## xf surface treatment and xf welding rods

## A SURFACE REVOLUTION



## LINOLEUM



- > Superior surface protection for extreme toughness
- > xf extreme finish surface treatment urethane polymer-based surface treatment with particle reinforcement
- > xf welding rods for clean and carefree joints
- > Excellent resistance to abrasion, stains and chemicals
- > Easy cleaning and maintenance no initial wax or polish needed

# Linoleum xf A surface revolution!

For more than a hundred years, linoleum flooring has been appreciated for its many strong benefits – its naturalness, comfort, durability and, most of all, its beauty. Now another important benefit can be added to the list: a surface protection that gives superior resistance to abrasion and chemicals as well as easy cleaning and maintenance. The daily care of linoleum flooring is a completely different story from now on. It gives a totally new economic picture, with excellent life cycle costs.



### Linoleum xf construction

 Urethane polymerbased surface treatment with particle reinforcement
 Solid linoleum
 Jute backing Tarkett presents Linoleum xf – a true surface revolution. With Linoleum xf, there are no longer any limitations to consider when you choose linoleum flooring. From beginning to end, Linoleum xf will give you all the advantages you could wish for:

- Extremely strong surface toughness second only to diamonds
- Excellent resistance to abrasion, stains and chemicals
- xf welding rods based on unique formula for perfect joints over time
- No initial wax or polish needed no need to strip
- Easy cleaning and maintenance, 30% saving on maintenance costs
- More than 50% saving on water, detergent and energy
- Excellent life cycle cost

#### Abrasion resistance for xf

The abrasion resistance for xf shows remarkable results, compared with regular surface treatment for resilient flooring. Surface treatment loss is measured in a modified Taber test, where a wheel covered with emery paper and loaded with a 1 kg weight rotates on the surface. The emery paper is renewed every 20 revolutions to maintain the abrasive action. When the surface treatment is worn out, the number of revolutions is noted.

Abrasion test based on internal Tarkett Laboratory testing.

#### Measure of Surface Treatment loss after number of Taber revolutions



#### Surface toughness second only to diamonds

Thanks to the permanent molecular cross-linking of the urethane formulation, the xf-treated surface is extremely resistant. On the Mohs scale of hardness, only diamond is tougher.





## Linoleum xf welding rods

All the advantages provided by Tarkett Linoleum flooring are now crowned by a crucial benefit for a perfect result – the xf welding rod. A unique formula developed and patented by Tarkett allows for welding rods that need no special treatment, and yet resist all kinds of soiling and abrasion. Your flooring will have perfect joints, both from an aesthetic and a functional point of view.

#### Unique cleaning performance

Abrasive powders were deposed by friction on the two samples to the right. The surfaces were cleaned with a dried rag. The sample with xf welding rod shows a remarkable improvement when it comes to soiling behaviour and cleaning properties.



**Scratch test** *xf welding rod\** 



Traditional welding rod\*



**Soiling test** *xf welding rod\** 



Traditional welding rod\*

## Linoleum xf - cleaning and maintenance

The greatest advance for Linoleum xf is the reduced cleaning and maintenance. Compared with untreated linoleum flooring, several steps are no longer necessary, and the whole cleaning and maintenance process is simplified. Always follow Tarkett's cleaning and maintenance system to be sure to get the very best result.

#### **Cleaning in three** easy steps

Our unique surface protection makes it possible to reduce cleaning and maintenance to three easy steps, yet still gets top flooring performance in every way.

### **General advice**

- Resilient floors are damaged by solvents.
- Wipe up any grease and spilt oil immediately, as it may damage the surface.
- Black rubber wheels and rubber feet can discolour the floorcovering.
- To avoid damage, chairs and stools should be fitted with quality plastic protective end caps.
- Remember, the light colours need more frequent cleaning.

#### 1. Preventive care for a cleaner environment



Entrance matting About 80% of surface soiling that has to be cleaned off is brought from outside. And 90% of that soiling can be avoided by an effective and correctly dimensioned entrance mat.

#### 2. Daily and regular cleaning



#### Dry mopping / Sweeping Removes dust and dirt. Use yarn or microfibre mops, or disposable mops, dry or impregnated. Use a suitable broom with soft bristles.



