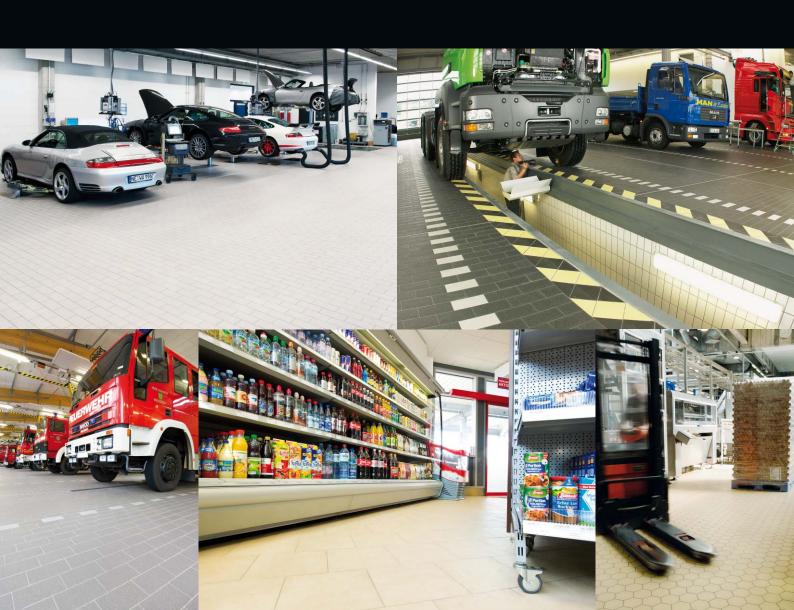


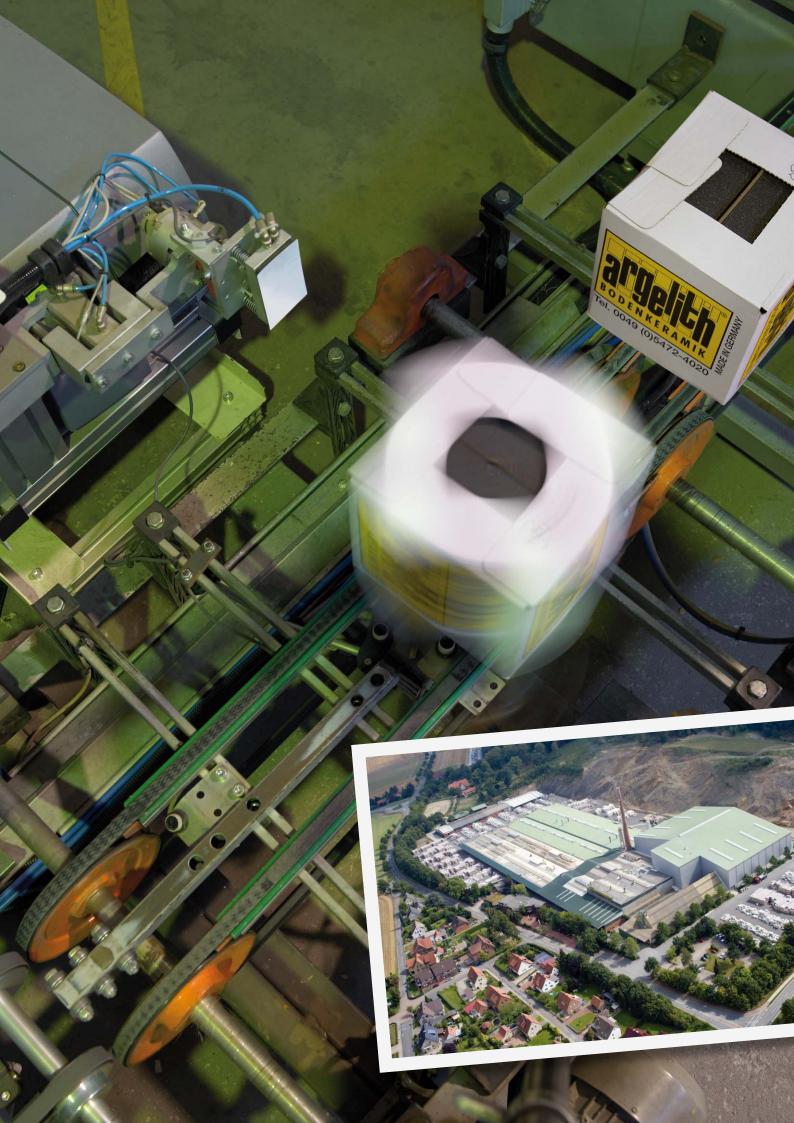
Product Range

STONEWARE mvtec...

dekortec...

CLINKER TILES





STONEWARE	04 / 05
STONEWARE — Colours and Surfaces	06 / 07
STONEWARE — Fine grained	08 / 09
STONEWARE — Fine grained	10/11
STONEWARE — Coarse grained / Dekortec	12/13
STONEWARE — Accessory tiles	14/15
CLINKER TILES	16/17
CLINKER TILES — Colours and Surfaces	18 / 19
CLINKER TILES — Accessory tiles	20 / 21
TECHNICAL INFORMATION	22 / 23
KERASIG / ARGENOL	24 / 25
SLIP RESISTANCE — BGR 181	26 - 29
PRODUCT FEATURES	30 / 31



Quality is our priority — We will happily provide test certificates for your desired product.













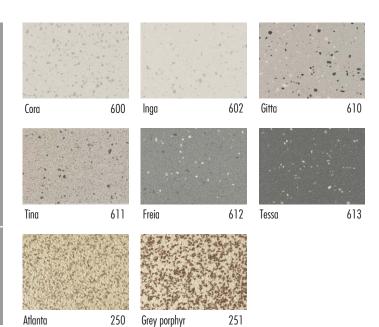
STONEWARE mytec...



STONEWARE mytec...

