IKO Rubershield Eco Extra

Technical Data Sheet – Section 2.00

PRODUCT INFORMATION

IKO Rubershield Eco Extra is a 120g/m² Low Resistance (LR) membrane, for use within pitched roofing.

Roll Dimensions	Product Code
1m x 50m	11501000
1.5m x 50m	11502000
1m x 20m	11410020

USE

The product can be used within ventilated and unventilated pitched roofs with a primary waterproofing covering of slates and tiles.

FEATURES & BENEFITS

Multi-Purpose - BBA Certified for use within Unventilated Warm/Cold Roof Constructions.
Breathable - product allows the passage of harmful water vapour.
Weather resistant - product acts as a secondary barrier to liquid water, wind driven snow and debris.
Compliant with BS5534:2014 - BRE tested product
Lightweight & Flexible - ease of transportation and use on-site.
Developed Range - IKO Rubershield product range contains IKO Eaves Protection Strip and IKO Rubershield Joint Tape to provide a complete roofing solution.

PERFORMANCE & COMPOSITION

Composition:	3-layer polypropylene
Form:	Roll
Colour:	Light Brown
Length:	50m/ 20m
Width:	1m/1.5m
Mass/Weight:	120g/m²
Thickness:	0.43mm
Reaction to fire (EN 13501-1:2007):	E
Resistance to water penetration (EN1928):	W1
Water vapour transmission (EN ISO 12572):	0.05m Sd
Tensile Strength (BS EN 12311-1):	LD 200N/50mm^{-1} TD 110N/50mm^{-1}

Elongation (BS EN 12311-1):	LD 60% TD 60%
Tear Resistance (BS EN 12310-1):	LD 80N TD 70N
Wind Loading:	
Taped Lap:	
≤345mm Batten Gauge:	Zones 1-5
≤250mm Batten Gauge:	Zones 1-5
Battened Lap:	
≤345mm Batten Gauge:	Unclassified
≤250mm Batten Gauge:	Zones 1-4

INDEPENDENT ACCREDITATION

CE
EN 13859-1; 2

BBA APPROVAL INSPECTION TESTING CERTIFICATION
AGRÉMENT CERTIFICATE 15/5190

The product carries a Declaration of Performance Certificate, and Agrément Certificate 15/5190.

SPECIFICATION

All construction detailing and specification should conform to UK Building Regulations, relevant Codes of Practice and British Standards.

In particular it is recommended that reference is made to the relevant parts of:

- BS 5534:2014+A2:2018 Slating and tiling for pitched roofs and vertical cladding. Code of practice
- BS 5250:2021 Management of moisture in buildings. Code of practice
- BS 8000-6:2023 Workmanship on construction sites - slating and tiling of roofs and walls. Code of practice

Particular attention should be made to ensure roof design & installations are in line with recommendations within BS 5250:2021, for effective control of moisture.

Where required by building warranty providers i.e. NHBC, LABC, etc. installers and those undertaking specifications should seek guidance from Technical Standards as issued by the provider in addition to the above.

If required, please consult with IKO Technical Services.

SYSTEM COMPONENTS

IKO has a range of essential system components, specifically tailored to facilitate the use of the IKO Rubershield membranes within pitched roofing.

The following represents the system components available as part of that range:

- IKO Rubershield Joint Tape - is a 50mm wide double-sided reinforced tape.
- IKO Eaves Protection Strip - is available as a 330mm or 500mm wide strip of high-performance polyester-based roofing felt to give long term protection at the eaves position of a pitched roof arrangement.
- IKO Flash - is a lead-free flashing system and can be used for abutment flashings and pitched valley linings.

SITE STORAGE

Material should be:

- Checked to ensure that it conforms to the project specification.
- Unloaded and handled with care to avoid damage.
- Stored on end on a firm, clean base protected from direct sunlight.

CONSTRUCTION

Preparation

Before commencing membrane installation work, the following should be checked:

- Roofing underlay packaging should be checked to ensure correct specification against issued design criteria i.e. ventilation requirements, Air & Vapour Control Layer inclusion, required Wind Zone performance, etc.
- Roof structure is structurally sound, secured and braced as specified;
- Timber noggins, lay boards, fascia boards and tilting fillets are installed where required at hips, valleys and other details to support the ends of tiling battens and underlay membrane as required;
- Roof structure is set to the required pitch;
- Pre-existing roof structures should be checked for sharp objects and protrusions which may snag, impede drape or damage the membrane i.e. nails.

