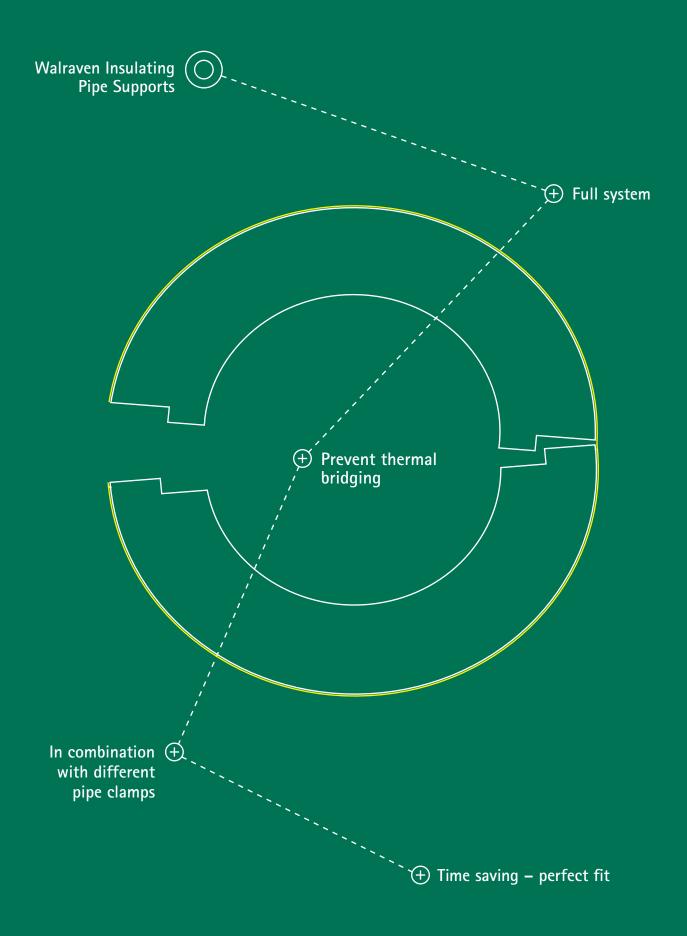
# walraven

Hot or cold, we've got you covered!

# Walraven Insulating Pipe Supports

Insulation and pipe fixing in a fast and easy way



### Inspired by smart solutions from the start

Walraven is a globally active company in the installation industry, founded in 1942. We have always been dedicated to make the work of our customers easier and more effective. With simple and smart solutions, comprehensive services and excellent support. Walraven. The value of smart

## Walraven Insulating Pipe Supports

### Hot or cold, we've got you covered!

Did you know that uninsulated pipe support elements represent 10-15% of the linear heat losses of heated pipes and that an installation with regular EPDM insulated pipe support is responsible for an energy loss of 3-5% of the building?

Why does this matter? First of all, increasing building efficiency, whether it's a new or existing building brings tangible economic benefits and enables cost savings. Second of all, both global and European organisations have been setting ambitious targets towards increasing efficiency and reducing the environmental footprint of buildings. From a European perspective, the most relevant targets are the '20-20-20' goals agreed and accepted by all EU countries in 2015. The '20-20-20' goals set the ambitious target of 20% reduction of CO2 emissions, 20% increase in renewables and 20% increase in energy efficiency by 2020 across Europe. Achieving this target is highly dependent on the performance and efficiency of new and existing buildings, therefore it's no surprise that the construction industry has also been challenged to rethink the way of building and which materials to use.

### Why work with Walraven?

#### Compliant, flexible and efficient portfolio

The Walraven insulating pipe supports portfolio covers the common applications both indoors and outdoors and is fully in line with the latest EU requirements. Due to the high level of compliance, the installation has an increased lifespan. Moreover, enabled by the flexible and easy product selection and prefabrication option, the Walraven portfolio enables reduced labour time and faster installation.

#### From engineering to on-site support

Walraven offers a wide range of technical support services throughout the construction process, from the design phase to on-site support.

