Isocell Omega Light Underlay

Product information
An extremely permeable roof underlay for installation directly on thermal insulation, timber composite panels or timber sheathing, on a pitched roof as roofing underlay or as wind-proofing for the wall. Tested for rain tightness by 'Holzforschung Austria'. (Report no. 301/2003/1-T/HH)

Product information
- composition - 3 layer PP fleece
- thickness of 0.60mm
- anthracite
- weight per unit area - 145 (±5) gr / m²
- Sd value - 0.025m (+0.035/-0.01)
- temperature resistance from approx. -40°C to +80°C (short term 100°C)
- UV resistance - 4 weeks
- resistance to water penetration EN 1928 - W1
- elongation EN 12311-2 - 35-70% length, 50-90% width
- tensile strength EN 12311-2 - 300 (±40) N/50mm length, 220 (±20) N/50mm width
- tear propagation resistance EN 12310-1 - 175 (±30) N length, 150 (±30) N width
- storage - cool and dry
- fire performance EN 13501-1/EN 11925-2 - E

Uses
- for vented pitched roofs and external walls
- high quality protection for timber and insulation
- for installation directly on thermal insulation or timber sheathing
- for ventilated closed facades

Product advantages
- rain-tight, wind-tight
- UV-stabilized
- 100% recyclable
- easy to cut
- anti-glare
- anti-slip

Product code	Description	Width (m)	Length (m)	Roll area (m²)	Packaging unit
2OMELI	Roof & wall underlay with two way adhesive strips	1.5	50	75	1
2OMELIPLWS	Roof & wall underlay with two way adhesive strips	1.5	50	75	1

Isocell Omega Light Underlay - continued

Guidelines for Installation

(1) Underlay (unsupported)
OMEGA roof underlay is nailed parallel to the eaves with a slight drape and laid and mechanically fixed above the rafters. Vertical overlaps/joins must always lie on a rafter. All overlaps must be bonded with OMEGA Quilli. Horizontal underlay panels can be joined using SK-DUO's adhesion as provided or with OMEGA Quilli (no pressure need be applied).

(2) Underlay (supported)
OMEGA roof underlay is laid on sheathing parallel to the eaves. The blankets are fixed with concealed nails spaced at 10 cm at the ridge-side edges (marks at edge). All overlaps/joins must be bonded with OMEGA Quilli (without applying pressure) or the integrated adhesive strips (applying adequate pressure). For the raintight version (temporary cover) a nail-seal under the counter batten (OMEGA Quilli or OMEGA Nail-Seal Tape) is necessary. The single-sided nail-seal tape must be attached to the roof underlay directly beneath the counter batten.

(3) Eaves construction
An eaves construction with drainage below the gutter is recommended so that excess water can easily drain off. The use of a metal sheet to drain off water is recommended.

(4) Ridge area
The ridge area is closed directly when covered with OMEGA roof underlay. This provides immediate protection against water penetration. In non-insulated lofts and/or ventilated interior insulation the ridge formation must be made open: the blankets end 3 cm before the ridge apex, counter battens are mounted and a 50 cm wide strip of OMEGA roof underlay must be attached over the roof apex.

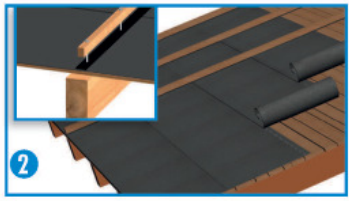
(5) Valley formation
The first step in valley formation is to lay a continuous valley blanket.

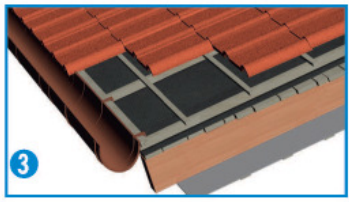
(6) Penetrations
Sections cut out for roof penetrations (extractor pipes, roof windows, chimneys, etc.) should be kept as small as possible and the ends of the sheets must be fixed so that no rain or snow can penetrate. To achieve a perfect seal the appropriate sealing tapes and sleeves supplied by ISOCELL GmbH must be used.

