



# **BIBOBLOCK<sup>®</sup>**

**FALL ARREST SYSTEM  
FOR FLAT ROOFS**

 **ZOONTJENS**  
A CRH COMPANY



# BIBOBLOCK®

## FALL ARREST SYSTEM FOR FLAT ROOFS

**Despite the great risk of falling when people work on flat roofs, these spaces have to be accessed regularly for maintenance and inspection. Zoontjens, a specialist in fall arrest systems, recognises safety and convenience as two essential criteria when working on roofs. Zoontjens patented BiboBlock® fall arrest system makes it possible to create comfortable and safe working environments on all flat roofs, without the need to penetrate the roof covering.**

### **RISK**

Without an excellent safety system that provides confidence to the user, there is a significant risk of falling when people work on flat roofs. The zone within 2.5 metres of the roof edge is generally considered to be unsafe. Nevertheless, flat roofs must be accessed quite frequently for inspection and maintenance work to the roof or to service items such as chimneys, satellite dishes, solar panels and façade/window cleaning systems.

### **RESPONSIBILITY**

The employer of the people carrying out the work has an obligation to have the necessary safety facilities installed. The owners of buildings, who commission works at height, are held jointly accountable for the consequences of people falling from the roof during maintenance work. These parties become increasingly aware of their accountability and have permanent safety facilities fitted to save on the recurring costs of temporary fall-arrest measures.

## SAFETY AND CONVENIENCE

Zoontjens considers safety and convenience to be essential preconditions for working on flat roofs. But the various professionals who access the roof all have their own requirements as regards safety and setting up their work environment. They all benefit from a fall arrest system which can be used rapidly and efficiently.

## NO NEED TO PENETRATE THE ROOF COVERING

The BiboBlock® fall arrest system can be fitted rapidly and easily. A major advantage is that there is no need to penetrate the roof covering and its substructure, thereby avoiding the possibility of unnecessary leaks and additional maintenance. Less roof maintenance means less exposure to risk and therefore increased safety at work.

## THE BIBOBLOCK® FALL ARREST SYSTEM

The BiboBlock® fall arrest system is a permanent fall arrest system for working on flat roofs. The basis of the system is the BiboBlock®, a 192-kg concrete slab, sized 900 x 900 x 110 mm, with an embedded 12 mm thick stainless steel ring. The slab has four integral rubber carriers which may be provided with bituminous adhesive pads, on which the slab is placed on the roof, preventing the roof covering from being penetrated. The multifunctional BiboBlock® can be used to install different fall arrest facilities on the roof. Zoontjens delivers the system complete with personal safety equipment such as lanyards and safety harnesses.

## THE ADVANTAGES

- ▶ **Safe**  
*The latest safety requirements have been considered during the extensive development and testing of the BiboBlock® fall arrest system. The entire system meets the applicable occupational health and safety rules and meets the requirements of the applicable BS EN795 standard.*
- ▶ **Cost-saving**  
*Carrying out works on roofs can be quite a costly affair. Expensive safety measures in the form of temporary fencing or cherry pickers have to be implemented for every individual job. Investing in the BiboBlock® fall arrest system will save money in the long run.*
- ▶ **Versatile applications**  
*The BiboBlock® fall arrest system can be installed on virtually all roof covering systems.*
- ▶ **The roof covering remains intact**  
*There is no need to penetrate the roof covering to install the BiboBlock® fall arrest system. This avoids an increased risk of leaks, additional maintenance and unnecessarily accessing the roof.*
- ▶ **Rapid and easy**  
*The BiboBlock® fall arrest system can be installed on the roof rapidly, easily and quietly.*
- ▶ **Durable**  
*The BiboBlock® fall arrest system will last for at least the lifetime of the building onto which it is installed. Following renovation the BiboBlock® fall arrest system can be re-used.*



# THE BIBOBLOCK® FALL ARREST SYSTEMS

The need for safety facilities on a flat roof depends on the extent to which the roof is accessed. Zoontjens has developed several BiboBlock® fall arrest systems to offer appropriate solutions for all situations.

## BIBOBLOCK® ANCHOR SYSTEM

With the BiboBlock® Anchor System, the user (maximum 3), wearing a safety harness, is secured to a BiboBlock® by means of the lanyard. Whenever work has to be carried out elsewhere on the roof, the user first returns to the BiboBlock®, removes the lanyard from the BiboBlock® and walks to the next BiboBlock® to which the lanyard is secured again. The BiboBlock® Anchor System is particularly suited to situations where the roof is accessed infrequently to frequently.

## BIBOBLOCK® CABLE SYSTEM

With the BiboBlock® Cable System a maximum of three users attach their safety harnesses and lanyards to a permanent horizontal steel cable system, enabling them to access all parts of the roof without having to disconnect their lanyards. To use this system, a galvanised steel adapter is installed on every BiboBlock® and a stainless steel cable is attached to the adapter. A shuttle runs along this cable, without being obstructed by the intermediate supports. The personal lanyard is attached to the shuttle to provide optimum freedom to move.

With this system the BiboBlocks® can be put maximum twelve metres apart. The BiboBlock® Cable System is excellently suited to flat roofs which have to be accessed for maintenance very frequently.