#### Our expertise is at your disposal

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

## Criteria for selecting insulating pipe supports

Among the most relevant criteria of selection we can mention thermal conductivity, required insulation thickness, material density, vapour resistance against water and surface emissivity. Please be aware that differences in local regulations may affect the selection of the proper and compliant insulating pipe support. Don't hesitate to contact us when you have questions about which insulating pipe support solution fits your installation best!



Walraven,

your support partner!

**BISOFIX® PIR** 



BIS Phenblox®



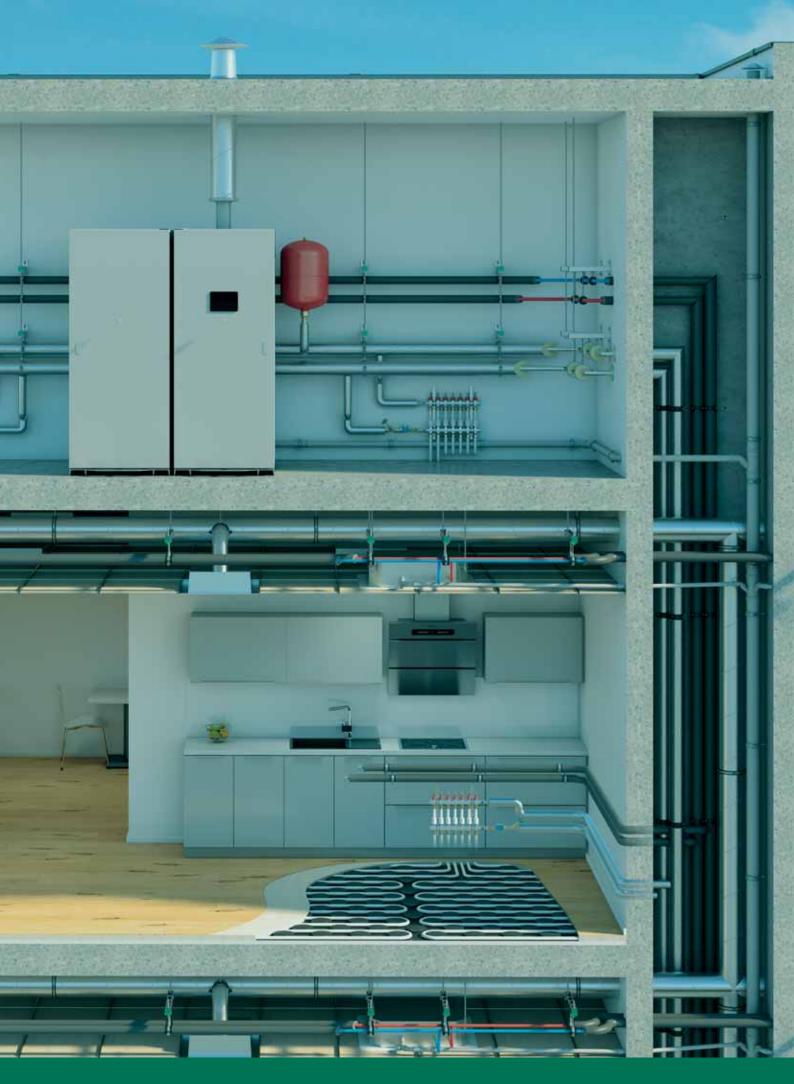
BISOFIX® E



BISOFIX® 88

For more information visit walraven.com/int/insulating-pipe-supports





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## Hot & cold water

Fitting a hot or cold pipe with the right insulation is a true craft. It helps to control pipe condensation, prevents pipe freezing, saves energy and prevents corrosion.

### 1

#### Keeping the heat where you need it

Significantly contributing to your energy saving goals, the insulation of hot water pipes can save up to 4% of energy consumption in the hot water preparation. Keeping the heat where you need it; hot water should stay hot until it reaches the tap. Next to the lengths of pipe insulation, the fixing points contribute significantly to heat dispersion. Insulating pipe supports also prevent thermal bridging.

