## Event 2 - Skills Assessment

Trainer & Assessor Marking Guide

**Criteria**

**Unit code, name and release number**

MSFFF2004 - Prepare surfaces for finishing (1)

**Qualification/Course code, name and release number**

MSF31113 - Certificate III in Cabinet Making (6)

Version: *1.0*

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RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/access/searching.do?doc=%3Cxml%2F%3E&in=P7ac4831b-430a-4b8d-8b56-f7b32ed5b9cf&q=&type=standard&sort=rank&dr=AFTER)

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**Assessment instructions**

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Instructions for the trainer and assessor** | This is a skill based assessment and will be assessing the student on their ability to demonstrate skills required in preparing a range of furniture surfaces for the application of surface coatings by hand or machine.  This assessment is in three parts:   1. Part 1 – Practical assessment   Task 1 – Job plan and JSEA  Task 2 – Edging detail panel (Preparing a horizontal surface)  Task 3 – Kitchen trolley tray (Preparing internal and vertical surfaces)  Task 4 – Shield project (Preparing curved surfaces - mouldings)  Task 5 – Metal plate (Preparing metal surfaces)   1. Observation Checklist 2. Assessment Feedback   The items you will be assessed on will be completed on different dates, with enough time between each task to ensure you receive feedback after each task.  **NOTE:** This assessment event is based on the further processing of projects that are produced during the assessment of other units of competency. These include:   * MSFFM2001 Hand and power tools, skill assessment 5 of 6 – Edging detail panel * MSFFM2010 Set up and operate basic static machines, skill assessment 3 of 3 – Kitchen trolley tray project. * MSFFM2005 Join solid timber skill assessment 3 of 3 – Shield project.   These projects will need to be retained and made available to the student for the assessment of this unit.  Model answers, sample responses or a criteria for each task or activity is provided below.  Use these to support your judgement when determining a satisfactory result.  The student’s response to each question must contain the information indicated in this marking guide in order for their response to be correct. However, if a student provides information other than indicated below, and in the professional opinion of the assessor it is appropriate and meets the intent of the question, it may be considered correct.  Complete the Observation Checklist for each task and activity and the Assessment Feedback to the student. Ensure the student have taken a copy of the assessment prior to it being returned to the student.  The Assessment Feedback page must be signed by both the student and the assessor so the student displays that they have received, understood and accepted the feedback.  Ensure the students name appears on the bottom of each page of the submitted assessment. |
| **About this marking guide** | The student’s response to each task or activity must contain the criteria indicated in this marking guide in order for their response to be correct.  All tasks and activities must be completed correctly in order to satisfactorily complete this assessment event.  Assessors will need to make a judgement call as to whether each response meets the criteria based upon the:   * Rules of Evidence:   + Validity – does the answer address the skill required and does the evidence reflect the four dimensions of competency?   + Sufficiency – is the task or activity sufficient in terms of length and depth?   + Currency – has the work been done so recently as to be current?   + Authenticity – is this work the student’s own authentic work? * Principles of Assessment   + Fairness – individual student’s needs are considered in the assessment process   + Flexibility – assessment is flexible to the individual student   + Validity – any assessment decision is justified, based on the evidence of performance of the student   + Reliability – evidence presented for assessment is consistently interpreted and assessment results are comparable irrespective of the assessor conducting the assessment * Dimensions of competency   + Task skills   + Task Management Skills   + Contingency Planning Skills   + Job Role Environment Skills |
| **Student must provide** | Approved PPE, (eye wear, hearing protection, safety boots, protective clothing, (hair restraint if required), P2 dust mask, no gloves to be used on machines, A4 paper and folder, calculator, pens, pencils, erasers. |
| **Assessor must provide** | A suitable environment to perform the task, computers, data sheets, reference text, organisational policy etc. that is referenced in the assessment, including tool SOP’s and MSDS’s for materials/chemicals used. These may be hard copy or made available online. The assessor will need to ensure each student has a sander with dust extraction, abrasive paper, scrapers, putty, putty knives and a suitable work space. The raw materials to prepare will come from previous assessment tasks the student has completed, which includes:   * MSFFM2001 Hand and power tools, skill assessment 5 of 6 – Edging detail panel * MSFFM2010 Set up and operate basic static machines, skill assessment 3 of 3 – Kitchen trolley tray project. * MSFFM2005 Join solid timber skill assessment 3 of 3 – Shield project.   The assessor will also need to supply a piece of flat brass 75mm x 20mm x 3mm. |
| **Due date/time allowed/venue** | TBA/240 minutes/TAFE workshop |

**Part 1: Practical assessment**

The tasks in this assessment event will be assessed on different dates and not on one occasion. The instructions and the criteria in the tasks and activities below will be used by the assessor to determine whether the tasks and activities have been satisfactorily completed. Use these instructions and criteria to ensure the student demonstrates the required skills and knowledge. Prior to any assessment students will be inducted on each tool and sign off on a SOP *(Standard operating procedure)* and will perform a PSE *(practice student exercise)* for each step in the assessment.

