

Versatile, durable solutions
and support

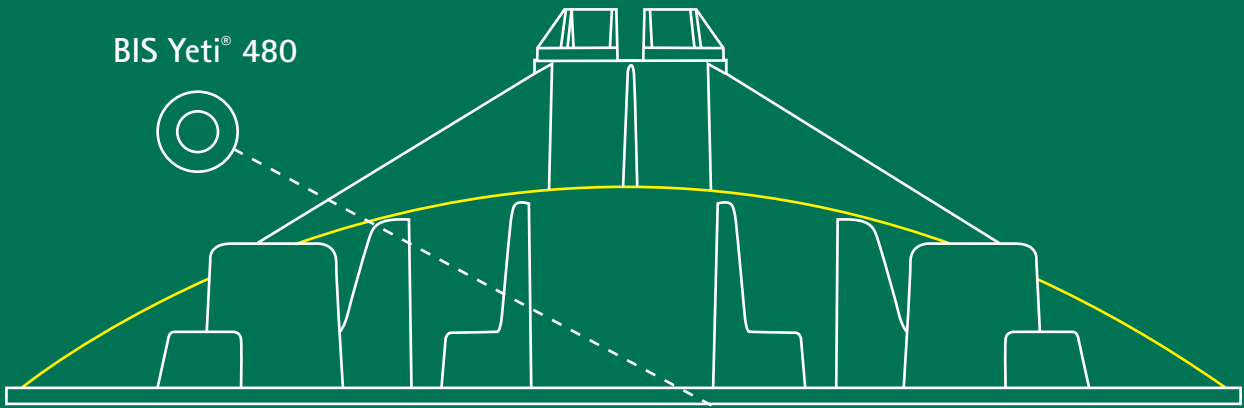


Walraven Rooftop Solutions

For supporting rooftop installations

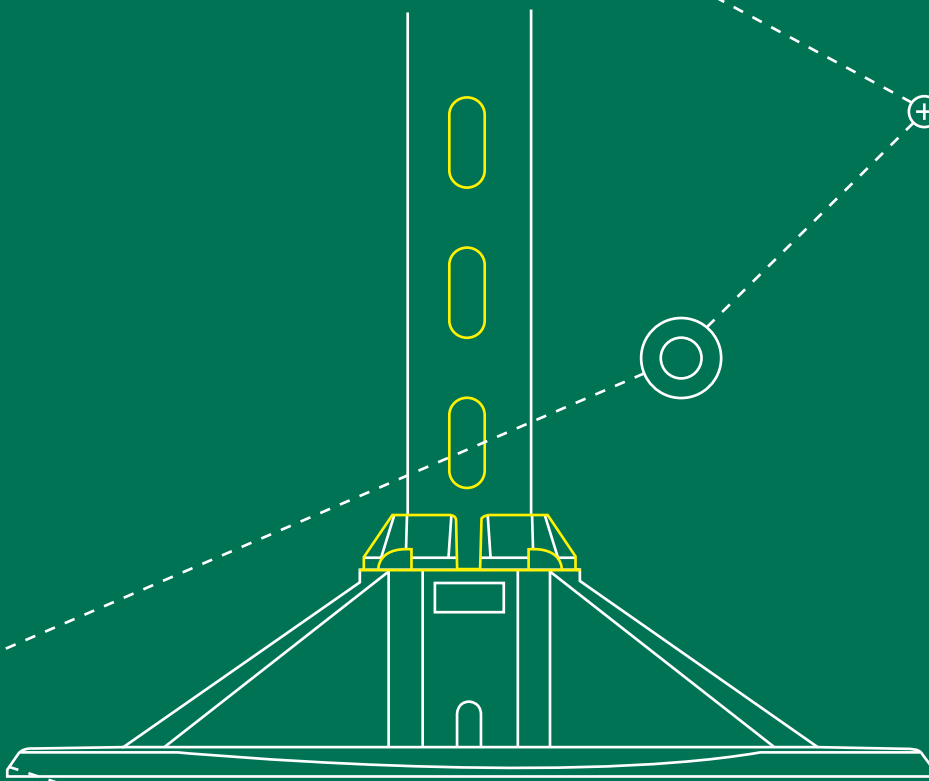


BIS Yeti® 480

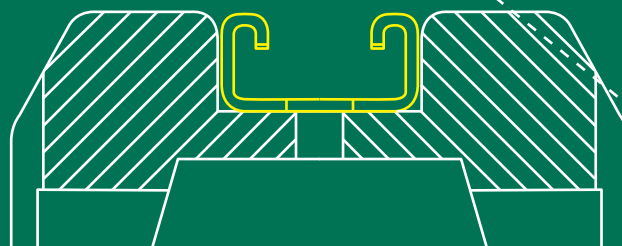


Adjustable to compensate roof pitch up to 7°

360° Rotatable insert



Optimised Load distribution



BIS Ursus

Walraven Rooftop Solutions

Your challenge, our support!

Each project comes with its own construction requirements and challenges. For rooftop installations, this is no different. Today's flat roofs must support an ever-increasing amount of lightweight and heavyweight equipment, whilst the installation supports need to be long-lasting and keep the roof membrane intact. Solutions offered should ideally be highly adjustable and time-saving to help address issues such as labour costs and limited crane availability. It is also important to consider wind resistance and compliance with the latest safety regulations.

How can we help?

You might not be able to solve some of these rooftop-related challenges on your own and that is where Walraven comes in. An extensive range of fixing rail products and mounting units creates a versatile and easy to install system for flat and low-pitched roofs. From small AC-units to high-load machinery and from service decks to step-overs, Walraven can do it all - and more!

Our solutions are not only time and cost-saving, they are also non-penetrative, leaving the roof membrane intact and reducing the risk of leakage. The modular fixing rail components can be used for almost any type of roof installation and can easily be expanded or adjusted if required. In addition, our BIS RapidStrut® fixing rail system, connectors and screw-joint components have a BIS UltraProtect® 1000 surface treatment which means they provide excellent protection against corrosion. Furthermore, the mounting units reduce sound transmission and are weather and UV-resistant.

