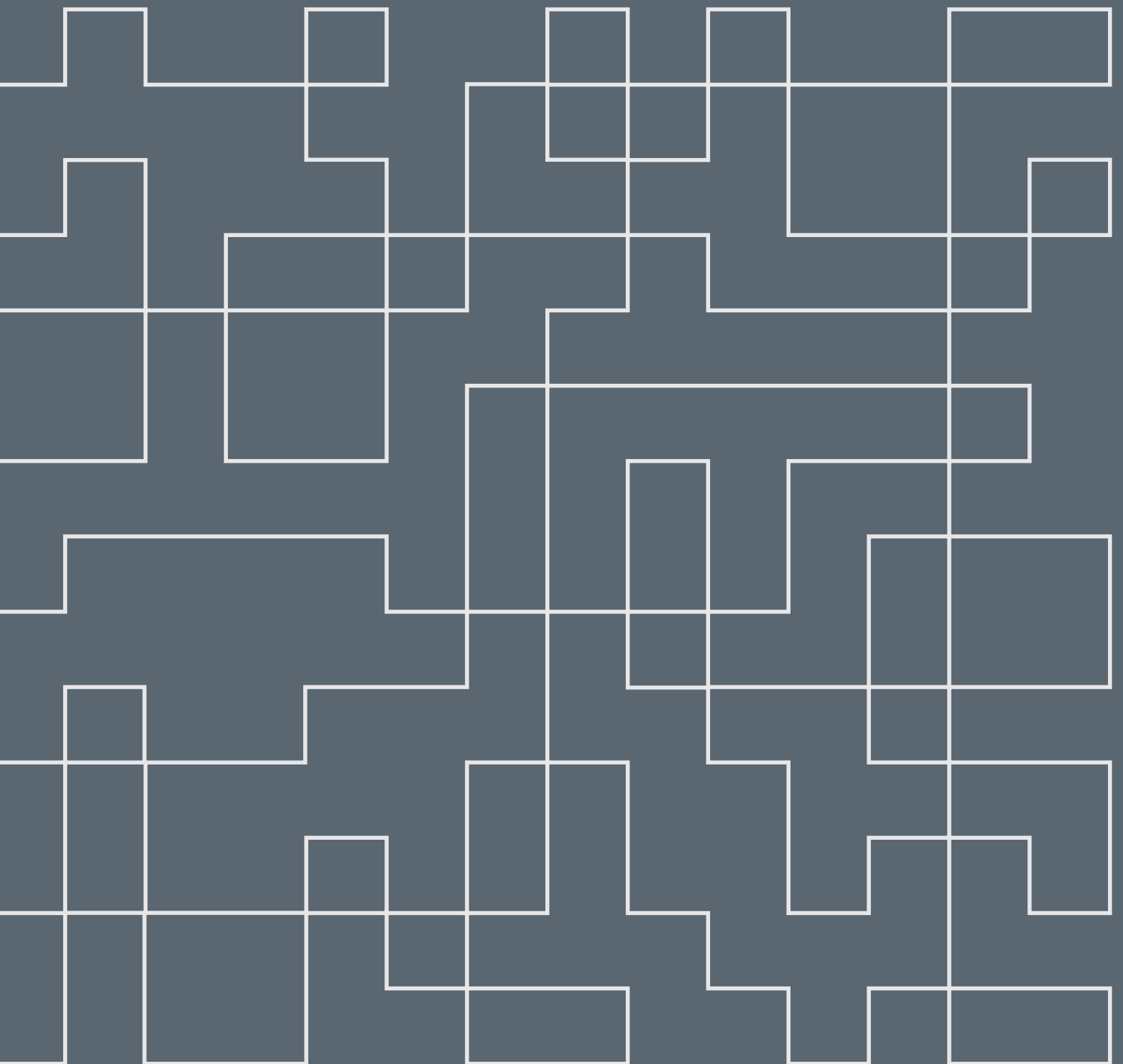


Intro Collection

Ceramic, Vitrified and Porcelain
Wall and Floor Tiles



Intro, a collection of high quality wall and floor tiles. Choose from ceramic, vitrified and porcelain. The **Intro Collection** offers a stylish yet affordable product range, covering both traditional and contemporary design styles.

The full Intro Collection is available from stock.

About us

You can be assured that with more than 100 years’ expertise, all Johnson Tiles products are designed and manufactured to the highest possible standards and performance ratings.

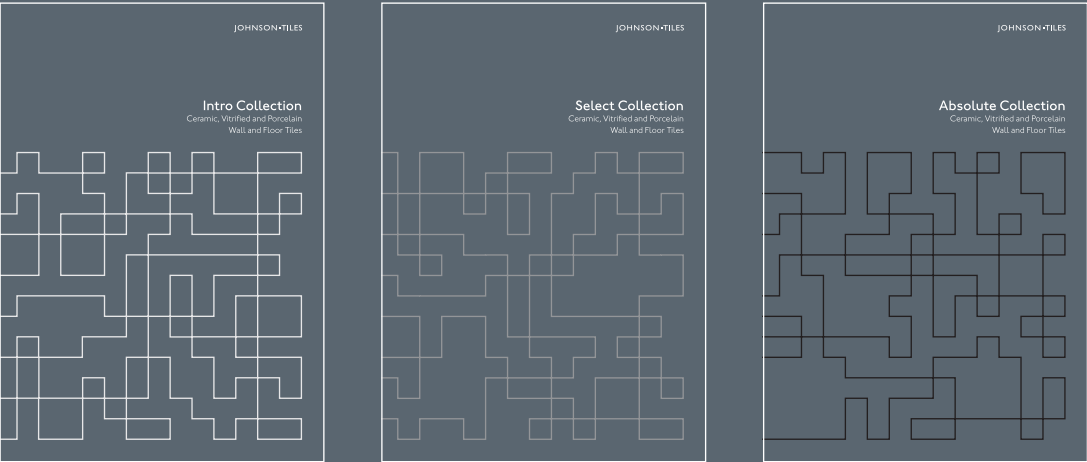
We are very conscious of our part in protecting the environment. Listed in ‘The Sunday Times Best Green Companies’, each year we re-use internal water supplies, recapture and distribute heat generated from our kilns, and recycle approximately 10k tonnes of ceramic waste; and all product manufactured at our Stoke on Trent base contains up to 14% recycled ceramic materials – a unique process worldwide.

