

APPENDIX D

BREEAM 2011 Wat 01 Water Consumption: Water Efficiency Calculator for New Non Domestic Office Buildings

BREEAM®

Building Details

Building name 17 & 19 Ferdinand Street

BRE Assessment Reference No. CCEL-PS30

Building type	Description of building type	Default occupancy	Default annual days/operation	Default daily hours of operation
Office	TCP Classification B1: Offices and workshop business (including those with a basic (category 1) laboratory area)	53.28	253	10

Main building activity areas	Description of activity area	Activity area present in building?	Net Floor Area (m ²)
Office - Office areas	Cellular or open plan office space, including staff kitchen where present/adjacent and reception areas. Exclude meeting rooms, visitor waiting or circulation areas.	Yes	480
Office - Small workshop / laboratory space	Small scale workshop or category 1 laboratory area	No	
Office - Staff canteen dining area	Seated dining areas that accompany a permanently staffed kitchen preparing food for consumption on the premises (excludes small un-staffed kitchen's used by office staff to re-heat food, make tea etc.)	No	
Office - Fitness suite/gym (with changing facility and showers)	A fitness suite or gym that is part of the office building/development and used by the building's employees only. The gym will have its own changing facility with showers.	No	

Water Consumption - Building Microcomponent

WC component - all activity areas	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
WC - male (no urinals installed)	Effective flush volume (Litres)	4.00	4.00	1.00	8.00
WC - female	Effective flush volume (Litres)	4.00	4.00	1.00	8.00

Urinal component - all activity areas	units	Specification	No. of cisterns	Flushing frequency (flushes/hour)	Consumption (L/person/day)
	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)

	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
Taps components (personal hygiene) - all activity areas					
Wash hand basin taps	Flow rate (litres/min)	4.50	4.00	0.25	3.05
Shower use	Flow rate (litres/min)		0.030	5.60	0.00
Fixed use - vessel filling	Litres/person/day	-	-	-	1.58
Tap components (cleaning) - staff kitchenette					
Kitchen taps - kitchenette	Flow rate (litres/min)	5.00	1.00	0.67	2.27
Dishwasher	Litres/cycle		0.04	1.00	0.00
Tap components (cleaning and food preparation) - staff canteen food preparation area					

	Microcomponent Consumption (L/person/day)
Total	22.89

Non Potable Water Yield - Greywater System

Has, or will, the greywater system be specified and installed in compliance with BS8525-1:2010 Greywater Systems - Part 1 Code of Practice	No
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Greywater source (building components)		Greywater Collected	Proportion of components collected from (%)	Greywater yield (L/person/day)
Greywater source (other components)	Typical greywater yield (litres)	Frequency of yield (days)	Greywater yield (litres/day)	Greywater yield (L/person/day)

	Greywater yield (L/person/day)
Total	0.00

Non Potable Water Yield - Rainwater System

Has, or will, the rainwater system be specified and installed in compliance with BS8515:2009 Rainwater Harvesting Systems - Code of practice	No
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How has the storage capacity for the proposed system been calculated?	
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Rainwater yield if intermediate:

Collection area (m2)	Rainfall (average mm/yr)	Hydraulic filter efficiency (%)	Yield co-efficient (%)	Annual rainwater yield (Litres)	Rainwater yield (L/person/day)

Rainwater yield if detailed:

Daily rainfall collection (litres)	Rainwater yield (L/person/day)

BREEAM Water Consumption Calculator Tool
Create Consulting Engineers
Ref: FK/RJH/282/02