COLOURS and COLOURCODES













			i hick- ness	Smooth	Security	Nopped profile
		Arkona white	15	R 9/R 10/R 11	R 12	R 12 / V 06
			18	R 9/R 10/R 11		
		Beige	15	R 9/R 10/R 11	R 12	R 12 / V 06
			18	R 9/R 10/R 11		
		Light grey	15	R 9/R 10/R 11	R 12	R 12 / V 06
			18	R 9/R 10/R 11		
	Square	Dark grey	15	R 9/R 10/R 11	R 12	R 12 / V 06
	198 x 198		18	R 9/R 10/R 11		
		Titanium grey	15	R 9/R 10/R 11	R 12	R 12 / V 06
S			18	R 9/R 10/R 11		
RIE		Cream yellow	15	R 9/R 10/R 11	R 12	R 12 / V 06
SE			18	R 9/R 10/R 11		
RÉE		Anthracite	15	R 9/R 10/R 11	R 12	R 12 / V 06
CARRÉE SERIES			18	R 9/R 10/R 11	R 12	R 12 / V 06
		Arkona white	12	R 9/R 10/R 11		
			15	R 9/R 10/R 11		
		Beige	12	R 9/R 10/R 11		
			15	R 9/R 10/R 11		
		Light grey	12	R 9/R 10/R 11		
	Square		15	R 9/R 10/R 11		
	298 x 298	Dark grey	12	R 9/R 10/R 11		
			15	R 9/R 10/R 11		
		Titanium grey	12	R 9/R 10/R 11		
			15	R 9/R 10/R 11		
		Anthracite	12	R 9/R 10/R 11		
			15	R 9/R 10/R 11		

Additional colours/formats available upon request.



Arkona white



Beige



Light grey



Dark grey



Titanium grey



Anthracite



Cream yellow

Material			Material requirements*	Contents	Contents	Weig	ght in
requirements table	Format	Thick- ness	including joints Pieces per sqm	Pieces/ Package	sqm/ Pallet	kg/ sqm	kg/ Pallet
	198 x 198	15	25	13	31,20	35	1.092
		18	25	11	26,40	41	1.083
	298 x 298	12	11	11	40,00	27	1.080
		15	11	9	32,73	35	1.145

^{*}Requirement with normal grouting. With a "groutless" installation (Vibration) the requirement will increase slightly.



			Thickness	Smooth	Security	Nopped profile	Star profile
		Arkona white	15	R 10/R 11	R 12	R 12 / V 04	
			18	R 10/R 11	R 12	R 12 / V 04	
		Beige	15	R 10/R 11	R 12	R 12 / V 04	R 13 / V 08
			18	R 10/R 11	R 12	R 12 / V 04	
		Light grey	15	R 10/R 11	R 12	R 12 / V 04	R 13 / V 08
			18	R 10/R 11	R 12	R 12 / V 04	
S		Dark grey	15	R 10/R 11	R 12	R 12 / V 04	
SERIES	Rectangular		18	R 10/R 11	R 12	R 12 / V 04	
S	198 x 98	Titanium grey	15	R 10/R 11	R 12	R 12 / V 04	
3510			18	R 10/R 11	R 12	R 12 / V 04	
CLASSIC		Cream yellow	15	R 10/R 11	R 12	R 12 / V 04	
			18	R 10/R 11	R 12	R 12 / V 04	
		Sand yellow	15	R 10/R 11	R 12	R 12 / V 04	
			18	R 10/R 11	R 12	R 12 / V 04	
		Anthracite	15	R 10/R 11	R 12	R 12 / V 04	
			18	R 10/R 11	R 12	R 12 / V 04	
	Rectangular	Sand yellow	15	R 10/R 11			
	*240 x 115		18	R 10/R 11			

Additional colours/formats available upon request.

*Limited special order availibility in other colours.



Arkona white



Beige



Light grey



Dark grey



Titanium grey



Anthracite



Cream yellow



Sand yellow

in principle all formals can be
installed with conventional (thin
set, et al) installation methods.

Material requirements table	Format	Thickness	Material requirements* including joints Pieces per sqm	Contents Pieces/ Package	Contents qm/ Pallet	Weig kg/ sqm	Jht in kg/ Pallet
	198 x 98	15	50	26	31,20	35	1.092
		18	50	22	26,40	41	1.083
	240 x 115	15	33	26	35,45	35	1.241
		18	33	22	30,00	41	1.230

^{*}Requirement with normal grouting. With a "groutless" installation (Vibration) the requirement will increase slightly.



blunt finishing tile

blunt finishing tiles.

All Hexagonal tile can also be delivered with pre-cut pointed and

			Thickness	Smooth	Security	Nopped profile
		Arkona white	15	R 10/R 11		
_		18	R 10/R 11	R 12	R 12 / V 04	
		Beige	15	R 10/R 11		
			18	R 10/R 11	R 12	R 12 / V 04
		Light grey	15	R 10/R 11		
IE S®			18	R 10/R 11	R 12	R 12 / V 04
SERIE		Dark grey	15	R 10/R 11		
	Hexagonal		18	R 10/R 11		
ALI	108 x 125	Cream yellow	15	R 10/R 11		
O HEXALITH			18	R 10/R 11	R 12	R 12 / V 04
$\overline{\bigcirc}$		Sand yellow	15	R 10/R 11		
			18	R 10/R 11	R 12	R 12 / V 04
		*Grey porphyr	15	R 10/R 11		
			18	R 10/R 11	R 12	R 12 / V 04
		*Atlanta	15	R 10/R 11		
			18	R 10/R 11	R 12	R 12 / V 04



* Additional formats (10x20, 20x20, 15x15) upon request.



Arkona white



Beige



Light grey



Dark grey



Cream yellow



Sand yellow



 ${\it Grey porphyr}$



Material requirements table	Format	Thickness	Material requirements* including joints Pieces per sqm	Contents Pieces/ Package	Contents sqm/ Pallet	Weig kg/ sqm	ht in kg/ Pallet
	108 x 125	15	97,5	48	26,58	35,20	970
		18	96,5	40	22,38	41,30	959

point finishing tile

^{*}Requirement with normal grouting. With a "groutless" installation (Vibration) the requirement will increase slightly.



