

Inside:
ConceptVan
2020

V.I.T. – THE VÖHRINGER INNOVATIONS TECHNOLOGY

CO₂ REDUCTION AND
WEIGHT SAVINGS THANKS
TO INNOVATIVE LIGHT-
WEIGHT CONSTRUCTION
SOLUTIONS. AS A RESULT,
ADDITIONAL LOAD
CAPACITY IS POSSIBLE.

THE CONCEPTVAN 2020



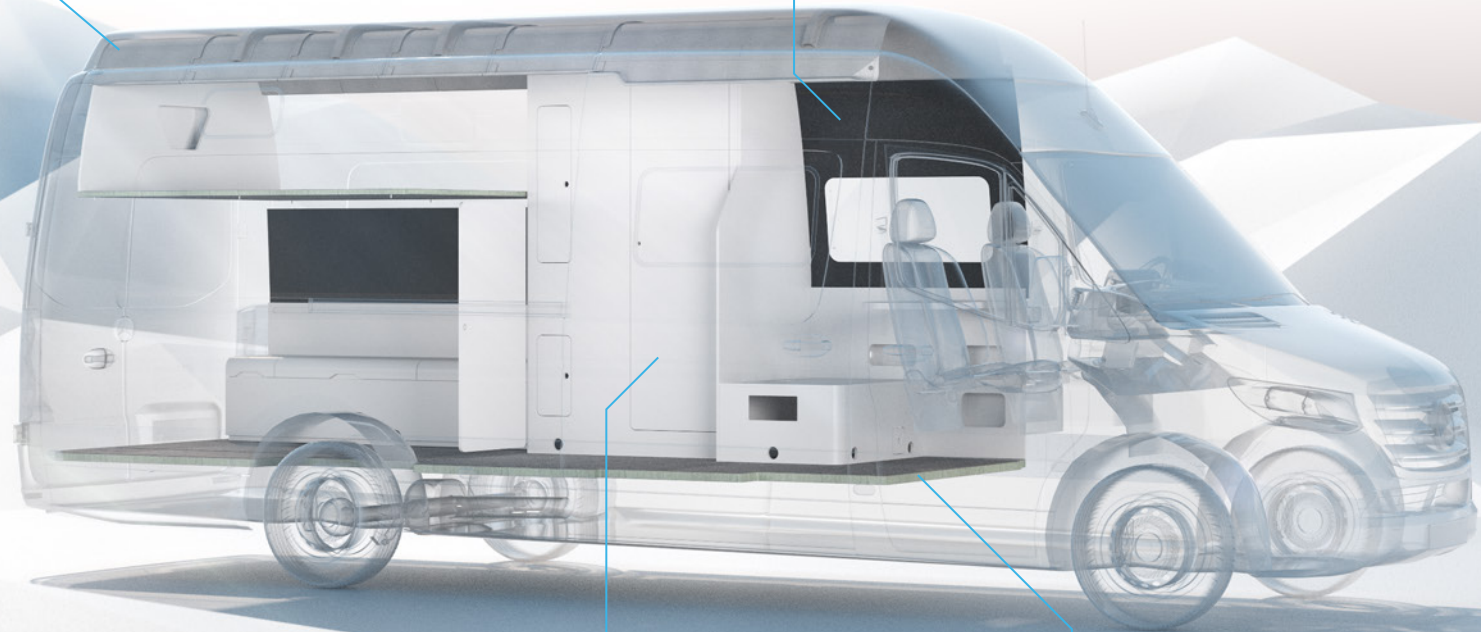
As a system supplier for lightweight parts, we are presenting ConceptVan 2020 with the slogan of INNOVATION INSIDE. In order to generate the load capacity necessary for this, all furniture and the interior from VÖHRINGER have been implemented. The motorhome, based on a Mercedes Benz Sprinter of the most recent generation, has been equipped with our V.I.T. (Vöhringer Innovations Technology), and consequently impresses with its significantly reduced weight and the reduction in CO₂ emissions

that comes with it. The consistent use of these parts of various lightweight construction materials, which come in many shapes, resulted in additional load capacity.

