Installation Guide



V1.3 (dec 2023)

Product Facts

The INCA WFS net® is a type-approved fire sealing system for air gaps in roof eaves and façades. It is designed for applications where airflow is initially needed but a fully sealed (EI) construction is required in case of a fire. It is suitable for use in ventilated roof eaves and behind façade cladding.

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Function

The INCA WFS net® provides maximum functionality without the risk of fire spreading above the created fire barrier. In case of fire, flames, sparks and heat get trapped in the intumescent net, which starts to expand at 150°C (expanding 50 times its thickness) and quickly seals the net openings to prevent fire spread.



Preparation Before Installation

The INCA WFS net® is easy to install. It consists of a high-performance intumescent metal net combined with an aluminum insect net. To install the system, you need the following:



Personal Protective Equipment

• Protective gloves

Necessary Tools

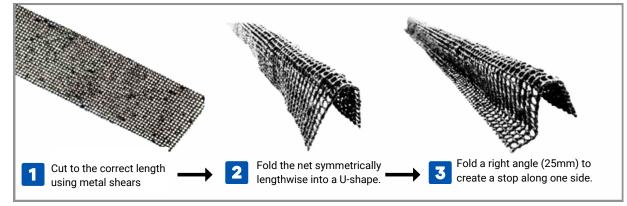
- Metal shears, scissors
- Screwdriver
- Staple gun

Required Fasteners

- Corrosion-free wood screws (min. class C2), 3.5 x 40mm
- Corrosion-free wood screws (min. class C2), 3.5 x 20mm
- Galvanized or stainless steel wide-crown staples, 8mm

Measuring, Cutting, and Folding the Fire Net

Measure the space between the roof trusses or between battens on the façade where the INCA WFS net® fire net will be installed. Use protective gloves. Cut the fire net to the correct length with metal shears.



Note: The fire net must not be painted as this reduces airflow.

Documenting the Installation

It is crucial that the installation is done according to this guide to meet type approval and Elclassification standards. Document the installation with photos, noting the fasteners used, measurements, date, signature, and the batch number of the fire net. This ensures the functionality of the fire protection and facilitates performance inspection.



Installation Guide - Ventilated Eaves

In accordance with KIWA type approval 1818

Criteria

1 The underlying beam must be at least 45 x 95mm.

2 Air gap: 25-45mm.

Important Points

Ensure the fire net is folded and shaped into a U-form and goes 40-50mm into the air gap. Ensure the fire net fits tightly without gaps at the ends against the roof trusses.

Installation of the Fire Net Against the Underlying Beam

- 1 Insert the folded fire net into the air gap, ensuring it goes 40-50mm into the air gap.
- 2 Fold down the fire net 25mm over the underlying beam
- 3 Secure the fire net to the beam using corrosion-free wood screws (min. class C2), 3.5 x 40mm. The maximum distance between fasteners is 300mm. The distance from the net's edges to the first fastener is 15-20mm.

Installation of the fire net against the roof sheathing

1 Attach the INCA WFS net® to the roof sheathing. Use corrosion-free wood screws (minimum class C2), 3.5 x 20mm. The maximum distance between fasteners should be 300mm. The distance from the net's edges to the first fastener should be 15-20mm.

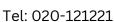
Installation of the Insect Net Behind the Fire Net

The insect net is attached to the beam and the roof sheathing/mating surface. Work carefully to avoid damaging the insect net. Use 8mm wide-crown staples, galvanized or stainless steel. The maximum distance between staples is 200mm. Ensure the net is stretched during installation.

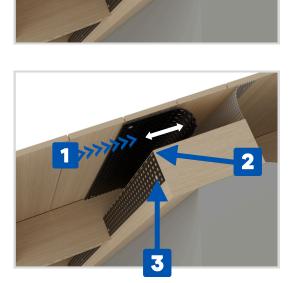
Why Use an Insect Net Above the Fire Net? The insect net creates a protection zone against falling debris and other materials above the INCA WFS net®, without the risk of fire spreading above the created fire barrier.

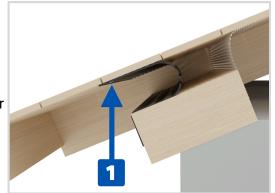
FLAMEGUARD

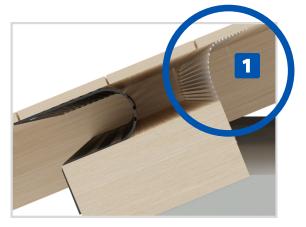
FIRE PROTECTION













Installation Guide - Retrofit installation, Vent. Eaves nca WFS net

In accordance with KIWA type approval 1818

Post-Installation/Renovation in Ventilted Eaves

Post-installation or retrofit is possible if the sheathing boards are already in place.

Criteria

1 The underlying beam must be at least 45 x 95mm.

Air gap: 25-45mm.

Important

Ensure the fire net is folded and shaped into a U-form and goes 40-50mm into the air gap. Ensure the fire net fits tightly without gaps at the ends against the roof trusses.

