

# RISK ASSESSMENT STRATEGY FOR DRINKING WATER SUPPLIES IN PUBLIC BUILDINGS



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The Water Health Partnership for Wales is a public health collaboration that brings together relevant organisations and agencies to work on water related public health issues. Its aim is to protect public health by working collaboratively to deliver consistent understanding and management of water quality issues and to supply safe and reliable water services. The Water Health Partnership for Wales involves a number of organisations including:

- Welsh Government
- Health Boards
- Local Authorities
- Public Health Wales
- Consumer Council for Water Wales
- Drinking Water Inspectorate
- Natural Resources Wales
- Dŵr Cymru Welsh Water
- Severn Trent Water
- Dee Valley Water
- Water Regulations Advisory Scheme

The Partnership facilitates supporting specific activities through the work of multi-agency working groups. The 'Public Buildings Task & Finish Group' (T&F Group) was set up to produce guidance, to enable all organisations with statutory duties for safeguarding drinking water to consistently and effectively manage the risks associated with drinking water supplies in public buildings.

The Public Buildings Task & Finish group consists of members from the following organisations:

- Dŵr Cymru Welsh Water
- Severn Trent Water
- Dee Valley Water
- Shared Regulatory Services, Cardiff, Vale and Bridgend Council
- Torfaen County Borough Council
- Water Regulations Advisory Scheme
- Drinking Water Inspectorate



Website: [www.waterhealthpartnership.wales](http://www.waterhealthpartnership.wales)



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## 1. EXECUTIVE SUMMARY

It has been estimated that there are in excess of 50,000 public buildings in Wales. These premises are predominantly supplied by a public water supply but there are a number of which receive their drinking water from a private supply.

The majority of these places are premises frequently visited by members of the public and have an important part to play in supporting the tourism industry in Wales. It is estimated that 90 million day visits are made to destinations in Wales.<sup>1</sup>

In order to protect public health, it is vital that the members of the public who visit such premises can rely on a safe, clean water supply.

The Drinking Water Inspectorate (DWI) has highlighted concerns with the management of water quality within public buildings in their annual reports for public and private water supplies Drinking Water 2013<sup>2,3</sup>. The DWI published a review of all water quality failures in public buildings since 2004, confirming that 1,149 private water supplies in Wales are used to provide water for drinking, cooking and washing in the provision of services to the public. The report also reminded water companies and local authorities that any defect in a domestic water system of a public building that causes or is likely to cause the water supply to be unwholesome must be rectified, using powers of enforcement as necessary, and/or powers of entry to carry out necessary works, with subsequent recovery of costs.

This guidance is designed to supplement existing risk assessment strategies for public buildings. It can also be used as a validation tool. Its application is intended for organisations involved in undertaking risk assessments and inspections. It applies whether the public building is supplied by a public or private water supply.

For local authority officers, this guidance can be applied where public buildings on private water supplies are identified. As these premises will require a risk assessment, this guidance provides a tool to assist officers with prioritisation of that activity.

<sup>1</sup><http://gov.wales/topics/tourism/researchmain/latest-stats/?lang=en>

<sup>2</sup><http://dwi.defra.gov.uk/about/annual-report/2013/wales.pdf>

<sup>3</sup><http://dwi.defra.gov.uk/about/annual-report/2013/private-wales.pdf>

## **2. CURRENT REGULATORY REQUIREMENTS**

The legal requirements and statutory duties covering the risk assessment and monitoring of water in public buildings are covered in The Water Supply (Water Quality) Regulations 2010 (Wales) (as amended)<sup>4</sup> for public supplies and in The Private Water Supplies (Wales) Regulations 2010 (as amended)<sup>5</sup>

Specifically, regulation 9 of The Private Water Supplies Regulations, and regulation 21 of The Water Supply (Water Quality) Regulations. DWI have published guidance on these regulations which can be found on their website. [www.dwi.defra.gov.uk](http://www.dwi.defra.gov.uk)

Local authorities' duties under regulation 9 mean that all public buildings must be risk assessed at least once every 5 years, and monitored as appropriate.

Water companies also have powers and duties under sections 73 to 75 of the Water Industry Act 1991<sup>6</sup> including The Water Supply (Water Fittings) Regulations 1999<sup>7</sup>.

## **3. AIMS OF THIS GUIDANCE**

The aims of this guidance are to:

- 1) Provide a definition of a public building with a domestic water supply system;
- 2) Provide a risk based framework to assess risks to water quality within public buildings and target risk assessment and inspection activity proportionate to the risk.
- 3) Provide water companies and local authorities with a validation tool that can be used to identify public buildings consistently and assist in the prioritisation of their risk assessment, inspection and monitoring programmes for such premises.

The guidance contained in this document, and specifically the application of the risk matrix to inform risk assessment and inspection programmes, will be adopted by the 3 largest water undertakers in Wales (Dwr Cymru Welsh Water, Dee Valley Water and Severn Trent Water) and local authorities in Wales.

<sup>4</sup><http://dwi.defra.gov.uk/stakeholders/legislation/wsr2010wales.pdf>

<sup>5</sup><http://www.legislation.gov.uk/wsi/2010/66/contents/made>

<sup>6</sup><http://www.legislation.gov.uk/ukpga/1991/56/contents>

<sup>7</sup><http://www.legislation.gov.uk/uksi/1999/1148/contents/made>

## **4. METHODOLOGY**

The rationale adopted and the approach taken to meet the aims was as follows.

### **1) Provide a definition of a public building with a domestic water supply system**

In order to achieve a unified and consistent approach to managing risk within public buildings, a review of regulatory requirements, existing guidance as well as current approaches, was undertaken to establish a definition which was both workable and unambiguous.

To confirm the credibility and robustness of this definition it was successfully tested against existing lists of public buildings, used by water companies and local authorities in Wales.

A public building is defined as:

A NON-HOUSEHOLD PREMISES WHERE WATER SUPPLIED FOR DOMESTIC PURPOSES IS MADE AVAILABLE TO MEMBERS OF THE PUBLIC

This definition should be used to determine whether a premises falls within scope of this document.

It was a conscious decision of the public buildings T&F Group to keep the definition as wide and all-encompassing as possible. This allowed the application of a risk matrix which would serve to assess the specific risks associated with the provision of water at each type of public building that met the definition.

This validation exercise also enabled a comprehensive list of premises to be developed which met the above definition of a public building.

