意大利道格拉斯陶瓷有限公司
CERAMICA DAUGRES ITALIA S.R.L.

Fiorano Modenese (mo)via Pedemontana 100 Cap 41042 Italy

道格拉斯(中国)
DAUGRES(CHINA)

Block 7, NO.88 Zhongshan 6th Road, Torch Development Zone Big Data Center, Zhongshan, Guangdong,P.R.China.
广东省中山市中山六路88号火炬大数据中心7栋道格拉斯大楼

DAUGRES SLAB TECHNICAL BROCHURE



DAUGRES SLAB TECHNICAL BROCHURE

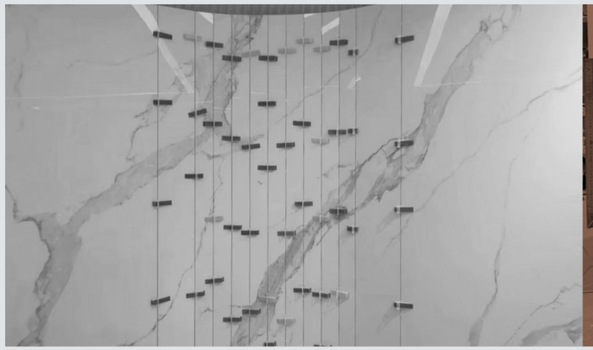
道格拉斯岩板技术手册

DAUGRES
道格拉斯岩板

Daugres designers drew inspirations from real materials in the world,reproducing natural details of stones and woods,to create complete collections with multi-sizes,thicknesses and surfaces.Thanks to the excellent performance in flexibility and stability,Daugres slabs are easy in processing and able to become anything you want for interior applications.

道格拉斯设计师们从世界各地采购珍稀天然石材、木材等进行图像化处理和设计，真实还原原灵感素材纹理，注重艺术表达；同色系产品配套完整，拥有多个规格、厚度、表面效果，给予空间更多可能性；良好的柔韧性和稳定性，易于切割、磨削、倒角或手工打造，可以运用在家居生活的方方面面。

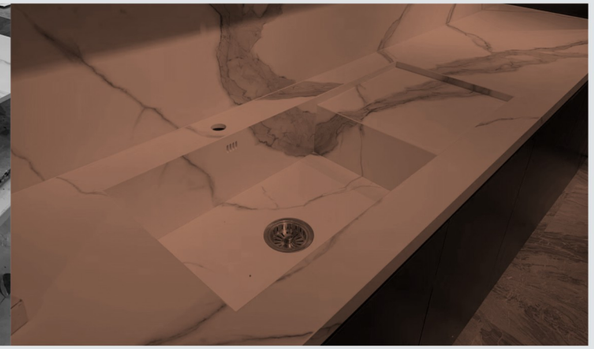






INFINITE POSSIBILITY 无限可能





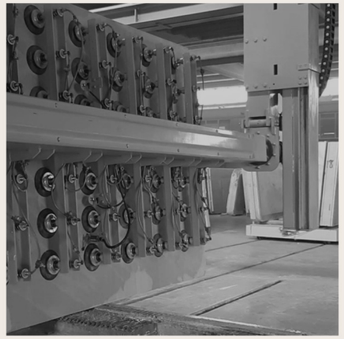
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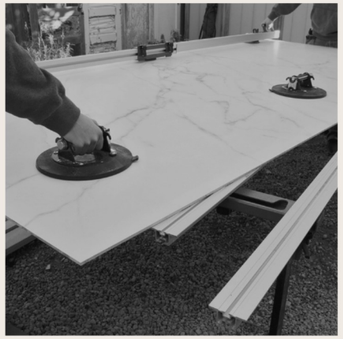
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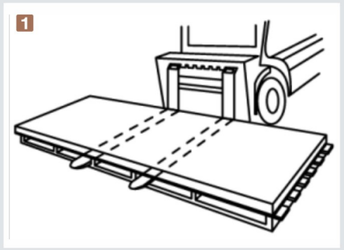




HANDLING

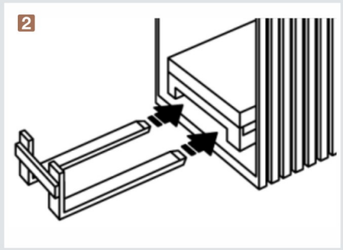
岩板产品的搬运

UNLOADING
装卸



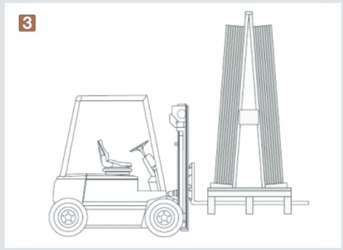
Before unloading the crate by forklift, make sure the distance between the forks must be ≥ 1 meter. Please lift the crate at its long side and adjust the forks' position at the middle of the crate, extend the forks' length till the whole crate has been crossed through. (Figure 1)

