**8. Paradiene 20 application.**

Roofing over NVS may begin as soon as 48 hours after finishing the pour. Bring the pour over the Insulperm and apply Paradiene 20 to the system. This will provide the needed surface resistance to water and protect the building interior from rainfall.

**9. Paradiene 30 application.**

Siplast’s Paradiene 20/30 SBS-modified bitumen membrane system is lightweight, highly flexible, simple to apply, and easy to maintain. It has an enviable performance history in some of the harshest weather conditions imaginable. This performance is enhanced when the membrane is installed over NVS Lightweight Insulating Concrete.
Solving problems specific to reroofing.

The NVS System provides a solution to the difficulties presented by excessive moisture, water, and structural lightweight concrete. This excessive moisture can affect the integrity and/or proper adhesion of other materials. Because the Siplast NVS System is engineered to maintain high moisture conditions without affecting the root membrane or insulation system and can be applied directly to structural lightweight concrete, it presents an economical way to address the issues, as well as help prevent the situation and construction sequencing.

NVS is used on all building types, from small offices to large warehouses to high rise hotel in downtown urban areas. And NVS has proven successfully in a wide range of climates.

How NVS solves problems specific to reroofing.

- Reroofing tear-off is extremely disruptive to building occupants.
- Often, with proper use of an elastomeric tear-off, the NVS System may be used to good advantage.

Because NVS eliminates, in most cases, the need for tear-off of the existing roof, construction dust, noise, and debris that would occur during tear-off are eliminated. The entire process is less disruptive, and the cost of the tear-off is typically not affected. The risk of interior building damage also is lessened significantly.

The NVS System is simple and quick to use. It is not possible to pour NVS directly over the existing structural boards, but its light mass than rigid board. Therefore, the membrane experiences slower temperature change and lessens the potential for deflection in the interior. Therefore, its insulation value remains initially, but can dissipate with time. As the environmental advantages. Reroofability has a significant positive impact on the life cycle cost of a roof.

NVS is highly resistant to damage from foot and other traffic. By reducing stress, NVS prolongs membrane life. It is less than twenty years old. Two previous roof systems failed; the Siplast Paradiene 20/30 and NVS System is the owner’s choice, and a sound investment.

The NVS Lightweight Insulating Concrete Roof Insulation System, NVS (Non-Vented Substrate) was developed to solve reroofing problems economically. Like Siplast’s NVS, a concrete system that combines the unique properties of aggregate lightweight insulating concrete and a bitumen modified asphalt permanent performance polyphamene from insulated boards. A concrete slab, a monolithic substrate ideal for use on existing roof substrate. The NVS System has excellent wind and the water resistance properties. It is approved by Factory Mutual as a non-combustible rated roof. It is based on the Factory Mutual Approval Guide for new and existing roof substrates. The finished NVS surface provides a minimum compressive strength of 21 psi or, 3,000 pounds per square foot. By comparison, polyisocyanurate has an average compression resistance of 25 psi per 2,000 pounds per square foot. The strength of the NVS System helps to eliminate membrane damage resulting from construction and maintenance traffic.

Why NVS is the lowest life cycle cost root insulation.

- By reducing stress, NVS prolongs membrane life.
- The NVS System works to enhance the performance of root membrane and prolong membrane life by reducing the thermal and mechanical stress. NVS has more than rigid board. Therefore, the membrane experiences slower temperature change and lessens the potential for deflection in the interior, so there is a minimum of thermal stress on the root membrane. And because NVS produces a monolithic surface, the need for work joints found with rigid insulations, a mechanical stress on the membrane is lessened.

Why NVS is the lowest life cycle cost root insulation.

- NVS is a responsible environmental choice, and a sound investment.

Unlike many rigid boards, properly applied NVS is highly resistant to damage from foot and other traffic. Therefore, its insulation value remains initially, but can dissipate with time. As the environmental advantages. Reroofability has a significant positive impact on the life cycle cost of a roof.

The Complete Siplast System.

Siplast offers the only commercial manufacturer to offer a complete reroofing package that combines SBS-modified bitumen membranes with the added benefits of lightweight insulating concrete. Used together, Siplast-SBS modified bitumen root membrane and NVS creates a superior roof with single source responsibility from one manufacturer.

Reroofing with NVS

Every NVS reroofing project is unique. Depending on the condition of the existing root system, NVS can repair the roof or provide a more efficient and comfortable structure. This puzzle-like application of NVS into the final configuration of the deck easily creates positive slope-to-drain with the NVS System. This results in higher insulation efficiency.

