



**For more information, contact:**

**Siplast**

1000 E. Rochelle Blvd.,

Irving, Texas 75062

469-995-2200

Facsimile: 469-995-2205

[www.siplast.com](http://www.siplast.com)

In Canada:

201 Bewicke Ave., Suite 210

North Vancouver, BC, Canada V7M 3M7

604-929-7687

Customer Service in North America:

Toll Free 1-800-922-8800



An Icopal Group Company

*Zonocel, Insulcel, Zono-tite and Insulperm are registered trademarks of Siplast. We hope the information given here will be helpful. It is based on data and knowledge considered to be true and accurate for the user's consideration, investigation and verification but we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would infringe any patent or copyright.*

March 2004

# SIPLAST LIGHTWEIGHT INSULATING CONCRETE NVS PREMIX



NVS Premix is a specially formulated product containing NVS Concrete Aggregate, additives, and Type I Portland cement. It is packaged in a 40-pound bag. When mixed with water, it becomes NVS Lightweight Insulating Concrete. NVS Premix was designed to facilitate NVS application on both small jobs and jobs where difficulty exists in setting up application equipment.

## Small Jobs

NVS Premix is ideal for small jobs. It eliminates the need to bring cement bulkers to the jobsite and reduces setup cost, speeding job completion.

## Difficult Job Site Conditions

NVS Premix is suitable for inner-city jobs where street access is limited and equipment set up is difficult. It also solves pumping problems associated with tall buildings, as the product can be taken to the rooftop via elevator, and be mixed with water at that point.

## Repairing Lightweight Insulating Concrete

NVS Premix is recommended as a compatible material for the repair of lightweight insulating concrete. NVS Premix is preferred over gypsum for repairing lightweight insulating concrete because it is Portland cement based. When used as a repair product, a minimum 1-inch (25 mm) thickness is required. NVS Premix can also be used as a patching compound for nail divots, if lightweight insulating concrete nails are removed from an existing roof deck.

## NVS Premix Product Characteristics

Bag Weight	40 pounds
Bag Yield	13 board feet
Mix Ratio	1:3.5 Cement Volume to NVS Aggregate Volume
Wet Density	64 +/- 4 pcf
Dry Density	38 +/- 3 pcf
Compressive Strength	300 psi minimum

## Storage and Handling

A bag of NVS Premix contains cement that must be kept dry and away from moisture or the cement will set in the bag, rendering the product useless. Therefore, store the product in a dry location until ready for jobsite delivery and use. On the jobsite, the product must be protected from moisture until it is mixed with water. When stored in a dry location, the product has a shelf life of six months.

## Mixing Instructions

One bag of NVS Premix requires approximately 4.5 gallons of water and should be mixed thoroughly until a uniform consistency is achieved. Adjust the water quantity to control the fluidity of the mixed product. Adding more water will make the product more flowable and adding less water will make the product less flowable. Sufficient water should be added to make the product finish to a smooth surface.

## Application Procedures

**Temperature Limitations:** NVS Premix must not be installed when the air temperatures will fall below 32°F during the 24 hours following application of the product.

**Substrate Limitations:** NVS Premix can be placed over structural concrete substrates in new construction and over existing asphalt topped roofing systems in reroofing construction. For new construction, the product should be placed directly to the concrete substrate. For reroofing applications where an occupied building is involved, the existing roof systems must be made watertight prior to application of NVS Premix in order to protect the building's interior.

## Application Over Approved Substrates:

- Any areas of the assembly where moisture is present must be removed and replaced with compatible materials, bringing the area back to level with the surrounding surfaces.
- Place the product over structural concrete and smooth surface asphalt topped roofing to a 1-inch (25 mm) minimum thickness. All surfaces should be cleared of loose debris prior to application.

- Place the product over a gravel surfaced roofing material to a 1<sup>1</sup>/<sub>4</sub>-inch (32 mm) thickness. All loose gravel must be removed prior to application of the product.
- When Insulperm Insulation Board is to be incorporated into the system, place a minimum 1<sup>1</sup>/<sub>4</sub>-inch (3 mm) coating of NVS Premix over smooth surface substrates or 1/8-inch (3 mm) above the gravel surface on a gravel surfaced substrate before embedding the Insulperm. Place the appropriate thickness of Insulperm into the NVS Premix coating within 30 minutes and step the board into place. Fill the holes in the Insulperm product with NVS Premix and top the surface of Insulperm with a minimum 1-inch (25 mm) thickness of NVS Premix.
- Avoid rooftop foot traffic for the first 24 hours or until the surface can withstand foot traffic without indenting.

When Insulperm is being stair-stepped to provide slope to drain, the maximum change in thickness of the Insulperm at the step is 1 inch (25 mm).

## Repair Application:

- Mark the outline of the area of the existing lightweight concrete to be prepared.
- Make a vertical cut in the existing lightweight concrete to a minimum 1-inch (25 mm) depth around the marked area.
- Remove the existing material to a minimum depth of 1 inch (25 mm) or to the lightweight concrete that is in good condition, whichever is greater.
- Sweep or vacuum the area to remove all loose debris.
- Dampen the surface of the area with water to ensure that the existing substrate does not remove excessive amount of water from the cement during the setting process.
- Mix and pour NVS Premix into the repair area and finish to a smooth surface. Avoid roof top foot traffic for the first 24 hours or until the surface can withstand foot traffic without indenting.

## Patching Nail Divots:

- Dampen surface area of nail divot.
- Apply NVS Premix into the surface depression.
- Smooth and feather edge into existing surrounding area.