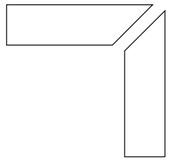
EDGE 45º ANGLE CUT



HALF CHAMFERED

FULL CHAMFERED

FULL BULLNOSE

HALF BULLNOSE

Choosing the right edge for your countertop

In any interior design project it is often the details that set it apart, and choosing your countertop edge is not a detail you want to overlook.

The edge can complete the style of your dream kitchen or bathroom.

Maximus standard and special edges are the finishing touch to your countertop installation.

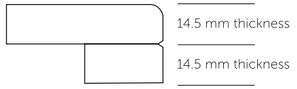
RAK E-System*

RAK E-System is a worldwide exclusive by RAK Ceramics. It's the ideal and innovative solution to the current needs of designers who need to combine the aesthetics of a natural looking product with the versatility of porcelain slabs.

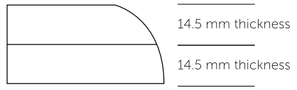
Thanks to its innovative and high performance materials, Maximus slabs can be easily processed to obtain glossy or matt thick edges, just gluing 2 overlapping slabs (14.5mm+14.5mm) according to the standards of natural stone processing.

HALF CHAMFERED

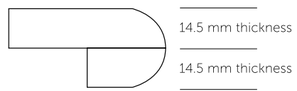
FULL CHAMFERED

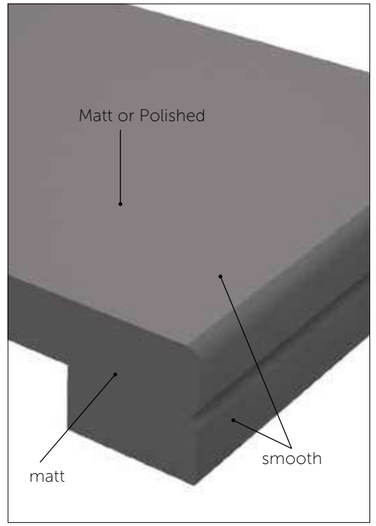


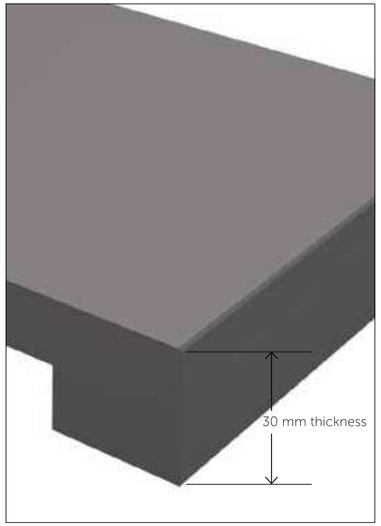
HALF BULLNOSE



FULL BULLNOSE







*RAK E-System is only available for UNI

TECHNICAL

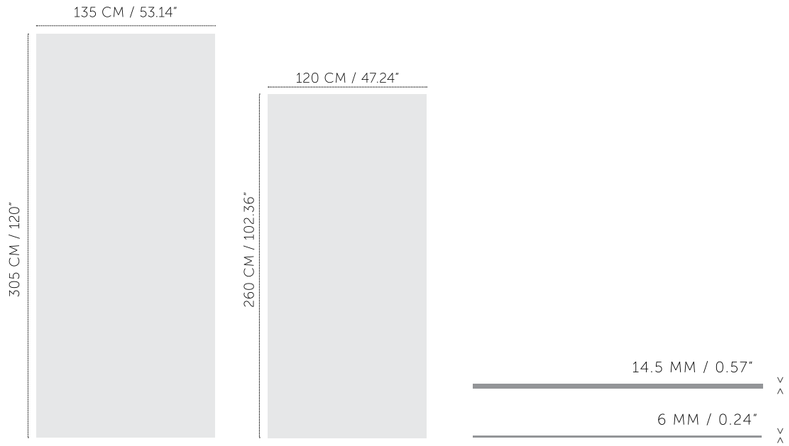
SIZES & PACKAGING

TECHNICAL SPECIFICATIONS

EQUIPMENTS AND HANDLING

CLEANING AND MAINTENANCE

Product sizes



Packaging details

135x305 PALLET DIMENSIONS (CM)

Finish	Length	Height	Width
Polished	315	40	150
Natural	315	40	150

TILE THICKNESS: 14.5MM

FINISH	TILE SIZE (CM)	TILE AREA (sqm)	KG per pc	PCS per pallet	TILE AREA per pallet (sqm)	WEIGHT per pallet (kg)
Polished	135x305	4.12	143	10	41.2	1502
Matt	135x305	4.12	150	10	41.2	1572

