
Overview

This standard addresses the competence required to create and fit decorative veneers on furniture. This involves:

- 1 selecting and cutting decorative veneers
- 2 preparing the groundwork for decorative veneer application
- 3 fitting decorative veneers
- 4 working in ways which maintain your own and others' safety

**Performance
criteria**

- You must be able to:
- P1 select veneers which meet the quality requirements in the work specification
 - P2 check that the veneers selected have no intermittent or full faults and set aside any which do
 - P3 match selected veneers for decoration, grain orientation, light refraction, burrs and cross-banding
 - P4 accurately measure and mark out the cuts to be made to within the specified tolerances
 - P5 minimise waste in your choice of veneers and in how you measure and mark them out for cutting
 - P6 handle the veneers in ways that avoid damaging them
 - P7 cut the veneers accurately to size and shape, keeping within the required tolerances
 - P8 accurately measure and align the veneers to form the required size when jointed
 - P9 make the joints of the required type
 - P10 deal promptly and effectively with any joint faults that arise
 - P11 use safe and effective techniques to make the cuts
 - P12 make sure that veneer surfaces to be glued are free of irregularities and are sanded and cleaned to the required surface finish
 - P13 store the veneers in appropriate conditions to keep them in the required state for working
 - P14 make sure that the groundwork is secure, clean, free of debris and damage that could affect the veneering process and at the required temperature for the adhesive type to be used
 - P15 select the most appropriate adhesive for the veneer to be applied, the pattern to be produced and the surface to be veneered
 - P16 apply the adhesive to a coverage and depth that is appropriate to the veneer to be applied, the type and surface area of pattern to be produced and the surface to be veneered
 - P17 use an application style for the adhesive that is appropriate to the veneer to be applied, the type and surface area of pattern to be produced and the surface to

be veneered

- P18 handle tools and adhesives safely
- P19 deal safely and promptly with adhesive spillages and splashes
- P20 use the correct personal protective equipment for the adhesives and equipment being used
- P21 deal promptly and effectively with any faults that arise
- P22 store the veneers in appropriate conditions to keep them in the required state for working
- P23 check and confirm that the inlay design and type matches the specification
- P24 determine the best sequence to follow to achieve the required design
- P25 make sure that the inlay fits the groundwork laterally and vertically
- P26 make sure that the required design is accurately reproduced
- P27 clean the surface so that it is free of any excess adhesives
- P28 key the surface using appropriate tools and techniques, so that the finish meets the specification
- P29 deal promptly and effectively with any faults that arise
- P30 follow the specified fitting method, using safe and effective technique
- P31 handle the inlays in ways which avoid damaging them
- P32 handle adhesives safely and apply them effectively to groundwork
- P33 deal safely and promptly with adhesive spillages and splashes
- P34 store the inlays in appropriate conditions to keep them in the required state for application

Knowledge and understanding

You need to know and understand:

- K1 the differences between marquetry and parquetry
- K2 the meaning of terms used in technical specifications for veneers including burr, oyster and fiddle-back
- K3 kinds of natural faults and handling damage can occur with veneers
- K4 how to identify faults which mean that the veneer cannot be used
- K5 why it is important to keep waste to a minimum
- K6 what characteristics are used to describe the quality of a veneer and how to identify them
- K7 how to balance and match veneers for burr and cross-banding
- K8 the growth and handling characteristics of different species of wood used as veneers, the importance of this to tensile strength, compression strength, seasoning, durability, degradation, infestation and density
- K9 how the characteristics of different wood veneers affects the way they are cut and stored
- K10 when and why quartered panel and stringed sheet jointing methods are used
- K11 what to look for when matching different types of veneers
- K12 the handling characteristics of veneers and how these can affect the jointing process
- K13 what kind of faults can occur with jointing veneers and what can be done to overcome them
- K14 quality checks that should be carried out on jointed veneers
- K15 why veneers may need to be flattened and damped during storage and the implications of not doing this
- K16 what the consequences are of inaccurate measuring and cutting
- K17 how to use cutting tools and equipment safely in ways that protect yourself and others from risk
- K18 the implications for your work of the relevant regulations, including where to find out about relevant risk assessment details and control measures that have been set by your organisation
- K19 how to dispose of waste in accordance with current legislation
- K20 the meaning of terms used in technical specifications for parquetry and

