



MULTI-FAMILY UNDERLAYMENT

**GSL® RH**

Radiant Heat Underlayment



## DESCRIPTION

GSL® RH radiant heat underlayment is a fast, quick-setting gypsum cement formulated for radiant floor heating applications.

GSL RH with compressive strengths up to 3500 psi is one of the most durable, high strength thermal masses available. GSL RH provides exceptional surface hardness to stand up to continuing construction traffic.

GSL RH does not shrink or crack, rather it encases your tubing or cables in place to reduce noise and tube chatter, providing you with a hard, flat surface ready for ceramic tile, marble tile, or any other floor covering of your choice.

GSL RH is mixed on the jobsite with sand and water providing a smooth, lightweight floor. At minimum depth of 3/4" over the top of the tubing or cables to a maximum of 3", typically 1-1/2". GSL RH weighs 14.4 lbs. per sq. ft. and has a density of approximately 115 lbs. per cu. ft.

Its UL approval in all standard assemblies and provides homeowners and developers the fire safety assurance required in today's residential projects.

**GSL is designed for installation by trained contractors from DEPENDABLE, LLC. Please consult with a local representative for a list of contractors in a specific geography.**

## PACKAGING

GSL® RH

- 80 lb. (36 kg.) Bag, valve double wall bag

## CHARACTERISTICS

### Flow Properties:

Medium Flow with flattening consistency

### Water Per Bag:

4.5 - 5.5 US GAL per 80 lb. Bag

### Compressive Strength:

2200 - 3500 psi                      ASTM C472

### Sand Per Bag:

1.0 - 1.8 cu. ft. of washed plaster or concrete sand  
(Meeting Dependable, LLC Gradation Criteria)

### Thickness Range:

3/4" over tubing or electric cables

### Surface Burning:

ASTM E84

Flame Spread: 0

Fuel Contribution: 0

Smoke Density: 0

### Wet Density (with aggregate):

110 - 125 lbs./cu.ft.

**Color:** Gray Powder

## APPLICATIONS

- Single-family
- Multi-family
- Light commercial
- Commercial/retail/office
- Hotel/motel

## UL LISTINGS

L501, L502, L503, L504, L505, L506, L507, L508, L509, L510, L511, L512, L513, L514, L515, L516, L517, L518, L519, L520, L522, L523, L524, L525, L526, L527, L528, L529, L530, L534, L535, L536, L537, L538, L539, L540, L541, L542, L543, L546, L547, L549, L550, L551, L552, L556, L558, L560, L563, L570, L574, L576, L577, L581, L583, L585, L587, L588, L590, L592, M500, M503, M504, M508, M511, M512, M517, M530, M535, G577, G578, G579, G580, G581, G582

If your listing is not shown here, please contact Dependable, LLC.

## FEATURES AND BENEFITS

- Provides additional protection for fire resistance as shown in UL approved assemblies
- Non-combustible
- Provides additional sound control enhancements as tested under ASTM E90, Airborne Noise or STC and ASTM E492, Impact Noise or IIC
- Provides an ultimate radiant mass with an even transfer of heat
- For radiant floor heating systems
- Can be poured over hot water tubes, electric heating cables or mats
- Smooth and formulated to resist breakdown
- Eliminates noisy floors and nail pops
- Reduces air leaks and baseboard drafts

## PREPARATION AND APPLICATION

### SITE CONDITIONS

- Building must be fully enclosed including doors, windows and roof.
- Interior ambient temperature must be 50°F at least one day before installation and maintained at "a minimum of" 50°F temperature for a minimum of 14-21 days after installation.
- Adequate ventilation must be maintained until the moisture in the gypsum has been allowed to evaporate. This requirement is typically a minimum of 14-21 days, but may be longer depending on thickness of underlayment, humidity and conditions in the local environment.
- Subfloor must be a minimum of L/360, broom swept with all excess wall board mud removed and all holes patched.
- Wood construction must be with tongue and groove subfloor (OSB or plywood).
- For installation on concrete substrates the subfloor must be fully cured (minimum 28 days). Moisture tests should be performed to assure proper hydration under ASTM F1869 to assure MVE level is less than 3.0 lb. per 1000 square feet.
- For below grade applications or over a crawl space, vapor barriers must be applied.

