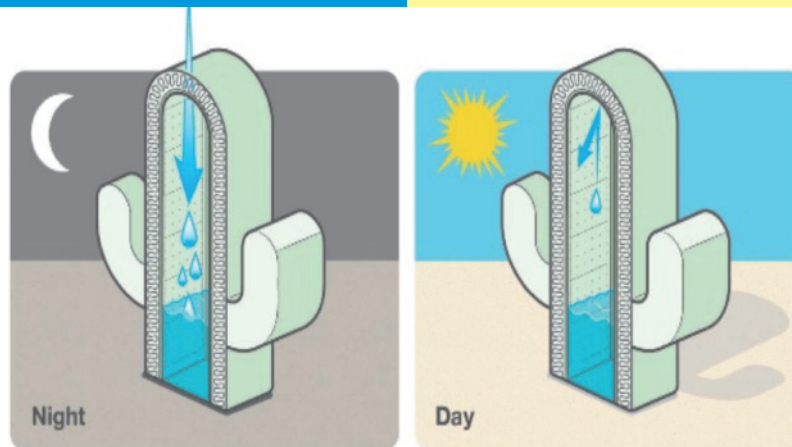


Introducing the Next Major Advance in Building Physics – SIGA Majrex[®]



It's the smartest and safest vapor control membrane available. Thanks to **Hygrobrid[®] technology** and 2 dimensional Sd values the moisture only transports in one direction. Majrex[®] lets the moisture in from the structure, where it shouldn't be to the inside but not back out the same way! No other product in the world is smart enough to do that. Majrex is the first and only vapour control membrane to have received component certification from the Passive House Institute.



The Problem

So called 'intelligent' membranes adjust their permeability based on the moisture content in the air. In areas with a high relative humidity, as it soaks up moisture the membrane will open up and allow this moisture to enter or escape because of its one dimensional Sd value.

This reaction to moisture, no matter on which side of the membrane, is exactly the problem. In a lot of areas during construction, we see high humidity levels inside, to which the "smart" membrane reacts and becomes more permeable to moisture and allows it to pass into the wall cavity, where it is not meant to be. What this means is these vapor variable membranes are not as smart as they claim to be. They are smart in being able to open up to moisture but not so smart as they allow it to pass in both directions by the same Sd value, depending on the direction of the vapour drive. For this reason vapor variable control membranes have not been as successful as expected in reducing the risk of damage.

Nature had the answer – unlocking the secret of the Cactus!

To develop Majrex, we studied a real survival master, the cactus. The home of the cactus is the desert which is a very dry place with little rain. How does a plant like the cactus survive in such a harsh environment?

The secret: "Moisture transport in one direction only." The cactus can absorb vapor through its skin at night letting the moisture inside, but during the day when temperatures rise, it manages to keep all the moisture inside and doesn't lose any of it to the exterior. The cactus has a skin which lets moisture in but not out meaning that it can distinguish between the directions.



Dr Wolfgang Feist,
Director of the
Passivehaus Institute
presenting SIGA's
Anselm Hoffman with
Majrex Certification.

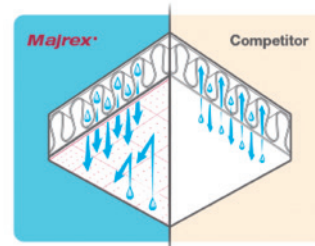
Majrex[®] Hygrobrid[®] Technology

After several years of research and development, we were able to decode the secret of the cactus, patented this technology and named it Hygrobrid[®]. We applied this patented technology to our new interior membrane called Majrex.

This is a big step forward in building physics as we can now have the best of both worlds in one product: The high amounts of moisture from the inside does not pass into the wall cavity, but the moisture we have in it can easily pass through the membrane towards the inside where it is not harmful. There's nothing else like that...except the cactus of course!

The Technical University of Dresden in Germany performed material measurements in the lab and measurements of construction elements in flat roofs in critical climatic conditions.

The measurements prove that SIGA-Majrex[®] with Hygrobrid[®] technology significantly reduces moisture development in the structure compared with conventional variable vapor control layers, and the diffusion of any moisture that is in the structure to the outside is faster.



Please visit www.zeroemissionsbuildingproducts.com.au or <http://www.siga.ch/en/company.html> for further information on SIGA's superlative Airtightness Range of VOC free products.

OTHER SIGA PRODUCTS MAKING UP THE AIRTIGHTNESS SYSTEM

EXTERNAL



Majvest

Europe's leading external weatherproof membrane provides for permanently airtight and weathertight facades on the exterior. Majvest is highly tear-proof and flexible, so it is easy and secure to lay. The material is permeable and permanently protects the internal wall construction from condensation build-up.



Majcoat

Europe's leading external weatherproof roof membrane. The driving rain-proof and diffusion-open breathable membrane Majcoat is specified for creating a permanently windtight building envelope.



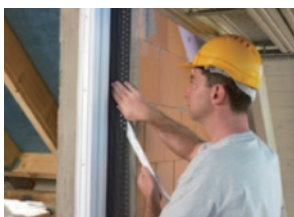
Wigluv

Europe's leading external façade sealing tape and the optimum solution for permanently windtight sealing of breathable membranes and facade membranes, for overlaps, penetrations and bonding the membrane to the concrete slab edge on the outside.



Fentrim F

The black, fleece-backed flashing tape Fentrim F is the ideal flashing solution for jobsite conditions where mixed substrates are present. The aggressive acrylic adhesive bonds in the most difficult temperature conditions. A tear-proof, split-release liner allows fast and error-free results...every time. Fentrim F removes the need for custom made flashings. It reduces cost from damage on site and delays due to incorrect manufacture.



Fentrim 2

The black coloured, single-sided high-performance adhesive tape Fentrim 2 is the optimal solution for permanent windtight and driving-rain proof bonding of window and door frames in solid construction on the outside. A perforated edge zone provides perfect keying in for final coating like render, acratex or similar trowelled finishes.

INTERNAL



Majpell

Europe's leading all-purpose, easy to apply vapour control layer Majpell covers not less than three different applications: between and above-rafter insulation and roof renovation from the outside and provides for permanently airtight building envelopes for roof, wall and ceiling structures in the interior.



Rissan

A specialised armoured tape with elastic properties allowing it to be melded tightly around circular penetrations such as pipes or cables, vapour control layers and wood-based panels. These areas are tricky and potential high leakage risks that can be easily, quickly and durably sealed airtight with the single-sided high-performance adhesive tape Rissan.



Sicrall

The single-sided high-performance adhesive tape Sicrall 60 is specified for permanent airtight sealing of vapour control layer overlaps in the interior. Also butt-joints between wood-based panels (e.g. OSB) can be easily, quickly and reliably sealed with Sicrall 60 to make them airtight.



Corvum

The single-sided high-performance pre-folded tape Corvum is the perfect solution for easy, quick and permanently airtight sealing troublesome right angle joints. The pre-fold is unique to SIGA. Use Corvum pre-folded 12/48 for sealing door and window frames to the internal membrane and in reveal frame corners. In addition, the tape is invisible behind cladding because it is precisely pre-folded. This makes application quick and easy. Use Corvum pre-folded 30/30 for permanent airtight sealing of purlins, joists, corners and skylights on the inside. Corvum can be easily, quickly and reliably applied.

50+
YEARS
DURABILITY
TESTED

Please visit www.zeroemissionsbuildingproducts.com.au or <http://www.siga.ch/en/company.html> for further information on SIGA's superlative Airtightness Range of VOC free products.