## BIBOBLOCK® LIFELINE SYSTEM

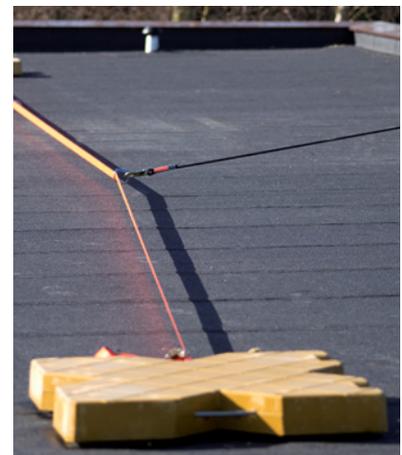
The BiboBlock® Lifeline System involves a temporary mobile lifeline being attached between two BiboBlocks®. Maximum three users attach their personal lanyards to this lifeline. By choosing the BiboBlock® Lifeline System users opt for more freedom to move than with the BiboBlock® Anchor System. There is no need to disconnect lanyards to carry out work safely on another part of the roof, one only needs to re-attach the lifeline. With this system, the BiboBlocks® can be placed up to twenty metres apart. This depends on the height of the roof and/or height differences in the roof. This makes the BiboBlock® Lifeline System an economic system which is mainly suitable for situations where the roof is accessed rarely to regularly. The Lifeline system can only be used on Bitumen and EPDM roofs.



*BiboBlock® Anchor System*



*BiboBlock® Cable System*



*BiboBlock® Lifeline System*





## INSTALLATION

The roof on which the BiboBlock® fall arrest system is to be installed, must comply with a number of design, construction, roofing and insulation requirements. Zoontjens is happy to help you determine whether a roof is eligible for the use of the BiboBlock® fall arrest system. As a rule, roofs with ballast layers have sufficient load-carrying strength. In principle, all common types of roof covering for flat roofs are suitable.



## INSTALLING THE BIBOBLOCKS® ON DIFFERENT KINDS OF ROOFING

Bitumen: the rubber slab carriers under the BiboBlocks® have bituminous adhesive pads. To install the slabs the roof surface first have to be heated with a small blowtorch or a hair dryer.

PVC and EPDM: the rubber slab carriers have been impregnated with a primer. The BiboBlock® is bonded to the cleaned surface using Bibo-Fix.

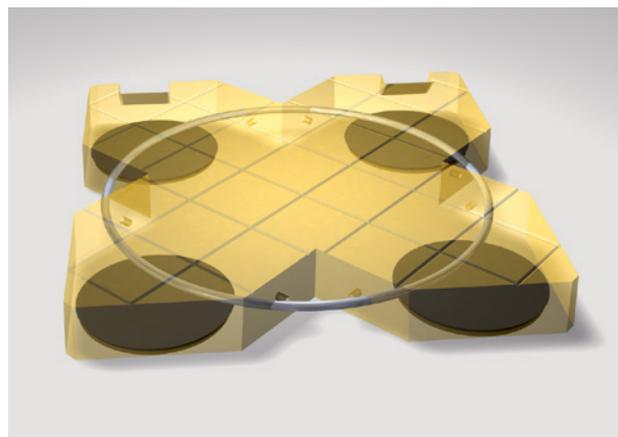
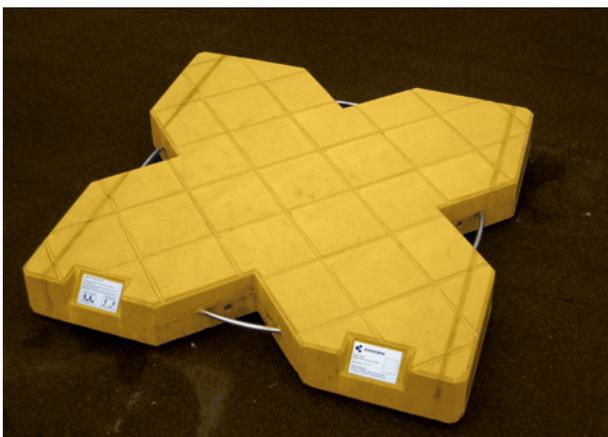




## RISK ASSESSMENT

Every employer is required by law to carry out a risk assessment to determine the risks run by their employees while at work. They then have to take tangible measures to eliminate these risks.

Zoontjens can have a Risk Assessment drawn up for all works that have to be carried out on flat roofs. A Risk Assessment offers some starting points to determine the best application of the BiboBlock® fall arrest system.





## SECTIONAL VIEW

Slab dimensions	900 x 900 mm
Material	B45 concrete
Slab thickness	110 mm
Colour	Yellow
Surface treatment	Diamond pattern
Weight	Approx. 192 kg

## RING DIMENSIONS

Diameter	800 x 12 mm
Material	Stainless steel 316

## SLAB CARRIER DIMENSIONS

Diameter	270 x 35 mm (20 mm effective)
Material	Vulcanised rubber granulate with (or without) modified bituminous adhesive pad
Drainage clearance under the slab	Minimum 15 mm

*The specifications, construction, and details have been gathered in accordance with the latest technical regulations and with the greatest care. Zoontjens International B.V. does not accept any liability for any errors or any incompleteness nor for the consequences thereof. In the interest of innovations and improvements, we reserve the right to modify our products and systems.*

## WHAT IF THE WORLD WERE TWICE AS BIG

It can be, as far as we're concerned. Our world, twice as big. A world that we are helping to design and construct perfectly with our roof slab systems. Our many years of experience have made us the number one expert in rooftop paving. For sustainable roofs, livable roofs for socialising. We interact with architects and contractors every day. With roofers and project developers. Creators and constructors. We listen to them, work with them and advise them. That's why we're the number one party with the best rooftop vision. It's our higher ground.