



Landscape Gardening

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We thank all the amazing sponsors that make this competition possible:



www.landscapeplus.com

Overview

Landscaping often referred to as gardening is that and so much more. The modern landscaper has to have an understanding of topography, construction, carpentry, lighting, plumbing and procurement. We hope this guide will provide you with a clear path to follow, from initial registration to the National finals and beyond.

Resources

For information and resources, including how to register, competition rules, and the steps to competing, visit:

<https://www.worldskillsuk.org/competitions/landscape-gardening/>

Project specifications (Entry Stage)

Projects will be designed to test competitor's technical ability to;

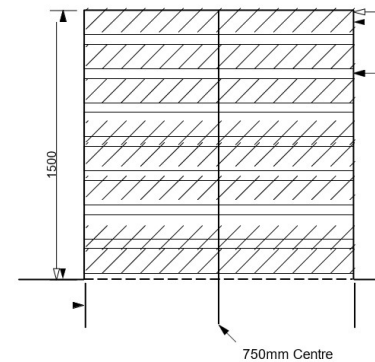
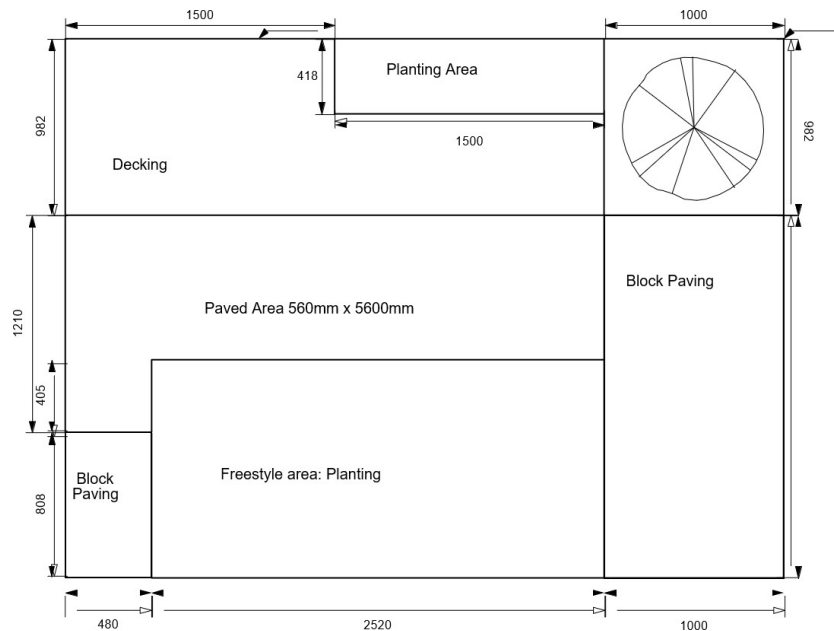
- Take details of a design
- Calculate areas and work out materials
- Calculate Costs
- Deliver a price for the project.

Project overview

Included features	Optional features
<ul style="list-style-type: none"> -Calculate area of Decking -Calculate area of Block Paving -Calculate area Paving -Calculate areas of Planting -Calculate Costs -Apply Margin and submit a total 	<ul style="list-style-type: none"> -Calculate man hours to complete project.

Project example: Entry stage

Design specification	
Material	Online email
Time	Should not take any longer than 1.5hrs
Additional data	<ul style="list-style-type: none"> ● Drawing is not to scale ● All measurements are present ● Top Right corner is raised sleeper bed, 3 high on the flat. ● Fence is gravel board, equally spaced.