			Thickness	Smooth
IES		Arkona white	15/12	R 9
SER		Light grey	15/12	R 9
CLASSIC SERIES	Rectangular 398 x 198	Dark grey	15/12	R 9
CLA	370 X 170	Titanium grey	15/12	R 9
		Anthracite	15/12	R 9

Additional colours/formats available upon request.

THE NEW FORMAT
40 x 20



Arkona white



Light grey



Dark grey



Titanium grey



Anthracite

Material requirements table	Format	Thickness	Material requirements* including joints Pieces per sqm	Contents Pieces/ Package	Contents sqm/ Pallet	Weig kg/ sqm	ht in kg/ Pallet
	398 x 198	15	12,5	9	34,56	35	1.209
		12	12,5	11	42,24	27	1.140

 $^{{}^{\}star}$ Requirement with normal grouting. With a "groutless" installation (Vibration) the requirement will increase slightly.



Additional colours/formats available upon request.

			Thickness	Smooth	Nopped profile
	Rectangular	Tina	15	R 11	
	198 x 98	Tessa	15	R 11	R 12 / V 04
		Cora	15	R 9/R 10	
	Square	Gitta	15	R 9/R 10	
	198 x 198	Freia	15	R 9/R 10	
		Inga	15	R 9/R 10	
		Cora	12	R 9/R 10	
			15	R 9/R 10	
		Gitta	12	R 9/R 10	
	Square		15	R 9/R 10	
	298 x 298	Freia	12	R 9/R 10	
			15	R 9/R 10	
		Inga	12	R 9/R 10	
			15	R 9/R 10	

Additional colours/formats available upon request.



Cora



Gitta



Freia



lina



Tessa



Inga

Material			Material requirements*	Contents	Contents	Weig	aht in
requirements table	Format	Thickness	including joints Pieces per sqm	Pieces/ Package	sqm/ Pallet	kg/ sqm	kg/ Pallet
	198 x 98	15	50	26	31,20	35	1.092
	198 x 198	15	25	13	31,20	35	1.092
		18	25	11	26,40	41	1.082
	298 x 298	12	11	11	40,00	27	1.070
		15	11	9	32,73	35	1.145

 $^{{}^{\}star}$ Requirement with normal grouting. With a "groutless" installation (Vibration) the requirement will increase slightly.

		Inickness	SIIP Resistance
398 x 198	Galaxyit	12/15	R 10
298 x 298	Sandstorm	12/14	R 10
270 X 270	Jade green	12/14	R 10





Galaxyit



Sandstorm



Jade green



Material requirements table	requirements		Material requirements* including joints Pieces per sqm	Contents Pieces/ Package	Contents sqm/ Pallet	Wei kg/ sqm	ght in kg/ Pallet
	398 x 198	12	12,5	11	42,24	27	1.141
		15	12,5	9	34,56	35	1.209
	298 x 298	12	11	11	40,00	27	1.080
		14	11	10	36,36	32	1.163

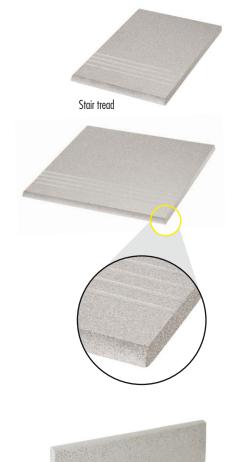
^{*}Requirement with normal grouting. With a "groutless" installation (Vibration) the requirement will increase slightly.



Stair tread tiles, rounded front with grooves		Thickness	Slip Resistance	Material requirements including joints Pieces/linear m	Contents Pieces/ Package	Contents linear m/ Pallet	Weiq kg/ linear m	jht in kg/ Pallet
298 x 198	Light grey	15	R 9/R 11	5	10	72,00	10	720
	Beige	15	R 9	5	10	72,00	10	720
	Dark grey	15	R 9	5	10	72,00	10	720
	Galaxyit	15	R 9	5	10	72,00	10	720
	Light grey	12	R 9 **	3,33	11	132,13	8,5	1.023
298 x 298	Beige	12	R 9 **	3,33	11	132,13	8,5	1.023
	Dark grey	12	R 9 **	3,33	11	132,13	8,5	1.023
	Anthracite	12	R 9 **	3,33	11	132,13	8,5	1.023

 $^{^{\}star\star}$ More surfaces available upon request $\,/\,$ Stair tread tile in coarse grain upon request.

Bullnose		Thickness	Material requirements induding joints Pieces/linear m	Contents Pieces/ Package	Contents linear m/ Pallet		ht in kg/ Pallet
	Light grey	12	3,33	28	538,14	1,90	1.022
	Beige	12	3,33	28	538,14	1,90	1.022
	Dark grey	12	3,33	28	538,14	1,90	1.022
	Anthracite	12	3,33	28	538,14	1,90	1.022
	Cora	12	3,33	28	538,14	1,90	1.022
298 x 72	Gitta	12	3,33	28	538,14	1,90	1.022
298 X 7 Z rounded	Freia	12	3,33	28	538,14	1,90	1.022
10011404	Hera	12	3,33	28	538,14	1,90	1.022
	Inga	12	3,33	28	538,14	1,90	1.022
	Tessa	12	3,33	28	538,14	1,90	1.022
	Sandstorm	12	3,33	28	538,14	1,90	1.022
	Jade green	12	3,33	28	538,14	1,90	1.022
	Light grey	12	2,50	16	378	2,20	832
398 x 72	Anthracite	12	2,50	16	378	2,20	832
	Galaxyit	12	2,50	16	378	2,20	832



Sit-on skirting Thick		Thickness	Material requirements including joints Pieces/linear m	Contents Contents Pieces/ linear m/ Package Pallet		0.	
198 x 98	Light grey	8	5	36	496,80	1,80	894
	Beige	8	5	36	496,80	1,80	894



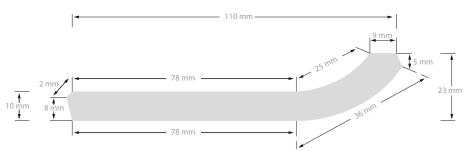


Bullnose



Coved base			Material requirements	Contents	Contents	Weig	ht in
skirting		Thickness	including joints Pieces/linear m	Pieces/ Package	linear m/ Pallet	kg/ linear m	kg/ Pallet
	Light grey	10	5	22	330	2,56	844,8
	Arkona white	10	5	22	330	2,56	844,8
	Beige	10	5	22	330	2,56	844,8
	Dark grey	10	5	22	330	2,56	844,8
	Titanium grey	10	5	22	330	2,56	844,8
194 x 110	Cream yellow	10	5	22	330	2,56	844,8
	Sand yellow	10	5	22	330	2,56	844,8
	Anthracite	10	5	22	330	2,56	844,8
	Freia	10	5	22	330	2,56	844,8
	Grey porphyr	10	5	22	330	2,56	844,8
	Atlanta	10	5	22	330	2,56	844,8

More colours/formats available upon request.