Vacuum cleaning (for large areas) Removes dust and loose dirt. Can supplement mopping in confined spaces. Recommended for large areas and initial site cleaning.

or

## Use a mop dampened with water or detergent solution. It is essential that water does not

Damp mopping





The floor is mopped using a wrung-out yarn mop head. The mop should not be over wet (to avoid wiping up afterwards). In some cases, it may be necessary to occasionally rinse with clean water. For very heavily soiled areas only.

or

or



#### Combined machine (for large areas) Industrial machine-cleaning (large areas). Use diluted neutral detergent. Adjustable speed (low

150-250 rpm to higher). Beige/red pads are usually most suitable, but check with pad guide.



#### Spot and stain removal

Treat stains immediately. Handle spot using a white/red nylon pad with methylated spirit, cleaning spirit or neutral detergent (solvents should not be used). Work from the outside of the mark towards its centre. Rinse and wipe afterwards with clean water.

#### 3. Periodic cleaning



#### Spray cleaning (Spot-cleaning and buffing in one operation) + Dry buffing

For light soiling and traffic wear to revitalize the surface. Mix water and neutral detergent or floor maintainer in the container tank. Suitable speed 300-500 / 1000 rpm. Dry buffing is then used to recover gloss when required. White pad is recommended. Suitable speed is 300-1000 rpm.

or



#### Machine scrubbing + Wet vacuuming + Dry buffing

Thorough machine-cleaning using a suitable pad. Use diluted neutral detergent. Low speed 150-250 rpm. Red pads are usually most suitable. After scrubbing cross-wise, wet vacuum to collect slurry, rinse with clear water and wet vacuum once again. Always dry-buff to restore finish (Used to restore the trafficked surface. Red pad is recommended. Suitable speed is 500-1000 rpm depending on the flooring material).







#### Life cycle cost for Linoleum xf

The cost of the initial investment and installation normally represents just a small part of a flooring's total life cycle cost. The rest is cleaning and maintenance. And that is why the reduced frequency and extent of cleaning and maintenance give Linoleum xf a very favourable life cycle cost.

Compared with untreated linoleum flooring, payback on the extra investment comes within one year. For more information, please contact your Tarkett representative.



### Cleaning costs – savings for 1000 m<sup>2</sup>

Cleaning and maintenance costs are reduced by 30%. Example: For an area of 1,000 m<sup>2</sup> over a period of 10 years, the savings will reach 60,000 euro.

Based upon internal Tarkett LCC (Life Cycle Cost) calculations.





#### **Resource consumption**

Thanks to the easy cleaning properties of Linoleum xf, there is a 50% reduction in the consumption of water, detergent and energy. This is a strong contribution to the environment.

Linoleum xf is part of Tarkett's choice of sustainable solutions, an integrated system that allows for balancing all the competing needs, while making choices

## Tarkett's Balanced Choice



BETTER MATERIALS Where we can use renewable resources, we do



RESOURCE STEWARDSHIP Using fewer resources is good for the environment and the bottom line



that are truly sustainable and work together aesthetically.

PEOPLE-FRIENDLY SPACES We make floors that help people work, play, shop, heal and learn better



REUSE AND RECYCLE We find ways to use more recycled content at the start and recycle more product at the end

Tests are carried out by the WFK Institute in Germany. WFK is an independent international cleaning technology research centre in Krefeld, Germany. Founded in 1950, it now specialises in hard surface cleaning technologies.

# And we can prove it

Both internal and external testing show extraordinary results for Linoleum xf. External tests by WFK compared Linoleum xf with non-xf treated linoleum. And the results speak for themselves.

#### Visual soiling behaviour and cleaning performance

The differences in brightness before and after soiling and cleaning were measured photometrically in accordance with DIN 5033-3 including the confidence interval. It is clear that Linoleum xf shows significantly better results in terms of brightness and colour differences.

#### Alkali resistance

Alkaline fluids (detergent) were left on test surfaces for different periods. Linoleum xf clearly shows significantly better results in terms of visual surface change. Example: Virtually no visual change to Linoleum xf after having fluid at pH 13 on its surface for 24 hours.

Test report number H0 3098/05-A

#### Stain test

Quantities (2 ml) of isopropanol, acetone, coffee and betaisodona on the different linoleum surfaces for 2 hours, and the changes were measured in accordance with DIN 5033-3. The results show that Linoleum xf has significantly better resistance to aggressive substances like these, in terms of visual surface change.

