



the future is safer with altro

altro
transflor

FLOORING FOR RAIL APPLICATIONS

For passenger comfort and safety

www.altrotransflor.com



Altro Transflor flooring for rail – innovative solutions for passenger comfort and safety

The Altro company ethos is to place passenger comfort and safety at the heart of product development. In this brochure we detail our portfolio of rail products including our latest rail innovations, which deliver slip resistance for the life of your transport, outstanding product durability, flexibility, strength, and, of course, compliance with the latest international fire, smoke and toxicity regulations. We back our products with generous product warranties, so that you can rest assured they won't let you down.

With over 50 years' experience in the transport industry, Altro Transflor boasts an international reputation for satisfying customers across Europe, North America, South America, Australia, Asia and Africa. It forms a vital part of the highly successful Altro Group, a family owned UK company operating in 50 countries worldwide.

The complete solution

Investing in an Altro Transflor product is an investment in a complete system which caters for your every need. A full range of accessories, including adhesives, colour co-ordinated weld rods and sealants, nosings, trims and mouldings is available.

Customer Service and Technical Support

At Altro, we have worked hard to earn a reputation for delivering world-class product innovation combined with excellent customer service. We are on-hand to support you with product and technical support, from the moment you make your initial enquiry, through the installation process and afterwards, for the life of the product. Your Altro consultant will happily assist you in arriving at the best solution for your requirements.

We have a dedicated Technical Hotline +44 (0) 1462 707 700, should you require information on any of our products or services, including tests and approvals as required.

Pre-cut service

Time is money so take advantage of our pre-cut service for faster and easier product installations, which return your rolling stock to service more quickly. We can even include your own logo in the flooring. Please contact your Altro Representative for more information.

Customised design option

We are able to work with your designers on bespoke options for you (conditions apply) on some of our ranges. Please refer to the individual product pages in this brochure.

Quality matters

Buy with complete confidence; our stringent quality control has been internationally accredited with manufacturing excellence awards for the last 20 years.



Kit cutting service

Key product features

Demands placed on rail traffic necessitate tough solutions. The Altro Transflor system delivers the following as standard

- Compliance with stringent Health & Safety regulations
- Fire, smoke and toxicity compliance (see pages 10-11 for details)
- Water resistance
- Lifetime durability
- Slip resistance
- Stain resistance
- Different thicknesses to suit your needs from light to heavy duty
- Design options
- Corporate and vibrant colours
- Ease of installation
- Ease of maintenance
- Bacteriostat

Tried and tested

Tested in working trains and under aggressive laboratory conditions, details of certification are given on the datasheets for each range, visit www.altrotransflor.com.

Slip resistance

Products retain their slip resistance for life owing to the incorporation of slip resistant minerals throughout the entire thickness from surface to base and keep your passengers and staff safe, even in wet conditions.

Detailing

Achieve perfectly sealed corners and steps etc to prevent water ingress and subfloor damage by using one of several techniques; our technicians will happily advise on which method best suits your installation.

Doing more to protect the environment

We are actively doing more to protect not just the environment but also the health of those who come into contact with our flooring; typically your passengers, drivers, cleaners, maintenance engineers and installers.

One example of our commitment to the environment is in our flooring production. We have never used known hazardous heavy metals and carcinogenic, mutagenic or toxic to reproduction (CMR) compounds. We have never used any substances which may be subject to any restrictions of the European REACH Regulation.

We have also implemented an environmental management system that conforms to ISO 14001.



Altro Limited a company certified by SGS to ISO 9001 and ISO 14001.



Create a home from home environment for your passengers with this brand new safety floor. The selection of 12 plain and chipped **colours** satisfies requirements both to match standard corporate liveries and provide design contrast with vibrant, accent colours. The range has been carefully researched with customers to bring you a palette with a proven track record in the transport industry. **Bespoke** colours and designs are also available on request.

Providing full **fire, smoke and toxicity** compliance, Altro Transflor Momentum has been developed both to keep your passengers safe and bring you many industry-leading product benefits. Its **lightweight** construction makes it ideal for installation in small or awkward spaces, where product flexibility is key; it can also contribute to long-term fuel savings resulting from lighter carriage weight. The inclusion of silicon carbide affords long-term **durability**, minimising repair and replacement costs. For areas of **intense traffic**, the 2.5 mm option provides excellent durability and resilience. The inclusion of PVC contributes to a more robust product, easily able to cope with the demands placed upon the flooring. The fleece backing facilitates bonding and the whole floor may be welded to create a **tankable** flooring system, with impervious jointing which protects the subfloor.

