



NuRoof[®]
Retrofit Framing Solutions



REAL PEOPLE. REAL PRODUCTS. REAL SOLUTIONS.

www.a-s.com

WHY SHOULD YOU RETROFIT YOUR BUILDINGS?



If you have roof problems due to leaks, high maintenance costs, low energy efficiency or a need to meet new wind uplift requirements, then look to the NuRoof® Retrofit Framing System.

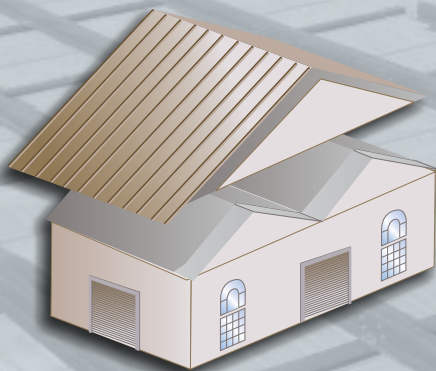
Combined with our wide spectrum of Cool Roof colors and metal roofing profiles, an attractive new roof can enhance your property's appearance, as well as offer a higher energy efficient roof.

Flat roofs are naturally problematic. They lack the ability to effectively discharge rainwater to the roof's edge so they retain moisture on the rooftop for possible infiltration into the building's interior. Because most flat roof weatherproofing membranes are hydrostatic in nature, they are subjected to a greater range of performance issues. Membranes such as built-up roofing must be expertly installed to provide a level surface to prevent water ponding.

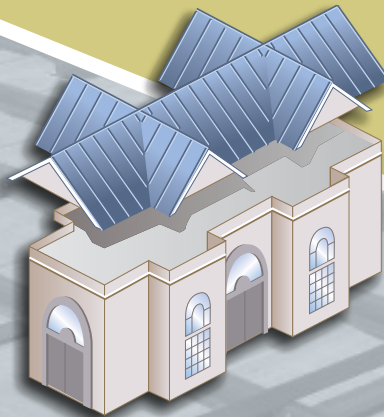
These membranes require continual maintenance to provide weathertightness assurance. It is common for a building owner to spend an average of 12 cents per square foot per year on maintenance. Add to that, the additional cost of a total roof replacement as the roof membrane reaches its life expectancy of 15 years. Compare this to a metal roof that has minimal maintenance requirements and a life expectancy of more than 30 years. Due to the savings on maintenance expenses and a metal roof's long life, a retrofit metal roof system will easily pay for itself over time.

The NuRoof® Framing System can be designed for utilitarian, low-slope applications with roof slopes as low as 1/4:12. This application is an economical approach that uses our 3"-high Ultra-Dek® or Double-Lok® standing seam roof system to ensure weatherability and long-term satisfaction. For high-slope applications, the BattenLok® HS, SuperLok® or LokSeam® roof systems offer more architectural aesthetics and ease of installation.

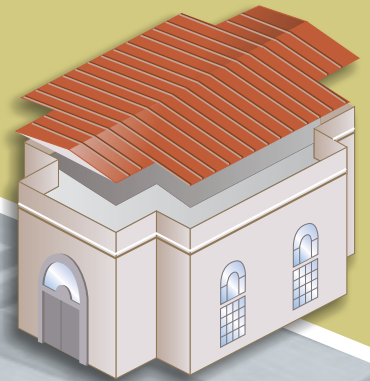
As many companies grow, they often find they must expand their facilities which can result in challenging roof geometries. The flexibility of the NuRoof® Retrofit Framing System offers the owner the ability to work with these complex roofing issues.



Roof-Geometry Solutions



High-Slope Architectural



Low-Slope Utilitarian

Why NuRoof® Retrofit Systems?

We have experience in retrofitting existing buildings proven with millions of square feet of successfully completed projects.

Often, a conventional retrofit framing system may not work due to high wind loads or snow loads or for complex roof geometries. We offer expert and professional design capabilities to enable custom solutions.

Our manufacturing plants are IAS accredited under AC472 reinforcing a commitment to quality assurance.

Our extensive metal roof system product offerings provide the design professional with an array of options from simple solutions to high-profile architectural installations.

The NuRoof® Retrofit Framing System is included in our highly respected Certified Installer Program, which offers training in the basic fundamentals of retrofitting buildings. Training includes hands-on installation of the NuRoof® framing system and standing seam metal roof systems.

Testing protocols, such as ASTM E-1592, are performed in the most modern test laboratory facilities in the industry. Many of our products also earn approvals by UL (Underwriters Laboratories) and FM (Factory Mutual).

We have systems designed that address retrofitting over existing metal roofs to upgrade to current building code requirements and to comply with Factory Mutual Certification. These systems can be designed to increase the buildings' thermal efficiency by adding insulation between the old and new roof.

NuRoof® and New Construction

For new construction projects, the NuRoof® system is an economical and competitive alternative to prefabricated truss construction.

Green Advantages

Metal roofs are energy efficient, recyclable, durable, lightweight and cost effective. Our panels are made from 25-35 percent recycled materials and are 100 percent recyclable. Cool metal roofing offers energy savings benefiting both economical and environmental concerns. In addition to potential energy savings, our products can help your project gain LEED points.