### **2) Provide a risk based framework to assess risks to water quality within public buildings and target risk assessment and inspection activity proportionate to the risk**

- Review and update of current information

A comprehensive list of public buildings was compiled in the Water Research Centre report entitled "Quality of Drinking Water in Public Buildings, final Report to the Drinking Water Inspectorate" (DWI 6348, March 2004)<sup>8</sup>

This provided a categorisation for public buildings to be used by water companies in the UK at that time. This list consisted of 6 categories and 46 sub categories.

This guidance has been used by water companies, but in practice its application has been inconsistent. The public building T&F Group has taken the original list of categories and using the knowledge and experience of relevant water company and local authority personnel it was reviewed to produce a more comprehensive list.

<sup>8</sup>[http://dwi.defra.gov.uk/research/completedresearch/reports/DWI70\\_2\\_164\\_public%20buildings.pdf](http://dwi.defra.gov.uk/research/completedresearch/reports/DWI70_2_164_public%20buildings.pdf)

The evaluation and analysis resulted in a list containing a total of 10 categories incorporating 136 different types of “public building” that meet the definition as stated above. The revised full list is shown in appendix 1.

This list was produced using all available information at the time. It is the intention that this should continue to be a dynamic list and updated periodically by collation of information and sharing of learning between water companies and local authorities.

- Development of the Risk Matrix

Initially a number of different approaches for proactive risk management were considered but eventually discounted as being impracticable or because they lacked the necessary detail. Through extensive testing it was concluded that a framework made up of a combination of a risk matrix and accompanying guidance to supplement, and validate, existing proactive inspection programmes would be the most effective means of managing risk in public buildings.

A number of factors were considered as part of the development of the risk based template for public buildings. These were largely based upon the established risk assessment methodology used by environmental health practitioners in determining the frequency of food hygiene inspections.<sup>9</sup>

The risk matrix developed is intended to be applied to each type rather than individual, public building. It is used to calculate a total risk score (TRS) by assessing the three most significant forms of risk to consumers in a specific type of public building by assigning a risk score in response to the following 3 questions:

1. The nature of water use by the public?
2. The risks to water quality from type of business activity and water systems in place?
3. The vulnerability of users of the premises?

Applying the matrix to each type of public building meeting the definition, led to the identification of three distinct risk classifications – high, medium and low risk public buildings. This tool can also be applied to validate and refine existing risk assessments of public buildings.

### **3) Provide water companies and local authorities with a validation tool that can be used to identify public buildings consistently and assist in the prioritisation of their risk assessment, inspection and monitoring programmes for such premises**

This guidance identifies what course of action should be considered, including what priority and frequency of risk assessment and inspection activity should be assigned, to each type of public building based upon their total risk score (TRS).

This action can range from incorporation into proactive inspection programmes, in line with company policy, to a site specific risk assessment of individual public buildings.

<sup>9</sup>Food Standards Agency (2014), *Food Law Code of Practice Wales*, London, Food Standards Agency, pages 129-138

To aid those using the matrix, the resources developed include a number of worked examples together with a list of the proposed TRS's calculated for each type of public building currently assigned by the three largest water undertakers supplying Wales. This information has been provided for illustration purposes only and represents the current position at May 2016 in Wales. The full list of Public Building types including TRS's is shown in appendix 2.

It is anticipated that many of the public building types shown in appendix 1 will already form part of existing, proactive inspection programmes. However, organisations may also wish to utilise this guidance in order to refine existing inspection frequencies and/or operational priorities.

It is recognised that risk profiles will vary between different organisations. However, where a type of public building has not been subject to a risk assessment or included in an existing proactive inspection programme, organisations with statutory duties are encouraged to use this risk based template to determine a course of action.

As general practice those public buildings that have been classified as higher risk should be prioritised, over those that have been classified as lower risk.

The use of this document will be subject to periodic review to ensure that there are no known common, unusual or emerging risk factors which may adversely affect the original risk rating assigned to that type of public building.

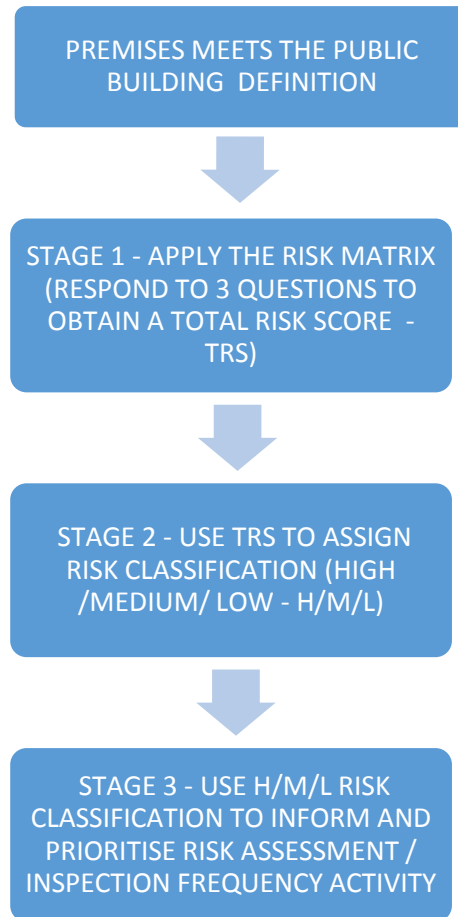
Organisations are encouraged set out a strategy for managing water quality within public buildings as part of existing policies and procedures.



## 5. APPLICATION

The overall process for application is illustrated in Figure 1 below

**FIGURE 1 – Process Overview**



### **Stage 1 – Applying the Risk Matrix**

Apply the risk matrix as shown in Figure 2, to all premises that meet the definition of a public building. This will assign an individual score to each stage. The sum of these 3 scores will determine the overall Total Risk Score (TRS). The TRS will indicate high, medium or low risk and inform what further action and prioritisation is required for each type of public building.

If the premises type does not meet the definition i.e. water is not made available to the public for domestic purposes, it does not fall within the scope and therefore is not applicable. However, these premises should still be subject to risk assessment in line with company policy.

## QUESTION 1

Score for response = Q1

### Nature of Water Usage?

The response to this question should be based on “a reasonable expectation” of public access to water, i.e. where a member of the public could reasonably expect to be served with drinks made with tap water, including drinks from vending machines OR where members of the public may come into close contact with tap water through washing & showering.

