

KFE4Skills Competition Spec – ELECTRICAL INSTALLATION L2+ (V2)

KFE4Skills general rules and guidance latest version is at: <https://www.kentfurthereducation.org/skills-competitions-1>

Relevant WSUK Occupational Standard: <https://api.worldskills.org/resources/download/12404/14965/15893?l=en>

	Section	Criteria Guidance	Spec Criteria
1	Entry Criteria	Entrants must be in education and/or employment with training, at one of the KFE college organisations (EKC Group, MidKent College and North Kent College (including Hadlow College), and/or have completed or be undertaking a relevant Level 2 or 3 or above programme within the last 12 months.	
2	Entrant Numbers	<ul style="list-style-type: none"> ○ Each college organisation (not campus) may register up to (6) students. ○ Confirmed max number of students in total showcase: 6 	
3	Competition Prep	<p>Preparatory Brief</p> <p>All competitors should be prepared to carry out installation of containment, 1st and 2nd fix. They are to demonstrate their knowledge of the Inspect and Testing. Note Diagram at Appendix 2.</p> <p>There are no pre-competition submissions required. Materials lists and tools lists (compiled by the competitors).</p>	
4	Core Competency	<ul style="list-style-type: none"> ○ Accurate measuring and marking out of work area from plans. ○ Construction of containment, trunking and conduit. ○ Installation of wiring systems. ○ Second fixing of electrical components. ○ Initial verification (inspection and testing). 	
5	Duration	<ul style="list-style-type: none"> ○ 4 hours ○ Additional time for familiarisation, health and Safety and general event briefings, judging and awards should be added to this time. 	

6	The Skills Competition Task Details	<p>Competitors will be given a plan of the required work on the day. This will be used by the competitors to enable all accessories and containments to be fitted. They will then go on to wire and second fix the tasks. The final section will be initial verification up to the point of making the system live.</p> <p>See Appendix 2 diagram for further task information.</p>																
7	Marking & Assessment Requirements	<p>Each competition module will be assessed and marked independently of any other competition activity, using objective and judgement criteria or a combination of both during each task.</p> <table border="1" data-bbox="501 628 1323 922"> <thead> <tr> <th>Task Skill</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>Health and Safety</td> <td>/10</td> </tr> <tr> <td>Accuracy of accessory placement</td> <td>/20</td> </tr> <tr> <td>Standards and terminations</td> <td>/20</td> </tr> <tr> <td>Understanding of design</td> <td>/20</td> </tr> <tr> <td>Testing circuits in order and manner</td> <td>/20</td> </tr> <tr> <td>Validity of test results</td> <td>/10</td> </tr> <tr> <td>Total</td> <td>100</td> </tr> </tbody> </table> <p>For all judgement criteria, the following marking scale will be used/ or a variation:</p> <ul style="list-style-type: none"> ○ 0 = Does not meet industry standard ○ 1 = Meets minimum industry standard ○ 2 = Meets industry standard ○ 3 = Exceeds industry standard 	Task Skill	Score	Health and Safety	/10	Accuracy of accessory placement	/20	Standards and terminations	/20	Understanding of design	/20	Testing circuits in order and manner	/20	Validity of test results	/10	Total	100
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8	Judges & Marking	<p>Judges will be selected from the expert KFE staff drawn from various colleges. Panels will normally number three to five judges and in some cases may include an external judge from the industry sector or an awarding body. Judges’ decisions are final in all instances, although scoring will be open and transparent.</p> <p>JUDGE MARKING SHEET – See Appendix 1.</p>																

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9	Student Support Required	<ul style="list-style-type: none"> ○ NA
10	Resources	<ul style="list-style-type: none"> ○ All competitors will be required to wear their college uniform (if appropriate). Protective footwear should be worn at all times in workshop areas. ○ Each competitor will require a 4 foot x 4 foot board and the materials listed on the attached sheet (Appendix 1). ○ This is to be provided by the host college venue alongside all hand tools that will be required (no personal hand tools to be used to ensure a level field).
11	Health & Safety	See relevant risk assessments and additional competition round specific rules and guidance requirements.
12	Risk Assessment	<ul style="list-style-type: none"> ○ The host college must have completed a relevant risk assessment and filed this centrally for KFE4Skills. ○ Participating visiting colleges should complete risk assessments relevant to their event participation.
13	Competition Spec additional rules and requirements	<p>A completed registration is a confirmation that a competitor has agreed to the overall rules and specific competition rules.</p> <p>All electrical equipment must be PAT tested and labelled before using at the competition and all the supporting equipment must be fit for purpose.</p>

JUDGE MARKING SHEET

Competitor	College	Health and safety	Accuracy of accessory placement	Standards of terminations	Understanding of design	Testing of circuits in order and manner	Validity of test results	Total Score

Comments:

Use this space for any specific comments noting the competitors as appropriate.

Appendix 2

Appendix 2 Task Information

Numbered list correlates to drawing below

1. 20mm Light gauge plastic conduit, used with appropriate adapters and connectors.
2. 15mm copper pipe, which PVC conduit must pass over obstruction with appropriate clearance.
3. 50x50 metal trunking with pre-manufactured 90° bend used, all sections of the trunking are to be earthed.
4. 2 double socket BS1363 outlets to be coupled directly to trunking.
5. This is a switch fused spur that should be spurred off the ring final circuit via an appropriate method.
6. This is a key switch operating the simulated emergency light (9) and a 2-way switch operating Light (10)
7. This is an intermediate switch to operate light (10)
8. This is a 2-way switch to operate light (10)

All circuits to be dead tested. Record results below.

No.	Circuit description	Continuity				Insulation Resistance			Polarity
		R1	Rn	R2	R1+R2	Test Voltage	L-N	L-E	✓

Appendix 2 Drawing – (Not to scale)