Key features

- 2mm and 2.5mm thicknesses
- Fire, smoke and toxicity compliant to BS6853 Class 1A
- Lightweight
- Pre-cut service available
- 12 colours, plain and chipped
- Bespoke colour service available (conditions apply)
- Contains recycle
- Warranty 10 years (2mm) / 12 years (2.5mm)
- Backed by full Altro Assurance of Customer Satisfaction for lifetime of product

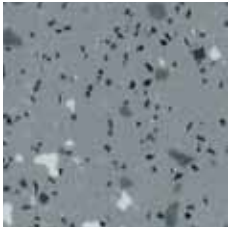
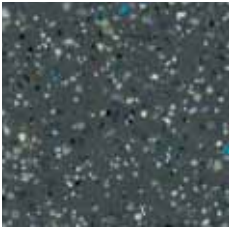
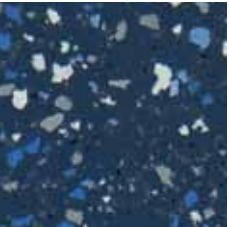
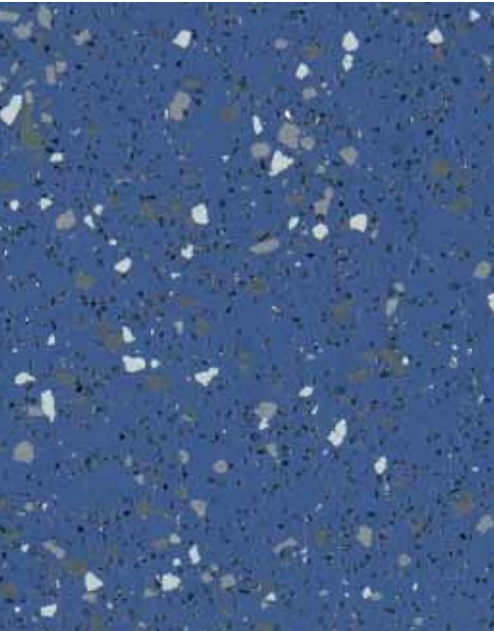
Contains integral Altrosan bacteriostat

- Provides enhanced hygiene
- Helps prevent the growth of bacteria

Ideal for use in

- Underground – all areas of train
- Overground – entrance, cab, galley, toilets, guard's room, luggage storage, second class travel areas, restaurant cars
- Short distance commuter – entrance, corridor, seating, cab, toilets
- Long distance commuter – entrance, corridor, cab, toilets
- Monorail
- Airport shuttle
- Eurotunnel - walkways

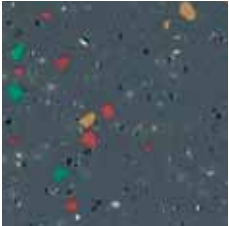
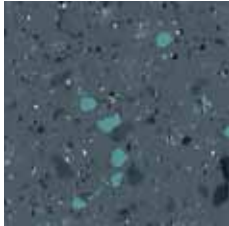
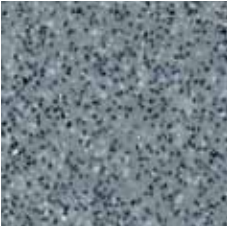
For specification see page 10-11



Capri LRV 11
MOM2004 (2mm),
MOM2504 (2.5mm)
WR231 / A1M73

Storm LRV 16
MOM2010 (2mm),
MOM2510 (2.5mm)
WR82 / A1M82

Elan LRV 26
MOM2002 (2mm),
MOM2502 (2.5mm)
WR81 / A1M81

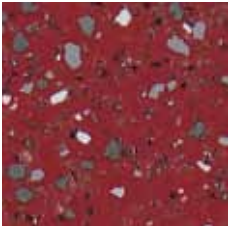
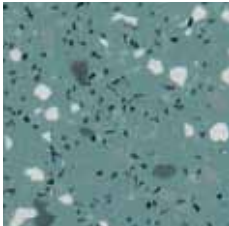
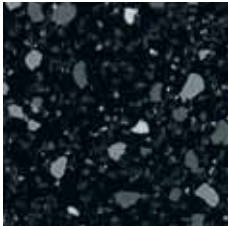
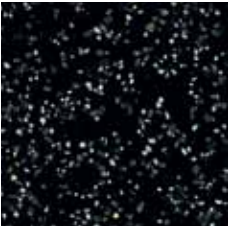