120x260 PALLET DIMENSIONS (CM)

Finish	Length	Height	Width
Polished / Natural / Honed	267	33.50	133

TILE THICKNESS: 6MM

FINISH	TILE SIZE (CM)	TILE AREA (sqm)	KG per pc	PCS per pallet	TILE AREA per pallet (sqm)	WEIGHT per pallet (kg)
Polished / Natural / Honed	120x260	3.12	44.00	20	62.4	1000.00

135x305 PALLET DIMENSIONS (CM)

Finish	Length	Height	Width
Polished	310	160	35
Natural	310	160	35

TILE THICKNESS: 14.5MM

FINISH	TILE SIZE (CM)	TILE AREA (sqm)	KG per pc	PCS per pallet	TILE AREA per pallet (sqm)	WEIGHT per pallet (kg)
Polished	135x305	4.12	143	10	41.20	1478
Natural	135x305	4.12	150	10	41.20	1548

Note: All tile dimensions mentioned above are rectified. Unrectified size is available in +/-140x308cm on request
All weights and thickness mentioned in the above table are approximate average.

Technical specifications

TEST DESCRIPTION	STANDARD TEST METHOD	STANDARD REQUIREMENTS	RAK CERAMICS SPECIFICATION	
			Porcelain Tiles (Natural) 14 MM THICKNESS 135X305	Full Body Porcelain Tiles (Natural/ Polished) 14 MM THICKNESS 135X305
Surface Quality	BS EN ISO 10545-2	A minimum of 95% of the tiles are to be free from visible defects	Minimum of 95% of the tiles are free from visible defects	
Length & Width	BS EN ISO 10545-2	± 1.0mm	± 1.0mm	± 1.0mm
Thickness	BS EN ISO 10545-2	± 0.5mm	± 0.5mm	± 0.5mm
Straightness Of Sides	BS EN ISO 10545-2	± 0.8mm	± 0.8mm	± 0.8mm
Rectangularity	BS EN ISO 10545-2	± 1.5mm	± 1.2mm	± 1.2mm
Surface Flatness: Centre Curvature	BS EN ISO 10545-2	± 1.8mm	± 1.8mm	± 1.8mm
Surface Flatness: Edge Curvature	BS EN ISO 10545-2	± 1.8mm	± 1.5mm	± 1.5mm
Surface Flatness: Warpage	BS EN ISO 10545-2	± 1.8mm	± 1.5mm	± 1.5mm
Water Absorption	BS EN ISO 10545-3	≤ 0.5%	≤ 0.4%	≤ 0.1%
Breaking Strength*	BS EN ISO 10545-4	≥ 1300 N ≥ 700 N	≥ 3500 N -	≥ 3500 N -
Modulus Of Rupture*	BS EN ISO 10545-4	≥ 35 N/mm^2	≥ 40 N/mm^2	≥ 40 N/mm^2
Resistance To Deep Abrasion	BS EN ISO 10545-6	≤ 175 mm^3	-	≤ 150 mm^3
Resistance To Surface Abrasion	BS EN ISO 10545-7	Report abrasion class	PEI CLASS 2-5	-
Coefficient Of Linear Thermal Expansion	BS EN ISO 10545-8	Test method available	≤ 7 X 10^{-6}/°C	≤ 7 X 10^{-6}/°C
Resistance To Thermal Shock	BS EN ISO 10545-9	Test method available	No visible defect	No visible defect
Frost Resistance	BS EN ISO 10545-12	Required	No crazing	No visible damage
Resistance To Household Chemicals & Swimming Pool Salts	BS EN ISO 10545-13	Minimum B	No visible damage	Class A No visible effect
Resistance To Low Concentrations Acids & Alkalis	BE EN ISO 10545-13	Manufacturer to state classification	Class A No visible effect	Class LA No visible effect
Resistance To High Concentrations Acids & Alkalis	BS EN ISO 10545-13	Test method available	Class LA No visible effect	Class HA No visible effect
Resistance To Staining (Natural)	BS EN ISO 10545-14	Min. Class 3	Min. Class 4 Stains removed	Min. Class 3 Stains removed
Resistance To Staining (Polished)	BS EN ISO 10545-14	Test method available	-	Min. Class 2 Stains removed

Note: This technical specifications are applicable only to tiles in choice "A".

