ATTENU8®
CELL

PRODUCT DATASHEET v4 | APRIL 2026

PRODUCT DETAILS

Product name	**Attenu8® Cell**
Product type	Structural attenuation cell

PRODUCT DESCRIPTION

Attenu8® Cell is designed for the attenuation of stormwater as part of the **Attenu8®** blue roof system.

It consists of recycled polypropylene plastic blocks, with the possibility of horizontal and vertical connections in various depths.

APPLICATION

Attenu8® system calculations are site-specific and require project approval based on load calculations, substrate construction, area size, finishes, etc. At every stage of installation refer to and follow Proteus project specification.

Inverted **Attenu8®** system is installed in the following sequence:

- Install the specified inverted Proteus system onto the roof surface
- Secure the **Attenu8® Outlet Raising Ring Device** into the roof outlet
- Place the inverted roof insulation over the membrane
- Loose-lay **Proteus Pro-Therm Low-K** on top of the insulation
- Based on design calculations, position **12mm Attenu8® Geo Cell** or **30mm Attenu8® Cell** across the roof, with **30mm Attenu8® Cell** along the vertical perimeter, matching the maximum storage depth, to create an overflow layer. **12mm Attenu8® Geo Cell** should not be used in vertical orientation along the perimeter
- Loose-lay the **Attenu8® Protection Layer** over the overflow layer
- Apply the **Attenu8® Aqua Wrap** membrane to the base and sides of the assembly
- Use **Attenu8® Aqua Wrap Double-Sided Tape** to secure overlaps in the **Attenu8® Aqua Wrap** membrane
- Seal the joints of the **Attenu8® Aqua Wrap** membrane with **Attenu8® Aqua Wrap Lap Tape** for a watertight finish
- Attach the **Attenu8® Flow Restrictor** and **Attenu8® Overflow Device** to the outlet raising rings
- Install the required 50mm **Attenu8® Cell** units within the blue roof attenuation zone until the designed storage depth is achieved - see Attenuation Zone Installation section for details. (30mm **Attenu8® Cell** can also be used if attenuation zone specified is below 85mm. When stacking these cells, secure them with zip ties)
- Fit the **Attenu8® Diffuser/Access Base** to provide access to the restrictor and outlet below. If additional height is needed, use the **Attenu8® Diffuser/Access Riser** instead
- Lay the **Attenu8® Filtration Layer** over the cells and around the access chamber to enable filtration
- Attach either the **Attenu8® Diffuser/Access Slotted Cover** or the **Attenu8® Diffuser/Access Solid Cover** onto the **Attenu8® Diffuser/Access Base** or **Attenu8® Diffuser/Access Riser** to complete the installation
- Finish with **Pro-Living®** Green or Bio-Diverse systems, or other third-party paving or ballast, with a minimum weight of **80 kg/m²**

Warm or uninsulated **Attenu8®** system is installed in the following sequence:

- Install the specified warm or uninsulated Proteus system onto the roof surface
- Secure the **Attenu8® Outlet Raising Ring Device** into the roof outlet
- Based on design calculations, position **12mm Attenu8® Geo Cell** or **30mm Attenu8® Cell** across the roof, with **30mm Attenu8® Cell** along the vertical perimeter, matching the maximum storage depth, to create an overflow layer. **12mm Attenu8® Geo Cell** should not be used in vertical orientation along the perimeter
- Loose-lay the **Attenu8® Protection Layer** over the overflow layer
- Apply the **Attenu8® Aqua Wrap** membrane to the base and sides of the assembly
- Use **Attenu8® Aqua Wrap Double-Sided Tape** to secure overlaps in the **Attenu8® Aqua Wrap** membrane
- Seal the joints of the **Attenu8® Aqua Wrap** membrane with **Attenu8® Aqua Wrap Lap Tape** for a watertight finish
- Attach the **Attenu8® Flow Restrictor** and **Attenu8® Overflow Device** to the outlet raising rings
- Install the required 50mm **Attenu8® Cell** units within the blue roof attenuation zone until the designed storage depth is achieved - see Attenuation Zone Installation section for details. (30mm **Attenu8® Cell** can also be used if attenuation zone specified is below 85mm. When stacking these cells, secure them with zip ties)
- Fit the **Attenu8® Diffuser/Access Base** to provide access to the restrictor and outlet below. If additional height is needed, use the **Attenu8® Diffuser/Access Riser** instead
- Lay the **Attenu8® Filtration Layer** over the cells and around the access chamber to enable filtration
- Attach either the **Attenu8® Diffuser/Access Slotted Cover** or the **Attenu8® Diffuser/Access Solid Cover** onto the **Attenu8® Diffuser/Access Base** or **Attenu8® Diffuser/Access Riser** to complete the installation
- Finish with **Pro-Living®** Green or Bio-Diverse systems, or other third-party paving or ballast, with a minimum weight of **80 kg/m²**

