

Fire and blast rated walls

Index

Experts in fire and blast rated walls	3
The walls	4
Welded wall systems	6
Bolted wall systems	7
Sandwich wall systems	10
Blast relief cladding	11
Heat & windshield cladding	12
Winterizing & arctic cladding	14
Radiation EMC cladding	15
What Van Dam needs to meet your requirements	16
How it started	17

Experts in fire and blast rated walls

The main purpose of a fire and blast rated wall system is to provide the highest level of safety to personnel and equipment.

Van Dam supplies completely pre-fabricated heavy, medium and light weight wall systems. Known as Generation II® (welded system) and Generation III® (bolted system). The systems will be designed for your specific requirements and you can add components and or penetrations. With these changes it is still possible to meet all requirements as outlined in the SOLAS 74, IMO FTP code GOST-R and NORSOK.

Application

Our walls are applicable the oil & gas market, the wind energy market and the infra & defense market.

Van Dam wall systems

Van Dam wall systems are designed to the highest standards and longevity. All walls are customizable to project or customer requirements.

Van Dam wall systems are fully engineered and certified and do not require any additional insulation as the Passive Fire Protection (PFP) is part of the Van Dam supply.

Wall system features

- Fire rating: A0, A60, H60, H120 and Jet Fire (J60)
- Blast Rated up to 4 bar overpressure
- Gastight
- Weathertight
- Sound reduction up to 45 dB
- High thermal insulation values

The walls

Welded

The Van Dam Generation II® walls are the traditional wall systems. They are fully welded, heavy-duty, medium-weight, and fire & blast resistant. These systems are made of stainless steel 316L, have a high strength steel (duplex) and have a mild steel finish with a weld primer or complete (offshore) paint system.

Van Dam is able to optimize the design and weight of the wall system, which results in customized solutions and flexible designs with regard to wall depth, material thickness and weight.

[Learn more](#)

Bolted

The Van Dam Generation III® walls are the untraditional and modern wall systems. They are fully bolted, heavy-duty, lightweight, and fire & blast resistant. The horizontal attachments and spans of this series reaches a maximum of 7 metres.

Van Dam is able to optimize the design and weight of the wall system, which results in customized solutions and flexible designs with regard to wall depth, material thickness and weight.

[Learn more](#)

Sandwich wall

In order to meet requirements of the on- and offshore Oil, Gas and Wind industry Van Dam has developed their Generation IV® Wall System, an A60 fire rated sandwich panel system. Especially set out for harsh offshore environments.

Panel dimensions and sizes are determined, but can be increased in case different project requirements need to be met. The length can be fabricated up to a staggering 20m1 length.

[Learn more](#)

Blast relief cladding

Blast relief cladding is a lightweight cladding system which relieves (opens) at a blast overpressure of 0.05 bar in 20 ms. The fixings will straighten up, causing the panels to open and thus vent the explosion pressure. The Van Dam blast relief cladding is a fully bolted, heavy-duty, lightweight wall system. Van Dam is able to design the cladding in order to meet several blast relief pressures and opening times.

[Learn more](#)

Heat and windshield cladding

The Van Dam Heat & Wind Shield Cladding is a fully bolted, heavy-duty, lightweight wall system. Van Dam is able to optimize the design of the wall system, which results in customized solutions and flexible designs with regard to wall depth, material thickness and weight.

Van Dam provides lightweight corrugated heat and windshield cladding, which provides protection against wind and heat radiation reduction up to 94%. In order to meet the project requirements, the heat and windshield panels can be perforated.

[Learn more](#)

Winterizing & Arctic

Winterizing and arctic walls provide protection in harsh environments in extremely low temperatures (-40 oC) and can be used to clad and enclose every type of application. The winterizing and arctic walls can be provided with thermal insulation in order to meet thermal requirements and are made from stainless steel 316L, plastisol or mild steel finished with an offshore paint system.

[Learn more](#)

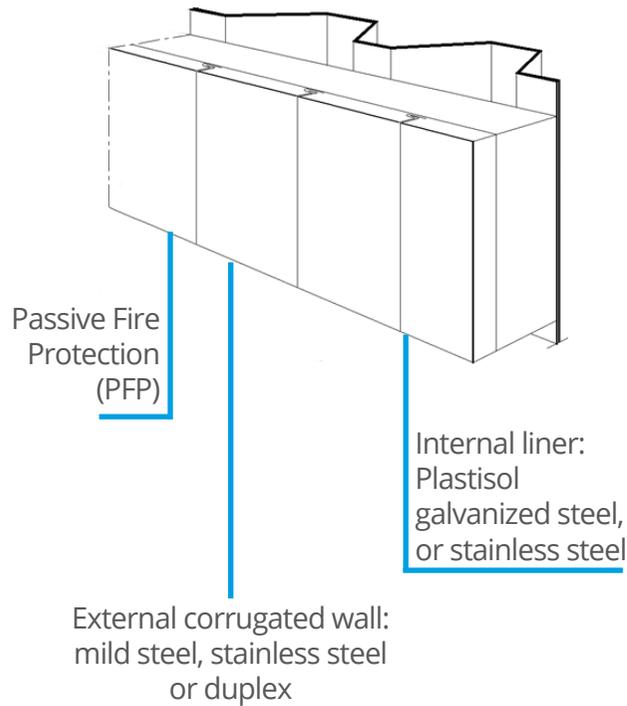
Radiation EMC

Van Dam has developed special aluminum and Stainless Steel walls for substations of offshore wind farms which prevent radiation to escape from the rooms (EMC Proof).

