Unit 226: Produce internal solid plastering finishes

# Delivery guide

Unit information

This unit is about interpreting information, adopting safe and healthy working practices and selecting materials and equipment. It covers preparing and applying one- and two-coat plaster to internal backgrounds.

Learners may be introduced to this unit by asking themselves questions such as:

* Why is internal solid plastering still commonly used today?
* What is the difference between lime based and cement-based backing plasters?
* What is the difference between a binder and aggregate?
* Why are the benefits of using Gypsum lightweight plasters?

Learning outcomes

1. Understand resource selection
2. Understand working to a contract specification
3. Comply with the given contract information to carry out the work safely and efficiently to the required specification

Suggested resources

Textbook

Gashe, M. and Byrne, K. (2020) *The City & Guilds Textbook in Plastering for Levels 1 and 2 Diploma (6708) and Level 2 Technical Certificate (7908)*. London: Hodder Education.

ISBN 978-1-3983-0647-9

Websites

* [British Gypsum | The White Book](https://www.british-gypsum.com/literature/white-book)
* [City & Guilds | Construction SmartScreen Factsheet Level 2 Technical Certificate in Plastering (7808-20)](https://www.cityandguilds.com/-/media/cityandguilds-site/documents/what-we-offer/centres/smartscreen/smartscreen-docs/7908-20-level-2-technical-certificate-in-plastering-pdf.ashx?la=en&hash=4242CFF99D985A7769335B23CCCB84852A3BB0EC)[HSE | Health and Safety at Work Act 1974: explained](https://www.hse-network.com/health-and-safety-at-work-act-1974-explained)
* [HSE | Work equipment machinery: PUWER](https://www.hse.gov.uk/work-equipment-machinery/puwer.htm)
* [HSE | Work at Height: the law](https://www.hse.gov.uk/work-at-height/the-law.htm)

