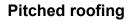
# **SECTION 9.2**





# **Technical Data Sheet**

February 2019

# **IKO SLATE**

#### **PRODUCT INFORMATION**

**IKO Slate** is a composite roof tile manufactured from mineral reinforced, 99% recycled and re-engineered materials, manufactured to create the same aesthetic qualities as natural slate.

**IKO Slate Crown Ridge Slates** are the perfect way to finish the roof. Having the same slate surface patterning as the regular IKO Slate, they have a flexible centre portion which allows them to be readily formed to the ridge profile.

Colour	Product Code
Grey Slate	57000002
Grey Crown Slate	57000006



# <u>USE</u>

**IKO Slates** are satisfactory for use as a roof covering on conventional ventilated and unventilated pitched roofs with a rafter pitch of 22.5° and over.

The ridge detailing utilises the system specific **IKO Slate Crown Ridge**.

On ventilated roof configurations, the system can utilise **IKO Armourvent Ridge Ventilation Strips**.

# FEATURES & BENEFITS

**Lightweight** - around 80% lighter than a traditional slate of the same size.

**Ease of use -** Integral spacer nibs to assist with setting out the slates and can be cut with a fine toothed handsaw.

**Convenience -** Easy to carry packs with unique carryhandle straps to make loading and off-loading as convenient as possible.

**Strength** - Resistant to breakages, making it easier to handle and install.

**Robust** - IKO Slate is resistant to fungicidal and microbial growth as well as airborne chemicals and pollutants.

**Fire performance -** product carries an S AA Fire Rating under BS 476: Part 3 2004.

#### PERFORMANCE & COMPOSITION

**IKO Slate Composition:** Colour: **General Dimension Data** Slate Length: Slate Width: Slate Weight: Slate Thickness: Slates per bundle: **Nominal Bundle Weight: IKO Crown Ridge Slate Composition:** Colour: **General Dimension Data** Slate Length: Slate Width (when flat): Slate Weight: Slate Thickness: Slates per bundle:

Plastic/Rubber Grey 425mm 286mm 0.57Kg 7mm 27 15.5kg

Plastic/Rubber Grey

425mm 286mm 0.45Kg 6.4mm 20 9kg

Performance Data External Fire Exposure (BS 476:Pt3): Service Life:

**Nominal Bundle Weight:** 

S AA In excess of 20 years

# **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+A1:2015 Slating and tiling for pitched roofs and vertical cladding - Code of practice BS 5250:2011 Code of practice for control of

condensation in buildings BS 8000-6:2013 Workmanship on building sites - Part

6: Code of practice for slating and tiling of roofs and walls

Particular attention should be made to ensure roof installations are ventilated as per the recommendations of BS 5250:2011.

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 have a range of essential system components, specifically tailored to facilitate the use of the IKO Slate system within pitched roofing.

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

**IKO Armourvent Multi/Multi Plus** - is a profiled ventilation strip for use at the ridge position in a ventilated pitched roof arrangement.

**IKO Flash** - a lead-free flashing system, which is a mixture of modified bitumen and additives reinforced with an aluminium mesh.

**IKO Stickall Mastic** - is a bituminous mastic sealant, typically used for the pointing of lead free flashings.

# SITE STORAGE

Material should be checked to ensure that it conforms to the project specification, and should be unloaded and handled with care to avoid damage.

Storage must be on a level base in dry conditions at temperatures above 0°C, under cover and away from the possibility of damage.

#### **CONSTRUCTION**

#### PRIOR TO COMMENCEMENT

Application must always follow good, safe working practice.

Prior to commencing works, it is advisable to consult Health and Safety Executive Guidance documents such as HSG33 'Health and Safety in Roof Work', irrespective of levels of competence, to ensure all works are being planned and undertaken in a safe, pragmatic manner.

#### PREPARATION

Before commencing installation work, the following should be checked.

- Materials are of the correct specification against issued design criteria;

- The slates are from the same batch - where this is not possible i.e. large roof areas, carefully mix different batches to create a consistent appearance;

- The roof structure is structurally sound, secured and braced;

- Roof structure is set to the required pitch; IKO Slates should not be installed below 22.5°;

- Pre-existing roof structures should be checked for sharp objects and protrusions which may impede or damage the roof shingle system i.e. nails.

- Pitched roof construction must include a suitable pitched roof underlay.