使用叉车或起重机提起和搬运岩板托盘时，车叉间距不得小于一米，重要的是必须从长边一侧叉取托盘，并且注意要定位在托盘的中心位置，将车叉伸到最长，贯穿托盘的整个深度；



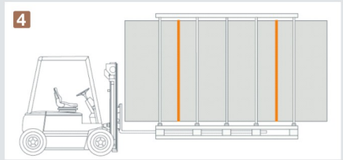
In the event of lifting the crate at its short side, when the slab length is ≤ 3 meters, make sure the fork length is ≥2.5 meters, when the slab length is 3.2 meters, make sure the fork length is ≥ 2.8 meters.(Figure 2)

如果从短边一侧叉取托盘 ，为了正确搬运产品，必须使用长度至少为2.5米的车叉（长度为3M以内的产品），若长度为3.2M的产品，必须使用长度至少为2.8米的车叉；



If the slabs are packaged in A Frame, please also make sure the distance between the forks must be ≥ 1 meter while lifting the A Frame at its long side.(Figure 3). Similarly, make sure the fork length is ≥ 2.8 meters while lifting the A Frame at its short side.(Figure 4)

如果从长边一侧叉取A字托，为了正确搬运产品，车叉间距不得小于一米。如果从短边一侧叉取A字托 ，必须使用长度至少为2.8米的车叉。







The slab whose size is over 1000x1000MM should be moved by 2 persons. Using the slip-proof glove to raise the holding power and prevent slipping. The packages(crate or A frame) are better be placed near the area where the slab is ready to lay on. Before moving the slab, hold up the slab from its long side, till the slab is vertical.(Figure 1 & 2)

规格在1000x1000MM以上的规格均要求两个人一起进行。搬运时要保持正确姿势，避免腰椎部位过劳，并应使用适当的手套，以提高抓力及防止滑落。包装建议放置在要铺设的地面附近，搬运时从长边一侧提起岩板，直至令其处于垂直位置。





While carrying the slab with the partner, please also keep the slab vertical to the ground, take care to preserve the slab's edges to avoid the damage caused by collision.(Figure 3)

与另一个人一起搬运岩板，必须保持岩板与地面垂直，避免弯曲，注意保护边角，以免因意外碰撞而损坏

In order to move the slab safely, it is recommended to use the professional aluminum handling tool equipped with suction cups, which is adaptable for handling the slab whose side length is over 2 meters. (Figure 4) Before the carrying, it is better to wipe the slab surface with the wet sponge to acquire a stronger suction.

为安全移动岩板，建议使用专业的搬运工具，该工具由铝制成，带有吸盘，非常适合用于超过两米高产品的搬运及安装。在处理和移动瓷砖之前，建议使用湿润的海绵清洁瓷砖和吸盘接触面，已取得更好的吸力。

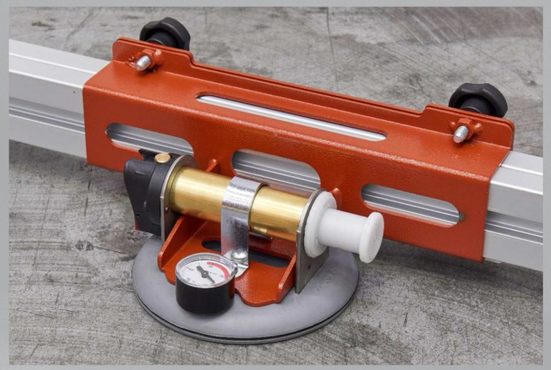
MOVING
搬运

COMMON TOOLS 常用工具



HANDLING TOOLS
搬运杆

SUCTION CUP
吸盘





For the slab which is specially cut out to be laid beside the door or window, it is recommended to use cross bar for moving.
开孔产品（或在门/窗位置）使用时，建议使用横杆。

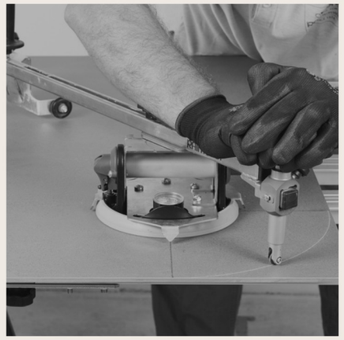
















MACHINING
岩板产品的切割

MACHINING
岩板产品的切割

HAND-DRIVEN CUTTING 手动切割



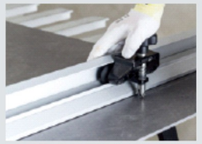
To secure the cutting process, please place the slab which is ready for cutting onto a firm operation platform.

为了整齐的切割或精确钻孔，岩板必须放在一个稳定，平坦和坚固的工作表面。



While planning a straight cut, put the cutting guide above the slab surface along the cut line. fasten it by the suction cup.

当进行直线切割时，将切割导轨沿着待切割的线放置在岩板上，并用吸盘将其固定到位。



Make a small cut of 1 to 2 cm long at each end of the slab from the inside towards the outside.(Very important!!)

从内向外，做1厘米至2厘米长的小切口。（这个步骤非常重要）



Locate the blade of the cutting guide at the starting point, then cut toward the termination point. A stable pressure on the blade is strongly suggested to reduce vibration and possible cracking.

