

WorldSkills Standards Specification

# Plastering and Drywall Systems

Construction and Building Technology



# THE WORLDSKILLS STANDARDS SPECIFICATION (WSSS)

## GENERAL NOTES ON THE WSSS

The WSSS specifies the knowledge, understanding, and specific skills that underpin international best practice in technical and vocational performance. It should reflect a shared global understanding of what the associated work role(s) or occupation(s) represent for industry and business ([www.worldskills.org/WSSS](http://www.worldskills.org/WSSS)).

The skill competition is intended to reflect international best practice as described by the WSSS, and to the extent that it is able to. The Standards Specification is therefore a guide to the required training and preparation for the skill competition.

In the skill competition the assessment of knowledge and understanding will take place through the assessment of performance. There will only be separate tests of knowledge and understanding where there is an overwhelming reason for these.

The Standards Specification is divided into distinct sections with headings and reference numbers added.

Each section is assigned a percentage of the total marks to indicate its relative importance within the Standards Specification. This is often referred to as the “weighting”. The sum of all the percentage marks is 100.

The Marking Scheme and Test Project will assess only those skills that are set out in the Standards Specification. They will reflect the Standards Specification as comprehensively as possible within the constraints of the skill competition.

The Marking Scheme and Test Project will follow the allocation of marks within the Standards Specification to the extent practically possible. A variation of five percent is allowed, provided that this does not distort the weightings assigned by the Standards Specification.

## WORLDSKILLS STANDARDS SPECIFICATION

| SECTION |  | RELATIVE IMPORTANCE (%) |
|---------|--|-------------------------|
| 1       | <b>Work organization and management</b>  | 15                      |
|         | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Laws relating to hygiene, safety, and related to plastering and drywall systems</li> <li>• Different types of personal protective equipment (PPE)</li> <li>• Precautions for the safe use of power and cordless tools</li> <li>• Building methods and construction technology</li> <li>• Basic knowledge of:               <ul style="list-style-type: none"> <li>• Electricity;</li> <li>• Plumbing;</li> <li>• Drainage;</li> <li>• Security systems;</li> <li>• Integrated entertainment systems</li> </ul> </li> <li>• Safe use, storage, and appropriate uses for materials used in plastering and drywall systems</li> <li>• Balance between economics and quality dependent on the expected output and circumstances</li> <li>• The need for security for the storage of tools and materials</li> <li>• Good working knowledge of mathematics and geometry</li> <li>• Dispose of waste safely and be aware of the possibilities for recycling</li> </ul>   |                         |
|         | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Create and maintain a safe and hygienic working environment</li> <li>• Install the work area to avoid injury, especially to the back, elbows, shoulders, and knees</li> <li>• Apply standards and laws relating to security, safety, and hygiene in plastering and drywall systems</li> <li>• Effectively use the appropriate personal protective equipment (PPE)</li> <li>• Use correct power and cordless tools in a safe manner</li> <li>• Store plasterboards and related products safely and securely</li> <li>• Be proactive in own continuous professional development in order to keep abreast of and methods of working in the construction industry and changing technologies, for example acoustics and the sustainability and environmental impact.</li> <li>• Work effectively as part of a team</li> <li>• Work effectively with other trades on a construction site</li> <li>• Take appropriate care of customer's fixtures, fittings, carpets, and belongings</li> <li>• Apply mathematic geometry principles to the calculation of angles, areas, perimeters, curves, arcs, volumes, ratios, etc.</li> </ul> |                         |

