

HYBASE

TECH DATASHEET SAM VR™

PRODUCT DESCRIPTION

HyBase SAM VR is a self-adhering elastomeric sheet membrane, manufactured in a process that blends coal tar pitch with DuPont's Elvaloy® KEE, and is reinforced with dispersed polyester fibers. The membrane is compounded, calendared to thickness, and in a separate manufacturing process the adhesive, release paper, and lay lines are added, completing the finished product. Two thickness are available: (50-mil) 35/15/50 and (60-mil) 45/15/60 products. (Membrane thickness/adhesive thickness/total thickness).

Selecting one of the products described will provide the designer with quality products to be specified and with those products address current environmental issues being imposed on the roofing industry by OSHA, state and local legislation, or codes. Your independent Sales Specialist can provide you with current information appropriate for your locality.

Torches with open and direct flame having a history of fires recently came under the scrutiny of a major industry association. The fume recovery equipment on kettles only partially deals with the fumes when materials are heated; transferring materials, applying them, or applying the hot materials is not addressed with this system. When working on environmentally sensitive projects the majority of the odor that permeates the air we live and work in is still present due to the application procedures.

HyBase SAM VR, HyBase SAM and Hyload WS installed in a multiple ply built up system provides the designer with the environmental, safety, and customer sensitivity solutions while providing long term roofing performance for customers. Hyload provides the alternative solution addressing all of the environmental and design issues rather than implement a partial remedy that only approaches a portion of the overall issues that designer's and their customers face in our litigious society.

HyBase SAM VR membranes are manufactured with trained personnel in a quality controlled environment. Both adhesive quality (SBS modified) and thickness are controlled and checked before material is shipped, ensuring correct application rates and thickness when installed. This quality-controlled environment in the Hyload plant is in sharp contrast to traditional job site quality control where materials are heated and applied with unsophisticated equipment at the site. In the traditional methods, workers in the field control critical temperature considerations as well as application rates. These workers must perform multiple tasks in a difficult and uncomfortable work environment, which invites errors in both preparation and application.

HyBase SAM VR is designed to be used as a vapor retarder membrane in a self-adhered built up assembly installed under roof insulation. HyBase SAM VR is a product widely selected for hospitals, schools, nursing homes, offices, high rise buildings, and other environmentally sensitive projects. Applications on these facilities require designers to meet more stringent code and environmental requirements as well as customer sensitivities that are directly addressed when the Hyload self-adhered membranes are used. Selecting HyBase SAM VR and utilizing the self-adhered concept will eliminate the need for roofing kettles producing the offensive odors, fume recovery systems, dangerous open flame and continuously noisy equipment.

Placing all equipment and materials in the building's work area (set-up), is a concern for both designers and contractors. This procedure can pose many difficulties and use of expensive equipment that may not be used in many cities due to code restrictions. Self-adhered products, including insulation adhesives, can eliminate the necessity for this heavy equipment. In addition much of the noisy, odorous, and dangerous equipment necessary in traditional applications or their set-up, is not necessary, and simplifies the processes.

Once all materials are in place, the basic equipment needed is a method of applying primer, a roller to exert 70 lbs. of pressure, knives, a straight edge, chalk line, a hand held roller. Also see welding equipment in 8. C. Projects have been completed by using the buildings freight elevator to completely set-up the project with both equipment and materials. This type set-up has been accomplished in a period considered off-hours, with no disruption to the customers activities.

A Building can be watertight when the HyBase SAM VR membrane is installed, the 3" side laps and specified end laps on the membrane are adhered, all "T" joints caulked with an approved caulk, and the flashing areas are installed to specifications. With the building watertight it can be considered to be in a dry in phase. This dry phase provides the contractor with options no other built up system offers, phased construction, the ability to do asbestos removal more efficiently, apply the complete system all at one time with efficiency and with fewer select personnel. The HyBase SAM VR membrane must not be exposed to any chemicals. (See 7. Chemical Resistance).

LIMITATIONS

HyBase SAM VR cannot be used with coal tar mastic due to the amount and various types of solvents used in those products. Phased construction is only approved if HyBase SAM VR is used as the vapor retarder and the "T" joints are caulked with an approved caulk.

HyBase SAM VR should only be applied when temperatures are 45° F and rising. Heat sources to aid in application must be of the hot air type only.

MATERIALS AND COMPOSITION

HyBase SAM VR membrane is composed of an elastomeric blend of coal tar pitch, reinforced with dispersed polyester fibers, and modified using DuPont's Elvaloy™ KEE. An SBS adhesive and release paper is applied to the membrane in a separate manufacturing process.

COLOR: Black

SIZE: Rolls of 36" x 50' (150 sq. ft.)

EFFECTIVE COVERAGE: (136.8 sq. ft. With 3" end lap)
(135.4 with 9" End lap)

WEIGHT: 57 lbs. Per roll. 50 mil 35/15/50,
packaged 20 rolls Per pallet.
67 lbs. Per roll and 60 mil 45/15/60,
packaged 20 rolls Per pallet.

APPLICABLE STANDARDS

HyBase SAM VR meets the requirements of Underwriters Laboratories for a Class A fire rating in various system configurations. HyBase SAM VR has Factory Mutual Class 1-90 approval in various system configurations. Other code approvals include the Southern Building Code Congress International and other regional codes. (For Specifics, consult the Hyload Technical Department).

