

5	WATER USE	5.1 WATER CONSERVATION	
		WU 3 WATER EFFICIENT IRRIGATION	
	EXCLUSIONS	Where soft landscaping and planting coverage is less than 50% of the area of the building footprint.	1
	OBJECTIVE	Reduce the reliance on potable water for irrigation.	
	CREDITS ATTAINABLE	1	
	PREREQUISITES	None.	
	CREDIT REQUIREMENT	<p>1 credit for the use of an irrigation system which does not require the use of municipal fresh water after a period of establishment is complete.</p> <p>Alternately,</p> <p>1 credit for demonstrating highly efficient irrigation technology and/or the use of harvested rainwater and/or recycled grey water to reduce fresh water consumption for irrigation by 50% or more in comparison with conventional irrigation of water intensive planting.</p>	
	ASSESSMENT	<p>The Client shall provide a report prepared by a suitably qualified person describing the soft landscaping design, species of plants, etc., and confirm that, after a period of establishment of the plants and vegetation, irrigation will not require the use of municipal potable (fresh) water supply.</p> <p>Alternatively, the Client shall demonstrate highly efficient irrigation technology and/or the use of harvested rainwater and/or recycled grey water to reduce fresh (mains) water consumption for irrigation by 50% or more in comparison with conventional irrigation of water intensive planting.</p> <p>Water use reduction may be demonstrated by comparing the metered data to any suitable benchmark, or may be demonstrated by calculations provided by a suitably qualified person.</p>	<p>2</p> <p>3</p> <p>4</p> <p>5</p>
	BACKGROUND	<p>Where a building development contains significant landscaping, as defined by the coverage of soft landscaping, greenery and planters, there is likely to be a significant consumption of potable water. Irrigation by lower quality (harvested or recycled) water can be equally effective. Native plants can survive without additional watering, and require less fertiliser and pesticides, thereby reducing impacts on local waters.</p> <p>There is the potential to use well water, but due consideration must be given to the requirements of the Water Authority. Normally, wells may not be sunk on government land [1]. Permission under Building (Construction) Regulation 85 [2] to sink a well in private land will be given only where the:</p> <ul style="list-style-type: none"> • well yield is adequate; and • water abstraction will not adversely affect nearby services buildings, structures or land. 	

1 Buildings Department. Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineer. PNAP No. APP-4 Water Supply and Wells.
<http://www.bd.gov.hk/english/documents/pnap/APP/APP004.pdf>

2 Department of Justice, CAP 123B Building (Construction) Regulations
[http://www.legislation.gov.hk/blis_pdf.nsf/6799165D2FEE3FA94825755E0033E532/4DB8C4250F4FD17D482575EE003EE38A/\\$FILE/CAP_123B_e_b5.pdf](http://www.legislation.gov.hk/blis_pdf.nsf/6799165D2FEE3FA94825755E0033E532/4DB8C4250F4FD17D482575EE003EE38A/$FILE/CAP_123B_e_b5.pdf)

EU 1 Reduction of CO2 Emissions

EU 1 - Option 2 Alternative Route: Passive Design

EU 2 Peak electricity demand reduction

EU 3 Embodied energy in building structural elements

EU 6 Renewable Energy System

EU 7 Air-conditioning units

EU 9 Energy efficient appliances

EU 10 Testing and Commissioning

EU 11 Operation and Maintenance

EU 12 Metering and monitoring

Water Use

WU P1 Water Quality Survey

WU P2 Minimum water saving performance

WU 1 Annual water use

WU 3 Water Efficient Irrigation

#149. WU 3, For BEAM Plus New Buildings Version 1.1 and 1.2 / WU 2, For BEAM Plus New Buildings Version 2.0 / WU 2, For BEAM Plus Existing Buildings Version 2.0 Comprehensive Scheme / WA 3, For BEAM Plus Neighbourhood Version 1.0, for calculation of the irrigation demand, how the landscaping and planting coverage should be calculated?

For calculation of the irrigation demand, the landscape and planting coverage shall take into account the following considerations:

(i) All greenery within the project assessment boundary shall be considered, including but not limited to:

- Uncovered and covered greenery areas
- Accessible and inaccessible (e.g. inaccessible roof) greenery areas

(ii) No reduction factor in APP-152 shall be applied

(Released on 28 January 2022)

WU 5 Water efficient appliances

Indoor Environmental Quality

IEQ P1 Minimum ventilation performance

IEQ 1 Security

IEQ 2 Plumbing and Drainage

IEQ 4 Waste Disposal Facilities

IEQ 5 Construction IAQ Management

IEQ 6 Outdoor Sources of Air Pollution

IEQ 7 Indoor Sources of Air Pollution

IEQ 9 Increased ventilation

IEQ 10 Background Ventilation

IEQ 11 Localised Ventilation

IEQ 12 Ventilation in Common Areas

IEQ 14 Thermal Comfort in Naturally Ventilated Premises

IEQ 15 Natural Lighting