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Best Practice Guidance Notes for Integrated and Non-chemical Amenity Hard Surface Weed Control



From a Defra-funded 5-year programme entitled:
*Development of zero and minimal herbicide regimes for
controlling weeds on hard surfaces and determining
their emissions PS2802 (2009-2015)*



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Who should read this guidance?

These guidance notes are designed for those involved in the control of weeds on hard surfaces. They have principally been developed for the amenity sector and offer weed management methods on hard surfaces with a focus on integrated and non-chemical weed control, including the development of management plans and tools to monitor the effectiveness of the chosen treatment regime. Although aimed at local authorities, they will be useful for other sectors controlling weeds on hard surfaces.

The development of these guidelines has been informed by the results of a study on the impacts of integrated and non-chemical methods of weed control in an amenity environment.

Purpose of this guidance note

- | | |
|-----------------------------------------------|---------------------------------------------------|
| <input type="radio"/> Comply with law | <input type="radio"/> Reduce pesticide resistance |
| <input type="radio"/> Minimise pesticide use | <input type="radio"/> Improve public perception |
| <input type="radio"/> Protect the environment | |

It is a legal requirement and Good Practice that those who use pesticides aim to minimise pesticide use in public spaces. Herbicides are the primary plant protection products used by the UK amenity sector. Glyphosate has been used to control weeds on hard surfaces by the UK amenity industry for over three decades, and is now the predominant herbicide applied.

Recent European legislation is reducing the hazards and risks associated with the use of pesticides, leading to:

- a reduction in the number of available products
- new requirements on the way products can be used
- a focus on protection of the aquatic environment, particularly drinking water

Economic budgets are a major factor in developing weed control programmes. These guidelines aim to provide managers and contractors with tools to develop more effective and efficient medium- to long-term integrated and non-chemical weed management approaches, enabling the minimising of pesticide inputs.

Sustainable Use Directive (SUD) definition of Integrated Pest Management

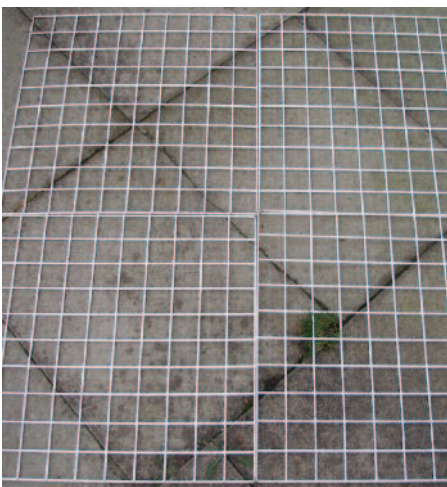
'Careful consideration of all available plant protection methods and subsequent integration of appropriate measures that discourage the development of populations of harmful organisms and keep the use of pesticides and other forms of intervention to levels that are economically and ecologically justified and reduce or minimise risks to human health or the environment'.

Introduction

Traditionally, the most common method used for hard surface weed control has been to apply herbicides at set times in the growing season. Targeted application and more effective and efficient use of herbicides can be achieved by flexible timing of applications based on monitoring, and the inclusion of alternative methods can minimise herbicide use.

Adopting alternative methods to control weeds reduces the risks associated with herbicide use (e.g. storage, handling, use and disposal), but it can be more costly. A decision to integrate the traditional scheduled herbicide treatments with alternative strategies can draw upon the experiences and lessons learnt from the five year trial on integrated and non-chemical methods of weed control in Thanet, Kent¹.

Table 1 outlines the actions and justifications needed to implement alternative approaches to weed control. The table can be used as an overview of the guidance notes with the main document providing further information on each stage.



Quadrant for weed assessment



Typical street in Thanet



Drain sample for analysing herbicide run-off

¹ Development of zero and minimal herbicide regimes for controlling weeds on hard surfaces and determining their emissions PS2802 (2009-2015). Defra.

Table 1.

