

Product Data Sheet

AQUAMODUL™ BLUE ROOF RESTRICTOR CHAMBER

Key component of the AQUAMODUL™ blue roof system

Axter's AQUAMODUL™ blue roof system is designed to provide attenuation capacity within a flat roof or podium construction of a development – an integral element of good SuDS design - and can be combined with living roof and mixed amenity finishes.

It comprises a combined drainage and attenuation void within the roof build up, and an outlet system which releases the attenuated water at a controlled discharge rate, as permitted in the planning consent of the site.

AQUAMODUL™ is suitable for use on a wide range of substrates and is compatible with most waterproofing systems. It can be used beneath many different roof and amenity finishes including intensive and biodiverse living roofs, terraces, ballasted, hard and soft landscaped, trafficked and un-trafficked areas, or combinations of them all.

AQUAMODUL™ Blue Roof Restrictor Chamber

The Aquamodul™ blue roof Restrictor Chamber is a key component within the system. Each chamber contains a restrictor valve and filter and when used in conjunction with the blue roof attenuation layers, controls the blue roof discharge rate in line with the planning consent of the site.

The Restrictor Chambers are installed over each roof outlet and act to control the rate of water discharge from each roof area.

They are available in two main types:

stainless steel chamber and lid

embedded and lockable for vehicular and pedestrian trafficable areas (e.g. podiums or walkways). A recessed lid option is also available.

dense polypropylene chamber with galvanised lid

for foot traffic and maintenance areas only (e.g. living and ballasted roofs)

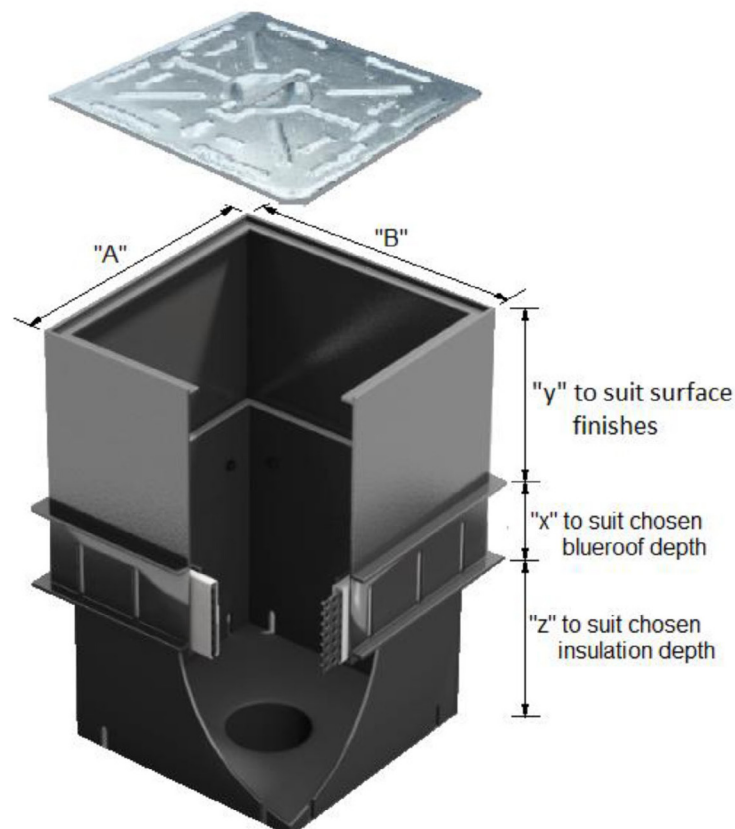
All chambers are accessible to allow for ongoing maintenance.



AQUAMODUL™ blue roof Restrictor Chamber

The Restrictor Chambers are manufactured to order to specific heights as required by the Aquamodul™ blue roof system ("x"), surface finish ("y") and insulation depth ("z").

An alternative chamber profile is available when used with a parapet outlet.



Each Aquamodul™ blue roof system is bespoke, comprising a series of engineered components tailored to meet the attenuation and discharge rates of the site.

Contact Axter Ltd for project specific blue roof designs and specifications, calculations and installation advice.

AQUAMODUL™ blue roof Restrictor Chamber

Internal Restrictor Chamber – polypropylene (maintenance foot traffic only) – <i>illustrated above</i>				
Materials: Polypropylene chamber Galvanised steel lid	Upper chamber width (mm) ("A") 361	Upper chamber Length (mm) ("B") 361	Application notes: Placed in open area of roof. Maintenance foot traffic only. No vehicular traffic, e.g. paved surface finish	
Parapet Restrictor Chamber – polypropylene (maintenance foot traffic only) <i>no ribs on one side to fit to parapet</i>				
Materials: Polypropylene chamber Galvanised steel lid	Upper chamber width (mm) ("A") 361	Upper chamber length (mm) ("B") 341	Application notes: Placed tight to parapet wall. Maintenance foot traffic only. No vehicular traffic, e.g. paved surface finish	
Internal Restrictor Chamber – steel (trafficked) – <i>similar profile to illustration above</i>				
Materials: Stainless steel chamber and lid	Upper chamber width (mm) ("A") 375	Upper chamber Length (mm) ("B") 375	Application notes: Placed in open area of roof. Pedestrian or vehicular traffic, e.g. podium deck	
Parapet Restrictor Chamber – steel (trafficked) – <i>no ribs on one side to fit to parapet</i>				
Materials: Stainless steel chamber and lid	Upper chamber width (mm) ("A") 375	Upper chamber Length (mm) ("B") 350	Application notes: Placed tight to parapet wall. Pedestrian or vehicular traffic, e.g. podium deck	
AQUAMODUL™ Blue Roof Filter Geotextile Characteristics				
Characteristic	Unit	Value	Allowable variance	Standard
Pore size O_{90}	(μm)	115	$\pm 30\%$	EN ISO 12956
Water flow at 50mm head	$\text{l/m}^2.\text{s}$	105	-15%	EN ISO 11058
Type of material	Non-woven needle-punched polypropylene geotextile Protector: non-woven felt of polypropylene. Min. weight of 250g/m^2			
Resistance to chemicals	Excellent			EN ISO 14030

Axter Ltd reserves the right to make changes without notice at any time to the above products. The values given are indicative and correspond to nominal results obtained in laboratories and testing institutes. Any additional installations such as services, PV panels or paved areas, must be discussed with Axter prior to their installation. Final determination of the suitability of any information is the sole responsibility of the user. Consult Axter to discuss the use of this or any other product but responsibility for selection of a material and its application in any specific project remains with the user. This system can be used in conjunction with rainwater harvesting systems. Any petrochemical pollution waste discharged from the system to be treated by others.