Quattro LRV 15
MOM2001 (2mm),
MOM2501 (2.5mm)
WR249 / A1M249

Fog LRV 27
MOM2005 (2mm),
MOM2505 (2.5mm)
WR81 / A1M81

Zeal LRV 15
MOM2012 (2mm),
MOM2512 (2.5mm)
WR83 / A1M83

Cyber LRV 14
MOM2006 (2mm),
MOM2506 (2.5mm)
WR83 / A1M83



Black LRV 7
MOM2011 (2mm),
MOM2511 (2.5mm)
WR100 / A1M100

Phantom LRV 7
MOM2008 (2mm),
MOM2508 (2.5mm)
WR100 / A1M100

Midnight LRV 8
MOM2007 (2mm),
MOM2507 (2.5mm)
WR72 / A1M72

Thema LRV 24
MOM2009 (2mm),
MOM2509 (2.5mm)
WR52 / A1M52

Sprint LRV 12
MOM2003 (2mm),
MOM2503 (2.5mm)
WR248 / A1M238

Products available in kit and roll format.

Please call to discuss your bespoke options, such as custom-made colours or made-to-order lengths and widths.

Please note: the 2.5mm version is available from stock, the 2mm is available to order.

Product information Tel: +44 1462 707 600 E-mail: enquiries@altro.com

For technical specifications and details of accessories, visit www.altrotransflor.com

Codes: **LRV** = Light Reflectance Value, **WR** = Weldrods, **A1M** = Mastic

For an unobtrusive appearance, colour matched weldrods and mastics are available.

EXPERIENCE HAS SHOWN THAT PRINTING CANNOT REPRODUCE COLOURS ACCURATELY. IF COLOUR CHOICE IS CRITICAL, PLEASE REQUEST A SAMPLE OF THE MATERIAL



Key features

- Acrylic construction
- 2mm thickness
- Fire, smoke and toxicity compliant
- Lightweight
- Pre-cut service available
- Includes 3 NEW colours by customer demand
- 6 plain popular, corporate colours
- Contains recycle
- Warranty 10 years
- Backed by full Altro Assurance of Customer Satisfaction for lifetime of product

Contains integral Altrosan bacteriostat

- Provides enhanced hygiene
- Helps prevent the growth of bacteria

Ideal for use in

- Underground – all areas of train
- Overground – entrance, cab, galley, toilets, luggage storage, second class travel areas
- Short distance commuter – entrance, corridor, seating, cab, toilets
- Long distance commuter – entrance, corridor, cab, toilets
- Monorail – all areas of train
- Eurotunnel - walkways

