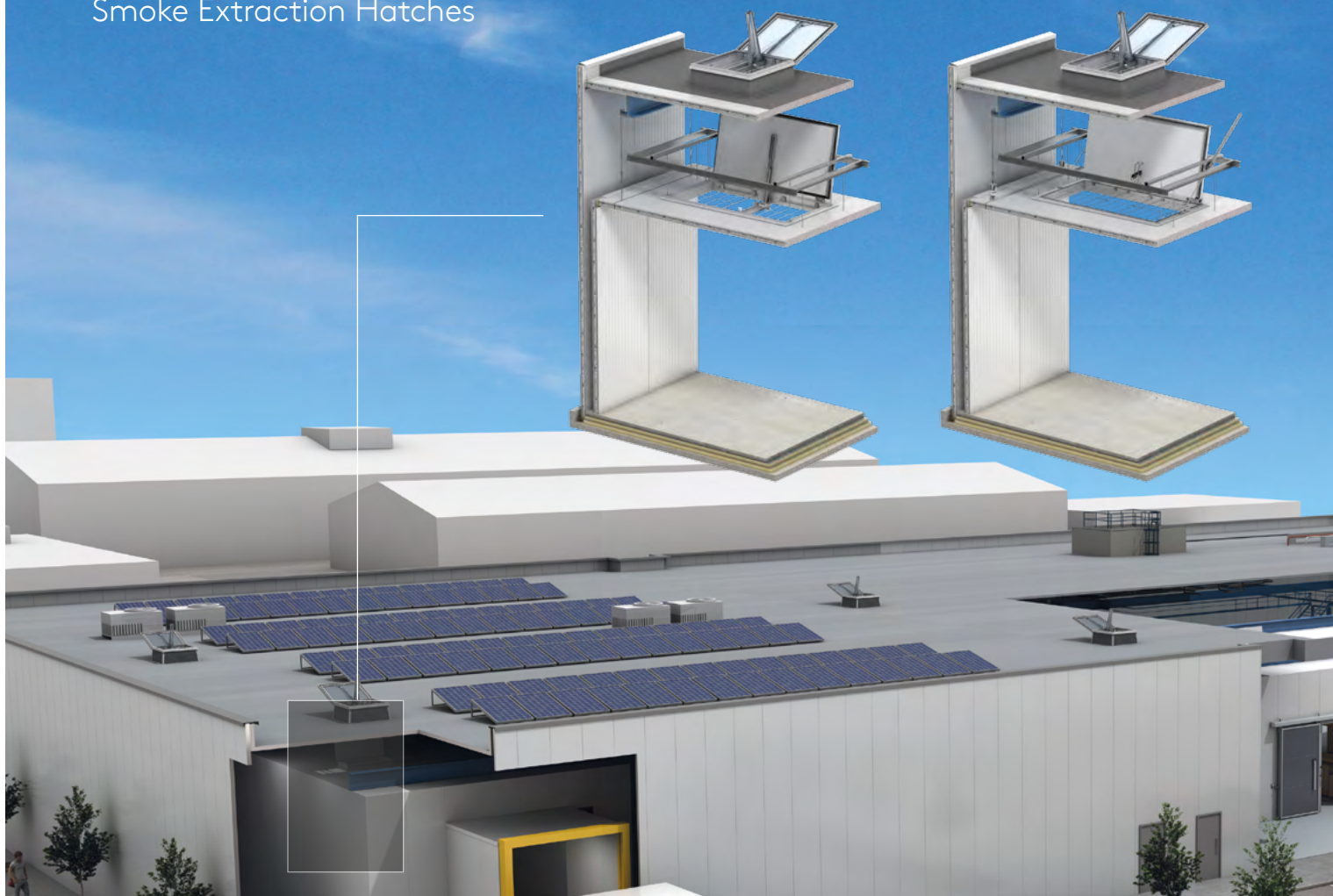


Insulated Sandwich Panels
Export

Isofeu Smoke Extraction Hatch for sandwich panels

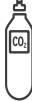
Smoke Extraction Hatches



isocab
By Kingspan

Extraction smoke hatches play a vital role in building fire safety. Designed to remove hot gases and smoke, they help maintain acceptable evacuation conditions and facilitate emergency response efforts.

The ISOFEU solutions offered by Isocab By Kingspan are subject to strict standards. When properly designed and maintained, they are a key component of a building's fire safety strategy and meet the following technical requirements:

Air Tightness	Hygiene	Pneumatics	Natural smoke exhaust	Maintenance	Certification	Safety
						
Enhanced airtightness and waterproofing to maintain controlled environmental conditions.	Corrosion-resistant, hygienic materials compatible systems designed for demanding environments.	A triggers pneumatic reliable with cylinder(s) double-acting (especially in the event of a power failure).	Natural smoke and heat extraction that allows for maintenance, and limits damage to material and human resources.	Designed for safe, quick and efficient access during maintenance.	CE marked and tested in accordance with EN 12101-2: 2003 standards.	Fastening solutions of the structure.