## Heating

### 2

#### Avoiding condensation

Condensation occurs when the medium temperature inside the pipe is below ambient temperature. Corrosion caused by this type of condensation will damage the installation and fixings. Vapour proof insulation is thus essential. Insulating cold water pipes and fixing material is time consuming, thus the installation of insulating pipe supports can save you a lot of time and hassle. Due to the lack of the thermal bridge to the fixing material, insulated pipe supports minimise the risk of corrosion.

### 3

#### Reducing noise

Insulating a pipe does not only help with limiting temperature loss or preventing condensation. Many installations are sensitive to structure-borne noise transfer of the pumps and of water circulation through the pipes. Insulating pipe supports are effective in eliminating transfer of structure-borne noise from the pipe through the fixing system. It is important to mention that noise reduction cannot be effectively achieved if the insulation is applied afterwards.

Energy saving starts with transporting heat to where you need it and not losing it along the way. The insulating value of the pipe supports should match the pipe insulation by selecting the right material and dimension.

#### 1

#### Solving the thermal bridge

Every uninsulated pipe fitted with metal fixing material results in a thermal bridge where heat is transferred from the pipe to the building structure. With the right insulating pipe support this heat transfer can be stopped. Correctly selected insulation material, calculated according to EN12241, can seamlessly be installed with the insulating pipe supports. Only joints, valves and crossing of pipe sections require additional attention.

#### 2

#### Reducing noise

Heating is most often based on circulation of hot water and even if the installation is perfectly designed, there will always be some noise transferred through the pumps. The right insulating pipe support can help with eliminating this structure-borne noise but only if you apply insulating pipe support during the original installation. When applying insulating pipe supports while retrofitting, the same quality of noise reduction cannot be achieved.

#### 3

#### Following design regulations

Most installations are mandated to be fitted with insulation in order to be compliant with EN12828. Although it seems logical, the insulating pipe support ranges always match with the insulation classes as specified in EN12828. Therefore, there is always a suitable solution for your local market demands including suitable fixing solutions.





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## Ventilation

Ventilation ducts and pipes are exposed to different temperatures. To prevent condensation, make sure the installation is properly fixed and insulated.

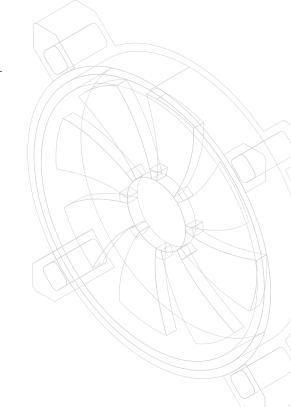
### 1

#### Ventilation duct supported by rails

Spiral duct insulation

2

Many ducts and pipes are supported by a construction of threaded rods and rails. As the ducts are directly resting on rails, there is a thermal bridge that requires insulation. Solving this thermal bridge with the same solution for square ducts and insulated pipe supports makes the job easier and the installation more accessible for maintenance and extensions. For spiro ducts there are a number of insulation solutions available. Elastomer insulation material application can easily be combined with the BISOFIX® E insulating pipe supports. Fixing the spiro ducts with BIS Aero® clamps paired with coextruded TPE lining creates a noise insulating solution. In situations where conditioned air is distributed, fitting an installation with BIS Aero® is a quick and easy solution offering effective noise reduction.



## Air-conditioning

Installations with hot and cold pipes running alongside the air-conditioning units are inextricably linked to the interior of buildings, yet rarely visible to the users.

### 1

#### Supply and return pipe

Supply and return pipes for an air-conditioning unit differ in temperature. Both however should be insulated to prevent both condensation and heat emission. The insulating pipe supports are a quick and easy way to fix the supply and return pipes for the Aircon units. With the right choice of clamps, the condensate drain pipe can be fixed with the same clamp line. The installation can be done in a quick, yet professional way.

