INSTALLATION INSTRUCTIONS FOR RENOSTONE AND RENOBRIK

1. CALCULATING THE REQUIRED QUANTITY

Measure the area of the wall to be covered by calculating its height times its length and substracting all openings such as windows, doors, etc.. For the quantity of corners needed, measure the linear feet or linear meters (height of the wall) of all 90 degree (exterior) corners.

Next, substract the surface area covered by the corners from the total surface calculated. Note: One linear foot of corners covers approximately 1/2 square foot of surface area.

Packaging:

Renostone:

Flat stones: one box covers 10 sq.ft. (.93m²) with a joint of ½" (1.27cm) between the stones and weighs approximately: 60-80 lbs (27-36kg).
Corners (90 degrees): one box covers 8 linear feet (2.44m) and approximately 5 sq.ft. (.46m²) of surface area when leaving a joint of ½" (1.27cm) between the stones. Approximate weight per box: 70 lbs (32kg).
Corners (135 degrees): one box covers 6 lin.ft. (1.83m) and approximately 4 sq.ft. (.37m²) of surface area when leaving a joint of ½" (1.27cm) between the stones. Approximate weight per box: 60 lbs (27kg).

Renobrik:

Flat bricks: One box contains 72 bricks which cover 12 sq.ft. (1.11m²) with a joint of 3/8" (.95cm) between each brick. Approximate weight per box, 30 lbs (13.6kg).
Corners: one box contains 24 bricks which cover 6 lin.ft. (1.83m) and approximately 4 sq.ft. (.37m²) of surface area with a joint of 3/8" (.95cm) between each brick. Approximate weight per box: 15 lbs (6.8kg).

Renofit:

Flat pieces: one box covers 8.32 sq.ft. (.77m²) and weighs approximately 80 lbs (36kg).
Corners: one box covers 5 lin.ft. (1.52m) and approximately 3 sq.ft. (.28m²) of surface area and weighs between 50-60 lbs (23-27kg).

Eurobrik:

Flat bricks: one box contains 94 bricks and covers 25 sq.ft. (2.32m²) and weighs between 80-85 lbs (36-39kg).
Corners: one box contains 35 bricks and covers 10.27 lin.ft. (3.13m) and weighs between 50-60 lbs (23-27kg)

2. BEFORE YOU START

It is very important to work as neat as possible to avoid excess cleaning. Always manipulate the stones or bricks with clean hands. Keep a damp rag close by to wipe hands as you work. At the end of your work day, wipe clean all mortar residues on the stones or bricks using a damp (not dripping) rag. Never use wire brushes, muriatic acid or other chemicals to clean the stones or bricks.

3. TOOLS FOR INSTALLATION

4. SURFACE PREPARATION FOR INTERIOR OR EXTERIOR APPLICATIONS

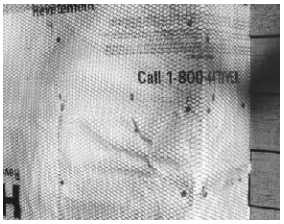
A. Over the following surfaces: wood, rigid insulation or gypsum board.

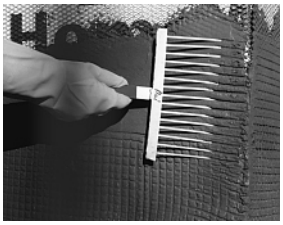
A scratch coat must be done before applying the stones or bricks. Exception: on small indoor applications under 8 feet high. Refer to section D.

Note: On exterior applications, if an air space is required by your local building code, install the paper and metal lath over the required strapping. In this case, you must apply a thicker (¾") scratch coat.

Steps to follow for scratch coat application:

1) Cover the surface with a sheathing paper such as a perforated 15 lbs roofing paper or a "Tyvek" or "Typar" paper.
2) Install galvanized metal lath sheets (27"x97" - 2.5 lbs) horizontally, with galvanized roofing nails, spaced every 6" (15.24cm) and penetrating studs a minimum of 1" (2.54cm). Overlap sheets approximately 2". Fold sheets at outside corners and cut at inside Corners.
   Note: When nailing metal lath over rigid insulation, galvanized washers must be used with the nails.
3) Next, using a plastering trowel, spread a ½" coat of mortar over the metal lath. Wait approximately 20 to 30 minutes before scratching the mortar coat with a mason's scratcher making horizontal and vertical lines. Wait 24 to 48 hours before applying the stones or bricks.



Mortar mix for scratch coat:

1. Type S pre-mixed mortar
   Or
2. 1 part Portland cement (type 10)
   ½ part masonry cement
   4 to 5 parts masonry sand

Mortar mix for installing the stones or bricks:

1. Type S pre-mixed mortar
   Mortar bonding agent (acrylic additive) for optimal adhesion
   Or
2. 1 part masonry cement
   2 to 3 parts masonry sand
   Mortar bonding agent (acrylic additive) for optimal adhesion

Note: Follow instructions on packaging for the proper dilution of the bonding agent.

Mortar mix for filling joints with a grout bag:

For optimal consistency of the mortar for it to flow easily from the grout bag:
1 part masonry cement
1.5 to 2 parts masonry sand
Oxides pigments to colour the mortar (optional)

Note: For small applications under 100 sq.ft., we recommend our grout kits available in gray, buff or beige. If you do not use a grout bag to fill in the joints, you can use the same mortar mix as for the installation of the stones/bricks.

Mix all dry ingredients first before adding water. Then, add approximately two parts water to your mix until you reach a smooth and creamy consistency. (Not too dry, not too liquid.) Always keep the same consistency while working.