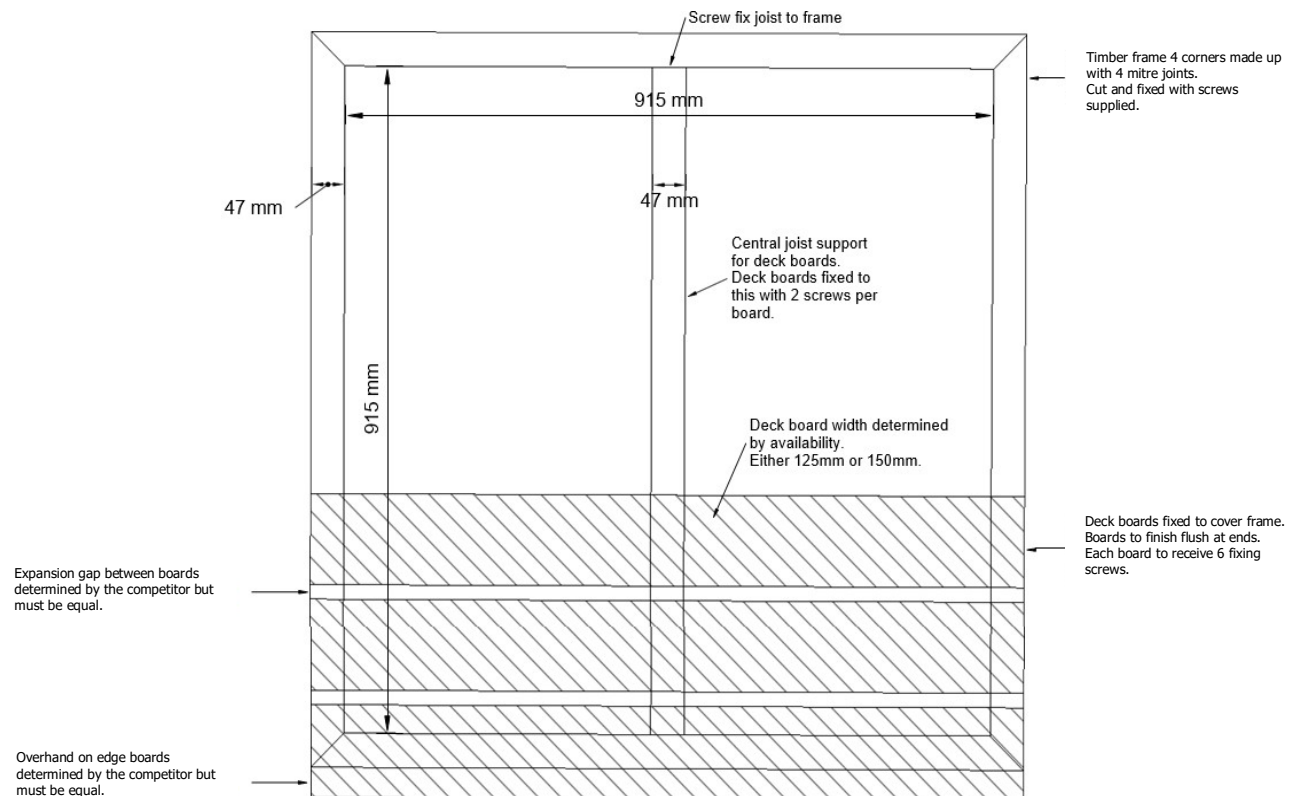
See extra guidance below.

