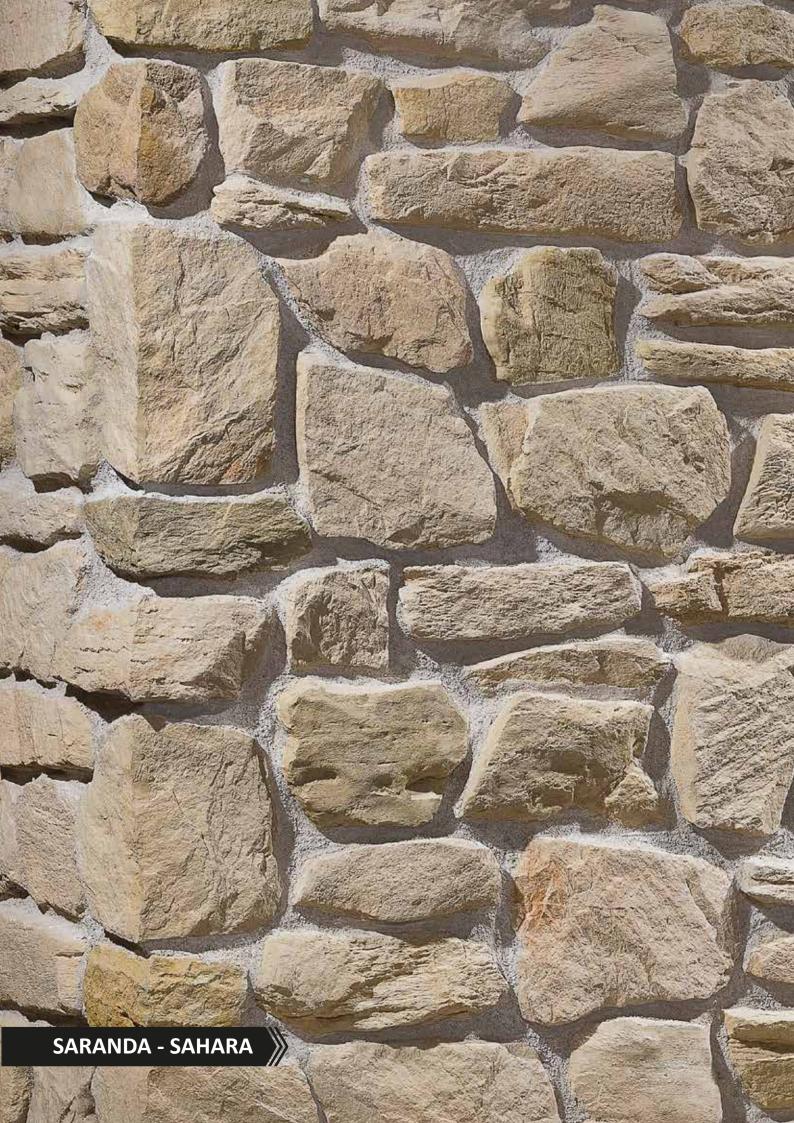


ASSEMBLY AND APPLICATION GUIDELINE



ABOUT US



We as Arteknik Decorative Stone and Brick Company bring our decorative culture stones and culture bricks under the brand name of Country Stone, our decorative panels under the brand name of Paneldeko together with our customers on our production journey that we have set out in 2000.

Our company, which prioritizes product quality and diversity, manufactures in ISO 9001 2015 world class with its R&D studies. It reaches its customers with domestic and foreign network of dealers and distributors.

Our goal-as Country Stone and Paneldeko- is to offer the best product experience in the industry with its quality and naturalness. We share our products that are nature conscious and supported by renewed production techniques with our customers by renewing ourselves and being aware of our responsibilities.

Our vision is to contribute to the development of industry standards by prioritizing the approaches that provide solutions to visual and architectural needs, and to produce quality-oriented products that respect the environment and nature identical habitat. We aim to be in a state of growth evolving to be an important player at abroad from domestic quality leadership for Decorative Stone and Panel solutions.

While providing service parallel to 21st century consumer expectations such as health-friendly production, easy application, long-lasting products and customer satisfaction. We aim to be a company that develops by adding value to its employees, emphasizes the dynamism and happiness of its employees

COUNTRY STONE PRODUCTS ASSEMBLY GUIDELINE



With Country Stone, you can easily have the elegancy and beauty of natural stones which need millions of years to form, without harming the natural harmony and unity all over the world. Country Stone offers stone veneer and brick slip models which are compared only by the nature.

Country Stone brings beauty, visual completeness, perfection and a completely different breath to your projects, your living spaces and your life without hiding the beauty and aesthetics that nature has already presented to us.

PROPERTIES OF COUNTRY STONE PRODUCTS

- The weight is between 25-50 kg/m2 depending on the product model.
- It contributes to sound and heat insulation thanks to its pumice dust ingredient.
- It is not flammable and has no harmful effects for the human health.
- It is resistant to external effects and impacts thanks to its high strength cement ingredient.
- The thickness varies between 2-7 cm depending on the product model.
- There are specially designed and manufactured corner stones for each model.

INSTALLATION SURFACE

The surfaces on which country stone adhesive can hold firmly are:



BRICK WALLS



GROUT OR PLASTER SURFACES

If there are paint, cracks, dirt, oil, rust, mold, moisture or swelling on the application surface that may prevent the assembly; firstly, these must be removed.

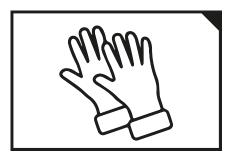
Moisture and swellings are water-caused problems; just cleaning the surface does not eliminate the root cause. There is possibility of repetition of the problem. Our company does not accept any responsibility in case of problems arising due to moisture and swelling on the adhesion surface.