Based upon internal testing

### Visual soiling behaviour New Linoleum xf Confidence interval: 0.7 Confidence interval: 0.7 10.00 20.00 5.00 15.00 25.00 0.00



#### Alkali resistance Visual change after 24 hours

New Tarkett Linoleum xf	Non xf-treated linoleum
× × ×	× × ×
XXX	-
XXX	-
	New Tarkett Linoleum xf

**XXX** = no visual change

= visual change

#### Stain test

Substance	New Tarkett Linoleum xf	Non xf-treated Linoleum
Isopropanol Acetone Coffee Betaisodona	× × × × × × × × ×	× × –

**X X X** = no visual changes

X X = no significant visual changes

X = slight visual changes
 — = significant visual changes

# Linoleum xf Collection

With its marbled design and saturated colours, the Linoleum collection is an inspiration to every sector – education, healthcare, commercial and residential.







2.5 mm: 1872 610



Smoke

2.0 mm: 1871 608

2.5 mm: 1872 608



**Pebble** 2.0 mm: 1871 604 2.5 mm: 1872 604





2.0 mm: 1871 669 2.5 mm: 1872 669 Navy 2.0 mm: 1871 688

2.5 mm: 1872 688



**Ocean** 2.0 mm: 1871 665 2.5 mm: 1872 665 3.2 mm: 1873 665 Silencio xf: 1892 665





**Lila** 2.0 mm: 1871 649 2.5 mm: 1872 649



**Plum** 2.0 mm: 1871 618 2.5 mm: 1872 618



**Grass** 2.0 mm: 1871 650 2.5 mm: 1872 650



Leaf 2.0 mm: 1871 751 2.5 mm: 1872 751



**Absinthe** 2.0 mm: 1871 695 2.5 mm: 1872 695 Silencio xf: 1892 95



**Olive** 2.0 mm: 1871 750 2.5 mm: 1872 750 **Sage** 2.0 mm: 1871 753 2.5 mm: 1872 753





**Burgundy** 2.0 mm: 1871 744 2.5 mm: 1872 744



**Carmine** 2.0 mm: 1871 645 2.5 mm: 1872 645



**Terracotta** 2.0 mm: 1871 641 2.5 mm: 1872 641 3.2 mm: 1873 641 Silencio xf: 1892 641



**Salmon** 2.0 mm: 1871 642 2.5 mm: 1872 642



**Coral** 2.0 mm: 1871 615 2.5 mm: 1872 615 Silencio xf: 1892 615



**Camel** 2.0 mm: 1871 616 2.5 mm: 1872 616 Silencio xf: 1892 616



 Citrine

 16
 2.0 mm: 1871 631

 16
 2.5 mm: 1872 631

 2 616
 2.5 mm: 1872 631

ALLEGRO xf



**Red mix** 2.5 mm: 1842 100



**Orange mix** 2.5 mm: 1842 130



**Yellow mix** 2.5 mm: 1842 120



**Anise mix** 2.5 mm: 1842 150



2.5 mm: 1842 170



2.5 mm: 1842 160



**Grey mix** 2.5 mm: 1842 140



**Purple** 2.5 mm: 1877 049



**Orange** 2.5 mm: 1877 037



**Yellow** 2.5 mm: 1877 036

**Anise** 2.5 mm: 1877 095





**Indigo** 2.5 mm: 1877 066

8



Stone 2.0 mm: 1871 692 2.5 mm: 1872 692



Aluminium 2.0 mm: 1871 672 2.5 mm: 1872 672



Steel 2.0 mm: 1871 673 2.5 mm: 1872 673 Silencio xf: 1892 673



Pewter 2.0 mm: 1871 685 2.5 mm: 1872 685



Zink 2.0 mm: 1871 671 2.5 mm: 1872 671



Platinium 2.0 mm: 1871 684 2.5 mm: 1872 684 Silencio xf: 1892 684



**Aquamarine** 2.0 mm: 1871 664 2.5 mm: 1872 664 3.2 mm: 1873 664



Ink 2.0 mm: 1871 662 2.5 mm: 1872 662 2.5 mm: 1872 666

Lavender 2.0 mm: 1871 670



Horizon 2.0 mm: 1871 663 2.5 mm: 1872 663 3.2 mm: 1873 663 Silencio xf: 1892 663



**Grey** 2.0 mm: 1871 793



**Ivory** 2.0 mm: 1871 601 2.5 mm: 1872 601



Khaki 2.0 mm: 1871 752 2.5 mm: 1872 752



2.0 mm: 1871 607 2.5 mm: 1872 607



2.5 mm: 1872 670

Taupe 2.0 mm: 1871 621 2.5 mm: 1872 621