For more information: www.walraven.com/int/rooftop



BIS Yeti® 480 and BIS Yeti® 335
Certified noise reduction
SG-Bauakustik / 1762-001-19

What's more?

From engineering to on-site construction support

In addition to the solutions we develop, Walraven also offers a wide range of Technical Support Services to tackle your construction challenges, from the design phase to on-site support. We are there to support you throughout the entire project.

Our expertise available to you!

Based on your individual requirements, our Technical Engineers deliver you a comprehensive proposal, including detailed load and wind calculations, AutoCAD drawings and parts lists. All to make your life a little easier.

In conclusion

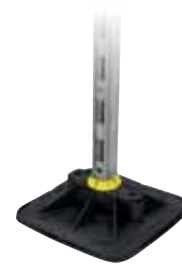
3 reasons for choosing Walraven:

- **Versatile solutions.** Our fully modular system makes it possible to deliver a whole range of solutions for flat and low-pitched roofs using time-efficient and cost-effective components.
- **Long life expectancy.** Our robust, lightweight and non-penetrative solutions avoid any structural damage to the roof and are suitable for corrosive environments (C1-C4 in accordance with ISO 12944-2).
- **Technical expertise.** Besides our solutions, we offer a comprehensive Technical Support Service to guide you throughout the project.

Walraven, your rooftop support partner!



BIS Yeti® 480



BIS Yeti® 335



BIS Ursus



The possibilities are endless

From small AC-units to high load machinery and from service decks to step-overs, Walraven can do it all - and more.

1

Equipment Support

For supporting commonly used AC-units, ventilation units and other equipment, Walraven has developed a range of standardised, pre-assembled and easily adaptable solutions. Our project engineers are happy to design the ideal support system configuration for safe carrying capacity, incorporating load and wind calculations, based on pre-assembled BIS Yeti® and BIS RapidStrut® frame sets.