If the application surface is made of metal, wood, cement board, drywall, wallpaper or other similar mediums such that it prevents sticking of the adhesives; a suitable primer grout application is required. Firstly, entire application area is covered with grouting mesh and they are fixed via screws. After that, entire area of the mesh is plastered with cement-based grout. After the area gets completely dry, installation surface is obtained ready to start application.

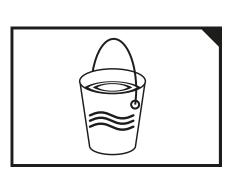
You can find list of applicable installation surfaces at the end of this manual.

2. ADHERENCE OF THE STONES

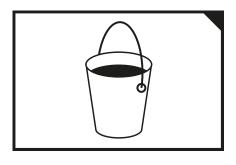
LIST OF MATERIALS



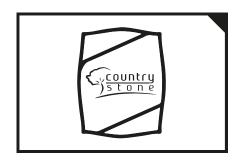
Gloves



Approximately 6,5 lt of cold, clean water



Mixing buckets and mixing equipment



25 kg of Country Stone adhesive mortar

2. ADHERENCE OF THE STONES



Preparation of adhesive mortar

Cleaning precautions are taken, gloves and other equipment are worn.





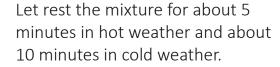


Firstly, add water to bucket and start to add adhesive mortar little by little, mix using a stick or electric mixer in low speed by adding some more adhesive until the mixture reaches a homogeneous consistency.











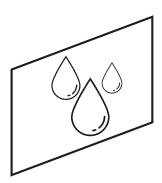
At the end of resting period, the mixture is mixed again for 30 seconds and is ready for use.

The prepared mortar should be used within approximately 2-3 hours.

APPLICATION OF ADHESIVE MORTAR

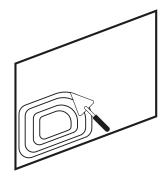
1. Spread a sheet cover on the ground for cleaning purposes and check necessary equipment.



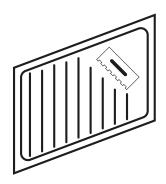


2. Wet slightly the surface of application.

3. Apply and spread adhesive mortar of about 1 cm thickness on the slightly wet surface using a suitable hand tool.

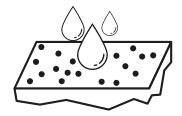


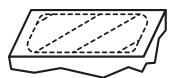
APPLICATION OF ADHESIVE MORTAR



4. After spreading, give form to mortar vertically and horizontally using a notched trowel.

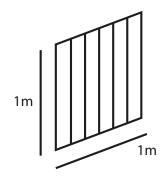
5. Wet slightly the surface of the stone to be adhered.





6. Cover the surface of the stone with enough amount of mortar suitable for the stone size. When adhered by pressing the stone, mortar should not overflow.

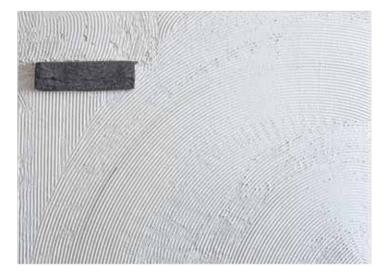
7. Adhere approximately 1m2 of stone each time in order for the applied mortar not to dry.



- Before starting the installation, cleaning and security precautions should be taken such as spreading a sheet cover on the ground, removal and taping of elements like window sills, electric sockets etc.
- Ideal application temperature is between +5 C/ +35 C degrees. If the ambient temperature is below +5 C, installation should not be done.
- Wetting the application surface enhances the adhesion of the mortar.
- 1 bag of Country Stone Adhesive Mortar is sufficient for the application of approximately 3.5- 4 m2 of product.

ADHESIVE MORTAR







WHITE ADHESIVE MORTAR 10019

Country Stone Flex® White Adhesive Mortar is produced for the best colour balance of lighter coloured products and light coloured joints

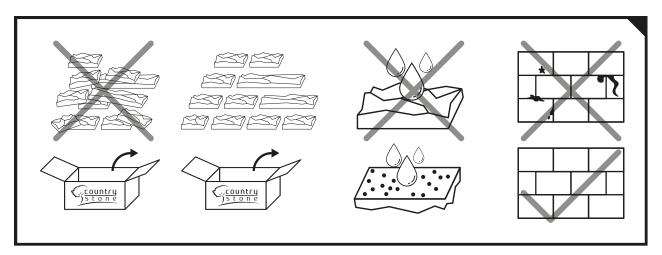


GREY ADHESIVE MORTAR 10018

Country Stone Flex® Grey Adhesive Mortar is produced for balancing the colours of non-light coloured products and non-light coloured joints.