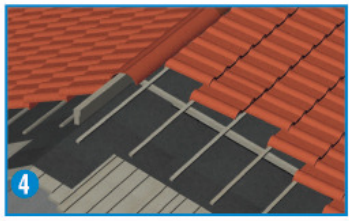
Ensure that the substrate is clean. The manufacturer can accept no liability for mechanical damage. The applicable regulations and guidelines must be observed.

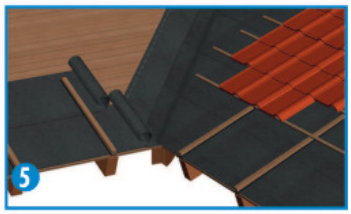
Timber preservatives can influence the impermeability of the underlay. Siegware staff are happy to offer you technical support.

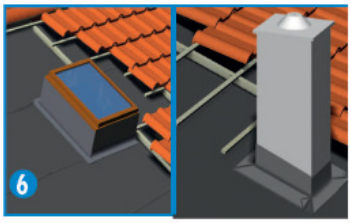
The roof underlay does not replace roof covering. The roof must be covered during the period of the specified weathering time. Early covering has a positive effect on the resistance to ageing.











Isocell Omega Mono 230 SK Duo Underlay

Product information

A non-vapour retardant roof underlay with two two-way acrylate adhesive strips for installation directly on the thermal insulation or the timber sheathing. In accordance with ÖNORM B 4119, the roof underlay is suitable for rainproof under-roofs as well as for under-roofs with increased rainproof properties with a roof pitch of > 15° and a snow load SK of up to 4.0 kN/m² and complies with the classification UDB-A and USB-A in accordance with the ZVDH Directive (ZVDH = German Central Association of the Roofing Trade).

Product information

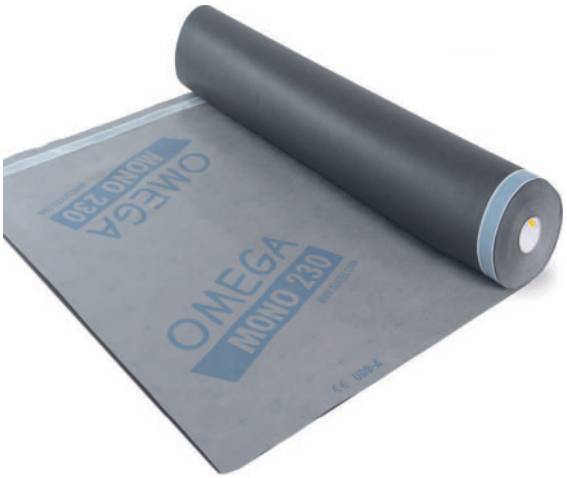
- monolithic membrane with PP fleece on both sides and two-way acrylate adhesive strips
- thickness of 0.75mm
- light grey
- weight per unit area - 230 gr / m²
- Sd value - 0.08m
- temperature resistance from approx. -40°C to +80°C
- UV resistance - 12 weeks
- resistance to water penetration EN 1928 - W1
- elongation EN 12311-1 - 80% length, 83% width
- tensile strength EN 12311-1 - 320 N/50mm length, 270 N/50mm width
- tear propagation resistance EN 12310-1 - 200 N length, 220 N width
- storage - cool and dry
- fire performance EN 13501-1/EN 11925-0 - E

Uses

- for vented pitched roofs
- for installation directly on the thermal insulation or the timber sheathing

Product advantages

- rain-tight
- wind-tight
- 12 weeks UV-stability
- non-glare
- watertight
- easy to cut



Product code	Description	Width (m)	Length (m)	Roll area (m²)	Packaging unit
2MONO230SK	Roof underlay with two way adhesive strips	1.5	50	75	1

Isocell Omega Mono 230 SK Duo Underlay - continued

Guidelines for Installation

(1) Underlay (unsupported)
OMEGA roof underlay is nailed parallel to the eaves with a slight drape and laid and mechanically fixed above the rafters. Vertical overlaps/joins must always lie on a rafter. All overlaps must be bonded with OMEGA Quilli. Horizontal underlay panels can be joined using SK-DUO's adhesion as provided or with OMEGA Quilli (no pressure need be applied).