Silk 2.0 mm: 1871 625 2.5 mm: 1872 625



Sand 2.0 mm: 1871 622 2.5 mm: 1872 622



Azurite 2.0 mm: 1871 624 2.5 mm: 1872 624



**Copper** 2.0 mm: 1871 634 2.5 mm: 1872 634



Earth

**Amber** 2.0 mm: 1871 636 2.5 mm: 1872 636



Chocolate

2.0 mm: 1871 632 2.5 mm: 1872 632

**Sunflower** 2.0 mm: 1871 628 2.5 mm: 1872 628 3.2 mm: 1873 628 Silencio xf: 1892 628



**Corn** 2.0 mm: 1871 612 2.5 mm: 1872 612 Silencio xf: 1892 612



Eggshell 2.0 mm: 1871 619 2.5 mm: 1872 619



Sisal 2.0 mm: 1871 611 2.5 mm: 1872 611 3.2 mm: 1873 611 Silencio xf: 1892 611



Cork 2.0 mm: 1871 679 2.5 mm: 1872 679



Beige mix 2.5 mm: 1842 121



2.5 mm: 1877 051



Black 2.5 mm: 1877 098 **Beige** 2.5 mm: 1877 002



# Linoleum xf

	NUME OF		50 50		A1:2004 A1:2004 A1:2004 A1:2004 A1:2004 Annufactured by: Tarkett SpA OS305 Narmi Italy EN 548 Linoleum xf
Technical data	Standards		Veneto xf		Veneto Acoustic xf
Total thickness	EN 428	2.0 mm	2.5 mm	3.2 mm	4.0 mm
Classification	EN 685 Domestic Commercial Light industrial UPEC	Classes: 23 32 41 U2SP2E1C2	Classes: 23 34 42 U4P3E1/2C2	Classes: 23 34 42 U4P3E1/2C2	Classes: 23 33 41
Total weight	EN 430	ca. 2 400 g/m²	ca. 3 000 g/m²	ca. 3 900 g/m²	ca. 4 500 g/m²
<b>Residual indentation</b>	EN 433	ca. 0.07 mm	ca. 0.08 mm	ca. 0.10 mm	ca. 0.25 mm
Castor chair	EN 425			Suitable for office cl	nairs with castors type W
Dimensional stability	EN 669				
Type of floorcovering	EN 686				
	EN 687				Linoleum on a corkment backing
	EN 14085				
Flexibility	EN 435 Method A	≤ 25 mm Ø	$\leq$ 30 mm Ø	≤ 40 mm Ø	≤ 30 mm Ø
Fire classification	EN 13501-1	C <sub>fl</sub> s1	C <sub>fl</sub> s1	C <sub>fl</sub> s1	C <sub>fl</sub> s1
Cigarette burns	EN 1399			Resis	stant to cigarette burns.
Static electrical propensity	EN 1815	< 2 kV	< 2 kV	< 2 kV	< 2 kV
Impact sound reduction	ISO 140-8 EN ISO 717-2	5 dB	6 dB	9 dB	14 dB
Impact sound reduction with Elafono*	ISO 140-8 EN ISO 717-2	14 dB	15 dB	15 dB	
Light fastness	ISO 105-B02 Method 3	$\geq 6$	≥ 6	≥ 6	≥ 6
Chemical resistance	EN 423			Resistant to d	ilute acids, oils, fats and
Thermal resistance	EN 1252/	0.012 m² K/W	0.015 m² K/W	0.019 m² K/W	0.040 m² K/W
Underfloor Heating	EN 12524	Suitable	Suitable	Suitable	Suitable
Colours		50	50	6	on request
Form of delivery (rolls)	EN 426		20-30 lm x 2 m	1	ca. 20 lm x 2 m
Form of delivery (tiles) - Side length - Squareness and straightness	EN 427				

#### **DESCRIPTION EN 548**

Linoleum homogeneous floorcovering on jute backing for rolls and synthetic backing for tiles.

#### Composition:

Wood and cork flour, linseed oil, natural resins, pigments.

The above information is subject to modifications for the benefit of further improvement (10/08). To obtain the exact colour of the samples, it is recommended to expose them to sunlight for several hours in order to remove the normal yellowing effect due to the oxidation process.

Tarkett's instructions regarding installation, cleaning and mainte-nance should be observed. Please contact Tarkett at the address shown

for these instructions.

