

## marmoleum® FR<sup>2</sup>

## LINOLEUM

### marmoleum® real FR<sup>2</sup>

Real FR is our classic aesthetic, consisting of many carefully selected individual colour tones that combine to create beautifully graded colours, from warm neutrals and calm greys to exciting brights and trend led shades. Developed to create choice, Real FR can be mixed together or combined with other Marmoleum designs to provide more imaginative compositions.



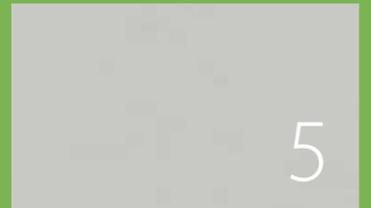
### marmoleum® fresco FR<sup>2</sup>

Fresco FR has a strong palette of subtly blended tone-on-tone items, each creating a fresh, delicate and balanced aesthetic. The soft contrast of its refined marbled structure gives a gentle feel which sets the stage for calm and soothing interiors. The softness of Fresco FR enables it to sit well next to all other Marbled and Striato FR items.



### marmoleum® walton FR<sup>2</sup>

Presenting the pure character of linoleum. The solid identity of Marmoleum Walton FR with its smooth surface and minimal, unpretentious material expression makes it the ultimate and pure representative of our linoleum flooring. Its plain visual makes Walton FR easily adaptable to the context it is used in, and the subtle texture gives it a soft and natural look.



### marmoleum® concrete FR<sup>2</sup>

The solid marble design of Marmoleum Concrete FR<sup>2</sup> differentiates itself from the classic Marmoleum FR<sup>2</sup> flooring with its subtle concrete structure. The color palette is neutral with both warm and cool tones, yet with an extension of 6 bright colours for creating a powerful accent in your floor design.



### marmoleum® vivace FR<sup>2</sup>

Vivace FR<sup>2</sup> is our liveliest and most outspoken aesthetic made with six to eight tones in each colourway. The differentiated elements combine to create a chameleon-like product that adapts well to a multitude of interiors, co-ordinating easily with many other surface finishes and colours. The high-contrast construction of Vivace FR<sup>2</sup> makes it a smart choice for areas prone to soiling, where the superior appearance retention of the product is valued.



### marmoleum® striato FR

Marmoleum Striato FR offers a palette that is neutral with warm tones and grey-infused hues spanning from light to dark, delivering natural looking floors that are great on their own and in combination with other floor coverings. The subtle linear pattern will easily pick up colours from its environment and works well with other materials.



*Please ensure that 'FR<sup>2</sup>' or 'FR' is clearly noted on all orders.*

**marmoleum® FR<sup>2</sup>**  
is the next generation  
linoleum floor covering  
for rail vehicles that  
now achieves  
**EN45545-2: HL3**  
**certification**

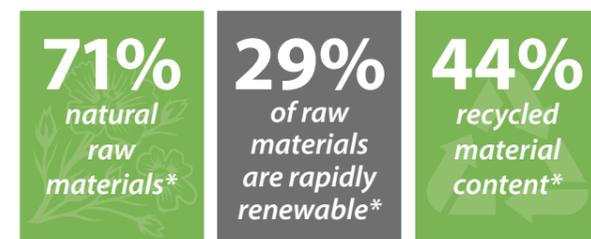
# marmoleum<sup>®</sup> FR<sup>2</sup> / marmoleum<sup>®</sup> striato FR

**Marmoleum has a track record of over 150 years. A natural floor covering that is associated with sustainability, durability, high quality and innovative design.**

For the rail sector, Marmoleum FR<sup>2</sup> and Marmoleum Striato FR, offer total versatility in terms of colour and design, but what makes these floor coverings really stand out is the fact that they are created using a high percentage of natural raw materials, with renewable and recycled contents.

- **Homogeneous durable construction**
- **A sustainable floor covering**
- **Low life cycle costs – can be renovated and repaired**
- **A floor covering that is naturally bacteriostatic**
- **Reaction to fire EN45545-2: HL3**
- **Lightweight at 2.9kg/m<sup>2</sup>**
- **Wide range of designs and colourways**
- **Aquajet cut to shape/size service available**
- **Suitable for use with underfloor heating**

## Environmental leadership:



\*The above results are for Marmoleum FR<sup>2</sup>. There is a small variation in results for Striato FR. Please ask for further details.

## Infection control & Allergy UK

Independent testing by the University of Glasgow has proved that Marmoleum has a unique suitability for a diverse range of environments where hygiene and control of bacteria are important. Marmoleum FR<sup>2</sup>/Striato FR is also an Allergy UK approved floor covering.