The ConceptVan 2020 is the prototype of a lightweight motorhome, which complies with ecological demands regarding fuel consumption, weight and CO₂ emission without any loss of function and aesthetics in the interior.

V3D COMPOSITE

VFLEX



VUNDER TECH

VSTRONG

V.I.T.

THE VÖHRINGER
INNOVATIONS
TECHNOLOGY

Our products VFLEX, VUNDER TECH, VSTRONG and V3D COMPOSITE set new benchmarks in lightweight construction. These innovations are used successfully in many industries around the world. From the caravan and motorhome market and medical engineering, to exhibit and property construction.

We use a separate system for optimal, dimensionally exact and safe connections between the lightweight elements to ensure perfect implementation of the wide variety of design and shape variants.

VFLEX



**SOUND ABSORBENT,
BREATHABLE, LIGHT,
PLEASANT HAPTIC**

The wood-free alternative to the plywood boards used so far in interior construction. Special polyester fibres form the basic matrix and prevent decay. VFLEX is breathable and can absorb humidity and emit it again. The material has a very low weight and in addition, absorbs noise. VFLEX is implemented in an unfinished

version or can be covered with fabrics or foils, particularly if the surface is to blend into the interior design. VFLEX is available for delivery in various sheet sizes or, in future, rolled as endless material.

// Supporting material:
Diverse inorganic
materials

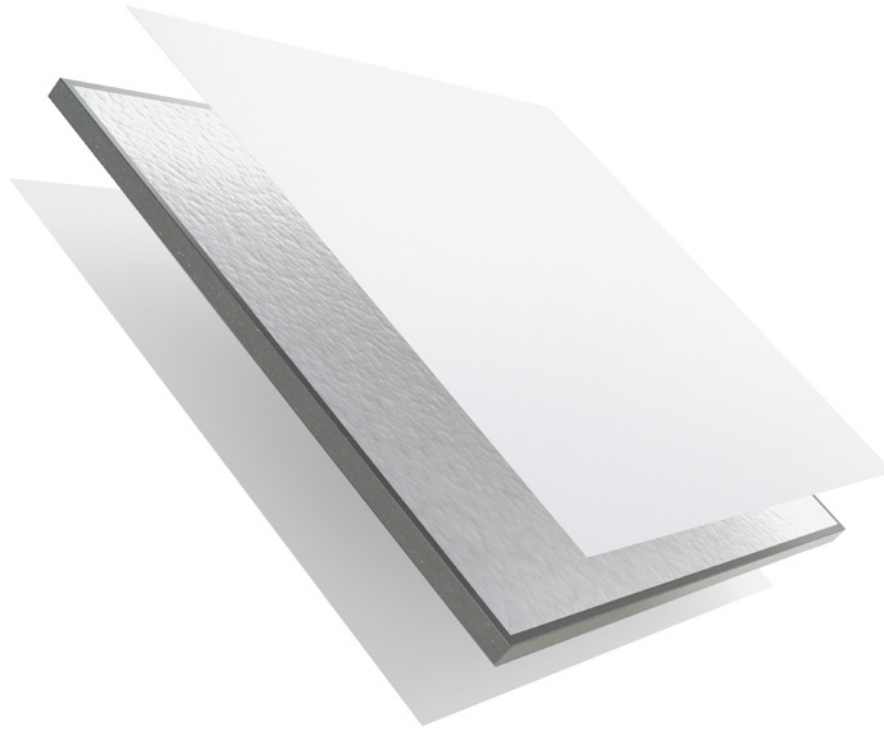
// Weight:
From 750 gr./m²

// Range of application:
For example wall
coverings, ceiling
panels, covering of
spaces or rear garages

// Lamination: Fabrics
and films (have to be
tested on compatibility
to the mould
individually)