Johnson Tiles is a division of Norcros Group (Holdings) Limited, Ladyfield House, Station Road, Wilmslow, Cheshire, SK9 1BU.

Registered in England number 566694.

One portfolio...

We operate from one core product portfolio used internationally. Three collections built on a Good, Better and Best principle. Each group has both wall and floor co-ordinating options. Our colour and design story works across all three collections allowing clients to ‘mix and match’ between price points and styles.



The **Intro Collection** – Available ranges...

Bevel Brick Glazed Ceramic Wall Tiles P D	Borders Glass, Natural Stone and Ceramic Wall Tiles D	City Touchstone Glazed Ceramic and Porcelain Wall and Floor Tiles S D
Country Stones Glazed Vitrified Wall Tiles S	County Glazed Ceramic and Porcelain Wall and Floor Tiles S	Cristal Glazed Ceramic Wall Tiles P D
Drift Glazed Ceramic Wall Tiles W D	Formations Glazed Ceramic Wall Tiles S	Grain Glazed Ceramic Wall Tiles W
Grasmere Glazed Ceramic Wall Tiles S	Kerastar Un-glazed Porcelain Wall and Floor Tiles C L	Lagos Glazed Porcelain Wall and Floor Tiles C P
Micros Glazed Ceramic Wall Tiles P D	Polar Glazed Ceramic Wall Tiles P D	Sanctuary Glazed Ceramic Wall Tiles S
Shimmer Glazed Vitrified and Porcelain Wall and Floor Tiles M	Studio Glazed Ceramic Wall Tiles P D	Tundra Glazed Ceramic Wall Tiles P D
Urbanique Glazed Ceramic Wall Tiles S	Woodland Glazed Porcelain Wall and Floor Tiles W	

P Plain colour

C Concrete

S Stone

W Wood

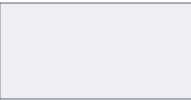
M Metallic

D Decorative

L Large format

Bevel Brick is available in **one** subtle and versatile size.

Size



200 x 100mm

Availability

All sizes
BVBR1A White Gloss
BVBR2A Cream Gloss
BVBR3A Black Gloss
BVBR4A Red Gloss

Thickness

All tiles in this range are 6.8mm thick.

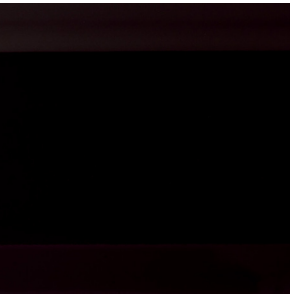
Four colours offering a neutral and contemporary palette.



White



Cream



Black



Red

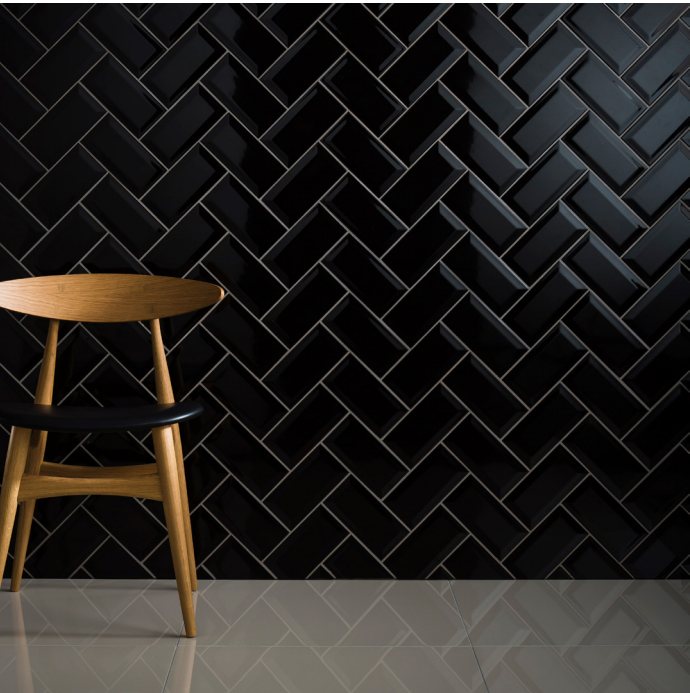
One finish

Example below is not to scale but has been enlarged to show detail:



Gloss

Bevel Brick Black



Borders are available in **five sizes**, perfectly designed for easy installation.



Size

Border size 315 x 44mm

22 x 22mm

Border size 300 x 55mm

35 x 17mm

Border size 300 x 50mm

27 x 27mm

Border size 300 x 50mm

300 x 50mm

Ribbed

50 x 50mm

Shatter

Border size 300 x 25mm

Mixed

Border size 300 x 20mm

Ribbed

300 x 20mm

Thickness

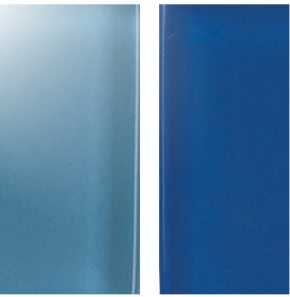
CLZA1B, STAR1B, GLI1B/2B, TAMA1B and SHTR1B are 10mm. PLTO3B is 15mm thick. All other borders in this range are 8mm thick.

