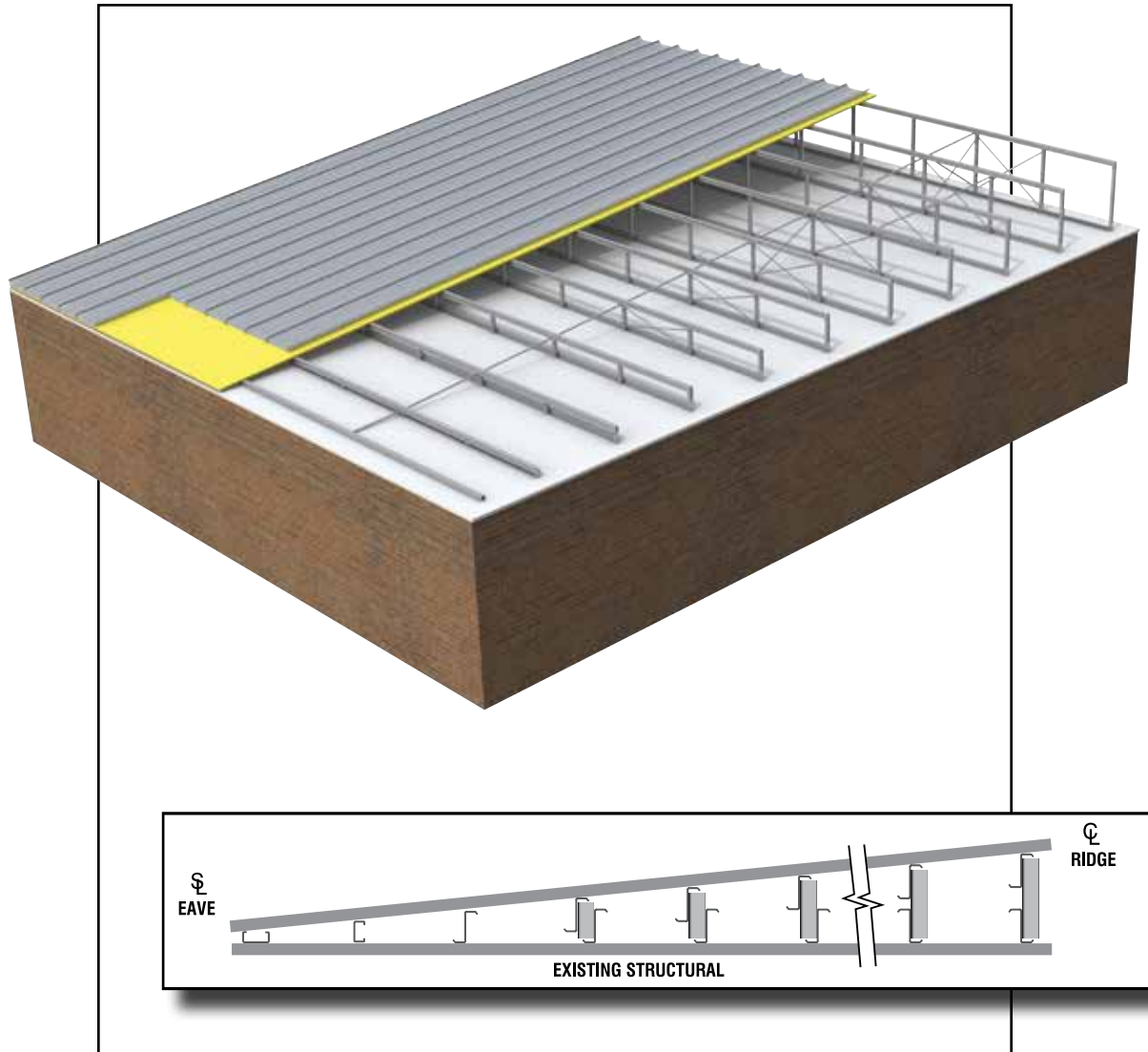




SLOPE BUILD-UP RETROFIT ROOF



ROOF SYSTEMS

FEATURES

- Uses SSR or SLR II roof panels
- Variety of cool colors available
- Additional insulation boosts thermal efficiency
- Weathertight seams eliminate leaks
- Slope framing support designed to exact architectural requirements

BENEFITS

- A roofing solution to stop leaks and ponding by adding slope over an existing flat or sloped roof and extend the life of your building
- Architectural roof sheeting improves building appearance
- Adding insulation improves energy efficiency
- Can be installed without costly tear-off or business interruption

SLOPE BUILD-UP RETROFIT ROOF

Varco Pruden's built-up slope provides an effective solution to leaks and ponding

Building owners looking for a way to stop roof leaks, reduce maintenance cost and improve the appearance of their facility are finding the answer with VP Roof Systems and their local Varco Pruden Builder. Whether your current roof is metal or non-metal...flat or sloped, Varco Pruden Roof Systems can provide a solution that gives you long-term, weathertight protection and fewer roofing headaches.