2

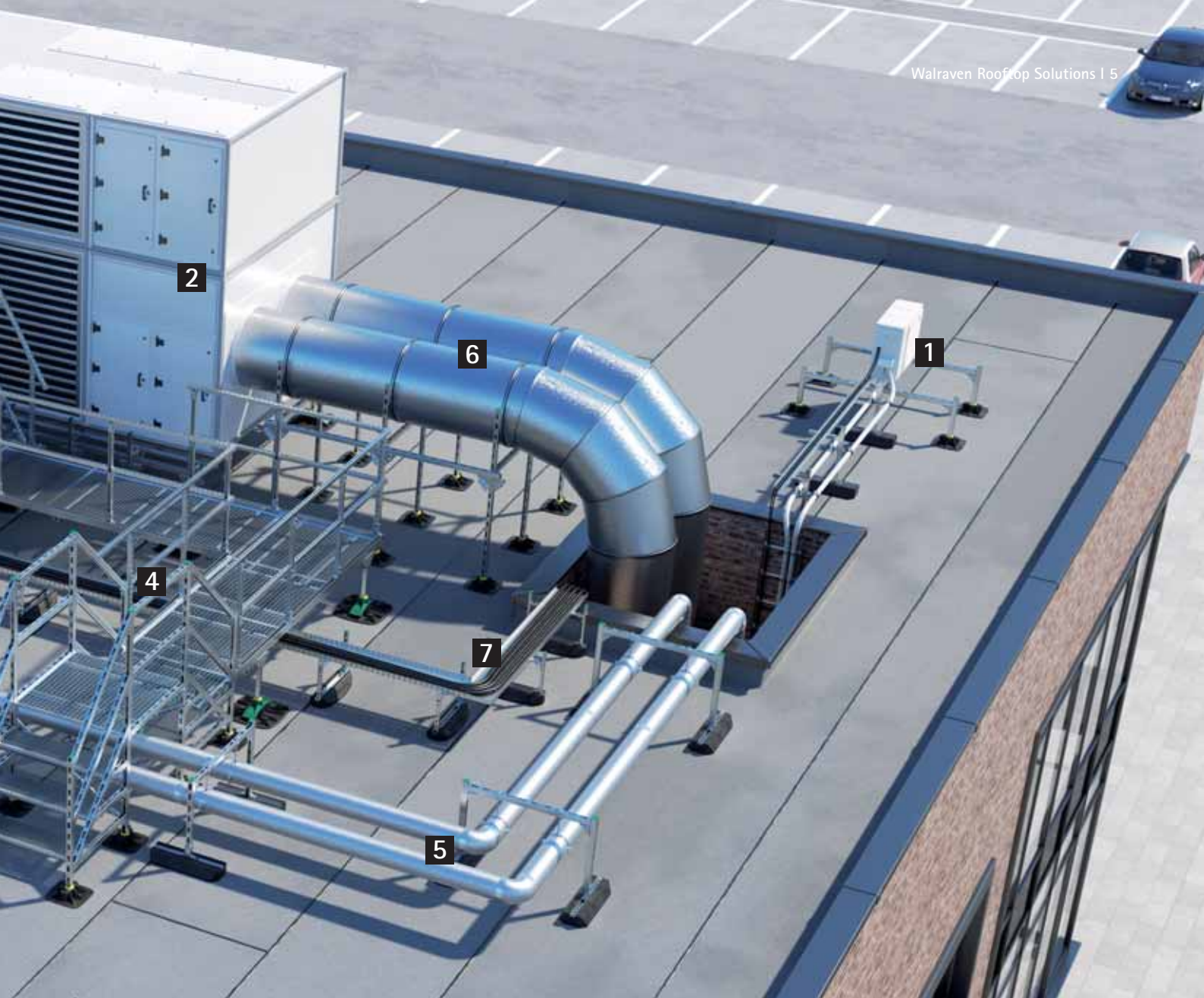
High load Support

Where load distribution is critical, we provide solutions capable of supporting the largest and heaviest equipment. Thanks to smart engineering, loads are spread in ways that prevent the risk of damage. Matching roof design specifications as well as site and building-specific requirements to our BIS Yeti®, BIS Ursus, BIS RapidStrut® and MAXX systems, means we can offer a solution for almost any situation.