Availability

22 x 22mm (315 x 44mm) CLZA1B Caliza Matt	300 x 50mm STAR1B Stardust Matt	50 x 50mm (300 x 50mm) VTO13B Vitrose Coral Gloss VTO15B Vitrose Blue Gloss VTO16B Vitrose Damson Gloss VTO17B Vitrose Seaspray Gloss	Mixed (300 x 50mm) TAMA1B Tamara Mixed
35 x 17mm (300 x 55mm) NSPA1B Natural Spa Matt	Ribbed (300 x 50mm) GLI1B Glide Gloss	Ribbed (300 x 25mm) GLI2B Glide Gloss	
27 x 27mm (300 x 55mm) ALEG1B Allegra Matt	Shatter (300 x 50mm) SHTR1B Shatter Matt	300 x 20mm PLTO3B Platino Matt	

Three finishes combine form and function.

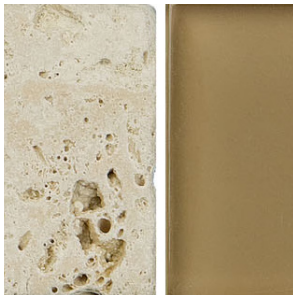
Examples below are not to scale but have been enlarged to show detail:



Gloss

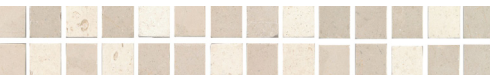


Matt

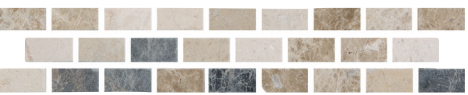


Mixed

12 colours offering a neutral and contemporary palette.



Caliza



Natural Spa



Allegra



Stardust



Glide



Vitrose Coral



Vitrose Blue



Vitrose Damson



Vitrose Seaspray



Shatter



Tamara



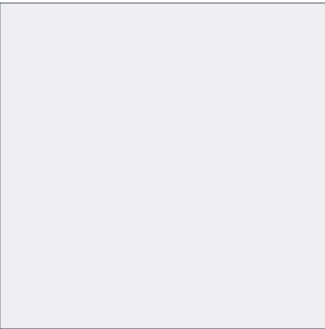
Platino

Borders Stardust Matt and Arctic White Gloss

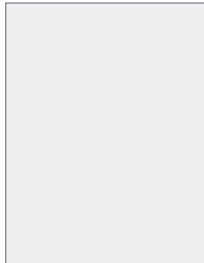
City Touchstone is available in **two sizes**, perfectly designed for easy installation.



Size



450 x 450mm



360 x 275mm

Availability

360 x 275mm

CTO1A Stone White Matt
CTO2A Soft Pebble Matt
CTO3A Sand Dune Matt
CTO4A Natural Slate Matt
CTO5A Greystone Matt
CTO6A Blackrock Matt
CTO1L Beige Mix Matt Structured
CTO2L Grey Mix Matt Structured

450 x 450mm

CTO1F Stone White Matt
CTO2F Soft Pebble Matt
CTO3F Sand Dune Matt
CTO4F Natural Slate Matt
CTO5F Greystone Matt
CTO6F Blackrock Matt

Thickness

450 x 450mm tiles in this range are 9.8mm thick.

Two finishes combine form and function.

Examples below are not to scale but have been enlarged to show detail:



Matt



Matt Structured

Eight colours offering a neutral and contemporary palette.



Stone White **PEI IV**



Soft Pebble **PEI III**



Sand Dune **PEI III**



Greystone **PEI II**



Natural Slate **PEI II**



Blackrock **PEI I**



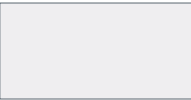
Beige Mix



Grey Mix

Country Stones is available in **two sizes**, perfectly designed for seamless installation.

Size



200 x 100mm



100 x 100mm

Availability

- All sizes**
COS01A Clay Brown Satin
COS02A Barley Cream Satin
COS03A Millstone White Satin
COS04A Dovetail Satin
COS05A Hearth Grey Satin
COS06A Summer Storm Satin
COS07A Midnight Satin

Thickness

All tiles in this range are 6.5mm thick.

One finish

Example below is not to scale but has been enlarged to show detail:



Satin

Seven colours offering a neutral and contemporary palette.



Midnight



Summer Storm



Hearth Grey



Dovetail



Millstone White



Barley Cream

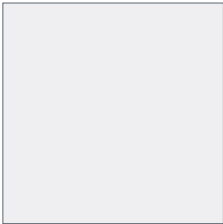


Clay Brown

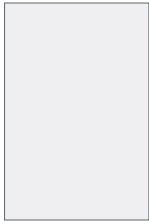
County is available in **two sizes**, perfectly designed for easy installation.



Size



305 x 305mm



300 x 200mm

Availability

300 x 200mm

CNY01A Old Stone Matt
CNY02A Classic White Matt
CNY03A Natural Grey Matt
CNY04A Rustic Taupe

305 x 305mm

CNY01F Old Stone Matt
CNY02F Classic White Matt
CNY03F Natural Grey Matt
CNY04F Rustic Taupe

Thickness

305 x 305mm tiles in this range are 8mm thick.

One finish

Example below is not to scale but has been enlarged to show detail:



Matt

Four colours offering a neutral and contemporary palette.



Classic White

PEI III



Old Stone

PEI III



Rustic Taupe

PEI III



Natural Grey

PEI III

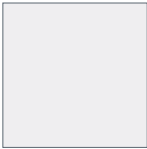


County Rustic Taupe

Crystal is available in **one** subtle and versatile size.



Size



150 x 150mm

Availability

All sizes

- CRWHIT White Gloss
- CRWH1B Grey Stripe Border Gloss
- CRWH1I Grey Stripe Inset Gloss
- CRWH2B Beige Stripe Border Gloss
- CRWH2I Beige Stripe Inset Gloss
- CRWH3B Blue Stripe Border Gloss
- CRWH3I Blue Stripe Inset Gloss
- CBWHIT White Bumpy Gloss
- CBCREM Cream Bumpy Gloss

Thickness

All tiles in this range are 5.5mm thick.