Internal corners/ External corners

Dimensional variation from these average values through normal manufacturing variables possible.

	Light grey
	Beige
	Dark grey
	Titanium grey
	Cream yellow
	Sand yellow
	Freia
Material	Grey porphyr
requirements: Pieces	Atlanta





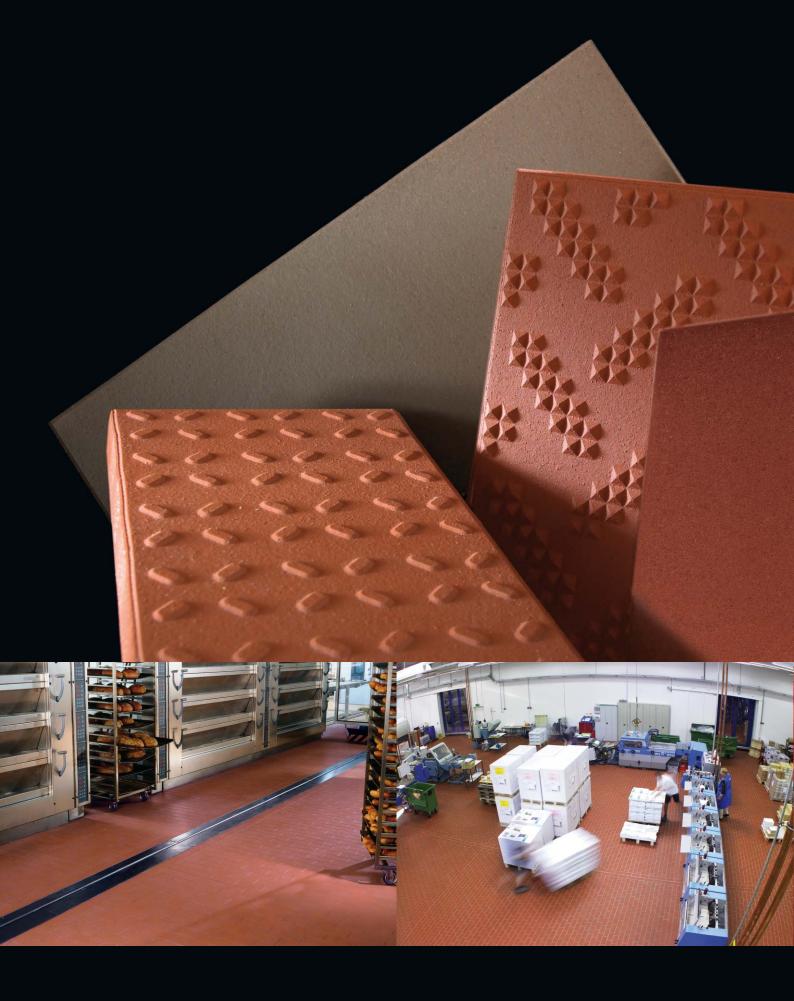
External corner

Internal right angle coved based skirting / External right angle coved based skirting

	Arkona white
	Light grey
	Beige
	Dark grey
	Titanium grey
	Cream yellow
	Sand yellow
	Anthracite
	Freia
Material	Grey porphyr
requirements: Pair	Atlanta







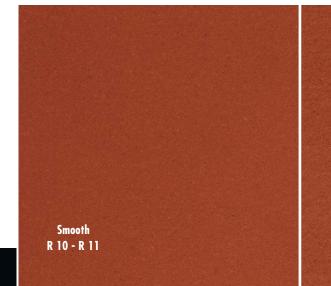
CLINKER TILES



		Thickness	Smooth	Security	Nopped profile
	Brick red	16	R 10/R 11	R 12	R 12 / V 06
Rectangular		20	R 10/R 11	R 12	R 12 / V 06
198 x 98	Blue-red	16	R 10		
	flamed	20	R 10		
	Brick red	16	R 10/R 11		
Destamanlan		20	R 10/R 11	R 12	R 12 / V 06
Rectangular 240 x 115		25	R 10		
210 % 110	Blue-red	16	R 10		
	flamed	20	R 10		
Sharp edged	Brick red	30	R 10		

Material requirements table	Format	Thickness	Material requirements* including joints Pieces per sqm	Contents Pieces/ Package	Contents sqm/ Pallet	Weiç kg/ sqm	jht in kg/ Pallet
	198 x 98	16	50	16	35,84	36,5	1.308
		20	50	13	29,12	47,5	1.383
	240 x 115	16	33	16	34,91	36,5	1.274
		20	33	13	28,36	46	1.305
		25	33	11	24,00	56	1.344
	Sharp edged	30	33	9	19,64	65	1.277

^{*}Requirement with normal grouting. With a "groutless" installation (Vibration) the requirement will increase slightly.



Security R 12

COLOURS





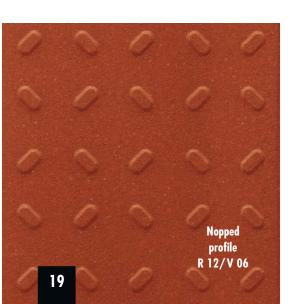
Brick red Blue-red flamed

Colour aberration from original product may be caused by printing.