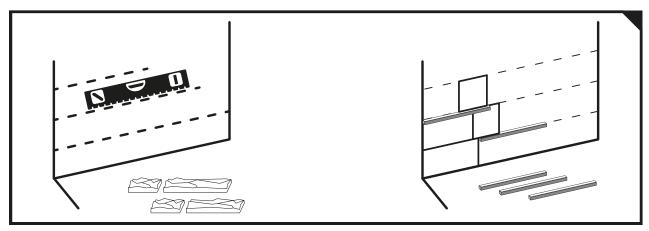
ADHESIVE APPLICATION CALCULATIONS

	STONE		BRICK
Surface	8-9 kg / m2	Surface	6-7 kg / m2
Corner	4-5 kg / m2	Corner	3-4 kg / m2

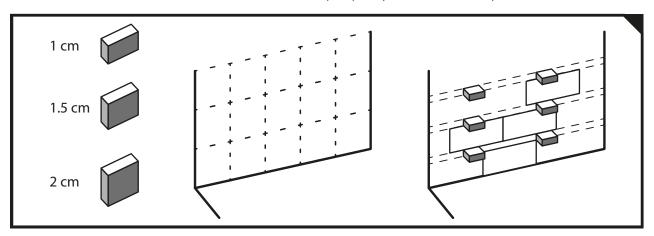


1. It is very important that the visible surfaces of the stones should not be scratched and are kept clean.

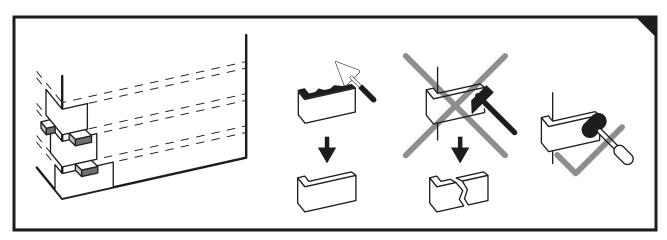
At all stages of the application (boxes should not be shaken while carrying, stones should be removed one by one from the boxes and should be handled one by one while wetting, cutting, adhering, cleaning after the application etc.), attention should be paid to surfaces of the stones.



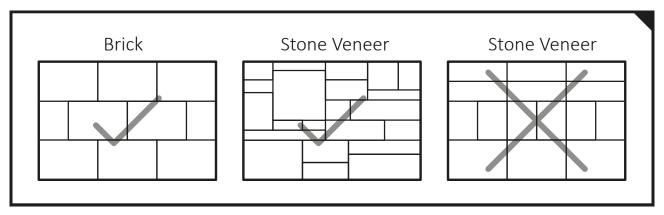
2. The installation should be started from the bottom of the surface. Flat lining elements (such as slats) that are aligned with a spirit level, should be placed on the wall in order for the stones to be adhered properly and not to slip.



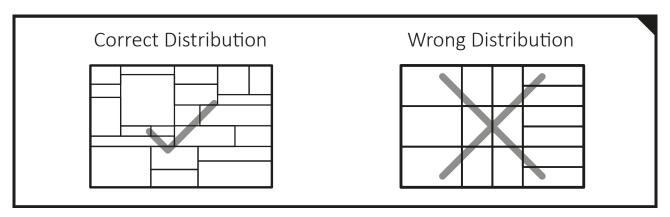
3. Wedges of varying sizes (1/1.2/1.5/2 cm) should be prepared and placed between stones during installation in order to ensure that joint gaps are of equal height.



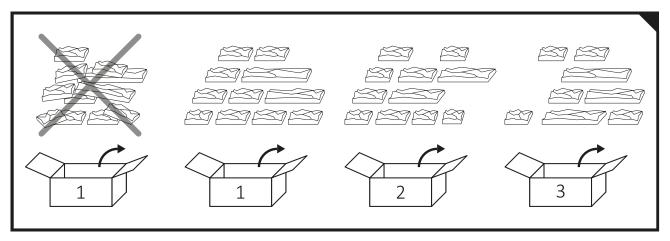
4. If there are corners in the application area, installation is started from the corners. The edges of the corner stones are checked against burrs, if any, burrs are removed using a trowel. Having placed a stone on the corner, it is ensured to fit tightly by hitting it slightly with a rubber hammer. It should not be hit by a steel hammer or any other metal tool. Otherwise, stones can be broken or damaged.



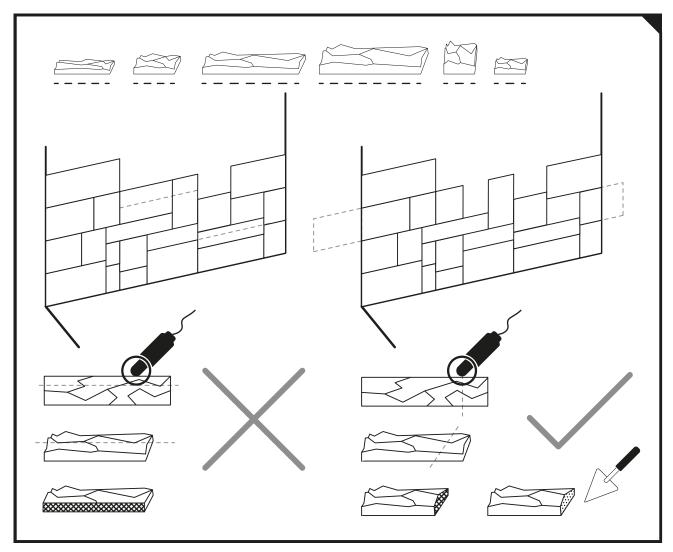
5. Joints of any product apart from bricks; should not be allowed to create vertical or horizontal straight lines in order to create a natural appearance. Asymmetric joints should be created, and a natural stone appearance should be obtained by using flat and corner stone pieces of different sizes and shapes.