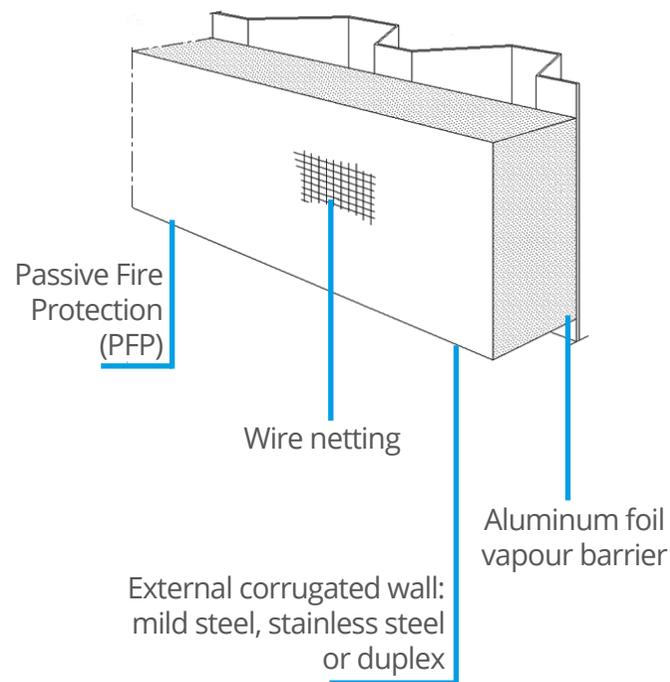
[Learn more](#)