Score	
100	<p><b>Is there a reasonable expectation that the Public will have access to water for human consumption. i.e. drinking and/or food preparation?</b></p> <p>Examples of TYPES of Public Building include; Hotels / Guest Houses, Cafes/takeaway, Nurseries, Hospitals, Community Centres, Airports, Health Clubs, Theatres, Prisons and Caravan Sites etc.</p>
50	<p><b>Is there a reasonable expectation that the Public will have access to water for other domestic purposes, other than human consumption, e.g. washing, showering / use of toilet facilities</b></p> <p>Examples of TYPES of Public Building include; Car/Vehicle Repairs, Veterinary Surgeries, Petrol Stations, Shops etc.</p>

## QUESTION 2

Score for response = Q2

### Risks to Water Quality from type of business activity and water systems in place?

Consideration should be given to the types of business activities being regularly carried out within the public building including whether there are any known risks associated with this type of business activity (based on previous experience and knowledge) together with the types of water systems in place and the associated risk to water quality and public health.

Score	
100	<p><b>High risk business activities and/or water systems</b></p> <p>Public Buildings with a typical business activity (and/or water systems in use) which represents a contamination risk that poses a serious or significant health hazard. If the presence of any high risk water system is known e.g. Rain water harvesting system or grey water re-use then the specific public building should be assigned a score of 100 for this question irrespective of type of premises.</p> <p>Examples of TYPES of Public Buildings include; Zoos, Cattle Markets, Funeral Homes, Hospitals, Universities, Hotels / Spa with swimming pools etc.</p>

50	<p><b>Medium risk business activities</b></p> <p>Public Buildings with a typical business activity (and/or water systems in use) which represents a contamination risk that poses a health hazard that is not serious or significant.</p> <p>Examples of TYPES of Public Buildings include; Garden centres, Hairdressers, Beauty Salons, Restaurants, Cafés, Pubs, Opticians etc.</p>
25	<p><b>Low risk business activities</b></p> <p>Public Buildings with a typical business activity (and/or water systems in use) which represents a contamination risk that poses no hazard to health but may impact aesthetic quality owing to a change in its temperature, or change in its taste, odour or appearance.</p> <p>Examples of TYPES of Public Buildings include; Shops, Cinemas, Bingo Halls, Police Stations, Churches, Courts etc.</p>

### QUESTION 3

Score for response = Q3

#### Vulnerability of Specific Groups?

Consideration should be given to the vulnerability (i.e. age or health status) of the population who work, reside or have frequent access to the public building.

Score	
100	<p><b>High probability of vulnerability within the population</b></p> <p>Public Buildings, by their very nature are intended to be frequently used by vulnerable populations, for example those who are likely to be more susceptible to the effects of illness that arise from water quality issues such as the under 5's, over 65's and people who are sick or immunocompromised.</p> <p>Examples of TYPES of Public Building include; Hospitals, G.P Surgeries, Nursing Homes, and Crèches etc.</p>
25	<p><b>Low probability of vulnerability within the population</b></p> <p>Public Buildings, by their very nature are intended to be used by the general population (General public) which may include the occasional use of vulnerable population.</p> <p>Examples of TYPES of Public Building include; Supermarkets, Hairdressers, Restaurants, Cafes, Council Buildings, Colleges, Opticians, Public Toilets, Health Clubs, Theatres etc.</p>

## Stage 2 - Classification of Risk

### **Q1 + Q2 + Q3 = TOTAL RISK SCORE (TRS)**

The TRS obtained for each type of public building can then be used to assign an overall Risk Classification.

For Public Buildings with TRS of 225 and above are classified as **High Risk**

For Public Buildings with TRS of 175 are classified as **Medium Risk**

For Public Buildings with TRS of 150 and below are classified as **Low Risk**

The risk classification is then used to inform the actions required in terms of prioritisation of risk assessment and inspection activity, the detail of which is shown below.

## Stage 3 – Prioritising Risk Assessment and Inspection Activity

The information below can be used by water companies to develop and refine their proactive inspection programme for public buildings in their area of supply.

For local authority officers, as these premises will require a risk assessment under current regulations, then the information below provides a tool to assist with prioritisation of this activity.

<u>Risk Classification</u>	<u>Total Risk Score (TRS)</u>	<u>Risk Assessment / Inspection Frequency</u>
High Risk 1 (H1)	300	<p>ALL public buildings types in this classification should be included in Water Companies proactive inspection programme. Individual premises within this type should be identified for a <b>site specific risk assessment</b>.</p> <p>INITIAL ACTIONS  <b>Where one has not already been carried out, an initial site specific risk assessment should be undertaken. This should include a physical inspection of each individual high risk public building in this classification (H1) ideally within 6 months.</b></p> <p>ONGOING ACTIONS            It is advised that a site specific risk assessment of individual high risk public buildings in this classification (H1) be <b>reviewed at least every 5 years</b>.</p>
High Risk 2 (H2)	250	<p>ALL public buildings types in this classification should be included in Water Companies proactive inspection programme. Individual premises within this type should be identified for a <b>site specific risk assessment</b>.</p> <p>INITIAL ACTIONS  <b>Where one has not already been carried out, an initial site specific risk assessment of each individual high risk public building in this classification (H2) should be carried out ideally within 12 months (This</b></p>

		<p>may take the form of a desktop exercise rather than physical inspection of premises)</p> <p>ONGOING ACTIONS</p> <p>It is advised that a site specific risk assessment of individual high risk public buildings in this classification (H2) be <b>reviewed at least every 5 years.</b></p>
High Risk 3 (H3)	225	<p>ALL public buildings types in this classification should be included in Water Companies proactive inspection programme. Individual premises within this type should be identified for a <b>site specific risk assessment.</b></p> <p>INITIAL ACTIONS</p> <p>Where one has not already been carried out, <b>an initial site specific risk assessment of all high risk public buildings in this classification (H3) should ideally be carried out within 18 months</b> (This may take the form of a desktop exercise rather than physical inspection of premises)</p> <p>ONGOING ACTIONS</p> <p>It is advised that a site specific risk assessment of individual high risk public buildings in this classification (H3) be <b>reviewed at least every 5 years.</b></p>
Medium Risk (M)	175	<p>ALL public buildings types in this classification should be included in Water Companies proactive inspection programme. <b>The frequency of risk assessment should be clearly defined within company policy.</b></p> <p>ACTIONS</p> <p>A <b>minimum of 10% (of each type) of medium risk public buildings in this classification should be risk assessed</b> in line with the frequencies defined in company policy.</p>
Low Risk (L)	150 and below	<p>ACTIONS</p> <p>Water companies <b>should review, and if necessary carry out a risk assessment</b> of low risk public buildings in this category in line with their defined company policies and procedures.</p>