Best Practice Guidance for integrated and non-chemical weed control - amenity weed control and planning treatments

Action	Reasoning	Page
Initial planning phase		
Design out the need for weed control	E.g. resurfacing, can lead to cost savings and result in a reduction in the use of pesticides	4
Understand legal requirements and budget constraints	Essential when considering developing a new weed control strategy (see Appendix 1)	4
Work with other stakeholders	Ensure all parties integrate operations and treatment timings to contribute to the most effective service	5
Manage expectations	Inform and educate the public and other stakeholders on reasons for the chosen treatment	5
Understand the asset and record key details	Develop an asset database (inc. quantity/condition of surface types and key landscape features)	5
Determine appropriate treatment programme		
Prioritise zones	Asset information can be used to target areas according to their surface type condition and priority	7
Understand treatment options	A range of treatments are available chemical, thermal, mechanical, manual	7
Treatment programmes	Decide on the most appropriate treatment programmes	10
Contract procurement and implementation		
Produce list of sites and maps from the asset information	Required for procurement and used by contractors to carry out weed control	11
Considerations for contract specification	Specify the chosen programme of treatments with built-in flexibility	11
Initiate tendering process	Obtain competitive prices and find a contractor that operates to the current Amenity Standard	12
Monitor and record	Weed monitoring is crucial to identify problem areas and target treatments	12
Review progress		
Review data from monitoring and treatments	Effective controls can only be achieved through monitoring, recording and refinement	13

Initial planning phase

Design out the need for weed control

Many weed problems can be addressed or minimised at the design stage and with long-term maintenance (e.g. using asphalt instead of slab). The majority of weed problems occur on hard surfaces at cracks or joints in the surface where there is a build-up of detritus which provides a substrate for weed seeds to germinate. If weeds are left untreated, they can degrade the surface leading to costly repair work.



Crazy paving, in pavement planting and cracks in paving all make weed control more difficult



Detritus builds up along edges of footways and kerbs and where weeds will take hold. In this photo, mechanical weed brushing has shifted detritus to the centre and must be cleared

Understand legal requirements

It is imperative that current legislation (Appendix 1) is met when planning weed control.

Local authorities and land managers have a duty of care to the public, including ensuring weeds do not pose a hazard. Untreated weeds in block paving may create a trip hazard (Code of practice on litter and refuse – Appendix 2). There are also specific central government standards on detritus level build-up of weeds in urban areas. In addition there are restrictions on pesticide application near water bodies.

Develop a policy that recognises the need to minimise the use of chemical herbicides and combines or promotes alternative methods that are sustainable and practical for the situation. Use advisers that are BASIS qualified and members of a CPD register such as BASIS. Staff training, qualifications (see Appendix 2) and working to Amenity Assured (or equivalent) standards is an integral part of ensuring that Best Practice for weed control is followed.

Local authorities may require a management plan or policy to be agreed

for significant changes to their current weed control regime, especially if there will be an impact on the budget

Work with other stakeholders

In the public sector the three main stakeholders who contribute to weed control are:

- Highway Authority
- District and Borough councils
- Local Parish or Town councils

NB: Residents/customers may have an impact on weed control but their input is outside the remit of this document.

Key stakeholders in local authorities have a responsibility to ensure the highway network remains safe for its users. District and Borough councils are responsible for street cleansing which can prevent the build-up of the detritus on pavements. Communication between departments in local authorities facilitates the coordination of weed control at all levels e.g. programming weed control operations before street cleansing will ensure that dead foliage is removed to prevent detritus build up. Local authorities can advise of the areas most affected by weeds by working with street cleansing departments. It is important to enlist support of the local district or borough council as they may inform members of the public of the methods being used to control weeds and the areas of priority.

Manage expectations

Applying alternative weed control techniques may generate interest from members of the public. Unlike chemical only treatments where there is a high level of weeds followed by a very low level of weeds or no weeds, integrated weed control results in a more consistent background level of weed coverage. Non-chemical only approaches risk a higher level of weeds, depending on the frequency of treatments.