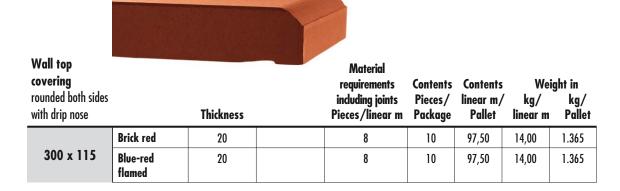


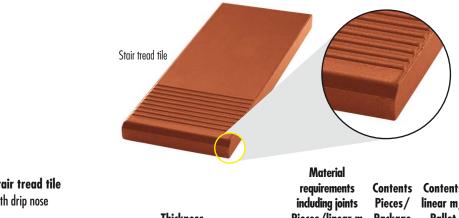




SURFACES

Window sill tile with drip nose		Thickness	Material requirements including joints Pieces/linear m	Pieces/	Contents linear m/ Pallet	Wei kg/ linear m	ght in kg/ Pallet
	Brick red	20	10	13	145,60	10,00	1.456
198 x 98	Blue-red flamed	20	10	13	145,60	10,00	1.456
	Brick red	20	8	13	117,00	11,00	1.278
240 x 115	Blue-red flamed	20	8	13	117,00	11,00	1.278





Stair tread tile			requirements	Contents	Contents	Wei	ght in
with drip nose		Thickness	including joints Pieces/linear m	Pieces/ Package	linear m/ Pallet	kg/ linear m	kg/ Pallet
300 x 98	Brick red	20	10	10	91,00	15,00	1.365
	Blue-red flamed	20	10	10	91,00	15,00	1.365
	Brick red	20	8	10	97,50	14,00	1.365
300 x 115	Blue-red flamed	20	8	10	97,50	14,00	1.365

Strip tile		Thickness	Material requirements including joints Pieces/linear m	Pieces/	•		ht in kg/ Pallet
	Brick red	12	4	22	858,00	1,60	1.372
240 x 52	Blue-red flamed	12	4	22	858,00	1,60	1.372



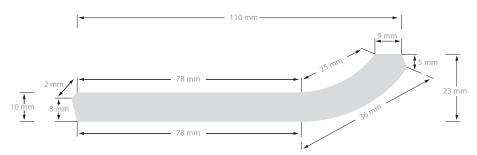
0n	ly in	Special	choice
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Bullnose		Thickness	Material requirements including joints Pieces/linear m	Pieces/		kg/	ht in kg/ Pallet
240 x 115	Brick red	16	4	16	288,00	4,40	1.267
						01:0	

Only in Special choice



Coved base				Material requirements	Contents	Contents	Weig	ht in
	skirting		Thickness	including joints Pieces/linear m				kg/ Pallet
	240 x 110	Brick red	10	4	14	224,00	3,00	672





Dimensional variation from these average values through normal manufacturing variables possible.

Internal right angled coved base skirting / External right angled coved base skirting

Brick red

Material requirements: Pair

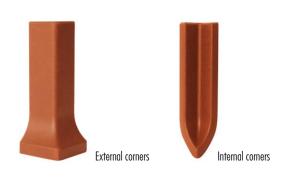


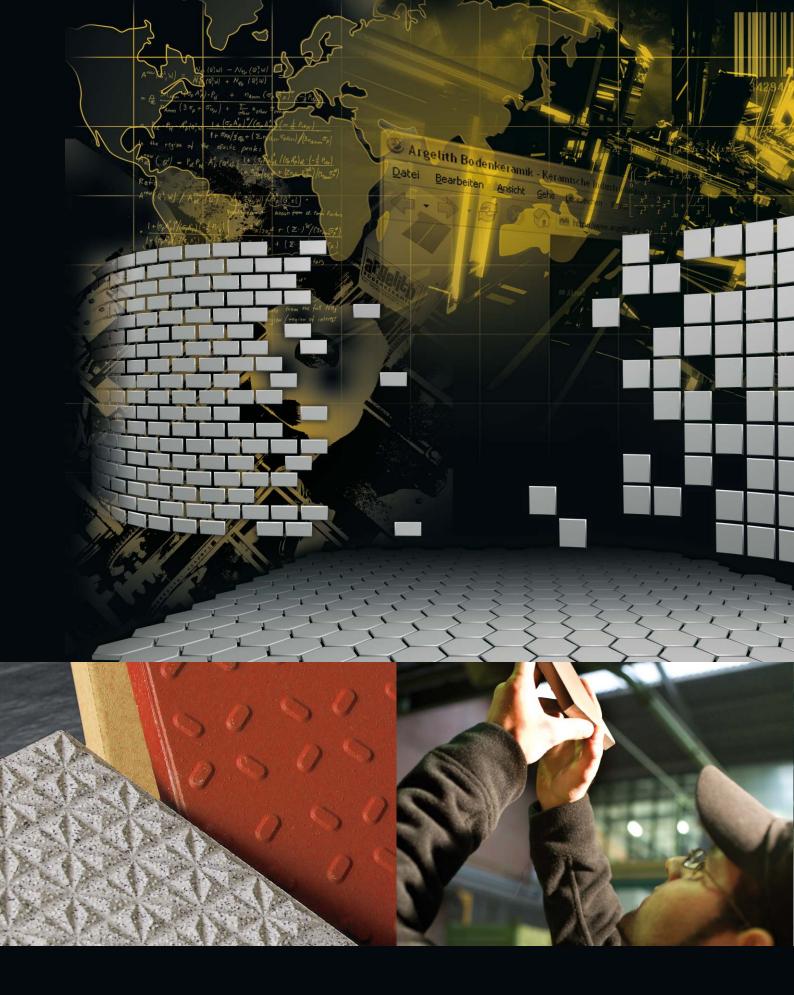


Internal corners/ External corners

Brick red

Material requirements: Pieces







TECHNICAL INFORMATION







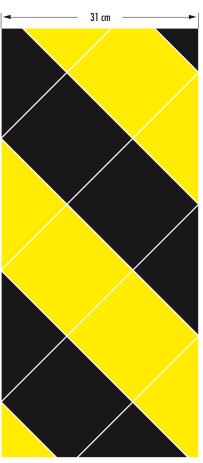
Microverdichtende Technologie

Alle Feinsteinzeugfliesen von Argelith tragen das mv-tec Gütesiegel für feinste Qualität.