Students will need to work as a team to discuss the work outcomes for each task. The team will then use the templates provided in this document to develop one job plan covering tasks 2, 3, 4 & 5 and one JSEA covering tasks 2, 3, 4 & 5. The student will also be required to participate in a practical demonstrations of how to complete each set task or activity. These practical tasks will be observed by the assessor, or the student can digitally record themselves during the process of the practical task and submit the video as evidence. The student’s responses will be used as part of the overall evidence requirements of the unit.

The student should refer to the list of criteria provided in the Observation Checklist to understand what skills the student is required to perform in this section of the assessment. This Checklist outlines the Performance Criteria, Performance Evidence and Assessment Conditions the student will be marked on. Once completed students are required to submit this assessment the tasks and activities required to be completed by the student for marking. The students are tasked with demonstrating their skills selecting and using a range of hand and power tools to prepare surfaces for finishing, including the following:

* Measuring tapes & rulers
* Squares
* Hammer
* Nail punch
* Liquid containers
* Brushes
* File
* Oil stone
* Steam iron
* Chisels
* Power sanders
* Air compressor & hoses
* Drill
* Steel wool/scourers
* Sanding blocks
* Cabinet Scrapers
* Fixed Belt/Stroke sander
* Screwdrivers
* Clamps
* Abrasive paper
* Mallet
* Vice
* Saw
* Plane spanners

The assessor will provide SOP’s *(standard operating procedure)* and MSDS’s *(Material Safety Data Sheet)* for all tools and materials to be used.

## **Task 1: Job plan and JSEA**

**Student instructions**

The steps for these task are:

* Discuss with another student:
  + The specifications of each project (Tasks 2, 3, 4 and 5).
  + The work requirements of preparing surfaces for each task, any perceived problems and confirm the workflow of a job plan.
  + The SOP’s for any tools that are determined as being required for tasks 2, 3, 4 & 5.
  + The MSDS’s for any chemicals that are determined as being required for tasks 2, 3, 4 & 5.
  + Potential safety procedures for preparing the surfaces for each task.
* Develop with another student using the provided template (pages 8-9), one job plan that can be used for the preparation of surfaces in tasks 2, 3, 4 and 5, including:
  + Identifying the workflow for the project tasks.
  + Identifying the tools, equipment, quality checks and materials required.
* List the characteristic of each prepared surface and the proposed surface coating for each task on the provided job plan template (table on page 9). Descriptions should include:
  + Type of material, open or closed grain, light or dark colour, straight or wavy grain, cranky or difficult grain, hard or soft texture, oily or dry to touch.
  + Surface coating must reflect the details listed in each task specifications list.
* Develop with another student using the provided template (pages 10-13), one JSEA that shows the safety procedures for tasks 2, 3, 4 and 5, including:
  + Identifying the safe use of tools and equipment.
  + The type of PPE required.
  + The hazards, controls and risk ratings for each process.

**Note:** Students must complete and submit the job plan for marking, before commencing the JSEA. Students must complete and submit the JSEA before accessing and using any tools and equipment. Each individual student must submit their own completed copy of the Job Plan and JSEA.