**Please Note:** An overview of the Stage 3 is shown overleaf as Figure 2

**FIGURE 2**

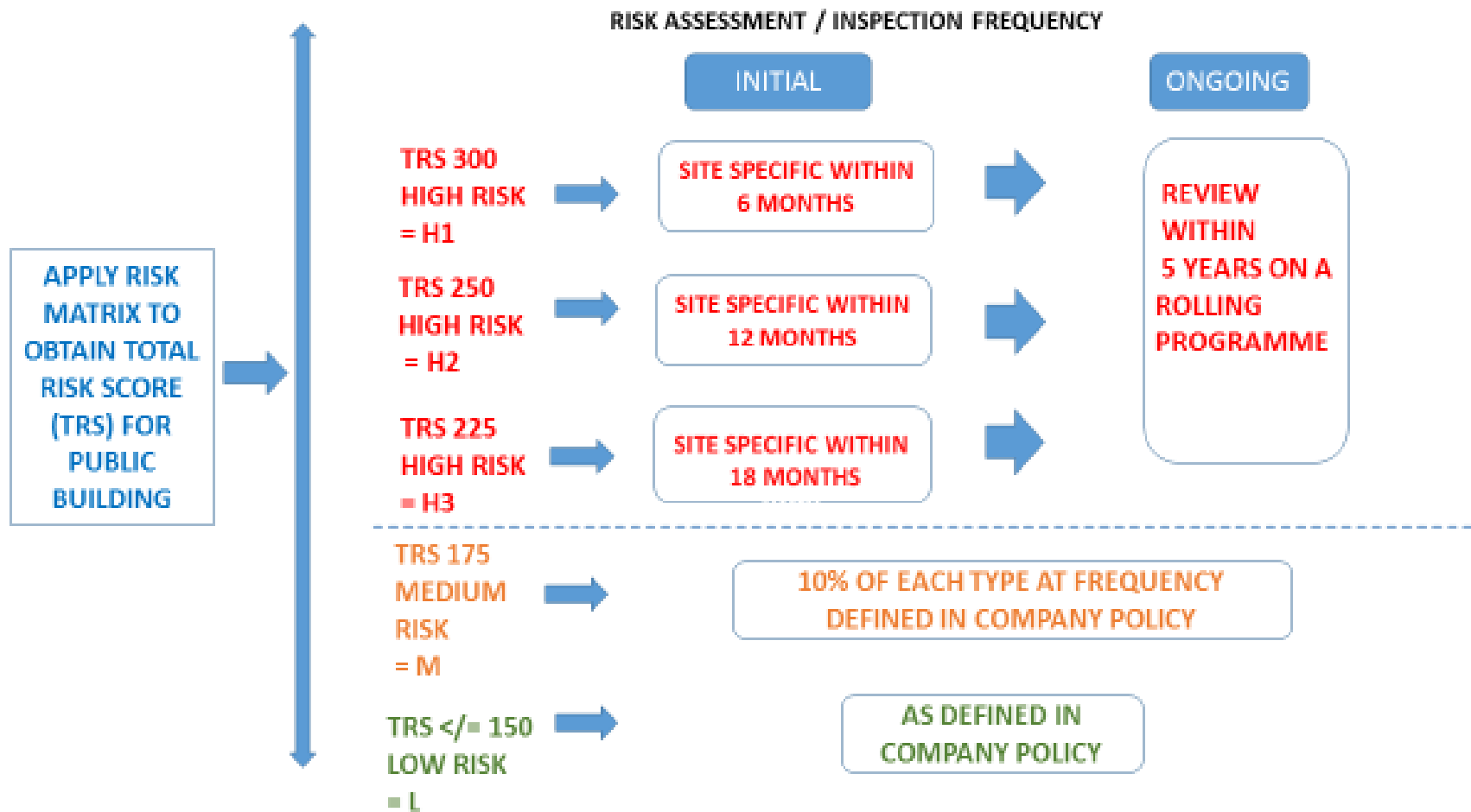


Figure 2 – Prioritisation of Risk Assessment / Inspection Frequency

## 6. WORKED EXAMPLES

The following worked examples are provided to describe the rationale applied when responding to the 3 questions to obtain the TRS.

One Public Building type from each Risk Classification (High / Medium / Low) is illustrated below.

### Example 1

Category - Tourism and Catering

Public Building Type - Café



<b>Risk Factor</b>	<b>Score</b>	<b>Comments / Reasoning for score</b>
<b>Q1 Nature of Water Usage</b>	100	It would be reasonable to expect members of the public would have access to water for human consumption either as drinking water or for the preparation of food.
<b>Q2 Risks to Water Quality from business activity / systems</b>	50	The typical business activities within this particular type of public building have potential to cause contamination which are likely to represent a health hazard.
<b>Q3 Vulnerability of population</b>	25	This particular type of public building is intended to be used by the general population (General Public)
<b>Total Risk Score (Q1 + Q2 + Q3 = TRS)</b>	<b><u>175</u></b>	

<b>Risk Classification</b>	<b>ACTIONS</b>
<b>MEDIUM RISK = M</b>	<p>Cafés should be included in Water Companies proactive inspection programme</p> <p>A risk assessment should be undertaken on 10% of all Cafes within a frequency defined in company policy.</p>

## Example 2

Category - Education

Public Building Type - Crèche



<b>Risk Factor</b>	<b>Score</b>	<b>Comments / Reasoning for score</b>
<b>Q1 Nature of Water Usage</b>	100	It would be reasonable to expect that members of the public would have access to water for human consumption either as drinking water or for the preparation of food.
<b>Q2 Risks to Water Quality from business activity / systems</b>	50	The typical business activities within this particular type of public building have potential to cause contamination which are likely to represent a health hazard.
<b>Q3 Vulnerability of population</b>	100	This public building is intended to be frequently used by a vulnerable population (i.e. children under the age of 5), who are likely to be more susceptible to the effects of illness that could arise from water quality issues.
<b>Total Risk Score (Q1 + Q2 + Q3 = TRS)</b>	<b><u>250</u></b>	