By ensuring effective smoke extraction, ISOFEU smoke hatches indirectly contribute to preserving product quality, ensuring personnel safety, and maintaining hygiene standards.

Technical specifications met by ISOFEU Isocab By Kingspan smoke hatches

Characteristics according to EN 12101-2: 2003		Value
Effective area (actual smoke exhaust area) – airflow performance (physical area of the opening when the damper is deployed)	EN12101-2, § 6	Aa = 1.42m ²
Geometric area SGO	EN12101-2, § 6	2m ²
Reliability (number of cycles, opening, closing)	EN12101-2, § 7.1	Re 300
Operation (opening – closing from the ground)	EN12101-2, § 4.3	Type B
Downward load (in N/m ²)	EN12101-2, § 7.2 et EN 1873, § 5.4.2	SL 200
Uplift load (mechanism's ability to open at very low temperatures) (uplift load in N/m ²)	EN12101-2, § 7.4 et EN 1873, § 5.4.1	WL 500
Temperature rise resistance test (in °C)	EN12101-2, § 4.1	B 300
Impact resistance	EN 1873, § 5.4.3.2	SB 1200

* DENFCs are tested to withstand humidity, corrosion, UV exposure, and aging of seals, hoses, and cylinders.

Two Isofeu solutions tailored to every environment

The hatches are equipped with cylinders, pull or push mechanisms depending on their intended use. They have a usable surface area of 1000mm x 2000mm and a 100mm-thick door panel.

The finish of the door panel and its protective grill can be adapted to the environment in which the hatches will be installed:

VP1 Hatch



VT2 Hatch



	Indoor environments					
	CPI1	CPI2	CPI3	CPI4	CPI5	
	- Non-aggressive atmosphere - Routine maintenance - Low humidity	- Non-aggressive environment - Routine maintenance - Medium humidity	- Non-aggressive environment - Non-intensive cleaning - High humidity	- Slightly aggressive environment - Non-intensive cleaning - High humidity	- Aggressive environment - Intensive cleaning - Very high humidity	- Very aggressive environment - Very intensive cleaning - Saturated humidity
VP1 hatch, CLEANsafe 25, galvanized grill						
VT2 hatch, CLEANsafe 25, galvanized grill						
VP1 hatch, CLEANsafe PET, 304L stainless steel grill						
VT2 hatch, CLEANsafe PET, 304L stainless steel grill						
VT2 hatch, CLEANsafe 304L stainless steel, 304L stainless steel grill						
VT2 access panel, CLEANsafe 316L stainless steel PET 150+, 316L stainless steel grill						Upon request
VT2 hatch, CLEANsafe 316L stainless steel, 316L stainless steel grill						

