

# Akasion Siphonic Roof Drainage



Akasion siphonic roof drainage is a concealed system that rapidly drains rainwater from commercial building roofs. The system siphons the water off roofs while maximising space due to its unique pipe system design, it uses fewer downpipes that are smaller than a conventional gravity drainage solution.

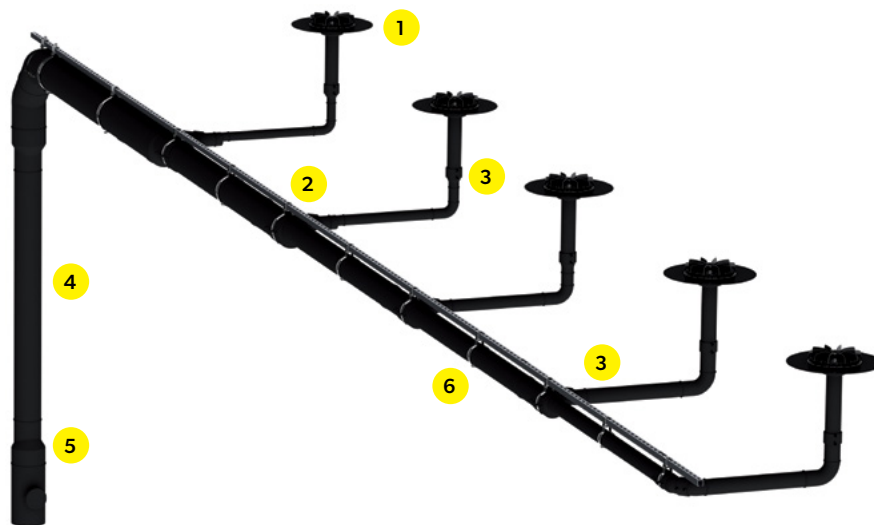
Common uses are found on projects such as industrial warehouses, sports stadiums, large commercial retail buildings and convention centres.

## Components of the system

Key system range:

- › Akasion siphonic roof outlets
- › Akasion pipe support steel rail system, brackets and wall fixings
- › HDPE pipe and fittings – [Akatherm drainage system](#)
- › PE drainage electrofusion couplers - Akafusion

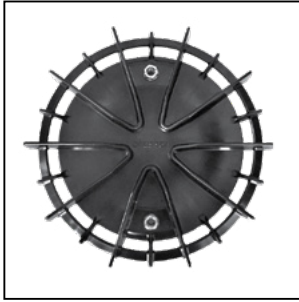
Refer to [Siphonic Drainage Brochure](#) for additional information.



### COMPONENT

- 1 Akasion siphonic roof outlet
- 2 Pipe support system – rail and brackets
- 3 Vertical and horizontal tailpipes
- 4 Downpipe
- 5 Siphon break point
- 6 Horizontal collector pipe

## Akasion Roof Outlets



PRODUCT CODE	
A740650	63mm METAL GUTTER
A749283	63mm CONNECTOR
A747514	75mm PVC FLANGE
A747500	75mm NON-BITUMINOUS*
A747312	75mm BITUMINOUS*
A740930	90mm NON-BITUMINOUS
A740932	90mm BITUMINOUS
A740950	90mm METAL GUTTER
A749285	90mm CONNECTOR
A747590	O/FLOW COLLAR 75mm/90mm
A745551	AIRBAFFLE NUT (SET OF 2)
A745582	O/FLOW EXTENSION NUT (SET OF 2)

\*Includes connector

## Akasion Rail & Fittings



PRODUCT CODE	
A700005	RAIL 30mmx30mm 5m For brackets 40 to 200mm
A700007	RAIL 41mmx41mm 5m For brackets 250 to 315mm
A700015	CONNECTOR 30mm/41mm
A700025	SUSPENSION BKT 30x30mm
A750435	BKT 40mm x M10
A750535	BKT 50mm x M10
A755635	BKT 56mm x M10
A750635	BKT 63mm x M10
A750735	BKT 75mm x M10
A750935	BKT 90mm x M10
A751135	BKT 110mm x M10
A751235	BKT 125mm x M10
A751635	BKT 160mm x M10
A752035	BKT 200mm x M10
A752535	BKT 250mm x M10
A700007	BKT 250mm x M35
A730025	ANCHORPOINT SET x M10 For brackets 40 to 200mm
A730027	ANCHORPOINT SET x M10 For brackets 250 to 315mm