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|----------|--|-----------|
| <b>2</b> | <b>Planning and communication</b>  | <b>15</b> |
|          | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Customer needs whether domestic or commercial</li> <li>• Impact of the use of the building on the plastering techniques and materials used</li> <li>• Required quality and standards such as the Q standard</li> <li>• The prioritization of work and the planning or order of work with other trades</li> <li>• Principles and methods for sourcing materials</li> <li>• Stock control and rotation including the importance of use by dates</li> <li>• Principles and methods of formal and informal communication</li> </ul>   |           |
|          | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Read and interpret documentation from a variety of sources</li> <li>• Interpret and work from different accepted specifications</li> <li>• Prepare specifications, mainly for private work</li> <li>• Provide advice and guidance to other professionals such as architects and quantity surveyors</li> <li>• Read and interpret drawings and specifications</li> <li>• Calculate materials in accordance with plans and specifications</li> <li>• Describe in writing and verbally the process of installation</li> <li>• Explain complex specialist and technical information about installations to clients and other professionals</li> </ul> |           |
| <b>3</b> | <b>Construction</b>  | <b>12</b> |
|          | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Standards and laws relating to construction of partitions and ceilings in plasterboard</li> <li>• Appropriate national standards</li> <li>• Specialist terminology</li> <li>• Construction methods including timber framed buildings</li> <li>• Framing systems used in construction of walls</li> <li>• framing systems used in construction ceilings</li> <li>• Screws and fastenings used in construction of walls and ceilings</li> <li>• Different types of plasterboard and fibre cement boards</li> </ul>  |           |
|          | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Set out the different elements of walls and ceilings</li> <li>• Measure accurately</li> <li>• Accurately cut metal profiles</li> <li>• Erect framing with inserts for windows and doors – square, plumb, and levelled</li> <li>• Screw, fix, or crimp metal components</li> <li>• Channel and stud metal profiles</li> <li>• Install curved metal work such as archways, barrelled ceilings</li> <li>• Cut and fix with adhesives and screws plasterboard sheets</li> <li>• Cut and fix with adhesives and screws fibre cement boards</li> <li>• Construct frames using Expanded Metal Lath (EML)</li> </ul>                                      |           |

| 4 | Insulation  | 6  |
|---|---|----|
|   | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Standards, laws and codes of practice relating to;               <ul style="list-style-type: none"> <li>• Thermal insulation in buildings;</li> <li>• Acoustic insulation in buildings;</li> <li>• Fire Rating &amp; Regulations</li> </ul> </li> <li>• Safety regulations relating to the storage, handling and installation of insulation materials</li> <li>• Materials used in:               <ul style="list-style-type: none"> <li>• Thermal insulation in buildings;</li> <li>• Acoustic insulation in buildings;</li> <li>• Fire Rating &amp; Regulations</li> </ul> </li> <li>• Appropriate use of materials used in;               <ul style="list-style-type: none"> <li>• Thermal insulation in buildings;</li> <li>• Acoustic insulation in buildings;</li> </ul> </li> <li>• Fire Rating and Regulations Impact of building regulations</li> <li>• The influence of sustainability and environmental impact on the insulation products and techniques</li> <li>• Current and changing technologies and practices relating to insulation</li> </ul> |    |
|   | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Install and fix acoustic products</li> <li>• Install and fix thermal products</li> <li>• Install and fix fire proof material and other materials to prevent the spread of fire</li> <li>• Use resilient material</li> <li>• Test installations and modify accordingly</li> </ul>   |    |
| 5 | Finishing of plasterboards  | 12 |
|   | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Different methods of finishing plasterboards</li> <li>• Materials and techniques used in finishing plasterboards</li> </ul>  |    |
|   | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Prepare the plasterboard to receive the finish</li> <li>• Cut the beads and trims</li> <li>• Mix plastering compounds</li> <li>• Finish plasterboard joins manually by taping and jointing finishes</li> <li>• Manually sand the finished joints</li> <li>• Apply full surface coating</li> <li>• Finish plasterboard using a skim coat of Gypsum plaster</li> </ul>   |    |

