

Installation Guide

INSTALLATION REQUIREMENTS (Read Prior to Installation)

For additional detailed information please see the RealStone System Architectural Specification document at www.realstonesystems.com

Preparation of Surface: Always make sure that the surface that RSS will be applied to is clean. All exterior surfaces require a water/weather resistant barrier before installing RSS panels. This barrier must meet local building codes, UBC Standard Code 14-1 regarding waterproof building paper or asphalt saturated building felt. Rigid non-corrosive flashing is required for exterior wall use.

A non corrosive expanded metal lath meeting ASTM C847 must be used. Make sure that the metal lath is secured properly using heavy staples or galvanized nails. These must be long enough to penetrate at least 1-2" into the studs. Follow ASTM C1063 expanded metal lath installation specification.

Type S mortar (*see Architecture Specification document for additional information*) is used for to create a thin scratch coat. For additional bonding use a manufacturer recommended additive. Follow the bonding agent instruction and be careful using bonding agents because they can sometimes be difficult to remove once they cure. It is recommended that the scratch coat dry for at least 24 hours. Certain weather conditions may require that the scratch coat is moistened prior to the installation of the RSS panels.

Preparation of RSS Panels: Always make sure that the back of each RSS panel is clean and free from stone dust. This can easily be done by wiping the back of the panel with a damp rag. Cutting RSS panels will create dust and should be worked on outside. Clean the back of all panels after cutting them. Only cut RSS Panels with a wet saw.

Installation of RSS Panels: If corner pieces are required they should be installed first. It is also recommended to lay out the RSS Panels to make sure that the pattern will meet your needs. The back of all panels should be covered with at least ½" inch of type S mortar. For additional bonding use a manufacturer recommended additive. Follow the bonding agent instruction and be careful using bonding agents because they can sometimes be difficult to remove once they cure.

The stone needs to be pressed firmly against the scratch coated wall to ensure a sound bond. It is suggested to keep the stonework free from mortar dropping and mortar smears as much as possible. Mortar droppings can be removed with a damp cloth.

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RSS does not recommend the use of an epoxy, and/or construction adhesive to install RSS panels for interior applications. All work should be done with great caution and only according to local building codes. RSS panels can weigh up to 16 pounds so they must be installed properly.

After 36 hours, it is suggested to wet the stonework down with water and then apply a mild cleaning detergent with a soft bristle brush to remove any dirt or mortar smear left from the installation. **DO NOT USE ANY TYPE OF ACID.**

The RSS natural stone can be sealed with a penetrating sealant to protect and enhance the stone surface.

Avoid laying the panels in a 'stretcher bond/brick' fashion, as this will emphasize the vertical joints of the panels.

Lay the panels in an irregular fashion. I.e. different lengths of panels and staggered joints as this will reduce the appearance of the vertical joints.

Safety glasses and a dust mask should always be worn when cutting and trimming any RSS material.

Please note that the assistance of a professional contractor or engineer may be needed to evaluate your installation or the soundness of your installation back up wall. A contractor or engineer can also provide important information regarding local building codes, seismic building codes, institutional building codes and installations

DETERMINING SURFACE PREPARATIONS FOR INSTALLATION OF REALSTONE SYSTEMS PANELS (RSS)

Exterior Framed Back up Wall (Includes wood stud and steel stud framing) – See *Figure 1 below*

Material, size and spacing needs to be in compliance to local building codes and/or any manufactures structural requirements that may apply. An exterior sheathing is required to provide a base for the application surface. This sheathing must meet local building codes for use as an acceptable exterior product which can include plywood, green treated plywood, and rigid composite board and flush metal siding. Cover sheathing with weather resistant vapor barrier. Lap vapor barrier at the joints by a minimum of 4 inches.

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Then, in accordance with local building codes, install expanded metal lath with galvanized nails or galvanized screws. 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 at a corner application, the expanded metal lath needs to wrap the corner completely and overlap the expanded metal lath that is applied to each adjacent flat wall surface a minimum of 4 inches. Apply 1/2" thick scratch coat and your RSS can now be applied.

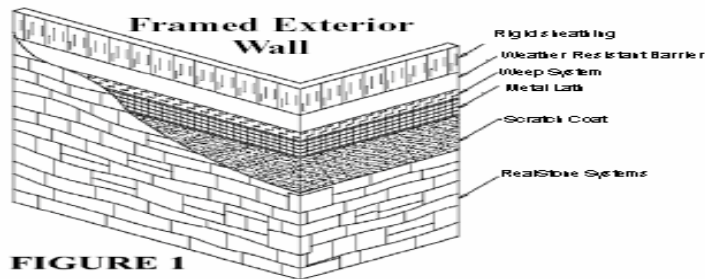


FIGURE 1

New Concrete Masonry Wall (Includes new concrete block or newly poured concrete wall.) *See Figure 2 below*

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, apply and etch areas with muriatic acid, rinse thoroughly and/or score the area with a wire brush. After these surfaces are cleaned, rinsed and allowed to dry, the RSS material can be installed directly to the concrete wall.