<b>Risk Classification</b>  <b>HIGH RISK = H2</b>	<p><b>ACTIONS</b> Crèche's should be included in Water Companies proactive inspection programme</p> <p><b>INITIAL</b> Where a risk assessment has not already been carried out, an initial site specific risk assessment of each Crèche should be undertaken within 12 months. (This may take the form of a desktop exercise rather than physical inspection of premises)</p> <p><b>ONGOING</b> Following initial risk assessment, it is advised that the site specific risk assessment of each Crèche should be reviewed within 5 years</p>
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### Example 3

Category - Other Service Sectors    Type of Public Building - Place of Worship



<u>Risk Factor</u>	<u>Score</u>	<u>Comments</u>
<b>Q1 Nature of Water Usage</b>	100	It would be reasonable to expect that members of the public would have access to water for human consumption either as drinking water or for the preparation of food.
<b>Q2 Risks to Water Quality from business activity / systems</b>	25	There is reasonable expectation that the typical business activities represent a contamination risk which presents no hazard to health but may impact aesthetic quality owing to a change in temperature, or change in taste, odour or appearance.
<b>Q3 Vulnerability of population</b>	25	This particular type of public building is intended for to be use by the general population (General Public)
<b>Total Risk Score (Q1 + Q2 + Q3 = TRS)</b>	<b><u>150</u></b>	

<b>Risk Classification</b>	<b>ACTIONS</b>
<b>LOW RISK = L</b>	Review, and if necessary undertake risk assessment churches / chapels in line with defined company policies and procedures.

## **7. SUMMARY**

The effective management of water quality in public buildings is dependent upon the identification and understanding of risk, along with the prioritisation of resources.

### **Proactive inspection programming**

An effective proactive inspection programme enables agencies responsible for safeguarding drinking water supplies in public buildings to respond to risk by targeting resources in a proportionate manner. It is recommended that:

- The risk matrix is used as a tool to supplement and validate existing proactive inspection programmes.
- Highest risk public buildings should be reassessed at least every 5 years. Reassessment of risk in this case may take the form of a desk top exercise rather than a repeat physical inspection

### **Understanding Risk**

An integral aspect of proactive risk management is the application of a range of factors to determine risk. The guidance identifies 3 forms of risks to consumers. Understanding how to evaluate and score these risks is informed by industry learning. Therefore, one valuable source of information which should not be underestimated is learning from actual incidents and events. This being the case the importance of effective inter agency collaboration and communication, at both a local and national level, should not be overlooked.

The T&F Group recommends that greater inter agency communication and cooperation be encouraged. With this in mind it is suggested that where possible data and other information should be shared to facilitate the:

- identification and promotion of new and emerging risk
- opportunities for improvement
- industry learning
- consistent application of key messages from the water quality regulator by water companies and local authorities

## **Policies and Procedures**

To be effective it is essential that any proactive inspection programmes for public building be aligned with existing policies and procedures. It is recommended that a strategy for maintaining water quality in public buildings is incorporated in all relevant policies and procedures, including:

- Drinking Water Safety Plans: recognise the importance of a robust proactive enforcement policy as a control measure to protect public health and the network/water source, and capture and reflect the risk associated with public buildings.
- Proactive inspection programmes: make specific provision for public buildings
- Enforcement policies: include specific provision for public buildings<sup>10</sup>

## **8. FUTURE WORK**

In producing this guidance document, the Public Buildings T&F Group are mindful that the guidance as presented only represents part of the process for managing the risk associated with public building, and that there is further work to be done by all stakeholders. The T&F Group recommends that moving forward consideration be given to:

- Further refinement of the options and methodology for risk assessment in the context of a Public Building.
- Making greater use of information from water fittings inspection programmes and analytical testing of the water supply to improve the management of water quality within public buildings
- Ways to embed greater integration and cooperation of organisations with statutory duties for safeguarding drinking water, as well as identification of opportunities to facilitate consistent compliance
- Setting timescales and arrangements for regular formal review of this guidance document.

## 9. GLOSSARY

The following words and phrases have been given the following meanings as they relate to the water sector:

**Business Activity** : the types of activity undertaken in a non-household premises that will involve water use. For example in leisure facilities this may be water used in a number of ways including to fill or replenish swimming pools, for catering, drinking and irrigation.

**Water Fittings Regulations** : the requirements for water fittings and plumbing systems which use, can be used, or convey water in premises connected or to be connected to the Public Water Supply as set out in the following legislation:

The Water Supply (Water Fittings) Regulations 1999 (as amended) - in England and Wales  
[http://dwi.defra.gov.uk/stakeholders/legislation/ws\(fittings\)regs1999.pdf](http://dwi.defra.gov.uk/stakeholders/legislation/ws(fittings)regs1999.pdf)

The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009 - in Northern Ireland  
[http://www.opsi.gov.uk/sr/sr2009/nisr\\_20090255\\_en\\_1](http://www.opsi.gov.uk/sr/sr2009/nisr_20090255_en_1)

Scottish Water Byelaws 2004 - in Scotland  
<http://dwqr.scot/information/regulatory-framework/scottish-water-byelaws/>

**Premises** : land and all buildings or other structures within its boundaries.

**Water Undertakers** : organisations or companies defined as water undertakers in the following primary legislation: Water Industry Act 1991 (as amended) - in England and Wales –  
<http://www.legislation.gov.uk/ukpga/1991/56/contents>

The Water and Sewerage Services (Northern Ireland) Order 2006 (as amended) - in Northern Ireland  
[http://www.niwater.com/siteFiles/resources/HTMLFiles/Information\\_Management/Water\\_and\\_Sewerage\\_Services\\_Northern\\_Ireland\\_Order\\_2006.pdf](http://www.niwater.com/siteFiles/resources/HTMLFiles/Information_Management/Water_and_Sewerage_Services_Northern_Ireland_Order_2006.pdf)

Water (Scotland) Act 1980 (as amended) – in Scotland  
<http://dwqr.scot/information/regulatory-framework/the-water-scotland-act-1980/>

**Water Quality Regulations** : the requirements for the standards of wholesomeness of public drinking water supplies as set out in the following legislation:

The Water Supply (Water Quality) (Wales) Regulations 2010 (as amended) – in Wales  
<http://dwi.defra.gov.uk/stakeholders/legislation/wsr2010wales.pdf>

The Water Supply (Water Quality) Regulations 2016 – in England  
<http://www.legislation.gov.uk/uksi/2016/614/contents/made>

The Water Supply (Water Quality) Regulations (Northern Ireland) 2007 (as amended) - in N. Ireland  
<http://www.legislation.gov.uk/nisr/2007/147/contents/made>

The Water Supply (Water Quality) (Scotland) Regulations 2001 (as amended) - in Scotland  
<http://dwqr.scot/information/regulatory-framework/the-water-supply-water-quality-scotland-regulations-2001-superseded/>

**Public Water Supply** : the water supplied by a Water Undertaker defined above.

**Private Water Supply** : the provision of water which has not been supplied from the Public Water Supply and falls under the jurisdiction of the Private Water Supplies Regulations defined below.