PHYSICAL PROPERTIES

Refer to the Physical Properties Chart within this Tech Data Sheet or in the Hyload Division 7 Technical Manual.

HYLOAD
ROOFING SYSTEMS

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HYBASE SAM VR™

CHEMICAL RESISTANCE

HyBase SAM VR is not intended as a membrane to be used as a final ply, with adhesive laps it is vulnerable to chemical attack and standing water over time. Use HyBase SAM VRWS (welded seam) as a vapor retarder when the installed membrane is to be exposed to these conditions.

TECHNICAL DATA

Hyload provides technical data as well as installation instructions, details and specification information to enable roofing contractors, engineers, architects, and specifiers to prepare project specifications. This information can be provided in various formats. Applicators may receive field training, as well as in-house training to become registered. Field inspections of the Hyload membrane may be performed by independent Sales Specialists and/or the Hyload Technical Department staff as part of the Hyload warranty program.

Preparation of Substrate

Substrates should be smooth, level, clean and dry. All surfaces on which HyBase SAM VR is to be adhered must be primed with an approved quick drying primer. The exception being, when applying a Hyload self-adhered membrane to the original manufactured surface of another Hyload self-adhered membrane. For this application it is not necessary or desirable to prime the Hyload membrane, but it must be clean, dry and not coated. Coated surfaces must be primed.

Contractors must ensure that the applied primer has thoroughly dried before applying the HyBase SAM VR membrane to the substrate. Contractor must give consideration to temperature, wind, substrate, and type of primer, when calculating drying time. Blisters in the applied membrane will occur if primer is not dry and the membrane is applied over even slightly wet primer. Dead load capabilities of the deck and supporting structure must be sufficient to support the load of the new system. Dead level applications are acceptable when standing water, snow, and ice loads do not exceed the design limits of the structure or substrate.

Insulation

Insulation must be approved by Hyload for use with the system being installed. Insulation should be attached according to the project specifications, recommendations of the insulation manufacture, or FM 1-90, whichever is more stringent. Attachment using cold adhesives is an approved method. Consult Hyload Technical Department for specifics.

Membrane Installation

Once the deck surface is primed and dry to the touch; the HyBase SAM can be installed onto the dry primed surfaces. The primed surfaces must be thoroughly dry before the membrane is applied or blisters will occur. Installation of the membrane must adhere to the picture frame methods, details, and instructions in the Division 7 manual.

HyBase SAM VR must be installed beginning at the low point on the roof. Plan the layout of the membrane so that laps on the HyBase SAM VR are not directly under the laps on the overlaying membrane. Laps are created by overlapping the membrane onto the previously installed membrane up to and parallel with the painted lay line. End laps should overlap 6" minimum and 9" when the membrane is used as a temporary roof. All installed sheets of HyBase SAM VR should be rolled with a weighted roller.

Perimeter picture frame membranes should be terminated a minimum of 2" up from the top of the cant and extend over the ends of the field sheet 6". If membrane is to be used as a temporary roof, extend over the ends of the field sheet 9".

Flashings will extend from the top of the projection and out onto the roof 6" from the base of the cant. When the membrane is terminated on the vertical, mechanical attachment is required by using a pressure bar or by nailing into a nailable surface every 6" on center. At edges, the membrane must extend over the edge and be fastened every 6" on center. When the membrane will not be roofed over in the course of the original installation, caulking the T-joints with an approved caulk is required.

When using HyBase SAM VR WS all side and end lap termination seams must be hot air welded with a welder which is suitable for the purpose.

PRECAUTIONS

User must read all product labels and material safety data sheets for health and safety precautions prior to use. User must read, understand, and have available at the project site all product literature, specifications with addendum's, and published data on products used in the project.

AVAILABILITY

HyBase SAM VR is available nationally. Contact the Hyload Corporate Sales Office for the name of the Hyload Sales Specialist in your area.

MAINTENANCE

Your local Hyload Sales Specialist can provide you with effective maintenance procedures that may vary, depending on specific conditions. Periodic inspections, inspections after weather events, preventive maintenance, and timely repairs must be part of a sound roof program.

WARRANTY

Hyload makes several high performance product warranties available to its customers. Contact Hyload's Corporate Office directly for details.

TECHNICAL SERVICES

All questions relating to technical items not covered specifically in the Tech Data Sheet or the Hyload product literature should be referred directly to your local Hyload Sales Specialist.

This Hyload Tech Data Sheet provides general technical data and guidelines regarding the nature and uses of the HyBase SAM VR membrane. This information is not intended, and should not be used, as a design or installation specification for any particular project. Neither the publication of this Tech Data Sheet nor any information contained herein constitutes or implies the acceptance by Hyload of any particular roof design, installation procedure, or roof component. This Tech Data Sheet is provided for general information purposes only. No statement contained herein is intended or shall be construed as an expressed warranty.

HyBase SAM VR PHYSICAL AND MECHANICAL PROPERTIES		
Property	Test Method	Results
Elongation	ASTMD412	170%
TensileStrength	ASTMD412	1500 lbs/in
TearStrength	ASTMD624	300ppi
Density@ 70F		80 lbs/ft
Low Temperature Flexibility	37-GP-56M	Pass
WaterAbsorption	37-GP-56M	Lessthen0.1%

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