6. In order to speed up the installation process; laying of the same or close-sized stone pieces in groups will spoil the natural appearance and create a bad application. **Stones should be lined up in different lengths and thicknesses.**

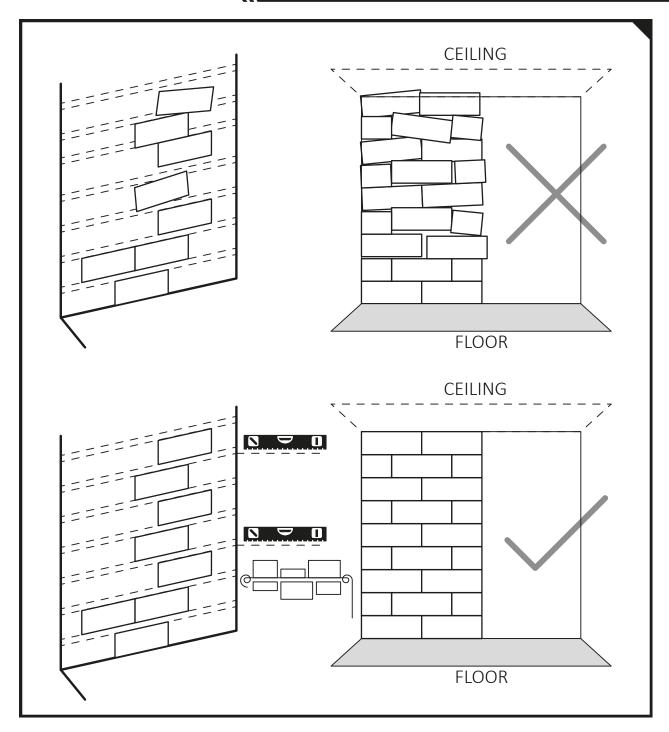


7. In the application area, distribution of the colors and the distribution of the stone sizes should be planned by opening 2-3 boxes at the same time. Collecting the same colored stones in an area will spoil the natural appearance and create a bad application.



8. There is no need to cut the stones during the application. It may only be required to cut the stones for the finishing edges. The difference of colors and textures that may arise from cutting operations should be hidden by covering with joint filling mortar.

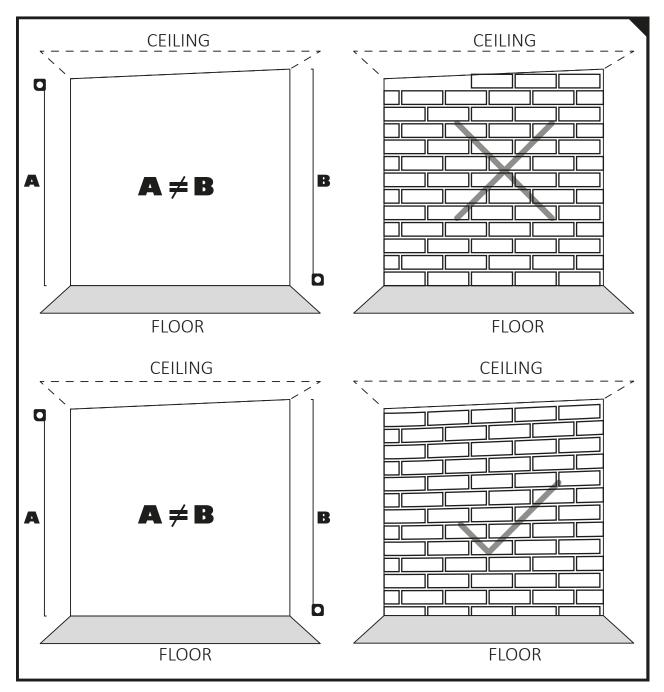




9. During the installation, alignment of the stones should be checked in every 3 rows with a spirit level. When installing thin stone pieces such as brick slips, slates etc., alignment of the stones should be regularly checked by installing a thin guiding rope on the row being installed. When a new row is being installed, the guiding rope should be moved to this row to ensure that process continues properly. Otherwise, slips, warps and unevenness will occur, and apparent gaps will be created at the ceiling level.

! It is not possible to fix uneven and distorted stone installations.

It has to be demolished and rebuilt by new stones.!

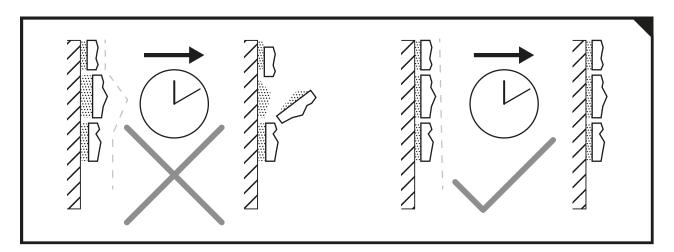


10. A problem often experienced on the application surfaces is that the left and right edges or corners have different heights (A and B). Before installation, it is necessary to measure firstly the heights of the left, middle and right-hand side of the wall. The resulting difference should be tolerated until the ceiling level by adding a few mm to joint gaps, starting from bottom row of the stones.

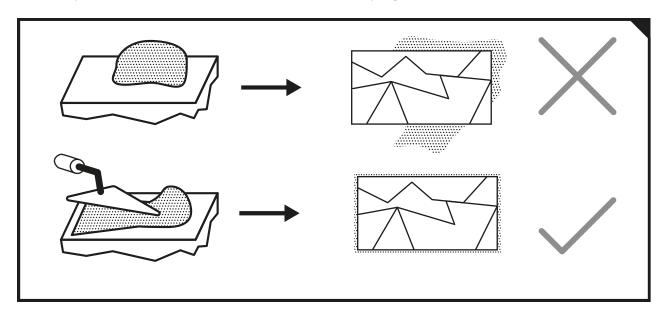
The works performed without measurements and the walls whose alignments were not correctly taken; will cause gaps in the ceiling joints and degrade the quality of the overall installation.

! It is not possible to fix uneven and distorted stone installations.

It has to be demolished and rebuilt by new stones.!



• Applying too much adhesive to stone or wall causes imbalances on the surface and may cause stones to fall due to unstable drying.



