UNIT R Level 1
Repair and conservation in earth building – clay plaster

Learning outcomes
Criteria and indicators

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### Knowledge

- Techniques for maintenance and touching up
- Common damage: powdery or sandy surface; cracks; stains; spalling; scratches and holes
- Causes of damage: plaster mix, application, construction, external factors
- Common repair techniques: closing cracks by floating and/or with use of new material; removal of damaged area and replacing with new, if necessary adding reinforcing mesh or key
- Accurate touching up
- Traditional earth building techniques
- Options for final surface treatments and coatings onto clay plasters: fixatives, paints, plasters with other binders, tiles
- Issues relating to external clay plaster
- Composition and application of clay slip, clay paint and washes
- Main differences between ecological paint and conventional paint
- Maintenance, repair and surface treatments:
  - Tools, machinery and equipment
  - The order of work
  - Safe and healthy working practices

### Skills

- Use maintenance techniques according to instructions
- Protect adjoining surfaces
- Close shrinkage cracks by floating or with new material
- Repair areas of localised damage in the upper layer with the repair mix provided
- Make joins with repair plaster as seamless as possible
- Demonstrate paint effects onto sample clay plaster boards
- Paint small clay plaster surfaces with clay paints or washes
- Apply fixatives
- Use the provided materials, tools and equipment
- Organise the work place
- Comply with workplace safety requirements at all times

### Competence

- Under supervision make small repairs, apply clay paint, apply fixative
- Recognise the value of traditional and heritage plaster backgrounds and clay plasters
- Control the consistency and homogeneity of clay paint and fixative
- At each stage check for accuracy and ensure instructions are being followed
## Criteria for the Evaluation of Skills

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicators</th>
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<tbody>
<tr>
<td>Preparation of repair</td>
<td>• The preparation conforms to the instructions</td>
</tr>
</tbody>
</table>
| Quality of the repaired surface | • The surface is homogenous  
• The cracks are closed |
| Quality of the Fixative | • The dilution conforms to the instructions |
| Workability of the Clay Paint | • The consistency conforms to the instructions |
| Quality of the painted or treated surface | • Paint or fix is homogenous |

Ensure that standards of work and materials comply with relevant codes of practice and to current standards.
<table>
<thead>
<tr>
<th>Unit R</th>
<th>Method of Work</th>
<th>Level 1</th>
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</thead>
<tbody>
<tr>
<td><strong>SUB-CRITERIA</strong></td>
<td><strong>INDICATOR</strong></td>
<td></td>
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<tr>
<td>Organisation</td>
<td>• Logical organization of both the work space and the order of work tasks</td>
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<tr>
<td>Economy of materials and time</td>
<td>• Optimum use of materials and time – no wastage</td>
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<tr>
<td>Use of tools and machines</td>
<td>• The use of the machines conforms to the operating instructions</td>
<td>• The use of machines, tools and equipment and the handling of materials is conducted ergonomically</td>
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<tr>
<td>Work place</td>
<td>• Tools and machines are cleaned and returned tidily to their correct place</td>
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<tr>
<td>Safety</td>
<td>• All Protective safeguards are in place</td>
<td>• The erection of ladders and scaffolding conforms to regulations</td>
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<tr>
<td>Wastage</td>
<td>• Wastage is appropriately sorted, stored, recycled, removed and disposed of according to regulations</td>
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<tr>
<td>Communication</td>
<td>• Problems during the working process or any deviation from the specifications are reported</td>
<td>• The finished work is reported / explained orally</td>
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