Possible installation width patterns







Material requirements table	Format	Thickness	Material requirements whole tiles linear m	Material requirements half tiles linear m
	10,5 cm	15 / 18		10
	21,0 cm	15 / 18	6	10
	31 0 cm	15 / 18	11	10



CARE AND CLEANING

Package size	10 litre	20 litre
Cement haze remover	•	•
Intensive cleaner*	•	•
Clinker oil	•	•
(only for use with Clinker tiles)		



GENERAL CARE INSTRUCTIONS

Clinker and fully vitrified Stoneware tiles are from their very nature easy to clean. With the tile cleaning programme from Argenol it is even easier.

Under no circumstance should a cleaner containing hydrofluoric acid ever be used.

Naturally, completely natural:

All the products in our Argenol cleaning program are considered fully bio-degradable by the Ordinance on Hazardous Substances.



^{*} Ideally suited for Clinker and Fully Vitrified Porcelain Tiles.

SLIP RESISTANCE

umber	Workplaces, workareas and operational traffic areas	Slip resistance Class (R-Group)	Displacement Area (V-Group)	Number	Workplaces, workareas and operational traffic areas	Slip resistance Class (R-Group)	Displacement Are (V-Group)
0	General work rooms			5.6	Raw sausage department	R 13	V6
	and areas			5.7	Drying room for sausages	R 12	
0.1	Entrance area, inside	R 9		5.8	Entrail storage	R 12	
0.2	Entrance area, outside	R 11 or R 10	V 4	5.9	Pickling and smoking room	R 12	
0.3	Stairways, inside	R 9	''	5.10	Chicken processing	R 12	V 6
0.4	Stairways, autside	R 11 or R 10	V 4	5.11	Cold Meat and packing department	R 12	
0.5	Sanitary rooms (eg toilets,	R 10		5.12	Workshops	R 12	V 8
0.5	changing rooms, cleaning rooms),	K TO		3.12	Workshops	K 12	
	break rooms (eg lounge, cafeteria),	R 9					
	first aid rooms	R 9		6	Fish and Delicatessen		
	ilisi ulu iooilis	K /		U	processing		
				6.1	Fish processing	R 13	V 10
	M () ()			6.2		R 13	V 10
1	Manufacture of margarine,			6.3	Delicatessen processing	R 13	V 6
	cooking fat, cooking oil	B 10		0.3	Mayonnaise processing	KIS	V 4
1.1	Fat melting	R 13	V 6				
1.2	Cooking oil refinery	R 13	V 4	7	Vanatables		
1.3	Manufacture and packing	R 12		7	Vegetables processing	n 10	W. /
	of margarine			7.1	Sauerkraut processing	R 13	V 6
1.4	Manufacture and packing of	R 12		7.2	Tinned vegetables processing	R 13	V 6
	cooking fat, bottling of cooking oil			7.3	Sterilisation rooms	R 11	
				7.4	Rooms in which vegetables are	R 12	V 4
					prepared for processing		
2	Manufacture of milk						
	and cheese						
2.1	Manufacture of fresh milk	R 12		8	Wet rooms in food and		
	and butter				beverage processing		
2.2	Manufacture, storage and packing	R 11		8.1	Fermenting rooms	R 10	
	of cheese			8.2	Beverage bottling, fruit juice manufacture	R 11	
2.3	Manufacture of ice cream	R 12					
				9	Kitchens, dining rooms		
3	Manufacture of chocolate and			9.1	Hotel and Restaurant kitchens		
J	confectionary			9.1.1	up to 100 meals per day	R 11	V 4
2 1		R 12		9.1.2	more than 100 meals per day	R 12	V 4
3.1	Sugar digester house Manufacture of cocoa	R 12		9.2	Kitchens in orphanages,	R 11	''
3.2				7.2	schools or sanatoria		
3.3	Manufacture of raw mix	R 11		9.3	Kitchens in hospitals and clinics	R 12	
3.4	Manufacture of praline	R 11		7.3 9.4	Canteen and catering kitchens	R 12	V 4
				9.5	Snack bar and fast food kitchens	R 12	V 4
				9.6	Thawing and warm-up kitchens	R 10	V 4
4	Manufacture of pastries			9.6 9.7	Coffee and Tea kitchens,	R 10	
	(bakeries, confectionery,			7.1	kitchens in B&B hotels, ward kitchens	I I I U	
	long-life bakery products)			0.0			
4.1	Manufacture of pastry	R 11		9.8	Sink-room	D 10	V. 4
4.2	Rooms in which fat or fluid products	R 12		9.8.1	Sink rooms for 9.1, 9.4, 9.5	R 12	V 4
	are produced and handled			9.8.2	Sink rooms for 9.2	R 11	
4.3	Sink-room	R 12	V 4	9.8.3 9.9	Sink rooms for 9.3 Serving and dining rooms	R 12 R 9	
	a l. 1. 1 				-		
5	Slaughter and Meat processing	D 10					
5.1	Slaughterhouse	R 13	V 10				
5.2	Tripe scalding room	R 13	V 10				
5.3	Meat cutting room	R 13	V 8				
5.4	Sausage kitchen	R 13	V 8				
5.5	Boiled sausage department	R 13	V 8				
		İ.	1			1	I