### SUBFLOOR PREPARATION

Subfloor must be properly primed. Use GSL PRIMER on all surfaces. Approved priming methods include: roller, soft bristle broom, brush or spray. All supporting surfaces shall be structurally sound, solid, free of movement and well bonded. They shall be dry, free of dust, oil, grease, tar or other contaminants that may act as a bond breaker. Deflection cannot exceed L/360. Radiant heat tubing must be mechanically attached to subfloor every 18" and at center arc of every bend in tubing.

### Priming

Dilute GSL Primer before application. Dilute 1 part GSL PRIMER concentrate to 4 parts potable water (1:4). Using a long handle roller, soft bristle broom, brush or sprayer, apply GSL PRIMER at a coverage rate of 270-320 sq. ft. per gallon of primer solution. Coverage rate varies depending upon surface porosity. Ensure a complete and uniform coverage. Allow to become very tacky or dry (about 1 hour).

### Mixing

Follow DEPENDABLE, LLC guidelines and specifications. GSL is only to be installed by trained contractors approved by Dependable, LLC.

### LIMITATIONS

- No single application of GSL RH Floor Underlayment should exceed 3" in depth. Consult DEPENDABLE, LLC contractors on how to achieve depths greater than 3".
- Any material poured above a crawl space must be protected by a vapor barrier.
- After installation of the GSL RH and prior to the resumption of construction, place temporary wood planking over underlayment where heavy wheeled or concrete loads will occur.
- GSL RH is not designed to be installed on or below grade, except over well-drained structural substrates.
- The structural floor should be designed to withstand designed loads with a minimum deflection criteria of L/360.
- GSL RH should not be used as a wearing surface.
- GSL RH should not be used for exterior applications or where they will come in prolonged contact with water.
- GSL is approved for use over concrete and new plywood or OSB. Other substrates and conditions may require special preparation. Consult the manufacturer before installation over other types of substrates.
- GSL RH is only one component of an effective floor-ceiling fire rated and sound rated assembly. Care must be taken in the installation of all construction components to assure the ultimate in design performance.

### LIMITED WARRANTY:

Dependable, LLC warrants to the initial purchaser only that the goods sold hereunder will be free from defects in material and workmanship and, except as otherwise set forth herein, will conform to the specifications provided. If any failure to meet this warranty appears within one year from the date of shipment of the goods, on the condition that Dependable, LLC. will correct any such failure by either replacing or repairing any defective goods, at Dependable, LLC's option.

The preceding paragraph sets forth the exclusive remedy for all claims based on failure of or defect in the goods sold hereunder, whether such failure or defect arises before or during the warranty period and whether a claim, however instituted, is based on contract, indemnity, warranty, tort (including negligence), strict liability or otherwise. The forgoing warranty is exclusive and is in lieu of all other warranties whether written, oral, implied or statutory.

### MIXING INSTRUCTIONS

Type	*Mix Design (Cubic feet sand/)	*Water (gal)	Slump (Inches)
GSL RH	1.0 - 1.8	4.5 - 5.5	9" ± 1-inch

\* Sand and Water per 80 Lb. bag

**24 HOUR EMERGENCY: CHEMTREC® 1-800-424-9300**  
**NON-TOXIC and NON-FLAMMABLE**

Keep container closed and keep away from children. May cause slight eye abrasion or irritation if spilled or rubbed in eyes. Flush thoroughly with water.

If taken internally, call a physician. Technical Assistance:  
Visit our website: [floorprep.com](http://floorprep.com) or call 1-800-227-3434.



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