// Dimensions: Flexible

// Packing Unit: Per
sheet and in future
also on roll



VUNDER TECH

**LIGHT, WATER
RESISTANT, STABLE,
VARIOUS FORMS**

The basis for this is the special sandwich construction of lightweight core material. (EPS, PET) This is made possible through a combination with robust outside layers. Styrofoam and laminates are moulded together by polyurethane (PU) and an integration of PET or wood is also possible. This eliminates all costs for tools

Thanks to the Styrofoam core, VUNDER TECH has a very high level of stability, making it a proverbial "lightweight."

and templates. The moulded PU bonds the core and the surface on the edge and provides additional stability. The materials are bonded seamlessly and the product is waterproof. In 2017, VUNDER TECH won the INTERZUM AWARD – the coveted "Best of the Best" distinction in the "Intelligent Material & Design" category.

// Thickness:
From 5 mm

// Maximum size:
2.100 x 1.300 mm

// Core material: Various
useable materials

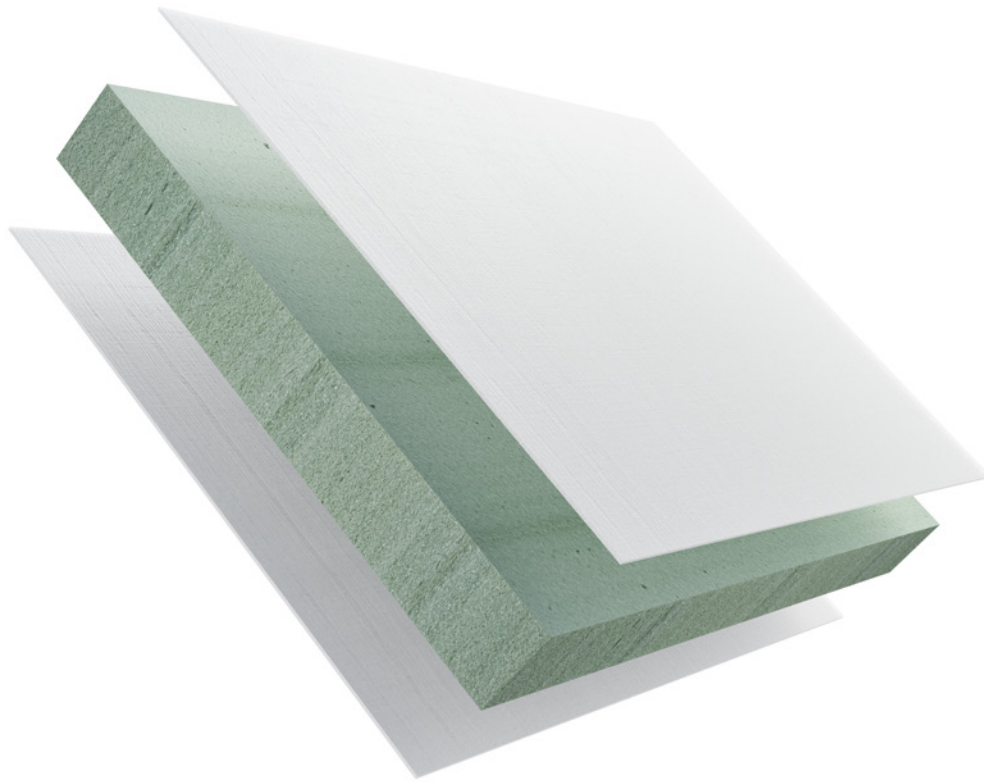
// Surface material:
Decors from 0.4 mm

// Edge colour:
Black and grey

// Screw pull-out value:
820N out of casted
material

// Batch size: Also small
quantities feasible

// Tooling costs:
None, exception:
curved parts



VSTRONG

**LOW AREA DENSITY,
HIGH FLEXURAL
STRENGTH, WATER
RESISTANT**

VSTRONG means lightweight panels which are predominantly installed as side walls and floor elements in caravans and motorhomes. It has been demonstrated in tests that the panels can sustain several tons of load. Various core materials (PET / honeycomb structure) in various densities can be used in order to modify the weight. Cover layers consisting of a glass-fibre-polypropylene roving enhance stability.