**Task 1: Job plan template (Benchmark response)**

Table 2 Job plan

| Job Plan - Tasks 2, 3, 4 & 5 | Tool | Pre start check | ‘post’ check | Returned |
| --- | --- | --- | --- | --- |
| Ensure work area is clear and safe to proceed | Observation | No trip or slip hazards | Observation | Cleaned and free of slip and trip hazards |
| Select and acquire tools | Measuring tape, square, nail punch, brushes, screwdrivers, clamps, sanding blocks, chisels, fixed belt/stroke sander, dust extraction unit, sander, putty knives, scrapers, abrasive paper, steam iron, compressor & hoses, clamps, drill, vice and saw | Ensure all tools are ready for use, maintain if required | ‘Post’ use check on all tools | Returned |
| Carry out pre-start checks | Measuring tape, square, nail punch, brushes, screwdrivers, clamps, sanding blocks, chisels, fixed belt/stroke sander, dust extraction unit, sander, putty knives, scrapers, abrasive paper, steam iron, compressor & hoses, clamps, drill, vice, oil stone and saw | Check for air leaks, casings leads, hoses and tag.  Perform maintenance as required | ‘Post’ use check on all tools |  |
| Select materials/ Task from fabrication of previous task | 1. Horizontal surface preparation – Edging detail panel 2. Vertical and Internal surface preparation – Trolley tray 3. Curved surface (moulding) preparation – Shield 4. Metal surface preparation – Metal plate | Check measure size, quantities & if material is acceptable to proceed. | Ensure waste is recycled |  |
| Identify faults punch nails below surface, lift any hollows or dents and fill holes, repair or replace defects and imperfections. | Nail punch, putty knife, iron and water | Ensure putty knife is clean and has no gaps in the edges | ‘Post’ use check | Returned |
| Sand all faces and edges with 120-150 grade abrasive paper. Dampen with wet rag to lift grain.  Metal plate start with 400 grade abrasive | Dust extraction unit, fixed belt/stroke sander, power or pneumatic orbital sander, block, abrasive paper, PPE (Dust mask, hearing protection) | Check paper is not clogged or torn, check dust extraction is on. | Quality check no rounding or hollows created |  |
| Sand all faces and edges with 180-240 grade abrasive paper.  Ensure sanding with the grain to remove circle marks for staining.  Metal plate continue with 1200 grade abrasive | Dust extraction unit, power or pneumatic orbital sander, block, abrasive paper, PPE (Dust mask, hearing protection) | Check paper is not clogged or torn, check dust extraction is on. | Quality check no rounding or hollows created |  |
| Metal plate continue with 3000 grade abrasive then finish with 4000 grade | Dust extraction unit, sander, block, abrasive paper, PPE (Dust mask, hearing protection) | Check paper is not clogged or torn, check dust extraction is on. | Quality check no rounding or hollows created |  |
| Arris all edges with 240 grade and finish with OOO steel wool or fine scourer | block, abrasive paper, PPE (Dust mask, hearing protection) | Check block has no glue or debris creating lumps on the surfaces. Check paper is not clogged or torn | Check all arises are equal, all surfaces are flat with no defects | Store & label. Present for marking |
| Check all tools ‘post’ use, clean and store | Measuring tape, square, nail punch, brushes, screwdrivers, clamps, sanding blocks, chisels, fixed belt/stroke sander, dust extraction unit, sander, putty knives, scrapers, abrasive paper, steam iron, compressor & hoses, clamps, drill, vice, oil stone and saw | Ensure all tools are cleaned and ready for storage. | ‘Post’ use check all tools as per pre start check | Returned and stored in appropriate place |
| Clean area and remove any hazards | Broom, dustpan |  | Observation | Cleaned and free of slip and trip hazards |

**Surface characteristics and required surface coatings:** Fill in the following details for each of the practical tasks.

|  |  |  |
| --- | --- | --- |
| Task | Surface characteristics (Your own description) | Required surface coating (As per specifications) |
| **Task 2 – Edging detail panel** | Descriptions can include: Veneered particle board, open or closed grain, light or dark colour, straight or wavy grain, cranky or difficult grain, hard or soft texture, oily or dry to touch | Shellac |
| **Task 3 – Trolley tray** | Descriptions can include: Solid hardwood, open or closed grain, light or dark colour, straight or wavy grain, cranky or difficult grain, hard or soft texture, oily or dry to touch | Nitrocellulose lacquer, stained to dark walnut |
| **Task 4 – Shield project** | Descriptions can include: Solid softwood, open or closed grain, light or dark colour, straight or wavy grain, cranky or difficult grain, hard or soft texture, oily or dry to touch | Oil finish |
| **Task 5 – Metal plate** | Descriptions can include: Brass, metal, non-porous | Nil |

**Acknowledgement by Student & Assessor**

I have contributed to and completed my job plan with the class environment and understood and been instructed in the steps of the practical task and will implement all the requirements.

Once the job plan is completed and signed off by the assessor, the student will need to complete the JSEA with a team member.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Student name (print) | Signature | Role | Date | Assessor Name (print) |  | Date |
| **Student XXX** |  | Practical Task |  |  |  |  |

Task 6: Job Safety & Environment Analysis PE2, PE4.1, 2

**Activity/ Task: Preparing surfaces for task 1, 2, 3 & 4** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Location: Tafe workshop**

**Conducted by: Student XXX** **In Consultation with: Teacher YYY Date** **Conducted: 28/11/2018**\_\_\_\_\_\_\_\_\_

**Reviewed by**: **Assessor ZZZ** **Comments: To be** observed\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Date Reviewed: 30/11/2018**