N.B

All Stripe Border and Inset tiles are only available in White in a Gloss finish.

Two finishes combine form and function.

Examples below are not to scale but have been enlarged to show detail:



Gloss

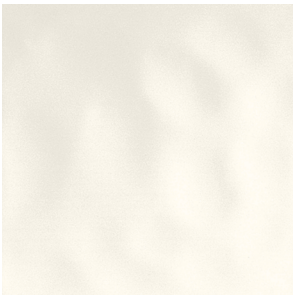


Bumpy Gloss

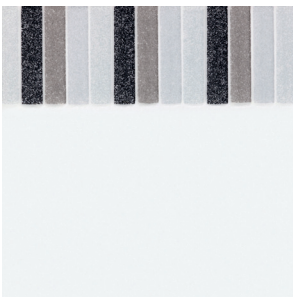
Five colours offering a neutral and contemporary palette.



White



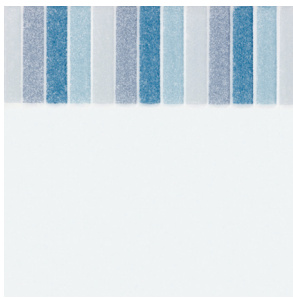
Cream



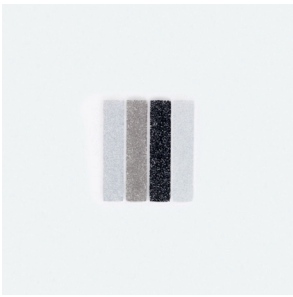
Grey Stripe Border



Beige Stripe Border



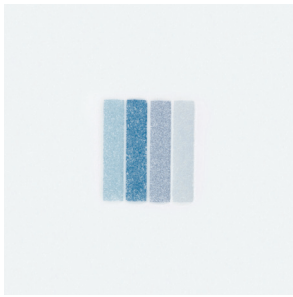
Blue Stripe Border



Grey Stripe Inset



Beige Stripe Inset

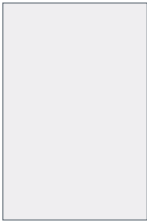


Blue Stripe Inset

Drift is available in **one** subtle and versatile size.



Size



300 x 200mm

Availability

All sizes

DRIF1A Autumn Reeds Matt Structured
DRIF2A Spring Frost Matt Structured
DRIF3A Summer Shadows Matt Structured

One finish

Example below is not to scale but has been enlarged to show detail:



Matt Structured

Three colours offering a neutral and contemporary palette.



Spring Frost



Autumn Reeds



Summer Shadows

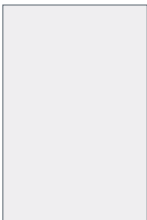


Drift Spring Frost, Autumn Reeds and Summer Shadows

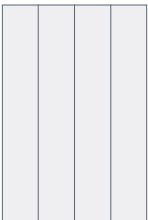
Formations is available in **one** subtle and versatile size, with **two** scored options.



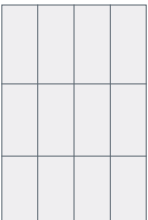
Size



300 x 200mm



300 x 200mm –
Scored One Way



300 x 200mm –
Scored Two Ways

Availability

All sizes
SHLE1A Shale Matt
SHLE1E Shale Scored One Way Matt
SHLE1F Shale Scored Two Ways Matt
DOLO1A Dolomite Matt
DOLO1E Dolomite Scored One Way Matt
DOLO1F Dolomite Scored Two Ways Matt
BSLT1A Basalt Matt
BSLT1E Basalt Scored One Way Matt
BSLT1F Basalt Scored Two Ways Matt

One finish

Example below is not to scale but has been enlarged to show detail:



Matt

Three colours offering a neutral and contemporary palette.



Shale



Dolomite



Basalt

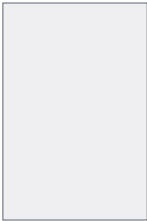


Formations Basalt and Basalt Scored One Way

Grain is available in **one** subtle and versatile size.



Size



300 x 200mm

Border

Border size 300 x 58mm



75 x 27mm



27 x 27mm

GRIN1B
(Ash, Driftwood and Mahogany Mix)

GRIN2B
(Ash, Driftwood and Mahogany Mix)

Availability

300 x 200mm
GRIN1A Ash Matt
GRIN2A Driftwood Matt
GRIN3A Mahogany Matt

One finish

Example below is not to scale but has been enlarged to show detail:



Matt

Three colours offering a neutral and contemporary palette.



Ash



Driftwood



Mahogany

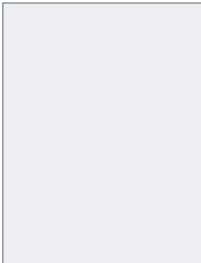


Grain Ash, Driftwood and 75 x 27mm Border

Grasmere is available in **one** subtle and versatile size.



Size



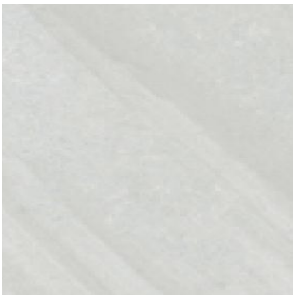
360 x 275mm

Availability

All sizes
GRA1A Bracken Matt
GRA2A Slate Matt

One finish

Example below is not to scale but has been enlarged to show detail:

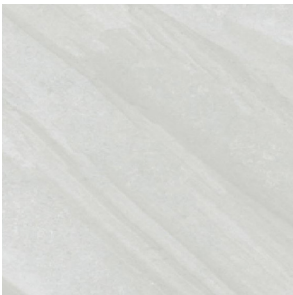


Matt

Two colours offering a neutral and contemporary palette.