从一端到另一端完成切割，确保在整个的切割上对刀具施加相同的压力。



Along the cut line, snap the slab in half slightly. Usually speaking, this step should be operated by two persons to avoid the edge breakage risk.

然后把岩板折成两半，直到两片断开。一般建议两个人进行这个操作，这样切割不易断裂跌落。



If there is reinforcement mesh in the slab, this can be cut and trimmed with a cutter.

如果岩板有加固背网，可使用切割机将其切割修整。



If the edges of the slab are sharp or rough after it has been snapped, please use the diamond pod or grinding plate to polish the edges.

如果岩板切断后，边缘变得锋利或参差不齐，请用金刚石垫或研磨盘清理和打磨岩板边缘。

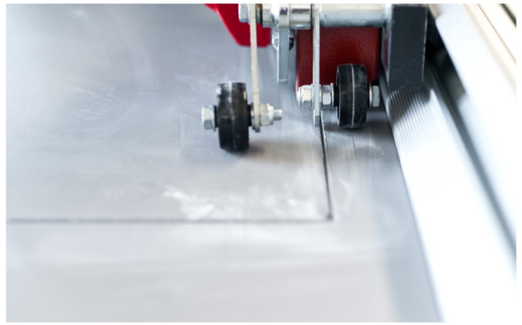




A straight cut may also be made with a disk cutter which runs along the cutting guide. A through cut or a partial cut may be made with this method.

也可以用沿着切割引导装置的圆盘切割器进行垂直切割。可以用这种方法进行贯穿切割或部分切割。这种情况切割出来的边缘更好和更洁净。

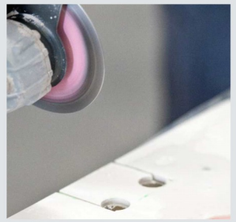
ELECTRIC CUTTING 机器切割





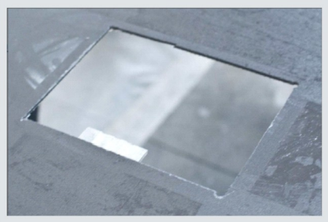
While using the circular diamond drill for the cutting works, the rotation speed mush be ＞ 2500 rpm, the moving speed must be ＜ 1m/min.
使用金刚石圆盘切割，圆盘转速必须要高（＞2500转/分钟），工具的推动速度要低（＜1米/分钟）

For the circular diamond drill, it is recommended to choose the imported sawblade in 350mm diameter.
大型电动切割机推荐使用直径为350MM的进口刀片，直线切割转速在2500转左右。









Before cutting a it's addiseed to a round hole at each corner of the rectangle to avoid possible cracking.
需要先在方形内的各个角落钻孔，以防止瓷砖破损

MACHINING
岩板产品的切割

MAKING HOLES 钻孔






Use a dry or wet diamond cutter to make round holes. Place the slab on the operation platform and mark the position where the hole is to made. Start making the hole with the cutting head placed at an angle with respect to the slab so that it cuts through it more accurately. Once the cutting head has started to make the hole, press down and apply a small circular movement. Keep the cutting area wet while using the wet method or remove all the resulting dust during the drilling operation while using the dry method.

使用干式或湿式金刚石切割机打孔。将岩板放在工作表面上，并标记出孔的位置。切割头相对岩板成一定的角度开始打孔，以便更准确地切割。一旦开始打孔，按压并沿着圆周进行切割。如果使用湿式切割法，切割区域应保持湿润。如果使用干式切割法，则在钻孔过程中清除所有产生的灰尘。




Before cutting out rectangular holes in the slab, please make a round hole at each corner of the rectangle. then make straight cuts between each hole.

要在岩板上制作矩形孔，首先在矩形的每个角上切割一个圆孔。然后用圆盘切割器在每个孔之间进行直线切割。

TIPS 注意事项

- Cool off the cutting head with water.
  用水冷却钻头
- Avoid over pressing.
  切勿过度施压
- Start with low speed.
  以低速开始
- While making holes, please do not knock the slab.
  钻孔时，请勿采用敲打模式

GRINDING 修边




It is recommended to use emery sponge or sandpaper to adjust the edges appearance. Soften the edge slightly till it becomes smooth, repeat the grinding work to let it appear a oblique effect(Figure right).
Remark: Using the hand-held angle grinder for the grinding work can obtain the same effect.