(2) Underlay (supported)
OMEGA roof underlay is laid on sheathing parallel to the eaves. The blankets are fixed with concealed nails spaced at 10 cm at the ridge-side edges (marks at edge). All overlaps/joins must be bonded with OMEGA Quilli (without applying pressure) or the integrated adhesive strips (applying adequate pressure). For the raintight version (temporary cover) a nail-seal under the counter batten (OMEGA Quilli or OMEGA Nail-Seal Tape) is necessary. The single-sided nail-seal tape must be attached to the roof underlay directly beneath the counter batten.

(3) Eaves construction
An eaves construction with drainage below the gutter is recommended so that excess water can easily drain off. The use of a metal sheet to drain off water is recommended.

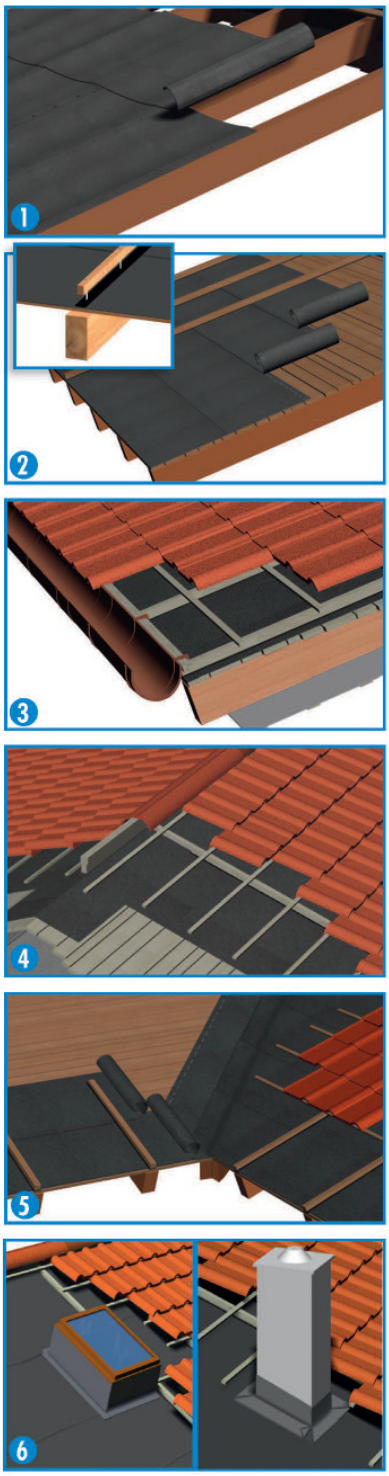
(4) Ridge area
The ridge area is closed directly when covered with OMEGA roof underlay. This provides immediate protection against water penetration. In non-insulated lofts and/or ventilated interior insulation the ridge formation must be made open: the blankets end 3 cm before the ridge apex, counter battens are mounted and a 50 cm wide strip of OMEGA roof underlay must be attached over the roof apex.

(5) Valley formation
The first step in valley formation is to lay a continuous valley blanket.

(6) Penetrations
Sections cut out for roof penetrations (extractor pipes, roof windows, chimneys, etc.) should be kept as small as possible and the ends of the sheets must be fixed so that no rain or snow can penetrate. To achieve a perfect seal the appropriate sealing tapes and sleeves supplied by ISOCELL GmbH must be used.

Ensure that the substrate is clean. The manufacturer can accept no liability for mechanical damage. The applicable regulations and guidelines must be observed.

The roof underlay does not replace roof covering. The roof must be covered during the period of the specified weathering time. Early covering has a positive effect on the resistance to ageing.