Bracken



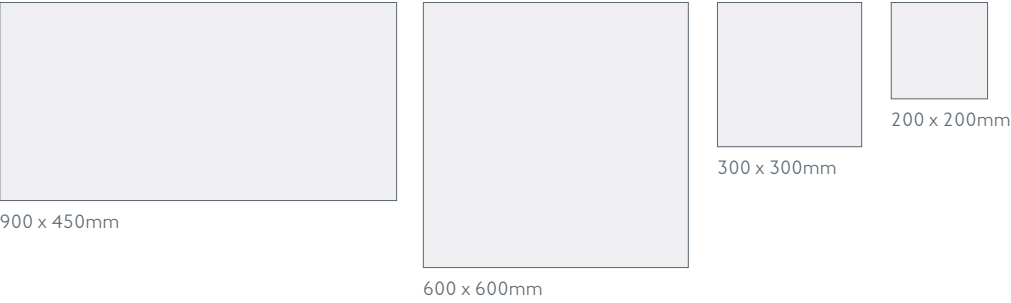
Slate



Grasmere Slate

Kerastar is available in **four sizes**, perfectly designed for seamless installation.

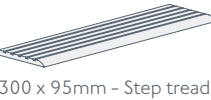
Size



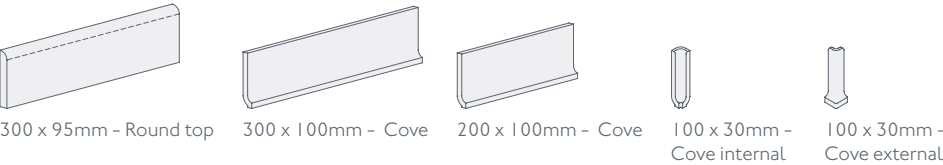
Thickness

900 x 450mm tiles in this range are 10.2mm thick. 600 x 600mm tiles are 10.5mm thick. All other tiles are 8.3mm thick.

Fitting



Skirting/Cove



Availability

200 x 200mm

KER503 String Natural
KER506 Clay Natural
KER507 Shadow Natural
KER509 Hail Natural
KER515 Graphite Natural
KER517 Granite Natural

KER509 Hail Diamond
KER515 Graphite Diamond
KER517 Granite Diamond

KER509 Hail Discface
KER515 Graphite Discface
KER517 Granite Discface

RT509 Hail Discface
RT515 Graphite Discface
RT517 Granite Discface

300 x 300mm

KER501 Chalk Natural
KER502 Linen Natural
KER503 String Natural
KER504 Mud Natural
KER505 Putty Natural
KER506 Clay Natural
KER507 Shadow Natural

KER508 Night Natural
KER509 Hail Natural
KER510 Biscuit Natural
KER511 Cord Natural
KER512 Fawn Natural
KER514 Pumice Natural
KER515 Graphite Natural
KER516 Night Sky Natural
KER517 Granite Natural

RT509 Hail Rocktop
RT515 Graphite Rocktop
RT517 Granite Rocktop

600 x 600mm

KER503 String Natural
KER506 Clay Natural
KER507 Shadow Natural

900 x 450mm

KER503 String Natural
KER506 Clay Natural
KER507 Shadow Natural

All fittings

KER503 String Natural
KER506 Clay Natural
KER507 Shadow Natural

All skirtings/coves

KER501 Chalk Natural*
KER502 Linen Natural*
KER503 String Natural
KER504 Mud Natural*
KER505 Putty Natural*
KER506 Clay Natural
KER507 Shadow Natural
KER508 Night Natural*
KER509 Hail Natural
KER510 Biscuit Natural*
KER511 Cord Natural*
KER512 Fawn Natural*
KER514 Pumice Natural*
KER515 Graphite Natural
KER516 Night Sky Natural*
KER517 Granite Natural

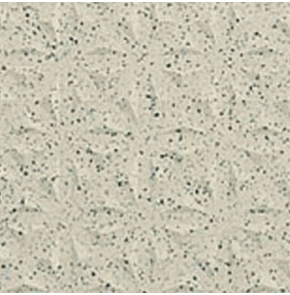
* Not available in 200 x 100mm - Cove

Four finishes combine form and function.

Examples below are not to scale but have been enlarged to show detail:



Natural



Diamond



Discface



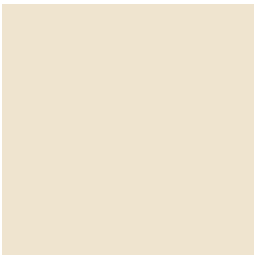
Rocktop



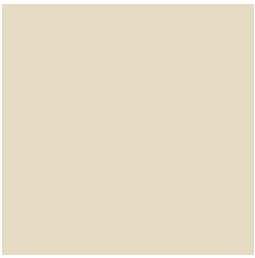
Kerastar Chalk Natural

Please turn over to view available colours...

16 colours offering a neutral and contemporary palette.



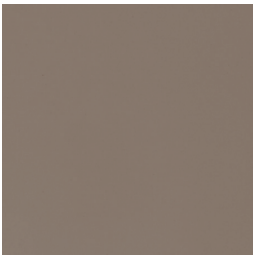
Chalk



Linen



String



Mud



Hail



Biscuit



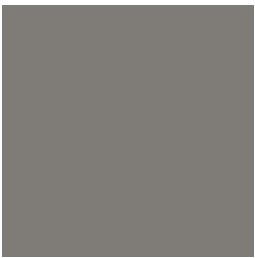
Cord



Fawn



Putty



Clay



Shadow



Night



Granite



Pumice



Graphite



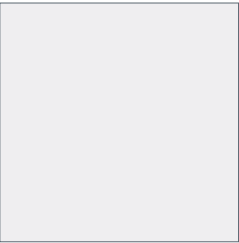
Night Sky



Kerastar Cord and Linen Natural

Lagos is available in **one** subtle and versatile size.

