Old Roedeanians' Association

HERITAGE PROJECTS

The Tiles in the Art Studio

ROEDEAN

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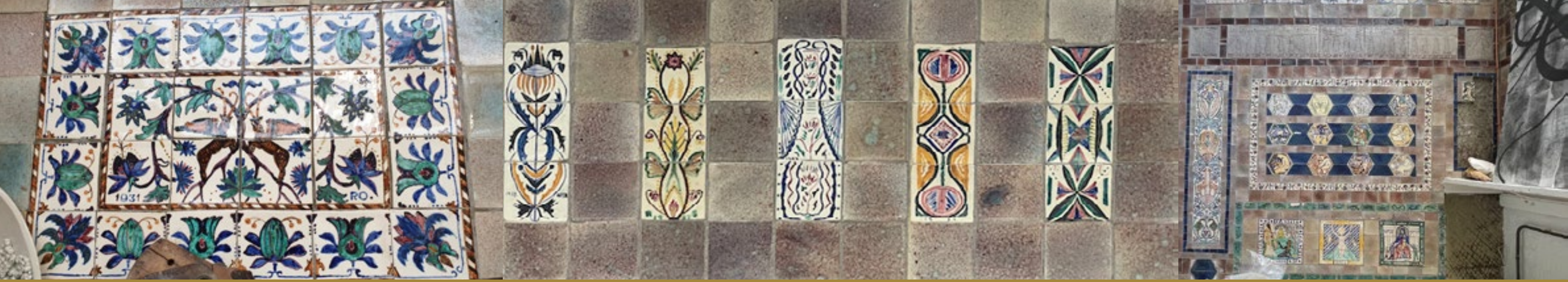


The Tiles in the Art Studio

Roedean School is a Grade II listed building. The principal school building is the 150m long range of school house and boarding houses built in 1897-8. There are other buildings of special architectural or historic interest attached to it, namely the chapel, of 1905-6, and the art, music and library wing of 1910-11 with the headmistress's house. The 1897-8 building is the work of John W Simpson, the others are by John W Simpson and Maxwell Ayrton.

The Art Studio may be divided into two, the east and the west. The decorative tiles are applied to the walls of the west end of the studio, covering approximately 8 square metres. The tiles are decorated using several techniques: intaglio, plain glazed, patterned glazed and a small run of slip trail design.

Several of the decorative tiles are dated and carry the initials of the girl who created them. The tiles on the south wall date from 1930-33, the west wall from 1934-35 and the north wall from 1936-46. These tiles were created by the girls at Roedean under the guidance of the Art mistress at the time, Dorothy Burt ("DB") Martin (1882-1949).

The intaglio tiles depicting daily life at the school run around the three walls in a border. Either side are plain, stylised tiles of foliage, birds and animals, (individual and forming larger panels) and panels of tiles depicting the cardinal and theological virtues and sins, St George and the Dragon, astrological signs, the seasons and the crest of Roedean School. All the tiles are handmade and a considerable number of them are slightly concave. Given the brightness of the colours, it is thought that a low fired glaze was used.

"The walls of the art room are covered with tiles executed by pupils in the 1930s and 1940s, many dated and signed; most are decorated with stylised foliage in painted enamels, but one notable series of relief-moulded tiles depicts scenes in the life of Roedean School."

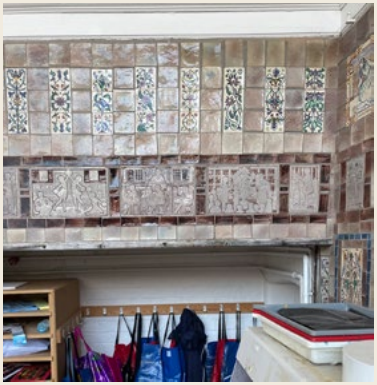
Extract from Official Listing of Roedean School, Historic England

"The interesting and beautiful tiles that line the walls of the pottery section of our studio will always be a tangible memorial to DB Martin's teaching; but her best memorial must be the work of her pupils who have become teachers, sculptors, painters, architects, and designers, and, not least, the very large number of girls who, perhaps having no great artistic skill, have gone out from the school with a living interest in and appreciation of Art in its many forms."