*** Test performed using 100X100 cm cut pieces from the slab.**
*** Thickness is nominal**

Technical specifications - Porcelain Tiles (Natural, Full Lappato, Honed)

TEST DESCRIPTION	STANDARD TEST METHOD	STANDARD REQUIREMENTS	RAK CERAMICS SPECIFICATION 6 MM THICKNESS (120x260)
Surface Quality	BS EN ISO 10545-2	A minimum of 95% of the tiles are to be free from visible defects	Minimum of 95% of the tiles are free from visible defects
Length & Width	BS EN ISO 10545-2	± 1.0mm	± 1.0mm
Thickness	BS EN ISO 10545-2	± 0.5mm	± 0.5mm
Straightness Of Sides	BS EN ISO 10545-2	± 0.8mm	± 0.8mm
Rectangularity	BS EN ISO 10545-2	± 1.5mm	± 1.2mm
Surface Flatness: Centre Curvature	BS EN ISO 10545-2	± 1.8mm	± 1.8mm
Surface Flatness: Edge Curvature	BS EN ISO 10545-2	± 1.8mm	± 1.5mm
Surface Flatness: Warpage	BS EN ISO 10545-2	± 1.8mm	± 1.5mm
Water Absorption	BS EN ISO 10545-3	≤ 0.5%	≤ 0.4%
Breaking Strength*	BS EN ISO 10545-4	≥ 700 N	≥ 700 N
Modulus Of Rupture*	BS EN ISO 10545-4	≥ 35 N/mm^2	≥ 35 N/mm^2
Resistance To Surface Abrasion	BS EN ISO 10545-7	Report abrasion class	PEI CLASS 2-5
Coefficient Of Linear Thermal Expansion	BS EN ISO 10545-8	Test method available	≤ 7 X $10^{-6}/^oC$
Resistance To Thermal Shock	BS EN ISO 10545-9	Test method available	No visible defect
Crazing Resistance	BS EN ISO 10545-11	Required	No crazing
Frost Resistance	BS EN ISO 10545-12	Required	No visible damage
Resistance To Household Chemicals & Swimming Pool Salts	BS EN ISO 10545-13	Minimum B	Class A No visible effect
Resistance To Low Concentrations Acids & Alkalis	BE EN ISO 10545-13	Manufacturer to state classification	Class LA No visible effect
Resistance To Staining	BS EN ISO 10545-14	Minimum class 3	Min. Class 4 Stains removed

Note: This technical specifications are applicable only to tiles in choice "A".

*** Test performed using 100X100 cm cut pieces from the slab.**
*** Thickness is nominal**

Technical specifications - Full Body Porcelain Tiles (Natural/Polished)

TEST DESCRIPTION	STANDARD TEST METHOD	STANDARD REQUIREMENTS	RAK CERAMICS SPECIFICATION 6 MM THICKNESS (120x260)
Surface Quality	BS EN ISO 10545-2	A minimum of 95% of the tiles are to be free from visible defects	Minimum of 95% of the tiles are free from visible defects
Length & Width	BS EN ISO 10545-2	± 1.0mm	± 1.0mm
Thickness	BS EN ISO 10545-2	± 0.5mm	± 0.5mm
Straightness Of Sides	BS EN ISO 10545-2	± 0.8mm	± 0.8mm
Rectangularity	BS EN ISO 10545-2	± 1.5mm	± 1.2mm
Surface Flatness: Centre Curvature	BS EN ISO 10545-2	± 1.8mm	± 1.8mm
Surface Flatness: Edge Curvature	BS EN ISO 10545-2	± 1.8mm	± 1.5mm
Surface Flatness: Warpage	BS EN ISO 10545-2	± 1.8mm	± 1.5mm
Water Absorption	BS EN ISO 10545-3	≤ 0.5%	≤ 0.1%
Breaking Strength*	BS EN ISO 10545-4	≥ 700 N	≥ 700 N
Modulus Of Rupture*	BS EN ISO 10545-4	≥ 35 N/mm^2	≥ 35 N/mm^2
Resistance To Deep Abrasion	BS EN ISO 10545-6	≤ 175 mm^3	≤ 150 mm^3
Coefficient Of Linear Thermal Expansion	BS EN ISO 10545-8	Test method available	≤ 7 X $10^{-6}/^oC$
Resistance To Thermal Shock	BS EN ISO 10545-9	Test method available	No visible defect
Frost Resistance	BS EN ISO 10545-12	Required	No visible damage
Resistance To Household Chemicals & Swimming Pool Salts	BS EN ISO 10545-13	Minimum B	Class A No visible effect
Resistance To Low Concentrations Acids & Alkalis	BE EN ISO 10545-13	Manufacturer to state classification	Class LA No visible effect
Resistance To High Concentrations Acids & Alkalis	BS EN ISO 10545-13	Test method available	Class HA No visible effect
Resistance To Staining (Natural)	BS EN ISO 10545-14	Test method available	Min. Class 3 Stains removed
Resistance To Staining (Polished)	BS EN ISO 10545-14	Test method available	Min. Class 2 Stains removed

Note: This technical specifications are applicable only to tiles in choice "A".