#### INSTALLATION

When installing IKO Slate it important to identify the exposure of the site, as indicated within the guidance of BS 5534:2014. Installers should also obtain an accurate pitch for the roof, as these factors will determine both the batten gauge and head lap provision.

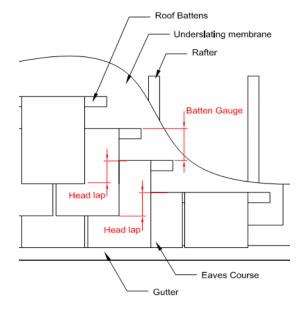


Figure 1 – Determining head lap and batten gauge

The first course of IKO Slate, or eaves course, will be formed from cut slates. When determining the length of this eaves course, installers should allow for a minimum 50mm overhang into the gutter and consider the required head lap for the roof pitch.

The positioning of the first batten and all subsequent battens should be determined using the tables below.

All battens should be graded and fixed, as per the requirements of BS5534:2014.

Moderate Exposure - <56.5l/m2 (driving rain per spell)					
Pitch (°)	Lap (mm)	Batten Gauge (mm)	Slates per m2	Weight (kg/m2)	
45	55	186	19	10.8	
40	60	183	19	10.8	
35	67	180	19	10.8	
30	77	175	20	11.4	
27.5	84	171	20	11.4	
25	92	167	21	11.9	
22.5	100	163	21	11.9	

Severe Exposure - >56.5l/m2 (driving rain per spell)					
Pitch (°)	Lap (mm)	Batten Gauge (mm)	Slates per m2	Weight (kg/m2)	
45	70	178	20	11.4	
40	76	175	20	11.4	
35	85	170	21	11.9	
30	98	164	21	11.9	
27.5	106	160	22	12.5	
25	116	155	22	12.5	
22.5	128	149	23	13.1	

#### **GENERAL FIXING OF IKO SLATES**

IKO Slate installations should be laid with the same traditional staggered arrangement of natural slate. The system does not have slate and a half, so alternate courses will start with a half slate to provide this staggered pattern. You will note that each centre nail penetrates the top edge of the preceding course, resulting in a 4 positions of fixing which allows the use of half slates in such areas of detailing.

Once the battens are set and fixed, the cut eaves course should be fixed with its riven face down, with the underside supported on the raised fascia edge. Nail this eaves course with its top edge flush with the top edge of the first batten using 25mm large headed copper or aluminium clout nails.

The first course of full IKO Slate should be installed break bonded over the starter course, with their lower edges flush. Additionally, unlike natural slate, the top edge of the IKO Slate should be flush with top edge of the second corresponding batten. They are centre nailed into the first batten, through the head of the starter course slates using 30mm large headed copper or aluminium clout nails.

All subsequent full courses of IKO Slates are set and centre nailed in the same manner into the corresponding battens, using the spacer nibs on their longest sides to ensure consistent gaps between slates (Figure 2).

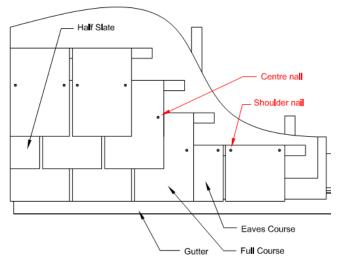


Figure 2 – Fixing the IKO Slate

# GENERAL FIXING OF IKO SLATE CROWN RIDGES

The IKO Slate Crown Ridges are utilised at both the hips and ridge positions. They are sequentially laid, with at least half of each units length lost to the overlap. The units are fixed through the underlying IKO Slate, and must locate into the timber battens beneath. This will result in the need to use longer large headed copper or aluminium clout nails, approximately 50mm long.

Linear Coverage					
Linear run (m)	Unit Lap (mm)	Exposed (mm)	Number of Packs	Weight (kg/Lm)	
4	225	200	1	2.25	
8	225	200	2	2.25	
12	225	200	3	2.25	

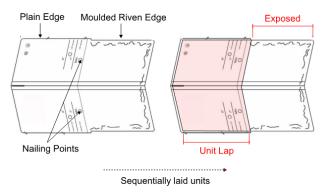


Figure 3 – IKO Slate Crown Ridge

#### FURTHER GUIDANCE

An in depth and fully illustrated installation manual is available can be found on the IKO Slate product webpage at www.ikogroup.co.uk

#### POST COMPLETION

#### DURABILITY

When installed and conditions are maintained as per IKO literature, relevant Codes of Practice and UK Building Regulations, the system will have a service life in excess of 20 years.

#### 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 reserve 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 issued.