**Private Water Supplies Regulations** : the requirements for the standards of wholesomeness and provision of water from sources other than from the Public Water Supply and in England and Wales to the further distribution of public water supplies (see Appendix A4) as set out in the following legislation: The Private Water Supplies (Wales) Regulations 2010 (as amended) – in Wales  
<http://www.legislation.gov.uk/wsi/2010/66/contents/made>

The Private Water Supplies (England) Regulations 2016 – in England  
<http://www.legislation.gov.uk/uksi/2016/618/contents/made>

The Private Water Supplies Regulations (Northern Ireland) 2009 (as amended) – in Northern Ireland  
<http://www.legislation.gov.uk/nisr/2009/413/contents/made>

The Private Water Supplies (Scotland) Regulations 2006 (as amended) – in Scotland  
<http://dwqr.scot/information/regulatory-framework/the-private-water-supplies-scotland-regulations-2006/>

**Public Building** : a non-household premises where water supplied for domestic purposes is made available to members of the public.

**Domestic Water systems** : all pipework, taps, fittings and appliances conveying water for any purposes, which are installed between the Water Undertakers distribution network and the point of use by the consumer. For the purposes of this document it also includes the private distribution network comprising supply pipes, fittings and storage cisterns used in the further distribution of the public water supply, all of which are the responsibility of the owner(s) These may also be known as Domestic Distribution Systems or an Onward Distribution Systems.

**Water fittings** : the individual components, fittings or pipework that make up a plumbing system or assembled products or appliance connected to a plumbing systems.

**Approved Installers** : commonly known as Approved Plumbers, are members of an Approved Contractor Scheme. Approved Installers are authorised to certify the compliance of their work under the Water Fittings Regulations. The scope of work that can be certified may be limited depending on the type of accreditation which has been granted by their Approved Contractor Scheme.

**Approved Contractor Scheme** : a scheme operated by a Water Undertaker or other body authorised by the Regulators defined in The Water Supply (Water Fittings) Regulations 1999. They provide a register of installers who are competent and have the relevant knowledge of the Water Fittings

Regulations applicable to their level of accreditation. Examples of the types of accreditation an Approved Installer may be registered can cover the installation or maintenance of:

- Below ground pipe only; or
- Catering equipment only; or
- Water coolers only; or
- Any part of plumbing systems within the scope of the Water Fittings Regulations.

## **10.LINKS TO OTHER RELEVANT INFORMATION**

There are a number of supporting guidance documents and information notes that help customers, occupiers, building operators, designers and installers comply with the Water Fittings Regulations.

The list below is not to be considered complete or exclusive.

Water Regulations Advisory Scheme (WRAS) Information and Guidance Notes and leaflets (WRAS website) <https://www.wras.co.uk/consumers/resources/publications/>

World Health Organisation – Water safety in buildings

[http://whqlibdoc.who.int/publications/2011/9789241548106\\_eng.pdf?ua=1](http://whqlibdoc.who.int/publications/2011/9789241548106_eng.pdf?ua=1)

A review of the risks to Drinking Water Quality at rural public buildings in England and Wales

<http://dwi.defra.gov.uk/research/completed-research/reports/DWI70-2-307.pdf>

DWI England & Wales - Enforcement Policy

<http://dwi.defra.gov.uk/about/enforcement-pol/dwi-enforcementv2.pdf>

Drinking Water Quality Regulator Scotland (DWQR) – Enforcement Policy

<http://dwqr.scot/about-us/enforcement-policy/>

Northern Ireland DWI-NI - Enforcement and Prosecution Policy

<https://www.daera-ni.gov.uk/sites/default/files/publications/doe/water-leaflet-drinking-water-inspectorate-for-northern-ireland-enforcement-and-prosecution-policy-2012.pdf>

## APPENDIX 1 : REVISED LIST OF PUBLIC BUILDINGS

Category	Type of Public Building	
Agriculture	Allotments	
Wholesale or Retail Distribution	Transport sales garage (cars, buses, caravans etc.)	Auctioneers
	Car / vehicle body Retails	Hairdresser
	Car / vehicle repair and service, tyre, exhausts	Retail - Beauty Salon (nails / piercings / tattoo)
	Supermarkets	Retail - Betting Shop
	Shopping centre / mall	Retail - Bakers / delicatessen
	Other indoor market environment	Retail - Hardware / DIY
	Other outdoor market environment	Retail - Photographic / design / arts and craft
	Temporary outdoor or indoor environment	Retail - Builders/Plumbing merchants
	Animal (eg Cattle/ Sheep) Market	Retail - Landscaping / gardening services
	Garden centres	Retail - Tool hire services
	Shop incl on site - food and drink production	Retail - Jewellery
	Retail - Bike / cycle	Retail - Music / musical instruments
	Retail - Clothes	Retail / Finance - Bank / Building Society
	Retail - Computer	Retail / Finance - Accountants
	Retail - Convenience / newsagents	Retail / Finance - Estate Agents / Letting Agents
	Retail - Furniture	Retail / Finance - Architects
	Retail - Opticians	Retail / Finance - Solicitors
Retail - Pharmacy	Retail / Finance - Insurance Brokers	
Retail - Farm Shop	Retail - mobility aids	
Tourism and Catering	Restaurant	Marinas
	Café	Takeaway
	Inns	Rifle club
	Wine Bar	Seaside Piers
	Public House	Parks and Park Buildings
	Bars / Nightclub	Festivals / Fetes
	Banquet / function	Amusement arcades / amusements
	Other catering establishment	Cinema
	Guest House / B&B / Boarding House / Hotel	Bingo Hall
	Hostel (YMCA etc.)	Outdoor / Adventure / activity centre
	Caravan Site (multiple dwellings)	Wildlife Centres / Farms / Zoos
	Campsite	Theme Park
	Hotell / Spa (with Swimming Pool)	Fairground
	Self catering holiday let	Circus
	Farm with holiday accommodation	Travel Agency
Social / Licenced Clubs (Masons, Conservative Clubs, Labour etc.)	Tour Operator	
	Other tourist attraction (Site specific)	