**Reason for this risk assessment**– *refer to the* [*Procedure for WHS Risk Management*](https://staff.tafensw.edu.au/employee-essentials/work-health-and-safety/policies-and-procedures/)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Workplace Change  Work task / activity  New building/ facility | | Procure new plant  Commission new plant  Decommission plant | | | | New chemical or storage  Maintenance activity  Lease or contract | | Staff work travel  Remote or lone working  Public event | Student excursion  Student off-site activity  Student work placement | | Other *(specify)* - |
| **RISK ASSESSMENT SUMMARY** | | | | | | | | | | | |
| **Plant / vehicles / substances involved**  TASK 1 HORIZONTAL SURFACE  TASK 2 VERTICAL SURFACE  TASK 3 INTERNAL SURFACE  TASK 4 CURVED & METAL SURFACE | | | **licenses / permits**  Driver’s licence  High Risk Work License  Plant operators license  Work at heights  Confined space entry permit  Hot work / permit to work  Other - | | | | *What are the top 5 risks for this activity / task?*  1. Electrocution  2. Dismemberment  3. Cuts & Abrasions  4. Impalement  5. Flying debris | | | *What are the top 5 safety controls?*  1.Isolation  2. Pre Start Check  3. Follow SOP  4. Wear PPE  5. Dust Extraction | |
| **Required Protective Clothing and PPE** | | | | | | | **Other documents needed to manage the risks** | | |  | |
| T:\ADMINISTRATION OH&S UNIT\Safety Symbols\%OH&S Safety Symbols Australian\Mandatory symbols\Eye.jpg | T:\ADMINISTRATION OH&S UNIT\Safety Symbols\%OH&S Safety Symbols Australian\Mandatory symbols\Foot.jpg | | | **T:\ADMINISTRATION OH&S UNIT\Safety Symbols\%OH&S Safety Symbols Australian\Mandatory symbols\Head.jpg** | T:\ADMINISTRATION OH&S UNIT\Safety Symbols\%OH&S Safety Symbols Australian\Mandatory symbols\Hearing.jpg | | *e.g. Procedure / SOP / work instruction, safety data sheet (SDS), inspection checklists, health declarations etc.*  SOP, Workshop Rules, Tafe Safe, Work Instruction from trainer | | | | |
| T:\ADMINISTRATION OH&S UNIT\Safety Symbols\%OH&S Safety Symbols Australian\Mandatory symbols\Protective clothing.jpg | T:\ADMINISTRATION OH&S UNIT\Safety Symbols\%OH&S Safety Symbols Australian\Mandatory symbols\Respiratory.jpg | | | T:\ADMINISTRATION OH&S UNIT\Safety Symbols\%OH&S Safety Symbols Australian\Mandatory symbols\Apron.jpg | T:\ADMINISTRATION OH&S UNIT\Safety Symbols\%OH&S Safety Symbols Australian\Mandatory symbols\Hand.jpg | | **Arrangements for First Aid and Emergencies**  Apply basic first aid and call or take to Tafe First Aid Station. If an Emergency call 000 | | | | |
| **Other** *(specify) -* | | | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| HAZARD CHECKLIST | | | RISK ASSESSMENT MATRIX |
| **Environment**  Weather  Hot or cold conditions  Air quality  Noise  UV exposure  Slip/trip hazards  Drowning  **Substances**  Hazardous chemicals  Explosives  Flammable substances  Toxic substances/ pesticides  Inhalable / respirable dust  Exhaust or other fumes  **Physical**  Pressure  Stored energy – mechanical  Stored energy – electrical  Stored energy – chemical  Confined spaces  Fall from height  Manual tasks / ergonomic | **Psychological and Social**  Stress  Fatigue  Violence / aggression  Drugs and alcohol  Isolation  Bullying and/or harassment  Communication barriers  **Biological**  Animal or insect bite  Riding or handling  Zoonosis  Infectious agents  Needle-stick / sharps  Bodily fluids  Contaminated waste  **Mechanical**  Traffic  Driving  Forklifts, Cranes etc.  Rotating / moving parts  Crushing  Shearing, cutting, stabbing  Vibration | **Environmental**  Air emissions  Release to stormwater  Chemical spill  Soil/groundwater contamination  Asbestos  Radioactive waste  Waste disposal  **Electrical**  Overhead power lines  Underground power lines  Arc welding  Power tools / leads  Electrical work  Portable power generators  Wet environments | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | **CONSEQUENCE** | | | | | | ***LIKELIHOOD*** | **Negligible** | **Minor** | **Medium** | **Major** | **Severe** | | ***Almost Certain*** | **9** Medium | **15** High | **18** High | **23 Critical** | **25 Critical** | | ***Likely*** | **7** Low | **12** Medium | **17** High | **20** High | **24** **Critical** | | ***Possible*** | **4** Low | **10** Medium | **13** Medium | **19** High | **22** High | | ***Unlikely*** | **2** Very low | **5** Low | **11** Medium | **14** Medium | **21** High | | ***Rare*** | **1** Very low | **3** Very low | **6** Low | **8** Low | **16** Medium | |

