

WATER CONSERVATION STATEMENT



**MORETUBE ENGINEERING LTD,
PLOT C2,
BRYN CEFNI BUSINESS PARK,
LLANGEFNI,
YNYS MON.**

**MARCH 2021
Suitability S1
Revision P01**

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1.0 Introduction

- 1.1 This Water Conservation Statement is submitted in support of an application for the construction of 3No. separate commercial buildings.
- 1.2 Policy PCYFF 6 of the adopted Anglesey and Gwynedd Joint Local Development Plan requires proposals greater than 10000m² to be accompanied by a Water Conservation Statement outlining how the development will protect and improve water resources through improved efficiency and demand management of water. This policy explains that there are a number of ways which water conservation can be achieved including water saving devices, rainwater harvesting and grey water recycling.
- 1.3 Water usage is known to be closely linked to user behaviour. However, a number of water efficiency measures are to be incorporated into the design of the proposed apartment development which will save significant amounts of water and energy.

2.0 Regulation & Guidance

2.1 The water efficiency measures outlined within this Statement have been devised in accordance with the following policies and guidance documents:

- Welsh Government Practice Guidance: Planning for Sustainable Buildings
- AECB – Water Standards: Delivering Buildings with Excellent Water and Energy Performance
- The Water Efficiency Calculator for New Dwellings (DCLG 2009)

3.0 The Measures

- 3.1 The proposed development consists of 6No. commercial building in 3No. blocks, and the following measures will be incorporated into the design of the building in order to ensure reduced water usage and encourage water recycling:
- 3.2 Water Consumption - The consumption of water by persons occupying each unit will not exceed 125L/person/day, calculated in accordance with the methodology set out in the The Water Efficiency Calculation (Appendix A)
- 3.3 Regulated Flow - Regulated flow to individual fittings to stabilise flow rates and temperatures throughout the system.
- 3.4 Fittings - Regulated aerated tap fittings to prevent waste through splashing water.
- 3.5 Rainwater Harvesting - Rainwater Recycling Butts will be provided to catch rainwater for the watering of outside plants.
- 3.6 Heating and Hot Water - The development will incorporate an efficient mechanical design and compact electric heating layout to reduce the lag time for water to run hot, reduce water consumption and ensure that all forms of generating heat are carbon free.
- 3.7 The design of the cold-water systems will be installed in accordance with BS 6700 and the “ideal” / minimum flow rates specified therein for any given type of draw-off / sanitary appliance.

APPENDICES

APPENDIX A - Part G Water Efficiency Calculations

WATER EFFICIENCY CALCULATOR - PER UNIT

Fitting	No.	Unit of measure	Indiv. Capacity / flow rate (1)	Cum. Capacity / flow rate (1)	Use factor (2)	Fixed use (3)	Total (Litres/person/day) (4)	Notes
WC (dual flush)	1	Single flush vol	0.00	0.00	4.42		0.000	Armitage Shanks Sandringham 21 Close coupled WC (WRAS Approval ref. Flush Valve - 1309069 Inlet Valve - NSF171723)
Basin taps	1	flow rate (L/min)	1.00	1.00	1.58	1.58	3.160	Pegler Ref. 4G4012
Shower	0	flow rate (L/min)	6.00	0.00	5.60		0.000	N/A
Bath (shower present)	0	Cap. To overflow	0.00	0.00	0.11		0.000	N/A
Sink/utility taps	1	flow rate (L/min)	0.00	0.00	0.44	10.36	10.360	Pegler Ref. 4G4099
W. Machine	0	L/kg load	5.90	0.00	2.10		0.000	N/A
Total calculated use (5)							13.520	
Contribution from grey water (6)							0.000	
Contribution from rainwater (7)							0.000	
Normalisation factor (8)							0.910	
Total water consumption (9) = [(5)-(6)-(7)] x (8)							12.303	
External water use (10)							5.000	
Total water consumption ((Max. consumption 125 litres/person/day from B. Reg. 17.K) = (9) + (10))							17.303	
								As a guide total calc use (5) must not exceed =(125-5) / 0.91= 131.86L/p/d
								PASS

Therefore, building complies with approved Doc G, regulation 17K

Note:

- Data for fittings obtained from <http://www.europeanwaterlabel.eu/findaproduct.asp?country=GB&category=&rating=&manufacturer=&order=>
- Products which have been approved as a water efficient product are given a flow rate of 0.00L/min/volume of 0.00L, as per the guidelines.