Marshall-Tufflex
Trunking for Education
Environments

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www.marshall-tufflex.com



Perimeter Trunking for the Education Environment

- → Classrooms
- → Laboratories
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- → Lecture Theatres
- → Workshops
- \rightarrow Offices

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Building Schools for the Future

Building Schools for the Future (BSF) is the largest ever Government-financed education building program. The project, managed by Partnership for Schools (PfS) is to rebuild and renew the majority of England's 3,500 Local Authority secondary schools by the year 2019. Running parallel to BSF is a second PfS program to deliver 400 new academies with a further building program to follow for the nation's primary schools.



The need within this program for new and increased capability cable management products that enable the distribution of power and high speed data services, allows Marshall-Tufflex, as the biggest UK manufacturer of cable management products, to apply their vast experience to meet these requirements.

Marshall-Tufflex has been supplying perimeter trunking and underfloor systems to the UK's educational facilities for over thirty years. We are dedicated to ensuring that our comprehensive range of products meets the needs of clients, designers and contractors working in the education sector.

WHAT WE OFFER

- Cable management products that are already proven and have been selected for use in the classrooms, workshops and offices in the education sector.
- A comprehensive range of trunking systems available in PVC-U, steel and aluminium, combining the latest technology in plug & play power connection to reduce installation time on site.
- Designs, dimensions and cable capacities to meet the latest cabling standards and to accommodate building designs and construction parameters.
- Products manufactured in our Hastings factories and readily available through a network of national electrical distributors.
- Products to comply with Part M of the UK Building Regulations (Disability Discrimination Act for Visual Impairment).
- Antimicrobial Trunking Systems with an integral formulation preventing 99.9% of harmful bacterial growth.

Compact 2 Trunking 130mm x 50mm

A compact two compartment system suited to fit within areas that have trunking height restrictions and where the physical outside dimensions are very important, for example to negotiate above or below radiators and window sills.

- One full size and one half size compartment.
- Suitable for height restricted applications.
- Separate lid access to each compartment.
- Can be fed from larger trunking system for increased cable distribution.
- MT32 pre-wired, pre-tested power connection optional (see page 9).
- Available with antimicrobial properties (see page 9).
- Coloured lid options and flush mounting plates available to assist with Part M compliance (see page 9).*
- Available in specific colours to match classroom environments.*

*minimum order quantities may apply.



Cable Capacity: Cat 6 UTP (Based on Ø6.5mm cable) COMPARTMENT 45% 100% FILL FILL 15 Α 34 *B (with accs box) 11 24 B (without accs box) 41

91



Data Information:

Standard bend radius 25mm (Cat 6).

Data fittings available for bend radius up to 50mm.

Steel divider is available to provide EMC screening between compartments.

Small compartment can be screened against electromagnetic interference with no reduction in cable capacity (see page 9).

Adjustable data box 32-40mm.

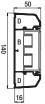
Mono Plus 20 Trunking 140mm x 50mm

An economical and stylish three compartment trunking, compact in size to fit within areas that have trunking height restriction where the physical outside dimensions are very important.

- Three segregated compartments.
- Suitable for height restricted applications.
- One piece fittings with single lid access for improved security.
- MT32 pre-wired, pre-tested power connection optional (see page 9).
- Available with antimicrobial properties (see page 9).
- Also available in aluminium.
- Coloured lid options and flush mounting plates available to assist with Part M compliance (see page 9).*
- Available in specific colours to match classroom environments.*
- A deeper version is available - 155mm x 55mm.

Cable Capacity

Cable Capacity.				
Cat 6 UTP (Based on Ø6.5mm cable)				
COMPARTMENT	45% FILL	100% FILL		
D	11	21		
*B (with accs box)	12	28		
B (without accs box)	37	82		



Data Information:

Standard bend radius 25mm (Cat 6). Adjustable data box 32-40mm.

* minimum order quantities may apply.

Sterling Profile 1 167mm x 50mm

This is a popular and stylish looking trunking system that is easy and cost effective to use and often favoured by electrical contractors and installers. Sterling Profile 1 has been tried and tested within the educational environment over many years.

- Three segregated compartments.
- Separate lid access to each compartment.
- Can be fed from larger trunking systems for increased cable distribution.
- MT32 pre-wired, pre-tested power connection optional (see page 9).
- Available with antimicrobial properties (see page 9).
- Also available in aluminium.
- Coloured lid options and flush mounting plates available to assist with Part M compliance (see page 9).*
- Available in specific colours to match classroom environments.*

*minimum order quantities may apply.