**Risk Assessment – Kitchen trolley top**

Table 3 Risk assessment

| Activity / Situation / Location | Hazards | Risk Score | Controls | New Score |
| --- | --- | --- | --- | --- |
| Ensure work area is clear and safe to proceed/ Workshop | dust, slips, trips, falls | Low | Clean area, PPE (dust mask, hearing protection), remove hazards | Very Low |
| Select and acquire tools/ Workshop | Pinch points, cuts, abrasions, strains | Med | Correct lifting techniques & follow SOP’s ensure safe handling | Very Low |
| Carry out pre-start checks/ Workshop | Pinch points, cuts, abrasions, strains, electrocution | Med | Correct lifting techniques & follow SOP’s ensure safe handling, isolate prior to pre-start check, ensure all tools are sharp. | Very Low |
| Select materials- / Workshop  Task 1 Horizontal preparation - Edging exercise | Pinch points, cuts, abrasions, strains | Med | Correct lifting techniques & ensure safe handling | Very Low |
| Select materials-/ Workshop  Task 2 Vertical preparation - Kitchen trolley | Pinch points, cuts, abrasions, strains | Med | Correct lifting techniques & ensure safe handling | Very Low |
| Select materials-/ Workshop  Task 3 Internal preparation - Trolley pull out tray | Pinch points, cuts, abrasions, strains | Med | Correct lifting techniques & ensure safe handling | Very Low |
| Select materials-/ Workshop  Task 4 curved timber surface (moulding) -Shield Metal plate | Pinch points, cuts, abrasions, strains | Med | Correct lifting techniques & ensure safe handling | Very Low |
| Identify faults, lift any hollows or dents and fill holes, defects and imperfections, remove scratches with cabinet scraper. / Workshop | Pinch points, cuts, abrasions, slips, trips, falls, burns | High | Correct handling techniques, follow SOP’s, observe MSDS’s ensure safe handling, wear PPE (dust mask, hearing protection), | Low |
| Sand all faces and edges with 120 - 150 grade abrasive paper/ Workshop  Metal plate start with 400 grade abrasive | Pinch points, cuts, abrasions, slips, trips, falls, noise, dust | High | Correct lifting techniques, follow SOP’s ensure safe handling, wear PPE (dust mask, hearing protection), ensure dust extraction is operational | Low |
| Sand all faces and edges with 180 - 240 grade abrasive paper/ Workshop  Metal plate continue with 1200 grade abrasive | Pinch points, cuts, abrasions, slips, trips, falls, noise, dust | High | Correct lifting techniques, follow SOP’s ensure safe handling, wear PPE (dust mask, hearing protection), ensure dust extraction is operational | Low |
| Aris all edges with 240 - 320 grade and finish with OOO steel wool or fine scourer/ Workshop | Cuts, abrasions, slips, trips, falls, dust | High | Correct lifting techniques, follow SOP’s ensure safe handling, wear PPE (dust mask, hearing protection) | Low |
| Metal plate continue with 3000 grade abrasive then finish with 4000 grade/ Workshop | Pinch points, cuts, abrasions, slips, trips, falls, noise, dust | High | Correct lifting techniques, follow SOP’s ensure safe handling, wear PPE (dust mask, hearing protection), ensure dust extraction is operational | Low |
| Check all tools ‘post’ use, clean and store/ Workshop | Pinch points, cuts, abrasions, slips, trips, falls, electrocution, noise | Crit | Correct lifting techniques, ensure safe handling, wear PPE (dust mask, hearing protection), isolate prior to post check | Low |
| Clean area and remove any hazards/ Workshop | Pinch points, cuts, abrasions, slips, trips, falls, noise | High | Correct lifting techniques, ensure safe handling, wear PPE (dust mask, hearing protection) | Low |

**Note:** Each student must complete and submit their own copy of the JSEA for marking.

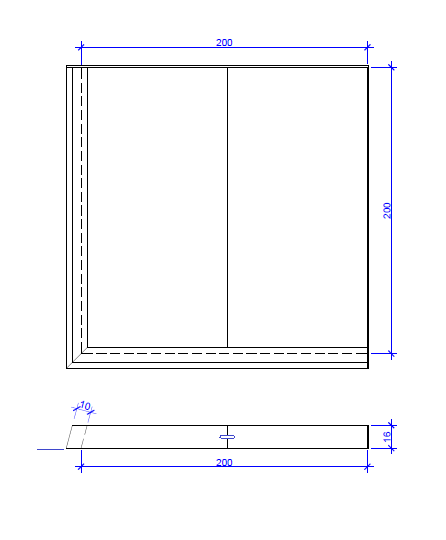
**Acknowledgement by Student & Assessor**

I have read and understand all SOP’s for tools to be used and I have been instructed in this risk management assessment and will implement all the requirements. Once the JSEA is completed and signed off by the assessor, the student can perform the project skills assessment.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Signature** | **Role** | **Date** | **Assessor Name** | **Assessor Signature** | **Date** |
|  |  |  |  |  |  |  |

## **Task 2: Edging detail panel (Preparing a horizontal surface)**

**Student instructions**



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## Project Specifications:

* Material: Veneered particle board/MDF
* Description: The front two edges have a 12°angle with a 10mm timber lipping over the raw material. The remaining two edges have a veneer edge.
* Proposed surface coating: Top will be finished with a traditional French polishing finish (shellac).

