





# MAXIMLS

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### TECHNICAL MANUAL AND HANDLING GUIDE

### MAXIM S <sup>01</sup> The system



# Big Slabs for Big Ideas - How will you use yours?

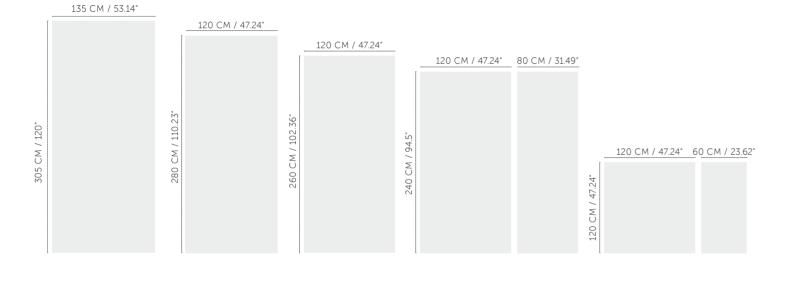
We have created a world where big is beautiful, with visually expanded spaces, fewer design interruptions and endless possibilities. Total flexibility to suit every need. Maximus is available in 3 thicknesses and many gigantic sizes.

# 

# Product Sizes

# Product Typology

BODY TYPE	SIZE (CM)	POLISHED/ FULL LAPPATO	NATURAL	HONED	6ММ ТНІСК	9ММ ТНІСК	14.5 MM THICK
Porcelain Tiles	135X305	$\checkmark$	$\checkmark$	$\checkmark$	×	$\times$	$\checkmark$
Porcelain Tiles	120X280	$\checkmark$	$\checkmark$	$\checkmark$	×	$\checkmark$	×
Porcelain Tiles	120X260	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	×	×
Porcelain Tiles	120X240	$\checkmark$	$\checkmark$	$\checkmark$	×	$\checkmark$	$\times$
Porcelain Tiles	80X240	$\checkmark$	$\checkmark$	$\checkmark$	$\times$	$\checkmark$	$\times$
Porcelain Tiles	120X120	$\checkmark$	$\checkmark$	$\checkmark$	$\times$	$\checkmark$	$\times$
Porcelain Tiles	60X120	$\checkmark$	$\checkmark$	$\checkmark$	×	$\checkmark$	$\times$
Full Body Porcelain Tiles	135X305	$\checkmark$	$\checkmark$	×	×	×	$\checkmark$
Full Body Porcelain Tiles	120X260	$\checkmark$	$\checkmark$	X	$\checkmark$	×	$\times$





# Full Body Porcelain Tiles (Natural)

TEST DESCRIPTION	STANDARD	STANDARD	RAK	CERAMICS SPECIFIC	ATION
	TEST METHOD	REQUIREMENTS	14.5 MM THICKNESS (135X305 CM)	9 MM THICKNESS (120X240,120x280,80x240, 120x120, 60x120 CM)	6 MM THICKNESS (120x260 CM)
Surface Quality	BS EN ISO 10545-2	a minimum of 95% of the tiles are to be free from visible defects		linimum of 95% of the til re free from visible defec	
Length & Width	BS EN ISO 10545-2	<u>+</u> 1.0mm	<u>+</u> 1.0mm	<u>+</u> 0.1mm	<u>+</u> 0.1mm
Thickness	BS EN ISO 10545-2	<u>+</u> 0.5mm	<u>+</u> 0.5mm	<u>+</u> 0.5mm	<u>+</u> 0.5mm
Straightness Of Sides	BS EN ISO 10545-2	± 0.8mm	<u>+</u> 0.8mm	<u>+</u> 0.8mm	<u>+</u> 0.8mm
Rectangularity	BS EN ISO 10545-2	<u>+</u> 1.5mm	± 1.5mm	<u>+</u> 1.5mm	<u>+</u> 1.5mm
Surface Flatness: Centre Curvature	BS EN ISO 10545-2	<u>+</u> 1.8mm	<u>+</u> 1.8mm	<u>+</u> 1.8mm	<u>+</u> 1.8mm
Surface Flatness: Edge Curvature	BS EN ISO 10545-2	<u>+</u> 1.8mm	<u>+</u> 1.8mm	<u>+</u> 1.8mm	<u>+</u> 1.8mm
Surface Flatness: Warpage	BS EN ISO 10545-2	<u>+</u> 1.8mm	<u>+</u> 1.8mm <u>+</u> 1.8mm		± 1.8mm
Water Absorption	BS EN ISO 10545-3	≤ 0.5%	≤ 0.1%	≤ 0.1%	≤ 0.1%
Breaking Strength*	BS EN ISO 10545-4	≥ 1300 N ≥ 700 N	≥ 3500 N -	≥ 1600 N -	- ≥ 700 N
Modulus Of Rupture*	BS EN ISO 10545-4	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>
Resistance To Deep Abrasion	BS EN ISO 10545-6	≤ 175 mm <sup>3</sup>	≤ 150 mm <sup>3</sup>	≤ 150 mm <sup>3</sup>	≤ 150 mm <sup>3</sup>
Coefficient Of Linear Thermal Expansion	BS EN ISO 10545-8	Test method available	≤ 7 X 10 <sup>-6</sup> /°C	≤ 7 X 10 <sup>-6</sup> /°C	≤ 7 X 10 <sup>-6</sup> /°C
Resistance To Thermal Shock	BS EN ISO 10545-9	Test method available	No visible defect	No visible defect	No visible defect
Frost Resistance	BS EN ISO 10545-12	Required	No visible damage	No visible damage	No visible damage
Resistance To Household Chemicals & Swimming Pool Salts	BS EN ISO 10545-13	Minimum B	Class A No visible effect	Class A No visible effect	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	Class LA No visible effect	Class LA No visible effect
Resistance To High Concentrations Acids & Alkalis	BS EN ISO 10545-13	Test method available	Class HA No visible effect	Class HA No visible effect	Class HA No visible effect
Resistance To Staining	BS EN ISO 10545-14	Test method available	Min. Class 3 Stains removed	Min. Class 3 Stains removed	Min. Class 3 Stains removed