Dame Emmeline Tanner, Headmistress 1924-47

Current Condition

The tiles are wonderfully executed, and part of their charm is the fact that they have been produced by the girls. Consequently, there are idiosyncrasies and flaws, such as cracks which have occurred in the firing, if not before. These do not pose a problem and add to their character and story. Generally, the tiles and tiled areas are in a relatively sound condition, however the whole collection/area is not entirely without issues. The main areas /issues noted are outlined below. The application of the tiles to the walls was undertaken in an inconsistent manner, possibly by DB Martin herself or an enthusiastic assistant.



The central plaque on the west wall of the Roedean Coat of Arms is by DB Martin. This is flanked by panels of Saint Lawrence, by Penelope D Russell (*Sillavan, No.3, 1929-34*) who was a great-niece of the founders, and Saint George by Margaret Brown (*Woodward, No.3, 1928-35*).

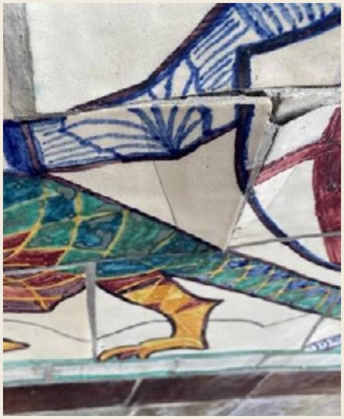
Possibly one other panel on the North Wall is also thought to be the work of DB Martin.

There is more than one empty panel where tiles have become detached, and there are several missing/broken tiles. The condition of the plasterwork also needs to be investigated as, while the tiles remain attached, the condition of the underlying fabric of the building is suspect.

There are three boxes of loose tiles, some of which were previously attached to the wall. There is also an additional series of intaglio tiles from 1946 depicting life at Keswick where the school was evacuated during WWII together with some glazed decorated tiles. There are also some “spare” background (light brown) tiles and edging (blue and brown).

Voids

Acoustic testing was systematically carried out on all three walls to determine unsound areas. In general, all tiles sounded hollow when tapped, but in certain areas, the extent was far more pronounced, suggesting that a void of 1 mm or more is present between the interface of the substrate and the rear of the tile. Other factors to consider are the irregular body of the tiles due to the firing process, and the uneven use of the cementitious mortar bed resulting in gaps behind the



tiles. Voids can be heard when tapping the tiles or noted where tiles have detached due to insufficient mortar. Voids are not necessarily an issue where the tile is still secure.

Cracks
There are several causes of cracking: mechanical damage, flaws in fabrication or firing, movement of the wall and pressure from adjacent tiles. Cracks are noted across all elevations. Many are of no concern as they are flaws which occurred during production and are now stable (although they may be weak points). Other cracks are more recent and may be as a result of interventions to the external walls. There are numerous small chips and losses to the surface of the tiles due to accidental impact damage.

Fractures and surface 'bulging'
The precise cause of some of the damage is not fully understood as the cracks, although they appear to be structural, are not fully indicative of structural damage as they do not extend in the expected manner. However, further investigation needs to be done to establish any relationship between the construction of the kiln room and also shelf fixings on the other side of the wall which may align with the pattern of failure to some of the tiles.

Losses
There are several losses or areas of loss, on all elevations. Some tiles may be detached and in storage such that they may be reinstated. Others are undoubtedly missing. There are various causes for the different losses which include the following: poor adhesion or use of materials when first fabricated; failure of the grout; mechanical damage; damp in wall. Given the discolouration of the cement in the northwest corner, damp may have been an issue.

Stress fractures to the tiles
Stress fractures are evident to localised tiles to the north-west corner and suggest structural movement within the substrate and the wall itself. The extent of the movement is unclear, but it visually appears to be minor. The exterior of the north-west corner shows a vertical crack to the north elevation and two vertical cracks to the west elevation. The crack to the north has been repaired with a cementitious mortar and is slightly opening up, suggesting movement is on-going. The movement may result from a change in the groundwater table, settlement of the area, or the groundwork and subsequent concrete floor for building of the adjacent kiln room, one of the external doors of which aligns to the rear of the "Giraffe" panel.

The use of a cementitious bedding mortar is also a contributing factor where movement is present. Due to its inflexible and fairly unforgiving nature, pressure is released by the spontaneous shelling of the glaze and ceramic body from the tile edges under lateral compression. This is evident in the “Giraffe”, “Charity” and rural working life panels and some of their border tiles.   In other instances, the tiles are held in position, and the fracture runs through both materials.

However, the number of tiles exhibiting stress fractures in the area is low, and the width of the exterior cracks appear relatively minor.

Surface Loss
The glazed surface is delaminating in small and isolated areas across all elevations.