The steps for this task are:

Prepare the top (horizontal) veneered surface of the panel using the processes listed in the job plan developed by you, including:

* Ensuring that the work area is safe and that tools are safe to use (pre use checks).
* Using all tools, equipment and PPE, according to the details in the JSEA developed by you.
* Using and materials according to the relevant MSDS (material safety data sheet).
* Inspecting approving the surface for further processing, removing and filling any defects.
* Cleaning up any excess glue.
* Sharpening and using a cabinet scraper to flush off lippings and remove any shallow scratches.
* Sanding the surface with different grades of abrasive paper, finishing with 240grit or finer and using the equipment listed in your job plan. Equipment can include: hand sanding tools or appropriate power sanding tools.
* Final sanding process to be done by hand and by sanding only with the direction of the grain.
* Arrising all edges.
* Clean up the work area at the end of the session and ensure that tools are checked for safety (post use checks) and returned to storage.
* Complete question 1.1 (page 15), calculating the required quantity of surface coating.

**NOTE:** This assessment event is based on the further processing of a project that was produced during the assessment of another unit of competency:

* MSFFM2001 Hand and power tools, skill assessment 5 of 6 – Edging detail panel

This project will need to be retained and made available to the student for the assessment of this task.

**Question 1.1 - Calculating the required quantity of surface coating** PE6

**Task:** Calculate the quantity of shellac, required to apply one coat to the top face of the edging detail panel.

**Details:** One litre of shellac will cover 5 square metres. Allow 20% for wastage.

Size of panel surface: 200 x 200mm

(Show all working out calculations).

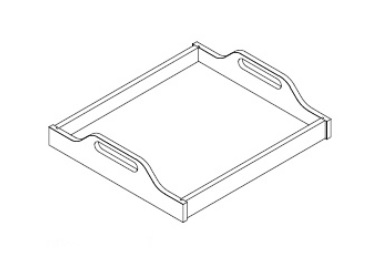
Table 4 Surface coating calculation

|  |  |
| --- | --- |
| Calculation (Benchmark response) | Answer |
| Area is 0.200 x 0.200 = 0.04 square metres  Product is 1ltre ÷ 5m² = 200ml per m²  0.200mls ÷ 0.04 m² = 5mls  Add 20% 5mls x 1.2 = 6 ml | 6 ml of shellac |

## **Task 3: Kitchen trolley tray (Preparing internal and vertical surfaces)**

**Student instructions**

## Project Specifications:



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* Material: Solid hardwood
* Description: A tray consisting of a front and back, 2 shaped sides and a bottom panel. Handle section to have a 5mm radius on both sides, all other edges square arrised.
* Proposed surface coating: Clear satin coat of nitrocellulose lacquer, stained to a dark walnut colour

The steps for this task are:

Prepare the internal and vertical surfaces of the tray using the processes listed in the job plan developed by you, including:

* Ensuring that the work area is safe and that tools are safe to use (pre use checks).
* Using all tools, equipment and PPE, according to the details in the JSEA developed by you.
* Using and materials according to the relevant MSDS (material safety data sheet).
* Inspecting approving the surface for further processing, removing and filling any defects.
* Cleaning up any excess glue.
* Dampen in between sanding grade changes to lift grain (optional)
* Sharpening and using a cabinet scraper to flush off lippings and remove any shallow scratches.
* Sanding the surface with different grades of abrasive paper, finishing with 240grit or finer and using the equipment listed in your job plan. Equipment can include: hand sanding tools or appropriate power sanding tools.
* Final sanding process to be done by hand and by sanding only with the direction of the grain.
* Arrising all edges.
* Clean up the work area at the end of the session and ensure that tools are checked for safety (post use checks) and returned to storage.

**NOTE:** This assessment event is based on the further processing of a project that was produced during the assessment of another unit of competency:

* MSFFM2010 Set up and operate basic static machines, skill assessment 3 of 3 – Kitchen trolley tray project.

This project will need to be retained and made available to the student for the assessment of this task.

## **Task 4: Shield project (Preparing curved surfaces - mouldings)**

**Student instructions**

## Project Specifications:



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* Material: Solid softwood
* Description: A shield with a moulding detail around the front edge.
* Proposed surface coating: Clear burnishing oil.