3

Service decks / Stairs

We offer tailored Service decks and Stairs to securely, safely and easily access different parts of the roof as well as access to the installations present on the roof. Our solutions make it possible that inspections, maintenance, cleaning and other tasks can be carried out. Our non-invasive mounting units and BIS RapidStrut® fixing rail system are easily and quickly installed and allow safe working at height.



4

Step-overs / Walkways

Tailored and non-penetrative solutions help maximise rooftop safety and allow maintenance workers to navigate easily through areas with obstacles that require bridging. These include pipe / ductwork and cable trays. Our solutions can match any project and safety requirement.

5

Pipe Support

The rooftop solutions for Pipe Supports are suitable for any type of pipe and size. By combining the mounting units, fixing rail system and clamps with BIS UltraProtect® 1000 surface treatment we are able to create supports that suit your needs and rooftop specifications.

6

Duct Support

From small to large ducts our tailored Duct Support solutions are suitable for all types and sizes of ductwork and can run at practically any specified height above the roof surface. Our solutions are sturdy and designed in such a way that the duct stands securely while the roof membrane stays intact.

7

Cable Tray Support

Our Cable Tray Support solutions, including mounting units and BIS RapidStrut® fixing rail components make installation and levelling easy. Our tailored offerings suit cable trays in various widths and can be configured to almost any required height above the roof surface.




System thinking

The products that make it happen


BIS Yeti® 480 Support System

BIS Yeti® 480 is a non-penetrative, modular system for supporting installations on flat roofs, other flat surfaces and even on low pitched roofs (up to 7°). The sturdy BIS Yeti® feet are used in combination with BIS RapidStrut® fixing rail. With the optional ballast blocks extra weight can be added providing even greater stability. The BIS Yeti® 480, available for both vertical and horizontal applications, is equipped with a non-slip, anti-vibration mat which prevents damage to the roof membrane, thereby minimising the risk of leakage. The BIS Yeti® 480 is highly adjustable, with a 360° rotatable insert, allowing precise positioning.

 **Innovative and multifunctional.**
Rooftop integrity assured.

BIS Yeti® 335 Support System and Frame Sets

The BIS Yeti® 335 is the smaller family member of the BIS Yeti® 480. It is designed to support installations on flat roofs or other flat surfaces, in combination with BIS RapidStrut® fixing rail. The BIS Yeti® 335, available for both vertical and horizontal applications, is supplied with a 360° rotatable insert, allowing precise positioning. It also comes with a non-slip, anti-vibration mat to prevent damage to the roof membrane. This product offers an easy to install range of standardised solutions with pre-assembled frame sets suitable for supporting the most common types of AC-units, ventilation units and more.

 **For all common applications.**
Standardised solutions.

New BIS Yeti® 130

A flexible and reliable foundation for light Strut based installations on roofs.



BIS Ursus Foot Support System

BIS Ursus is designed to support small, linear pipework systems, ductwork runs, cable trays and is ideal for climate installations, walkways and similar on flat roofs. The BIS Ursus Foot Support System is made from UV resistant, vulcanised rubber, and includes a BIS RapidStrut® fixing rail piece, with BIS UltraProtect® 1000 surface treatment. This makes the system easy to combine with the complete BIS RapidStrut® fixing rail system and therefore saves time. BIS Ursus is a sturdy system which does not penetrate the roof's waterproof membrane, meaning there is less risk of any potential damage or leakages.

■ For linear installation systems.
Rail included.

MAXX

In addition to the BIS RapidStrut® system Walraven offers a modular, heavy-duty, load-bearing frame support system which can be used for outdoor applications, including rooftop installations.

Maxx systems can be delivered fully pre-assembled or in parts, allowing easy transportation to site.

The high-quality components are made from hot dipped galvanized steel and the system does not require welding and drilling. This avoids potential structural damage and saves time and costs.



