



Australian Government

Assessment Requirements for MSFPT4000 Select and use materials for piano repair and manufacture

Release: 1

Assessment Requirements for MSFPT4000 Select and use materials for piano repair and manufacture

Modification History

Release 1. Changes to code, application, elements, performance criteria, assessment requirements. Foundation skills added. Range of conditions removed. Assessment requirements changed.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- select and use at least three types of fasteners and use three different adhesives to make piano repairs.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- workplace standards, requirements, policies and procedures for selecting materials for piano repair and manufacture
- types, characteristics, uses, limitations and preparation of the following materials, tools, equipment and hardware used in piano repair and manufacture, and where relevant their safe use, operation and maintenance:
 - timber materials, including:
 - spruce
 - ebony
 - beech
 - birch
 - hardwood
 - softwood
 - veneers
 - chipboard
 - medium density fibreboard (MDF)
 - characteristics of piano timbers, including:
 - density
 - moisture content
 - grain
 - shrinkage
 - knots
 - holding and support techniques, including:

- portable workbench
- clamps
- vices
- gripper mats
- clamping tools and techniques, including:
 - sash
 - G clamp
 - spring
 - pipe
- plastic or synthetic materials, including:
 - keys
 - bushings
 - damper head
 - damper flanges
 - hammer butt
 - jack
 - jack flange
 - capstan
- felts including synthetic and wool
- natural materials including ivory and leather
- metals including:
 - aluminium
 - steel
 - solders
 - cast iron
 - brass
- fasteners including:
 - screws (head, slot, machine and thread types)
 - nails (panel pins)
- adhesives including:
 - animal (horse and fish)
 - polyvinyl chloride (PVC)
 - contact
 - epoxy
 - casein
 - latex
- surface coatings including:
 - shellack
 - single pack
 - polyurethane (two pack)

- nitro-cellulose and pre-catalysed lacquers
- woodgrain fillers
- stains
- oils
- enamels
- acrylics
- finishes including:
 - high gloss
 - gloss
 - satin
 - matt
 - limed
 - pigmented
- hardware including:
 - locks
 - hinges (butt and escutcheon inserts)
 - sliding rollers/runners
 - knobs
 - handles
 - finger guards
 - castors
- structural requirements including:
 - hardness
 - density
- aesthetic requirements including:
 - growth rings
 - veneers
 - medullary rays
 - colour
 - grain patterns
- how to identify and resolve routine and non-routine problems
- set-up and operation of tools and equipment used to repair and manufacture pianos
- storage systems and labelling, especially for hazardous materials
- procedures for recording, reporting and maintaining workplace records and information
- work health and safety requirements related to materials used in piano manufacture and repair.
-

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources required for performance evidence, including:
 - pianos for repair
 - hand and power tools
 - repair materials
 - workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>