It may therefore be necessary to manage different stakeholders expectations accordingly. Having a weed control policy available in an easily accessible format e.g. on the local authority's website, that clearly details the reasons, benefits, consequences and expected weed growth, should help minimise the number of enquiries received and help to manage customer expectations.

Understand the asset and record key details

Different hard surface materials require different programmes of weed control. By having areas zoned, problem locations can receive more targeted treatments with more regular monitoring and areas with fewer weed pressures can receive fewer treatments, making the best use of resources. A continuous surface

cover such as asphalt, generally has less weed growth than slabbed paving. However, as asphalt ages and deteriorates cracks appear and weeds push through causing:

- degradation of the surface
- detritus build up
- places for weed seeds to collect and germinate



An example of how an area could be zoned to identify problem and difficult to treat areas where more time and effort will be required

The crevices and joints in slab and block paving result in a larger area for weeds to emerge. Mapping the different surface types on a Geographic Information System (GIS) provides a useful way of understanding the quantity of hard surface requiring treatment and the location in relation to the surrounding area (e.g. sensitive or vulnerable areas (see, Environment Agency 'what's in your back yard' Appendix 2).

Details to consider adding to GIS attributes, could include:

- groundwater vulnerability
- proximity to surface waters (Appendix 1)
- surface types
- run-off risks
- street furniture and parked vehicles
- public perception

Determine appropriate treatment programme



Stream (Photo: MEASE Ltd.)



Borehole (Photo: South East Water Ltd.)

Prioritise zones

Determine how each zone will be treated using the information obtained through the mapping exercise including the number of operations, treatment types, cost and constraints of the surrounding area ('what's in your back yard' Appendix 2).

Priority areas will vary from region to region, but sensitive areas where the risk of adverse impacts from herbicide will include proximity to ground water bore holes and surface water systems.

An important component of a non-chemical or integrated weed control programme will be the timing. This may require programmes to be conducted to a performance specification, only undertaking operations when the level of weed growth has exceeded a pre-determined threshold. A weed classification system has been developed to aid the level of acceptable weed coverage and is best used in conjunction with the series of photographs which provide a guide to the different levels of weed coverage (Appendix 3).



Understanding treatment options

a) Well designed and maintained surfaces

See 'Design out the need for weed control', above

Prioritise areas depending on use

b) Chemical

Only use UK authorised products (Appendix 1). Products are predominantly glyphosate based and only effective on actively growing plants. Other basic legal requirements include application by competent, trained

operatives and following label instructions. Improvements to minimising chemical use can be made through selection of adjuvants, machinery, nozzle types and herbicide products.

c) *Thermal*

Currently, thermal weed control methods include hot foam, steam, hot water and weed burners (infra-red and flame). Thermal treatments heat up the vegetative parts of the plant rapidly and mainly destroy the surface parts of the weed.



Examples of the thermal methods of weed control, burner and hot foam treatment

d) *Mechanical/Manual*

Brushing/weed ripping, mowing, strimming and weed pulling are examples of mechanical and manual treatments. The methods remove, injure or kill weeds. There may be a requirement to follow these methods of weed control with street sweeping to remove debris from the pavement



Brushing, an example of mechanical weed control

e) *Other*

In the future other methods may become more common for controlling weeds on hard surfaces including electrical and biological controls.

Issues to consider

Thermal and mechanical operations do not require a pesticide specified certificate as listed on the HSE website (Appendix 2). However operatives should be trained and competent in the use of the methods and equipment and the associated health and safety implications, including operator exposure limits (e.g. 'Hand Arm Vibration at Work' Appendix 2).

Account should be taken of larger weed control equipment that cannot reach awkward areas, obstruction by parked vehicles and street furniture. Also awareness of flammable objects such as wooden fences and resinous plants is needed with some thermal techniques.