## Akasion Guide and Anchor Brackets



PRODUCT CODE	
A700410	WALL GUIDE BKT 40mm x M10
A700510	WALL GUIDE BKT 50mm x M10
A705610	WALL GUIDE BKT 56mm x M10
A700610	WALL GUIDE BKT 63mm x M10
A700710	WALL GUIDE BKT 75mm x M10
A700910	WALL GUIDE BKT 90mm x M10
A701110	WALL GUIDE BKT 110mm x M10
A701210	WALL GUIDE BKT 125mm x M10
A701610	WALL GUIDE BKT 160mm x M10
A700478	WALL ANCHOR BKT 40mm x 1/2"
A700578	WALL ANCHOR BKT 50mm x 1/2"
A705678	WALL ANCHOR BKT 56mm x 1/2"
A700678	WALL ANCHOR BKT 63mm x 1/2"
A700778	WALL ANCHOR BKT 75mm x 1/2"
A700978	WALL ANCHOR BKT 90mm x 1/2"
A701178	WALL ANCHOR BKT 110mm x 1/2"
A701278	WALL ANCHOR BKT 125mm x 1/2"
A701678	WALL ANCHOR BKT 160mm x 1/2"
A702080	WALL GUIDE & ANCHOR BKT 200mm x 1"
A709410	WALL GUIDE BKT MOUNTING PLATE M10
A709478	WALL GUIDE BKT MOUNTING PLATE 1/2"
A709480	WALL GUIDE & ANCHOR BKT MOUNTING PLATE 1"

## Manufacturer

The range of fittings and valves are distributed by Marley and manufactured by a sister company.

### Aliaxis Nederland BV

- › Industrierrein Panningen 11,  
5981 NK Panningen, Netherlands
- › [www.akasion.com](http://www.akasion.com)
- › [info@akasion.com](mailto:info@akasion.com)

## Relevant Building Code Clauses

Akasion Siphonic Roof Drainage system when used, installed, and maintained in accordance with the requirements outlined in this document, will meet or contribute to meeting:

- › NZBC Clause B2 Durability. Exceeds the requirements for NZBC B2.3.1 (b) 15 years.
- › NZBC Clause E2: External moisture. Meets the requirements for NZBC E2.3.1 and E2.3.2.
- › NZBC Clause F2: Hazardous Building Materials. Meets this requirement and will not present a health hazard to people.

## Limitations on the use

Akasion siphonic roof drainage systems are **NOT** suitable for use on residential buildings.

## Design

Akasion roof drainage system requires specialist design as part of a complete solution offered to the building asset owner. Marley offers a New Zealand-based design service for siphonic roof drainage projects.

## Installation

Akasion should be installed by a qualified trade person and training will be given prior installation.

### Fixing system

The Akasion fixing system offers a single solution for all types of roofs. The system has many features that enable a secure and convenient pipe installation. The brackets have a 215° hook which supports the pipe, freeing both hands for further installation. The brackets can be installed on a rail system or as a suspended system from a threaded rod.

### Rail fixing system

The rail fixing system is designed to hold various pipe sizes without transferring stress onto the roof construction. The rail height is set, maintaining the same plane across the system. The brackets can be installed over the rail using easy click on mounting, allowing for a quicker installation.

### Akafusion welding technology

For jointing PE pipe and fittings, we use our Akafusion system. Electrofusion is the ideal method for jointing large roof systems as pipe work can be easily assembled and welded close under the roof. The Akafusion control box is lightweight and can weld the full diameter range of electrofusion couplers 40-315mm.

## Maintenance requirements

- › Siphonic roof drainage systems should be maintained regularly to ensure reliable performance.
- › Roof outlets and pipework shall be inspected at least twice a year, or more frequently if the accumulation of leaves from trees is likely and similarly for buildings located in industrial areas where likelihood of accumulation of debris is greater.
- › Debris around roof outlets e.g. leaves, plastic bags, bird feathers, that may partially or fully obstruct the outlet shall be thoroughly cleaned away.
- › Tailpipe drains shall be examined at the same time and any pipework with excessive debris shall be rodded out.

## Warning and/or Bans

Akasion siphonic drainage is not subject to any warning or ban.