## Topshield<sup>2</sup>

All Marmoleum FR<sup>2</sup>/Striato FR floors include Topshield<sup>2</sup>, a double layer, UV-cured finish that is scratch and scuff resistant, easy to maintain and ensures long lasting appearance retention. With its natural bacteriostatic properties and resistance to chemicals, it is the ideal solution for heavy traffic rail vehicles.



## Welding

In the majority of installations, Marmoleum does not need to be welded as it is completely dimensionally stable and will not shrink after proper installation. However, if welding is the preferred option, there are matching welding cords for every Marmoleum FR<sup>2</sup>/Striato FR design.



## Aquajet

Forbo recognise that sometimes you may wish to create something totally unique, perhaps something specific to a particular project, such as signage to facilitate the restrictions and safety guidelines within the train. Whatever may be required, our in-house design team has skills and experience to turn ideas into reality.

From an initial concept, detailed drawing, or computer file, our design team prepares a flooring design that is transferred electronically to the Aquajet cutting machines. These computer-controlled machines represent state-of-the-art cutting technology and produce precision cut items accurate to a fraction of a millimetre.

The pattern is inlaid and, importantly, retains all the performance characteristics of the original product. Whether it is a complete rail layout in floor covering, a company logo, signage or thematic design, the possibilities are limitless.



Forbo's Marmoleum FR<sup>2</sup> and Striato FR have been independently confirmed as CO<sub>2</sub> neutral floor coverings in the cradle to gate phase of the product's life cycle, without the need for offsetting.

In simple terms, the CO<sub>2</sub> produced in the extraction, transportation and manufacturing process of Marmoleum FR<sup>2</sup>/Striato FR is balanced by the removal of CO<sub>2</sub> through the growing of its natural ingredients such as flax, jute and rosin.

As such, Forbo Marmoleum FR<sup>2</sup>/Striato FR is the best flooring choice for every sustainable interior. By using durable materials in your rail projects, you can also contribute to a better environment.



A floor covering made from natural materials. Key materials from which Marmoleum FR<sup>2</sup>/Striato FR is created:

- **linseed oil from the seeds of the flax plants**
- **fibres from jute stems**
- **rosin from pine trees**
- **upcycled wood residues from controlled sustainable forestry**
- **limestone**
- **pigments**



# marmoleum® FR<sup>2</sup>

fresco FR<sup>2</sup> | real FR<sup>2</sup> | vivace FR<sup>2</sup> | walton FR<sup>2</sup> | concrete FR<sup>2</sup>



# marmoleum® FR<sup>2</sup>

fresco FR<sup>2</sup> | real FR<sup>2</sup> | vivace FR<sup>2</sup> | walton FR<sup>2</sup> | concrete FR<sup>2</sup>

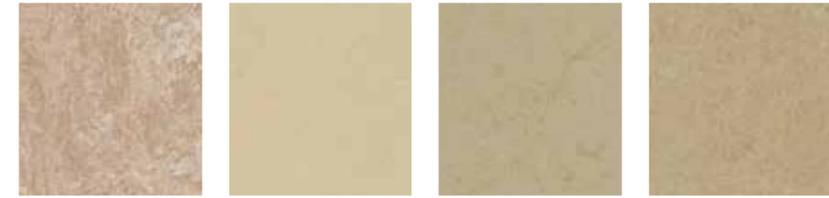


Description	Linoleum sheet	
Dimensions	EN ISO 24341	Roll width 2.0m Roll length ≤ 32m
Total thickness	2.5mm	
Collection size	124	
Acoustical impact sound reduction	EN-ISO 717-2	ΔL <sub>w</sub> = <5 dB
Tested flammability standard	EN 45545-2	HL3*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	EN 1815	≤ 2 kV
Thermal conductivity	EN 12524	0.17 W/m·K

3858FR2 | Barbados LRV 65 3726FR2 | Venus LRV 52



2713FR2 | calico LRV 53 2499FR2 | sand LRV 56 3120FR2 | rosato LRV 51



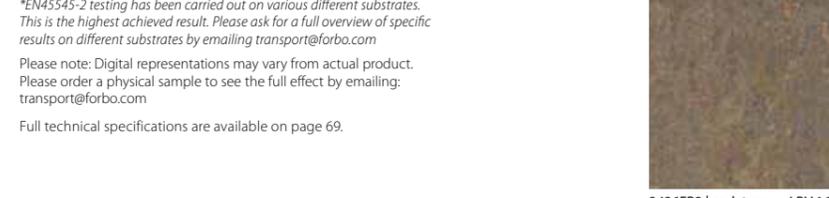
3861FR2 | Arabian pearl LRV 50 3711FR2 | cloudy sand LRV 49 3234FR2 | forest ground LRV 33 3427FR2 | agate LRV 39 3232FR2 | horse roan LRV 40 3708FR2 | fossil LRV 34