Parked cars make weed control more difficult



Lavender bush (below) and conifer hedge (left) following fire through inappropriate use of weed burner



Treatment programmes

A. Integrated Approach

This approach uses non-chemical techniques to suppress weeds, with minimal use of herbicides (Table 2). The treatment timing is determined by regular weed monitoring. The frequency of treatments is likely to be increased to that of chemical only treatments. The use of herbicides is used primarily to target persistent and inaccessible weeds. Tap rooted weeds treated with mechanical or thermal methods can re-emerge after approximately 2 weeks. Therefore, in an integrated approach, spot treating weeds with a herbicide at the end of the growing season can be used. Rotating control methods is likely to improve control and reduce herbicide resistance.

Table 2.

Advantages and disadvantages of three approaches to weed control on hard surfaces.

	Advantages	Disadvantages
Chemical	<ul style="list-style-type: none"> ○ Quick ○ Efficient ○ Cost effective ○ A fixed number of treatments per growing season ○ Fewer greenhouse gas emissions 	<ul style="list-style-type: none"> ○ Pesticide losses to the environment ○ Potential for herbicide resistance ○ Public perception of spraying chemicals
Integrated	<ul style="list-style-type: none"> ○ Reduced risks associated with pesticide use ○ Less pesticide PPE required 	<ul style="list-style-type: none"> ○ Increased greenhouse gas emissions ○ Monitoring required ○ Increased costs (x2)² ○ Increased no. of treatments (2-6)
Non-chemical	<ul style="list-style-type: none"> ○ Avoid the risks which may arise from pesticide use ○ No pesticide PPE required 	<ul style="list-style-type: none"> ○ Greater greenhouse gas emissions ○ Increased monitoring ○ Greater costs (x8)² ○ Persistent perennial weeds ○ Increased number of treatments (3-6)

² Costs are based on current estimates and will depend on the season, successful implementation of the programmes and future technologies becoming available.

B. Non-chemical Approach

Currently non-chemical approaches rely on mechanical or thermal treatments or manual labour. Non-chemical weed control methods are not as effective at controlling persistent weed species but may be desirable in areas vulnerable to the impact of herbicides. The frequency of treatment applications will be increased.

A typical treatment monitoring record for both integrated and non-chemical approaches is shown in Table 3. It is expected that the costs in the initial season will be higher until the zones are understood and weed growth is managed.

Contract procurement and implementation

Produce maps from the asset information

This will form the basis of the weed control agreement between the client and the contractor. Consider:

- long-term (e.g. 3-5 year) contracts to enable the contractor to learn where the problem areas are, target them more efficiently and recoup the cost of investing in machinery
- combining road sweeping and weed control contracts for better street management
- regular monitoring, better communication and flexibility

Consideration for contract specification

The contract documents need to clearly define the works being undertaken. Things to consider include:

- Length of term, e.g. 5 years allows refinement of treatment programmes and provides contractors with the necessary incentive to invest in new machinery; arrangement of a contract with extension periods to further lengthen the term if desired performance was met
- Consider the available resource, an integrated approach will require a greater amount of monitoring and any specification needs to be tailored to the available client resource
- Budget available will determine the maximum number of visits and the acceptable level of weed coverage specified
- Determine whether to use a performance or frequency based specification or a mix of both. A performance based specification carries a greater element of risk as neither the client nor contractor knows how many

operations will be needed to meet pre-determined acceptable level of weed coverage. A frequency based specification provides a defined number of treatments which make it more straight forward to price. Additional weed control treatments can be listed separately and called upon when required in either scenario