Size



330 x 330mm

Availability

All sizes
LAGO1F Dark Grey Matt
LAGO2F Black Matt
LAGO3F Light Grey Matt
LAGO4F White Matt
LAGO5F Beige Matt

Thickness

All tiles in this range are 8.5mm thick.

One finish

Example below is not to scale but has been enlarged to show detail:



Matt

Five colours offering a neutral and contemporary palette.



White **PEI IV**



Beige **PEI III**



Light Grey **PEI II**



Dark Grey **PEI I**



Black **PEI I**

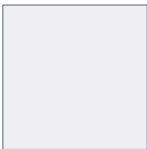


Lagos Black

Micros is available in **one** subtle and versatile size.



Size



150 x 150mm

Availability

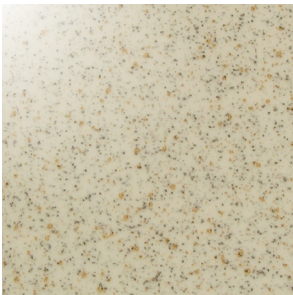
- All sizes**
PRG1 White Gloss
PRG6 Black Gloss
PRG11 Shark Gloss
PRG20 Magnolia Gloss
PRM57 White/Shark Gloss
PRM60 Magnolia/Redwood Gloss

Thickness

All tiles in this range are 6.5mm thick.

One finish

Example below is not to scale but has been enlarged to show detail:

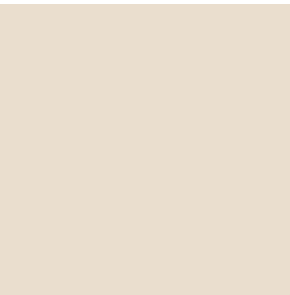


Gloss

Six colours offering a neutral and contemporary palette.



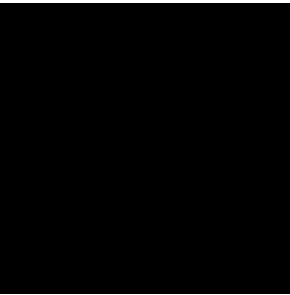
White



Magnolia



Shark



Black



White/Shark



Magnolia/Redwood

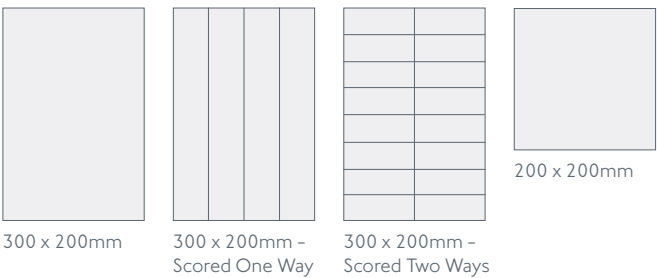


Micros Black, Shark and White/Shark

Polar is available in **two sizes**, with scored options, perfectly designed for seamless installation.



Size



Thickness

200 x 200mm tiles in this range are 6.5mm thick.

Availability

200 x 200mm

PRG1 White Gloss

PRS12 White Satin

ALPN1A White Bumpy Gloss

300 x 200mm

PURE1A White Gloss

PURE1E White Scored One Way Gloss

PURE1F White Scored Two Ways Gloss

CLAS1A White Satin

CLAS1E White Scored One Way Satin

CLAS1L White Satin Structured

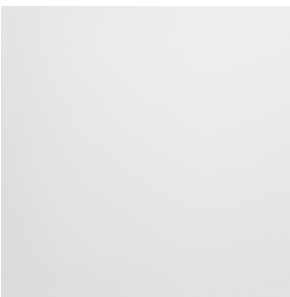
ALPN1A White Bumpy Gloss

Four finishes combine form and function.

Examples below are not to scale but have been enlarged to show detail:



Gloss



Satin

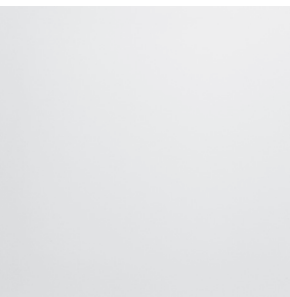


Bumpy Gloss



Satin Structured

One colour



White



Polar White and White Scored One Way Gloss

Sanctuary is available in **one** subtle and versatile size.



Size



300 x 200mm

Availability

All sizes

- CTBC1A Bianco Carrara Gloss
- MLOCKA Matlock Gloss
- HORI01 Horizon Gloss
- BATH1A Bath Gloss
- CTBC2A Bianco Carrara Satin
- MLOCKS Matlock Satin
- BXTONA Buxton Satin
- BATH2A Bath Satin

Two finishes combine form and function.

Examples below are not to scale but have been enlarged to show detail:



Gloss



Satin

Five colours offering a neutral and contemporary palette.



Bianco Carrara



Matlock



Horizon



Buxton



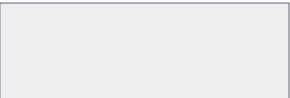
Bath



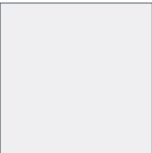
Sanctuary Bianco Carrara Gloss

Shimmer is available in **two sizes**, perfectly designed for easy installation.

Size



600 x 200mm



316 x 316mm

Availability

316 x 316mm
SHI01F Warm White Satin
SHI02F Platinum Satin
SHI03F Buff Steel Satin

600 x 200mm
SHI01A Warm White Satin
SHI02A Platinum Satin
SHI03A Buff Steel Satin

Thickness

All tiles in this range are 9.5mm thick.

One finish

Example below is not to scale but has been enlarged to show detail:



Satin

Three colours offering a neutral and contemporary palette.