\* Elafono:

Description: one-layer under layer made of cork grain and a binding agent on jute backing. Properties: sound-reducing effect. Available: rolls of 20 to 30 lm x 2 m. Thickness: 2.0 mm Ref: 1861030

CE (14041:2004)	Manufactured by: Tarket: SpA 05036 Narmi Italy EN 686 Linoleum Silencio xf	EN 14041:2004 EN 14041:2004 Tarkett Sp 05030 Narr Laly EN 687 Linoleum Acoust	atic xf	ISO 14001
Veneto Tiles xf	Silencio xf	Veneto Soluzione xf	Allegro xf	Etrusco xf
2.5 mm	3.8 mm	10 mm 2.5 mm		2.5 mm
Classes: 23 34 42	Classes: 23 33 41 U4P3E1/2C2	Classes: 23 32	Classes: 23 34 42 U4P3E1/2C2	Classes: 23 34 42 U4P3E1/2C2
ca. 3 150 g/m²	ca. 3 350 g/m²	ca. 8 600 g/m²	ca. 3 000 g/m²	ca. 3 000 g/m²
ca. 0.08 mm	≤ 0.20	max. 0.12 mm	ca. 0.08 mm	ca. 0.08 mm
(Norm EN 12529).				
Variation $\leq$ 0.10 %				
	Linoleum on a foam backing			
		Floor panels for loose laying		
$\leq$ 30 mm Ø	$\leq$ 30 mm Ø		$\leq$ 30 mm Ø	$\leq$ 30 mm Ø
C <sub>fl</sub> s1	C <sub>fl</sub> s1	C <sub>fl</sub> s1	C <sub>fl</sub> s1	C <sub>fl</sub> s1
< 2 kV	< 2 kV	< 2 kV	< 2 kV	< 2 kV
6 dB	17 dB	16 dB	6 dB	6 dB
			15 dB	15 dB
≥ 6	≥6	≥6	≥ 6	≥6
current solvents and alka	llis.			
0.015 m² K/W	0.040 m² K/W	0.098 m² K/W	0.015 m² K/W	0.015 m² K/W
Suitable	Suitable	Suitable	Suitable	Suitable
on request	12	12 on request	8	10
	ca. 20 lm x 2 m		20-30	lm x 2 m
50 x 50 cm deviation: ≤ 0.50 mm deviation: ≤ 0.35 mm		30.5 x 91.5 cm or 30.5 x 30.5 cm accordingly accordingly		

Also available: Narnidur xf • Linear marbled design • 4 mm thickness designed to withstand heavy traffic • Ideal for industrial applications • 8 colours available on request • Corresponding to 3.2 mm Veneto xf

Color name	Reference SAP	Weld. rod
Veneto xf		
ivory	601	1751601
earth	604 607	1751604
smoke	608	1751608
charcoal	610	1751610
sisal	611 612	1751313
coral	615	1751615
camel	616	1751313
plum	618 610	1751618
taupe	621	1751621
sand	622	1751119
azurite	624 625	1751679
sunflower	628	1751628
citrine	631	1751631
chocolate	632	1751632
amber	636	1751636
terracotta	641	1751641
salmon	642	1751642
lila	045 649	1751645
grass	650	1751650
ink	662	1751662
norizon aquamarine	664	1751664
ocean	665	1751665
lagoon	666	1751664
denim Javender	669 670	1751669
zinc	671	1751671
aluminium	672	1751672
steel	673 674	1751673
turquoise	677	1751677
cork	679	1751679
platinium	684	1751684
concrete	686	1751686
navy	688	1751068
stone	692	1751692
burgundy	744	1751095
olive	750	1751750
leaf	751	1751751
khaki sage	752 753	1/51/52 1751753
grey	793	1751793
<b>Etrusco xf</b>	002	1751002
yellow	036	1751036
orange	037	1751037
red	041	1751041 1751049
green	050	1751050
metal	051	1751051
indigo	066	1751066
black	098	1751095
Allegro xf	100	1751100
yellow mix	120	1751120
beige mix	121	1751121
orange mix	130	1751130
anise mix	140	1751140
indigo mix	160	1751160
blue mix	170	1751467
Elafono		
cork underlayer	1861030	

# INTELLIGENT FLOORING SOLUTIONS



#### **S**YSTEM

**S**ERVICE

Providing not just a product, but a complete functional solution designed to fully meet customer needs. Supporting customers from first consultation to product installation, and throughout the product's service life. Finding materials, construction and solutions that minimise maintenance requirements and achieve best life cycle costs.

**S**AVINGS

#### STYLE & DESIGN Contributing to atmosphere, state of mind and emotion, to efficiency and a sense of well-being.



## SUSTAINABILITY

Taking the lead in promoting measures to help preserve a sustainable environment.

#### Sales Offices

- Production Sites
- Recycling Plants
- Training Centers



**The Tarkett Group** 



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### www.tarkett-commercial.com

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