Category	Type of Public Building	
Public Administration and Defence	Prison/ Detection Centre	Government / Local Authority / Council buildings
	Court / Crown buildings	
	Police station / services	
Education	Crèches	University
	Nursery School / kids nursery	Other education
	Kindergarten	Halls of residence
	Primary schools	Other student accommodation
	Colleges	Day Centre (all ages)
Medical / Health / Wellbeing	Hospital	Treatment practices e.g. chiropractors, acupuncture, physiotherapy, massage, electrologist
	GP Surgery / Doctors	Vet practices / Animal protection or rescue centre
	Doctors surgery / Health centre	Crematorium
	Local Authority Residential Care / Home	Opticians
	Nursing Home	Sunbeds / solaria
	Private Residential Care / Home	Funeral services / Funeral home / Chapel of Rest
	Children's Homes	Health Club / Fitness Centre, no swimming pool
	Dentist Surgery	Health Club / Fitness Centre, with swimming pool
Other service sectors	Community Centre / Hall	Place of Worship - Mosque
	Public Toilets	Job Centre
	Place of Worship - Church . Chapel etc,	
Transport Operated Environments	Service Station (eg Motorway)	Airports / Ports
	Bus/coach depots	Flying school
	Train Stations	Petrol stations / garages (small)
Sports/ Leisure / Fitness	Leisure Centre, no swimming pool	Rugby / Football / Cricket / Athletic grounds
	Leisure Centre, with swimming pool	Racecourse
	Swimming Pool	Bowling Green / Tennis clubs
	Polo Grounds	Boating Club
	Boxing/Judo Clubs etc.	
	Golf Course / Driving range	
Arenas, Venues, Exhibitions	Museum with refreshments	Ice Rink/Ski Centre
	Museum without refreshments	Domes (e.g. velodromes)
	Art Gallery	Scout / cadet / youth centre
	Exhibition Centre	Car racing circuit / motorsports
	Conference Centre	Stately Homes/ Places like National Botanic Gardens etc.
	Stadium / Arenas	Riding / Stables
	Theatre	Library



## APPENDIX 2 : LIST OF PUBLIC BUILDING TYPES INCLUDING TOTAL RISK SCORES (TRS)

Category	Type of Public Building	SCORES FROM RISK MATRIX			
		QUESTION 1 SCORE	QUESTION 2 SCORE	QUESTION 3 SCORE	Total Risk Score (TRS)
Agriculture	Allotments	100	50	25	175
Wholesale or Retail Distribution	Transport sales garage (e.g. cars, buses, caravans etc)	100	50	25	175
Wholesale or Retail Distribution	Car / vehicle bodyshops	50	50	25	125
Wholesale or Retail Distribution	Car / vehicle repair and service, tyre, exhausts	50	50	25	125
Wholesale or Retail Distribution	Supermarkets	100	50	25	175
Wholesale or Retail Distribution	Shopping centre / mall	100	50	25	175
Wholesale or Retail Distribution	Other indoor market environment	100	50	25	175
Wholesale or Retail Distribution	Other outdoor market environment	100	50	25	175
Wholesale or Retail Distribution	Temporary outdoor or indoor environment	50	50	25	125
Wholesale or Retail Distribution	Animal (eg Cattle / Sheep) Market	100	100	25	225
Wholesale or Retail Distribution	Garden centres	100	50	25	175
Wholesale or Retail Distribution	Shop inc on site - food and drink production	100	50	25	175
Wholesale or Retail Distribution	Retail - Bike / cycle	50	25	25	100
Wholesale or Retail Distribution	Retail - Clothes	50	25	25	100
Wholesale or Retail Distribution	Retail - Computer	50	25	25	100
Wholesale or Retail Distribution	Retail - Convenience / newsagents	50	25	25	100
Wholesale or Retail Distribution	Retail - Furniture	50	25	25	100
Wholesale or Retail Distribution	Retail - Opticians	50	25	25	100
Wholesale or Retail Distribution	Retail - Pharmacy	50	25	25	100
Wholesale or Retail Distribution	Retail - Farm Shop	50	25	25	100
Wholesale or Retail Distribution	Auctioneers	50	25	25	100
Wholesale or Retail Distribution	Hairdresser	100	50	25	175
Wholesale or Retail Distribution	Retail - Beauty Salon (nails / piercings / tattoo)	100	50	25	175
Wholesale or Retail Distribution	Retail - Betting Shop	100	25	25	150
Wholesale or Retail Distribution	Retail - Bakers / delicatessen	50	25	25	100
Wholesale or Retail Distribution	Retail - Hardware / DIY	50	25	25	100
Wholesale or Retail Distribution	Retail - Photographic / design / arts and craft	50	25	25	100
Wholesale or Retail Distribution	Retail - Builders merchants	50	25	25	100
Wholesale or Retail Distribution	Retail - Landscaping / gardening services	50	25	25	100
Wholesale or Retail Distribution	Retail - Tool hire services	50	25	25	100
Wholesale or Retail Distribution	Retail - Jewellery	50	25	25	100
Wholesale or Retail Distribution	Retail - Music / musical instruments	50	25	25	100
Wholesale or Retail Distribution	Retail / Finance - Bank / Building Society	50	25	25	100
Wholesale or Retail Distribution	Retail / Finance - Accountants	50	25	25	100
Wholesale or Retail Distribution	Retail / Finance - Estate Agents / Letting Agents	50	25	25	100
Wholesale or Retail Distribution	Retail / Finance - Architects	50	25	25	100
Wholesale or Retail Distribution	Retail / Finance - Solicitors	50	25	25	100
Wholesale or Retail Distribution	Retail / Finance - Insurance Brokers	50	25	25	100
Wholesale or Retail Distribution	Retailer - mobility aids	50	25	25	100
Tourism and Catering	Restaurant	100	50	25	175
Tourism and Catering	Café	100	50	25	175
Tourism and Catering	Takeaways	100	50	25	175
Tourism and Catering	Inns	100	50	25	175
Tourism and Catering	Wine Bar	100	50	25	175
Tourism and Catering	Public House	100	50	25	175
Tourism and Catering	Bars / Nightclub	100	50	25	175
Tourism and Catering	Banquet / function hall	100	50	25	175
Tourism and Catering	Other catering establishment	100	50	25	175
Tourism and Catering	Guest House / B&B / Boarding House / Hotel	100	50	25	175
Tourism and Catering	Hostel (YMCA etc)	100	50	25	175
Tourism and Catering	Caravan Site (multiple dwellings)	100	100	25	225
Tourism and Catering	Campsite (no caravans)	100	50	25	175
Tourism and Catering	Hotel / Spa (with swimming pool)	100	100	25	225
Tourism and Catering	Self catering holiday let	100	50	25	175
Tourism and Catering	Farm with holiday accommodation	100	50	25	175
Tourism and Catering	Social / Licenced Clubs (Masons, Conservative Clubs, Labour etc)	100	50	25	175