- marquetry
- K21 kinds of handling damage can occur with veneers and how to avoid it
 - K22 what kinds of faults can occur with parquetry and marquetry and how to deal with them
 - K23 how atmospheric conditions can affect the process
 - K24 why veneers may need to be flattened and damped during storage and the implications of not doing this
 - K25 when and why different parquetry and marquetry methods are used
 - K26 the open times, shelf life and setting times of adhesives and the implications of these for the way you work
 - K27 the different types of adhesives, their absorption capabilities through inlays and veneers and their compatibility with veneers of different types
 - K28 problems associated with adhesives and how to overcome them
 - K29 where, when and how to use different types of adhesives
 - K30 why preparation is so important to the quality of the work
 - K31 the purpose of different tools and equipment used in fitting parquetry and marquetry inlays
 - K32 the differences between parquetry and marquetry inlays and the depth of inlay required for each
 - K33 kinds of handling damage can occur with inlays and how to avoid it
 - K34 kinds of faults can occur with inlay fitting and how to deal with them
 - K35 how atmospheric conditions can affect the fitting process
 - K36 how inlays should be stored and why
 - K37 when and why different fitting methods are used
 - K38 the open times, shelf life and setting times of adhesives and the implications of these for the way you work
 - K39 the different types of adhesives, their absorption capabilities through inlays and veneers and their compatibility with inlays of different types
 - K40 the uses and benefits of different ways of pressing
 - K41 consequences of inaccurate positioning
 - K42 where, when and how to use different types of adhesives
 - K43 why preparation is so important to the quality of the work
 - K44 recognise window knifecut and fret cutting techniques for marquetry
 - K45 identify sandshading techniques

Additional information

Scope

Adhesives

Commercially available glues used in making hand-crafted furniture. These include polyvinyl acetate, urea or phenol formaldehyde, animal based glues, resorcinol, epoxy resins and cyanide acrylic based glues.

Conditions

The conditions under which veneers require to be kept includes flattening and damping them to ensure that they remain in a suitable state for working.

Cuts

This standard covers flame or crotch, burr, crown, oyster and fiddle back veneer cuts.

Joints

The joints used in making hand-crafted veneers would include the making of quartered panels, edged sheets and stringed sheets. These are influenced by the design required, which will be stated in the specifications. Joints must be accurately matched for grain orientation, colour and hue, decoration and light refraction qualities.

Jointing faults

Jointing faults can arise from misalignment of panels, marks and damage to the veneers. The person carrying out this role is responsible for identifying and making minor repairs where these can be achieved without affecting the quality of the work. Problems which cannot be resolved in that way would be reported to a senior crafts person using the correct workplace procedures.

Faults

Faults can arise as a result of misalignment, discolouration, marking or blistering of the veneer or glue penetration. The person carrying out this role is responsible for preventing and resolving faults which have occurred.

Fitting method

The inlay fitting methods covered by this unit are dry fitting, pressing and the use of adhesives.

Surface

The surfaces to which veneers are applied in the context of this unit cover top, edge, back and underneath positions, as well as curved and flat surfaces.

Tools and equipment

The tools and equipment used within hand-crafted furniture production environments for cutting and laying veneers covers veneering saws and knives, planes, measuring devices, veneering tape, veneering hammers, heated and unheated presses, heated cauls, adhesive rollers, edge clamps, veneer pins, adhesive pots, brushes and gluesticks, flat irons and sand bags.

Veneers

Veneers used in making hand-crafted furniture are made of natural timber. Typical timbers would include walnut, oak, mahogany, cherry and maple. Other materials may also be used, such as mother-of-pearl, brass and silver nickel.

Veneering methods

The veneering methods covered by this unit are hand-laid and mechanical pressing.

Work specification

The set of instructions which describe the work to be carried out, including details of the qualities of the veneer, the dimensions of the veneered area and the nature of the joints to be produced. The specification will also detail the surfaces to be veneered be produced, the decorative patterns to be produced. Specifications may be written, drawn or passed on orally.

Quality

The quality of a veneer can be described in terms of the grain fineness and orientation, its colour, hue and decoration, moisture content and light refraction characteristics. Veneers to be jointed require to be matched for straight, slip laid, leaf laid, book match and edge veneering, taking account of these qualities and of burrs and cross-banding.

Developed by	Proskills
Version number	2
Date approved	October 2013
Indicative review date	April 2018
Validity	Current
Status	Original
Originating organisation	Proskills
Original URN	PROFFI304
Relevant occupations	Paper and Wood Machine Operatives; Furniture Makers and Other Craft Woodworkers; Upholsterers; Labourers build and woodworking trades
Suite	Furniture Making
Key words	Contemporary Furniture Making; Traditional Furniture Making; Bed Making; Frame Making; Component Manufacture; Veneering; Modern Upholstery; Traditional Upholstery; Soft Furnishing; Cutting; Sewing; Hand Finishing;