# Full Body Porcelain Tiles (Polished)

TEST DESCRIPTION	STANDARD	STANDARD	RAK C	CERAMICS SPECIFIC	ATION		
	TEST METHOD	REQUIREMENTS	14.5 MM THICKNESS (135X305 CM)	9 MM THICKNESS (120X240,120x280,80x240, 120x120, 60x120 CM)	6 MM THICKNESS (120x260 CM)		
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	<u>+</u> 1.0mm	<u>+</u> 1.0mm	<u>+</u> 0.1mm	<u>+</u> 0.1mm		
Thickness	BS EN ISO 10545-2	<u>+</u> 0.5mm	<u>+</u> 0.5mm	<u>+</u> 0.5mm	<u>+</u> 0.5mm		
Straightness Of Sides	BS EN ISO 10545-2	<u>+</u> 0.8mm	<u>+</u> 0.8mm	<u>+</u> 0.8mm	<u>+</u> 0.8mm		
Rectangularity	BS EN ISO 10545-2	<u>+</u> 1.5mm	<u>+</u> 1.5mm	<u>+</u> 1.5mm	<u>+</u> 1.5mm		
Surface Flatness: Centre Curvature	BS EN ISO 10545-2	<u>+</u> 1.8mm	± 1.8mm	<u>+</u> 1.8mm	<u>+</u> 1.8mm		
Surface Flatness: Edge Curvature	BS EN ISO 10545-2	<u>+</u> 1.8mm	± 1.8mm	<u>+</u> 1.8mm	<u>+</u> 1.8mm		
Surface Flatness: Warpage	BS EN ISO 10545-2	<u>+</u> 1.8mm	± 1.8mm	<u>+</u> 1.8mm	<u>+</u> 1.8mm		
Water Absorption	BS EN ISO 10545-3	≤ 0.5%	≤ 0.1%	≤ 0.1%	≤ 0.1%		
Breaking Strength*	BS EN ISO 10545-4	≥ 1300 N ≥ 700 N	≥ 3500 N -	≥ 1600 N -	- ≥ 700 N		
Modulus Of Rupture*	BS EN ISO 10545-4	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>		
Resistance To Deep Abrasion	BS EN ISO 10545-6	≤ 175 mm <sup>3</sup>	≤ 150 mm <sup>3</sup>	≤ 150 mm <sup>3</sup>	≤ 150 mm <sup>3</sup>		
Coefficient Of Linear Thermal Expansion	BS EN ISO 10545-8	Test method available	≤ 7 X 10 <sup>-6</sup> /°C	≤ 7 X 10 <sup>-6</sup> /°C	≤ 7 X 10 <sup>-6</sup> /°C		
Resistance To Thermal Shock	BS EN ISO 10545-9	Test method available	No visible defect	No visible defect	No visible defect		
Frost Resistance	BS EN ISO 10545-12	Required	No visible damage	No visible damage	No visible damage		
Resistance To Household Chemicals & Swimming Pool Salts	BS EN ISO 10545-13	Minimum B	Class A No visible effect	Class A No visible effect	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	Class LA No visible effect	Class LA No visible effect		
Resistance To High Concentrations Acids & Alkalis	BS EN ISO 10545-13	Test method available	Class HA No visible effect	Class HA No visible effect	Class HA No visible effect		
Resistance To Staining	BS EN ISO 10545-14	Test method available	Min. Class 2 Stains removed	Min. Class 2 Stains removed	Min. Class 2 Stains removed		

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

\* Test performed using 60X60 cm cut pieces from the slab.