• Leaving the adhesive on the surface of the stone without spreading it with a hand tool, leaving it as a heap, will cause pollution by overflowing from the sides. Also, the stones may not adhere properly due to the uneven adhesive appliance and there may be gaps among the stones and the wall. This situation may cause stones the fall off of in the long term.



IMPORTANT: MORTAR BURNING PROBLEM

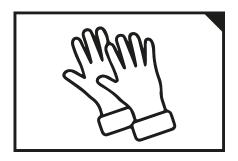


• The surface of the wall and the back of the stones should be wetted lightly with water before applying adhesive mortar. If they are not wetted, the wall and stone absorb the water of the adhesive that is between them. Since there will be no chemical reaction in the cement inside the adhesive, which is dehydrated, the adhesive cannot cure and adhere properly.

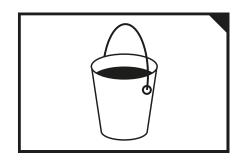
In the industry, this situation is called "Mortar burning". It is a situation that cannot be seen by the human eye and causes the stones to fall down in the future.

4. THE PREPARATION AND APPLICATION OF JOINT MORTAR

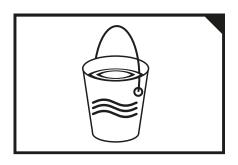
LIST OF MATERIALS



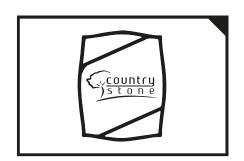
Gloves



Mixing buckets and mixing equipment



Approximately 4,5 lt of cold, clean water



20 kg of Country Stone joint mortar

PREPARATION OF JOINT MORTAR

Cleaning precautions are taken, gloves and other equipment are worn.







Firstly, add water to bucket and start to add mortar little by little, mix using a stick or electric mixer in low speed by adding some more mortar until the mixture reaches a homogeneous consistency.









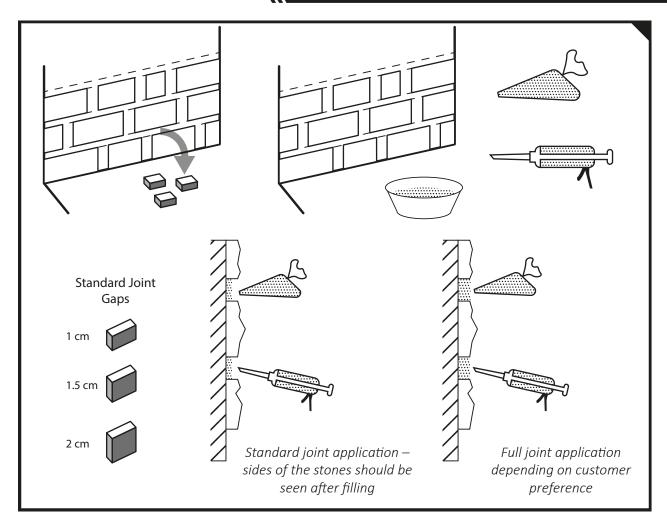
Let rest the mixture for about 5 minutes in hot weather and about 10 minutes in cold weather.



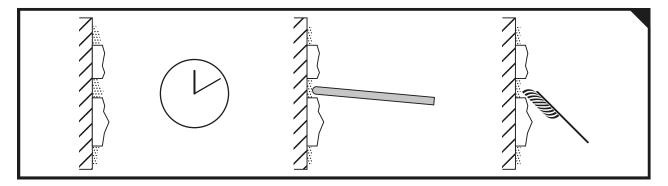
At the end of resting period, the mixture is mixed again for 30 seconds and is ready for use.

The prepared mortar should be used within approximately 1 hours.

4. JOINT PREPARATION AND APPLICATION



• After the wedges spaced between the stones are taken out, joint mortar with specific color which was chosen according to customer's preference, is started to be applied by using a mortar pump or a mortar bag (a funnel-shaped, punched bag) in a way that it does not cover the side surfaces of the stones. Attention should be paid not to stain stone surfaces during the process. The deep filling of the joints will show the quality of the application by showing the natural appearance of the stones. In some cases, full joint work can be done according to customer preference.



• When the joint mortar filling is complete and it starts to dry (the duration of this process varies depending on the ambient temperature; it is the right time when the mortar starts not to stick to the stones), filled joints should be adjusted using a wooden stick, if any, excess should be removed and cleaned with the help of a brush.

















LIGHT GREY JOINT



GREY JOINT



ANTHRACITE JOINT



WHITE JOINT



LIGHT BEIGE JOINT



BEIGE JOINT



COFFEE JOINT

JOINT FILLING COLOR **PALETTE**

Country Stone Joints® perfectly match the product colours to complete your design.

JOINT COLOUR EFFECTS

Country Stone® Joints' colours are specially curated to for our Stone and Brick product colours. By mixing or matching the joint colours you can change or enhance your desired feeling.



SARDES ANTHRACITE JOINT



SARDES LIGHT BEIGE JOINT



JOINT APPLICATION CALCULATIONS

Standart Joint

6-7 kg / m2



Standart Joint

 $4-5 \, \text{kg} / \text{m}^2$





7-11 kg / m2



Over Joint

 $5-7 \, \text{kg} / \text{m}^2$

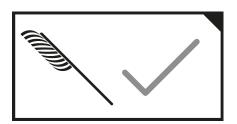






5. CLEANING

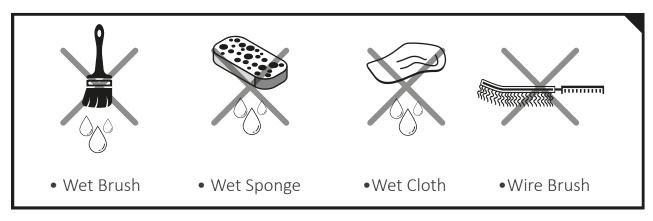
• Although attention is paid during the application, there may be some adhesive and joint mortar that are adhered to the surfaces and edges of the stones. In such cases, intervention should never be made before adhesive and mortar fully dries. Adhered material should be allowed to dry, after that they should be removed and cleaned with a clean, soft, dry brush.