Construction and maintenance traffic damage the roof.

- NVS high-compressive strength reduces the potential for damage from foot and other traffic.

How NVS solves problems specific to reroofing.

- Often, with proper use of a tear-off, the NVS System may be used to good advantage.
Solving problems specific to reroofing.

The NVS System provides a solution to the difficulties presented by excessive moisture and structural lightweight concrete. This excessive moisture can affect the integrity and/or proper adhesion of roofing materials. Because the SteepNav NVS System is engineered to manage high moisture conditions without affecting the roof membrane or insulation system and can be applied directly to structural lightweight floors, it presents an economical way to solve the issue, as well as help roofing application and construction sequencing.

NVS is used on all building types, from small offices to large warehouses to high rise hotels in busy downtown urban areas. And NVS is poured successfully in a wide range of climates.

How NVS solves problems specifically to reroofing.

- Reroofing tear-off is extremely disruptive to building occupants.
- NVS solves this problem by being a lightweight concrete, non-structural, insulating substrate that can be poured without disturbing the existing system. NVS can be poured over existing roof substrates, it has a high compressive strength that allows it to be poured with minimal slump, and its high density allows it to be poured from high buildings without spattering. NVS also has a high thermal mass, which makes it an excellent thermal inertia material. It is approved and used in new construction applications.

- Because NVS is lightweight, it is easier to pour and handle than traditional concrete.
- NVS also has a high compressive strength, which allows it to be poured with minimal slump.
- NVS is also a monolithic, nailable substrate ideal for use in reroofing applications, and by Underwriters Laboratories for hourly fire rated designs.

- The finished NVS surface provides a minimum compressive strength of 100 psi, and a complete resistance of no less than 50 psi per square foot. By comparison, polyisocyanurate has an average compressive resistance of 21 psi per square foot. The compressive strength of NVS means it can withstand membrane damage resulting from construction and maintenance traffic.

Why NVS is the lowest life cycle cost roof solution.

- NVS is highly resistant to damage from traffic.
- NVS is HCFC-free, its R-value remains constant.
- Unlikely many rigid boards, properly applied NVS is highly resistant to damage from traffic. Therefore, its resistance to traffic is outstanding. This ability to resist traffic keeps it from breaking down, which can help reduce maintenance costs and increase the life cycle cost of a roof.

The NVS Lightweight Insulating Concrete Roof Insulation System.

The NVS Lightweight Insulating Concrete Roof Insulation System, NVS (Non-Vented Substrate) was developed to solve reroofing problems economically. Like Siplast's ZVC, NVS is a composite system that combines the unique properties of aggregate lightweight insulating concrete with the high performance mineral wool products from high density board insulation, creating a monolithic, self-interlocking substrate ideal for use in reroofing applications.

The NVS System has excellent wind and the resistance properties. It is protected by factors such as non-ventilated or self-ventilated systems. It is lined in the Factory Mutual Approval Guide for new and reroofing applications, and has Underwriters Laboratories for hourly fire rated designs.

The finished NVS surface provides a minimum compressive strength of 100 psi, and a complete resistance of no less than 50 psi per square foot. By comparison, polyisocyanurate has an average compressive resistance of 21 psi per square foot. The compressive strength of NVS means it can withstand membrane damage resulting from construction and maintenance traffic.

Why NVS is the lowest life cycle cost roof solution.

- NVS is highly resistant to damage from traffic.
- NVS is highly resistant to damage from traffic. Therefore, its resistance to traffic is outstanding. This ability to resist traffic keeps it from breaking down, which can help reduce maintenance costs and increase the life cycle cost of a roof.
Solving problems specific to reroofing.

The NVS Lightweight Insulating Concrete Roofing System was developed to solve reroofing problems economically. Like Siplast’s ZIC, NVS is a composite system that combines the unique properties of aggregate-based lightweight insulating concrete and bitumen roof membranes to provide a single source roofing solution. Chronic ponding water is indicative of inadequate or extreme roof failure. Tear-off is followed by the application of a temporary roof. Pouring over the existing system, costs of complete tear-off and removal are saved, and additional insulation value is added to the roof system.

The NVS System provides a solution to the difficulties presented by excessive moisture uptake in structural lightweight concrete. This excessive moisture can affect the integrity and proper adhesion of roofing materials. Because the Siplast NVS System is engineered to manage high moisture conditions without affecting the root-membrane or insulation system and can be applied directly to structural lightweight de­signs, it presents an economic way to solve the issues, and keep ponding application and construction sequencing.

NVS is used on all building types, from small offices to large warehouses to high rise hotels in busy downtown urban areas. And NVS is poured successfully in a wide range of climates.