SLIP RESISTANCE

ımber	Workplaces, workareas and operational traffic areas	Slip resistance Class (R-Group)	Displacement Area (V-Group)	Number	Workplaces, workareas and operational traffic areas	Slip resistance Class (R-Group)	Displacement Area (V-Group)
10	Cold and freezer rooms			13	Laundries and Laundromats		
10.1	for non-packed goods	R 12		13.1	Rooms with washing machines	R 9	
10.2	for packed goods	R 11		13.2	Rooms with washing machines, where	R 11	
0.2	Tor pucked goods	KII		10.2	clothes are handled dripping wet	KII	
				13.3	Ironing and pressing rooms	R 9	
1	Sales rooms			10.0	noning and pressing rooms	K /	
1.1	Reception of meat						
1.1.1		R 11		1.4	Concentrated feed processing		
	for non-packed goods			14		n 11	
1.1.2	for packed goods	R 10		14.1	Provender manufacture	R 11	V 4
1.2	Reception of fish	R 11		14.2	Provender manufacture with fat	R 11	V 4
1.3	Serving area for meat and sausages	D 11			and water		
1.3.1	for unpackaged goods	R 11					
1.3.2	for packaged goods	R 10					
1.4	Serving area for bread and pastries	R 10		15	Leather production, textiles		
1.5	Serving area for dairy products and	R 10		15.1	Wet working areas in a tannery	R 13	
	delicatessen, nonpacked goods			15.2	Room with fleshing machine	R 13	V 10
1.6	Serving area for fish			15.3	Room with leather waste	R 13	V 10
1.6.1	for unpackaged goods	R 12		15.4	Room for production of fat based proofing	R 12	
1.6.2	for packaged goods	R 11		15.5	Fabric dyeing in textile production	R 11	
1.7	Serving places, excl. $11.3 - 11.6$	R 9			, , ,		
1.8	Preparation rooms						
1.8.1	for meat processing, excl. no. 5	R 12	V 8	16	Painting		
1.8.2	for meat manufacture, excl. no. 5	R 11		16.1	Wet polishing areas	R 12	V 10
1.9	Flower binding	R 11		10.1	Wor polishing arous	K 12	' ' ' '
1.10	Sales areas with stationary ovens	KII					
	for producing pastries	R 11		17	Ceramics industry		
	for crisp-up prefabricated pastries	R 10		17.1	Wet milling	R 11	
1.10.2	Sales areas for stationary deep	R 12	V 4	17.1	Mixing	R 11	V 6
1.11		K IZ	V 4	17.2	Handling of materials such as tar, pitch,	KII	V 0
1 10	fryers or grills	D O					
1.12	Sales rooms, customer rooms	R 9		17.0	graphite or resins	n 11	V (
1.13	Preparation rooms of food for	R 10		17.3	Pressing (moulding)	R 11	V 6
	self-service areas	D 0			Handling of materials such as tar, pitch,		
1.14	Cashpoint and packing areas	R 9		17.4	graphite or resins		
1.15	Outdoor sales areas	R 11 or R 10	V 4	17.4	Casting areas	R 12	
				17.5	Glazing areas	R 12	
<mark>2</mark> 2.1	Social and welfare service rooms Disinfection rooms (wet)	R 11		18	Glass and stone processing		
2.1	Pre-cleaning for sterilisation	R 10		18.1	Stone sawing and grindery	R 11	
2.2	Human waste rooms, outlet rooms,,	R 10		18.2	Glass forming	R 11	
L.J		I K I U		18.3	Grindery for glass	R 11	
2 /	unsanitary care rooms	D 10				KII	
2.4	Autopsy rooms	R 10		18.4	Manufacture of insulated glass	D 11	W /
2.5	Bathrooms, water cure rooms,	D 13		10.5	Handling of granulates	R 11	V 6
0 /	Fango treatments	R 11		18.5	Packing and Shipping of flat glass,		J ,, ,
2.6	Washing rooms for Operations,	R 10			Handling of separating agents	R 11	V 6
_	cast rooms			18.6	Etching plants for glass	R11	
2.7	Sanitary rooms, ward bathrooms	R 10					
2.8	Rooms for medical diagnosis and therapy,	R 9					
	massage rooms						
2.9	Operating rooms	R 9					
2.10	Wards with sickrooms and corridors	R 9					
2.11	Doctors' Offices, Day hospitals	R 9					
2.12	Pharmacies	R 9					
2.13	Laboratories	R 9					
2.14	Hair Salons	R 9					
		1	1				

SLIP RESISTANCE

Number	Workplaces, workareas and operational traffic areas	Slip resistance Class (R-Group)	Displacement Area (V-Group)
19 19.1	Concrete production Concrete washing areas	R 11	
20	Store rooms	2.10	
20.1 20.2	Store rooms for oil and fat	R 12 R 10	V 6
20.2	Store rooms for packed grocery Outdoor store rooms	R 11 or R 10	V 4
21	Chemical and thermal treatment of metals		
21.1	Pickling shop	R 12	
21.2	Hardening shop	R 12	
21.3	Laboratory	R 11	
22	Metal treatment, workshops		
22.1	Galvanising rooms	R 12	
22.2	Cast iron handling areas	R 11	V 4
22.3	Mechanical work areas	R 11	V 4
22.4	(for example turning shop or milling shop), punching shop, pressing shop, drawing shop, and all areas with increased oil lubrication requirements Parts cleaning areas, areas with waste	R 12	
23	Service Workshops for motor vehicles		
23.1	Service rooms	R 11	
23.2	Pits	R 12	V 4
23.3	Car Wash	R 11	V 4
24 24.1 24.2	Service rooms for airplanes Hangars Dockyards	R 11 R 12	
24.3	Wash areas	R 11	V 4
25	Sewage Plants		
25.1	Pump rooms	R 12	
25.2	Sludge dehydration rooms	R 12	
25.3	Raking rooms	R 12	
25.4	Store rooms for service and maintenance platforms	R 12	
26	Fire stations		
26.1	Garages for vehicles	R 12	
26.2	Rooms for tube maintenance	R 12	
27 27.1	Financial institutions Circuit breaker room	R 9	

