

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

Learning outcomes
Criteria and indicators

Licence: CC-BY 4.0 Learn●Earth, ecvetearth.hypotheses.org

Revised edition: September 2015

First edition: Leonardo da Vinci Project, Lernpunkt Lehm 2007-2009





Repair and conservation in earth building clay plaster

ECVET
Unit R2

Level 1

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

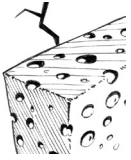
Skills

- 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



Repair and conservation in earth building clay plaster

ECVET
Unit R2

Level 1

Criteria for the Evaluation of Skills

Criteria	Indicators
Preparation of repair	<ul style="list-style-type: none">• The preparation conforms to the instructions
Quality of the repaired surface	<ul style="list-style-type: none">• The surface is homogenous• The cracks are closed
Quality of the Fixative	<ul style="list-style-type: none">• The dilution conforms to the instructions
Workability of the Clay Paint	<ul style="list-style-type: none">• The consistency conforms to the instructions
Quality of the painted or treated surface	<ul style="list-style-type: none">• Paint or fix is homogenous

Ensure that standards of work and materials comply with relevant codes of practice and to current standards.

Criteria for the assessment of the method of work (criteria of skills evaluation)

Unit R	Method of Work	Level 1
SUB-CRITERIA	INDICATOR	
Organisation	<ul style="list-style-type: none"> • logical organization of both the work space and the order of work tasks 	
Economy of materials and time	<ul style="list-style-type: none"> • Optimum use of materials and time – no wastage 	
Use of tools and machines	<ul style="list-style-type: none"> • The use of the machines conforms to the operating instructions • The use of machines, tools and equipment and the handling of materials is conducted ergonomically • The handling and use of tools, machines, equipment and materials is done skillfully and carefully 	
Work place	<ul style="list-style-type: none"> • Tools and machines are cleaned and returned tidily to their correct place 	
Safety	<ul style="list-style-type: none"> • All Protective safeguards are in place • The erection of ladders and scaffolding conforms to regulations 	
Wastage	<ul style="list-style-type: none"> • Wastage is appropriately sorted, stored, recycled, removed and disposed of according to regulations 	
Communication	<ul style="list-style-type: none"> • Problems during the working process or any deviation from the specifications are reported • The finished work is reported / explained orally • Progress and the various stages of work are discussed with the work team • Instructions that are not understood are questioned 	