\* Thickness is nominal

<sup>\*</sup> Test performed using 60X60 cm cut pieces from the slab. \* Thickness is nominal

## Porcelain Tiles (Natural)

TEST DESCRIPTION	STANDARD	STANDARD	RAK	CERAMICS SPECIFIC	ATION
	TEST METHOD	REQUIREMENTS	14.5 MM THICKNESS (135X305 CM)	9 MM THICKNESS (120X240,120x280,80x240, 120x120, 60x120 CM)	6 MM THICKNESS (120x260 CM)
Surface Quality	BS EN ISO 10545-2	a minimum of 95% of the tiles are to be free from visible defects		linimum of 95% of the ti re free from visible defea	
Length & Width	BS EN ISO 10545-2	<u>+</u> 1.0mm	± 1.0mm	<u>+</u> 0.1mm	<u>+</u> 0.1mm
Thickness	BS EN ISO 10545-2	<u>+</u> 0.5mm	<u>+</u> 0.5mm	<u>+</u> 0.5mm	<u>+</u> 0.5mm
Straightness Of Sides	BS EN ISO 10545-2	<u>+</u> 0.8mm	± 0.8mm	± 0.8mm	<u>+</u> 0.8mm
Rectangularity	BS EN ISO 10545-2	<u>+</u> 1.5mm	<u>+</u> 1.5mm	± 1.5mm	± 1.5mm
Surface Flatness: Centre Curvature	BS EN ISO 10545-2	<u>+</u> 1.8mm	<u>+</u> 1.8mm	± 1.8mm	± 1.8mm
Surface Flatness: Edge Curvature	BS EN ISO 10545-2	<u>+</u> 1.8mm	<u>+</u> 1.8mm	± 1.8mm	± 1.8mm
Surface Flatness: Warpage	BS EN ISO 10545-2	<u>+</u> 1.8mm	<u>+</u> 1.8mm	± 1.8mm	± 1.8mm
Water Absorption	BS EN ISO 10545-3	≤ 0.5%	≤ 0.4%	≤ 0.4%	≤ 0.4%
Breaking Strength*	BS EN ISO 10545-4	≥ 1300 N ≥ 700 N	≥ 3500 N	≥ 1600 N	- ≥ 700 N
Modulus Of Rupture*	BS EN ISO 10545-4	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>
Resistance To Surface Abrasion	BS EN ISO 10545-7	Report abrasion class	PEI CLASS 2-5	PEI CLASS 2-5	PEI CLASS 2-5
Coefficient Of Linear Thermal Expansion	BS EN ISO 10545-8	Test method available	≤ 7 X 10 <sup>-6</sup> /°C	≤ 7 X 10 <sup>-6</sup> /°C	≤ 7 X 10 <sup>-6</sup> /°C
Resistance To Thermal Shock	BS EN ISO 10545-9	Test method available	No visible defect	No visible defect	No visible defect
Crazing Resistance	BS EN ISO 10545-11	Required	No crazing	No crazing	No crazing
Frost Resistance	BS EN ISO 10545-12	Required	No visible damage	No visible damage	No visible damage
Resistance To Household Chemicals & Swimming Pool Salts	BS EN ISO 10545-13	Minimum B	Class A No visible effect	Class A No visible effect	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	Class LA No visible effect	Class LA No visible effect
Resistance To Staining	BS EN ISO 10545-14	Test method available	Min. Class 4 Stains removed	Min. Class 4 Stains removed	Min. Class 4 Stains removed

Superior quality raw materials like kaolin, clay, feldspar, silica, and colouring inks are imported from Europe and other parts of the world to manufacture Maximus Mega Slabs, without compromising on its breaking strength, water absorption, dust, termite and chemical resistance.

Maximus Mega Slabs are exceptionally hard, resist thermal shock better than any material available today, are virtually non-porous and are a green product. Installation is quicker and easier because of the dimensions of the product.

Flooring, wall cladding, kitchen counter tops, vanity tops, steps and risers, and bath surrounds are all possible.

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

\* Test performed using 60X60 cm cut pieces from the slab. \* Thickness is nominal

# Packaging Details

#### 135x305 CM

FINISH	THICKNESS	TILE SIZE	TILE AREA	KG	PCS	TILE AREA	WEIGHT	PALL	ET DIMENTIONS	(cm)
FINISH	(mm)	(cm)	(sqm)	per pc	per pallet	per pallet (sqm)	per pallet (kg)	LENGTH	HEIGHT	WIDTH
Polished	14.5	135x305	4.12	143.00	10	41.20	1478.00	310	160	35
Natural	14.5	135x305	4.12	150.00	10	41.20	1548.00	310	160	35
Polished	14.5	135x305	4.12	143.00	10	41.20	1502.00	315	50	150
Natural	14.5	135x305	4.12	150.00	10	41.20	1572.00	315	50	150