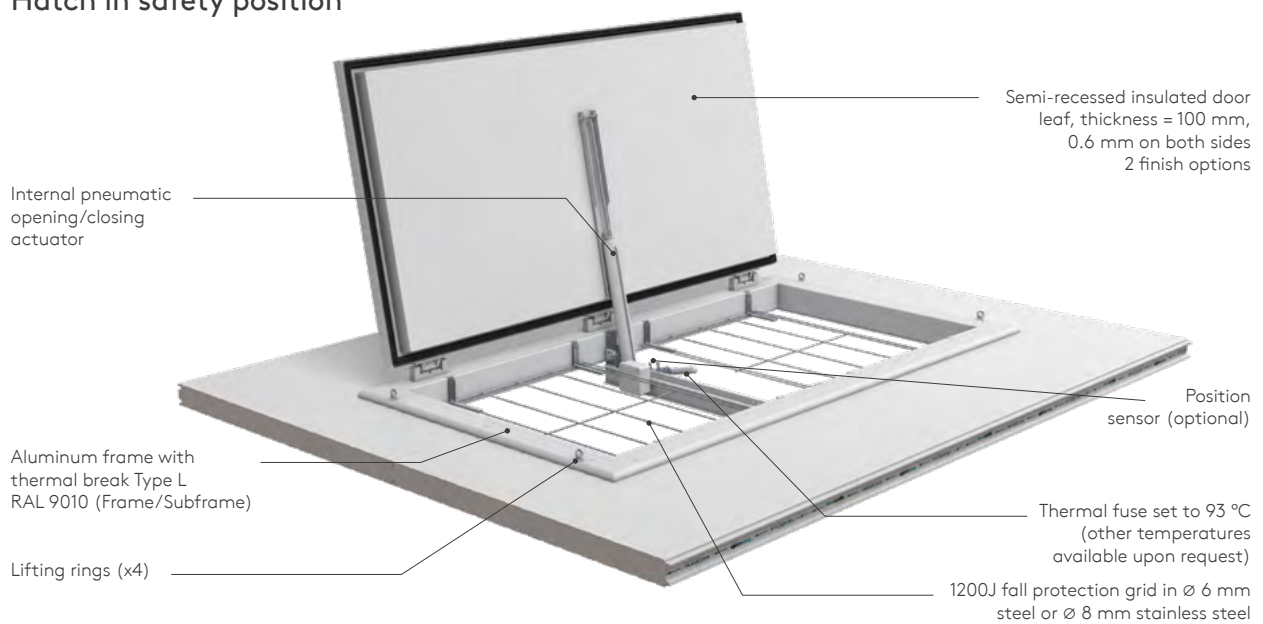
Examples of application markets

Application areas:	
CPI1	Storage of packaged dry goods, Data center
CPI2	Refrigeration, sorting, packaging of fruits and vegetables, controlled atmosphere storage, storage and preservation of packaged dairy or meat products
CPI3	Storage, preparation in a humid environment (salads, flowers, fruits), refrigeration of meat products, ice cream production
CPI4	Endive cold rooms, preparation of prepared meals, poultry and rabbit slaughtering hall, wine cellar, butter processing, meat cutting, delicatessen / cured meat production
CPI5	Sheep, cattle, pig, and goat slaughtering hall, mushroom cultivation, cooking room, drying rooms, smokehouses, blanching, evisceration, cheese ripening room, bread-making laboratory, storage, freezing of unpackaged fish
CPI5	Washing, showering, offal processing, hides and skins, salting, brining, dairy processing room, cheese-making, processing and preparation of seafood

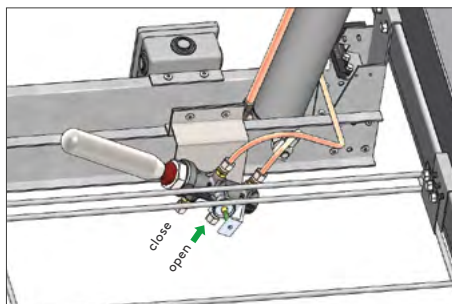
VP1 Hatch

This hatch is equipped with a pneumatic push cylinder located inside the chamber. It ensures high permeability through its downward-locking system. This hatch is constructed of steel components suitable for non-aggressive environments. It is suitable for environments such as: logistics platforms, storage areas, and anhydrous zones.

Hatch in safety position



Hatch in standby position



VP1 Hatch

Technical specifications of the VP1 hatch

Composition	
Actuator	1 push cylinder
Opening	Upward
Weight	77 kg
Dimensions	1000 mm x 2000 mm
Door type	Semi-recessed
Internal coating	Depending on the desired look
External coating	CleanSafe 25, 0.6 mm sheet metal, RAL 9010
Perimeter seal	4 sides
Closure	3 Fermod hinges
Operating pressure	10 bar
Thermal fuse	Automatic activation of the smoke vent opening. Set at 93°C
Cylinder volume	8.5 standard liters
Low temperature	T(-15)

Internal coatings

Coating and counter frames	RAL
CLEANsafe 25	RAL 9010
CLEANsafe PET	RAL 9010

Frame and subframe

Frame and subframe finish
Aluminium RAL 9010

Hardware and safety grill

Material
Galvanized steel
Stainless steel 304L

Panel thickness options:

The hatch integrates seamlessly into isocab Quadcore IND and IND sandwich panels :

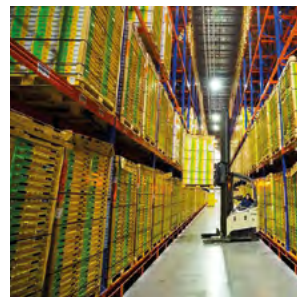
Available panel thicknesses
80, 100, 120mm

Option :

Position sensor (safety position/standby position) that indicates whether the hatch is open or closed.



