

Overview

This standard covers the design and production of digital artwork for print using software such as desk top publishing, word processing, electronic page composition or graphic illustration.

The standard is intended for designers working in a production environment whose role involves working with and advising customers on appropriate specifications for artwork for print and producing finished digital artwork to agreed or amended specifications.

This is what the standard covers:

Creative colour artwork for print is required for a vast range of products that may be printed using various printing methods. For example, printed textiles, ceramics, packaging, books, magazines, display and point-of-sale material, may involve lithography, flexography, gravure or screen process, depending on the substrate and other factors.

Each product and printing method requires artwork to be designed and produced, mostly in digital format that will meet the product specification and the customer's requirements.

It is critically important at the outset of a printing project that the product design requirements, as they relate to print, are correctly specified. For example the size of the print area, the number of colours to be used and any post-print processes that may impact on the design must be determined. There will be many different factors to be considered, depending on the type of product.

The designer must be able to assess technical printing issues and product requirements when the artwork design is being specified, and to offer correct advice to the customer to prevent subsequent problems during printing and post-printing operations. In addition, the designer must be capable of understanding and interpreting the customer's creative requirements, so that the artwork fulfils its practical, aesthetic and design objectives.

Once a design specification has been agreed, artwork must be produced, often incorporating several different kinds of source material. Photography, copy-writing and image scanning may need to be commissioned, for example. Depending on the size of the project, work colleagues and outworkers may need to be co-ordinated so that all the elements required for the creation of the digital artwork are available in time to meet the production schedule.

After the first proof has been submitted to the customer, there are likely to be changes required. These may range from simple typographical corrections to major re-working of the artwork. The designer must be able to deal with the customer professionally and helpfully whilst making sure that the project remains on time, within budget, and meets the product technical specification and print requirements. Where any of these are at risk of being missed, the designer must give appropriate and timely advice.

On completion of the artwork and approval by the customer, the designer must make sure that all the digital files are properly archived and the files required for print are forwarded in the required format to the printer.

Performance criteria

You must be able to:

Agree a design specification for digital colour artwork for print

1. establish the proposed specification for artwork, including any technical requirements relating to application or use of printed product, from appropriate people including the customer
2. establish the printing method, substrate and finishing method likely to be used for printing artwork, together with any enhancements which will be needed during or after printing to meet the specification
3. establish the creative or stylistic needs for artwork in order to satisfy its intended audience, use or application
4. propose to customers design specifications that meet requirements relating to creative or stylistic needs, product use and printing method
5. amend your proposals to comply with any comments from customers and re-submit proposed design specifications until customers are satisfied
6. agree timescales with customers for the production of artwork that both meets the needs of customers and the capability of yourself and your team
7. keep adequate records of agreed designs and product specifications, the scope of the work agreed, and any other relevant contractual issues

Produce creative digital colour artwork suitable for proofing

8. identify the range and sequence of tasks required to produce artwork
9. check you have the correct digital files needed for production of artwork, including any text, database, spreadsheet or image files
10. identify and obtain other appropriate source material as required
11. delegate and co-ordinate tasks to colleagues or external sources when required in order to meet agreed production timescales
12. confirm that digital files for use in artwork are in a suitable format
13. convert or use appropriate import filters to bring files into artwork layout software, retaining original formatting where required
14. produce creative colour artwork that meets agreed design specification as far as possible
15. check that any typographical elements are formatted to a high standard of accuracy
16. check that any charts or tables are in the appropriate format
17. check that any line-art or bitmap images are of sufficient quality for the document use and have the correct resolution and colour space
18. check that all the colours used in documents are consistent with the intended printing method

19. save digital files in a secure way, using an adequate archiving or indexing system
20. submit colour proofs to customers in the appropriate manner for them to evaluate

Amend digital colour artwork as required to meet customer and product specification