TECHNICAL INFORMATION

Characteristic	Value	Unit
Compressive strength	800	kN/m²
Biological/chemical resistance	Unaffected by moulds and algae, soil borne chemicals, bacteria and bitumen	-

SIZE, FINISH AND COLOUR

Product Code	Length mm	Width mm	Height mm	Net Water Volume L/m²	Unit Weight kg/m²	Porosity %	Colour
A8ADC030	500	500	30	28.4	10	95	Black
A8ASL050	500	500	50	36	4.4	95	Black

HANDLING

Always use relevant safe manual handling techniques for product of this size and weight.

MATERIAL

Polypropylene.

PACKAGING

Pallet with plastic wrap.

LIMITATIONS OF USE

For professional use only.

GUARANTEES

Defects arising from lack of maintenance or abnormal use may fall outside of the cover of the Proteus Waterproofing guarantee.

GUIDELINES AND STANDARDS

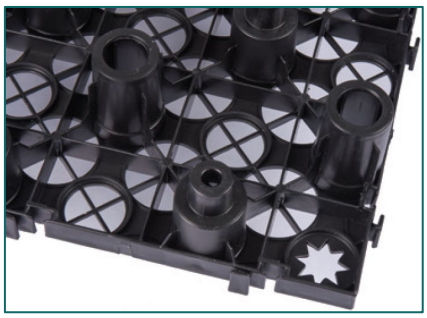
It is the responsibility of the Contractor to thoroughly familiarise themselves with all relevant Codes of Practice and Building Regulations to the works or referred in the specification.

Proteus Waterproofing take no responsibility for misinterpretation or lack of knowledge for third parties.

The works shall be carried out in accordance with the requirements of:

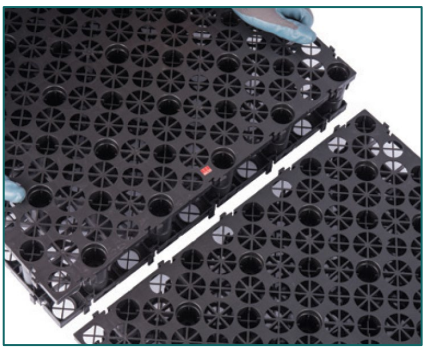
- **BS 6229** Flat roofs with continuously supported flexible waterproof coverings - Code of practice
- **BS 8217** Reinforced bitumen membranes for roofing - Code of practice
- **BS 8000-0** Workmanship on construction sites - Introduction and general principles
- **BS 8000-4** Workmanship on building sites - Code of practice for waterproofing
- **LRWA** Design Guide for Specifiers
- **S2T** Safe to Torch
- **GRO** Code of Best Practice

ATTENUATION ZONE INSTALLATION



1. 50mm **Attenu8® Cell** is a building block used to construct desired depth of the blue roof attenuation zone

2. First layer (base block) always comprises of two 50mm cells, where one is rotated and placed on top of the other. Stars at the corners of both cells have to align for the supporting columns to join together. Because cells interlock, resulting overall depth of the base block is 85mm



3. Such assembled base blocks can then be joined together by aligning integral connectors and pushing down firmly

4. Where deeper attenuation zone is required, additional 50mm cells stacked on top of the base block can be used to achieve the desired depth. Each additional 50mm cell layer results in 40mm increase in overall attenuation zone's depth (due to cells interlocking)

Number of cells required to achieve specific attenuation zone depth:

30mm | 4x 30mm cells per m²
60mm | 8x 30mm cells per m² (zip-tied together)
85mm | 8x 50mm cells per m²
125mm | 12x 50mm cells per m²
165mm | 16x 50mm cells per m²
205mm | 20x 50mm cells per m²
+40mm | +4x 50mm cells per m²

Proteus Waterproofing Limited
21a Sirdar Road
Brook Road Industrial Estate Rayleigh
Essex SS6 7XF

Telephone 01268 777 871
E-mail office@proteuswaterproofing.co.uk
Website www.proteuswaterproofing.co.uk