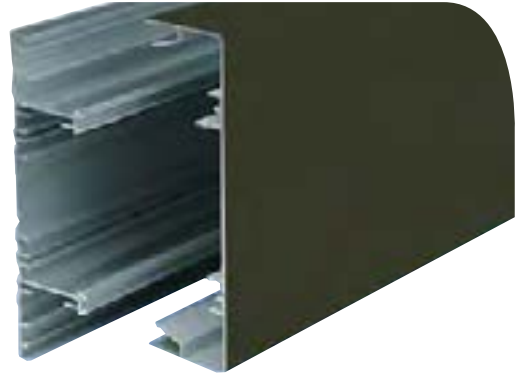
Birmingham University

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.

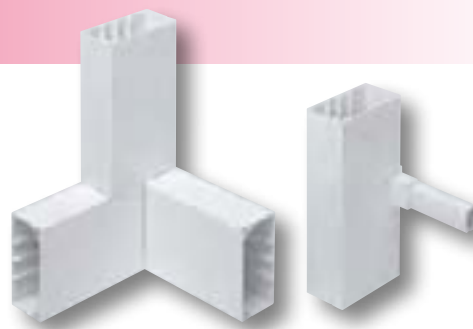
Series 2 PowerPost suspended



Ceiling-mounted units supplying various services are available as fixed items or hinged to allow for unobtrusive 'parking'.

Combination bend

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



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.