Odyssey Trunking 180mm x 57mm

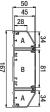
A top of the range trunking system with a unique curved profile designed specifically for heavy traffic areas such as classrooms. Moving away from the traditional box shape, this trunking not only presents a uniquely striking appearance but is mechanically stronger, with a profile that prohibits clutter, avoids dust traps and makes cleaning easy. Odyssey offers pioneering design-led aesthetics combined with functional excellence.

- Three segregated compartments.
- Curved profile does not allow placement of objects.
- Flush accessories to maintain a smooth profile.
- Internally reinforced for extra mechanical strength.
- Tamper resistant trunking and fittings that locate with a special clip design.
- Includes a lock feature for adjustable corners.
- MT32 pre-wired, pre-tested power connection optional (see page 9).
- Available with antimicrobial properties (see page 9).
- Coloured accessory boxes and adaptors to assist with Part M compliance of the UK Building Regulations for visual impairment (see page 9).
- Available in specific colours to match classroom environments.*



Cable Capacity: Cat 6 UTP (Based on Ø 6.5mm cable)

COMPARTMENT	45% FILL	100% FILL
А	13	28
*B (with accs box)	10	23
B (without accs box)	41	91



Data Information:

Standard bend radius 25mm (Cat 6).

Data fittings available for bend radius up to 50mm.

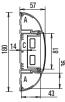
Steel divider is available to provide EMC screening between compartments.

Can be screened against electromagnetic interference with no reduction in cable capacity (see page 9).

Adjustable data box 32-40mm.

Cable Capacity: Cat 6 UTP (Based on Ø6.5mm cable)

COMPARTMENT	45% FILL	100% FILL
A	13	30
*C (with accs box)	10	23
C (without accs box)	38	85



Data Information:

Standard bend radius 25mm (Cat 6).

Steel divider is available to provide EMC screening between compartments.

Can be screened against electromagnetic interference with no reduction in cable capacity (see page 9).

Adjustable data box 32-40mm.

* minimum order quantities may apply.

Twin Plus Trunking 210mm x 57mm

For schools, colleges and universities requiring large quantities of Cat 6 data cabling throughout classrooms and computer suites, this high capacity, segregated, two compartment containment system looks good and incorporates 50mm bend radius fittings that exceed international standard requirements.

- Two large segregated compartments.
- Separate lid access to each compartment.
- Extra depth for increased cable capacity.
- MT32 pre-wired, pre-tested power connection optional (see page 9).
- Also available in aluminium.
- Coloured lid options and flush mounting plates available to assist with Part M compliance (see page 9).*
- Available in specific colours to match classroom environments.*



Cable Capacity: Cat 6 UTP (Based on Ø6.5mm cable) COMPARTMENT 45% 100% FILL FILL 53 A 117 *B (with accs box) 20 45



Data Information:

50mm bend radius fittings.

Steel divider is available to provide EMC screening between compartments.

Can be screened against electromagnetic interference with no reduction in cable capacity (see page 9).

Adjustable data box 32-47mm.

*minimum order quantities may apply.

Bench Trunking 105mm x 105mm

In a laboratory or workshop area, Bench Trunking can be usefully mounted directly on the bench or angled under shelving. This is a sturdy and easy to install trunking that, with dividing fillets, can bring segregated services to desks and benches.

- Can also be designed to individual specifications and pre-wired.
- Back to back configuration available.
- Positive fixing lids for easy re-configuration of cabling.
- 1, 2 and 3 gang boxes available.
- MT32 pre-wired power connection optional (see page 9).
- Available with antimicrobial properties (see page 9).
- Also available in aluminium.
- Coloured lid options and flush mounting plates available to assist with Part M compliance (see page 9).*
- Available in specific colours to match classroom environments.*

*minimum order quantities may apply.

Metal Trunking Systems

Metal is an excellent material for installation within school, workshop and laboratory areas.

- Aluminium systems are manufactured from high precision extruded aluminium and accept most standard ranges of wiring accessories. They are available with a white or silver powder coating as standard or in specific colours, subject to minimum quantity.
- Steel systems combine mechanical strength with a stylish appearance and excellent electromagnetic interference screening performance. These systems accept most standard ranges of wiring accessories and are available with a white powder coating.



Special Solutions for Schools, Colleges and Universities

Marshall-Tufflex recognises that a growing number of school buildings need a bespoke or one-off solution. Architects are designing more imaginative buildings and solutions for cable management are becoming an integral design element. Curved trunking for rounded buildings or pre-wired units ready for installation are an example of bespoke products designed to solve a specific problem that a client is facing.

We work with architects, design teams, main contractors and electrical contractors to understand what issues they need to address. The service we provide is at differing levels ranging from solving last minute problems to creating complete design solutions.

Case Study:

Curved cable management for Tretherras School in Newquay

Building designers and electrical contractors looking to bring a new dimension to their work can take inspiration from a project carried out on behalf of a specialist technology college in Cornwall.