边角可以使用粗糙金刚石海绵或砂纸进行手动修整。将边缘轻轻打磨直至变得圆滑，或者进行多次重复打磨以获得斜切效果（如下图右）。使用适用于角磨机砂磨圆盘也可以取得同样的效果。

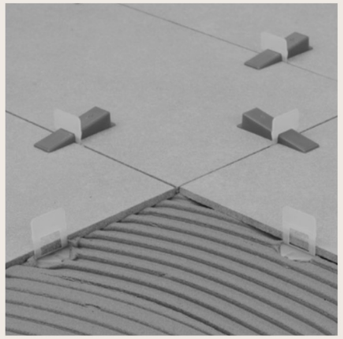
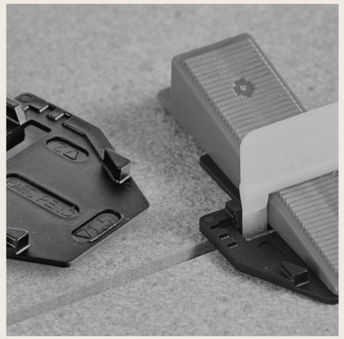
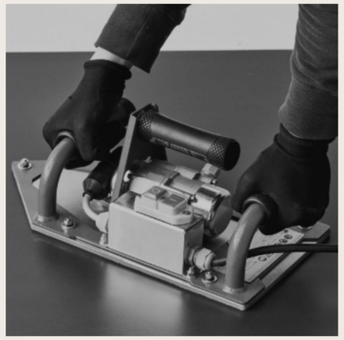
COMMON TOOLS 常用工具




OPERATION PLATFORM&CUTTING MACHINE
工作台&手动/电动切割机

Ensure that the operation platform is flat and stable
首先确保工作台面是固定且平整的







SLAB INSTALLATION

岩板产品的安装

SLAB INSTALLATION
岩板产品的安装

FLOOR INSTALLATION 地面施工流程



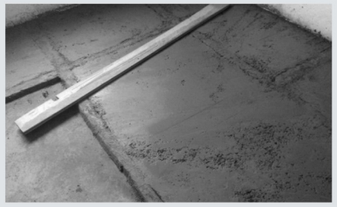
MESUREMENT AND ACCURATELY POSITION
检测空鼓、弹线定位

STEP . 01



CHECK THE FLATNESS OF SLAB
检测砖面平整、排砖对纹

STEP . 02



CONFIRM THE BASE
地面找平，调整垫层

STEP . 03



SPREAD THE ADHESIVES
涂抹瓷砖胶

STEP . 04



INSTALL THE SLAB
岩板铺贴

STEP . 05



CLEAN THE RESIDUES
清洁养护

STEP . 06

WALL INSTALLATION 墙身面施工流程



MESUREMENT AND ACCURATELY POSITION
检测空鼓、垂直度

STEP . 01



PROTECTIVE PROCESSING ON WALL
墙身防水防潮防霉防裂处理

STEP . 02



CHECK THE FLATNESS OF SLAB
检测砖面平整、排砖对纹

STEP . 03



SPREAD THE ADHESIVES
涂抹瓷砖胶

STEP . 04



INSTALL THE SLAB
岩板铺贴

STEP . 05



CLEAN THE RESIDUES
清洁养护

STEP . 06

SLAB INSTALLATION
岩板产品的安装

INSTALLATION 安装

Tips: As the substrate on which the slab is ready to be installed, please make sure it is clean and dry without the fragments such as the residues of cement and paint.

注意：对于即将安装的支撑表面，必须无尘、无油、无脂，且保持干燥；没有水泥残留物、灰泥或油漆等易碎碎片突起；任何碎片都要清除。



It is necessary to use the tile adhesive during the installation progress. Besides, the adhesive must keep the back surface of the slab wet to assure there are no gaps. Otherwise, the firmness and durability of the adhesion can not be guaranteed.

岩板铺贴必须使用瓷砖胶粘剂。另一个安装大规格岩板的基本要求是，胶粘剂必须保证岩板背面的高度湿润，从而不会产生间隙，否则会影响粘合的牢固性和耐用性。



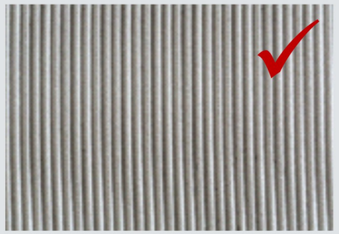
To apply the adhesive on the substrate, please use the spreader with sloping notches (with a pitch of at least 10 mm) to get better distribution of the adhesive.

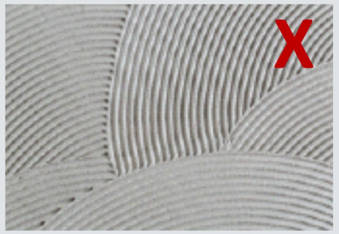
使用具有倾斜凹口（间距至少10mm）的刮刀，将胶粘剂施涂在基面上，使胶粘剂均匀分布于基面上。



On the other hand, to apply the adhesive on the back surface of the slab, please use a spreader with smaller notches (square notches of at least 3-4 mm) so that almost 100% of the surface is wetted with adhesive.

另一方面，使用齿口较小（方形齿口间隔至少3–4 mm）的刮刀将胶粘剂施涂在岩板背面，这样使得岩板背面100%满涂胶粘剂。





The adhesive should be applied in a straight line, with no circular movements, parallel to the short side of the slab to reduce the distance travelled by the air being pushed out.