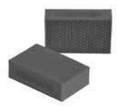
*** Test performed using 100X100 cm cut pieces from the slab.**
*** Thickness is nominal**

Suggested equipment

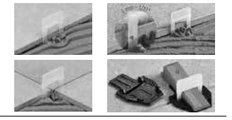
HANDLING EQUIPMENT

Aluminum Parallel profile with crossbars and Suction Vacuum suction cups with vacuum gauge	
Tile Cart Trolley	
Double Suction Cups	
Modular Work Bench BM180	
Modular Work Bench BM180 BM180 Plus (Perfect Workstation for large format tiles up to 160cm width)	

CUTTING AND DRILLING EQUIPMENT

Compass device with suction cups for Circular Cuts	
Free cut guide with complete outfit Max. Cut of length – 156 cm	
Free Cut Extension	
Cutting off pliers for tile/slabs	
Diamond polishing pad	
Diamond for edge and side polishing	
Diamond Blades for simultaneous cutting and grooving	

INSTALLATION AND LEVELLINGEQUIPMENT

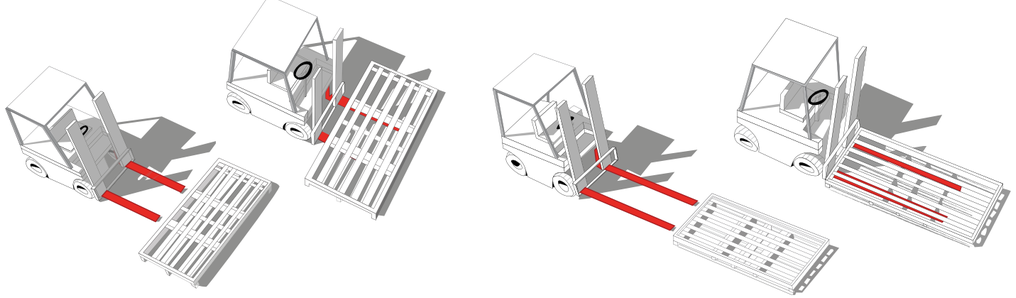
Compact Vibrator or Tile Beater	
RLS 3D Clips for tiles	
Wedges (for Anti- Chipping / Anti-Scratching preventing platforms)	
Adjustable pliers for wall and floor covering	
Low-speed mixer	
Rubber Grout floats	
Slant ridge notched trowel	
Diamond for edge and side polishing	