	A	B	C	D	E	F	G	H	I
1	Project Overview and materials list								
2	The attached project is a test piece, but the aim is for us to see if you can translate the detail that is on the drawing in to a bill of quantities and then provide an accurate price for doing the job. There are areas in the project where you will be able to make accurate assessments, but some will be provided by us... eg sand and cement, Type 1, screws and jointing sands/compounds. These will be the same for all. We would like you to provide the amounts and costs of all materials as (Stage 1). Then apply a margin of 30% (Stage 2). Then a figure on the amount of time it would take you to complete (Stage 3) Finally (Stage 4) give APL a full cost including labour to do the job.								
3									
4									
5									
6									
7									
8									
9									
10									
11									
12	Bill of Materials								
13	You should assume the area is site ready and all dig out has been completed correctly								
14	Description				Quantity			Cost/Unit	Total
15	Fence								
16	Fence Posts 2400 x 75 x 75 Treated							10.5 each	
17	Fence Boards (Gravel Board 22 x 150 x 3000)							10 each	
18	Deck (£150 has been used for Geotextile and								£150.00
19	Joist Timber 100 x 50 C24							3.10 / m	
20	Posts and noggins use as above also for posts in							3.10 / m	
21	Decking Boards 29 x 124 x 3000							8.22 each	
22	Raised Border								
23	Sleepers 2400 x 200 x 100 Treated set on the flat edge 3 high.							32.3 each	
24	Assume soil for planting areas has been from dig out. Post for raised border calculated in Posts and Noggins.							FOC	£0.00
25	Ground works								
26	Type 1 MOT @ 75mm depth				1 Tonne			50/tonne	
27	Paving								
28	Mortar (Sand and Cement)				Rounded Up			50 total	£50.00
29	Paving 560 x 560 x 22 Calibrated Sandstone							32/m2	
30	Jointing Compound				Included with Paving			F.O.C	£0.00
31	Block Paving								
32	Sharp Sand @ 50mm				.5 Tonne			50/tonne	
33	Block Pavers 200x 100 x 50							25/m2	
34	Jointing Sand				1 bag			5 / bag	
35	Planting areas to be completed with 5lt plants at a rate of 3/m2. Large area should have 1 small tree								
36	Plants								
37	Tree for planting area 10lt							30 each	
38	Tree for raised area 50lt							150 each	
39	Plants 5lt							6.5 each	
40	Mulch				1 bulk bag			120	£120.00
41								Grand Total Materials	£320.00
42									

Full sheet is supplied on application. Pass mark is 60% explanation of marking schemes below.