Installation of the Aluminum Insect Net

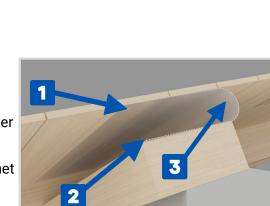
- Attach the insect net to the roof sheathing with a staple gun. Use 8mm wide-crown staples, galvanized or stainless steel. Place the staples about 1 cm into the net, with 6-10 staples per meter.
- Secure the insect net to the top in the same way, or fold the net down 1 cm over the edge for easier fastening.
- Gently press the net into the air gap with your fingers or a soft tool, ensuring it forms the correct shape as illustrated.

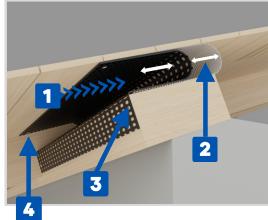
Installation of the INCA WFS net® Fire Net

Now install the folded and U-shaped fire net, ensuring it goes 40-50mm into the air gap.

Work carefully to avoid damaging the insect net.

- Ensure there is at least a 30 mm margin/protection zone between the insect net and the fire net.
- Fold down the fire net 25mm over the underlying nogging or header. Secure with corrosion-free wood screws (min. class C2), 3.5 x 40mm. The maximum distance between fasteners is 300mm. The distance from the net's edges to the first fastener is 15-20mm.
- Then secure the fire net to the roof sheathing with corrosionfree wood screws (min. class C2), 3.5 x 20mm. The maximum distance between fasteners is 300mm. The distance from the net's edges to the first fastener is 15-20mm.











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Type Approval 1818 issued by KIWA

š kiwa **TYPGODKÄNNANDE 1818** MED BESLUT OM TILLVERKNINGSKONTROLL Innehavare: FG Sweden AB Box 2048, 135 02 Tyresö, Stockholms län. Tel: +46 (0)8-712 52 00 E-post: info@flameguard.se Hemsida: www.flameguard.se Brandtätningssystem för luftspalter i fasad och takfot Produktbeskrivning Brandtätningssystemet består av ett brandsvällande metallnät i kombination med ett insektsnät av aluminium. Systemet säkerställer luftspaltens nödvändiga luftrörelser samtidigt som insektsnätet skapar skyddszon mot tätningsmaterialet. Vid 150°C börjar det brandsvällande materialet expandera (50 gånger sin egen tjocklek) och förseglar snabbt metallnätets öppningar samt förhindrar att omfattande brandspridning kan inträffa. Avsedd användning Förhindra brand- och brandgasspridning i luftspalter bakom fasadbeklädnaden och i den ventilerade tak foten. Omfattning INCA WFS Net® by Flameguard Godkännande Produkterna uppfyller kraven i Plan- och Bygglagens (PBL) 8 kap 4 § avseende Byggnadsverks tekniska egenskaper i fråga om 2. säkerhet i händelse av brand såväl som 4. Säkerhet vid användning, under förutsättning att det som anges i detta godkännande följs. Produkterna godkänns i enlighet med följande avsnitt i Boverkets byggregler (BBR): Byggprodukter med bedömda egenskaper 1:4 Brandteknisk klass* EI 45 / E 60 5:231 Vinds- och undertaksutrymmen** 5:535 Ytterväggar *** 5:55 * Klassificeringen gäller för brandmotstånd från undersidan. Den svällande tätningen måste vara mot den exponerade sida. Max höjd på luftspalt: 45 mm. ** Gäller endast egenskapen "Begränsa risken för brandspridning från fönster via takfot till vind". *** Gäller egenskapen "Begränsa brandspridningen i luftspalten i fasadkonstruktionen". Märkning Produkten/förpackningen bör inte märkas med brandklass, eftersom den inte har något brandmotstånd förrän den är monterad. Märkning ska göras på produkten eller, om det finns särskilda skäl, på förpackningen eller följesedeln. Märkning ska innehålla följande information: Innehavare: FG Sweden AB INCA WFS Net® by Flameguard **Kiwa Certification AB** Produktensnamn, och eventuellt artikelnummer: Campus Gräsvik 1 SE-371 75 Karlskrot Tillverkningsställe: Berört tillverkningsställe (t. ex. åååå-mm-dd eller batchnummer) Tillverkningsår mån eller annan spårbarhet till tillverkningen: Boverkets inregistrerade varumärke nr 241 217: Tel +46 (0)455-30 56 00 Certifieringsorgan: Kiwa Certification AB (3) Fax +46 (0)455-104 36 se.bygg@kiwa.com www.kiwa.se Ackrediteringsnummer: 1913 Typgodkännande: TG 1818 NEDAC Kontrollorgan: Kiwa Certification AB WW 2 Tillhörande handling, t.ex. monteringsanvisning eller dylik, ska märkas med uppgift om brandteknisk REDITE klass med referens till standard: EI 45/E 60 enligt EN 13501-2. Accred. no. 1 Certification Products ISO/IEC 170



Technical Support

Fire protection can often be complicated, and no construction project is the same. We are always ready to help with technical support, advice, and information. We have extensive experience in preventive fire protection work in connection with new construction and renovations and place great importance on understanding and interpreting your needs and conditions.