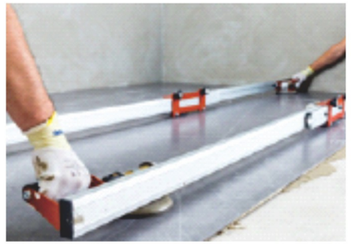
应该以平行于岩板的短边直线施涂胶粘剂，不可以画圆的方式施涂，这样能减少粘贴时挤压产生的空气。





The adhesive must be extended in the same direction on the back surface of the slab and on the substrate (in straight lines parallel to the short side of the slab).

必须以相同的方向施涂胶粘剂于岩板背面和基面上（与岩板短边直线平行）。



To install the slab much easier and safer, there are some recommended tools for your reference as follows: runners & cross-members or a frame with suction cups.
Placing the ribs of adhesive on the substrate and on the back of the slab parallel to help push the air out.

为更容易和更安全处理和安装岩板，建议使用滑道和横向构件或带有抽吸装置的框架。使用平行安装装置将岩板安装于基面上，以将空气挤压出去。



To ensure the slab is completely adhered to the substrate without air gap, please try to use the vibro-plate or anti-bounce rubber to tap over the surface of the slab.

为确保岩板完全粘合于基面，并且挤压出所有空气，请使用振动器或者防反弹的橡胶板抚平岩板表面。



We suggest to start tapping the slab from its center position, then extend toward the edges in the same direction as the adhesive went through, which means the direction is parallel to the short side, to ensure all the air under the slab is pushed out.

我们建议从岩板的中间向四周按压，按压方向与瓷砖胶粘剂的刮痕相同，即平行于短边，以确保岩板与基面之间的空气都挤压出来。

SLAB INSTALLATION
岩板产品的安装

THE ADHESIVE SELECTION – INTERIOR FLOOR AND WALL 瓷砖胶粘剂的推荐——室内墙地面

Type of Substrate	Size of tile	Adhesive	Class according to EN 12004
Cementitious screed or render Anhydrite screed or render Self-levelling products Concrete Cement-Fibre panels Plasterboard Old ceramic Terrazzo Stone	surface ⩽3600CM^2 side ⩽60CM	KERAFLEX MAXI S1 KERAFLEX MAXI S1 ZERO ULTRALITE S1	C2TE S1 C2TE S1 C2TE S1
	surface ⩽3600CM^2 side ⩽120CM		
	surface ⩽1M^2 side ⩽120CM	ULTRALITE S2 KERABOND T + ISOLASTIC	C2E S2 C2E S2
Heated screeds	surface ⩽3600CM^2 side ⩽60CM	ULTRALITE S1 KERAFLEX MAXI S1 KERAFLEX MAXI S1 ZERO	C2TE S1 C2TE S1 C2TE S1
	surface ⩽3600CM^2 side ⩽120CM	ULTRALITE S2 KERABOND T + ISOLASTIC	C2E S2 C2E S2
	surface ⩽1M^2 side ⩽120CM	ULTRALITE S2 KERABOND T + ISOLASTIC	C2E S2 C2E S2
Waterprooling systems (from the MAPELASTIC range and MAPEGUM WPS)	surface ⩽3600CM^2 side ⩽60CM	KERAFLEX MAXI S1 KERAFLEX MAXI S1 ZERO ULTRALITE S1	C2TE S1 C2TE S1 C2TE S1
	surface ⩽3600CM^2 side ⩽120CM	ULTRALITE S2 KERABOND T + ISOLASTIC	C2E S2 C2E S2
	surface ⩽1M^2 side ⩽120CM		
Wood PVC,rubber and linoleurn Metal surface Resin	All formats	KERALASTIC KERALASTIC T ULTRABOND ECO PU 2K	R2 R2T R2T

基面类型	瓷砖尺寸	胶粘剂	根据EN12004符合的级别
水泥基找平砂浆层 硬石膏找平砂浆层 使用了自流平产品的基面 混凝土 水泥纤维板 石膏板 旧瓷砖 水磨石 石材	表面 ⩽3600CM^2 侧面 ⩽60CM	马贝高柔瓷砖胶S1 马贝低尘高柔瓷砖胶S1 马贝轻型瓷砖胶S1	C2TE S1 C2TE S1 C2TE S1
	表面 ⩽3600CM^2 侧面 ⩽120CM		
	表面 ⩽1M^2 侧面 ⩽120CM	马贝轻型瓷砖胶S2 马贝瓷砖胶101T+马贝乳液112	C2E S2 C2E S2
埋有加热设备 的找平砂浆层	表面 ⩽3600CM^2 侧面 ⩽60CM	马贝轻型瓷砖胶S1 马贝高柔瓷砖胶S1 马贝低尘高柔瓷砖胶S1	C2TE S1 C2TE S1 C2TE S1
	表面 ⩽3600CM^2 侧面 ⩽120CM	马贝轻型瓷砖胶S2 马贝瓷砖胶101T+马贝乳液112	C2E S2 C2E S2
	表面 ⩽1M^2 侧面 ⩽120CM	马贝轻型瓷砖胶S2 马贝瓷砖胶101T+马贝乳液112	C2E S2 C2E S2
防水系统（使用了马贝 弹性防水砂浆331系列和 MAPEGUM WPS）	表面 ⩽3600CM^2 侧面 ⩽60CM	马贝高柔瓷砖胶S1 马贝低尘高柔瓷砖胶S1 马贝轻型瓷砖胶S1	C2TE S1 C2TE S1 C2TE S1
	表面 ⩽3600CM^2 侧面 ⩽120CM	马贝轻型瓷砖胶S2 马贝瓷砖胶101T+马贝乳液112	C2E S2 C2E S2
	表面 ⩽1M^2 侧面 ⩽120CM		
木 PVC，橡胶和油毡 金属表面 树脂	所有规格	马贝聚氨酯胶122 马贝聚氨酯胶112T 马贝环保胶PU 2K	R2 R2T R2T