How NVS solves problems specifically described:

- Reroofing tear-off is extremely disruptive to building occupants.
- NVS reroofing applications, and by Underwriters Laboratories Inc. (UL) and Factory Mutual as a non-combustible fire resistance property. It is approved to solve reroofing problems economically.

The NVS Lightweight Insulating Concrete Roofing System solves the following problems:

1. Severe ponding water.
2. Marking the existing roof for repairs.
3. The NVS System is very forgiving and the existing roof is rot proof.
4. Placing Insulperm.

Reroofing with NVS

Every NVS roofing project is unique. Depending on the condition of the existing roof system, NVS can eliminate the need for costly tear-off and months of traffic preparation. The proper course of action is always determined by the building owner’s evaluation team as they study existing conditions and specific building needs.

1. Severe ponding water. The NVS-SBS membrane is about twenty years old. Two previous roof systems failed; one was a built-up roof on this facility without affecting the integrity of the assembly. By pouring over the existing system, costs of complete tear-off and removal are saved, and additional insulation value is added to the roof system.

2. Marking the existing roof for repairs. It was determined in a field survey that areas of over 43,200 pounds per square foot. Hence, NVS is a responsible environmental choice, and a sound investment.

Unlike many rigid boards, properly applied NVS is highly resistant to damage from traffic. Therefore, it is an excellent choice in cases by saving disposal costs and space in landfills, NVS has both functional and environmental advantages. Perforability has a significant positive impact on the life cycle cost of a roof system. The Complete Siplast System.

The Complete Siplast System, from Siplast, is the only commercial manufacturer to offer a complete roofing package that combines SBS-modified bitumen membranes with the added benefits of lightweight insulating concrete. Combined, Siplast SBS-modified bitumen roof membranes and NVS create a superior roof with a single source responsibility from one manufacturer.
Reroofing with NVS

5. Stair-stepped Insulperm. Insulperm Insulation Board creates a slope-to-drain contour that effectively removes water from the roof’s surface.

6. Top Fill. A top fill of NVS is poured over the Insulperm. Shing the repair, the Insulperm and taking it out of the system reduces the use of fasteners. Because of its high compressive and tensile strength, NVS requires a one-inch minimum thickness over the top of the Insulperm.

7. Screeding. The pour is screeded to a smooth finished surface.

8. Paradiene 20 application. Paradiene 20 is a lightweight, highly flexible, simple-to-apply, and easy-to-maintain. It has an enviable performance history in some of the harshest weather conditions imaginable. This performance is enhanced when the membrane is installed over NVS Lightweight Insulating Concrete.

9. Paradiene 30 application. Paradiene 30 may begin as soon as 48 hours after finishing the pour. During this process, the Insulperm is integrated into the Insulperm Insulation Board creates a slope-to-drain contour that effectively removes water from the roof’s surface. A top fill of NVS is poured over the Insulperm, filling the holes in the Insulperm and locking it into the system without the use of fasteners. Because of its high compressive and tensile strength, NVS requires a one-inch minimum thickness over the top of the Insulperm.

www.siplast.com

Siplast
1000 Rochelle Blvd.
Irving, Texas 75062
O: 469.995.2000
F: 469.995.2005

In Canada:
201 Bremecle Ave., Suite 205
North Vancouver, BC, Canada V7M 3M7
1.877.233.2338

Customer Service in North America
1.800.922.8800

For information on Siplast Roofing and Waterproofing Systems, scan our QR code.
Reroofing with NVS

1. Stair-stepped Insulperm. Insulperm Insulation Board creates a slope-to-drain contour that effectively removes water from the roof’s surface.

6. Top fill. A top fill of NVS is poured over the Insulperm. Bring the roof system to the desired thickness by gutting the system while still wet to ensure full adhesion of the fasteners. Because of the high compressive and tensile strength, NVS requires a one-inch minimum thickness over the top of the Insulperm.

7. Screeding. The pour is screeded to a smooth finished surface.

8. Paradiene 20 application. Paradiene 20 is applied to the entire building surface. This application is followed by the installation of the base sheet. The installation of the base sheet is followed by the installation of the Paradiene 20 application. Paradiene 20 is applied.

9. Paradiene 30 application. Siplast’s Paradiene 20/30 SBS-modified bitumen membrane system is lightweight, highly flexible, simple to apply, and easy to maintain. It has an enviable performance history in some of the harshest weather conditions imaginable. This performance is enhanced when the membrane is installed over NVS Lightweight Insulating Concrete.