Soiling
All areas are soiled and require cleaning. Some areas have paint spills or other surface deposits, as would be expected in any art studio (and for which tiling makes the perfect wall finish!). A white bloom is evident in specific locations which may indicate salts caused by historic damp.

Interventions
There are past repairs causing physical and aesthetic issues: unsightly or unsuitable adhesive, M&E conduit or wiring fixed to tiles.

Moisture Survey
A liquid moisture survey using a Protimeter moisture meter was carried out. The liquid moisture levels recorded indicated a low moisture level. Higher moisture levels were expected, giving the fact that the exterior ground level is on average 60 cm higher than the floor of the art studio to the northwest corner and 1.5 meters higher than the main art studio to the east.

Proposed Conservation

The objective of the project is, (subject to the outcome and confirmation of the approach from the conservation/restoration reports), including appropriate remediation to the condition of the walls and plasterwork, to reaffix loose tiles (if they are available), to restore damaged tiles, or to replicate tiles from information held in the Roedean School Archive. If, after this, blank areas remain with no information as to the design of the tiles previously in situ, and no suitable loose tiles/panels exist, then the current thought is to fill these with tiles/panels, perhaps with scenes of current life at the school, designed by the girls, subject to the appropriate Listed Building Consent.

The proposals offer a comprehensive conservation treatment; however, the urgency and necessity of all steps varies considerably. In order to prioritise the interventions, they have been divided into three categories:

URGENT:	NECESSARY:	DESIRABLE:
Conservation intervention is required to prevent imminent deterioration of the condition and/or significant loss of material which may be of structural, historic and/or artistic significance. This also includes interventions required where there is imminent or potential danger to people or other objects, structures.	Conservation intervention is required to prevent further loss or deterioration of material, or loss of historic or artistic significance.	Conservation treatment is desirable but not necessary. This may be to: improve visual integrity and legibility; to increase understanding; to facilitate future conservation or reduce the level of future interventions

These are prefaced by a Preliminary and General phase containing items which are not categorised (unless indicated as Urgent), as they form part of the enabling works. This phase also includes the Conservation Trials.

Phase 1: Preliminary

The preliminary items are included to support or prepare for the conservation works. They are not prioritised, other than where indicated, as they inform the conservation works. The results of conservation trials will establish the most suitable methodology. The findings of investigations may change the indicated prioritisation category.

RECORD: A written and photographic record of the tiles, before and after the trials and conservation works will be created. A digital copy will be held by the school upon completion.

FURTHER ASSESSMENT & INVESTIGATIONS: Include cataloguing of all tiles in-situ and boxed plus archival research (continuing the work already underway by the ORA).

REMEDIAL WORKS TO EXTERIOR OR GENERAL FABRIC: Clean out and check guttering, roof valley, downpipes, and drainage systems to ensure base of building is kept clear of damp. Remove ivy to avoid plants encroaching into the building. Review and repair cracks to pebbledash on west and north walls and open joints to stonework in north wall. Assess high level window on west end to ensure it is weather tight. Confirm timetable of remedial work and any interface with internal works to the tiled area.

CONSERVATION TRIALS: to establish suitable

- grout and mortar for re-adhering detached tiles in original locations and pointing joints.
- method for emergency consolidation of loose fragments prior to removing dust and debris
- method and material for full scale consolidation
- injectable consolidating grout to provide support, additional stability and adhesion for tiles with a void behind without removing tiles from the wall
- solvent to remove past adhesive/glues.
- method for removal of loose and severely cracked tiles including method to support and prevent loss of surface

General Items

PROTECTIONS & ACCESS: Apply protection to floor and other areas as deemed necessary, surrounding the workplace. Erect access platform to reach high level.

DE-DUST ALL SURFACES: Use a soft brush and avoid vulnerable areas and locations with loose tiles. Apply protection/ softening to end of vacuum to prevent damage to the surface.

EMERGENCY CONSOLIDATION: Of loose fragments as required prior to removing dust and debris. This process will go hand in hand with dust removal, however does not constitute full scale consolidation which will be based on the results of trials.

COLLECT, LABEL & BAG ANY DETACHED FRAGMENTS: For reinstatement during conservation works. Record the location where all fragments are found.

Phase 2: Urgent

VOIDS AND LOOSE TILES: Undertake a gentle tapping survey across all elevations of all tiles to establish any loose tiles or hollow areas. Assess and record the stability of each tile and necessity to fill voids. This is not always required, particularly if there is no evidence of movement in immediate area or cracking to perimeter. Inject or grout, as appropriate behind to stabilise any loose tiles in-situ.

