

#### **Overview**

This standard is for those who use knowledge of fabrics in relation to product design and production.

The job role may involve:

- 1 an understanding of the characteristics and behaviour of different fabrics
- 2 analysing designs
- 3 recommending appropriate fabrics for production



## Performance criteria

ou must be able to:	P1	interpre	et the design requirements		
	P2	analysis	s the style and function of the design		
	P3	identify the fabric properties required recommend suitable fabrics for the design			
	P4				
	P5	maintain an overall knowledge of:			
		P5.1	the properties of fibres and fabrics		
		P5.2	the characteristics of fabrics		
		P5.3	product production characteristics		
		P5.4	durability characteristics		
		P5.5	style characteristics		
		P5.6	utility characteristics		
	P6	comple	te appropriate records and documents		
	P7	commu	inicate effectively with colleagues within the workplace and remotely		
	P8	use saf	e working practices including the use of equipment, personal		
		conduc	et and arrangement of work station		
	P9	work to	quality standards, systems and procedures		
	P10	identify	problems and resolve issues within limits of your own responsibility		
	P11	report p	problems outside area of responsibility to the appropriate person		
	P12	work to	legal requirements, standards and regulations, policies, procedures		

and professional codes



### Knowledge and understanding

You	need	to	know
and	undei	eta	and:

- K1 how to interpret design briefs, working sketches and specifications
- K2 how to analyse information
- K3 how to evaluate findings and present recommendations
- K4 fabric and fibre properties including:
  - K4.1 fibre/ filament types
  - K4.2 yarn
  - K4.3 weight
  - K4.4 thickness
- K5 fabric structures including:
  - K5.1 woven fabrics
  - K5.2 knitted fabric
  - K5.3 finishes: chemicals such as resins, starches, waxes
  - K5.4 fabric width
  - K5.5 colour: hue, value and intensity (degree of brilliance)
  - K5.6 fabric density
  - K5.7 surface contour
- K6 product production working characteristics (characteristics which affect the quality and cost of production) including:
  - K6.1 coefficient of friction ( cutting, sewing, pressing and packing)
  - K6.2 sewed seam strength
  - K6.3 sewed seam slippage (yarn slippage)
  - K6.4 sewing distortions
  - K6.5 yarn severage
  - K6.6 bond ability strength (fused, cemented, and heat sealed seams
  - K6.7 pressing moldeability (to what degree a flat piece of fabric may be skewed during pressing with hand and /press buck)
  - K6.8 die mouldability how well a flat seamless piece of fabric may be moulded
- K7 utility characteristics, such as fabric elongation, elasticity, flexibility etc.
- K8 style characteristics of fabric including:
  - K8.1 hand characteristic (changes of the fabric plane with hand



You need to know manipulations) and understand: K8.2 tactile characteristics (soft, coarse, rough, hard, smooth) K8.3 visual characteristics (changes in the colour values when either the fabric or light is moved) K9 transformation characteristics including: K9.1 colour fastness K9.2 crease resistance K9.3 dimensional stability K9.4 pilling K9.5 shrinkage K10 durability characteristics - the capacities of fabric to maintain the style and utility characteristics during wear including: K10.1 abrasive strength K10.2 bursting strength K10.3 launder ability K10.4 tearing strength K10.5 moth resistance K10.6 tensile strength K10.7 fire resistance K10.8 dry cleaning durability K11 quality standards, systems and procedures K12 the limits of personal responsibility working practices K13 how to report problems outside of your area of responsibility K14 the importance of effective communication K15 the lines of communication, authority and reporting procedures K16 responsibilities under the health & safety at work act 1974 etc., with

particular focus on appropriate posture when working at a visual display

unit



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