Welded wall systems

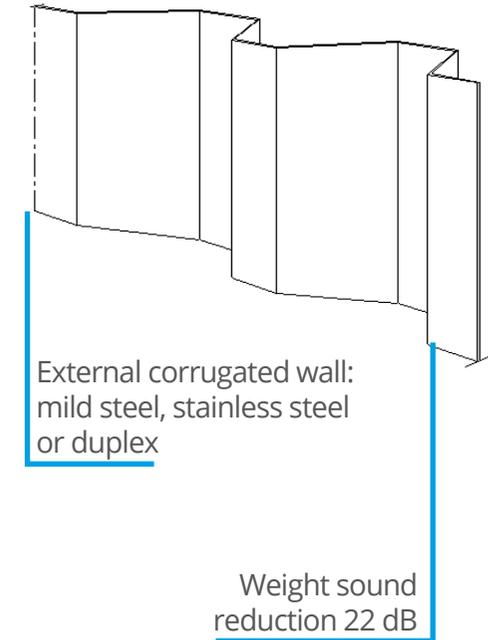
Generation II-A®



Generation II-C®

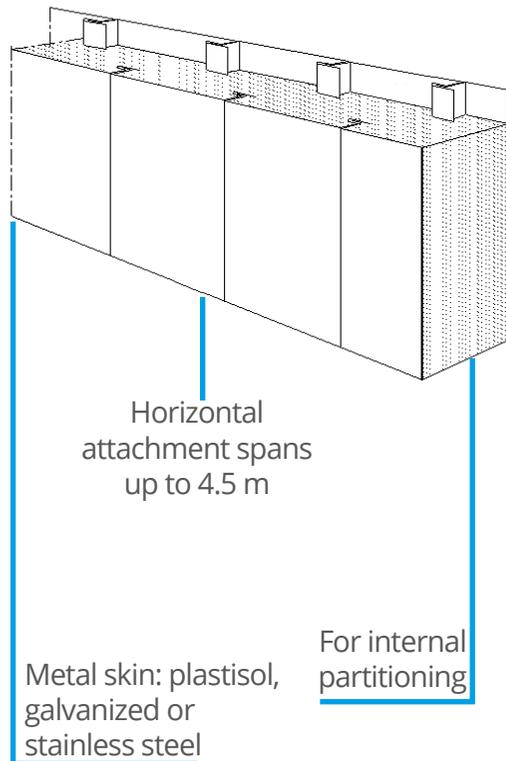


Generation II-D®

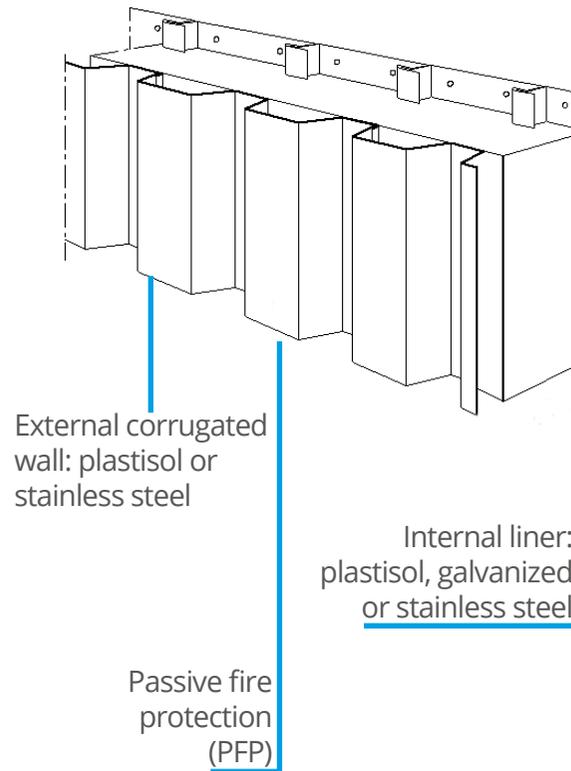


Bolted wall systems