CRACKED AND 'BULGING' TILES: Where the tile is in-situ but cracked and deformed from the original surface line, carefully remove the broken sections of tile using hand tools. It may be necessary to use a diamond disc on a Dremmel to cut along the grout line avoiding contact with the tile. Remove broken sections of tile and clean break edges and rear face for reinstatement. Investigate cause of failure. Remove cement grout and any other material or fixing which is causing an obstruction. Repair and refix.

Necessary

CLEANING: Lightly brush into a hoover to remove surface dust. Clean tiles, avoiding damaged tiles at this stage, using a non-ionic surfactant and deionised water.

ADHESIVE REMOVAL: Remove disfiguring and discoloured adhesive of past repairs. Method to be based on results of conservation solvent trials.

CONSOLIDATION AND REPAIR: Re-adhere broken tiles and dislodged fragments, ensuring break edges are clean prior to adhering. Consolidate edges of glaze where flaking.

REPAIRS AND SUPPORT FILLS: Re-adhere detached tiles in original locations. It may be necessary to reduce the remaining cementitious material on the wall prior to refixing. Re-fix all loose tiles.

CRACKS: If the cracks are due to a flaw in the original firing or fabrication, do not fill. Simply clean and leave as they are part of the character of the original work. New cracks: clean, fill and colour match to surrounding finish.

Phase 3: Desirable

FILL: Fill holes within tiles with plaster of Paris or Toupret fine surface filler. Colour match and finish surface. Fill losses to joints with grout or mortar colour matched to original.

REPAIR IN-PAINT MISSING GLAZED SURFACE: Colour match repairs using appropriate pigments and reglaze with cold glaze. Ensure colours and sheen match original finish.

Proposed Restoration: Missing tiles, untiled panels and north elevation

It would be wonderful to reinstate tiles to the untiled patches (some examples below) within the existing scheme as well as tile the large areas of un-tiled wall adjacent to the existing tiles, which were clearly prepared for tiling.

Some of the loose tiles/panels, including a series of intaglio tiles depicting life at Keswick, would be suitable for this. This would also require the fabrication of some new tiles, in a similar or matching style.

The current students of Roedean may be interested in contributing to this. Student involvement would continue and enhance the social history commentary and would arguably enhance the significance of the existing work. The school has the facilities (kiln) to undertake the work. It may be that an external ceramicist could advise on glazes and materials (if required).

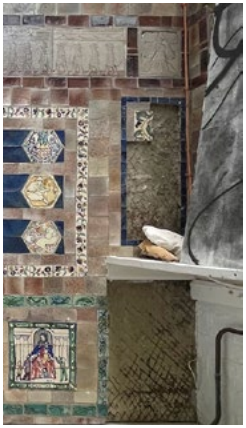
As part of the trials a quotation will be obtained from a manufacturer to create bespoke tiles, for background and borders and for decorated tiles where the design is known. This will help confirm costs for latter phases. There are a number of oxides and glaze sample tiles which illustrate the original palette utilised which should prove helpful.

Area on north elevation with extensive loss of tiles.
On close inspection the mortar appears to have been dry when applied and/ or insufficient in

quantity in some areas when the tiles were applied. Aligning the white patches on the exposed cement, from the reverse side of the tile, it may be possible to match up detached tiles with the wall.

Area of missing tiling in northwest corner

The B&W image shows tiles in situ; the small inset image illustrates arrangement of four loose tiles from the boxed collection which are likely to have come from this location and may be reinstated. Staining to the lower edge of the empty area indicates that damp may have been the cause of the tiles to become detached. However, three tiles are missing from the arrangement and consideration may be given to the fabrication of new.



The Potter's Wheel (South elevation)

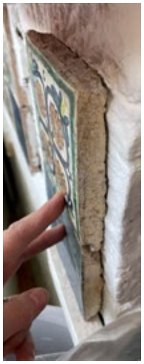
The image on the left shows DB Martin teaching students at a (treadle operated) potter's wheel in 1931. Note, while there are tiles on part of the south wall, the west is as yet un-tiled.

Below is the same location today. The image illustrates 2 areas (a & b) which appear to have missing or detached tiles. Area 'a' was clearly tiled in the historic photo , however area 'b' appears not to have been tiled, as a potter's wheel was located in front of this area. The images also show the original location of two detached tiles together with profile detail illustrating the matching wall and tile mortar profile which fit together like a jigsaw and can be used to aid identification of original location.