Thanks to the inorganic materials and the core made of enclosed cells, VSTRONG panels are water-resistant and have good insulation values. Interior designers enhance the panels with foils and edges to integrate them into their architectural layouts for rooms.

// Core: For example closed celled PET, PU foam, honeycomb, etc.

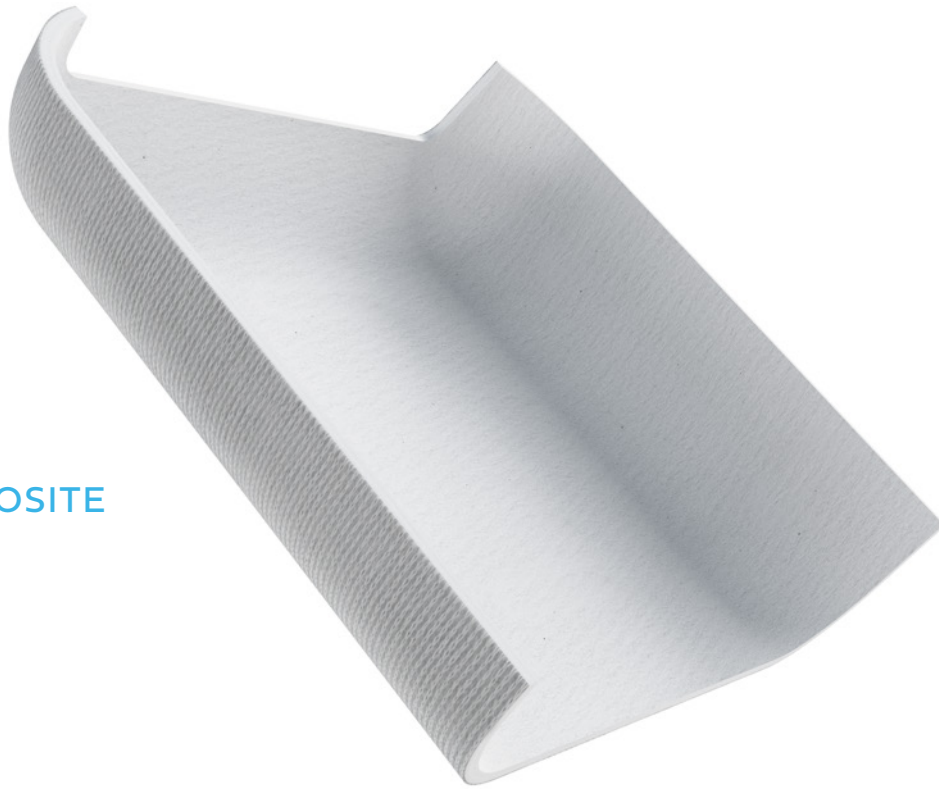
// Surface: PP with a high proportion of directional fibreglass

// Maximum Size:
8.000 x 2.450 mm

// High screw pull force values: In relative to the core density and thickness of the top / bottom layers

// Edge banding: Possible

// Lamination: Possible



V3D COMPOSITE

**SOUND ABSORBENT,
BREATHABLE, LIGHT,
PLEASANT HAPTIC**

V3D COMPOSITE lightweight construction elements feature weight reduction, breathability and noise reduction in pleasant haptics. Every part is manufactured as specified by the customer (design, form, integration). V3D COMPOSITE is used for the interior installations in vehicles: Side wall trims, roof liners and ceiling trims, interior panelling for cabinets, B-pillar trims and

// Supporting material:
Diverse such as
Polyester, natural
fibre, PES etc

// Decorative surface:
Fabrics and films
(have to be tested on
compatibility to the
mould individually)

// Moisture: Absorbing
and releasing

// Batch size: Also small
and medium size
quantities feasible at a
reasonable price

// In areas of strong
material deformation:
Only a negligible ma-
terial attenuation

rear garage trims. Especially in B-pillars, it becomes evident how smooth a transition between living space and drivers cab is possible thanks to the V3D COMPOSITE solutions and what a unified whole they create.



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