BIS RapidStrut® fixing rail system

BIS RapidStrut® system consists of various rail profiles and an extensive range of accessories, such as slide nuts, T-bolt assemblies, ball swivel hangers and various rail connectors. The accessories are pre-assembled and delivered 'ready-to-use' to the building site. The plastic spring allows the slide nut to be fixed into the rail easily and adjustments can be made within seconds. BIS RapidStrut® is so easy to use that it is possible to save up to 40% in fixing time! In addition, the products offered in combination with our Rooftop Solutions have highly corrosion-resistant BIS UltraProtect® 1000 surface treatment. Ideal for outdoor applications.

■ Insert, lock, done.
Saves up to 40% fixing time.

BIS UltraProtect® 1000

Optimal protection

- All applied surface treatments effortlessly withstand a salt spray test of at least 1000 hours*
- Suitable for corrosive environments (C1–C4 in accordance with ISO 12944-2)



Better than Hot Dip Galvanizing

- Higher corrosion resistance: 1000 hours* versus 300 – 600 hours (with a layer thickness of 50 – 80 µm)
- Threaded products are also well protected
- Products feel smooth and are also visually appealing



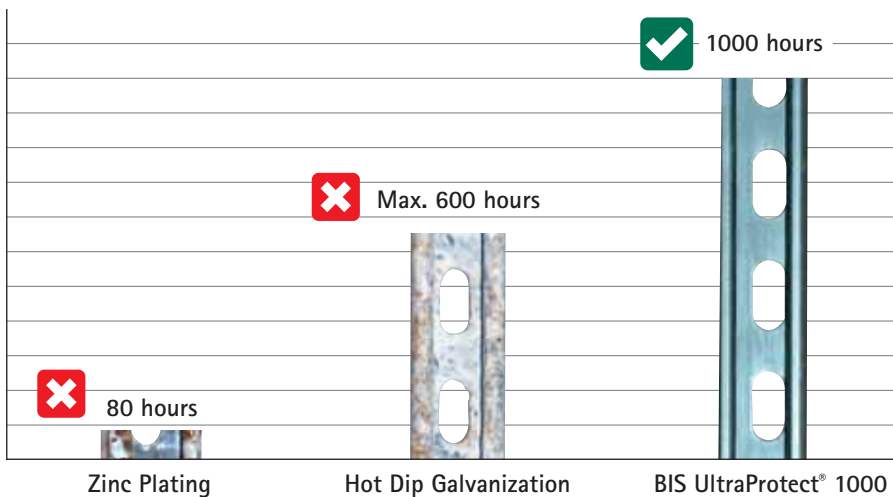
Complementary system

- The products in the BIS UltraProtect® 1000 System combine together perfectly
- Can also be combined with zinc plated, pre-galvanized or hot dip galvanized products



* Until the occurrence of maximum 5% red rust.

The proof after 1000 hours salt spray test



Corrosion resistance

- C1 - C4 / ISO 12944-2

Salt spray test

- 1000 hour / ISO 9227

Complementary system

- Perfect combination with other products

Your challenge, our support



Every rooftop is different. Fortunately, Walraven understands the specific challenges that come with developing rooftop solutions and working at height.

In addition to a comprehensive range of robust, durable and easy-to-install product systems, our experts and engineers are always available to share their years of expertise and advise you on the safest, most durable and cost-effective solutions for your installation.

To find out how we can support you, visit [walraven.com/int/rooftop](https://www.walraven.com/int/rooftop) or call +31 (0)297 23 30 00.

Walraven

Technical Support Services

Experience in solving technical challenges

Working with roof supports becomes more and more complex. When preparing or executing a rooftop-related project you may encounter a challenge that you cannot solve yourself, and that's where Walraven comes in.

At Walraven, the service does not end after you have purchased our products. We pride ourselves on our invaluable after sales support and technical advice. Based on your individual requirements, our Technical Engineers deliver you a comprehensive proposal, including detailed load and wind calculations, AutoCAD drawings and parts lists. All to make your life a little easier.

Our expertise available for you!



Find out how we can support you

Would you like to find out more about any of the solutions described in this brochure?

Or would you like to discuss how we could help you find the best possible solution for your project? Get in touch today!

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