

#### **Cloud Stone Installation Instructions**

Because it's ultra light weight, Cloud Stone can be applied faster and easier to any structurally sound interior or exterior vertical surface. Simple Installation instructions will enable you to experience the authentic and modern look.

- Estimating stone amount:
- A) Wall length x Wall height  $\{Example 20' \times 9' = 180 \text{ SFT}\}\$
- B) Subtract your fireplace box, window or door area by multiplying length and height.  $\{\text{Example 4'} \times \text{4'} = 16 \text{ SFT}\}$
- C) If there is any corners: Measure bottom of the wall to top (each corner, you are wrapping around). That's how many Lineal feet corners you need. {Example 9' high one corner = 9 LFT}
- D) But corners change your total Square footage, to find out your total Square footage area, Subtract corners in Lineal feet x .35 {Example 9'  $\times$  .35 =3.15 SFT} Your Stone requirement:

Facings: A (180)-B (16)-D (3) = 161 SFT

Corners: Always as C

- **Interior:** Cloud Stone is approved to install over drywall. You do not need expensive and time consuming preparation like you need for exterior application. Check your wall is clean. Absolutely oil, grease and dust free. If your drywall is covered with wallpaper, remove it as wallpaper can separate from wall. Apply adhesive to back of the stone least 3/8" to ½" continuous bead along the stone length. 4" high pieces should have 2 bead lines. Press firmly and evenly on the wall. Keep your first row straight and level, leaving ½" to 3/8" gap from floor to protect stone from any future wall movements.

If corner pieces are used, apply them first alternating the long and short sides as you go. So you are cutting flat pieces to finish off the wall. Work with the flat stones carefully into position so you don't bump and dislodge any existing stone.

- **Exterior:** It is always recommended that you check your local building code first before you applying stone to the exterior walls.

# Plywood - Wall Sheathing

Place a moisture barrier of 60 min building paper (tarpaper) to the area you wish to apply the stone veneer. Stone application must be protected from water penetration by proper use of flashing and or caulk. Install 2.5 lb. galvanized metal

lath or other code-approved lath securely, taking care to nail into your framing studs every 6" vertically and 16" horizontally with galvanized roofing nails to a minimum penetration of 1". You should always wrap the lath around outside corners a minimum 16". Overlap lath sides not less than 1/2" and lath ends not less than 1". Attach lath with small diamonds pointing upwards and nail it as flat as possible to the wall surface.

## Brick - Block - Concrete (Clean, Untreated and Not Glazed)

No preparation needed. Keep surface damp ahead of stoning process.

## Brick - Block - Concrete (Dirty, Painted or Sealed)

Sandblast or chisel score and wash. Metal lath can also be applied using concrete nails.

## Brick- Block- Concrete (Smooth, Glazed Surface)

Sandblast, chisel score or lath. To ensure a good adhesion, a bonding agent can be added to the mortar. NOTE: If you have concerns about the adhesive quality of the surface prepare a small test section before proceeding.

## **Metal Buildings**

Attach minimum 3.4 lb. 3/8" rib expanded metal lath galvanized or other code accepted metal lath with self- tapping screws.

#### **MORTAR PREPARATION**

For convenience and ease of preparation you can utilize our stone installation mortar mix. Just add water (80 lbs bag will install 15 sq. ft. of stone). For larger projects, mix 1 part masonry cement (Type S) to 2½-3 parts clean masonry sand.

## **MORTAR CONSISTENCY**

Mix thoroughly with clean water until mixture becomes like heavy cream.

NOTE: Add water slowly because you can always add more but you can't take it back out. A dry, crumbly mortar will not provide a proper bond and a wet mortar will be weak and messy. NOTE: Do not use anti-freeze compounds in mortar.

# **CUTTING AND TRIMMING**

If stones need to be shaped to fit, use a hack saw or power saw or pair of nippers or hatchet. Broken stones may be used to fill in gaps between larger stones. Coat the cut and broken edges with mortar for a professional finished appearance. Another trick is always try to cut thinner end, doing this exposed concrete end will be hidden when you put against thicker piece.

# **APPLYING MORTAR**

After all wire lath and flashings are installed, you can apply a base scratch coat. Use a mason's trowel to apply mortar 1/2" thick covering whole surface area. Scratch mortar to ensure a good bond.

In hot weather it may be necessary to moisten scratch coat and the back of the stone with fine spray of water or wet brush. This will prevent excessive moisture absorption.

Completely cover the entire back of the stone with mortar, 3/8" thick, taking care not to get any mortar on the face of the stone.

#### APPLYING VENEER STONE

You may apply stone from the bottom up or from the top down. Working from the top down may help avoid splashing previously applied stone with dripping mortar. If corner pieces are used, apply them first alternating the long and short sides as you go. Work the flat stones carefully into position so you don't bump and dislodge any existing stone. Fix the stone in place using an up and down motion applying firm enough pressure to squeeze some mortar out around the edges. Stone should now be "set". If stone slides off, chances are the mortar is too dry or too wet. Leave at least 1/4" gap between bottom of stone and sidewalk or driveway.

**NOTE:** Approximately one half of your time is spent on preparation and balance of your time is needed for applying stone.

#### **SEALING**

After allowing the mortar to dry completely for several days, a silicone sealer, such as Fabrishield MS-230, can be applied. Acrylic sealer, such as Fabriglaze MS 240, can be used for interior stone surfaces to add sheen and darken the colour.

# **SCUFFING**

As with natural stone, some scuffing may occur on Cloud Stone. This can enhance the overall natural appearance of your installation. Some scuff marks can be removed by cleaning as described below.

## **CLEANING**

For removal of common dirt, soot or occasional efflorescence, use a strong solution of soap or detergent and scrub with a stiff bristle brush.

For more difficult stains, use a mild solution of Manufactured Stone Cleaner Type 110, 1 part to 12 parts of water. Please follow the instructions on bottle and rinse thoroughly. Use Moss & Algae Cleaner Type 320 for moss and algae removal.

# IMPORTANT! DO NOT ACID CLEAN HOT AND COLD WEATHER APPLICATIONS

In very hot, dry weather, it is best to spray/moisturize the back of each stone to prevent the rapid absorption of moisture from the mortar.

In cold weather applications must be protected from freezing temperatures while the mortar is setting.

## **SALT AND DE-ICING CHEMICALS**

Because all concrete and masonry can be damaged by salt and other deicing compounds, Cloud Stone is not warranted against damage incurred following their use.

- **NOTICE:** As Rocky Mountain Stoneworks Ltd. cannot be responsible for incorrect application and other factors beyond the manufacturer's control; our only obligation shall be to replace any materials proved to be defective.