- Can weed control be combined with the street cleansing contract? It makes sense to combine these as one to aid coordination of operations
- Incorporate a method of measuring contract performance and use KPI's where possible to discourage/minimise defects, reduce incidents and improve overall contract performance
- Consider specifying that the contractor is a member fo the Amenity Forum and/or is Amenity Assured
- Provision for a method of rectifying defects that is sufficiently robust to ensure that these are corrected quickly
- As the contract proceeds, have a mechanism in place for updating the asset information and collecting new data. GIS systems are useful for this and a regular update of maps ensures that information is continually improved
- Specify that the contractor should provide sufficient programmes in advance to enable all stakeholders to have access to when and where operations are taking place. Overall programmes supplemented with weekly updates means clients have a greater awareness of treatments and can communicate this to stakeholders
- Undertake an annual review of the service

Initiate tendering process

The use of a pre-qualification questionnaires or a tender assessment which includes both quality and price should ensure that operators applying the treatments possess a relevant specified certificate e.g. City and Guilds (Appendix 2) and belong to BASIS Amenity Training Register and/or meet Amenity Assured (or equivalent) standards. Further guidance on the use of pesticides is provided in the Code of Practice for Using Plant Protection Products (Appendix 2).

Monitor and record

The emphasis of the integrated and non-chemical approaches is on regular monitoring in order to prevent a troublesome weed burden before it occurs. The frequency of monitoring will depend on the time of year and growing

Table 3.

Example of record sheet of weed monitoring and weed control programme shared by client and contractor

Road Name	Road length (km)	Next treatment planned	Treated	Justification for next treatment	Next Monitoring Inspection	Weed Score	Treated
NASH LANE	0.258				08/05/2013	2	14/05/2013
ROWE CLOSE	0.153				08/05/2013	1	
ST ANDREWS CLOSE	0.385				08/05/2013	2	14/05/2013
NASH COURT GARDENS (one-way road)	0.472	within 6 weeks	18/4/13		08/05/2013	3	

conditions; mild wet weather increasing weed growth.

Regular records will help to keep checks on the problem areas and form agreements between the client and contractor. The Weediness Scales shown in Appendix 3 can be used to determine when non-porous surfaces such as tarmac or more porous surfaces such as slab paving may require weed treatment. The scale can be used to set and measure the level of acceptable weed coverage and is best used in conjunction with a series of local photographs which provide a pictorial guide to the different levels of weed coverage. Records should be kept of the monitoring including the date, weed level scale and action taken. This can be a 'living' document and readily accessible to the contractor and local authority enabling both parties to monitor progress and target weed control strategies.

Initially an increased number of monitoring visits will be required during the growing season to ensure weed control treatments are being applied at the appropriate time and have been effective. Visits may be as frequent as every three weeks to begin with and need to be flexible to reflect the weather and growing conditions. Monitoring visits may become fewer but more focused onto the weedier locations as these become known. Monitoring with both the contractor and client will ensure an acceptable level of weed coverage is understood between both parties. Using the weed level scale and associated photos will also aid this process (Appendix 3).

Review progress

Review data from monitoring and treatments

The treatments and Weediness Scales need to be checked monthly and reviewed annually. Over time it will be possible to 'fine tune' the treatment programmes to ensure the most cost effective methods are being used. Consideration of long-term solutions including resurfacing with appropriate materials should be part of a long-term planning strategy.

APPENDIX 1

NB: the following notes on legislation were correct at the time of writing. Users of these guidelines should consult the appropriate websites for recent changes.

Legislation

Regulation (EC) 1107/2009

European legislation, Regulation (EC) No 1107/2009, concerning the authorisation of plant protection products, came into force on 14 June 2011 and applies directly in the UK. This replaced previous EU legislation for plant protection products (Council Directive 91/414/EEC), which was implemented in the UK by the Plant Protection Product Regulations 2005 (as amended), with separate but similar legislation in Scotland and Northern Ireland.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:309:0001:0050:EN:PDF>

Although Regulation (EC) No 1107/2009 applies directly in the UK, national legislation was needed to underpin its operation and to introduce new fees and charges to replace the previous fees legislation. These new provisions were implemented by the following legislation:

- Plant Protection Products Regulations 2011
<http://www.legislation.gov.uk/ukxi/2011/2131/contents/made>
- Plant Protection Products Regulations (Northern Ireland) 2011;
<http://www.legislation.gov.uk/nisr/2011/295/contents/made>
- Plant Protection Products (Fees and Charges) Regulations 2011
<http://www.legislation.gov.uk/ukxi/2011/2132/contents/made>

Some pesticides used for plant protection purposes continue to be regulated under the Control of Pesticides Regulations 1986 (as amended). Such pesticides are the commodity substances and products used to generate ethylene (to control fruit ripening).