Isocell Wind Seal 90gr

Product information
Non-vapour retardant, 3-layer wind infiltration sheeting made from textured polypropylene for installation directly on timber sheathing or thermal insulation. The sheeting protects the construction element and the thermal insulation against the effects of weather and penetration of air from outside.

Product information
- composition - PP fleece membrane
- thickness of 0.59mm
- white
- weight per unit area - 90 gr / m²
- Sd value - 0.02m
- temperature resistance from approx. -40°C to +80°C
- UV resistance - 2 months
- resistance to water penetration EN 1928 - W1
- elongation EN 12311-1 - 70 (-20)% length, 80 (±50)% width
- tensile strength EN 12311-1 - 220 (±30) N/50mm length, 130 (±30) N/50mm width
- tear propagation resistance EN 12310-1 - 100 (±15) N length, 140 (±20) N width
- storage - cool and dry
- fire performance EN 13501-1/EN 11925-0 - E

Product advantages
- high vapour permeability
- wind-tight
- tear-resistant
- soft
- robust

Product code	Description	Width (m)	Length (m)	Roll area (m²)	Packaging unit
2WIND3N	Wind seal 90 gr white	3.0	50	150	1

Guidelines for Installation

Wind Seal is attached to the substrate using a tacker with the printed side facing outwards. There should be approx. 10cm overlap.

AIRSTOP Sealant SPRINT or OMEGA QUILLI should be used for the bonding of Wind Seal panels or at joins. The materials used must be free from dust and grease and the substrates must be dry and supporting. The adhesive has the function of sealant and not of a strong connector.

Isocell Airstop Diva Vapour Barrier - Fabric Reinforced

Product information

A moisture-variable vapour barrier for use in the air-tight layer. The functional membrane changes its diffusion resistance depending on the current humidity. During the winter months room atmosphere is generally dryer. The Sd-value of the vapour barrier increases. This process results in the penetration of only a little water vapour into the construction and/or into the insulation. In summer, when there is sufficient solar insolation, the relative humidity behind the membrane is higher as a result of reverse diffusion. The water molecules are stored in the membrane. The Sd-value sinks, causing more water vapour to escape from the construction and into the rooms, and the building element becomes dryer.

Product information

- non-woven composite made from polymers with filament reinforcement
- weight per unit area EN 1849-2 - 110 gr / m² (±5%)
- temperature resistance from approx. -40°C to +80°C
- storage - cool and dry
- Sd value - ≤ 0.5m - ≥ 30m
- transparent with blue print
- tear strength EN 12311-2 - 350 (±20) N/50mm length, 315 (±20) N/50mm width
- elongation at maximum EN 12311-2 - 20% length, 20% width
- nail tear strength EN 12310-1 - 350 N (-25/+35) length, 375 N (-25/+35) width

Uses

- for internal wall, ceiling and roof
- flat roofs
- construction components with permeable and impermeable outer shell in new constructions and refurbishment

Product advantages

- transparent
- moisture-variable with a very high Sd-value range
- printed cutting line
- tear resistant

Product code	Description	Width (m)	Length (m)	Roll area (m²)	Packaging unit
2DIVAGV	Vapour barrier - fabric reinforced	1.5	50	75	1

Isocell Airstop Diva Vapour Barrier - Fabric Reinforced - continued

Guidelines for Use

Vapour barriers can be used with wall, roof and ceiling construction elements as an air-tight layer and as a vapour retarding layer.

Attachment to the sub-surface

(1) Mechanical attachment of the vapour barrier

The vapour barrier is usually attached transverse to the position of the rafters, joists or beams with the smooth and/or printed side facing the installer. The lengths are fixed mechanically to the construction's timber with approx. 10cm overlap using tacking staples. For metal C-studs a temporary attachment using double-sided adhesive tape or even a spray-on contact adhesive is a possibility.

(2) Airtight adhesion

Airtight adhesion of the joints, connections and penetration points must be carried out using the AIRSTOP adhesion system.