#### 120x280 CM

FINISH	THICKNESS	TILE SIZE	TILE AREA	KG	PCS	TILE AREA	WEIGHT	PALLET DIMENTIONS (cm)			
	(mm)	(cm)	(sqm)	per pc	per pallet	per pallet (sqm)	per pallet (kg)	LENGTH	HEIGHT	WIDTH	
Polished / Natu- ral / Honed	9	120x280	3.36	68	20	67.2	1435.00	287	37	133	

#### 120x260 CM

FINISH	THICKNESS	TILE SIZE	TILE AREA (sqm)	KG	PCS	TILE AREA	WEIGHT	PALLET DIMENTIONS (cm)			
	(mm)	(cm)		per pc	per pallet	per pallet (sqm)	per pallet (kg)	LENGTH	HEIGHT	WIDTH	
Polished / Natural / Honed	6	120x260	3.12	44.00	20	62.4	1000.00	267	33.50	133	

#### 120x240 CM

I FINISH I	THICKNESS	TILE SIZE	TILE AREA	PCS	TILE AREA per box (sqm)	WEIGHT	BOX		WEIGHT	PALLET DIMENTIONS (cm)		
	(mm)	(cm) (sq	(sqm)	per box		per box (kg)	per pallet		per pallet (kg)	LENGTH	HEIGHT	WIDTH
Polished / Natural / Honed	9	120x240	2.88	1	2.88	62.00	28	80.64	1826.00	243	53	148

#### 80x240 CM

FINISH	THICKNESS TILE SIZE		TILE SIZE TILE AREA		TILE AREA	WEIGHT	BOX TILE AREA	WEIGHT	PALLET DIMENTIONS (cm)			
	(mm)	(cm)	(sqm)	per box	per box (sqm)	per box (kg)	per pallet	per pallet (sqm)	per pallet (kg)	LENGTH	HEIGHT	WIDTH
Polished / Natural / Honed	9	80x240	1.92	2	3.84	82.00	18	69.12	1570.00	243	53	148

### 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.

#### 90x180 CM

FINISH	THICKNESS	TILE SIZE (cm)		PCS	TILE AREA per box (sqm)	WEIGHT	BOX	TILE AREA per pallet (sqm)	WEIGHT	PALLET DIMENTIONS (cm)		
FINISH	(mm)			per box		per box (kg)	per pallet		per pallet (kg)	LENGTH	HEIGHT	WIDTH
Polished / / Natural Honed	9	90x180	1.62	2	3.24	68.00	24	77.76	1712.00	189	73	111

#### 80x160 CM

FINISH	THICKNESS	TILE SIZE	TILE AREA	PCS	TILE AREA per box (sqm)	WEIGHT	BOX	TILE AREA	WEIGHT	PALLET DIMENTIONS (cm)			
FINISH	(mm)	(cm)	(sqm)	per box		per box (kg)	per pallet	per pallet (sqm)	per pallet (kg)	LENGTH	HEIGHT	WIDTH	
Polished / / Natural Honed	9	80x160	1.28	2	2.56	55.00	24	61.44	1400.00	173	73	97	
Polished / / Natural Honed	9	80x160	1.28	2	2.56	55.00	18	46.08	1070.00	173	57	97	