The steps for this task are:

Prepare the curved (moulding) surface of the shield using the processes listed in the job plan developed by you, including:

* Ensuring that the work area is safe and that tools are safe to use (pre use checks).
* Using all tools, equipment and PPE, according to the details in the JSEA developed by you.
* Using and materials according to the relevant MSDS (material safety data sheet).
* Inspecting approving the surface for further processing, removing and filling any defects.
* Cleaning up any excess glue.
* Dampen in between sanding grade changes to lift grain (optional)
* Sharpening and using a cabinet scraper to flush off lippings and remove any shallow scratches.
* Sanding the surface with different grades of abrasive paper, finishing with 240grit or finer and using the equipment listed in your job plan. Equipment can include: hand sanding tools or appropriate power sanding tools.
* Final sanding process to be done by hand and by sanding only with the direction of the grain.
* Arrising all edges.
* Clean up the work area at the end of the session and ensure that tools are checked for safety (post use checks) and returned to storage.

**NOTE:** This assessment event is based on the further processing of a project that was produced during the assessment of another unit of competency:

* MSFFM2005 Join solid timber skill assessment 3 of 3 – Shield project.

This project will need to be retained and made available to the student for the assessment of this unit.

## **Task 5: Metal plate (Preparing metal surfaces)**

**Student instructions**



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Before polishing

## Project Specifications:

* Material: Solid brass or aluminium flat bar (75 x 20 x 3mm)
* Proposed surface finish: Polished to a mirror finish.



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After polishing

The steps for this task are:

Prepare the surface of the metal plate using the processes listed in the job plan developed by you, including:

* Ensuring that the work area is safe and that tools are safe to use (pre use checks).
* Using all tools, equipment and PPE, according to the details in the JSEA developed by you.
* Using and materials according to the relevant MSDS (material safety data sheet).
* Inspecting approving the surface for further processing, removing any defects.
* Sanding the surface with different grades of abrasive paper, Starting with 400 grit, second sanding with 1200grit or finer, final sanding with 3000 grit or finer and using the equipment listed in your job plan. Equipment to include: hand sanding tools.
* Final polishing process to be done by hand and by sanding with a fine scourer or steel wool.
* Arrising all edges and removing any finger prints from surface.
* Clean up the work area at the end of the session and ensure that tools are checked for safety (post use checks) and returned to storage.

Part 2: Observation Checklist

The Observation Checklist will be used by the student to mark the students’ performance in any of the previous event types. Use this Checklist to understand what skills the student is required to demonstrate in this section of the assessment. This Checklist outlines the Performance Criteria, Performance Evidence and Assessment Conditions the student will be marking the student on. All the criteria must be met. The student’s demonstration will be used as part of the overall evidence requirements of the unit. The student may ask questions while the demonstration is taking place or if appropriate directly after the task/activity has been completed.