Logistics warehouse



Packaged goods



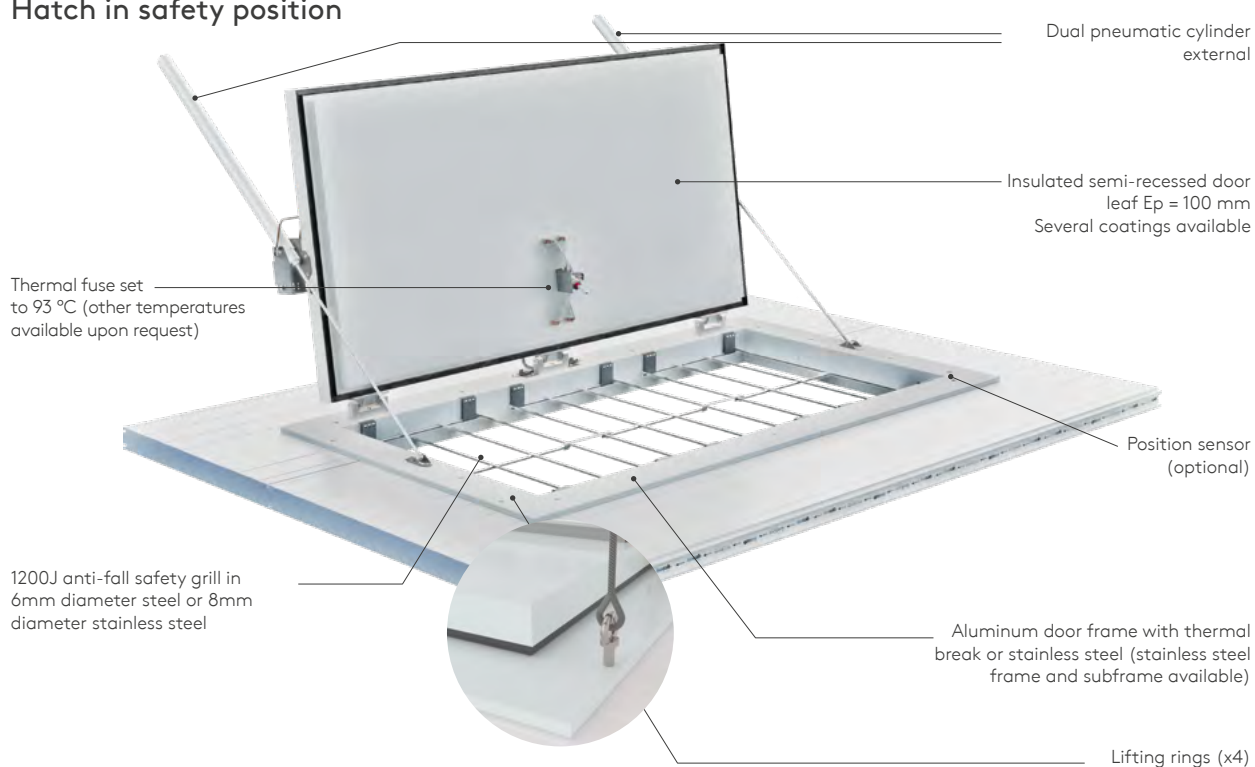
See all examples of facilities in our product catalog.

VT2 Hatch

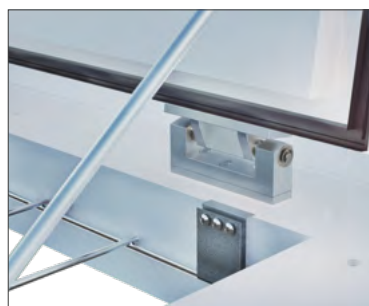
This hatch, equipped with two pull-type actuators, is designed for more aggressive environments requiring regular cleaning. With the actuators mounted externally, the number of internal components is minimized, making cleaning easier and saving space. Featuring stainless steel components, this hatch is suitable for aggressive environments.

Leak tests have been conducted on our hatches to precisely measure and verify their permeability rates, ensuring their seamless integration into pressurized rooms and controlled-atmosphere environments.

Hatch in safety position



Hatch in standby position



VT2 Hatch

Technical specifications of the VT2 hatch

Composition	
Cylinder	2 pull cylinders
Opening	Upward
Weight	110 kg
Dimensions	1000 mm x 2000 mm
Door type	Semi-recessed
Internal coating	Depending on the desired atmosphere
External coating	CleanSafe 25, 0.6 mm sheet metal, RAL 9010
Perimeter seal	4-sided
Closure	3 Fermod hinges
Operating pressure	8 bar
Thermal fuse	Automatic activation of the smoke vent opening. Set at 93°C
Cylinder volume	16.08 standard liters
Air tightness (at 100 Pa)	0.09 m³/h/m²
Low temperature	T(-25) or T(00) if locking option

Internal coatings

Lining and counter frames	RAL
CLEANsafe 25	RAL 9010
CLEANsafe PET	RAL 9010
CLEANsafe 304L Inox	2B
CLEANsafe Inox PET 150+	RAL 9010
CLEANsafe 316L Inox	2B

Frame and subframe

Frame and subframe finish
Aluminum RAL 9010
Stainless Steel 304 L



Hardware and fall protection grills

Materials
Galvanized steel
304L Inox
316L Inox

Panel thickness options:

The hatch integrates perfectly into Isocab Quadcore IND and IND sandwich panels:

Available panel thicknesses
80, 100, 120, 150*, 170, 180*, 200 mm

* Excluding IND

Options

Position sensor (safety position/standby position) that indicates whether the hatch is open or closed.

Seafood plant



Cheese storage



Cleanroom



Salting



See all examples of facilities in our color chart brochure.

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