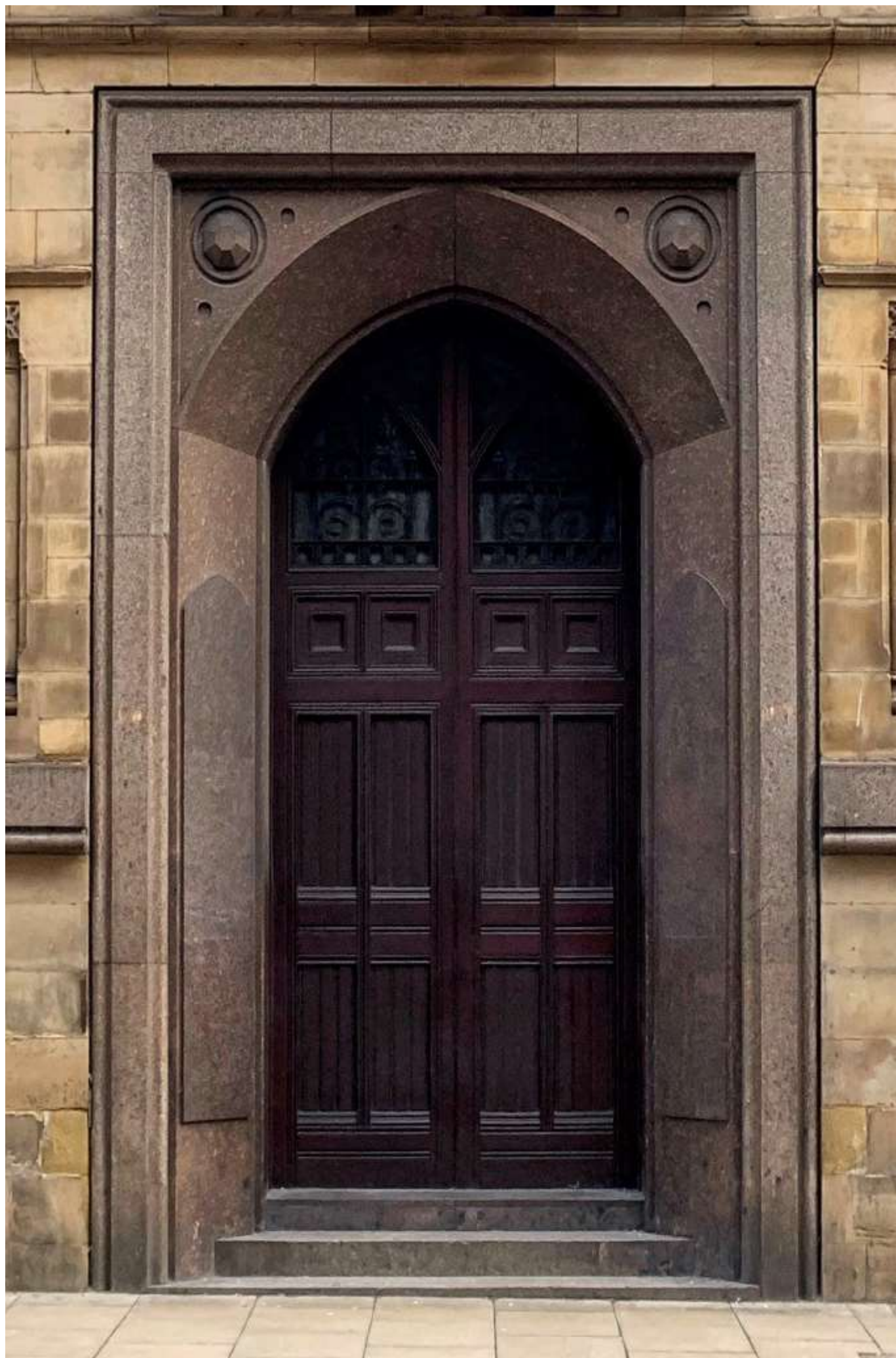


# 50 Fountain Street Spring Gardens Entrance Materials

|                            |    |
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| Granite Surround - Type 01 | 4  |
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## Granite Surround - Type 01

Granite material to be used to infill voids in existing stone surround resulting from the removal of existing stone step and the drop in level to create a level threshold as well as replacing top step.

Granite is sourced through Leiths Natural Stone, quarried at Shap, in the east of the Lake District (England), and the quarry is owned by the Armstrong Group.