Sustainable Use of Pesticides Directive (2009/128/EC)

The Sustainable Use Directive (SUD) is implemented by the Plant Protection Products (Sustainable Use) Regulations 2012 which set out legal requirements for those who use, or cause or permit others to use pesticides. The law contains a number of obligations, in addition to the requirements on minimising use. A key requirement is the need to demonstrate due diligence in taking 'reasonable precautions' to protect human health and the environment when using pesticides. The most important aspect of the SUD with respect to hard surfaces is the requirement that: on or along roads, railway lines, very permeable surfaces or other infrastructure close to surface water or

groundwater; on sealed surfaces with a high risk of run-off into surface water or sewage systems; and in areas used by the general public, pesticide use be minimised. The SUD also requires Member States to develop and promote integrated approaches to pesticide use.

http://www.legislation.gov.uk/uksi/2011/2131/pdfs/uksi_20112131_en.pdf
[http://www.pesticides.gov.uk/Resources/CRD/Migrated-Resources/Documents/P/Plant_Protection_Products_\(Sustainable_Use\)_Regulations_2012.pdf](http://www.pesticides.gov.uk/Resources/CRD/Migrated-Resources/Documents/P/Plant_Protection_Products_(Sustainable_Use)_Regulations_2012.pdf)
http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221034/pb13894-nap-pesticides-20130226.pdf
<http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals>

The Water Framework Directive (2000/60/EC)

Under the Water Framework Directive (WFD) member states assessed surface waters and groundwater against specific thresholds and established a baseline in 2009. Where problems with the water levels, water quality or the associated ecological systems were identified a range of objectives have been put in place to remedy the situation. Improvements are measured and reported in River Basin Management Plans over cycles of 6 years (in 2015, 2021 and 2027).

Under the Water Framework Directive (WFD) the UK must be able to demonstrate it has credible plans in place and is able to demonstrate progress towards meeting these. Pesticide users can help by adoption of integrated approaches.

http://ec.europa.eu/environment/water/water-framework/index_en.html

There are also a number of other pieces of legislation that impinge on the use of plant protection products in the UK:

The Weeds Act 1959

This is related to "Preventing the spread of harmful or injurious weeds". There are five 'injurious' weeds covered by the provisions of the Weeds Act; spear thistle (*Cirsium vulgare*), creeping or field thistle (*Cirsium arvense*), curled dock (*Rumex crispus*), broad leaved dock (*Rumex obtusifolius*) and common ragwort (*Senecio jacobaea*).

<http://www.legislation.gov.uk>

Wildlife and Countryside Act 1981

This is aimed at preventing the spread of invasive weeds but does not enforce a requirement for local authorities to control or prevent the spread of the less invasive weeds which commonly inhabit our streets and pavements.

Plant Protection Products Regulations 2011

http://www.legislation.gov.uk/uksi/2011/2131/pdfs/uksi_20112131_en.pdf

APPENDIX 2

Codes of Practice

- Code of Practice for Using Plant Protection Products
www.pesticides.gov.uk
- Code of Practice for litter and refuse
<http://www.gov.uk/government/publications/code-of-practice-on-litter-and-refuse>
- DfT & DCLG 'Manual for Streets'
http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/341513/pdfmanforstreets.pdf

Health and Safety

- Health and Safety At Work Act
<http://www.hse.gov.uk/legislation/hswa.htm>
- Hand Arm Vibration at Work
<http://www.hse.gov.uk/VIBRATION/hav/index.htm>