(3) Transverse lathing / mounted at intervals

The laths underneath the vapour barrier have to be mounted before the cellulose is blown in. The centre distance shall be ≤ 30cm. The joints of the vapour barrier also have to be covered by an additional lath. Glued connections and joints that were under tension have to be mechanically secured. The membrane has to be applied without tension.

(4) Longitudinal lathing

When no transverse lathing is used, e.g. if formwork is installed on longitudinal lathing, the vapour barrier must be placed parallel to the rafters or to the construction. The joints must lie on the timber of the construction and be stapled overlapping and sealed using AIRSTOP adhesive tape. Before the insulation is blown in the longitudinal lathing must be mounted to provide mechanical relief of the joints.

For detailed solutions please go to www.isocell.at or ask for our brochure "Air-tightness in Detail".

Isocell FH Forte Vapour Barrier

Product information

A transparent vapour barrier for the airtight layer in roof and wall constructions. In general FH FORTE Fleece Vapour Barrier is suitable for use in building components that are non-vapour retardant on the outside. In constructions that are well sealed on the exterior (e.g. flat roofs, renovations) the low Sd-value guarantees a high degree of drying towards the interior during the summer months. A check should be made in every case by carrying out a calculation (e.g. with WUFI) to ensure the suitability of this option. Siegware staff are happy to offer you technical support. The FH FORTE fleece vapour barrier can also be used for the sub-and-top system in refurbishment.

Product information

- composition - PP fleece and PP film
- weight per unit area EN 1849-2 - 120 gr / m² (±10)
- temperature resistance from approx. -40°C to +80°C
- storage - cool and dry
- Sd value EN 1931 - 2.0 m (±1)
- white transparent
- tear strength EN 12311-2 - > 180 N/50mm length, > 170 N/50mm width
- elongation at maximum EN 12311-2 - > 50% length, > 60% width
- nail tear strength EN 12310-1 - > 150 N length, > 150 N width
- fire performance EN 13501/EN 11925-2 - E

Uses

- for roof and wall constructions
- for exterior vapour-permeable structural elements
- interior walls and ceiling

Product advantages

- transparent
- soft, pliant
- easy to install

Product code	Description	Width (m)	Length (m)	Roll area (m²)	Packaging unit
2FHFVDB	Vapour barrier	1.5	50	75	1
2FHFVDB3	Vapour barrier	3.0	50	150	1

Isocell FH Forte Vapour Barrier - continued

Guidelines for Use

Vapour barriers can used with wall, roof and ceiling construction elements as an airtight layer and as a vapour retarding layer.

Attachment to the sub-surface

(1) Mechanical attachment of the vapour barrier

The vapour barrier is usually attached transverse to the position of the rafters, joists or beams with the smooth and/or printed side facing the installer. The lengths are fixed mechanically to the construction's timber with approx. 10cm overlap using tacking staples. For metal C-studs a temporary attachment using double-sided adhesive tape or even a spray-on contact adhesive is a possibility.

(2) Airtight adhesion

Airtight adhesion of the joints, connections and penetration points must be carried out using the AIRSTOP adhesion system.

(3) Transverse lathing / mounted at intervals

The laths underneath the vapour barrier have to be mounted before the cellulose is blown in. The centre distance shall be less than 40cm. The joints of the vapour barrier also have to be covered by an additional lath. Glued connections and joints that were under tension have to be mechanically secured. The membrane has to be applied without tension.
**Exception: for AIRSTOP DIVA FORTE distance is 30 cm c-to-c*

(4) Longitudinal lathing

When no transverse lathing is used, e.g. if formwork is installed on longitudinal lathing, the vapour barrier must be placed parallel to the rafters or to the construction. The joints must lie on the timber of the construction and be stapled overlapping and sealed using AIRSTOP adhesive tape. Before the insulation is blown in the longitudinal lathing must be mounted to provide mechanical relief of the joints.

For detailed solutions please go to www.isocell.at or ask for our brochure "Air-tightness in Detail".