Both supply and return pipes need to be insulated to prevent condensation and heat emission



## System approach

## The products that make it happen

#### **BISOFIX® PIR**

The insulated pipe support consists of two identical segments, made of PIR rigid foam. These two parts are covered with glass fibre reinforced aluminium tape. They have a self-adhesive closing. The self-adhesive strip at the tip of the foil forms a quick and solid vapour proof barrier. During installation the joints between the insulating pipe supports and the pipe sections must be sealed with aluminium tape. The final thermal insulation value of the insulated pipe support combined with the load baring capacity make PIR insulating pipe supports a quick and efficient solution.



Quick and efficient

#### BIS Phenblox®

The CE marked insulated pipe support consists of two identical segments, made of Phenolic rigid foam. These two parts have stepped joint faces and are covered with glass fibre reinforced aluminium tape. This tape contains a self-adhesive closing. The self-adhesive strip at the tip of the foil forms a quick and solid vapour proof barrier. The joints between the insulating pipe supports and the pipe sections must be sealed with aluminium tape. The thermal insulation value combined with the load baring capacity make BIS Phenblox<sup>®</sup> insulating pipe supports a quickly processable solution.



A solid vapour proof barrier Quickly processable solution

#### BISOFIX® E

BISOFIX® E insulating pipe supports with PIR core have a PVC vapour barrier. Insulating pipe supports remove the thermal bridge at each fixing point, prevent energy loss and condensation thereby preventing corrosion which extends the lifespan of the fixing material. A self-adhesive tape ensures an easy, yet effective sealed vapour proof barrier. The load bearing capacity and required insulation values are reached by selecting the right PIR rigid insulation foam shells and covering those with elastomeric foam layers for easy adhesion to the insulation foams.



Prevents corrosion Extends lifespan of the installation



BISOFIX® 88 insulating pipe supports are made out of steel clamps with casted polyurethane insulation bodies. The inside of the clamp is covered with rubber foam for noise insulation. This way, the BISOFIX® 88 is effective in both thermal and noise insulation. The connection nut of the BISOFIX® 88 is equipped with 3 different thread sizes to match with M8, M10 and 1/2" threaded rod or pipes up to 139mm. For bigger dimensions the thread connections develop up to M24 for DN400 pipe.



Quick and easy installation Effective in both thermal and noise insulation

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# Hot or cold, we've got you covered!

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

In addition to a comprehensive range of robust, durable and easy-to-install products and 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/insulating-pipe-supports

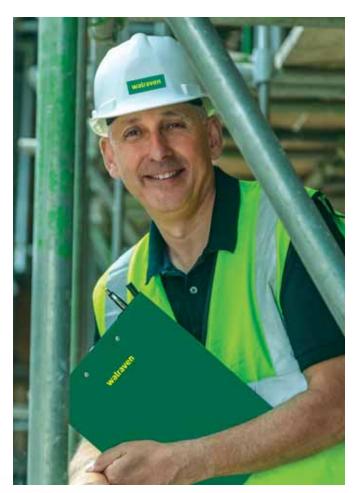
## **Technical Support Services**

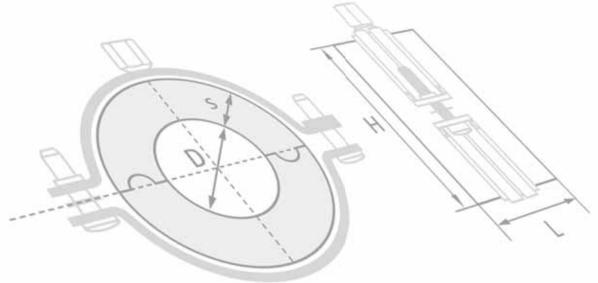
Experience in solving technical challenges

Working with insulating pipe supports becomes more and more common. Although insulating pipe supports are saving time in the installation process, it is essential to select the right material. When preparing or executing a 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 when you purchase our products. We pride ourselves on our invaluable after sales support and technical advice. Based on your individual requirements, our technical engineers can provide you with a comprehensive proposal including detailed load and wind calculations, technical drawings and component lists. All to make your life easier and your work on site more efficient.

#### To contact our technical team directly, please send an email to: export@walraven.com







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## 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!

Other countries

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