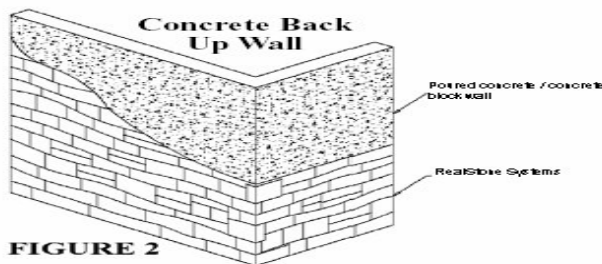


FIGURE 2

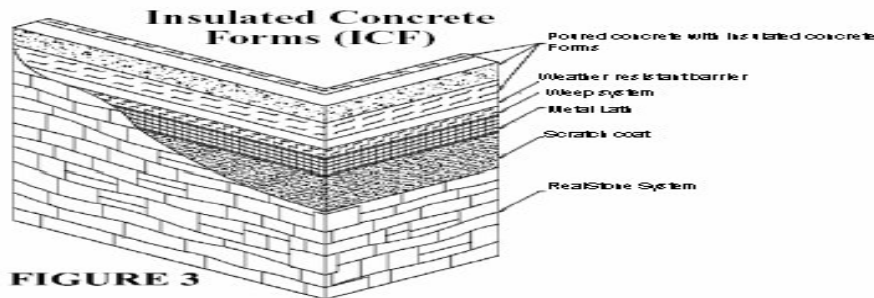
Existing Concrete Masonry Wall (Includes sealed/painted concrete or brick work.) *See Figure 2 above*

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It is important to verify with a builder or engineer that the existing wall is strong and sound. Sandblast the surface to remove any paint or sealer. Rinse thoroughly. Once the surface has dried, RSS material 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 1/2" thick scratch coat.

Insulated Concrete Forms (ICF) *See Figure 3 below*

Install the expanded metal lath as specified by the manufacturer's Insulated Forms. Concrete fasteners that secure the expanded metal lath to the wall need to be long enough to penetrate clear through the insulation and secure into the cured poured concrete wall. Apply 1/2" thick scratch coat.



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Framed Interior Back up Wall *See Figure 4 below*

A wall board is required to provide a base for the application surface. This wall board must meet local building codes which can include sheetrock, green sheetrock, concrete board or plywood. Install expanded metal lath over wall board with recommended galvanized nails or screws. (It is not necessary to install expanded metal lath over concrete board unless local building codes require it. RSS can be mortared directly to soundly installed concrete board.) 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 at a corner application, the expanded metal lath needs to lap over the expanded metal lath that is applied to each adjacent wall surface a minimum of 4 inches. Apply 1/2" thick scratch coat. Your RSS can now be applied.

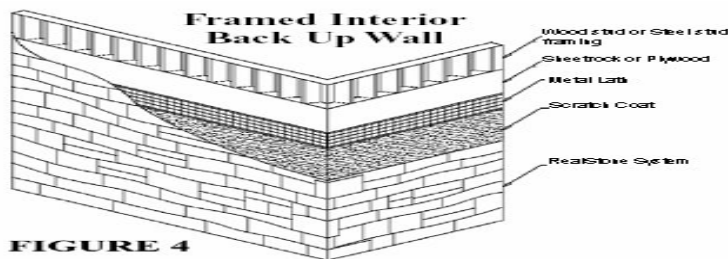


FIGURE 4

Realstone Systems, LLC Limited Warranty

Realstone Systems, LLC ("RSS") warrants its products for a period of fifty (50) years from the date of original purchase from RSS against manufacturing defects when used on a structure which conforms to all building codes and regulations and when installed in accordance with RSS's instructions and specifications. In the event of a manufacturing defect, RSS will, at its sole option, credit the cost of the products purchased or provide new products to replace the products determined to be defective. This warranty is non transferable and limited to the original purchaser. The warranty may not be transferred to any subsequent owner. This warranty does not cover damage from: a) settlement of the building or improvement or other structural movements; b) contact with chemicals or paint; c) deterioration or discoloration due to airborne contaminants; or d) staining or oxidation. This limited warranty only covers manufacturing defects in RSS products. RSS is not responsible for labor costs in removal and replacement of defective products.

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