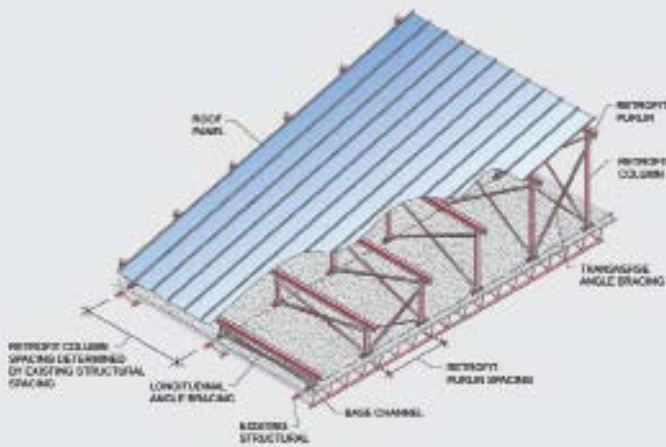
Metal roofs can be totally recycled and can usually be installed right over an existing roof, keeping materials out of landfills and saving natural resources. According to a 2007 Corps of Engineers study covering the last 40 years, 7-10% of landfill space is occupied by obsolete roofing material. Additionally, metal roofs are energy efficient, recyclable, durable, lightweight, and cost effective. Our panels are made from 25-35 percent recycled materials and are 100 percent recyclable. This structural addition will extend the lifecycle of your building and, when combined with a specific color palette and the appropriate roofing slope, can reduce energy consumption and help prevent the occurrence of heat islands where they are a problem offering a savings that benefits both economical and environmental concerns. Furthermore, our products can help your project gain LEED points.



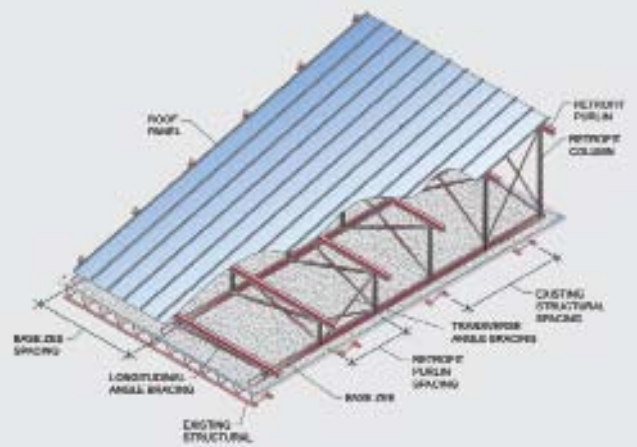
NuRoof® is a light-gauge framing system fully designed to create a sloped roof plane and ready to accept a new metal roofing system. You can choose either a low-slope functional and economical system where the roof is barely visible from curbside. Or, you can choose a high-slope system with a painted standing seam metal roof system that adds to the aesthetics of the building. Additional materials, such as EIFS or other products, can further update and beautify the existing building. This retrofit concept has been embraced by public school systems, municipal and state government agencies as well as the federal government. We are recognized for expert solutions supported by professional analysis and proven performance products.

NuRoof® Retrofit Solutions Offer Adaptability

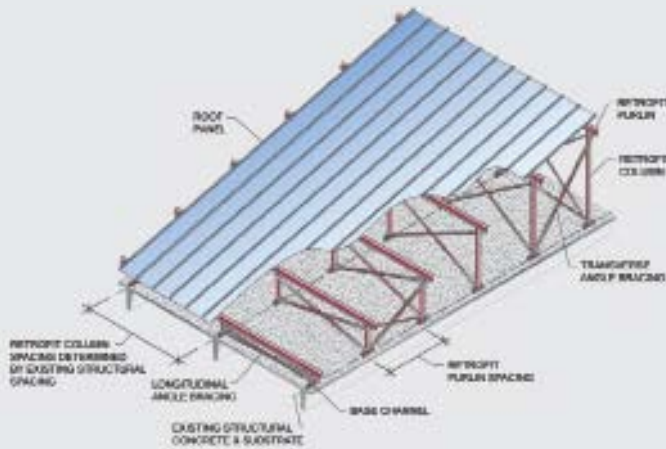
Regardless of whether your roof substrate is steel, wood or concrete the retrofit concept can be employed to satisfy the building owner's requirements. We have the experience required to design the retrofit framing system that will comply with the original loads of the substrate. Our rigid design process ensures every NuRoof® System is engineered properly to give you the peace of mind that it will perform for you.



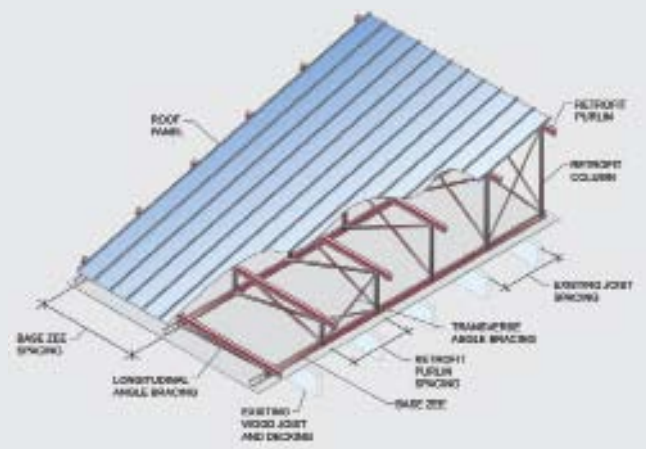
Parallel Framing Over Steel Bar Joist



Perpendicular Framing Over Steel Bar Joist



Parallel Framing Over Structural Concrete



Perpendicular Framing Over Wood Joist



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