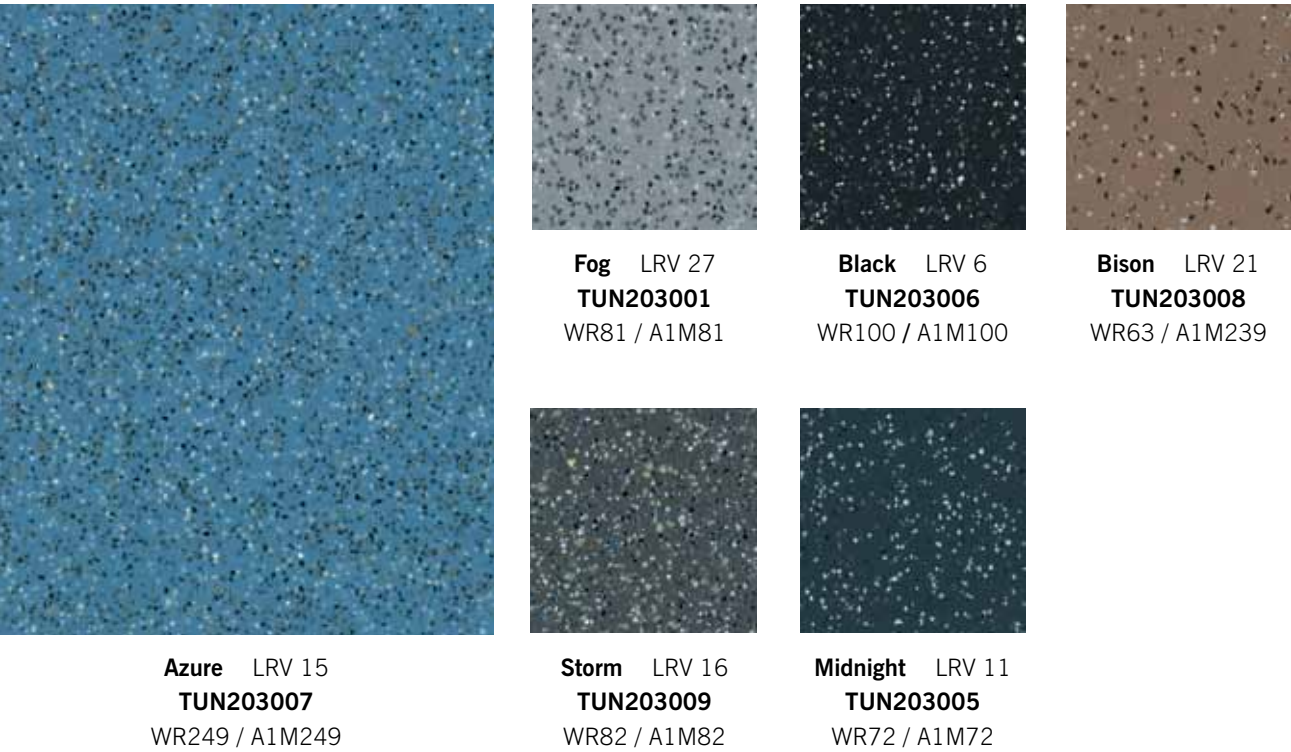
For specification see page 10-11

This well-established acrylic range has been improved with enhancements to its colour range and construction, bringing you additional product benefits.

Designed with your passenger safety in mind, acrylic Altro Transflor Tungsten provides full **fire, smoke and toxicity** compliance and the reassurance afforded by a safety floor with enhanced slip resistance. This acrylic flooring fulfils the need for resilience and safety where vinyl flooring is not the preferred option.

The look of Altro Transflor Tungsten has been brought up-to-date with the introduction of **three new colours**, which have been developed through a programme of extensive customer research, to bring you exactly what you need in your rolling stock.

Its new formulation brings with it **superior flexibility** and the new scrim affords **additional strength**. The range now incorporates a new fleece backing for ease of bonding, which also adds to the enhanced flexibility, making the product easier to install. Altro Transflor Tungsten boasts long-lasting **durability**, helping reduce your repair and replacement costs over the lifetime of the product. It can be welded to create a tankable installation with impervious jointing which protects the subfloor from the ingress of water. At 2mm thick, this **lightweight** flooring is easy to handle and install in confined and awkward areas. Its light weight can contribute to overall fuel economies.



Products available in kit and roll format.

Please call to discuss your bespoke options, such as custom-made colours or made-to-order lengths and widths.

Product information Tel: +44 1462 707 600 E-mail: enquiries@altro.com

For technical specifications and details of accessories, visit www.altrotransflor.com

Codes: **LRV** = Light Reflectance Value, **WR** = Weldrods, **A1M** = Mastic

For an unobtrusive appearance, colour matched weldrods and mastics are available.

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Altro Transflor Met 20/25™



Altro Transflor Met 20/25 is a **fire, smoke and toxicity** compliant safety floor with a proven twelve year track record. This product represents excellent value for money and can offer significant cost savings over its lifetime. Available in two thicknesses, 2mm and 2.5mm, it remains **lightweight and flexible** even in the 2.5mm option and is therefore a perfect solution for installation in confined locations. Typically, as this product is lighter than many other flooring options, installation is faster and more cost-effective. The lighter carriage weight, achieved by installing Altro Transflor Met 20/25, can contribute to long-term fuel savings. Strong and **durable** with excellent slip resistance, its proven technology will keep your passengers safe for the full term of its warranty and beyond. Protect the subfloor of your rolling stock with welded, impervious jointing which creates a tankable flooring system.

This successful range offers you the opportunity to create a totally **bespoke** safety flooring to match your corporate livery and complement the aesthetics of your rolling stock. Simply choose your base colour, plain or chipped finish and whether you would like to include the Windmill pattern (for images of Windmill pattern visit www.altrotransflor.com). The swatches shown opposite are for illustration only, for the full scope of options possible, please consult your local Altro Representative.

Altro Transflor Met 20/25 contains recyclate and is 100% recyclable.