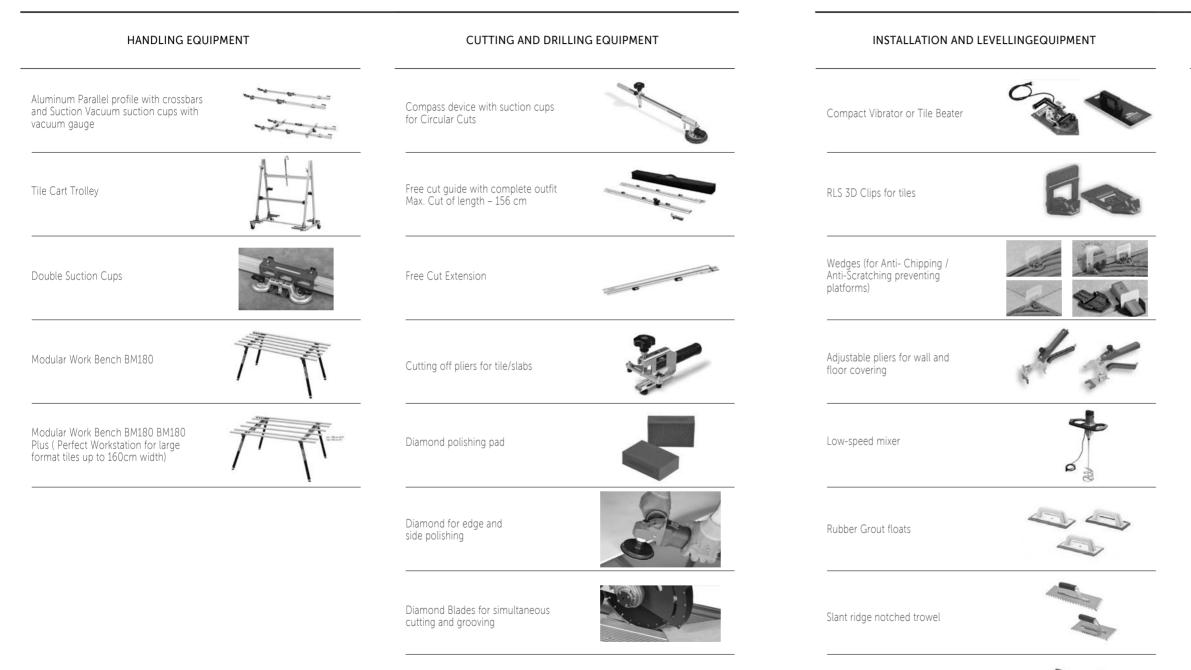
#### 120x120 CM

FINISH	THICKNESS	TILE SIZE	TILE AREA	PCS	TILE AREA	WEIGHT	BOX	TILE AREA	WEIGHT	PALLE	T DIMENTION	S (cm)
FINISH	(mm)	(cm)	(sqm)	per box	per box (sqm)	per box (kg)	per pallet	per pallet (sqm)	per pallet (kg)	LENGTH	HEIGHT	WIDTH
Polished / / Natural Honed	9	120x120	1.44	2	2.88	62.00	28	80.64	1766.00	122	76	134
Polished / / Natural Honed	9	120x120	1.44	2	2.88	62.00	20	57.60	1260.00	122	122	58

#### 60x120 CM

FINISH	THICKNESS	TILE SIZE	TILE AREA	PCS	TILE AREA	WEIGHT	BOX	TILE AREA	WEIGHT	PALLE	T DIMENTION	S (cm)
FINISH	(mm)	(cm)	(sqm)	per box	per box (sqm)	per box (kg)	per pallet	per pallet (sqm)	per pallet (kg)	LENGTH	HEIGHT	WIDTH
Polished / / Natural Honed	9	60x120	0.72	2	1.44	31.00	68	97.92	2108.00	111	111	130
Polished / / Natural Honed	9	60x120	0.72	2	1.44	31.00	20	28.80	620.00	122	68	56

**05** Suggested equipment



Diamond for edge and side polishing

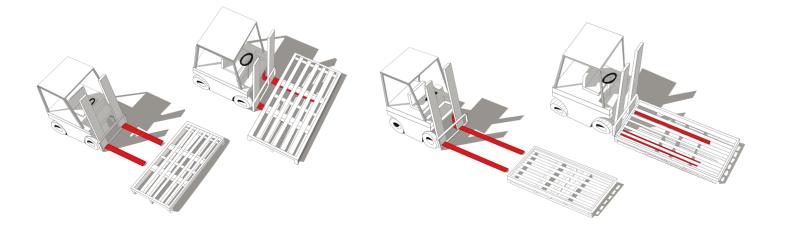
e and side

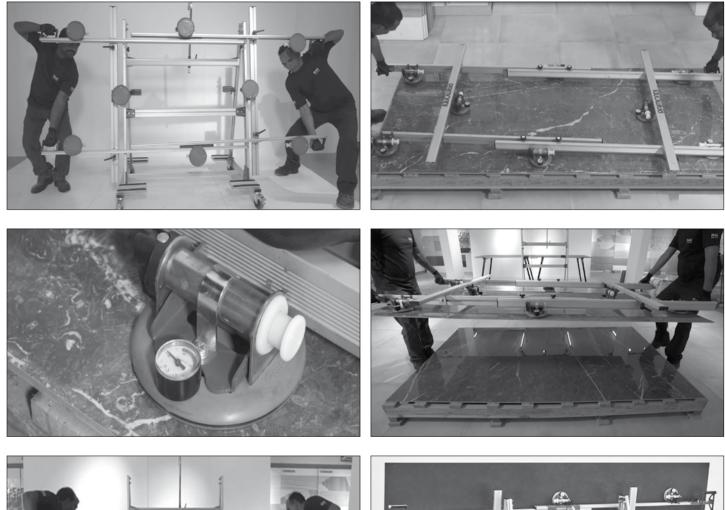
#### CLEANING AND MAINTENANCE



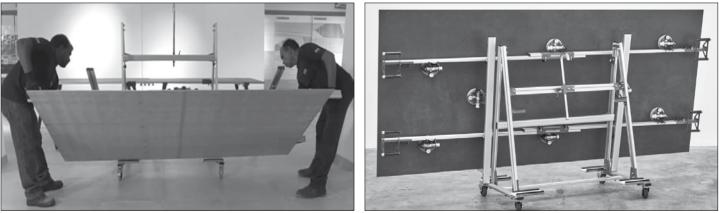
# Handling Maximus

- 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 laving 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.