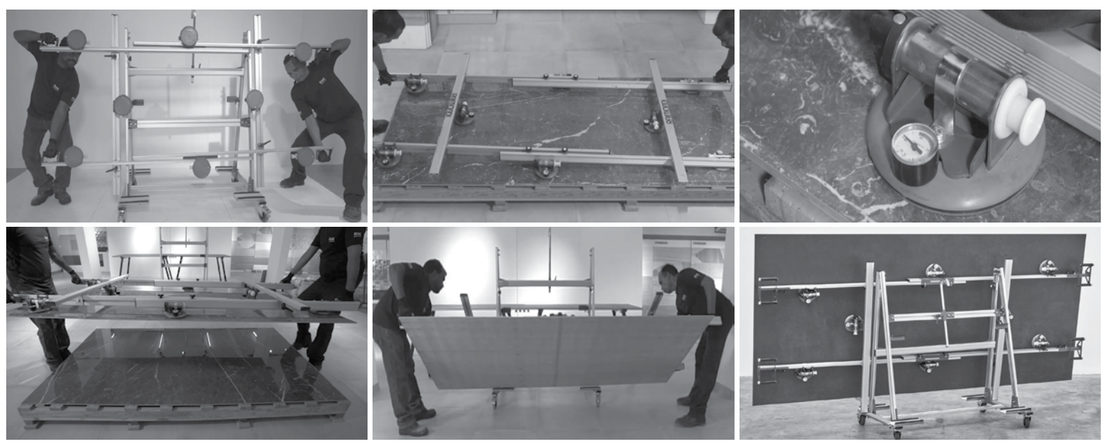
CLEANING AND MAINTENANCE

Brooms	
Floats with abrasive pads	

Handling Maximus

- Maximus extra-large format slabs arrive in oversized crates, which require specific Handling equipment to prevent from damage occurring during forklift operation, specific fork sizes must be used. For example, to handle a crate of 135cm x 305cm tiles from the side, 112cm/ 44" long forks are recommended.
- To handle the same crate from the narrow end requires forks that are at least 213cm/ 84" long. Lifting multiple crates with longer forks may require forklifts with a greater lift capacity.
- Specialized tools and equipment are currently available for the handling, installation and cutting of large porcelain surfaces. Innovative trowels with unique notch configurations can help increase the consistency of the mortar coverage on the back of the tile.
- To increase rigidity and limit twisting, use a system composed of parallel and transverse guides.
- For a perfect adhesion clean the slab and the sukers with a damp spongue.
- The suckers run along the guides and adhere to the slab. Make sure that a vacuum is created between the device and the surface.
- A single guide device can be used for sizes of maximum length.
- Use four operators at a time to carry out handling operations of large size slabs.
- Lift the slab along the long side and hang it vertically to the handles of the frame.
- For the large size slab a suitably reinforced trollry is recommended. Set the guides to the trolley for carrying the slab.
- Follow the same procedure for handling the 120x240cm and all other sub-sizes, where ony two operators are sufficient.





Cut-to-pieces and drilling

- RAK Ceramics recommends the use of special designed devices for handling as well as cutting and laying of big slabs.
- Handle slab with a proper and professional trolley of aluminum parallel profile with crossbars and vacuum suction cups along with a vacuum gauge. Please use double suction cups for slabs above 300cm. This could make sure that appropriate vacuum is created between the device and the slab. Lift the slab and keep it vertically to the trolley frame.
- Keep the slab on a stable, flat and intractable surface. For successful cutting and drilling, RAK Ceramic recommend using a professional modular workbench with aluminum profiles and proper cutting tools for each type of cut.
- Set the cutting unit on the tile so that the references coincide with the marked lines and lock it with the appropriate suckers. Score the slab from one edge to the other, being carefully maintaining the same pressure while moving.
- When the cut has been made, move the slab until the slit line sticks out a 10 to 15 cm from the workbench. Start hew from both sides using appropriate cutting-off pliers and follow the scoring line to complete the hew.
- Smooth rough edges and sides with an appropriate diamond polishing pad.
- To drill internal cutouts from the slab, first you need to draw the guide lines. For circular cuts, use the compass device with suction cups. For rectangular cut, drill first a 5 – 7 mm hole at the corners of the rectangle shape, using a non-percussion drill. For a better drilling always, keep the surface and drill a little bit wet. Then Follow the drilled lines using a diamond-blade angle grinder and then finish off the edges with a diamond-polishing pad. Round holes (4) must be made in wet drilling, using diamond-blades. Start engraving the surface with a 75 degrees point angle, then straighten out the drill avoiding excessive pressure on the slab. Also, in this case finish with a diamond-polishing pad.
- Manual traction devices are available, in order to make a finishing cut at 45° and thus enable special applications of the material.

Cleaning And Maintenance

Maximus products are non porous (due to their high quality raw materials, stringent production parameters and state of the art technology), hence any dust or deposited waste cannot penetrate the surface. For most cases only a damp cloth is sufficient for cleaning. Regular cleaning highlights the aesthetic features of the surface and gives it exceptional shine. For highly aggressive cleaning caused by some common food and substances follow the table below.

TYPE OF STAIN	CHEMICAL PRODUCT	EXAMPLE
Grease	Alkaline - Solvent	Detergent
Oil	Solvent	Ammonia
Ink	Oxidant - Solvent	Alcohol
Rust	Acid	Hydrolic acid
Lime	Acid	Descaling products
Cement	Acid	Hydrolic acid
Wine	Alkaline	Ammonia or Bleach
Coffee	Alkaline - Solvent	Ammonia or Bleach
Rubber	Solvent	Alcohol
Plaster	Acid	Hydrolic acid
Candle wax	Solvent	Alcohol
Iodine	Oxidant	Bleach
Blood	Oxidant	Bleach
Ice cream	Alkaline	Detergent
Resins	Solvent	Alcohol
Fruit juices	Oxidant	Bleach

Disclaimer: The aim of this manual is to offer helpful suggestions about handling and maintaining Maximus mega slabs. Due to nature of sintered ceramic material, it is highly advisable to consult an expert for these purposes. RAK Ceramics cannot be held responsible for any damage resulting from using the information and suggestions contained in this technical manual.

NOTES