B. Over the following surfaces that have not been painted or sealed: concrete blocks, concrete foundation wall, cement board, brick, aggregate stucco (not acrylic-based).
No scratch coat is required. However, when applying the stones or bricks, add an acrylic mortar bonding agent to the mortar for maximum adhesion

C. Over the same surfaces as above (in section B) that are painted or sealed.
Sandblast surface or install a galvanized metal lath with galvanized concrete nails and do a scratch coat as outlined in section A before applying the stones or bricks.

D. For small indoor applications (under 8 feet high).

The product can be applied directly over gypsum board or wood surfaces using a thin-set mortar (for tiles) such as the brand names, “Keralastic” or “Ultraflex” from Mapei or the equivalent. Follow instructions on packaging. Using a putty knife or trowel, spread a thin coat of adhesive on the wall and on the back of the stone or brick. Spread on a surface area that is workable within 20 minutes or less. Next, apply stones or bricks to the wall by pressing them into position by sliding them slightly from side to side for proper bonding, Depending on the consistency of the adhesive, if stones tend to slide downward, a drywall screw can be added underneath the stones until the adhesive sets. Wait 24 hours before filling joints. Refer to section 5 for general information on the installation of the products.

5. GENERAL INSTRUCTIONS FOR THE INSTALLATION OF THE PRODUCT

A. Installation of the product using mortar.



When working with mortar, dampen the wall surface and the entire back of the stones or bricks using a long bristle brush or spray bottle. Do not dip the stones or bricks in the bucket of water to soak them all the way through. Next, apply approximately ¾” (1.91cm) of mortar to the entire back of the stone or ½” (1.27cm) of mortar to the entire back of the brick. Press the stone or brick onto the wall with a slight wiggling motion (by moving the product slightly up and down and from side to side) until the mortar oozes out evenly all around while leaving a mortar thickness of approximately 3/8” between the stone and the wall and a mortar thickness of at least ¼” between the brick and the wall. This excess mortar can sometimes be sufficient for filling the joints but more can be added with a grout bag.


Note: 1) If corners are required, install these first by alternating short and long sides at each level and pressing them onto the wall by sliding them slightly up and down until mortar oozes out equally all around.
2) When installing the brick,or Renofit, check each course to keep work level.
3) The ideal space between the stones varies from ½” to 1” (except for the Renofit where there are not joints to be made) and Approx. 3/8” between the bricks.

B. Cutting

When cutting, always wear protective eyewear. The products can be cut using wide-mouth tile nippers, a hatchet, a rod saw (for the bricks), a wet saw or a circular saw with a masonry blade. For best appearance, cut edges can be coated with mortar. Note: Half bricks are cut at 3 13/16” (9.68cm) lengths.


C. Finishing joints

1. For application of the product using mortar, the joints can be finished immediately by compacting the excess mortar around the stones or bricks, using a metal or wooden jointer. For additional filling or when colouring the mortar, use a grout bag or other method (ex. dry packing). For indoor applications of the product using a thin-set mortar, wait 24 hours before filling the joints with mortar.



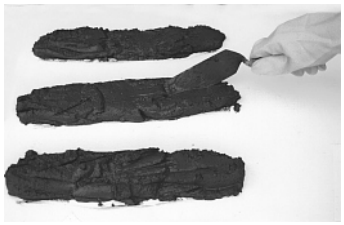
2. When mortar becomes partially firm, compact the joints and level them off with a jointer. For the final finishing, brush joints with a dry paint brush.

3. With a damp rag (not dripping), gently wipe clean any mortar spills on the stones or bricks. Never wait until the next day for cleaning as stains will be much more difficult to remove.

D. Installation of hearth slabs

Note: Hearth slabs should not be used outdoors as patio stones or any other floor covering. They are not warranted for that use.

Hearth slabs can be installed directly over a wood surface using a thin-set mortar. If regular mortar is used, the wood surface must be covered with a sheathing paper and metal lath. Over concrete or brick surfaces that have not been sealed or painted, the hearth slabs can be installed using a thin-set mortar or a regular mortar mix without a metal lath.



For each hearth slab, place three rows of mortar (2” apart), approximately 3” (7.62cm) wide and ¾” (1.91cm) thick.

Deposit the first hearth slab on the mortar and level. Place subsequent slabs and level with the first one. Leave approximately a 1/2” (1.27cm) joint between the slabs. Cover hearth area with plastic or cardboard before installing wall stones to avoid unnecessary cleaning. When cutting, use a circular saw with a masonry or diamond blade. Place cut edge so that they are not visible. Fill joints with mortar and finish, following instructions described in section 5 “C“. The hearth slabs must not exceed more than 1 ½” (3.81cm) without support. The grouted joint should extend the full length of the slab for best appearance. Note: A long nail can be inserted in the joint to support the mortar. Once completed, the hearth area canbe sealed with a masonry sealer for easy cleaning.

E. Other important notes

1. It is not recommended to install the product at temperatures below 4 degrees C.
2. The product should be installed at a minimum of 4” above ground level.
3. The product should not be installed under water, such as inside a fountain, a pool or an artificial lake.
4. It is recommended to seal the stones or bricks with a breathable masonry sealer in the following areas: kitchen, bathroom, fireplace and hearth, the first 4 feet above ground level, chimneys, lampposts and retaining walls.
5. The product is non-combustible. It is made of Portland cement, lightweight aggregates and colour oxide pigments.

FOR FURTHER TECHNICAL ASSISTANCE, CALL SPACE DIMENSIONS A.D. INC. AT 819-775-3179 or 877-778-6402.