Application

Work should commence with the installation of IKO Eaves Protection Strip, laid parallel to the eaves and fixed with clout nails to every rafter 25mm from the top edge. The bottom edge should be dressed and detailed over the fascia, eaves support board and tilt fillets into the externally mounted gutter position, a minimum material overhang of 50mm or to the centre line of the gutter system is desirable. Do not allow the material to sit in direct contact with the gutter as this may obstruct water flow.

Horizontal overlaps must be created to shed water out and down the slope. Roof pitch and overlaps should be set for the rafter pitch and roof construction accordingly.

Roof pitch °	Horizontal lap (mm)		Vertical lap (mm)
	Unsupported	Fully supported	
12.5 - 14	225	150	100
15+	150	150	100

With the black side uppermost, the IKO Pitched Roof Underlay membrane should be laid to overlap the IKO Eaves Protection Strip by the required horizontal lap measurement, and fixed with clout nails to each rafter 25mm in from the top edge of the lower sheet and 25mm from the exposed edge of the upper sheet.

Depending on the Wind Uplift performance required for the stated region, the joint must be restrained, incorporating IKO Rubershield Joint Tape as illustrated within Figure 1 or a battened lap as illustrated within Figure 2.

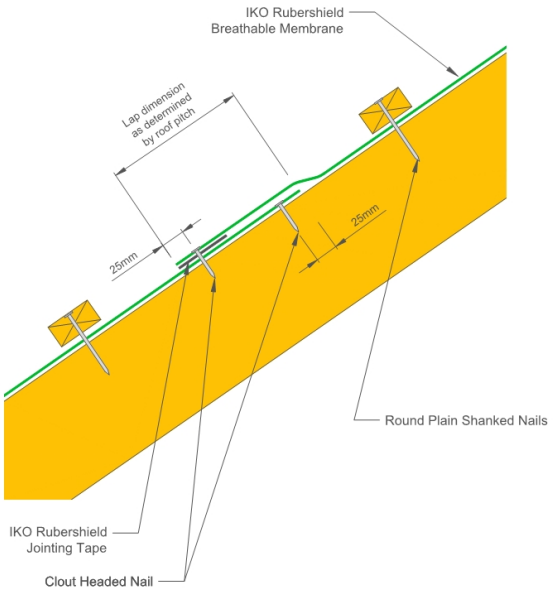

Figure 1: Creating the Overlap – Taped Detail

Figure 2: Creating the Overlap - Battened Overlap Detail

When being used unsupported, the roofing membrane should achieve a nominal 10mm drape in between the support positions in order to prevent contact with the underside of the tiles, thus avoiding the transfer of wind loading to the primary roof covering. The drape also serves as drainage for water within the batten space to the eaves position and into the gutter. Fully supported membranes i.e. installed over sarking boards must incorporate counter battens.

The ridge position must be ventilated, and the top edge of the underlay should be set, laid and fixed down with clout nails to each rafter at dimensions set by the ridge system manufacturer. The membrane should not impede or restrict the required/ specified air flow requirement.

At verges, the underlay should be laid or neatly cut onto the outer skin of the wall or onto the flying rafters in the case of overhanging verges.

Fixing of subsequent materials such as verge cloak material, verge tiles or dry verge systems should follow the guidance issued by the respective system provider.

At hip positions, the main underlay should be overlapped across the hip by 150mm. On completion of adjacent sloped areas, a separate 600mm piece of membrane should be laid longitudinally for the length of the hip and secured to each rafter 25mm in from the edge.

At valley positions, lay boards to support valley linings should be fixed beneath the underlay in between the rafters, finishing flush with the tops of the rafters.

When using lead valleys, the underlay from adjacent slopes should be cut to the rake of the valley and lap onto the valley lining by no less than 50mm but should not go beyond the longitudinal tilt fillet.

When using proprietary valley systems such as GRP linings, the guidance of the respective system manufacturer should be sought.

On interleaved valleys, a continuous 600mm wide strip of underlay should be laid down the valley, allowing the underlay from adjacent slopes to overlap by no less than 300mm.

At abutments, roofing underlay should be dressed and cut neatly. Membranes should be turned up by a 100mm minimum behind roof flashings, and sealed to adjacent prepared structure with the IKO Rubershield Joint Tape.

Any penetrations through the underlay should be protected from water ingress using IKO Rubershield Joint Tape or detailed to include proprietary seals specified and installed in accordance with the respective manufacturer's guidelines.