Table 5 Observation Checklist

| Task # | **Task/Activity Performed**  *(Assessors are to record their observations in sufficient detail to demonstrate their judgement of the student’s performance against the criteria required)* | **Edging detail panel**  **Date:** | | **Trolley tray**  **Date:** | | **Shield project**  **Date:** | | **Metal plate**  **Date:** | | **Assessor Comments** *(Describe the student’s ability in demonstrating the required skills and knowledge)* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **S** | **U/S** | **S** | **U/S** | **S** | **U/S** | **S** | **U/S** |  |
| 1 – Preparing for work | 1.1 Communicate with at least 1 other to locate, confirm and interpret:   * The specifications of the task projects. PE1 * The work requirements for preparing the surfaces for each of the tasks, any problems and the reporting of work requirements in a job plan. PE7 * The safety procedures for preparing the surfaces for each of the tasks. PE7 |  |  |  |  |  |  |  |  | *Did you see the student communicate with at least 1 other and discuss:*   * *The specifications of each task* * *The work requirements for each task, any problems and the potential structure of a job plan* * *Any safety procedures for preparing the surfaces in each task* |
| 1.2 Work with at least 1 other to apply information by developing a job plan for the surface preparation tasks, including: PE1   * Identifying the work flow and procedures for preparing the surfaces, according to the coating materials for each task. 1.5, PE9 * Identifying the tools, equipment and materials required for the tasks. 1.3, PE3 * Identify the characteristics of the surfaces and the required surface coating materials. 1.1 |  |  |  |  |  |  |  |  | *Did the student apply the supplied information and develop a job plan with at least 1 other, that includes:*   * *The work flow, procedures, tools, equipment and materials, as per the benchmark response (Job plan pages 8-11)* * *Identification of the surface characteristics and the required surface coating for each task, as per the benchmark response (Job plan page 11)* |
| 1.3 Develop a JSEA for the surface finishing tasks, that identifies details of:   * The safety procedures for the tasks. PE7 * Safe use of tools and equipment, including hazards, control measures and risk ratings. 1.3 |  |  |  |  |  |  |  |  | *Did the student develop a JSEA with at least 1 other, that includes:*   * *The safety procedures for the tasks, as per the benchmark response (JSEA pages 12-15)* * *Safe use, Hazards and control measures for the tools and equipment, as per the benchmark response (JSEA pages 12-15)* |
| 1.4 Complete calculations for the volume of required surface coating (Task 2 calculations Q1.1, page 15). PE6 |  |  |  |  |  |  |  |  | *Did the student correctly complete the calculation for the volume of required surface coating, as per the benchmark response (Task 2 Q1.1, page 17)* |
| 2 – Preparing surfaces | 2.1 Prepare surfaces on a minimum of 4 occasions. PE5 |  |  |  |  |  |  |  |  | *Student prepared surfaces on 4 occasions per Job plan benchmark responses* |
| 2.2 Prepare a horizontal surface on veneered board. PE5.1, PE5.5 |  |  |  |  |  |  |  |  | *Student prepared a horizontal surface on veneered manufactured board material per job completed plan benchmark responses* |
| 2.3 Prepare a vertical surface on solid hardwood. PE5.2, PE5.5 |  |  |  |  |  |  |  |  | *Student prepared a vertical surface on solid hardwood as per completed job plan benchmark responses* |
| 2.4 Prepare an internal surface on solid hardwood. PE5.3, PE5.5 |  |  |  |  |  |  |  |  | *Student prepared an internal surface on solid hardwood as per completed job plan benchmark responses* |
| 2.5 Prepare a curved surface (moulding) on solid softwood. PE5.4, PE5.5 |  |  |  |  |  |  |  |  | *Student prepared a curved moulding surface on solid softwood as per completed job plan benchmark responses* |
| 2.6 Prepare a metal surface. PE5.5 |  |  |  |  |  |  |  |  | *Student prepared a metal surface as per completed job plan benchmark responses* |
| 2.7 During all work, ensure that you:   * Inspect product surface between each process, to ensure suitability for the next step and conformity to specifications. 2.2, 2.4 * Follow the procedures and specifications for each task as per the proposed surface coatings and as set out in the task job plan. 1.5, 2.1 * Set up any required tools, equipment and engineering controls, including dust extraction. 1.3 * Identify and exclude any sources of contamination from the work area. 1.4 * Repair any surface faults or defects and report any non-reparable components. 2.3, 2.5 * Minimise the wasting of materials, time and money. PE8 * Following work instructions to prevent damage to goods, equipment and products. PE4, PE4.2 * Follow inspection processes to maintain required production output and quality, as per the task specifications. PE4, PE4.3 |  |  |  |  |  |  |  |  | *Does the students work conform to the specifications of each task?*  *During work did the student:*   * *Inspect the surfaces between each process* * *Follow the procedures as per the benchmark response Job plan (pages 8-11)* * *Set up all required safety controls, including dust extraction and as per the benchmark response JSEA (pages 12-15)* * *Identify and remove sources of contamination from the work area* * *Repair any surface faults or defects and report un-reparable components to the supervisor or assessor* * *Prevent damage to goods, equipment and products.* * *Maintain the required production output and quality by inspecting work and ensuring quality, as listed in the specifications for each task* |
| 3 – Clean work area and maintain equipment | 3.1 After the completion of work, ensure that you:   * Pack and store products in an appropriate area. Label the task as being ready for the next process (Can include “ready for polishing”). 3.1 * Clean equipment, inspect for condition and store appropriately. 3.2 * Identify and tag any faulty equipment and inform appropriate supervisor. 3.3 * Store and dispose any chemicals according to WHS regulations. 3.4 * Clean the work area so that it is ready for the next task. 3.5 |  |  |  |  |  |  |  |  | *At the completion of work, did you see the student:*   * *Store products in an appropriate area* * *Label the products as being ready for polishing* * *Clean equipment, inspect for condition and store appropriately* * *Identify and tag any faulty equipment and report to supervisor or assessor* * *Store and dispose of chemicals according to WHS regulations, including storing in an approved fire proof cabinet and not disposing chemicals down drains* * *Clean the work area* |
| 4 – Working safely | 4.1 Demonstrate WHS requirements and operating procedures during work, including:   * Safe handling and personal protective requirements, according to the details listed in the task JSEA. 1.2, PE2 * Showing an ability to minimise any risk to self or others. PE4, PE4.1 |  |  |  |  |  |  |  |  | *Did you see the student demonstrate WHS requirements during work, including:*   * *Safe handling of products* * *Use of PPE, according to the JSEA benchmark response (pages 12-15)* * *Showing an ability to minimise risk to self and others* |