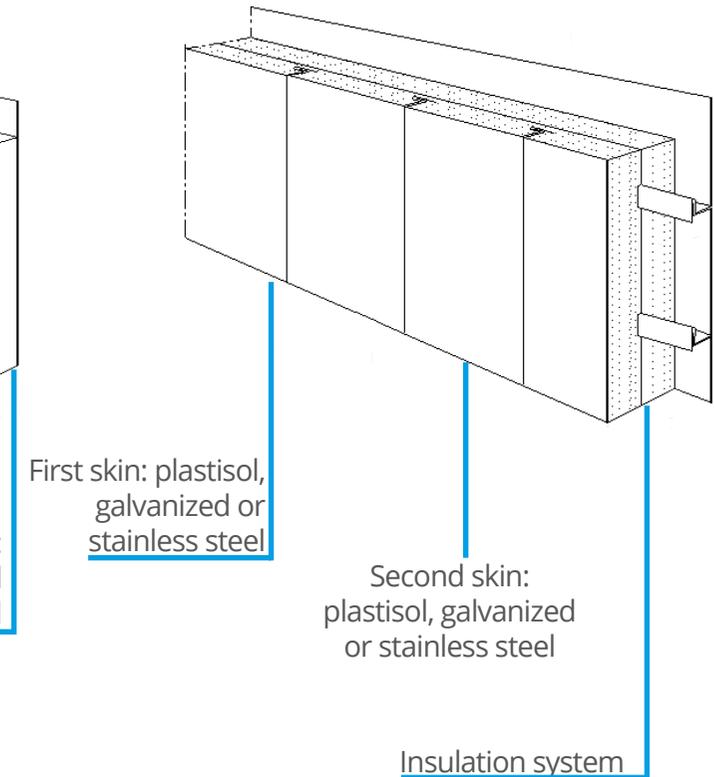
Generation III-A®



Generation III-B®

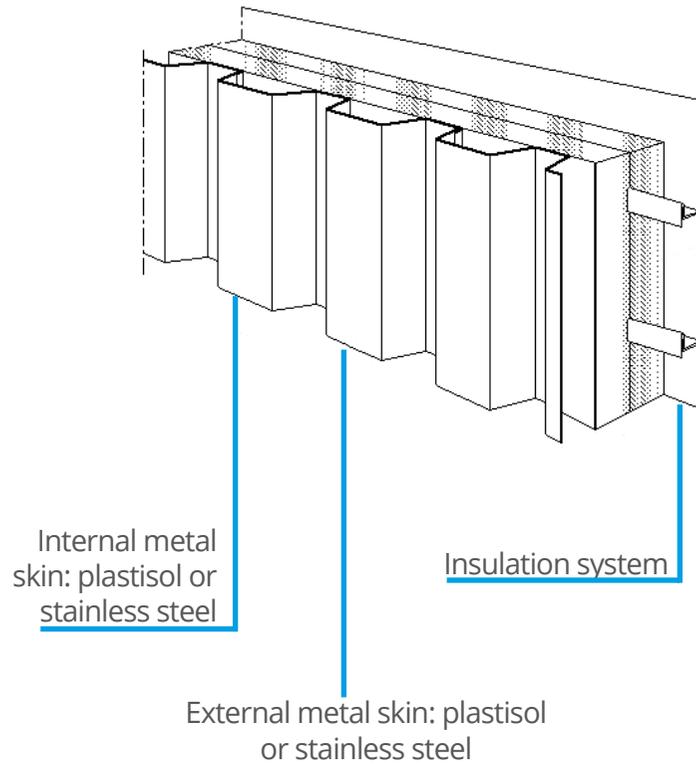


Generation III-C®

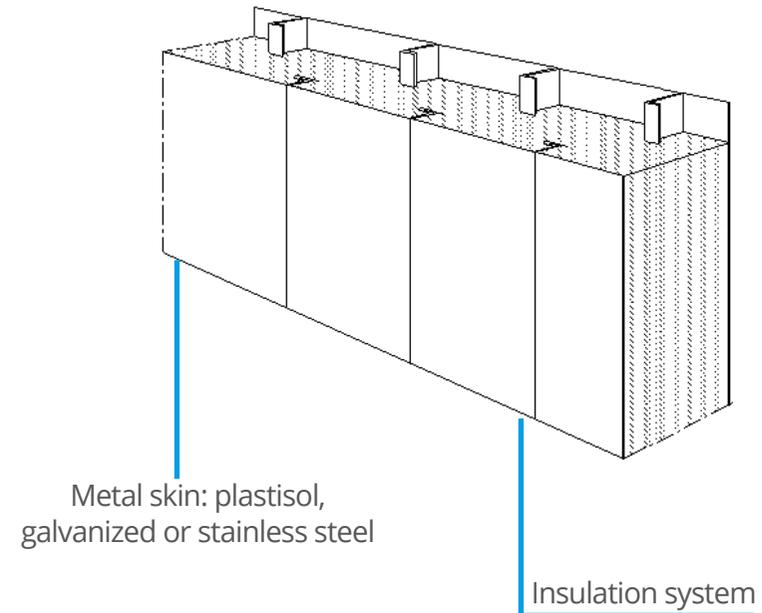


Bolted wall systems

Generation III-D®