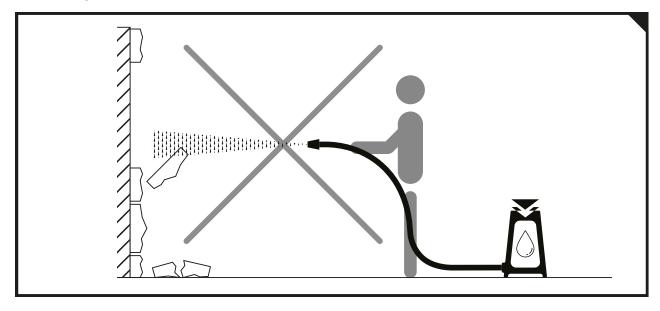
Tool to be used for cleaning:

• Dry, soft brush

Things that should never be used for cleaning:



- It is wrong to touch with any kind of wet tool; this will cause stone colors to become dirty and lose their naturalness.
- It is wrong to touch with harsh brushes such as a wire brush; this will cause scratching of the stone surfaces and loss of their naturalness.

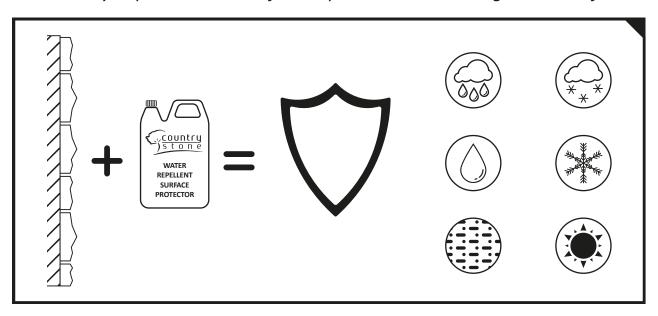


• It is wrong to apply pressurized water; this will cause damaging of the stone surfaces or colors and loss of their naturalness.



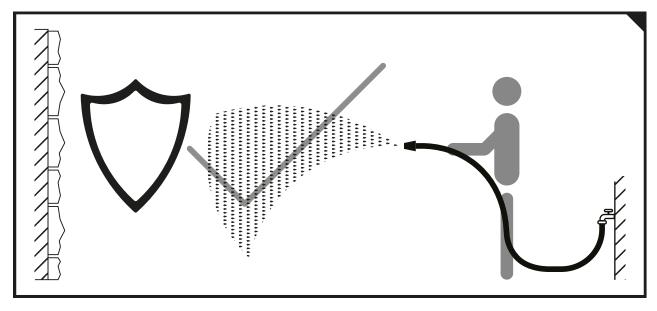
COUNTRY STONE WATER REPELLENT:

It is very important to use it for our products to have longer service life.

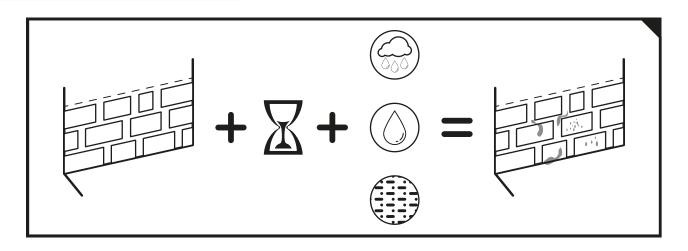




• Since Country Stone Water Repellent is transparent, it does not cause any color change on the product surfaces. It prevents stones from absorbing water. This protective layer formed; helps to prevent contamination and staining of the stones. It also ensures that products are not damaged in cold weather conditions such as snow or frost.



• The walls on which water repellent have been applied, can be washed and cleaned by non-pressurized water.

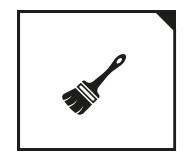




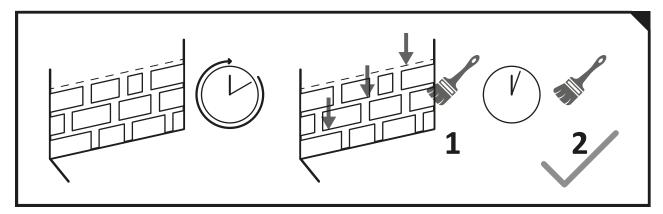




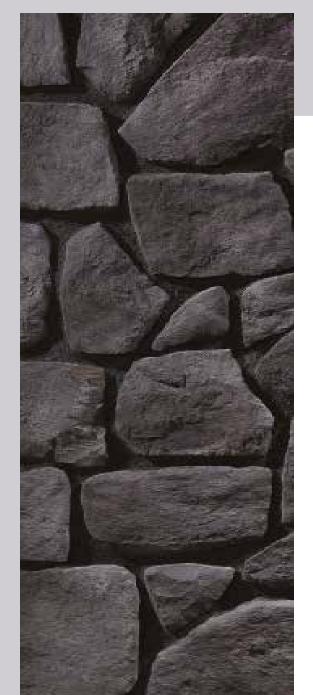
Country Stone Water Repellent



A lint-free soft brush



- Application of Country Stone Water Repellent:
- Wait for the Stone/Brick installation to dry. 1.
- Spread Country Stone Water Repellent with a lint-free soft brush on the stone 2. and joint mortar surfaces.
- Depending on the weather conditions, 15 minutes later after the first layer is applied, complete the process of water repellent appliance by spreading second layer.