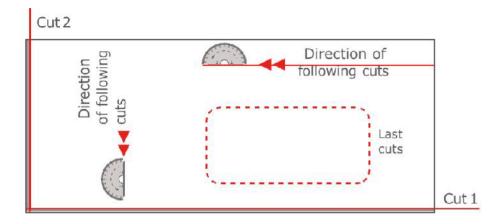




### MAXIM S CUTTING INSTRUCTIONS (Diamond cutting Disc)

It is important to trim off, longitudinally and transversally the slab before any process. The distance for the cut to the edges must be proportional to the thickness of the slab.

The cutting direction must be always the same of the diamond disc rotation direction.



General instructions for bridge saw with Diamond cutting Disc:



(pic.1)

\*Be sure that the working table of the milling machine is flat.

\*Use plenty of water while cutting. The jet of the water must be directed in front or at the side of the diamond disc, as much as possible close to the cutting area. (See pic.1).

### General instructions for bridge saw with Diamond cutting Disc:

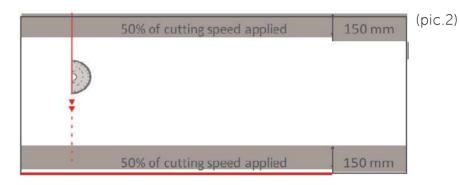
Ø diamond cutting disc (mm)	RPM
Ø300	2800
Ø350	2400
Ø400	1600
Ø450	1400
Ø500	1260

\*If the spindle speed is fixed, you must choose the diamond disc that requires a speed as close as possible to that spindle.

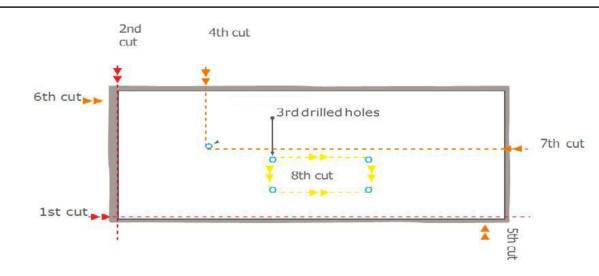
### Diamond Cutting disc Parameters of bridge saw:

Type of cut	Feed rate mm/min thickness from 10 to 14.5mm	Feed rate mm/min thickness from 15 to 20mm
Cut entering form above the slab	100	100
Straight cut speed	1000	600
Inclined 45 ° cut speed	600	350

\*For the first and the last 150mm it is advisable to reduce the feed rate by 50% (see Pic.2)



### Example of Cutting diagram using bridge saw with cutting diamond disc:



1- Slab trimming (red sections)

2- Core drilling (blu sections)

3- Top perimeter cutting (orange sections)

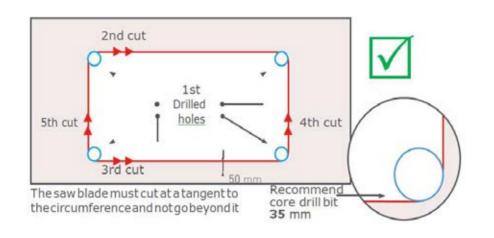
4- Interrupted cuts (yellow section

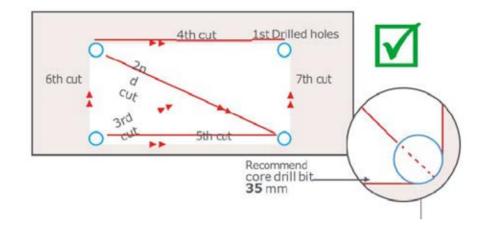


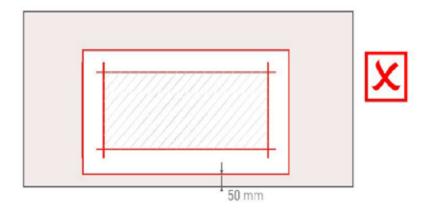
Example of Cutting diagram for sink using bridge saw with cutting diamond disc:

We recommend the below cutting diagram in case of one or more of the following conditions: - non-flat resting base

- island not measuring more than 2600x600 mm
- sink not measuring more than 560x480 mm