3141FR2 | Himalaya LRV 40 3729FR2 | mica LRV 42 3728FR2 | kaolin LRV 36 3890FR2 | oat LRV 31 3252FR2 | sparrow LRV 29 3706FR2 | beton LRV 28



3727FR2 | drift LRV 31 3246FR2 | shrike LRV 21 3702FR2 | liquid clay LRV 23



3709FR2 | silt LRV 22 3254FR2 | clay LRV 17 3568FR2 | delta lace LRV 13



3426FR2 | cork tree LRV 16 3874FR2 | walnut LRV 11 3236FR2 | dark bistre LRV 7

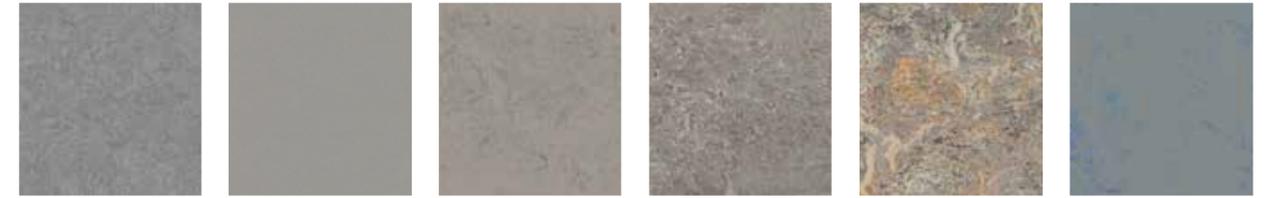
*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing transport@forbo.com*  
 Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: transport@forbo.com  
 Full technical specifications are available on page 69.



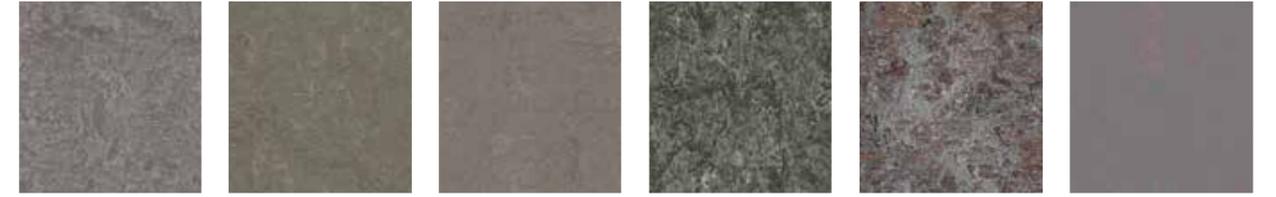
3257FR2 | edelweiss LRV 58 3701FR2 | moon LRV 61 3136FR2 | concrete LRV 47 3860FR2 | silver shadow LRV 48 3733FR2 | yellow shimmer LRV 42



3883FR2 | moonstone LRV 45 3724FR2 | orbit LRV 37 3889FR2 | cinder LRV 30 3146FR2 | serene grey LRV 27 3420FR2 | surprising storm LRV 31 3712FR2 | orange shimmer LRV 31



3866FR2 | eternity LRV 21 3367FR2 | alloy LRV 25 3704FR2 | satellite LRV 23 2629FR2 | eiger LRV 19 3405FR2 | Granada LRV 28 3734FR2 | blue shimmer LRV 20



3137FR2 | slate grey LRV 16 3723FR2 | nebula LRV 17 3705FR2 | meteorite LRV 16 3048FR2 | graphite LRV 14 3421FR2 | oyster mountain LRV 17 3735FR2 | purple shimmer LRV 18



3872FR2 | volcanic ash LRV 10 3725FR2 | cosmos LRV 9 3368FR2 | grey iron LRV 12 3737FR2 | red shimmer LRV 15



2939FR2 | black LRV 5 3707FR2 | black hole LRV 7 3139FR2 | lava LRV 9 3703FR2 | comet LRV 14

# marmoleum® striato FR

Marmoleum Striato FR offers a palette that has neutral and bright colours with warm tones and grey-infused hues spanning from light to dark, delivering natural looking floors that are great on their own and in combination with other floor coverings.

The subtle linear pattern will easily pick up colours from its environment and works well with other materials.



5216FR | Pacific beaches LRV 48



5241FR | sunshine yellow LRV 39



5232FR | rocky ice LRV 44



3575FR | white cliffs LRV 57



5230FR | whitewash LRV 49



5238FR | straw field LRV 42



5225FR | compressed time LRV 34



5240FR | canyon shadow LRV 18



5244FR | hint of yellow LRV 70



3573FR | trace of nature LRV 27



5246FR | orange highlights LRV 33



5239FR | oxidised copper LRV 27



5242FR | red roses LRV 21



5217FR | withered prairie LRV 23



5221FR | colour stream LRV 26



5245FR | blue stroke LRV 69



5243FR | peacock blue LRV 23



5218FR | Welsh moor LRV 8



5237FR | black sheep LRV 18



5247FR | dark aura LRV 11

LRV 11

Description	Linoleum sheet	
Dimensions	EN-ISO 24341	Roll width 2,0m Roll length ≤ 32m
Total thickness	2.5mm	
Collection size	20	
Impact noise reduction	EN-ISO 717-2	ΔLw = <5 dB
Tested flammability standard	EN 45545-2	HL3*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	EN 1815	≤ 2 kV
Thermal conductivity	EN 12524	0.17 W/m-K

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*  
 Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
 Full technical specifications are available on page 69.