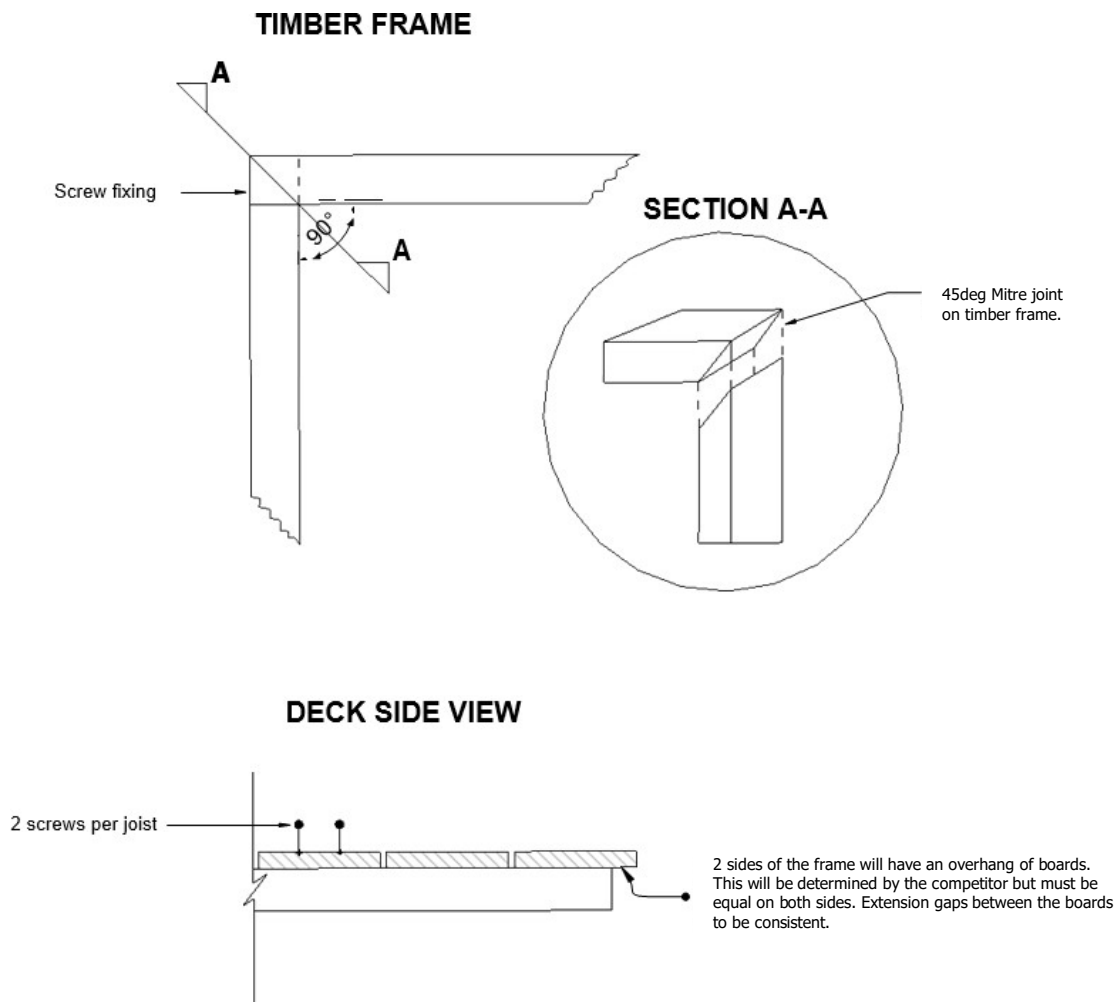
Project example: Qualifying Heats

Design specification	
Materials	Timber, 50mm x 100mm. Decking boards, Grit/ Sharp Sand, Block Paving. Screws and Kiln dried sand.
Time	4 hours
Additional data	<ul style="list-style-type: none"> Where possible all tools to be provided by competitors. All cuts will be made by hand saws and block splitters only. Marking is done against drawings and within mm tolerances. A plant ID will also form part of this qualifier



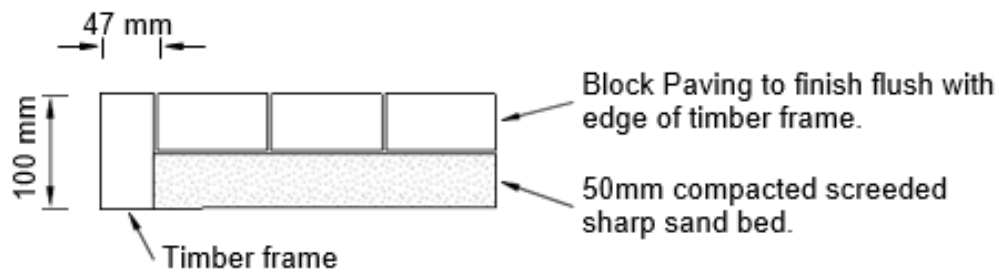
Not to Scale

Project example: Qualifying Heat drawings continued...



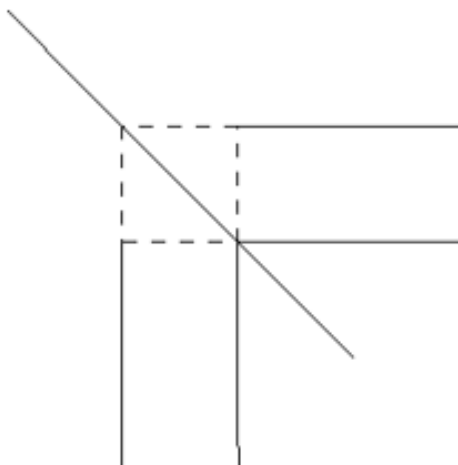
Project example: Qualifying Heat drawings continued...