Warm White

PEI IV



Platinum

PEI III



Buff Steel

PEI II

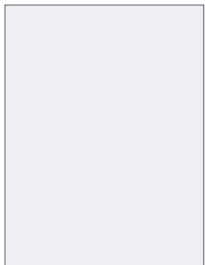


Shimmer Warm White and Buff Steel

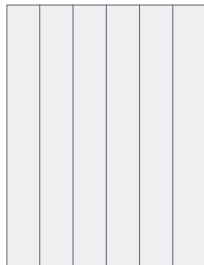
Studio is available in **one** subtle and versatile size, with **one** scored option.



Size



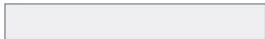
360 x 275mm



360 x 275mm –
Scored One Way

Border

Border size 360 x 50mm



360 x 50mm

Availability

All sizes

TUND1A Tundra Gloss
STUD2G Haze Gloss
STUD3G Sand Gloss
STUD4G Mist Gloss

TUND2A Tundra Satin
TUND2E Tundra Scored One Way Satin
STUD2G Haze Satin
STUD2E Haze Scored One Way Satin
STUD3G Sand Satin
STUD3E Sand Scored One Way Satin
STUD4G Mist Satin
STUD4E Mist Scored One Way Satin

TUND2L Tundra Satin Structured
STUD2L Haze Satin Structured
STUD3L Sand Satin Structured
STUD4L Mist Satin Structured

All borders

STUD1B Beige Mix Satin Structured
STUD2B Grey Mix Satin Structured

Three finishes combine form and function.

Examples below are not to scale but have been enlarged to show detail:



Gloss

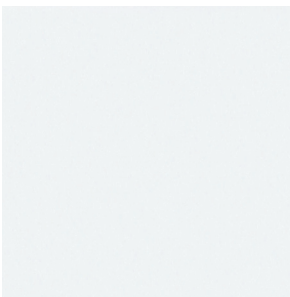


Satin



Satin Structured

Six colours offering a neutral and contemporary palette.



Tundra



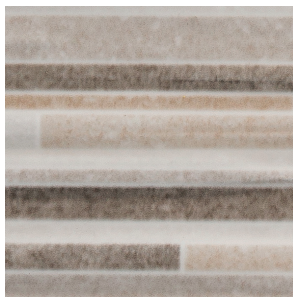
Haze



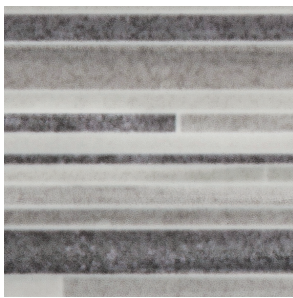
Sand



Mist



Beige Mix



Grey Mix

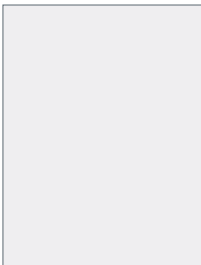


**Studio Sand and Sand
Scored One Way Satin**

Tundra is available in **one** subtle and versatile size.



Size



360 x 275mm

Availability

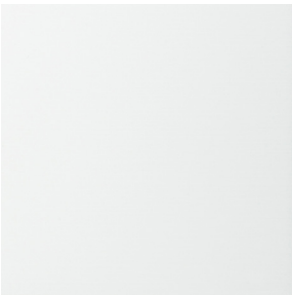
- All sizes**
TUND1A White Gloss
TUND2A White Satin
POLY1A White Satin Polygon
DMNS1A White Gloss Dimensions
DMNS2A White Satin Dimensions

Five finishes combine form and function.

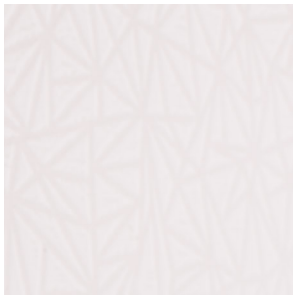
Examples below are not to scale but have been enlarged to show detail:



Gloss



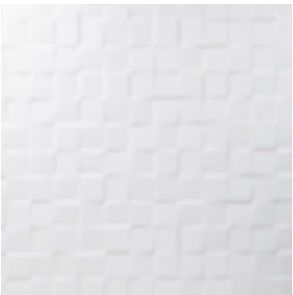
Satin



Satin Polygon



Gloss Dimensions



Satin Dimensions

One colour



White

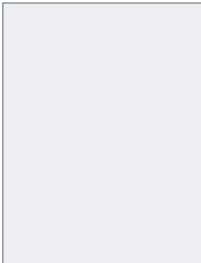


Tundra White Satin

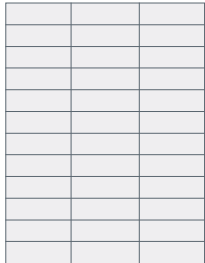
Urbanique is available in **one** subtle and versatile size, with **one** scored option.



Size



360 x 275mm



360 x 275mm –
Scored Two Ways

Availability

- All sizes**
URBN1A Stone Matt
URBN1S Stone Scored Two Ways Matt
URBN2A Honey Matt
URBN2S Honey Scored Two Ways Matt
URBN3A Mink Matt
URBN3S Mink Scored Two Ways Matt

One finish

Example below is not to scale but has been enlarged to show detail:



Matt

Three colours offering a neutral and contemporary palette.



Stone



Honey



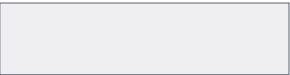
Mink



Urbanique Stone and Stone Scored Two Ways

Woodland is available in **one** bold and impactful size.

Size



600 x 150mm

Availability

All sizes
WDL1F Ebony Natural
WDL2F Elm Natural
WDL3F Ash Natural
WDL4F Pine Natural
WDL5F Oak Natural
WDL6F Walnut Natural

Thickness

All tiles in this range are 9mm thick.