Architectural practice, The Bazeley Partnership, was tasked by Cornwall County Council with designing a new IT department within the sixth form of Tretherras School in Newquay. The architects came up with a design that included curved cable containment wrapped around a central workstation, the focal point of the room.

When it came to sourcing a cable management system for the scheme, the county council's senior electrical engineer David Shuff turned to Marshall-Tufflex for advice on 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.

Mr Shuff said: "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."

To discuss your requirements for specialised cable management solutions, please contact our Technical Department on +44 (0) 1424 856688.



Environmental



Marshall-Tufflex actively pursues a comprehensive programme to develop material formulations based on environmentally acceptable materials, whilst still maintaining and, where possible, improving on long-term performance properties.

Jim Fletcher, Managing Director

Marshall-Tufflex is recognised by the BSI as a firm of Assessed Capability to BS EN ISO 14001:2004.

Carbon assessment

The Carbon Trust was set up by Government in 2001 as an independent company. Their mission is to accelerate the move to a low carbon economy by working with organisations to reduce carbon emissions and develop commercial low carbon technologies.

Marshall-Tufflex was assessed by the Carbon Trust in 2007 and received an excellent report.

RECYCLING

Marshall-Tufflex is active in and financially supports various industry bodies in driving the industry forward in the use and control of PVC-based materials, with the aim of increasing awareness and use of recycled material.



All materials used in the manufacture of our PVC-U Trunking Systems are 100% recyclable.



Marshall-Tufflex and Vinyl 2010

Marshall-Tufflex is dedicated to meeting the requirements of Vinyl 2010 and its Voluntary Commitment to the European Commission. www.vinyl2010.org

Material Performance

Aluminium

- Fire performance: withstands high temperatures.
- EMC properties: first class EMI screening performance especially at higher frequencies.
- Recycling and environmental: aluminium can be recycled many times without loss of quality.

Steel

- Fire performance: withstands high temperatures.
- EMC properties: an excellent screening material.
- Recycling and environmental: steel can be recycled many times without loss of quality.

PVC-U

- Fire performance: PVC-U is difficult to ignite, does little to contribute to the spread of fire, has low smoke production, chars and is self-extinguishing and does not produce flaming droplets or burning debris.
- EMC properties: steel and aluminium screening inserts are available as well as a unique conductive spray coating.
- **Recycling and environmental:** PVC-U has proven sustainability and is 100% recyclable with no phthalates being used in manufacture.

Other services and products from Marshall-Tufflex

Marshall-Tufflex offer many other products and services designed to meet regulations and to assist contractors with speed of installation. For further details, please contact our Technical Department on +44 (0) 1424 856688.

MT32 Power Connection

The revolutionary MT32 Power Connection system is a pre-wired & pretested cabling solution with a unique, compact, 32Amp connector for ring and radial circuits. The system offers unprecedented speed of installation of complete cabling runs from power source to final accessory, outlet or application.

Antimicrobial Trunking Solutions

Certain microbial organisms are harmful to people and proliferate to cause infections and disease. There is a need to control these organisms particularly in the type of environment where there is a high risk of cross-infection, such as school laboratories and classrooms.

Where hygiene is a priority, we are now able to offer a range of Bio Trunking Solutions with integral antimicrobial properties that prevent 99.9% of harmful bacteria growth. The special Bio formulation is integral to the PVC-U material and as a result there is no reduction in effectiveness, even if scratched or damaged.

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Marshall-Tufflex

DDA Regulations

Part M of the UK Building Regulations for Visual Impairment requires that face plates differ in colour from their background. Coloured lids, flush mounting plates, adaptors and the Marshall-Tufflex range of Odyssey coloured accessory boxes all provide a different colour frame to contrast against standard white accessories.

(Minimum order quantities may apply).

Screening for data systems

Electromagnetic screening is a conductive spray coating unique to Marshall-Tufflex and offering protection from electromagnetic interference to data and communications.

- No reduction in cable capacity per cross section area of trunking.
- Excellent long term performance.
- Superior scratch and wear resistance.



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In pursuance of our policy of continued product improvement Marshall-Tufflex reserve the right to change the design or specification of its products without notification.



Registration BS EN ISO 9001:2000

Quality Management Systems:

Marshall-Tufflex is totally committed to quality and customer satisfaction and the Company is recognised by the British Standards Institution as a firm of Assessed Capability to BS EN ISO 9001:2000.



BS EN ISO 14001:2004

Environmental Management Systems:

PVC-U is a proven superior material and offers major environmental benefits. Marshall-Tufflex is recognised by the BSI as a firm of Assessed Capability to BS EN ISO 14001:2004.

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