Block Paving and Timber Frame section



NB jointing sand to be brushed into paving on completion

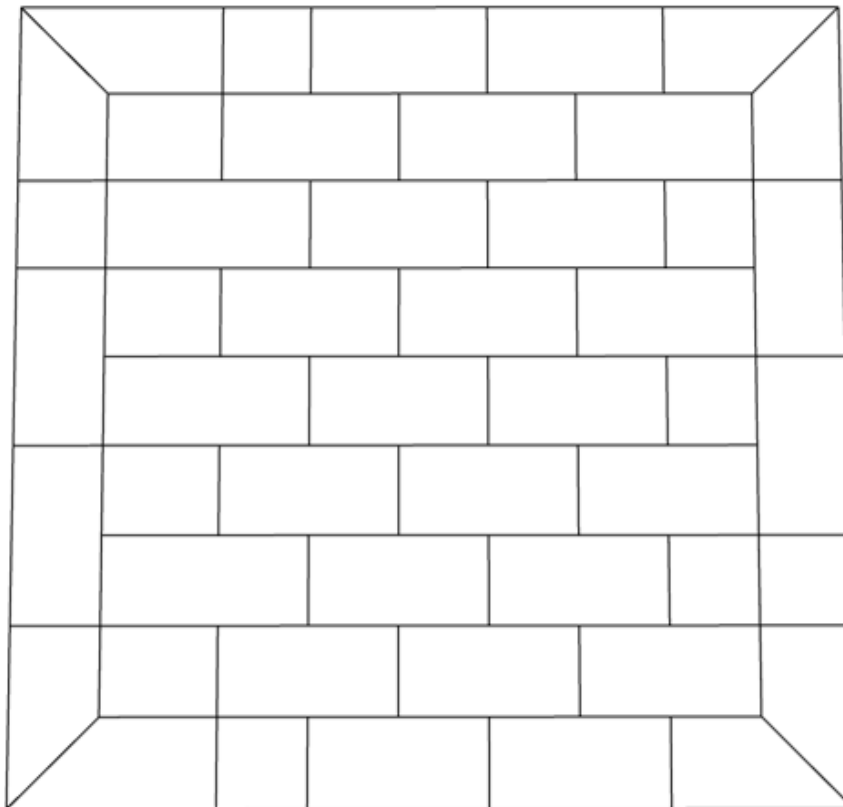
Block Paving Mitre



To create a simple 45deg mitre.

- Place one block over the other at a 90deg angle.
- Score your line.
- Use a Block Splitter to create a 45deg cut

Project example: Qualifying Heat drawings continued...