MARMOLEUM FR<sup>2</sup>/STRIATO FR **REFERENCES BY DESIGN**

Real FR <sup>2</sup>	Fresco FR <sup>2</sup>	Vivace FR <sup>2</sup>	Walton FR <sup>2</sup>	Concrete FR <sup>2</sup>	Striato FR
2499FR2 sand	2939FR2 black	3403FR2 Asian tiger	3352FR2 Berlin red	3568FR2 delta lace	3573FR trace of nature
2621FR2 dove grey	3125FR2 golden sunset	3411FR2 sunny day	3358FR2 petrol	3701FR2 moon	3575FR white cliffs
2629FR2 eiger	3126FR2 Kyoto	3413FR2 green melody	3359FR2 bottle green	3702FR2 liquid clay	5216FR Pacific beach
2713FR2 calico	3131FR2 scarlet	3407FR2 donkey island	3353FR2 eggplant purple	3703FR2 comet	5217FR withered prairie
2767FR2 rust	3139FR2 lava	3405FR2 Granada	3370FR2 terracotta	3704FR2 satellite	5218FR Welsh moor
3030FR2 blue	3203FR2 henna	3420FR2 surprising storm	3360FR2 vintage blue	3705FR2 meteorite	5221FR colour stream
3032FR2 mist grey	3246FR2 shrike	3421FR2 oyster mountain	3355FR2 rosemary green	3706FR2 beton	5225FR compressed time
3038FR2 Caribbean	3247FR2 green	3426FR2 cork tree	3363FR2 lilac	3707FR2 black hole	5230FR whitewash
3048FR2 graphite	3251FR2 lemon zest	3427FR2 agate	3368FR2 grey iron	3708FR2 fossil	5232FR rocky ice
3053FR2 dove blue	3252FR2 sparrow		3369FR2 titanium	3709FR2 silt	5237FR black sheep
3055FR2 fresco blue	3254FR2 clay		3367FR2 alloy	3711FR2 cloudy sand	5238FR straw field
3075FR2 shell	3257FR2 edelweiss			3712FR2 orange shimmer	5239FR oxidised copper
3120FR2 rosato	3259FR2 mustard			3723FR2 nebula	5240FR canyon shadow
3123FR2 arabesque	360FR2 leaf			3724FR2 orbit	5241FR sunshine yellow
3127FR2 Bleckerstreet	3261FR2 marine			3725FR2 cosmos	5242FR red roses
3136FR2 concrete	3262FR2 marigold			3726FR2 Venus	5243FR peacock blue
3137FR2 slate grey	3263FR2 rose			3727FR2 drift	5244FR hint of yellow
3141FR2 Himalaya	3264FR2 Greek blue			3728FR2 kaolin	5245FR blue stroke
3146FR2 serene grey	3265FR2 avocado			3729FR2 mica	5246FR orange highlights
3173FR2 Van Gogh	3266FR2 lilac			3730FR2 Stella	5247FR dark aura
3174FR2 Sahara	3267FR2 aqua			3731FR2 flux	
3219FR2 spa	3269FR2 turquoise			3732FR2 asteroid	
3224FR2 chartreuse	3271FR2 hunter green			3733FR2 yellow shimmer	
3225FR2 dandelion	3273FR2 ruby			3734FR2 blue shimmer	
3232FR2 horse roan	3825FR2 African desert			3735FR2 purple shimmer	
3233FR2 shitake	3828FR2 blue heaven			3736FR2 green shimmer	
3234FR2 forest ground	3846FR2 natural corn			3737FR2 red shimmer	
3236FR2 dark bistre	3858FR2 Barbados			3738FR2 orange glow	
3268FR2 honey suckle	3860FR2 silver shadow			3739FR2 blue glow	
3270FR2 violet	3861FR2 Arabian pearl			3740FR2 purple glow	
3272FR2 plum	3866FR2 eternity			3741FR2 yellow glow	
3847FR2 golden saffron	3872FR2 volcanic ash			3742FR2 green glow	
3881FR2 green wellness	3874FR2 walnut			3743FR2 red glow	
	3883FR2 moonstone				
	3885FR2 spring buds				
	3889FR2 cinder				
	3890FR2 oat				
	3891FR2 sage				