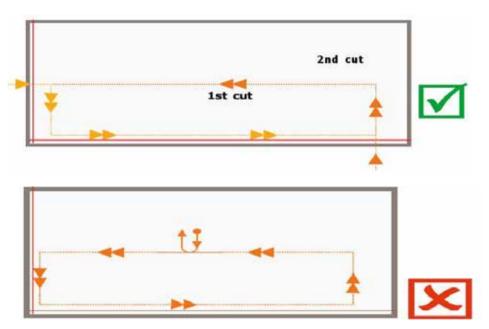




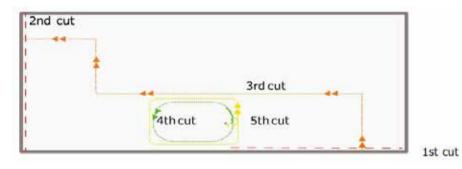
07 CUTTING INSTRUCTIONS (Waterjet machine)

### Cutting diagram by using waterjet machine:

To cut the top outline, the profile should be divided into two parts and the first cut should be at the outer side of the slab. The outline cut must always be made after the trimming cuts.



Example of Cutting diagram for sink using waterjet machine:



1-2 Slab trimming (red sections)

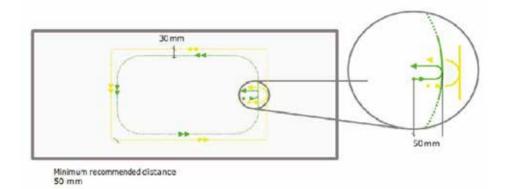
2- Workpiece shape cutting (orange sections)

3- Sink pre-cutting "if required" (green sections)

4- Sink cutting (yellow section)

We recommend the below cutting diagram in case of one or more of the following conditions: -non-flat resting base

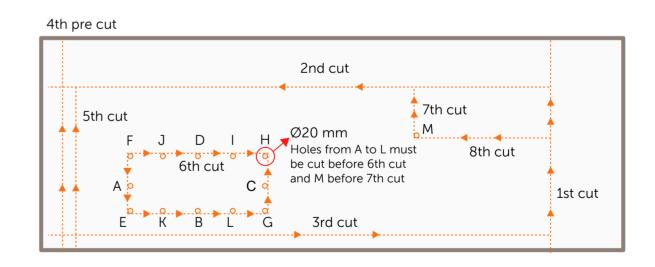
-islands not measuring more than 2600x600 mm -sinks not measuring more than 560x480 mm



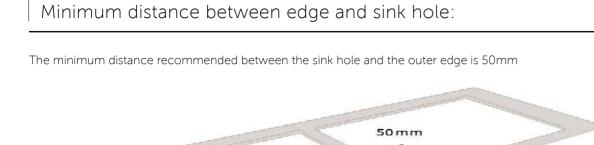
We reccomend the below cuting in case of one or more of the folloing installation. 1- not flat resting base

2- island measuring more than 2600x600 mm

3- sink measuring more than 560x580 mm



### 07 CUTTING INSTRUCTIONS

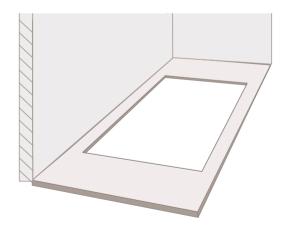


50 mm

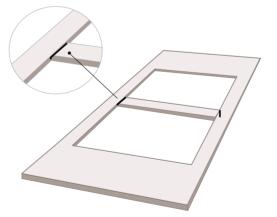
### Design of holes for sink. Gas/Induction hob:

To restrict the potential for breakage during handling and installation it is advisable to leave a strip of material in place to support the top. The top part (already cut half way through its thickness) should be completely cut off once the installation procedures are completed.

#### Large size hole:

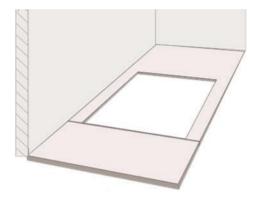


Installed top



Pre-cut strip to be cut off after top installation

### Interrupted sink hole:



Installed top

### Waterjet Parameters:

Low pressure piercing

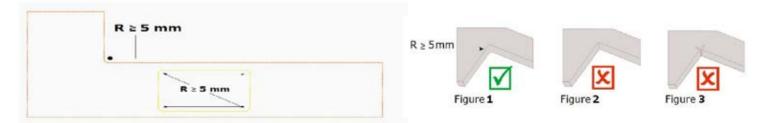
#### High Pressure cutting parameter:

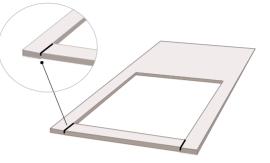
Thickness	Pressure (bar)	Abrasive 80 mesh Kg/min	Thickness	Minimum Pressure (bar)	Feed rate mm/min	Abrasive 80 mesh Kg/min
10 to 14.5	500 to 600	0.35-0.45	10 to 14.5	2200	200-300	0.35-0.45
15 to 20	600 to 700	0.35-0.45	15 to 20	2800	150-200	0.35-0.45

\*The above data of Feed rate refers to the maximum recommended values. Reduce the feed speed rate to get a better finishing. \*In case of equal angles or angles smaller than 90° it is recommended to join up the corners with radius  $\geq$  5mm.