Environment

- Environment Agency 'what's in your back yard'
<http://apps.environment-agency.gov.uk/wiyby/default.aspx>

Industry Organisation

- The Amenity Forum includes amenity best practice guidance notes and the 'ten golden rules'
<http://www.amenityforum.co.uk/guidance.htm>

Assurance Schemes

- BASIS 'Amenity Assured' Standard (Incorporating BACCS)
<http://www.basis-reg.co.uk/media/documents/AMENITY%20ASSURED%20booklet.pdf>

Training

- BASIS registration amenity
<http://www.basis-reg.com/amenity/default.aspx>
Certificates of Competence <http://www.nptc.org.uk>

Useful Contacts

Environment Agency incident hotline (Telephone 24 hour service)
0800 80 70 60

APPENDIX 3

Weed Level Scale criteria for Slabs (see examples below)

Score each criterion separately and add together to determine the overall score and weed level.

Slab - within pavement rule; >20 cm length within pavement area, >30 cm height, downgrade by 1 classification (i.e. add 3 points to total score).

Criteria			Score	Level	Description
Height (mm)	Weed diameter or length (mm)	Joint coverage (%)			
<10	<50	<10	<3	1	No noticeable weeds
10-50	50-100	0-20	4-6	2	Occasional small weeds
50-100	100-150	20-30	7-9	3	Patchy weed growth with some flowering weeds
100-150	150-200	30-40	10-12	4	Numerous weeds, many flowering, view annoys or irritates public
150-200	200-300	40-50	13-15	5	Numerous large weeds, risk to slip or trip
>200	>300	>50	16-18	6	Numerous large weeds, many tall and flowering, causing obstruction

In this example green is acceptable, yellow indicates that action is required, red is unacceptable. Levels of acceptability and unacceptability will differ depending on local circumstances.



Weediness Scale for slabs

		Level 3
		
		Level 5
		Level 6

Weed Level Scale criteria for asphalt (see examples below)

Score each criterion separately and add together to determine the overall score and weed level.

Criteria		Score	Level	Description
Height (mm)	Weed diameter or length (mm)			
<10	<50	2	1	No noticeable weeds
10-75	50-100	3-4	2	Occasional small weeds
75-150	100-150	5-6	3	Patchy weed growth with some flowering weeds
150-200	150-200	7-8	4	Numerous weeds, many flowering, view annoys or irritates public
200=300	200-300	9-10	5	Numerous large weeds, risk to slip or trip
>300	>300	11-12	6	Numerous large weeds, many tall and flowering, causing obstruction

In this example green is acceptable, yellow indicates that action is required, red is unacceptable. Levels of acceptability and unacceptability will differ depending on local circumstances



Weediness Scale for asphalt

		Level 3
		
		Level 5
		Level 6

Examples of how to use Weed Level scores for slab surfaces

Example 1



	Height (mm)	Weed diameter or length (mm)	Joint coverage (%)	Total score	Level	Works required
Criteria	120	230	20-30			
Score	4	5	3	12	4	yes

In this example the annoyance to the public has already been reached. The weeds may also be causing a trip or slip hazard and so immediate works are required.

Example 2



	Height (mm)	Weed diameter or length (mm)	Joint coverage (%)	Total score	Level	Works required
Criteria	100-150	50-100	30			
Score	4	2	2	8	3	no

Although there is no immediate work required the area should be closely monitored considering weather conditions.

Examples of how to use Weed Level scores for asphalt surfaces

Example 1



	Height (mm)	Weed diameter or length (mm)	Total score	Level	Works required
Criteria	150-200	50-100			
Score	4	2	6	3	no

Treatment should be scheduled within the next two weeks.

Example 2



	Height (mm)	Weed diameter or length (mm)	Total score	Level	Works required
Criteria	200-300	200-300			
Score	5	5	10	5	yes

Treatment required urgently, potentially followed by street cleansing to remove debris.





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