Photo: Granite sample next to existing granite

## Granite Surround - Type 02

Granite material to be used to infill voids in existing stone surround resulting from the removal of existing stone step and the drop in level to create a level threshold.

Granite is sourced through Leiths Natural Stone, quarried at Shap, in the east of the Lake District (England), and the quarry is owned by the Armstrong Group.

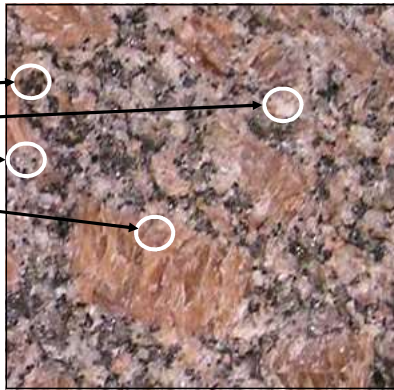


Photo: Granite sample next to existing granite

The granite, or more accurately **adamellite** due to the greater abundance of potassium feldspar, is a mixture of four minerals:

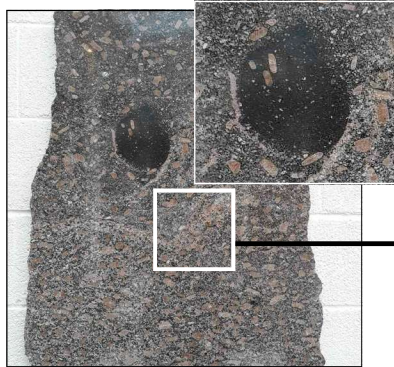
- **black, shiny biotite mica**
- **white plagioclase feldspar**
- **grey, glassy quartz**
- **pink orthoclase feldspar**

This coarse, crystalline texture only develops when magma (liquid rock) cools slowly many kilometres deep in the Earth's crust. The first crystals to grow were the large pink feldspars, after which the granite magma, now a crystal 'mush', intruded higher in the crust where the coarse-grained background then crystallised. The age of the rock is about 393 million years, in the early Devonian Period.



Feldspar crystals showing Carlsbad twinning formed when one crystal grows into another and reflects light at a different angle.

The dark grey inclusions tell an interesting story. The angular one (top left of the left panel below) is a piece of local rock that broke off as the granite was intruded into its final position. The other rounded, dark inclusions are liquid blobs of another pulse of magma with a slightly different composition. As they rose up through the partially crystallised granite 'mush' they 'swallowed' and absorbed some of the large pink feldspar crystals. The right panel shows several different granitic magma compositions and textures mixed together by convection as the pluton cooled.



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Volume 17: Caledonian Igneous Rocks of Great Britain  
 Chapter 4: Lake District and northern England  
 Site: SHAP FELL CRAGS (GCR ID: 1408)

## SHAP FELL CRAGS

*S.C. Loughlin*

OS Grid Reference: NY555084

### Introduction

The Shap Fell Crag GCR site comprises the Shap Pink Quarry and is the principal exposure of the Shap granite, renowned as a distinctive, decorative building stone. The igneous processes that can be demonstrated within the quarry make this an internationally significant site. The site (Figure 4.44) has been a popular field locality for undergraduate students and amateur geologists for many years. The granite and its associated metasomatism and mineralization have been described by many authors (e.g. Harker and Marr, 1891, 1893; Rastall and Wilcockson, 1915; Grantham, 1928; Firman, 1957, 1978a, 1978b) and it is featured in numerous classic geological textbooks (e.g. Teall, 1888; Hatch *et al.*, 1971; Holmes, 1993).

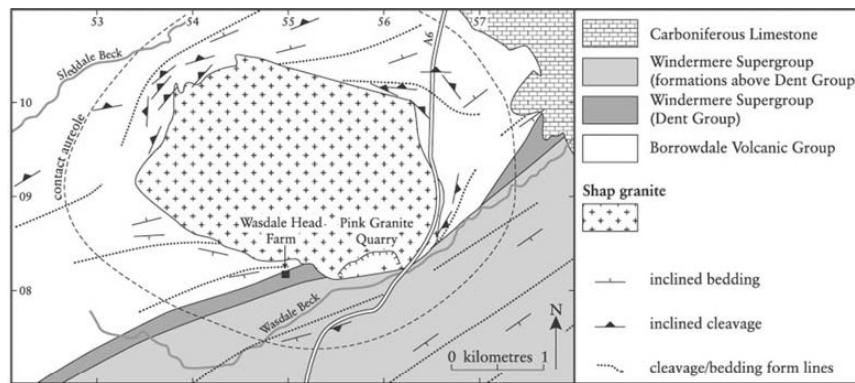


Figure 4.44: Map of the Shap Fell Crag GCR site (after Soper and Kneller, 1990).