### Radiusing:

We recommend that all internal angles follows at least a radius of 5mm. A greater radius imparts greater structural strength to the workpiece, while any Non-radiused corner will create a stress point on the top that causes breakages.





#### Pre-cut strip to be cut off after top installation

## Installation

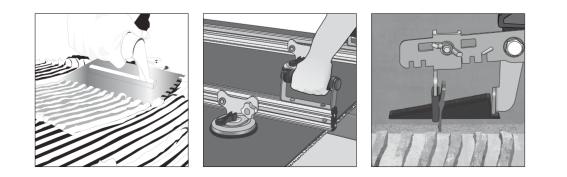
Laying "Maximus" slabs requires similar laying conditions to those required for traditional format slabs. Maximus requires the adhesive to be applied both on the setting bed and on the back of the slab.

### Maximus Slabs For Flooring Require The Following Conditions:

- A flat surface that is clean and free from dust, scraps and any lumps of cement
- The setting bed must be uniform and have already undergone the dry shrinkage process
- Repair any cracks
- Any uneven parts on the surface must be filled with suitable levelling compounds

### Instruments Required

- Cement-based powder adhesive for full spread, class "C2E according to EN12004 and S1 according to EN12002 standards"
- 3x3 mm square toothed trowel and 15 mm round toothed trowel
- Frame with suction cups for handling or double suction cups
- Non-bounce plastic mallet 170x370 mm
- Levelling system: base clip + wedge + pliers



# Bonding To The Floor

- Ensure that the surface to be covered is solid, flat and free from dust and oil/grease.
- Use the adhesives described above mixed according to the specifications indicated in the technical data sheet of the chosen adhesive.
- dimensions of the slab.
- With the slab in a vertical position on the handling frame, spread the adhesive onto the back of the slab with a 3x3 mm square toothed trowel
- Using the frame with suction cups, bring the slab into a horizontal position and lay it.
- using the levelling system.

# Bonding To The Wall

- Ensure that the surface to be covered is solid, flat and free from dust. •
- Cement-based powder adhesive for full spread, class "C2E according to EN12004 and S1 according to EN12002 standards". •
- dimensions of the slab.
- With the slab in a vertical position on the handling frame, spread the adhesive onto the back of the slab with a 3x3 mm square toothed trowel.
- Using the handling frame in a vertical position lay the slab. •
- Before releasing the slab from the handling frame, ensure that the adhesive will hold it in place. •
- To guarantee complete bonding of the slab and eliminate any air, tap from the middle towards the edges using the non-bounce • plastic mallet.
- red nailing machine.

Spread the adhesive onto the surface to be covered with a 15 mm round toothed trowel across an area of 5/10 cm more than the

To guarantee uniform bonding of the slab, the special 170x370 mm non-bounce plastic mallet must be used, tapping from the middle towards the edges so as to remove any air pockets between the back of the slab, the adhesive and the surface to be tiled

Spread the adhesive onto the surface to be covered with a 15 mm round toothed trowel across an area of 5/10 cm more than the

Before bonding the next slab, fix the hidden mechanical hook to the wall with the relevant nails (length 27 mm) using the gas-powe-

## Ventilated Façade

#### Maximus Mega Slab – Ventilated Façade Systems

A ventilated façade is a coating system on the outside of a building which leaves a ventilated chamber between the coating (façade) and the building insulation. Considered as the best solution for maximising insulation whilst reducing unwanted condensation or thermal bridge problems, ventilated façades provide excellent thermal-hygrometric solutions.

- Advantages of Ventilated Façade Systems
- Energy Saving Excellent thermal insulation, reduction in heat/cool dispersal, and less heat absorption in warm climates. •
- Technical and Aesthetic Durability Significant reduction in deterioration due to pollution, does not absorb dust or dirt, easy to clean and maintain and promotes humidity dispersal.
- Healthier Environment Increased comfort for users and meets all hygiene, health and environmental protection standards.

### Grout Filling

- Use a professional and high guality grouting products.
- While stirring, pour the grout into a clean and rust free container, containing 22/26 percent by weight of clean water.
- Mix the grout with a low-speed mixer to avoid air entrapment, until a smooth paste is obtained. •
- Let the mix stand for 2-3 minutes. Stir again briefly before use. •
- Use the mixture within 20-25 minutes of its preparation. •
- for 15-30 minutes.
- Clean off the excess mixture with a hard, damp sponge, working in a diagonal direction to the joints.





Fill the joints with a special grout float or rubber squeeze without leaving any gaps or steps. Remove any excess grout and leave

MAXIML

## 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
lodine	Oxidant	Bleach
Blood	Oxidant	Bleach
lce 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


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