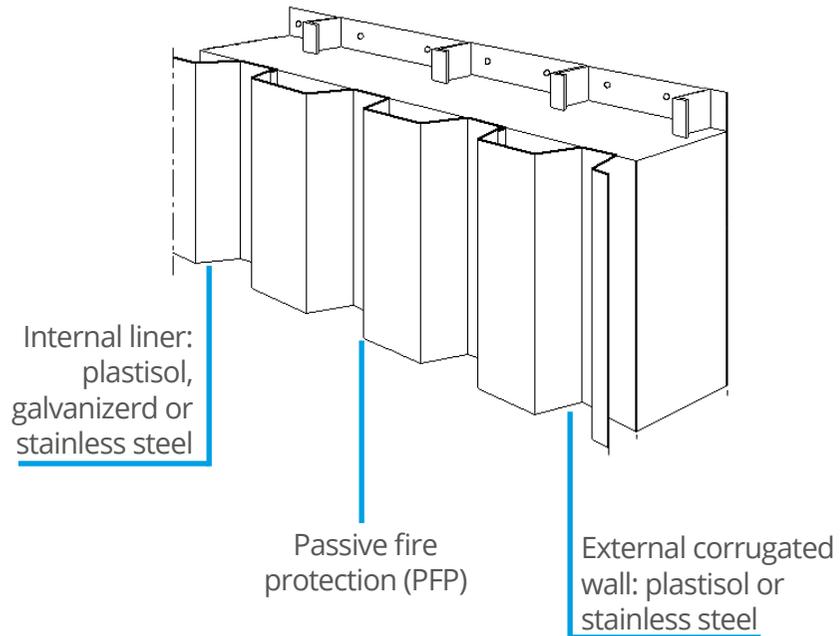


Generation III-E®

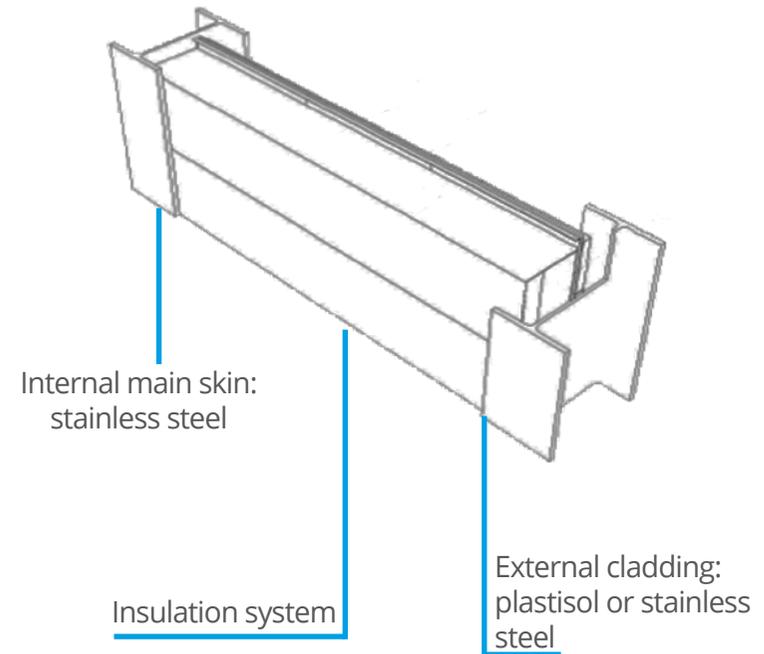


Bolted wall systems

Generation III-F®

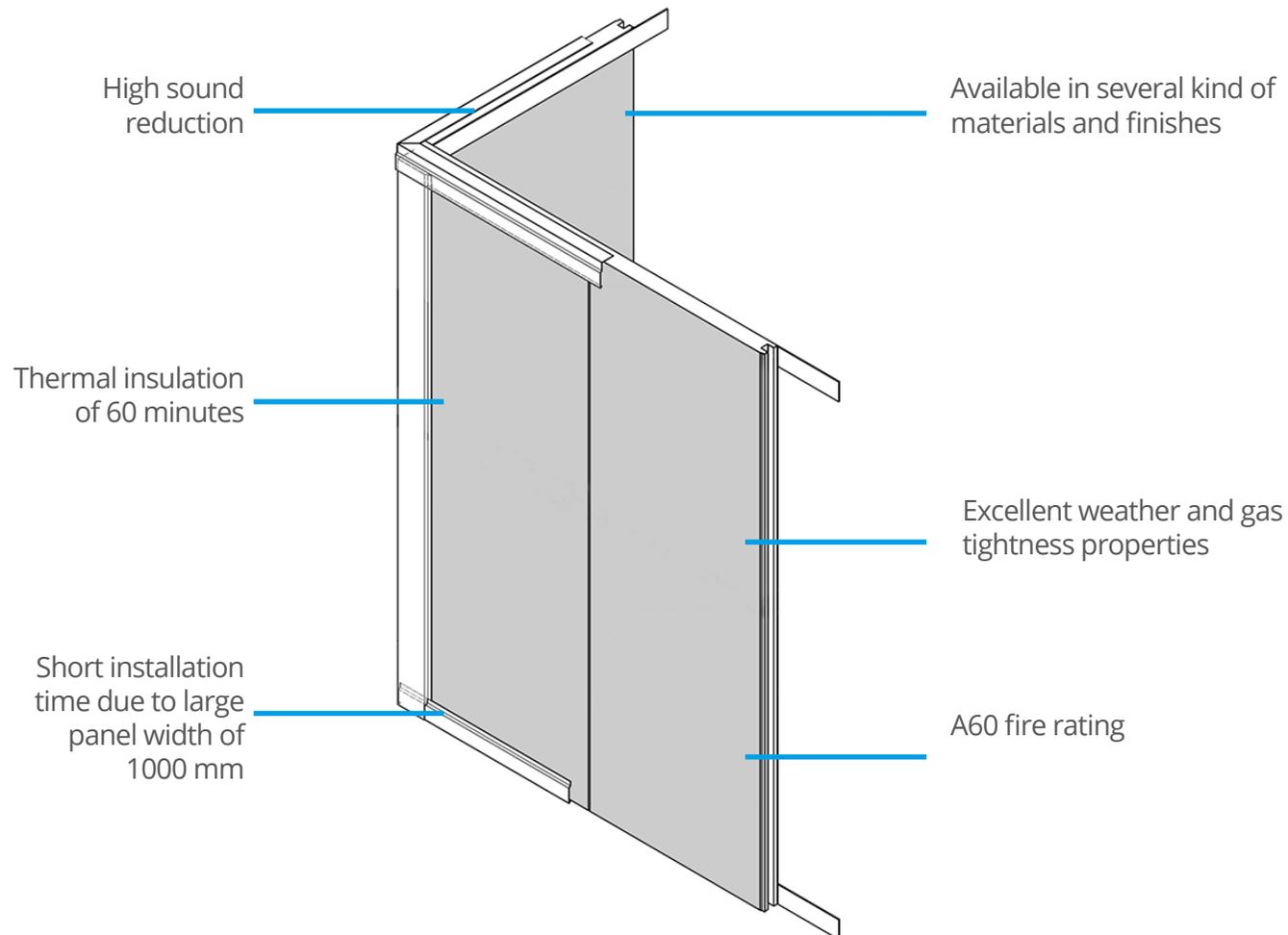


Generation III-M/N®