More comprehensive installation details can be sourced from the product web page at www.ikogroup.co.uk

COMPLETION

Completed work should be protected from potential damage by subsequent site work.

The product is designed as a secondary barrier, serving the underside of the primary roof covering. It should not be considered as a primary waterproofing layer.

Good roofing practice is to install the primary waterproof covering i.e. tiling, slates as soon as practically possible and within 2 weeks of membrane installation; only then should the roof structure be considered as fully protected from the external environment.

The NFRC Guidance Document 'Installing Pitched Roofs in accordance with BS5534' states:

- BS 5534:2014+A2:2018 recommends that you should always use underlay beneath tiles and slates to provide a continuous barrier against wind uplift and as a secondary barrier against wind-driven rain, snow or dust. In fact, underlay takes on about 50% of a roof covering's total wind load.

- The underlay should provide temporary weather protection before slates and tiles are installed. However, if there is persistent heavy rainfall or a severe freeze/thaw, underlays should not be exposed for more than a few days. Exposure to UV light can also lead to a premature failure of the underlay. If leaving the underlay exposed is unavoidable, then protect it with a tarpaulin.

POST COMPLETION

Building owners and occupiers should be aware of the measures required to ensure that the product functions as intended when installed as part of a complete pitched roof system. Common issues to roof spaces and roof voids in the course of a buildings life cycle often relate to condensation, and it is important that building users, owners and custodians ensure that all possible risks are minimised or eradicated by adopting good practice in building operation, follow on maintenance and future building service installations.

The following additional measures are not exhaustive, but must be considered as part of that approach to good practice:

- All penetrations into the roof space from habitable spaces must be properly sealed, and loft hatches made convection tight by, for example, using a compressible draught seal.
- All water tanks in the loft space should be covered and all pipe work lagged.
- Services passing through and/or into the roof space from inside and outside must be correctly sealed.
- Appropriate measures must be taken to limit the rate of water vapour transfer into the loft space from the dwelling below. Appropriate ventilation rates and approaches to restrict the effects of high humidity areas such as mechanical extraction from bathrooms, etc. should be provided in accordance with UK Building regulations and relevant British Standards.

DURABILITY

When installed and conditions are maintained as per IKO literature, relevant Codes of Practice and UK Building Regulations, the product will remain unaffected by normal conditions found within the roof space and will have a life comparable to that of traditional roof tile underlay.

OTHER RELEVENT DOCUMENTATION

Where applicable, Material Safety Data Sheets (MSDS), Declaration of Performances (DoPs), and Third-Party Accreditations are available to view and download from the IKO website Resource Centre:
https://ikogroup.co.uk/resource-centre/

PRODUCT SUPPORT

Should you have any queries in relation to this product please contact one of the relevant teams below:

Technical technical.ab@iko.com
- For Reinforced Bitumen Membranes, IKOpro and Flexia Liquid Applied Waterproofing, Pitched Roofing, IKO Hyload Structural Waterproofing

technical.ma@iko.com
- For Mastic Asphalt

technical.cc@iko.com
- For Single Ply and Permatec Hot Melt

Sales sales.uk@iko.com
Marketing getintouch.uk@iko.com

COMPANY ACCREDITATIONS

IKO PLC, a roofing, waterproofing, and insulation company, holds various accreditations that demonstrate its commitment to quality, safety, and environmental responsibility. These include ISO certifications for quality management and occupational health and safety, British Board of Agrément (BBA) accreditations for specific products and systems, and Factory Mutual (FM) approval for certain roofing systems.

All our manufacturing plants have BS EN ISO 9001, BS EN ISO 14001, BS EN ISO 45001, and BES 6001 accreditation, meaning we match the quality and sustainability requirements and use responsibly sourced raw materials in our production. We also re-use by-products from manufacture, wrap products in minimal packaging, and we employ a streamlined transportation network.

IKO is also a leading member of all relevant trade associations such as NFRC, BFRA, SPRA, LRWA, MAC, RSTA, BJA and LCRIG having technical experts within the technical and standards committees to help us get informed first-hand about recent updates on technical requirements for the design and installation of roofing, waterproofing, road and bridge maintenance industry products.

DISCLAIMER

Whilst every precaution is taken to ensure that the information given in this literature is correct and up-to-date it is not intended to form part of any contract or give rise to any collateral liability, which is hereby specifically excluded.

IKO reserves the right to amend and/or withdraw this document without notice.

Intending purchasers of our materials should therefore verify with the company whether any changes in our specification, application details, withdrawals or otherwise have taken place since this literature was published.