

## Surface Preparations for Installation of Natural Thinstone Veneer

### Exterior Framed Wall

\* Note - Installation applies to both wood and steel stud framed walls.

(See Figure #2)

Installation applies both to wood and steel stud framed walls. Material, size and spacing needs to be in compliance to local building codes and/or any manufacturers structural requirements.

An exterior sheathing material is required to provide a base for the application surface. Cover sheathing with weather resistant vapor barrier. Lap vapor barrier at the joints by a minimum of 4 inches. Install 2.5 lb galvanized expanded metal lath with galvanized nails or screws. Fasteners should be installed at a minimum of 6 inches on center vertically and 16 inches horizontally. It is important to note that in a corner application, the expanded metal lath needs to wrap the corner completely and overlap the expanded metal lath to a minimum of 4 inches. Apply 1/2 inch thick scratch coat, allow 24 hours to dry, and your Natural Thinstone Veneer can now be applied.

### Interior Framed Wall

\* Note - A wall board is required to provide a base for the application surface.

(See Figure #2)

Install a vapor barrier and 2.5lb galvanized expanded metal lath over wall board with recommended galvanized nails or screws. Expanded metal lath over concrete board is not necessary unless local building codes require it. Concrete board that is properly installed can have Natural Thinstone Veneer applied right to it.

Fasteners should be installed at a minimum of 6 inches on center vertically and 16 inches on center horizontally. It is important to note that in a corner application, the expanded metal lath needs to lap over the expanded metal lath that is applied to each adjacent wall surface by a minimum of 4 inches. Apply 1/2 inch thick scratch coat, allow 24 hours to dry, and apply the Natural Thinstone Veneer.

### Existing Concrete Masonry Wall

\* Note - Including sealed and/or painted concrete and brick.

(See Figure #1)

It is important to verify with a builder or engineer that an existing wall is strong and sound. Sandblast the surface to remove any paint or sealer if required. Rinse thoroughly. Once the surface has dried, Natural Thinstone Veneer can be applied directly to the clean surface. If this application is not reasonable, another option is to apply expanded metal lath to the painted or sealed surface with concrete screws or nails. Then apply a 1/2 inch scratch coat and allow 24 hours to dry.

### New Concrete Masonry Wall

\* Note - Including new concrete block and/or newly poured concrete walls.

(See Figure #1)

No special preparation is required for a concrete block wall. When working with a poured concrete wall, it is important to take extra time to examine the entire surface as it may have areas of form release agents on the concrete surface. To remove this oil, contact an industry professional for recommended cleaning solutions and/or score the area with a wire brush. After these surfaces are cleaned, rinsed and allowed to dry, the Natural Thinstone Veneer can be installed directly to the concrete wall.

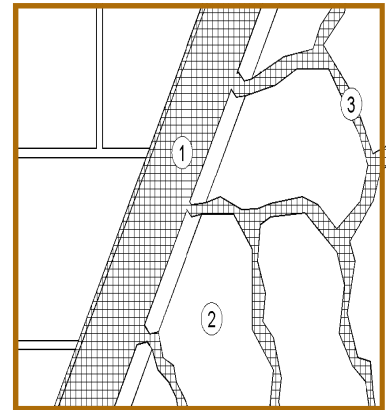
### Insulated Concrete Forms

(See Figure #1)

Apply vapor barrier. Next install the expanded metal lath as specified by the manufacturer of the insulated forms. Concrete fasteners that secure the 2.5 lb galvanized expanded metal lath to the wall, will need to be long enough to penetrate clear through the insulation and secure into the cured poured concrete wall. Apply a 1/2 inch thick scratch coat, allow 24 hours to dry, and then apply your Natural Thinstone Veneer.