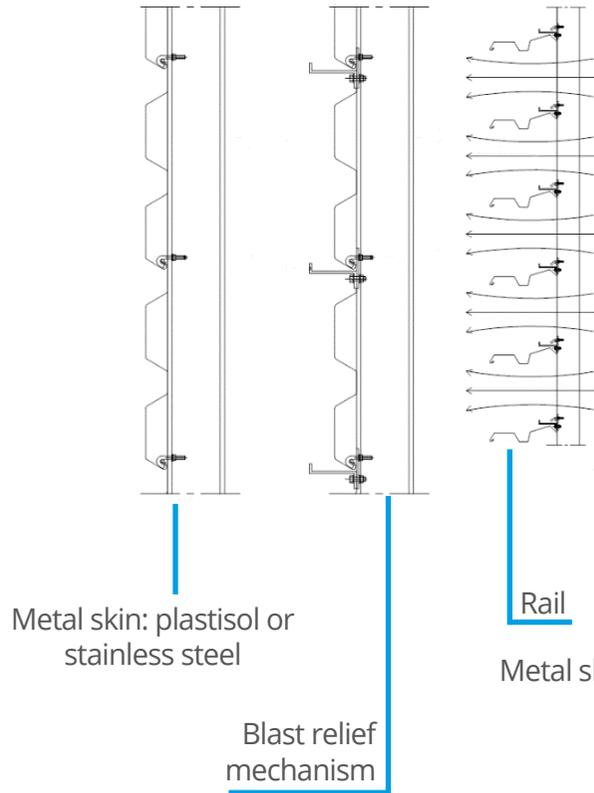
Sandwich wall systems

Generation IV®

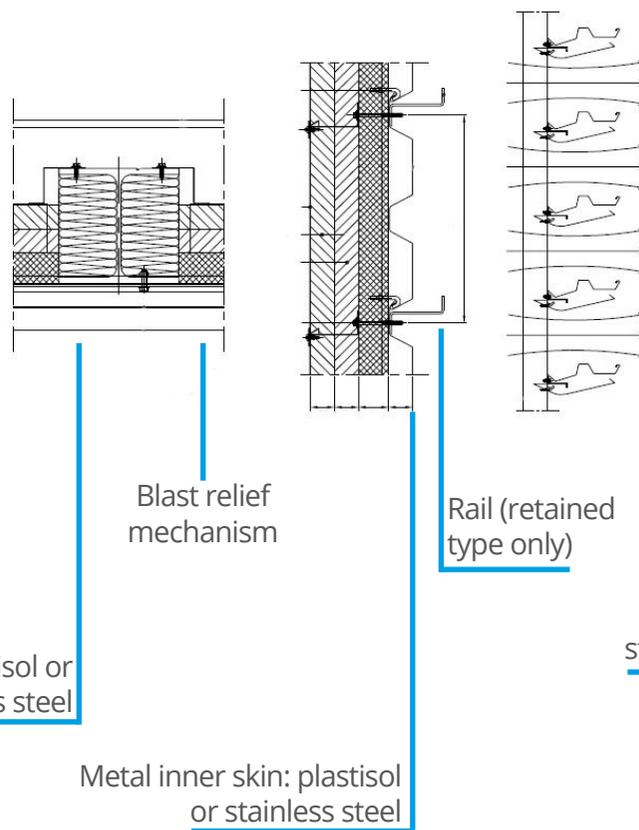


Blast relief cladding

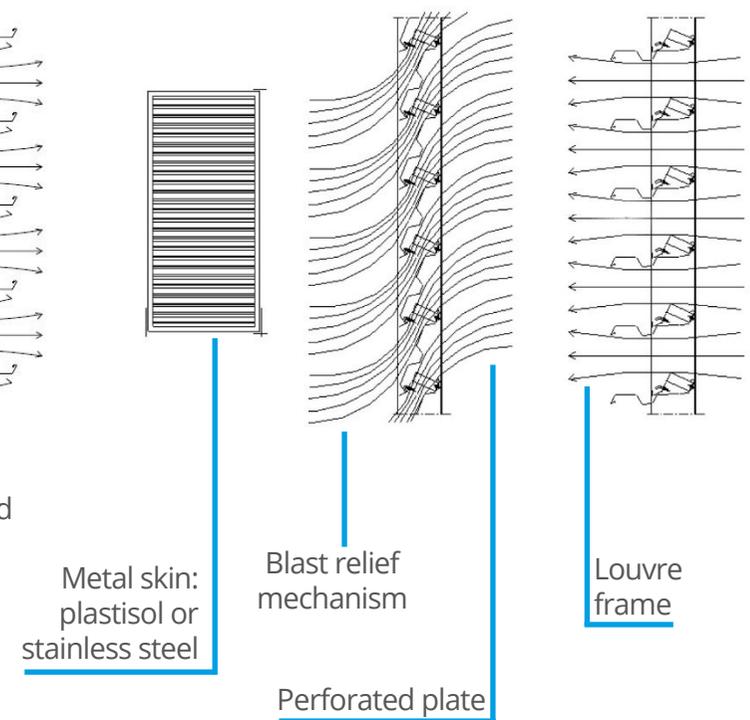
Blast relief blow out or retained insulated