One finish

Example below is not to scale but has been enlarged to show detail:



Natural

Six colours offering a neutral and contemporary palette.



Pine **PEI II**



Oak **PEI II**



Walnut **PEI I**



Ash **PEI II**



Elm **PEI II**



Ebony **PEI I**



Woodland Oak

Floor tile suitability

Abrasion resistance of glazed floor tiles (PEI)

This approximate classification is given for guidance only. It should not be taken to provide accurate product specifications for specific requirements.

PEI I

Floor coverings in areas that are walked on essentially with soft soled footwear or bare feet without scratching dirt (e.g. residential bathrooms or bedrooms without direct access from the outside).

PEI II

Floor coverings in areas that are walked on by soft soled or normal footwear with, at most, the occasional small amounts of scratching dirt (e.g. rooms in living areas of homes but with the exception of kitchens, entrances and other rooms which may have a lot of traffic). This does not apply to abnormal footwear; for example hobnailed boots.

PEI III

Floor coverings in areas that, with normal footwear, are walked on more often with small amounts of scratching dirt (e.g. residential kitchens, halls and corridors). This does not apply to abnormal footwear; for example hobnailed boots.

PEI IV

Floor coverings that are walked on by regular traffic with some scratching dirt so that the conditions are more severe than Class III (e.g. conservatories).

PEI V

Floor coverings that are subject to severe pedestrian traffic over sustained periods with some scratching dirt, so that the conditions are the most severe for which glazed floor tiles may be suitable (e.g. public areas such as restaurant floors, office internal walkways and reception areas).





This classification is valid for the given applications in normal conditions. Consideration should be given to footwear, type of traffic and cleaning methods expected and the floors should be adequately protected against scratching dirt at the entrance to the buildings by interposing footwear cleaning devices.

Colour notations







Range	Code	Colour	PEI value
City Touchstone	CTO1F	Stone White	IV
City Touchstone	CTO2F	Soft Pebble	III
City Touchstone	CTO3F	Sand Dune	III
City Touchstone	CTO4F	Natural Slate	II
City Touchstone	CTO5F	Greystone	II
City Touchstone	CTO6F	Blackrock	I
County	CNY01F	Old Stone	III
County	CNY02F	Classic White	III
County	CNY03F	Natural Grey	III
County	CNY04F	Rustic Taupe	III
Lagos	LAGO1F	Dark Grey	I
Lagos	LAGO2F	Black	I
Lagos	LAGO3F	Light Grey	II
Lagos	LAGO4F	White	IV
Lagos	LAGO5F	Beige	III
Shimmer	SHI01F	Warm White	IV
Shimmer	SHI02F	Platinum	III
Shimmer	SHI03F	Buff Steel	II
Woodland	WDL1F	Ebony	I
Woodland	WDL2F	Elm	II
Woodland	WDL3F	Ash	II
Woodland	WDL4F	Pine	II
Woodland	WDL5F	Oak	II
Woodland	WDL6F	Walnut	I

Note: These results are from Johnson Tiles’ internal test reports and are to be used for guidance only.

Ceramic tile physical properties

Test		Standard	Requirement	Typical test value
	Length/width	EN ISO 10545-2	$\pm 0.5\% \leq \pm 2\text{mm}$	Pass
	Straightness of side	EN ISO 10545-2	$\pm 0.3\% \leq \pm 1.5\text{mm}$	Pass
	Water absorption	EN ISO 10545-3	10% to 20%	Pass
	Modulus of rupture	EN ISO 10545-4	Min 15N/mm ²	Pass
	Frost resistance	EN ISO 10545-12		Not suitable for installations where temperatures may fall below freezing.
	Stain resistance	EN ISO 10545-14	Min Class 3	Pass

Vitrified tile physical properties

Test		Standard	Requirement	Typical test value
	Length/width	EN ISO 10545-2	$\pm 0.6\% \leq \pm 2\text{mm}$	Pass
	Straightness of side	EN ISO 10545-2	$\pm 0.5\% \leq \pm 1.5\text{mm}$	Pass
	Water absorption	EN ISO 10545-3	3% to 6%	Pass
	Modulus of rupture	EN ISO 10545-4	Min 22N/mm ²	Pass
	Frost resistance	EN ISO 10545-12		Not suitable for installations where temperatures may fall below freezing.
	Stain resistance	EN ISO 10545-14	Min Class 3	Pass

Porcelain tile physical properties

Test		Standard	Requirement	Typical test value
	Length/width	EN ISO 10545-2	$\pm 0.6\% \leq \pm 2\text{mm}$	Pass
	Straightness of side	EN ISO 10545-2	$\pm 0.5\% \leq \pm 1.5\text{mm}$	Pass
	Water absorption	EN ISO 10545-3	$\leq 0.5\%$	Pass
	Modulus of rupture	EN ISO 10545-4	Min 35N/mm ²	Pass
	Frost resistance	EN ISO 10545-12	Resistant	Resistant
	Stain resistance	EN ISO 10545-14	Min Class 3	Pass

Important information

During the manufacture of all ceramic, vitrified and porcelain tiles, some variation in shade or pattern can occur. Before fixing tiles, several cartons should be opened, and the contents mixed, to ensure that the size, shade, colour and patterning are acceptable. The tiles illustrated in this brochure are quality products and conform to the physical properties listed above.

- For specific suitability and fit-for-purpose details, contact the technical helpline.
- Johnson Tiles cannot accept responsibility for any tiles that have been fixed.
- Every effort has been made to ensure the accuracy of the information given in this brochure.
- In the interest of progress, Johnson Tiles reserves the right to change specifications and availability without prior notice.
- Nothing in these statement’s does, or will affect the statutory rights of the consumer.

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Uniclass	Epic
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CI/SfB	[42] Sg3

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