SLAB INSTALLATION
岩板产品的安装

THE ADHESIVE SELECTION – EXTERNAL WALL 瓷砖胶粘剂的推荐—外墙

Type of Substrate	Size of tile	Adhesive	Class according to EN 12004
Cementitious render Concrete	surface ≤3600CM^2 side ≤60CM	KERAFLEX MAXI S1 KERAFLEX MAXI S1 ZERO ULTRALITE S1	C2TE S1 C2TE S1 C2TE S1
	surface ≤3600CM^2 side ≤120CM	ULTRALITE S2 KERABOND T + ISOLASTIC	C2E S2 C2E S2
	surface ≤1M^2 side ≤120CM	ULTRALITE S2 KERABOND T + ISOLASTIC	C2E S2 C2E S2

基面类型	瓷砖尺寸	胶粘剂	根据EN12004符合的级别
水泥抹灰层 混凝土	表面 ≤3600CM^2 侧面 ≤60CM	马贝高柔瓷砖胶S1 马贝低尘高柔瓷砖胶S1 马贝轻型瓷砖胶S1	C2TE S1 C2TE S1 C2TE S1
	表面 ≤3600CM^2 侧面 ≤120CM	马贝轻型瓷砖胶S2 马贝瓷砖胶101T+马贝乳液112	C2E S2 C2E S2
	表面 ≤1M^2 侧面 ≤120CM	马贝轻型瓷砖胶S2 马贝瓷砖胶101T+马贝乳液112	C2E S2 C2E S2

TIPS 注意事项

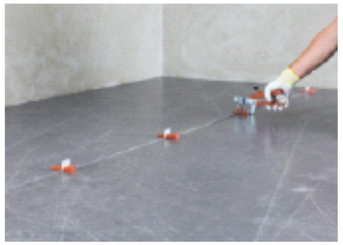
For tiles with reinforcement mesh and one side ≥ 120 cm use class KERABOND T + ISOLASTIC
如瓷砖背面有加固网以及侧边≥120CM，请使用R2/R2T等级的胶粘剂，如马贝101T+马贝乳液112。

GROUTING 填缝



Maintain the correct gap(≥2mm) between each slab, and reduce out-of-flatness between adjacent slabs, it is recommended to use spacers between the slabs (around one spacer every 50 cm).

岩板铺贴必须预留至少2mm宽的缝，铺贴时建议在岩板之间使用垫片（每隔 50 cm使用一个垫片）。



It is important to place the spacers in the appropriate position before installing the slabs and make sure the spacers are embedded in the adhesive.

非常重要的一步是安装岩板前将垫片放置在适当的位置，并将垫片嵌入胶粘剂中。



To make this operation easier, please use the positioning tool to correct the width of the grout line between adjacent slabs and bring the slabs to the position required.

为使这一操作更便捷，可以使用特殊的定位工具来校正相邻砖之间的填缝宽度，并使砖安装到位。



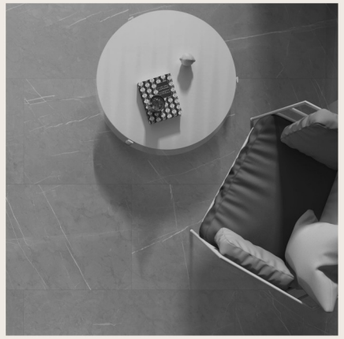
The grout lines is better to be filled with cementitious grout, such as Ultracolor Plus, or with epoxy grout, such as Kerapoxy, Kerapoxy Design or Kerapoxy CQ. Before grouting, always clean out the grout lines with a cutter, an abrasive scraper, etc.

砖缝可以使用水泥基填缝剂，如马贝彩色防霉填缝剂2801，或者环氧填缝剂，如马贝环氧填缝剂141 ，马贝环氧装饰填缝剂149或者马贝填缝剂CQ。填缝前，请使用刮刀清理砖缝。



Clean the grouting by using a little of water and an abrasive pad (such as Scotch-Brite®) followed by a firm cellulose sponge, be careful not to remove the grout.
If you choose the epoxy mortar to fill the grout lines, the cleaning must be carried out while the grout is still fresh, with a higher amount of water if necessary, in order to remove completely all epoxy resin residuals.