Blast relief blow out or retained type

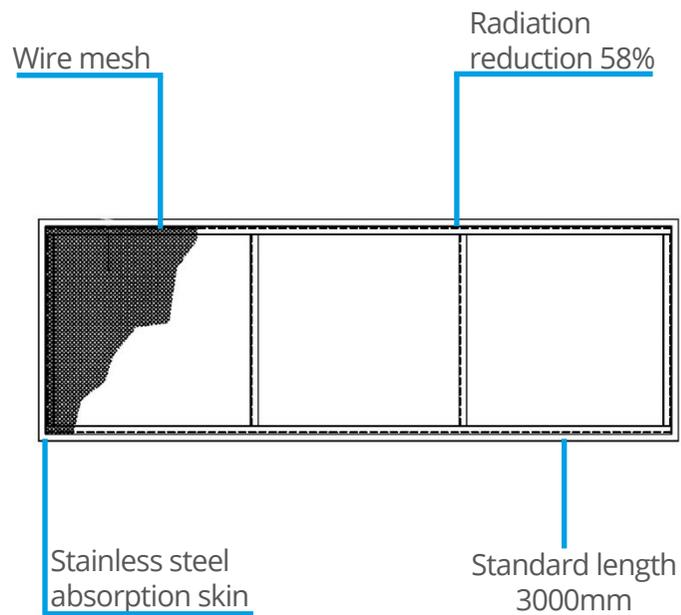


Blast relief louvre blow out or retained insulated type

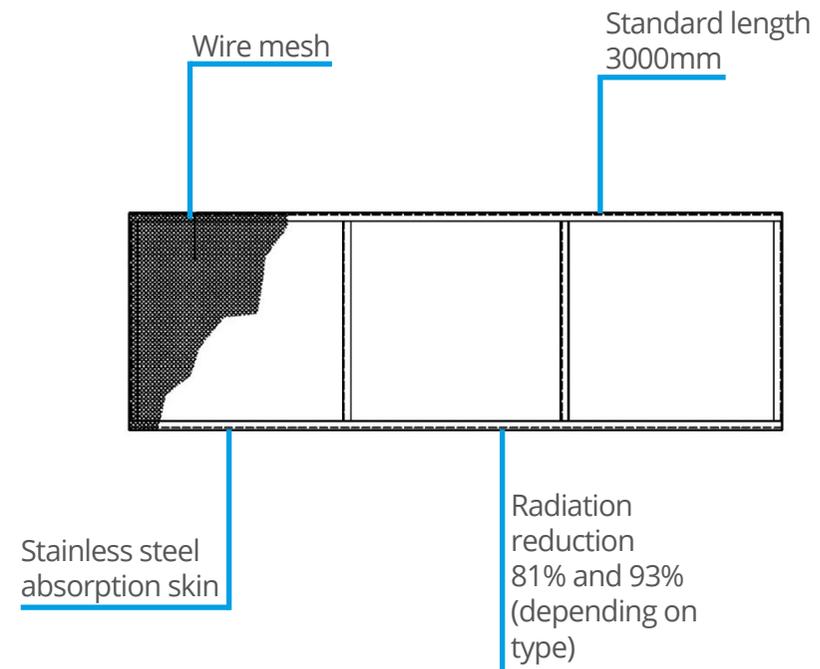


Heat & windshield cladding

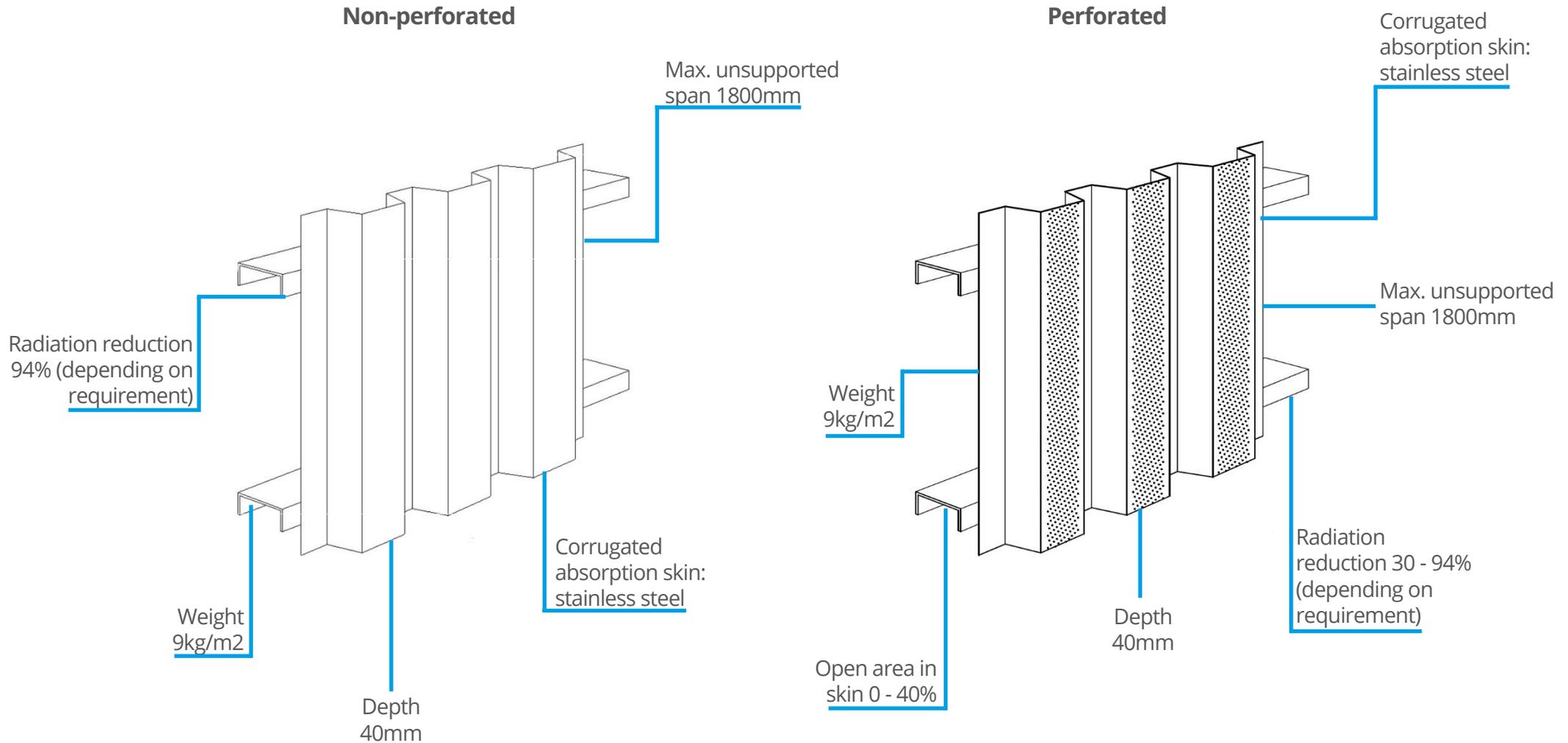
Single wire mesh



Double mesh



Heat & windshield cladding



Winterizing & arctic cladding



Finished with an offshore paint system

Can be provided with thermal insulation

Provide protection in extremely harsh environments and can be used to clad and enclose every type of application

Corrugated skin: stainless steel 316L, plastisol or mild steel

Radiation EMC cladding

Special aluminum
and stainless steel
walls



EMC proof

For application
on offshore wind
substations

What Van Dam needs to meet your requirements

Van Dam has made sustainable research and development a core element in its activities. Through innovation and high-end engineering, we can provide the best quality in fire and blast rated wall systems.