WATER REPELLENT



Country Stone Water Repellent® (CSWR) Any in-door application or an out-door application, CS Water Repellent protects the products colours from probable water, rain, snow, frost damage.

CSWR doesn't effect the colours of the products. When applied on the products, you can clean the dust and the dirt with water.

One bottle of CSWR is 4Lts and covers 12m2 surface area.

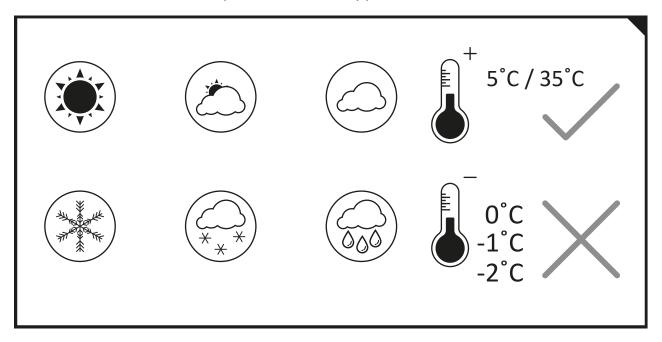
CSWR application essential for the guarantee.

WATER REPELLENT APPLICATION CALCULATIONS

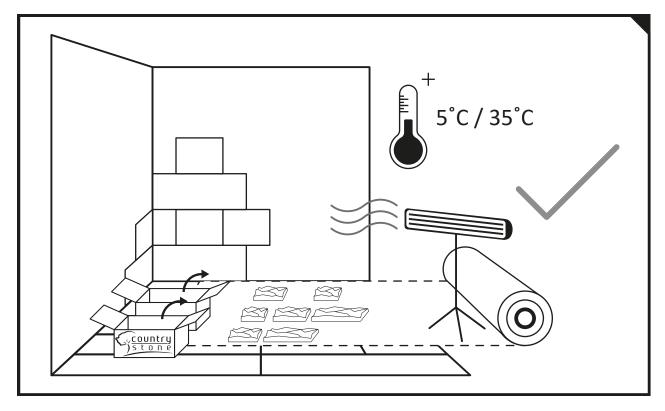
Country Stone Water Repellent must be applied twice on surfaces.

	STONE		BRICK
Surface	0.3 lt/ m2	Surface	0.3 lt/ m2

Effect of ambient temperature on the applications:



- Weather condition should be checked before starting the application.
- Ideal application temperature is between +5 °C/ +35 °C degrees. If the ambient temperature is below +5 °C, installation should not be done.



• Installation can be performed by heating the place with a heater.

Cold air causes water in the adhesive and joint mortar to freeze and adhesion rate to decrease. This can cause stones not to adhere properly and fall off.

IMPORTANT INFORMATION ABOUT ADHESIVE MORTAR

APPLICATION AREAS

• Used for adhering products like Country Stone stone veneer, Country Stone brick slips etc. on horizontal and vertical surfaces of the interior and exterior facades of the buildings.

GENERAL INFORMATION

- One bag (25kg) of Country Stone adhesive mortar is sufficient for approximately 3.5-4m2 area application
- Permitted waiting time of the prepared mortar in the bucket is maximum 2-3 hours.
- It fully dries in up to 24 hours after the installation is finished.
- Country stone adhesive mortar is a cement based adhesive.
- Sand, cement, etc. should not be added to mortar mixture.
- Surfaces to be applied must be clean and dry.
- Crusting time is 20 minutes on average.
- The equipment used should be washed with plenty of water after the application.
- Reaction to fire: A1

SHELF LIFE

- Bags that have not been opened and kept under appropriate storage conditions should be consumed within 1 year from the production date.
- Opened bags should be used within maximum 1 week. Adhesive mortar which has been remained open for more than a week, is not suitable for use as it will begin to lose its chemical properties due to moisture in the air.
- It should be stored in original 25 kg kraft bags, on wooden pallets, with a stacking height of maximum 10 bags in a moisture-free area.
- The date of production is the date stamped on the Kraft bag.
- Part and serial number are same as the date of production.

SAFETY & HEALTH WARNINGS

- As it contains cement, it should not be contacted with eyes, mouth and skin. If any contact, it should be washed with plenty of water.
- It should be kept away from children and animals.

IMPORTANT INFORMATION ABOUT JOINT FILLING MORTAR

APPLICATION AREAS

• Used for filling joints of the products like Country Stone stone veneer and Country Stone brick slips etc. on horizontal and vertical surfaces of the interior and exterior facades of the buildings.

GENERAL INFORMATION

- In Country Stone brick applications; 1 bag(20kg) of joint mortar is sufficient for approximately 5m2 area.
- In the Country Stone stone veneer applications; 1 bag(20kg) of joint mortar is sufficient for approximately 3m2 area.
- The surfaces to be applied must be clean and dry.
- Permitted waiting time of the prepared mortar in the bucket is maximum 1 hour.
- Joint mortar which has expired should not be used again by mixing with water or dry mortar.
- Depending on the ambient temperature, filled joints are levelled with a wooden stick 30-45 minutes after the application. They are cleaned with a dry paint brush and given their final shape.
- Joint filling mortar is expected to cure and dry.
- The equipment used should be washed with a plenty of water after the application.