Another section on the south wall with missing tiles

4 tiles have become detached, possibly due to lack of key and adhesion. None of the loose tiles seem to fit the mortar profile.

Overall on the south wall below the shelf there are 8 missing tiles, 4 blue and 4 patterned. If it is considered that the Fire Blanket can be relocated (safely) then a further 2 blue tiles will be required.



Dorothy Burt “DB” Martin, 1882-1949

DB Martin succeeded Sylvia Lawrence as Head of Art at Roedean in 1916 and continued in the role until she retired in 1946.

DB Martin was educated at Wolverhampton Municipal School of Art and at the Royal College of Art. She was a painter, etcher, potter, embroiderer, and illustrator. During her time as Head of Art at Roedean, she also taught etching at Brighton Municipal School of Art. She also produced her own work, showing at the Royal Academy and elsewhere. She created a series of etchings of the school. Examples of her work are in the V&A Museum and in the Royal Horticultural Society Lindley Library.

In 1877 a mould and plaster cast of the highly decorated sandstone Saxon column at St Peter’s Church in Wolverhampton was made which is now stored in the V&A. Since then, the real column has suffered badly from pollution and weathering. The cast was used in 1911/13 by DB Martin as a source for an extended drawing in pencil of its carved decoration. This also forms part of the Collection at the V&A.

300 of DB Martin’s flower drawings are today housed at the RHS Lindley Library. They have been used in several RHS publications and continue to be used to decorate RHS merchandise.

The following is an excerpt from the introduction to the RHS Diary 1993 by Brent Elliott of the RHS Lindley Library within which were first published 55 of DB’s finest illustrations.

Dorothy B. Martin completed over 300 drawings for a projected flora of the British Isles during her time at Roedean School, where she was art mistress from 1916 to 1946. She found the models for her charming illustrations in the Sussex countryside around Roedean, in the Lake District (namely Keswick) where the school was evacuated during the Second World War, and in specimens specially sent to her. Her love of nature and single minded pursuit of her art is recalled by a friend who remembers her sitting calmly in the School’s studio to paint a flower sent to her, surrounded by the detritus of the recent removal from Keswick to Brighton; “For, my dear,” she said, “the flower may be dead tomorrow, but the mess will still be here.”

Had Miss Martin completed her flora, from the artistic point of view it would easily have rivalled the work of her slightly elder contemporary, the Reverend Keble Martin, whose Concise British Flora, eventually published in 1965, is the best known and most reprinted illustrated British flora of the 20th century. The two artists were very different in style, but both were rooted in the Edwardian context of botanical illustration. This manifested itself, at about the time when Miss Martin was starting her teaching career at Roedean, in the publication of three separate British floras; each defined a different set of stylistic choices, which provided the background against which Miss Martin began her work.

On Dorothy Martin's death, her twin sister Margaret, as executor, sought the advice of the Royal Horticultural Society's librarian, W.T. Stearn, about the value of the drawings. A formal notice of acceptance followed Dr Stearn's visit to Brighton to inspect the paintings to see "if they proved of a quality to merit their inclusion in the Lindley Library". Dr Stearn was the co-author of Wilfred Blunt's book The Art of Botanical Illustration (1950), which made the first public reference to Dorothy Martin's "several hundred fine sheets of British wildflowers". A condition was attached to the bequest, allowing the drawings to be exhibited outside the Society's own rooms (not a normal practice at that time).

References

- *Condition survey of glazed and intaglio tiles in the Art Studio, Cliveden Conservation*
- *Condition Assessment & Conservation Recommendations, Humphries & Jones*
- *Roedean School Magazine November 1949*
- *The Times, 19th October 1992*
- *Royal Horticultural Society Diary 1993*
- *http://historywebsite.co.uk/articles/saxoncross/shaft.htm*

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More information on each of the projects can be obtained by:

- Downloading detailed project brochures from **https://community.roedean.co.uk/resources**
- Emailing **heritage@oldroedeanians.co.uk**
- Calling the Roedeanian Office on **01273 667398**

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Roedean Community Network: https://community.roedean.co.uk/news/ora-news

By newsletters and publications

We will also be including updates in the Roedeanian Society Newsletter, The Roedeanian, as well as in the Old Roedeanians' Magazine.

Thank you so much for your support!

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