## Masonry or Concrete

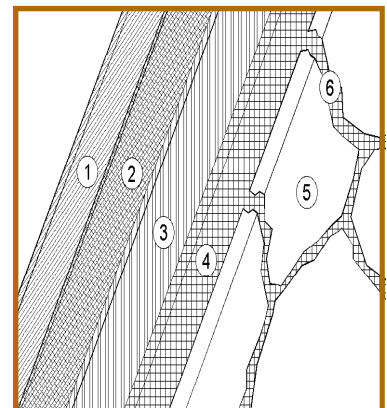
Figure #1



- (1) mortar applied directly to untreated masonry, concrete or stucco
- (2) natural stone veneer
- (3) mortar joint.

## Wood Frame

Figure #2



- (1) sheathing
- (2) building paper or vapor barrier
- (3) galvanized metal lath
- (4) mortar
- (5) Natural Thinstone Veneer

# INSTALLATION OF NATURAL THINSTONE VENEER

## Installation Requirements

(Read Prior to Installation)

- All exterior surfaces are required to have a water resistant barrier installed. (See local building codes.)
- Applications that use an expanded metal lath must use a lath that is corrosion resistant.
- When using expanded metal lath in your application, a 1/2 inch thick scratch coat must be created.
- It is recommended to allow a scratch coat at least 24 hours to dry.
- Safety Glasses and a dust mask should always be worn when cutting or trimming any of K2 Stone quarries products.
- Type 'S' mortar is utilized for all Natural Thinstone installations.
- The use of an acrylic bonding agent mixed in with the mortar is recommended to add strength to the installation.
- It is recommended that 100% of the back of each stone be covered by a minimum of 1/2 inch of mortar.
- If corner pieces are required for the application, the corner pieces should be installed prior to any flats.
- The use of an epoxy or thin set should be limited to interior applications.
- It is suggested that 48 hours after application, the stonework be watered down and a cleaning agent applied to remove any dirt.
- All of K2 Stone quarries products are washed prior to packaging.
- All local building codes must be adhered to at all times.

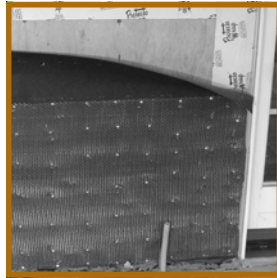


PHOTO #1 - Application of galvanized lath to exterior wall.



PHOTO #2 - Application of scratch coat to surface of exterior wall.



← PHOTO #3 - Application of mortar onto Natural Thinstone Veneer.

PHOTO #4 - Application of Natural Thinstone Veneer. →



## How to Install Natural Thinstone Veneer

### STEPS:

1. Properly prep the surface as previously described.
2. Mix Mortar (3 parts sand to 1 part type 'S' cement) to a creamy consistency. The use of an acrylic bonding agent mixed in with the mortar at a ratio of 5 ounces to each 30 kilogram bag of type 'S' cement is recommended to add bond strength to the installation.
3. Ensure surfaces are clean of dirt, sand, or loose particles.
4. Trowel Mortar scratch coat on wall approximately 1/2 inch thick over metal lath. Allow 24 hours to dry.
5. Slightly dampen the scratch coat in order to create a suction bond effect with the Natural Thinstone veneer.
6. Apply a thin coat of mortar onto the backside of stone. (See photo #3) This creates a tighter bond to the wall.
7. Press stone into mortar, rotating slightly, forcing some of the mortar to squeeze out freely. Any mortar forced out beyond the

finished joint can be troweled to finish joint.

8. Use a grout bag or trowel to fill all the joints. As the mortar stiffens, tool to the desired depth and brush off all excess.

### HOW TO CLEAN:

Excess mortar and film may be removed using a certified cleaning solution (contact an industry professional for recommendations). Always choose a non-conspicuous area to test cleaning solution prior to application. Rinse thoroughly with clean water.

### HOW TO SEAL:

Stone may be sealed with a good quality breathable sealer only after thoroughly curing which takes 3 to 4 weeks on inside work. Follow manufacturers directions on the application of sealer. Sealers must be periodically reapplied, especially on exterior applications, and could alter the natural coloring of the stone. Always choose a non-conspicuous area to test sealer prior to application.

## Typical Thinstone Applications



Fieldstone



Ledge stone



Carmanah Cobble