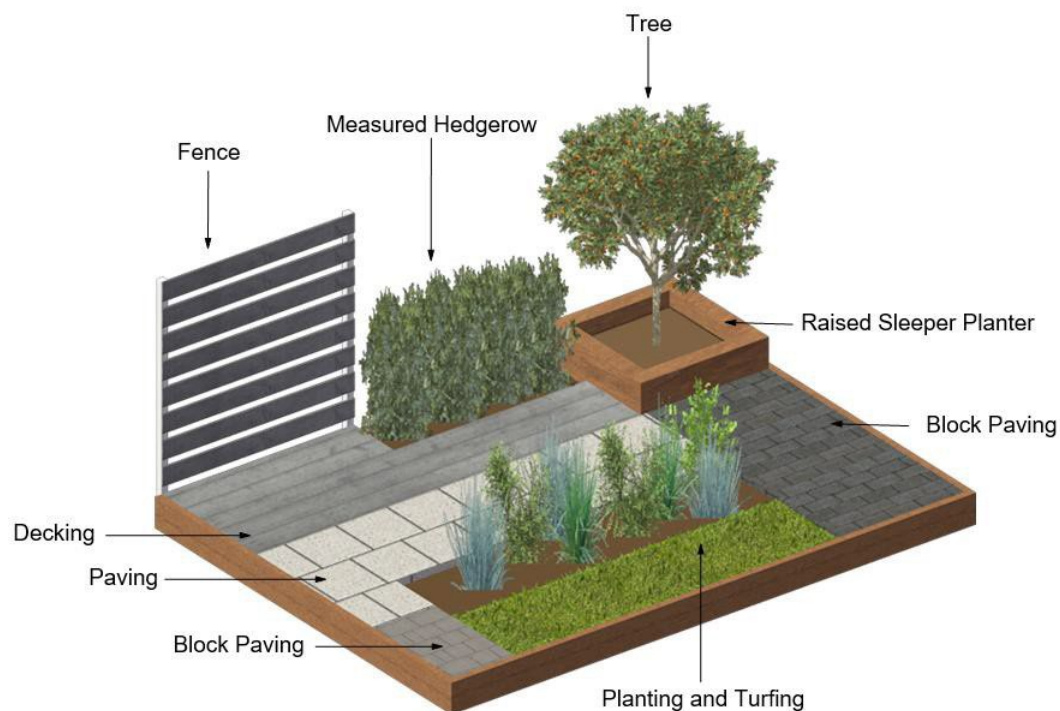
Block Paving

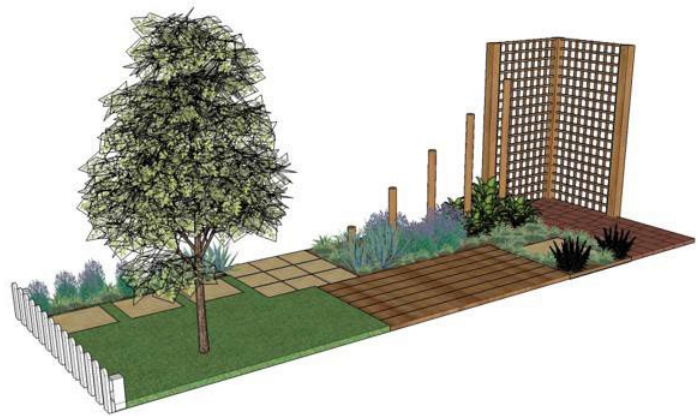
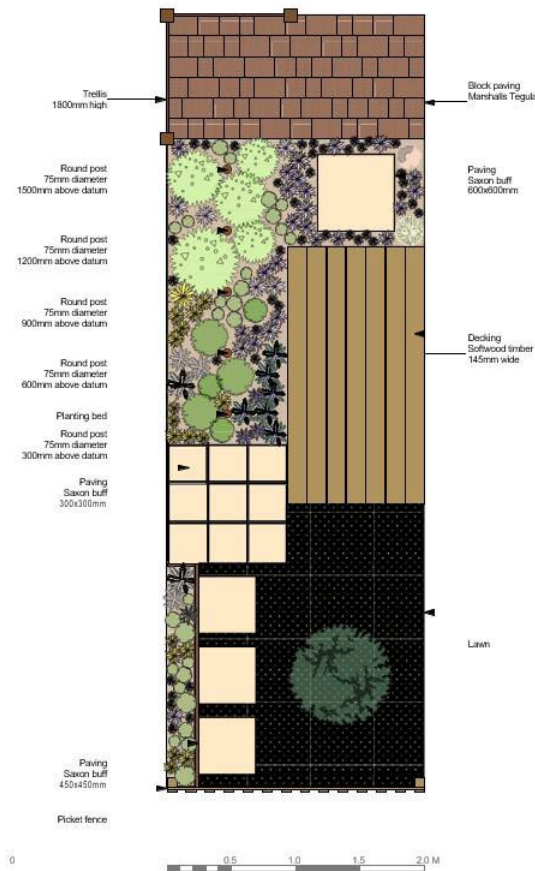
Suggested pattern based on
blocks 200mm x 100mm

Suggested Block Pave Pattern. Not to Scale

Project examples: WSUK Final (this could change in layout and detail)

Materials	Paving, Decking, Fencing, Planting, Lighting, Water Features and Raised Planters.
Time	16.5 hours
Additional data	<ul style="list-style-type: none"> • Where possible all tools to be provided by competitors. • All cuts will be made by hand saws and block splitters only. • Marking is done against drawings and within mm tolerances. • A plant ID will also form part of this qualifier





This competition assesses the skills and abilities of competitors entering the field of Landscaping.

Whilst in appearance both examples look to be simple structures, they encompass all elements of today's modern landscaping.