|          |  |           |
|----------|--|-----------|
| <b>6</b> | <b>Plastering</b>  | <b>15</b> |
|          | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Types of plaster and their uses</li> <li>• Types of background surfaces and their impact on plastering</li> <li>• Techniques and practices for plastering</li> <li>• Tools and equipment used in plastering</li> <li>• How to complete patching and repairs</li> <li>• Cutting of internal and external mitred corners</li> <li>• Use of plaster coatings</li> </ul>  |           |
|          | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Prepare surfaces for plastering</li> <li>• Mix plaster to correct consistency</li> <li>• Apply render, float, skim, and set coats to straight and curved surfaces</li> <li>• Apply smooth coat finishes</li> <li>• Repair plasterwork</li> </ul>  |           |
| <b>7</b> | <b>Creation and fitting of decorative mouldings</b>  | <b>8</b>  |
|          | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Methods and principles of making decorative mouldings</li> <li>• Range and use of decorative mouldings</li> <li>• Specialist finishes such as Scagliola or Venetian Plaster and other specialist techniques</li> <li>• Adhesives used in the fitting of decorative mouldings</li> </ul>   |           |
|          | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Listen to, interpret and respect the opinion of customers</li> <li>• Interpret a proposed theme</li> <li>• Cut products accurately</li> <li>• Create internal and external mitres accurately</li> <li>• Apply and stick decorative coatings in a professional manner</li> <li>• Prepare and run in-situ moulds</li> <li>• Measure and cut components accurately</li> <li>• Cut and fix paper-faced cornices</li> <li>• Match, mitre and install cast ornamental cornices and panel mouldings including:               <ul style="list-style-type: none"> <li>• Moulds;</li> <li>• Arches;</li> <li>• Coving;</li> <li>• Dado rails;</li> <li>• Cornices;</li> <li>• Skirting;</li> <li>• Panel moulds;</li> <li>• Ceiling roses</li> </ul> </li> <li>• Repair decorative mouldings</li> </ul> |           |



| 8 | External plastering  | 10         |
|---|--|------------|
|   | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Legislation and guidance relating to the application of external plastering and coatings</li> <li>• Safe working practices in relation to external plastering</li> <li>• Safe working practices on scaffolding platforms</li> <li>• Equipment and PPE needed for external plastering work</li> <li>• Characteristics, quality, uses, and limitations of available materials and techniques</li> <li>• Methods of application</li> <li>• Appropriate and safe disposal of waste</li> </ul>   |            |
|   | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Meet contract specification</li> <li>• Apply legislation and official guidance in working methods</li> <li>• Use and maintain PPE, equipment, and resources appropriately and effectively</li> <li>• Dispose of waste safely</li> <li>• Measure, mark out, apply, and finish</li> <li>• Prepare materials and apply to external backgrounds:               <ul style="list-style-type: none"> <li>• Brick and/or block and/or concrete surfaces;</li> <li>• Plinths</li> <li>• Internal and external angles;</li> <li>• Reveals;</li> <li>• Walls;</li> <li>• Installation of Expanded Metal Lath (EML)</li> </ul> </li> <li>• Form industry recognized external rendering finishes:               <ul style="list-style-type: none"> <li>• Two-coat work;</li> <li>• Three-coat work;</li> <li>• Internal and external angles;</li> <li>• Reveals</li> </ul> </li> <li>• Apply textured coated finishes</li> </ul> |            |
| 9 | Heritage   | 7          |
|   | <p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> <li>• Various specialist materials used on heritage sites and historical buildings</li> <li>• The history of the building, its fabrication and building techniques</li> <li>• The laws and regulations relating to planning and conservation</li> </ul>   |            |
|   | <p>The individual shall be able to:</p> <ul style="list-style-type: none"> <li>• Respect a building's history</li> <li>• Understand and follow plans and specifications</li> <li>• Communicate effectively with clients</li> <li>• Communicate effectively with officials</li> <li>• Prepare materials</li> <li>• Prepare the building ready for renovation or repair for both internal and external surfaces</li> <li>• Apply appropriate plastering techniques according to the building's history and fabrication whilst maintaining the building's integrity for both internal and external surfaces</li> </ul>  |            |
|   | <b>Total</b>   | <b>100</b> |

## REFERENCES FOR INDUSTRY CONSULTATION

WorldSkills is committed to ensuring that the WorldSkills Standards Specifications fully reflect the dynamism of internationally recognized best practice in industry and business. To do this WorldSkills approaches a number of organizations across the world that can offer feedback on the draft Description of the Associated Role and WorldSkills Standards Specification on a two-yearly cycle.

In parallel to this, WSI consults three international occupational classifications and databases:

- ISCO-08: (<http://www.ilo.org/public/english/bureau/stat/isco/isco08/>)
- ESCO: (<https://ec.europa.eu/esco/portal/home> )
- O\*NET OnLine ([www.onetonline.org/](http://www.onetonline.org/))

This WSSS (Section 2) appears most closely to relate to *Plasterers*:

<http://data.europa.eu/esco/isco/C7123>

These links also enable adjacent occupations to be explored.