1. General

The Retrofit Slope Build-Up System, hereafter referred to as the "System," is designed to be installed over any flat built up or membrane roof having a substrate of steel or wood. The System is an assembly of quality components, assembled in the field to achieve the desire slope. Field cutting vertical components in the field allows the contractor to make adjustments for inconsistencies in the existing roof surface. All materials provided by Varco Pruden Buildings are of first quality. To ensure quality, all materials and parts must meet rigid material and performance specifications.

2. System Components

Base Members

The base members shall be (1.) a base clip meeting or exceeding the requirements of ASTM A572 or (2) a pre-painted base spanning purlin, 17 gauge G-30 x 3", 5½", 7" or 8½" in height meeting or exceeding the requirements of ASTM A570.

Vertical Members

The vertical members of the System shall be (1.) a 2" x 2½" G-60 cee section. The cee section shall be 17 gauge (50 ksi), or 14 gauge (50 ksi) thickness meeting or exceeding the requirements of ASTM A446 or (2) a 2" x 2" x .188 (36 ksi) prime painted structural tube meeting or exceeding the requirements of ASTM A501.

Upper Members

The upper members of the System shall be a 17 gauge G-30 x 3", 5½", 7" or 8½" purlins with both flanges broke parallel to the roof slope. The purlin shall be pre-painted steel 55 ksi meeting or exceeding the requirements of ASTM A570. Roof panel design requires these members to be placed at a maximum spacing of 5'0" O.C.

3. Bracing

Horizontal Bracing

The horizontal bracing shall be a 17 gauge G-30 x 1¼" x 1¼" pre-painted angle which meets or exceeds the requirements of ASTM A570.

Longitudinal and Transverse X-Bracing

The longitudinal and transverse bracing shall be pre-punched zinc (wax coated) strapping 1¼" width and 18 gauge G-90 thickness. This strapping meets or exceeds the requirements of ASTM D3953 and Federal Specifications 005781(1).

Connections

All structural connections of the System shall be made using a 5/16" x 1" self drilling fastener. Due to variable site conditions, Varco Pruden shall not be responsible for the connection of the Retrofit System to the existing structure. A licensed Structural Engineer should determine project requirements.



4. Design Information

The recommend slope range of the System is ¼":12 through 6½":12. Maximum height of the System above the existing roof plane shall be 15'. The System has been designed in accordance with the 1996 American Iron and Steel Institute (AISI), the 9th Edition of the American Institute for Steel Construction (AISC), and in accordance with the reliable engineering methods and practices.

The design loads (uniform and concentrated, gravity and wind) shall be applied to the Retrofit Slope Build-Up System. The System will transfer these loads to the existing structure. This load transfer will result in concentrated loads being applied to the existing structure. Varco Pruden will not be held responsible for the structural integrity of the existing structure due to the transfer of additional load of the System into the existing structure. A Professional Structural Engineer should review the existing structure to determine the structural integrity.

The Retrofit Build-Up System requires that a 3" minimum layer of blanket insulation be used between the roof panel and the retrofit purlin to control condensation and dampen roof vibration and noise. It is recommended that the newly created attic space be evaluated for any required venting and/or fire code requirements.

5. Roof Panels

The Retrofit Build-Up System is designed to interface with either the SSR Standing Seam Roof or the SLR II Architectural Standing Seam Roof System. Both roof systems carry a UL-90 uplift, CEGS 007416, and ASTM E330 modified certification, as well as FM windstorm ratings.

6. Finishes

Following is a listing finish descriptions referred to in this document.

Pre-painted – Hot rolled coil applied structural primer meeting or exceeding the requirements of Federal Specification TT-P-636D, TT-P-664C, and Steel Structures Painting Council SSPC-25.

Prime Painted – Single coat structural primer 1.0 and 2.0 mils thick applied to a surface meeting or exceeding SSPC-5P3.

G90 – A galvanized hot dip finish meeting or exceeding the requirements of ASTM A446 and A525.



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