使用少量的清水和坚硬的高密度海绵研磨垫（如Scotch–Brite ）清洁砖缝，注意不要清除到填缝浆料。如果使用环氧填缝剂，必须趁环氧填缝浆料还是新鲜粘手时清理砖缝，必要时需要大量的清水清除残留的环氧树脂浆料。








MAINTENANCE

岩板产品的清洁与保养

THE CLEANING AFTER INSTALLATION
安装结束后的清洁

CLEANING UP THE CEMENT-BASE RESIDUES清洁混有水的水泥基灰泥

- To clean up the cement-base residues mixed with water, please use the diluted acid detergent.
  清洁混有水的水泥基灰泥，必须使用稀释过后的特殊酸性缓冲清洁剂进行清洁。

- The cleaning should be started 4 to 5 days after grouting(till the grout has become solid); Please do not defer the cleaning 10 days later, otherwise it would increase the difficulty on the cleaning.
  灌浆后4–5天进行清洁（等灌浆硬化后）；请勿等到10天后才进行清洁。超过这段时期，清洁将变得相当费劲。

- Please dampen the floor or wall with water before the cleaning, in this way the grouts will absorb the moisture and therefore lessen touches with the detergent.
  清洁前先用水弄湿地板。这样灌浆就会吸收水分，与清洁剂的接触也就减少。

- Let the detergent be in contact with grout for a while, then wash it away rapidly.
  让清洁剂作用一段时间，然后尽快用水冲洗掉。

- If the surface temperature of the installed slab is very high(e.g. being exposed under the sunlight in summer), please do not clean up the slab with detergent as the corrosiveness of the detergent will increase in such a climate condition. It is recommended to proceed the cleaning when the temperature gets lower.
  如果平铺的表面温度非常高（例如在温度高的月份暴露于阳光下），切勿用清洁剂进行清洁，因为化学作用和清洁剂的侵蚀潜能增强。夏季，建议在一天中最凉爽的时间进行清洁。

- Please test the detergent’s performance on the extra part left by the installed slab before the cleaning.
  确保在使用清洁产品前先在多余的岩板上进行测试。





CLEANING UP THE EPOXY GROUT 清洁环氧粘合剂

The epoxy grout should be cleaned up quickly and thoroughly since this kind of grout could be harden in a few minutes after the installation. Please strictly follow the manufacturer’s instruction, and also please test the detergent’s performance on the extra part left by the installed slab before the cleaning.

清除这些粘合剂必须迅速且彻底，因为这些粘合剂硬化得非常迅速，可能在几分钟后就硬化。请严格遵守制造商的说明。在使用清洁剂前，先在多余的岩板上进行测试。

RECOMMENDED DETERGENTS清洁剂推荐

type of detergent 清洁剂类型	name of detergent 清洁剂名称	manufacturer 制造商
acid base 酸性	keranet(*)	Mapei
	cement remover(*)	Faberchimica
	pavim(*)	Panariagroup
	deterdek(*)	Fila
	trek(*)	Kiter
	zementschleierentferner(*)	Lithofin
	hmk r63(*)	Hmk
	solvacid(*)	Geal
	litoclean plus(*)	Litokol

Follow the instructions on the packs. Always test product on a before use.

(*)请严格遵守包装上的说明。在使用前，先在瓷砖产品上进行测试。

THE CLEANING AFTER INSTALLATION
安装结束后的清洁

REGULAR CLEANING日常清洁

Please note that the neutral detergent without wax is always the ideal option for regular cleaning. Before the cleaning, please dilute the detergent with warm water. After the cleaning, please flush the slab surface with water then wipe it up with the super-microfiber fabric. The usual detergents are recommended as follow:

总是使用不含蜡的中性清洁剂，并用温水稀释后进行清洁。清洁完后用水进行彻底冲洗，然后使用超细纤维织物擦去水分。常用的清洁剂推荐如下：

type of detergent 清洁剂类型	name of detergent 清洁剂名称	manufacturer 制造商
neutral 中性	floor cleaner	Faberchimica
	fila cleaner	Fila
	pflegereiniger	Lithofin
	hmk p15	Gmk