In order to create the best match between project and products, we need to know several key points such as:

- Project specification
- Bill of material (BoM)
- Blast load + duration
- Type of certification
- Acoustic requirements

Van Dam is strongly committed to expanding its offer far beyond the standard products. We aim to continuously develop exciting new solutions and services to help our customers improve performance in various market segments.

How it started

Van Dam's long history dates all the way back to 1906, when we started as a metal sheet company supplying the local ship building industry with airbreathers and various engineered metal specialties.

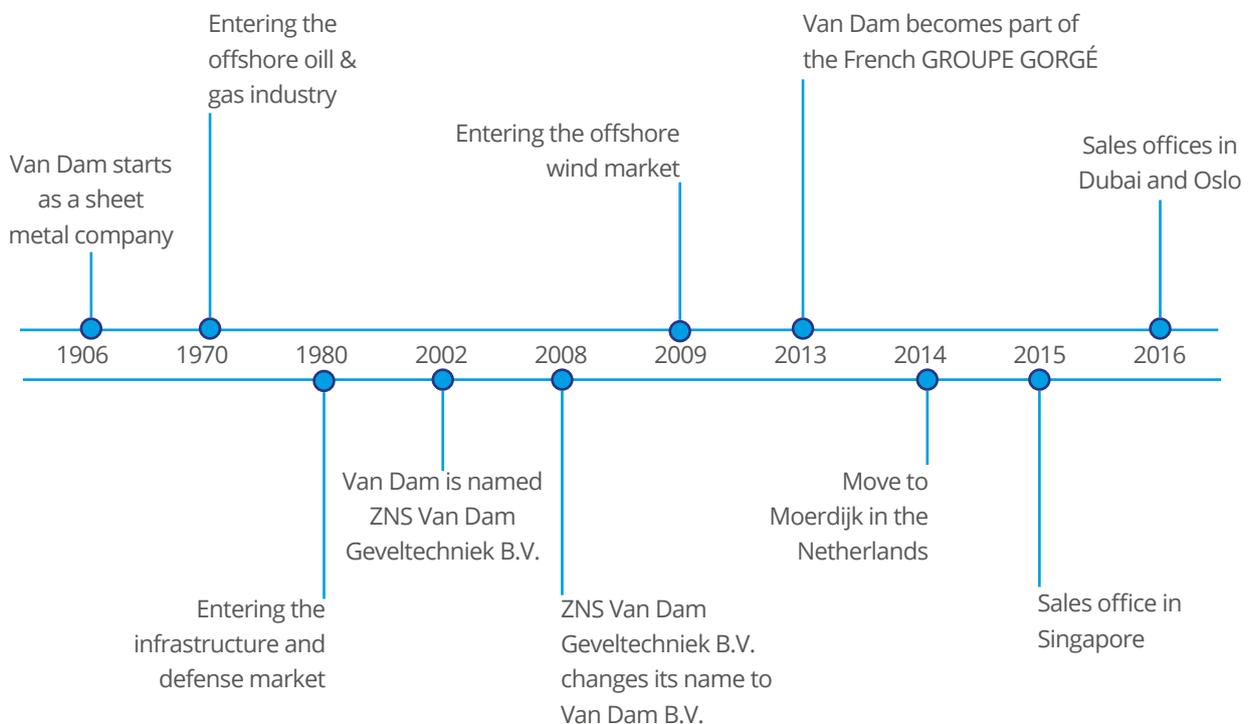
With the development of the offshore oil & gas industry in the 1970's, van Dam has developed into being a market leader in fire and blast rated products and solutions.

Our goal is to provide our customers worldwide with superior fire and blast protective products based on innovative and creative solutions and technologies, ultimately delivering sustainable growth and profit in a safe environment.

Our track record and diverse projects in the oil and gas market, the wind market and infra & defense market has made a solid statement in the industry.

We believe that innovation is a key factor in being able to comply with the highest standards and regulations and also with customers' needs and requirements.

In business for over 100 years, let our long experience be your added value!



About van Dam

We design and manufacture fire and blast protective products and solutions to protect personnel and critical equipment. Van Dam B.V. is a market leader in this niche market and our innovative character enables us to stay ahead of the competition by investing in its technologies and anticipating on constant changing safety regulations.

Our organization

We wish to supply a variety of products to the global market from our central organization in the Netherlands with a staff that is highly knowledgeable in fire and explosion proof products and associated products, whereby production activities will take place worldwide. Distributors all over the world are responsible for overseeing and selling a diversity of products on a global basis.

All activities take place from the head office in Moerdijk, the Netherlands, which manages the global production sites and sales network. But also Van Dam ventured into the works setting up Branch offices worldwide. Van Dam B.V. is a genuine project organization, whereby all departments contribute towards the successful completion of a project.

The organization has more than 100 years of experience in projects for international customers who maintain the highest of standards, such as IMO Solas, NORSOK, USCG and many other specifications.

Our organization is fully geared up, and qualified, to face and match the challenges of your complex Design & Build projects.

The Group

Van Dam B.V. is part of Vigians (listed on the Euronext Paris Stock exchange), a leading independent engineering group.

Vigians' activities are focused on the fast growing technological niche market in the nuclear, defense and aerospace industry.

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