



INCA WFS^{net}[®]

A new strategy for wildfire defense

INCA WFS net[®] introduces a fundamentally new approach to wildfire defense. When exposed to intense heat, the net rapidly expands and closes its structure, creating a protective barrier against the advancing fire front. With a pre-installed SelfGuarding solution, the system remains discreetly prepared and can be deployed into its protective position immediately when needed. WFS net[®] takes the heat at the fire front — creating a safer operational space for firefighters to work behind the barrier.



WFS net TAKES THE HEAT

Deployed at the firefront to reduce radiant heat, stop embers and slow fire spread



YOU STAY PROTECTED

Firefighters work behind the barrier in safer conditions with reduced exposure and greater control



A NEW WAY FORWARD

WFS net[®] enables a proactive, coordinated approach to wildfire management — saving time, resources and lives



SELFGUARDING READY

When pre-installed as part of INCA's SelfGuarding solution, the barrier is ready and can be deployed immediately when protection is needed most.

WFS net[®] creates a protected operational space —
so you can focus on what matters most.



REDUCES RADIANT
HEAT AND EMBERS



BREATHABLE — ALLOWS
AIR AND WATER THROUGH



FAST TO DEPLOY AND
EASY TO HANDLE



DURABLE AND BUILT FOR
HARSH CONDITIONS



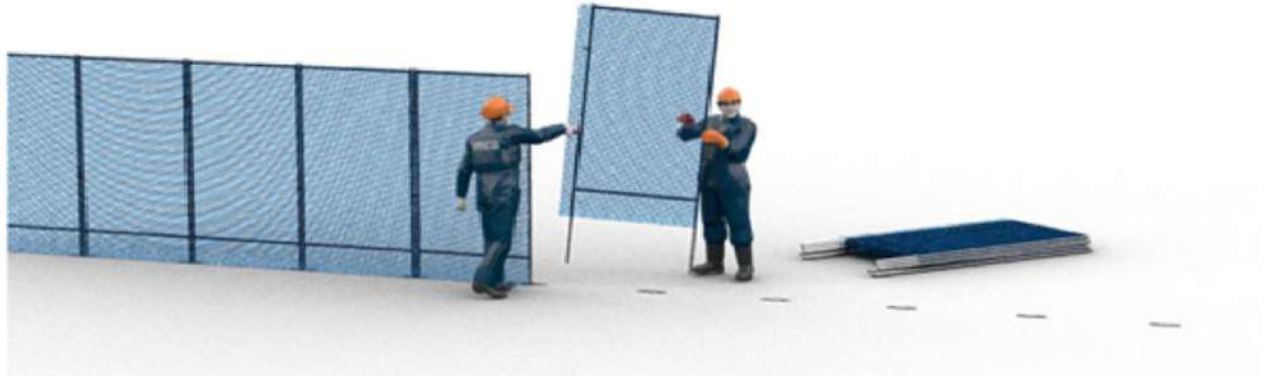
REUSABLE AND
RECYCLABLE



MINIMAL ENVIRONMENTAL
FOOTPRINT

INCA WFS net®

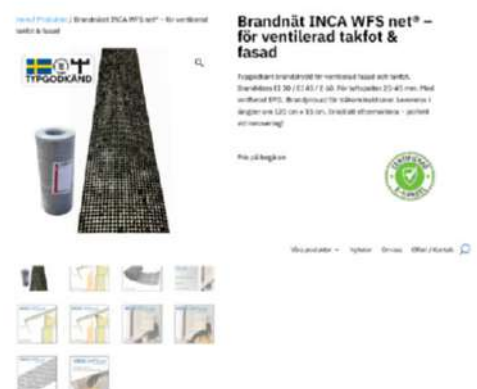
Developed to Halt and Suppress Fires



The **WFS net®** consists of a metal- or fiber- based substrate coated with an intumescent coating. The expansion starts at approximately 120°C (248°F) and can swell to 30–50 times its original thickness depending on the product grade.

The **WFS net®** is extremely **Flexible** and **Multifunctional** and can be used to protect from Wildfires outdoor, Battery Compartments, Steel, Wood and Wooden Structures, Tree Trunks, Attics, Facades, Foam Insulation and many other applications. Depending on the application and installation method, the **WFS net®** can provide fire resistance for up to two hours and withstand temperatures exceeding 1,100°C (2,012°F). For applications designed to prevent fire spread in peatlands, the resistance time can be significantly longer.

Below are examples of how customers market the solution eaves and facades in buildings in Sweden and Finland, together with the various environmental- and sustainability certifications and assessments that have been presented:



WFS net® - Technical Specification (Standard)

The **WFS net®** can be delivered in accordance with the customers needs and specifications.

The multi functional product, **WFS net®**, is a coated net/mesh of metal or fiber material. As standard the substrate quality is welded hot-galvanized steel:



Mesh size: 0,5~0,8mm wire diameter
Mesh eye – steel wire: 5~7 mm
Width: 120 cm
Length: Customer defined. (Standard: 10 M per Roll)
Weight - coated: 2,3 ~ 2,7 kg per m².
LOI (Limited Oxygen Index): >50
Expansion Rate: ~50 times
UV resistant.