Number	Workplaces, workareas and operational traffic areas	Slip resistance Class (R-Group)	Displacement Area (V-Group)
28	Parking areas		
28.1	Garages, multi-storey car park, underground garage protected from outside weather	R 10	
28.2	Garages, multi-storey car park, underground garage not protected from outside weather	R 11 or R 10	V 4
28.3	Outdoor parking areas	R 11 or R 10	V 4
29	Schools and playschools		
29.1	Entrances, corridors, break halls	R 9	
29.2	Classrooms, meeting rooms	R 9	
29.3	Stairways	R 9	
29.4	Toilets, wash rooms	R 10	
29.5	Teaching kitchens (see no. 9)	R 10	
29.6	Kitchens in kindergartens	R 10	
29.7	Machine rooms for wood working	R 10	
29.8	Special rooms for crafts / handwork	R 10	
29.9	Schoolyards	R 11 or R 10	V 4
30	Industrial traffic routes in		
	outdoor areas		
30.1	Walkways	R 11 or R 10	V 4
30.2	Loading docks		
30.2.1	Roofed	R 11 or R 10	V 4
30.2.2	Not roofed	R 12	V 4
30.3	Inclined ramps (eg wheel chairs, loading ramps)	R 12	
30.4.1	Refuelling area	R 12	
30.4.2	Refuelling area roofed	R 11	

Example of use:

The work area 6.3, mayonnaise processing, is assessed as having a slip resistance requirement of R13. The minimum displacement volume for the floor is rated V04, meaning a minimum of $4 \text{ cm}^3/\text{dm}^2$.

The selection of an appropriate floor will depend upon the usage of the area and will refer to the following tested properties:

Slip resistance	Displacement volume
R 13	V 4
R 13	V 6
R 13	V 8
R 13	V 10



Always stay on safe ground

Argelith has proven to be the right choice for industrial floors requiring resistance to thermal, chemical mechanical and other stresses. As the graph shows Argelith keeps you on the safe side. Argelith tiles meet and exceed both requirements and norms for industrial floors.

Security:

Stoneware and clinker tiles meet the key requirements in the high load areas of industry and commerce. And they always exceed the required standards!



Slip resistant
Argelith meets the requirements
for all areas of application.
(R10-R13 and V04-V10)



Chemical resistant
Argelith tiles are unglazed and
oil, acid and alkali resistant



Frost resistant Argelith tiles do not crack, even in low temperatures and at thermal shocks



Ecologically sound Only natural materials with no chemical additives are used



Maximum load bearing Argelith products are inherently elastic and can withstand high pressure

Protect your people and the environment

It is important, as well as possibly legally required, that the environment should not be damaged. Whether exposed to oils, fats, alkalis, acids or other dangerous substances a floor of Argelith tiles ensures that the required standards can be met!

Technical values:

tested according to DIN EN ISO 10545 Section 1-16

Argelith fine porcelain stoneware tiles comply in all tested properties with the requirements of the material Norm DIN EN 14411, Section G, Group B I and UGL.

	Example: Sechseck 108 x 125 x 18 mm	Requirement according to DIN EN 14411	Argelith Bodenkeramik
STONEWARE	Modulus of rupture N/mm² and average breaking strength in N	min. 35 N/mm²	ca. 73,3 ± 4,1 ca. 15289 ± 911
ONE	Resistance against deep wear	max. 175 mm ³	ca. 100 mm ³
ST	Water absorption in weight - %	max. 0,5 %	< 0,05 %

The above values are an extract from a test certificate. We will happily send you a test certificate for your desired material.

Surfaces



 Smooth
 Security

 R 9 - R 10 - R 11
 R 12



Nopped/Star R 12/V 04 R 12/V 06 R 13/V 08

Technical values according to DIN 18158

Argelith clinker tiles

	Tested characteristic	requirement in DIN	Argelith is better!
	Modulus of rupture	min. 20 N/mm²	38,1 N/mm²
	Compressive strength	min. $150 \text{ N/} \text{ mm}^2$	252 N/ mm ²
	Water absorption	max. 3 %	fulfilled
ES	Acid resistance	required	fulfilled**
⊏	Alkali resistance	required	fulfilled**
	Frost resistance	required	fulfilled
CLINKER TILES	Resistance against wear by grinding	max. 10 cm²	5,7 cm ²
J	Size consistency	±1,5%	fulfilled
	Coefficient of linear thermal expansion	5-8 x 10 ⁻⁶ K ⁻¹	6,7 x 10 ⁻⁶ K ⁻¹
	Thermal shock resistance	required	fulfilled
			l .

^{**}Exception: Fluoridic acid (HF) and its compounds

Surfaces



Smooth R 10 - R 11



Security R 12



Nopped profile R 12/V 06

"Load distribution of tiles and slabs"



15 mm tile on concrete slab: Fracture of slab and tile at 37.800 N (average value)

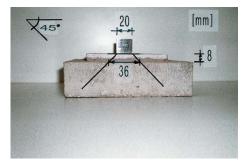


20 mm tile on concrete slabFracture of slab and tile at 45.200 N (average value)

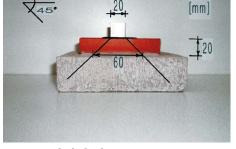








System with thin tile (8 mm)



System with thick tile (20 mm)

Source: Säurefliesner-Vereinigung e.V.

The test clearly shows:

- ✓ The thicker the tile, the greater the load required to cause fractures.
- ✓ Load distribution of a tile depends on its thickness.
- As tile thickness increases, load distribution is also greater, resulting in increased mechanical resistance.
- Ceramic tiles work to distribute the load into the substructure. This load-distribution effect is greater when thicker tiles are used. This should be taken into account during selection and when determining the expected mechanical load.

Tests were carried out with a load increase of approximately 1.000 N (corresponds to 100 kg) per second.

The break occured as the force decreased, bringing along with it visible damage to the test pieces.

System tested	Breaking load in	N
Load distribution 20 x 20 mm	Single values	Average value
Mortar (no tile)	19.000	
150 x 150 x 40	20.500	20.500
	22.000	
tile	28.000	
100 x 100 x 8 mm	30.000	28.000
on mortar	26.000	
150 x 150 x 40 mm		
tile	34.000	
100 x 100 x 12 mm	35.500	34.200
on mortar	33.000	
150 x 150 x 40 mm		
tile	37.000	
100 x 100 x 15 mm	37.500	37.800
on mortar	39.000	
150 x 150 x 40 mm		
tile	46.000	
100 x 100 x 20 mm	45.500	45.200
on mortar	44.000	
150 x 150 x 40 mm		



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