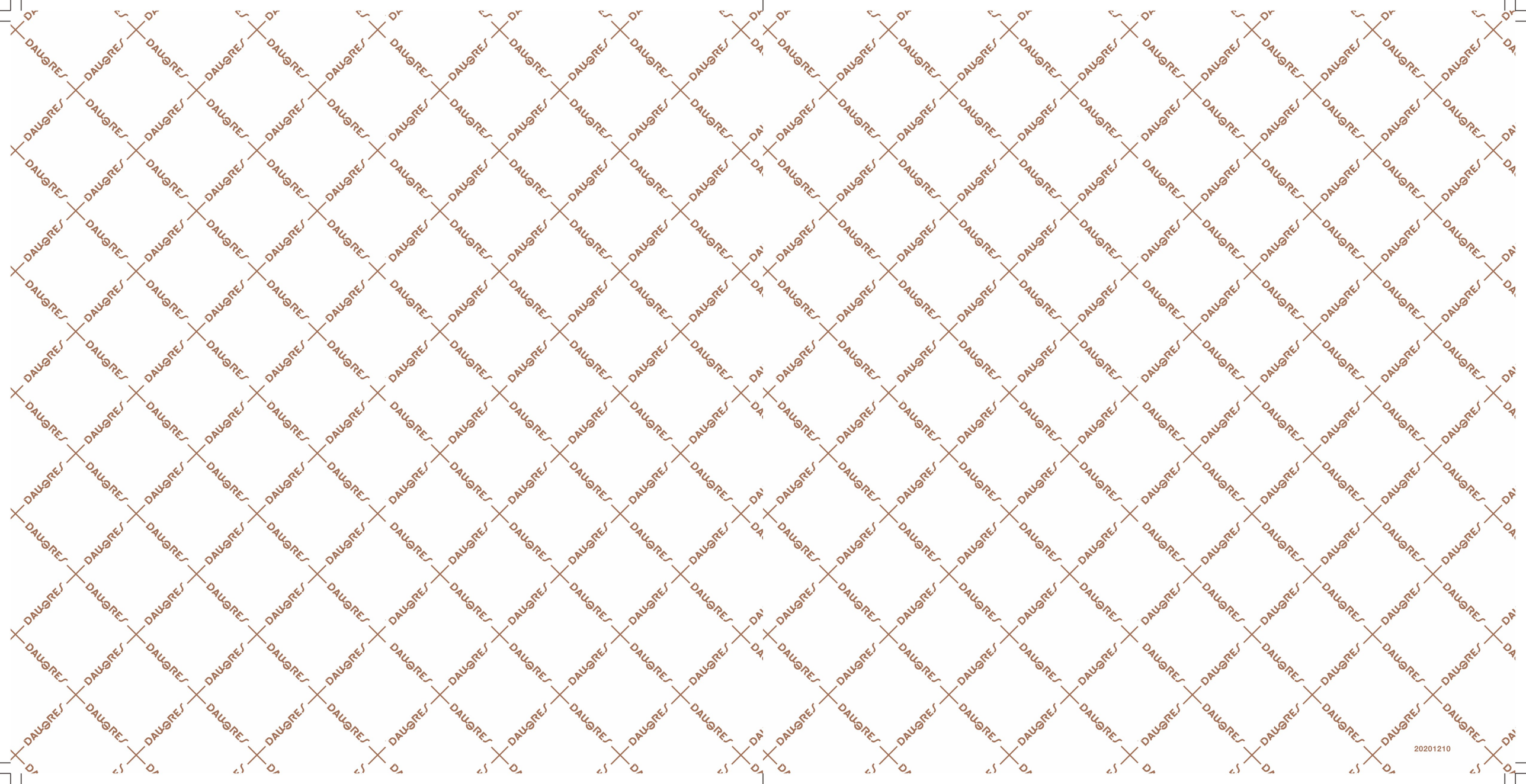
EXCESS CLEANING 额外清洁

This procedure is specially for cleaning up the dirt or residues whose color is obviously deep. Considering that such kind of dirt or residues are difficult to be removed, it is recommended to clean them up at once they have been found. Please kindly refer the introduction of detergents and their corresponding type of dirt.

此步骤用于清除特别陈旧或深色污渍或残留物。由于此类污渍或残留物比较顽固，建议产生污渍时第一时间进行清理，时间过长有可能无法清理。下面表格推荐了最有效的清洁剂及其应对的污渍类型。

type of dirt 污渍类型	type of detergent 清洁剂类型	name of detergent 清洁剂名称	manufacturer 制造商
coffee, coca cola, fruit juice 咖啡，可乐，果汁	multipurpose, alkaline-based 多用途，碱性	coloured stain remover ps87 greslind	Faberchimica Fila Panariagroup
grease, dust, deep cleaning 油脂，灰尘，深层清洁	multipurpose, alkaline-based 多用途，碱性	ps87 litonet greslind intensivreiniger hmk r55 taski r20-strip	Fila Litokol Panariagroup Lithofin Hmk Johnsondiversey
wine 红酒	oxidizer 氧化剂	oxidant	Faberchimica
lime deposits 石灰沉淀物	acid base 酸性	viakal	Procter & gamble
rust 锈	acid base 酸性	diluted muriatic acid	Various makers
tyre and pencil marks,metal marks 轮胎和铅笔痕迹，金属痕迹	abrasive paste 磨蚀剂	polishing cream, detergum, vim clorex, strong remover	Faberchimica, zep italia, Guaber, faberchimica
ink, felt-tip pen 墨水，记号笔	solvent-based 溶剂型	nitro thinner; tce, turpentine	Various makers Saberchimica
dirt in grouts 泥浆中的污垢	specific 特殊型	fuganet fugenreiniger	Fila Lithofin

Always test the product on a spare tile.
清洁前，请先在多余的瓷砖产品上进行测试。


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