

HYBASE

TECH DATA SHEET SAM

PRODUCT DESCRIPTION

HyBase SAM 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, calendered 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 Specialists can provide you with current information appropriate for your locality.

In addition to meeting all of these imposed requirements it is necessary to appease the customers sensitivities to offensive odors, continuous machinery noise, and dangerous open flame equipment which must be used in hot applied, torch applied and in cold adhesive applied systems. 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 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 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 can be used as a base sheet/interply membrane in a self-adhered built up assembly installed over insulation or other substrates, and is normally covered with Hyload WS as the finish ply completing the system unless a coating is required by the customer or designer. HyBase SAM 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 and utilizing the self-adhered concept will eliminate the need for roofing kettles producing the offensive odors, 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 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, then the finish ply membrane is applied. 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 finish ply all at one time with efficiency and with fewer select personnel. The HyBase SAM membrane must not be exposed to any chemicals. (See 7. Chemical Resistance).

LIMITATIONS

HyBase SAM is compatible with and can be installed over an existing coal tar system. A variety of attachment and installation options are available. Contact Hyload to discuss specific applications.

Vertical flashing must extend up to an approved mechanical termination point with the membrane installed in the strapped method (shown in details within the division 7 manual). Membranes used in base flashing must be a minimum of 60/15/75. On high walls the top of the roof flashing should terminate by a mechanical means approximately 8" above the roof surface and or below any masonry weep holes, see Hyload's Division 7 Manual for specific details on membrane installation. Covering of walls must be treated independently of the roof, this is the designer's responsibility and is not included in the roof warranty. HyBase SAM 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 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 6" 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 meets the requirements of Underwriters Laboratories for a Class A fire rating in various system configurations. HyBase SAM 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).

HYLOAD
ROOFING SYSTEMS

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HYBASE SAM

PHYSICAL PROPERTIES

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

CHEMICAL RESISTANCE

HyBase SAM 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 Hyload WS as a base/interply 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 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 Hyload 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

Hyload must approve insulation for use with the system being installed. Insulation manufacturer must designate insulation type as acceptable for use with self-adhered membranes. A recover board must be applied over the polyisocyanurate insulation. (Refer to latest NRCA Bulletin on polyisocyanurate Insulation) Fastening of the insulation must be done per the manufacturer recommendations, project specifications, or Hyload's specification whichever is more stringent. When FM or UL standards are required, the specifications must reflect those requirements. Refer to the FM and UL approvals guide or their latest supplement.

Membrane Installation

Membrane assemblies can be numerous in type and scope of application. Sales Specialists maintain a database of material and specification

information to assist the design professional and customers in developing a custom specification for their project's membrane application.

When all layers of insulation/recovery board are installed, priming of the final layer/substrate and all metal is completed; 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.

Factory Mutual requires wood blocking and wood cants for reroof and new construction applications. Hyload warranted assemblies require this construction unless otherwise approved in writing by the Hyload Technical Department. Wood blocking must be installed to the same height as the installed insulation + or - 1/8". Exceptions to this requirement must be approved in writing by the Hyload Technical Department.

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".

HyBase SAM may be approved as a base/interply for installation directly over existing roofs when Hyload WS is specified as the final ply. These applications are approved on a job-by-job basis after the condition of the existing roof assembly has been verified to be an acceptable substrate.

The installed system HyBase SAM with Hyload WS as a final ply is normally finished with a smooth surface, with or without a coating. All seams (both side and end laps in the field and on vertical terminations) for the final ply (Hyload WS laps) must be welded by a hot air welder suitable for the purpose. A generator suitable to provide the recommended uninterrupted power to the welding device as recommended by the manufacturer of the welding equipment must be used.

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 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.

TECHNICALSERVICES

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 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 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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