Durability: ASTM G154 and climate tested according to EOTA TR 024:2019-08, 2.2.5 "Testing reactive products intended for type Y2 applications", Table 2A "Exposure condition cycle for reactive products without temperature restriction" has been performed for 3 weeks. No visual changes concerning appearance or expansion ability of the fire protection nets was observed.

Disposal and Environment

Consumed **WFS net®** is recovered and sorted as metal or as construction waste. The product does not give rise to hazardous waste during use/construction or production.

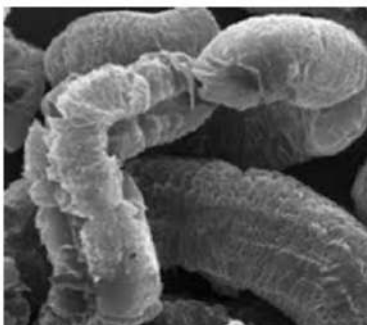
The used product is not classified as hazardous waste during demolition/dismantling as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.120

Toxic Gasses and Smoke during Expansion

During expansion watersteam and CO₂ are released – Self extinguishing

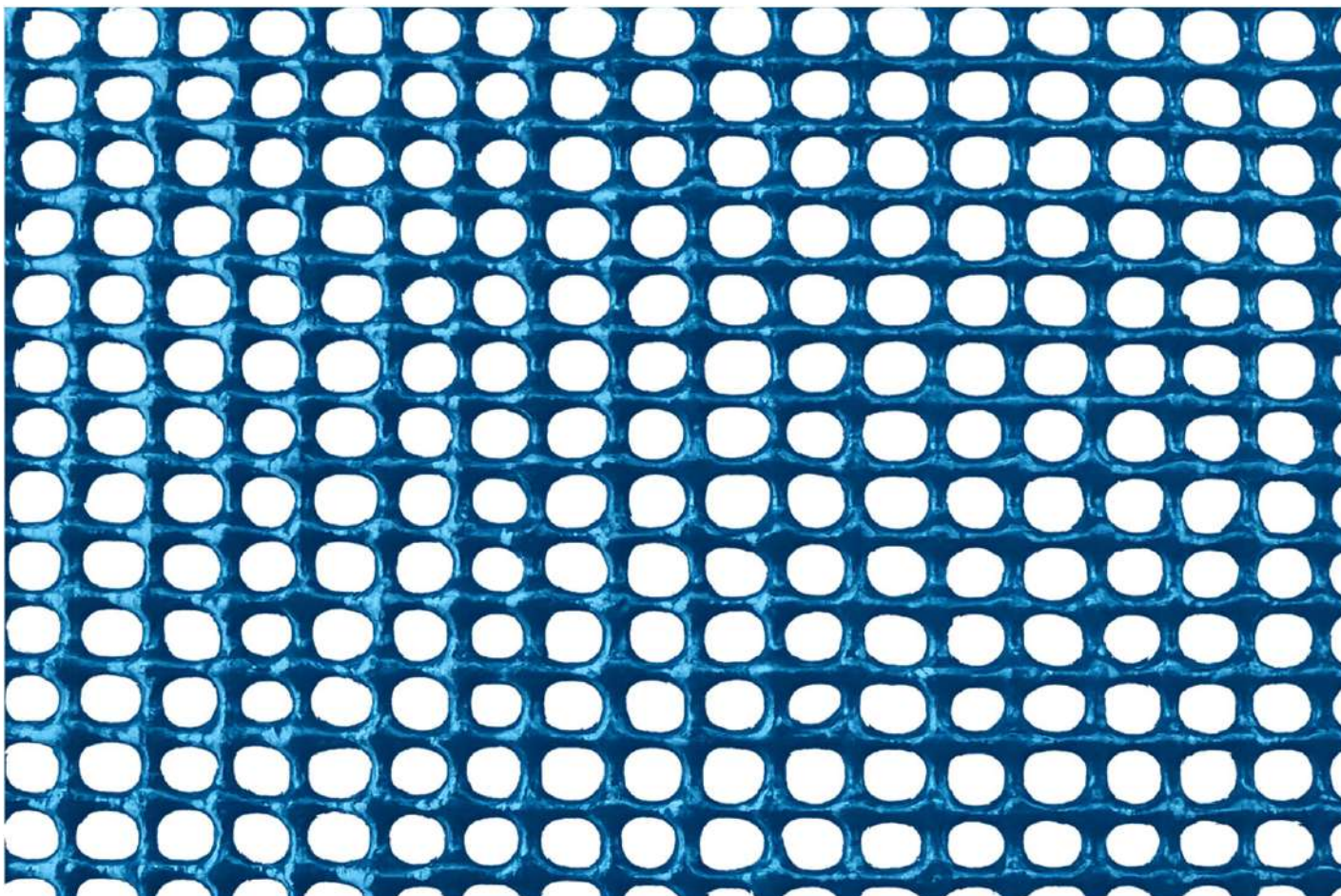
The expansion is endothermic - no combustion - leads to cooler smoke gases!

The toxic gases formed during the expansion have been tested by a third-party research institute according to ASTM E662 and BSS7239 with the following results:



- HCL : 0 ppm
- HF : 0 ppm
- SO₂ : 25 ppm
- NOx : 15 ppm
- HCXN : 17 ppm
- CO : 160 ppm





inca | **WFS[®]**

info@incatech.se

inca

International
Carbide Technology AB

+46 (0)70-543 75 28