Key features

- 2mm and 2.5mm thicknesses
- Fire, smoke and toxicity compliant BS6853 Class1B
- Lightweight
- Pre-cut service available
- Bespoke colour service available (conditions apply)
- Contains recyclate and can be recycled
- Warranty 10 years (2mm) / 12 years (2.5mm)
- Backed by full Altro Assurance of Customer Satisfaction for lifetime of product

Contains integral Altrosan bacteriostat

- Provides enhanced hygiene
- Helps prevent the growth of bacteria

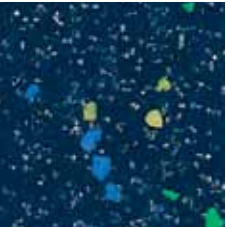
Ideal for use in

- Underground – as national standards vary please consult your local Altro representative for suitable areas
- Overground – entrance, cab, galley, toilets, guard's room, luggage storage, second class travel areas
- Short distance commuter – entrance, corridor, seating, cab, toilets
- Long distance commuter – entrance, corridor, cab, toilets
- Monorail
- Airport shuttle

For specification see page 10-11



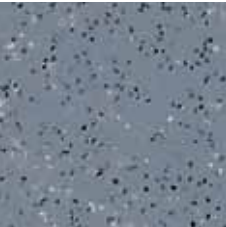
Midnight LRV 9
MET2042 (2mm),
MET25421 (2.5mm)
WR72 / A1M72



Quasar Blue LRV 7
MET2032 (2mm),
MET2532 (2.5mm)
WR73 / A1M73



Storm LRV 15
MET20903 (2mm),
MET25903 (2.5mm)
WR82 / A1M82



Grampian LRV 23
MET2084 (2mm),
MET2584 (2.5mm)
WR84 / A1M84

The swatches shown are for illustration only. Please call to discuss your bespoke options, such as custom-made colours or made-to-order lengths and widths.

Products available in kit and roll format.

[Product information](#) Tel: +44 1462 707 600 E-mail: enquiries@altro.com

For technical specifications and details of accessories, visit www.altrotransflor.com

Codes: **LRV** = Light Reflectance Value, **WR** = Weldrods, **A1M** = Mastic For an unobtrusive appearance, colour matched weldrods and mastics are available.

EXPERIENCE HAS SHOWN THAT PRINTING CANNOT REPRODUCE COLOURS ACCURATELY. IF COLOUR CHOICE IS CRITICAL, PLEASE REQUEST A SAMPLE OF THE MATERIAL

PROPERTY		ALTRO TRANSFLOR MOMENTUM 2MM	ALTRO TRANSFLOR MOMENTUM 2.5MM
SPECIFICATION			
Format		Roll / Kit	Roll / Kit
EN 426	Dimensions	20m x 2m / 6.58' x 65.62'	20m x 2m / 6.58' x 65.62'
EN 428	Thickness	2.0mm / 0.08"	2.5mm / 0.10"
EN430	Weight	2.5 kg / m² / 4.60lb / yd²	3 kg / m² / 5.53lb / yd²
PERFORMANCE (SLIP)			
TRRL		> 40	> 40
DIN 51130		R10	R10
Satra TM144		> 40	> 40
COMPLIANCE			
BS6853		Category Ia	Category Ia
DIN 5510			
- EN ISO 5659-2	Toxicity	FED <1	FED <1
- EN ISO 9239-1	Fire	> 4.5kW / m² SF3	> 4.5kW / m² SF3
NFPA 130 / 49CFR			
- ASTM-E-662	Smoke	Ds (1.5) < 100 Ds (4.0) < 200	Ds (1.5) < 100 Ds (4.0) < 200
- ASTM-E-648	Fire	Class 1	Class 1
NFF-16101			
- NFP 92-501	Fire		
- NFX 70-100	Smoke/ Toxicity		

ALTRO TRANSFLOR TUNGSTEN	ALTRO TRANSFLOR MET 20	ALTRO TRANSFLOR MET 25
Roll / Kit	Roll / Kit	Roll / Kit
20m x 2m / 6.58' x 65.62'	20m x 2m / 6.58' x 65.62'	20m x 2m / 6.58' x 65.62'
2.0mm / 0.08"	2.0mm / 0.08"	2.5mm / 0.10"
2.7 kg / m² / 4.98lbs / yd²	2.7kg / m² / 4.98lbs / yd²	3.2 kg / m² / 5.87lbs / yd²
> 40	> 40	> 40
R11	R10	R10
> 40	> 40	> 40
Category Ia	Category Ib	Category Ib
FED <1		
> 4.5kW / m² SF3	> 4.5kW / m² SF3	> 4.5kW / m² SF3
Ds (1.5) < 100 Ds (4.0) < 200		
Class 1	Class 1	Class 1
M3	M1	
F1	F4	

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