Your projects are measured and judged within mm tolerances, your finish has to be clean and blemish free, the planting needs to be creative.

Add to this, you are an individual competitor and your 12m² of landscaping has to be completed in just 16.5hrs, you can appreciate this is a challenge.

Marking scheme

The marking scheme is designed to fairly compare every competitor's work. Marking is split between measurement and judgement aspects.

Measurement

Any dimension on the drawing can be a measurement mark. Measurements and levels are marked to tolerances of between 2 and 5mm.

In some cases, there are a range of marks:

- Within tolerance (Full Marks) e.g. 3 points
- ($\pm 0-1.9\text{mm}$) 2 points
- ($\pm 2.1-2.9\text{mm}$) 1 point
- ($\pm 3\text{mm}$) 0 points
- Some marks are awarded on completion of tasks, these are simple Yes/No

All projects will be supplied with a mark summary form. The mark summary form will show only the number of marks assigned to each aspect, not the breakdown of marks (e.g., Decking Exercise: 40 marks maximum).

Judgement

Judgement marks are more subjective, for aspects such as:

- Health and Safety
- General Work Practices and Process
- Overall finish
- Competence on machinery
- Attitude

Judges will work to a judgement handbook with examples of each criterion. Each judge will reveal a value from zero to three, and an average will be taken. For example, if all judges assess the Health and safety as a two overall, the competitor will receive 66% of the possible marks. Judgement marking accounts for only 10% of the overall score.

Example of a score sheet.



Competition Marking Form – Decking - WorldSkills UK Landscaping Intermediate/Advanced – Heat 2020

Competitor Name/Number:

Venue:

Date:

Aspect ID	Description	Tolerance/ Requirement	Max Mark	Mark Awarded
1	Decking			
1:1	Frame Joint 1, 45degree mitre	0-1.9mm: 3 points 2mm- 2.9mm: 2 points 3mm +: 0 points	3	
1:2	Frame Joint 1, 45degree mitre	0-1.9mm: 3 points 2mm- 2.9mm: 2 points 3mm +: 0 points	3	
1:3	Frame Joint 1, 45degree mitre	0-1.9mm: 3 points 2mm- 2.9mm: 2 points 3mm +: 0 points	3	
1:4	Frame Joint 1, 45degree mitre	0-1.9mm: 3 points 2mm- 2.9mm: 2 points 3mm +: 0 points	3	
1:5	Frame (915mm)/(915mm) Internal Measurement <i>This will be confirmed at start of heat depending on blocks supplied</i>	0-1.9mm: 3 points 2-2.9mm: 2 points 3-4.9mm: 1 points 5mm+: 0 points	3	
1:6	Is frame square?	Yes/No No = 0 points	3	
1:7	Safe use of hand tools with correct PPE <i>3 strikes = 0 points.</i>	Yes/No No = 0 points	3	
1:8	All Decking boards to finish flush on two external sides and be equal in length and sanded. Any overhang to equal on uncut sides	0-1.9mm: 4 points 2mm- 2.9mm: 2 points 3mm +: 0 points	4	
1:9	Spacing between decking boards to be equal	+/-2mm Over tolerance = 0 points	3	
1:10	All screws to be in straight line (Minimum of 6 screws per board)	100% 3 80-99% 2 Under 60% 0 points	3	
1:11	All screws flush and evenly spaced (Minimum of 6 screws per board)	100% 3 80-99% 2 Under 60% 0 points	3	
1:12	Test piece complete	Yes/No No = 0 points	6	
			40	

Equipment

During training and delivery of the National finals, there is a range of equipment you will be required to use. If not used before training will be given on the familiarization period ahead of the finals:

Disc Cutter



Model EK6100 is a Power cutter 305mm (12") equipped with 61cm³ 2-stroke engine with stratified scavenging system to comply with all known exhaust emission regulations.

Compared with the predecessor model DPC6430, this new model has the following advantages:

- Lightweight; 1.2kg (2.6lbs) lighter than DPC6430
- Enhanced air filtration; cyclone pre-separation system effectively removes dust particles away from intake air and reduces dust stuck on the filter.