The origin of the abundant pink Carlsbad-twinned K-feldspar megacrysts, which are the trademark of the Shap granite, has been a source of much controversy. The megacrysts occur not only in the granite but also within microgranular mafic enclaves within the granite, leading to the suggestion that the megacrysts are porphyroblasts resulting from late-stage crystallization from potassium-rich metasomatic fluids (Vistelius, 1969; Firman, 1978b; Le Bas, 1982a). However, recent work favours a phenocrystic origin for the megacrysts (e.g. Vernon, 1986; Lee *et al.*, 1995; Cox *et al.*, 1996; Lee and Parsons, 1997).

The intrusion is steep sided, and was emplaced close to the boundary between the Borrowdale Volcanic Group and the Windermere Supergroup (Locke and Brown, 1978). Radiometric dates obtained by a number of methods indicate an Early Devonian age (Pidgeon and Aftalion, 1978; Wadge *et al.*, 1978; Rundle, 1992). The granite was originally thought to post-date Caledonian deformation (Boulter and Soper, 1973), but recent field evidence proves that it was emplaced during, not after, the late Caledonian Acadian Event (Soper and Kneller, 1990). Thus, the granite is crucial in dating Caledonian deformation events within the Lake District.

A geochemical study of the Shap granite was made by O'Brien *et al.* (1985). Elevated levels of the radioactive elements U, Th, Rb and K explain the high present-day heat production of the granite which has been investigated as a potential source of geothermal energy (Wheildon *et al.*, 1984).

### Description

Grantham (1928) recognized that the Shap granite was formed in three stages. To the west of the quarry, near Wasdale Head Farm (549 081), is a grey granite ('stage' I) which grades up

into, and is transgressed by, the familiar pink, coarse-grained granite ('stage' II) which occupies up to 90% of the intrusion. The 'stage' III granite is less common and cuts the earlier mass in dyke-like bodies between 1 cm and 1 m wide.

The 'stage' I granite contains about 15% pink, Carlsbad-twinned orthoclase-perthite megacrysts up to 5 cm in length. The groundmass is composed of orthoclase, plagioclase zoned from andesine to albite, quartz, and biotite. By contrast, the 'stage' II granite contains less biotite and up to 30% pink K-feldspar megacrysts which commonly show a preferred alignment. The 'stage' III granite is very similar in appearance to the 'stage' II granite, but contains up to 60% pink K-feldspar megacrysts and has even less biotite. Accessory minerals include titanite, apatite, magnetite, zircon, fluorite, monazite, allanite, amphibole and pyrite (Firman, 1978b). Complex microtextures in the megacrysts have been described by Lee *et al.* (1995), Cox *et al.* (1996) and Lee and Parsons (1997). The megacrysts also contain numerous inclusions of plagioclase, biotite and quartz that increase in size and abundance towards the rim.

The 'stage' I and 'stage' II granites contain abundant enclaves (Figure 4.45). Most common are rounded, microdioritic enclaves comprising fine- to medium-grained aggregates of plagioclase, quartz, biotite and K-feldspar. Slightly rounded, pink K-feldspar megacrysts with oligoclase rims may constitute 5–8% of the enclaves; some of these megacrysts occur partly within the enclave and partly within the granite host. Clots of granite matrix up to 1.5 cm across have been reported from within some enclaves (Cox *et al.*, 1996). In addition, the 'stage' II granite contains enclaves of 'stage' I granite that range from only a few centimetres across to rafts with dimensions of 36 × 30 × 6 m (Grantham, 1928). Identifiable xenoliths of hornfelsed andesitic rocks from the Borrowdale Volcanic Group occur near the margins of the intrusion. Xenoliths of Dent Group lithologies (formerly the Conistone Limestone) were abundant near the southern contact of the intrusion, but are now rare because quarrying has advanced away from this contact. Harker and Marr (1891) noted that K-feldspar megacrysts do not occur in 'xenoliths formed from solid rock fragments'.