SHELF LIFE

- Bags that have not been opened and kept under appropriate storage conditions should be consumed within 1 year from the production date.
- Opened bags should be used within maximum 1 week. Joint filling mortar which has been remained open for more than a week, is not suitable for use as it will begin to lose its chemical properties due to moisture in the air.
- It should be stored in original 20 kg kraft bags, on wooden pallets, with a stacking height of maximum 10 bags in a moisture-free area.
- The date of production is the date stamped on the Kraft bag.
- Part and serial number are same as the date of production.

SAFETY & HEALTH WARNINGS

- As it contains cement, it should not be contacted with eyes, mouth and skin. If any contact, it should be washed with plenty of water.
- It should be kept away from children and animals.

IMORTANT INFORMATION ABOUT WATER REPELLENT

APPLICATION AREAS

- Used for sealing surfaces and joints of products like Country Stone stone veneer and Country Stone brick slips etc. on horizontal and vertical surfaces of the interior and exterior facades of the buildings.
- The color and texture of the applied surface is not spoiled.
- It is absorbed by the surface on which it is applied.
- It provides surfaces properties of being water repellent and UV resistant.

GENERAL INFORMATION

- A can(4kg) of Country Stone Water Repellent is sufficient for an area of 10-15m2 depending on the absorption capacity of the surface used.
- The surfaces to be applied must be clean and dry.
- After the application, the full effect(curing) time is 24 hours.
- The equipment used should be washed with a plenty of water after application.

SHELF LIFE

- It can be stored for at least 1 year in a cool place unless it is in contact with open air.
- In storage; keep them away from direct sunlight and frost.

SAFETY & HEALTH WARNINGS

- It should not be contacted with eyes, mouth and skin. If any contact, it should be washed with plenty of water.
- It should be kept away from children and animals.
- In case of drinking, drink plenty of water and consult a doctor immediately.
- It is not suitable for use on the surfaces that are in contact with food.

SURFACE APPLICATION GUIDE

The surfaces on which Country Stone adhesive mortar can be applied are as follows:

THERMAL INSULATION PLASTER CONVERSION PRIMER PLASTER MESH

The surfaces on which Country stone adhesive mortar can be applied by firstly applying plaster mesh and plaster are as follows:

COARSE GROUT
DRYWALL*
CEMENT BOARD*
XPS INSULATION*
EPS INSULATION*
GLASS WOOL*



The surfaces on which Country stone adhesive mortar cannot be applied are as follows:

WOODEN SURFACES

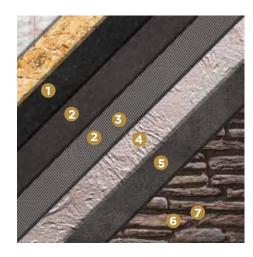
WALLPAPER

METAL SURFACES

STEEL CONSTRUCTION FRAMES

^{*}Surfaces should have loadbearing characteristics. Our company does not accept any responsibility for the applications that have been done on the surfaces with insufficient loadbearing characteristics.

BACK-UP WALL TYPES AND SURFACE PREPARATION REQUIREMENTS



WOOD

- 1. Sheathing,
- 2. Two layers of water resistive barrier (WRB),
- 3. Galvanized metal lath,
- 4. Scratch coat,
- 5. Mortar setting bed,
- 6. Country Stone® Stone Veneer or Brick Slips
- 7. Mortar joint.



MASONRY / CONCRETE

- 1. Mortar applied directly to untreated, unpainted masonry, concrete or stucco,
- 2. Country Stone® Stone Veneer or Brick Slips
- 3. Mortar joint. Note: Painted, sealed, dirty & smooth surfaces/walls will require additional preparation to address these conditions.

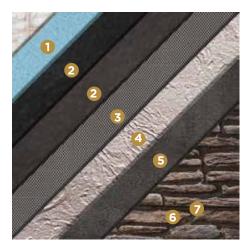
Note: Surfaces having any paint, dust, dirt, rust, mold or cracks on them have to be cleaned and repaired before starting the application."



METAL FRAME

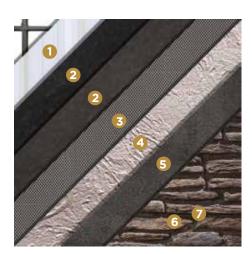
- 1. Sheathing,
- 2. Two layers of water resistive barrier (WRB),
- 3. Galvanized metal lath,
- 4. Scratch coat.
- 5. Mortar setting bed
- 6. Country Stone® Stone Veneer or Brick Slips
- 7. Mortar joint.

BACK-UP WALL TYPES AND SURFACE PREPARATION REQUIREMENTS



RIGID FOAM INSULATION

- 1. Rigid foam insulation,
- 2. Two layers of water resistive barrier (WRB),
- 3. Galvanized metal lath (Ribbed Lath shown),
- 4. Scratch coat,
- 5. Mortar setting bed,
- 6. Country Stone® Stone Veneer or Brick Slips
- 7. Mortar joint.



METAL BUILDINGS

- 1. Sheathing,
- 2. Two layers of water resistive barrier (WRB),
- 3. Galvanized metal lath,
- 4. Scratch coat,
- 5. Mortar setting bed,
- 6. Country Stone® Stone Veneer or Brick Slips
- 7. Mortar joint.



CEMENT BOARD

- 1. Sheathing,
- 2. Two layers of water resistive barrier (WRB),
- 3. Cement board,
- 4. Mortar setting bed,
- 5. Country Stone® Stone Veneer or Brick Slips
- 6. Mortar joint.