Chop Saw



TECHNICAL SPECIFICATIONS

Blade Diameter 260 mm Max mitre range 60 - 60 ° Max mitre cut at 90° 68 x 310 mm Bore Diameter 30 mm Max bevel range 48 - 48 ° Noise sound pressure 91 dB(A) Noise sound power 101 dB(A) Noise K factor 3 dB(A) Input Wattage 1510 w No Load Speed 3200 rpm Vibration K factor 1.5 m/sec² Vibration no load 2.5 m/sec² Net weight 26.3 kg

Link to product - www.makitauk.com

USER BENEFITS

- Built in laser guide.
- Motor head slides on fixed pipes without extending machine at rear end, so the machine can be placed close to wall.
- Front knob for easy bevel adjustment
- Holders to support a wide workpiece
- Easy-to-operate mitre angle lock
- One-touch sliding lock
- Large turn base
- Connects to dust extractor
- Electric brake
- Soft start
- Constant speed control
- Double Insulation

Drilling



TECHNICAL INFO:

Capacity in Steel

13 mm

Capacity in Wood

38

Chuck Capacity

1.5 - 13 mm

No Load Speed (Hi)

0 - 1,900 rpm

No Load Speed (Lo)

0 - 500 rpm

Blows per Minute (Hi) - ipm

0 - 28,500 ipm

Blows per Minute (Lo) - ipm

0 - 7,500 ipm

Capacity in Masonry

13 mm

Voltage

18 v

Torque Settings

21 + drill

Battery Type

Lithium-ion

Vibration K factor

1.5 m/sec²

Noise sound pressure

82 dB(A)

Noise sound power

93 dB(A)

Noise K factor

3 dB(A)

Net weight

1.5 - 1.8 kg

Battery Quantity (5.0Ah)

2

Max. Fastening Torque (Soft Joint)

27 Nm

Max. Fastening Torque (Hard Joint)

50 Nm

Vibration: Impact drilling into concrete

8.0 m/sec²

Vibration: Drilling into metal

2.5 m/sec²

National finals

What to expect

The National finals are huge: the largest skills event in the UK.

Employers can enter the competition floor with the permission of the competition manager; they can take sponsorship photos or gain a better understanding of the competition itself. Competitors are expected to wear the appropriate H&S equipment (e.g., safety boots, gloves glasses, face masks).

The competition stand will be prepared with all the equipment necessary to compete. Each competitor will be provided with an individual toolkit and drill set. Some other tools such as disk cutter, chop saws and mixers will be shared. Usage of these items will be explained during familiarisation session and monitored throughout the competition.

Beyond the National finals

Looking beyond the National finals, there are opportunities for competitors.

Competitors may join the Skills Champions program, which allows continued involvement, including the opportunity to work with WorldSkills UK and visit schools, colleges, and events to inspire the next generations.

The Association of Professional Landscapers can support you with introductions to some of the best landscapers in the country and even give you opportunities at some of the UK's major flower shows.

Alternatively, if training is of interest to you, you could consider supporting WorldSkills UK with organising and training, and even helping to run the National finals.

Useful Links

There are many useful links for competitors.

www.landscaper.org.uk The Association of professional landscapers. Join the APL here as a student member and get invites to industry focused meetings on Zoom plus regular email e-shots.

<https://www.landscapelibrary.co.uk/> The landscape library is a fantastic resource for Landscapers, Gardeners and Designers. Created and populated by the founder of the APL it has a reduced student membership of £25/year or free for 1 year if a member of the APL.

<https://www.pavingexpert.com/> On this site, you'll find professional, impartial information from an ex-contractor, with construction guides and specifications to all the most popular British and Irish paving types.

<https://deckingnetwork.com/> The fastest growing free network of all things Decking to include photos, forum, blogs, news, information, advice and how to's. This is the hub for the largest gathering of people that share the same interest – and that's Decking