| **Learning outcomes** | **Criteria** | **Delivery guidance** |
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| 1. Understand resource selection | * 1. Characteristics of the resources | * Learners to understand how to interpret drawings, specifications, schedules, method statements and risk assessments. * Learners to be able to assess the condition of materials and components for suitability and correct use. * Learners to be able to set aside inappropriate materials and components and report problems to the correct level of authority to mitigate and rectify problems that they may cause to work standards and schedules. * Learners to reference *British Gypsum White Book* for information on manufacturers’ technical information on gypsum pre-blended backing and finishing plasters. * Learners to identify a range of manufacturers that produce plastering materials within specifications. * Learners to select, apply and finish various plastering systems to set standards outlined in the specification. * Learners to reference *City and Guilds Textbook Level 1 and 2 Diploma and Level 2 Technical Certificate* pp55, 98, 99 and 165 for information on use of lime. * Learners to reference *City and Guilds Textbook Levels 1 and 2 Diploma and Level 2 Technical Certificate*, Ch4 for information on cement-based plasters, mixing ratios, calculations of materials, selection of materials, ruling in, consolidating, keying and finishing one- and two-coat applications. * Learners to make use of any Manufacturers’ Technical Information (MTI) for guidance on storage and use-by dates. * Learners to assess quality and condition of materials when taking deliveries to site and know how to report any defective materials that are not fit for purpose. * Learners to identify which materials to be used come under Control of Substances Hazardous to Health (COSHH) Regulations. * Learners to recap MTI and COSHH. |
| * 1. Use of resources | * Learners to give examples of specifications and use of method statements when selecting resources and materials. See *City and Guilds Textbook Levels 1 and 2 Diploma and Level 2 Technical Certificate Textbook in Plastering*, pp35 and 161 (specifications) and p63 (method statement). * Learners to complete a method statement for a small task. * Learners to complete a task on how to report any issues on background preparation and applications of plaster and components. * Learners to mix, apply and finish plastering systems in line with the manufacturers’ instructions. |
| * 1. Organisational procedures to select resources | * Learners to understand and be familiar with organisational documents such as drawings, specifications, schedules and MTIs. * Learners to have an awareness of how to ensure quality before, during and after applications when preparing, mixing, applying and finishing work to industry standard. |
| * 1. Hazards | * Learners to be able to produce and understand Risk Assessment Method Statements (RAMS). * Learners to understand what an induction process and toolbox talks are and how they advise on use of Personal Protective Equipment (PPE), their responsibility for reporting on accidents, hazards and near misses in conjunction with Health and Safety at Work Act (HASAWA). |
| 1. Understand working to a contract specification | * 1. Methods of work | * Learners to be familiar with a Gantt chart work programme for a plastering contract. * Learners to understand the difference between a method statement and a work programme and give examples. * Learners to know the organisation’s procedures for reporting problems when undergoing the installation process when checking background surfaces for condition of strength, straightness, plasterboard layout, stud and joist centres, screw fixing centres, fixing of beads and tapes and any potential bond failure. * Learners to select appropriate chemical bonding adhesives for various low suction and poorly keyed surfaces. * Learners to select appropriate grit adhesives for over plaster. * Learners to be able to assess backgrounds for strength and prepare surfaces with mechanical key, such as expanded metal lath. * Learners to be able to state the consequences of not meeting agreed deadlines and the effect this can have on the follow-on trades and the planned work programme. |
| * 1. Tools and equipment | * Learners to research and understand when Portable Appliance Testing (PAT) must be done for the safe use of electrical tools. See: *City & Guilds Level 1 and 2 Diploma and Level 2 Technical Certificate Textbook in Plastering*, p69. * Learners to have an awareness of Provision and Use of Work Equipment Regulations (PUWER). * Learners to know how to understand a method statement to assist in the correct selection of tools and equipment to complete tasks such as preparation of backgrounds, correct fixing of beads and applications of backing and finishing plasters. * Learners to be able to state what types of access equipment they must be aware of and understand how to use it safely while conforming to the Working at Height Regulations (WAH) 2005. |
| 1. Comply with the given contract information to carry out the work safely and efficiently to the required specification | * 1. Prepare background surfaces to receive one and two coat internal plaster systems to given working instructions relating to the following: * plain walls * walls with openings – reveals, cills and soffits (door and/or windows) * walls with returns * plain ceilings * beams and piers | * Learners to be able to state the correct procedure to prepare various backgrounds such as dusty, composite, high suction, low suction, poorly keyed to receive one, two and three coat systems for plaster application. * Learners to carry out training procedures for setting out window walls with returns, walls with attached piers and bulkhead beams to receive plaster applications. See *City & Guilds Level 1 and 2 Diploma and Level 2 Technical Certificate Textbook in Plastering* pp144, 145. * Learners to be able to reference the specification, drawings and manufacturers’ instructions, RAMS and MTI for preparation of application to plain walls, window walls, ceilings plain and sloping and beams and piers. |
| * 1. Measure, cut and set out components | * Learners to complete calculation tasks for measuring, incorporating cutting and fixing beads, cutting and fixing plasterboards, application of setting coat, application of backing coat, including an agreed percentage allowing for waste. * Learners to use linear, area and perimeter measurements for calculating materials. |
| * 1. Demonstration of work skills to prepare, gauge, mix, apply and finish one, two and three coat solid plastering work (including making good defects) | * Learners to carry out training procedures demonstrating knowledge and skills to prepare, gauge, mix and apply one, two and three coat plasterwork and make good repairs to damaged and defective surface areas. * Learners to show examples of preparing various backgrounds to include low, medium and high suction backgrounds using various suction control methods such as damping down, application of slurries, sealers, primers and application of bonding agents. * Learners to explain different types of fixing methods for plasterboard, including mechanical fix and correct centres. * Learners to identify and select different types of standard and thin coat beads used for internal plastering work. * Learners to identify and select appropriate types of fixing methods of beads including mechanical fix and wet fix and plumbing and levelling process. * Learners to carry out training procedures on setting up of wet screeds and the dot and screed method for achieving a high industry tolerance for applying backing coats and floating out walls, including cutting back at beads, frames, internal angles, etc. * Learners to show examples of cutting out and fixing around services including application of direct bond methods and floating methods. * Learners to demonstrate practical skills to achieve flat, defect-free surfaces including wall and ceiling angles, beads and around all service points. * Learners to demonstrate practical skills to achieve defect-free finish when undertaking repairs to defective plaster surfaces. |
| * 1. Use and maintain hand tools, portable power tools and mechanical equipment and resourcesto prepare pre-blended materials, apply and finish internal one, two and three coat plasterwork to given working instructions: * plain walls * walls with openings – reveals, cills and soffits (e.g. door and/or windows), walls with returns * plain ceilings * beams and piers | * Learners to demonstrate knowledge of pre-checks needed for installation of plasterboard mechanically and floating coat application, including any necessary dubbing out using levels and straight edges to determine high points and low points for consideration before application. * Learners to demonstrate practical skills for application of the correct and compatible materials for various backgrounds, such as textured surfaces, solid masonry and existing pre-plastered surfaces. * Learners to carry out training exercises for the application of various bonding agents and beads for pre-application of plastering materials. * Learners to demonstrate practical skills and techniques to apply and finish plaster application to industry standards in preparation to receive decoration. * Learners to be able to produce a tools and resources list to prepare backgrounds, measure, gauge and mix materials and apply plaster to walls and ceilings, walls and ceilings with doors and windows, stair walls, piers, beams and soffits. |