Tourism and Catering	Marinas	100	100	25	225
Tourism and Catering	Rifle club	100	25	25	150
Tourism and Catering	Seaside Piers	100	25	25	150
Tourism and Catering	Parks and Park Buildings	100	50	25	175
Tourism and Catering	Festivals / Fetes	100	25	25	150
Tourism and Catering	Amusement arcades / amusements	50	25	25	100
Tourism and Catering	Cinema	100	25	25	150
Tourism and Catering	Bingo Hall	100	25	25	150
Tourism and Catering	Outdoor / Adventure / Activity centre	100	50	25	175
Tourism and Catering	Wildlife Centres / Farms / Zoos	100	100	25	225
Tourism and Catering	Theme Park	100	50	25	175
Tourism and Catering	Fairground	50	25	25	100
Tourism and Catering	Circus	100	50	25	175
Tourism and Catering	Travel Agency	50	25	25	100
Tourism and Catering	Tour Operator	50	25	25	100
Public Administration and Defence	Prison/ Detection Centre	100	25	25	150
Public Administration and Defence	Court / Crown buildings	100	25	25	150
Public Administration and Defence	Police station / services	100	25	25	150
Public Administration and Defence	Government / Local Authority / Council buildings	100	25	25	150
Education	Crèches	100	50	100	250
Education	Nursery School / kids nursery	100	50	100	250
Education	Kindergarden	100	50	100	250
Education	Primary schools	100	50	100	250
Education	Colleges	100	100	25	225
Education	University	100	100	25	225
Education	Other education	100	100	25	225
Education	Halls of residence	100	50	25	175
Education	Other student accommodation	100	50	25	175
Education	Day Centre (all ages)	100	50	25	175
Medical / Health / Wellbeing	Hospital	100	100	100	300
Medical / Health / Wellbeing	GP Surgery / Doctors	100	50	100	250
Medical / Health / Wellbeing	Doctors surgery / Health centre	100	50	100	250
Medical / Health / Wellbeing	Local Authority Residential Care / Home	100	100	100	300
Medical / Health / Wellbeing	Nursing Home	100	100	100	300
Medical / Health / Wellbeing	Private Residential Care / Home	100	100	100	300
Medical / Health / Wellbeing	Childrens Homes	100	50	100	250
Medical / Health / Wellbeing	Dentist Surgery	100	100	25	225
Medical / Health / Wellbeing	Treatment practices e.g. chiropractors, acupunture, physiotherapy, massage, electrologist	100	25	25	150
Medical / Health / Wellbeing	Vetinary practices / Animal protection or rescue centre	50	100	25	175
Medical / Health / Wellbeing	Opticians	50	50	25	125
Medical / Health / Wellbeing	Sunbeds / solaria	100	25	25	150
Medical / Health / Wellbeing	Funeral services / Funeral Home / Chapel of Rest	100	100	25	225
Medical / Health / Wellbeing	Crematorium	50	50	25	125
Medical / Health / Wellbeing	Health Club / Fitness Centre, no swimming pool	100	25	25	150
Medical / Health / Wellbeing	Health Club / Fitness Centre, with swimming pool	100	100	25	225
Other service sectors	Community Centre / Hall	100	25	25	150
Other service sectors	Public Toilets	100	25	25	150
Other service sectors	Place of Worship / church / chapel	100	25	25	150
Other service sectors	Place of Worship / mosque	100	100	25	225
Other service sectors	Job Centre	100	25	25	150
Transport Operated Environments	Service station (eg. motorway)	100	50	25	175
Transport Operated Environments	Train stations	100	50	25	175
Transport Operated Environments	Bus/coach depots	100	50	25	175
Transport Operated Environments	Ports / Airports	100	100	25	225
Transport Operated Environments	Petrol stations / garages	50	50	25	125
Transport Operated Environments	Flying school	100	25	25	150
Sports / Leisure / Fitness	Leisure Centre, no swimming pool	100	25	25	150
Sports / Leisure / Fitness	Leisure Centre, with swimming pool	100	100	25	225

Sports / Leisure / Fitness	Swimming Pool	100	100	25	225
Sports / Leisure / Fitness	Golf Course / Driving range	100	100	25	225
Sports / Leisure / Fitness	Rugby / Football /Cricket/ Athletic grounds	100	50	25	175
Sports / Leisure / Fitness	Racecourse	100	100	25	225
Sports / Leisure / Fitness	Polo Grounds	100	100	25	225
Sports / Leisure / Fitness	Boxing/Judo Clubs etc	100	25	25	150
Sports / Leisure / Fitness	Boating Club	100	100	25	225
Sports / Leisure / Fitness	Bowling Green / Tennis clubs	100	50	25	175
Arenas, Venues, Exhibitions	Museum with refreshments	100	50	25	175
Arenas, Venues, Exhibitions	Museum without refreshments	50	25	25	100
Arenas, Venues, Exhibitions	Art Gallery	50	25	25	100
Arenas, Venues, Exhibitions	Exhibition Centre	100	50	25	175
Arenas, Venues, Exhibitions	Conference Centre	100	50	25	175
Arenas, Venues, Exhibitions	Stadium / Arenas	100	50	25	175
Arenas, Venues, Exhibitions	Theatre	100	50	25	175
Arenas, Venues, Exhibitions	Ice Rink/Ski Centre	100	50	25	175
Arenas, Venues, Exhibitions	Domes (e.g. velodrones)	100	50	25	175
Arenas, Venues, Exhibitions	Library	100	50	25	175
Arenas, Venues, Exhibitions	Scout / cadet / youth centre	100	25	25	150
Arenas, Venues, Exhibitions	Car racing curcuit / motorsports	100	50	25	175
Arenas, Venues, Exhibitions	Stately Homes/ Places like National Botanic Gardens Etc	100	50	25	175
Arenas, Venues, Exhibitions	Riding Centre / Stables	100	100	25	225