21. carry out a realistic assessment of the extent of any corrections, amendments and stylistic changes required to proofs by customers
22. interpret and apply accurate typographic corrections indicated by readers and copy preparation marks
23. seek clarification or advice from customers, in the appropriate manner, where requirements are unclear or unable to be effected
24. bring issues relating to likely additional costs caused by unexpected re-working to the attention of customers or appropriate colleague in line with organisational procedures
25. seek agreement for additional work to be done, when necessary, in line with the policy of your organisation
26. make corrections and amendments which meet customer requirements and submit subsequent proofs after each round of amendments until artwork is approved
27. archive digital files in a secure way
28. submit finished digital artwork for printing in the format required by printers
29. liaise with printers or pre-press specialists in the appropriate way to resolve any difficulties with digital artwork
30. assess printed work against requirements to evaluate how design and artwork have worked in practice

Knowledge and understanding

You need to know and understand:

The law as it affects printing

1. defamation
2. copyright and ownership of images
3. obscenity
4. incitement
5. forgery
6. data protection

Ethical issues relevant to printing

7. confidentiality
8. personal issues important to others, including ethnic origin, gender, religion, sexuality

Health and safety

9. hazards and risks in your own job, their assessment and the action to take to deal with them
10. the relevant health and safety regulations on the safe handling of equipment and materials, and the safe use of computer equipment

Security and storage

11. how to safely handle customer material
12. computer system security and virus protection
13. the print with time-sensitive or restricted release dates
14. the high value products or print with a high risk of theft
15. how to securely archive digital and conventional artwork

Communication requirements and processes

16. how to communicate with colleagues
17. how to communicate with customers
18. how to communicate with suppliers
19. how to communicate with visitors

Workplace policy and practice

20. workplace objectives, priorities, standards and procedures
21. the range of work carried out in the workplace
22. the key job roles within the printing and graphic communications industry and their main purposes

- 23. the identification and assessment of printing options
- 24. the reasons for selecting one process over another
- 25. the choice of processes for any particular product
- 26. the role of images in graphic communication
- 27. changing image styles, fashions and demands in printed products
- 28. the stages in the printing process from pre-press to printed product

Time and resources

- 29. the different types of resource, including labour, materials, and machinery
- 30. the relationship between resource usage and profitability

The operation of equipment

- 31. the operation of software and hardware used in a creative artwork environment

Typography and design

- 32. typefaces and fonts
- 33. the procedures for document checking and proofing
- 34. document layout
- 35. the principles of design and how it is affected by different substrates
- 36. the finishing method used and how this will affect the creation of digital colour artwork

Digital imaging

- 37. ways to obtain sources of material including photography, scanning or copy-writing
- 38. sources of original material, including photographers and graphic artists
- 39. how to find and use archive and on-line sources of digital images colour theory
- 40. the importance of visual compatibility in digital images
- 41. the relationship between image size, file size and resolution file formats for digital images
- 42. the assessment of material for scanning and potential problems and solutions

Digital files

- 43. dealing with embedded information
- 44. file management procedures
- 45. file conversion techniques
- 46. how to transmit digital files

Administrative procedures

- 47. planning and scheduling
- 48. recording and reporting
- 49. product labelling

Quality assurance and control

- 50. the main features of quality assurance and quality control systems
- 51. the light standards for viewing and assessing colour print

Materials

- 52. the types and characteristics of paper, board and other commonly used substrates the types & characteristics of inks, coatings and coatings

Proofing

- 53. the principal types of proof and their role in the printing process
- 54. the printers imprint

Scope/range

The essence of this standard is that the designer takes full responsibility for managing the creative and production process from concept to completion.

The work involves an appreciation of budgets, co-ordination of different source material, understanding of technical specifications of products, processes and substrates and applying that knowledge in the creation and production of artwork.

References to customer in this standard may also be taken to mean 'an appropriate person' such as internal senior colleague or a third party such as a print buyer / consultant. However, the essence of this standard is one of taking responsibility for the design and production process.

PRODPP711 (SQA Unit Code - H9K2 04)

Design and produce creative digital colour artwork for print



Developed by Proskills

Version Number 2

Date Approved October 2014

Indicative Review Date April 2019

Validity Current

Status Original

Originating Organisation Proskills

Original URN PRODPP711

Relevant Occupations Originators compositors and print preps; Printers; Printing machine minders and assistants; Printing Trades; Bookbinders and print finishers; Graphic designers; Screen printers

Suite Pre Press

Keywords digital, print, pre-press, pre press, design, colour, artwork