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Volume 17: Caledonian Igneous Rocks of Great Britain  
 Chapter 4: Lake District and northern England  
 Site: SHAP FELL CRAGS (GCR ID: 1408)

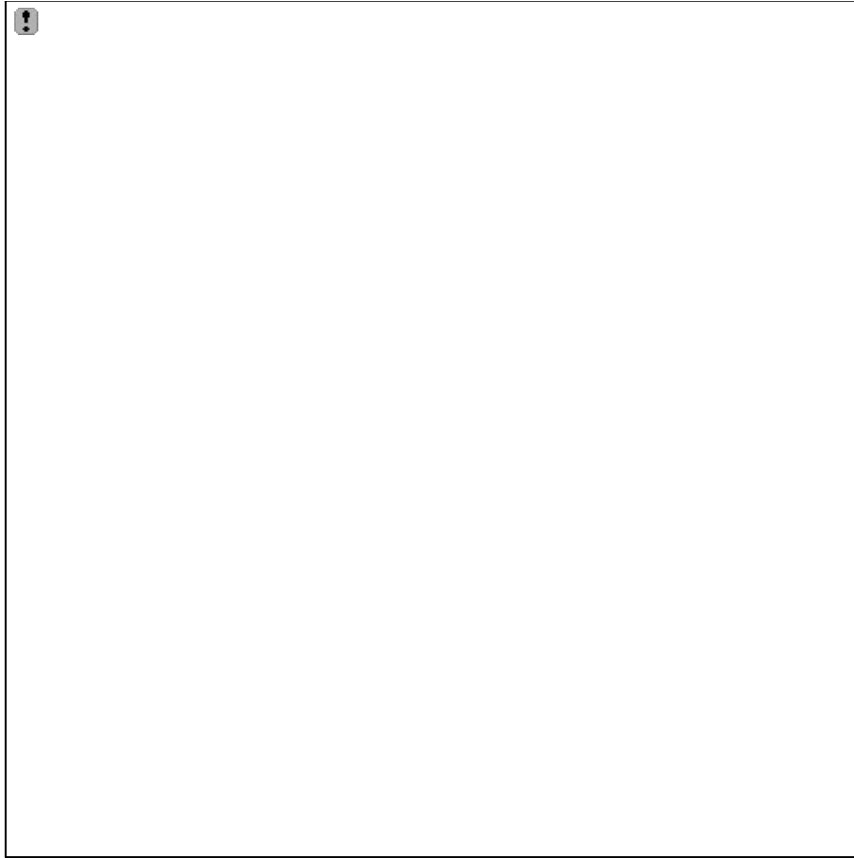


*Figure 4.45: Pink granite with xenoliths containing K-feldspar megacrysts. (Photo: D. Millward.)*

Aplitic veins are common within the granite and country rocks, and pegmatitic rocks are common locally; both contain quartz, K-feldspar and a little plagioclase. Molybdenite and hydrothermal vein minerals coat many surfaces within a pervasive, blocky joint system. Two distinct vein assemblages are seen: the first contains quartz, calcite, bismuthinite and chalcopryrite, and the later veins contain quartz, calcite, haematite, fluorite and baryte. These veins commonly penetrate the centre of 'stage' III granite bodies giving the orthoclase on either side of the vein a deeper pink colour. Where such veins cut the 'stage' II granite, darkening of the feldspars may occur up to 5 m from the vein giving rise to the 'Dark Shap', a highly prized variety of the Shap granite that is difficult to extract. 'Light Shap' refers to the normal unaltered pink variety of granite.

Though the Shap granite outcrop is small (c. 5 km<sup>2</sup>), gravity data (Lee, 1986) and contact metamorphism suggest that it extends at shallow depths at least 10 km farther to the NW. Andesite and tuff within the metamorphic aureole have been converted to biotite hornfels with some amphibole in places. The more aluminous sedimentary rocks of the Windermere Supergroup may contain sillimanite, andalusite and cordierite. The country rocks are folded and faulted and a near-vertical cleavage is deflected around the Shap granite (Figure 4.44; Boulter and Soper, 1973; Soper and Kneller, 1990). At several localities in the volcanic rocks of the metamorphic aureole, biotite has clearly overgrown the cleavage (Boulter and Soper, 1973). The granite has an associated dyke swarm which is crudely orientated NE–SW, sub-parallel to the Acadian folding and faulting.

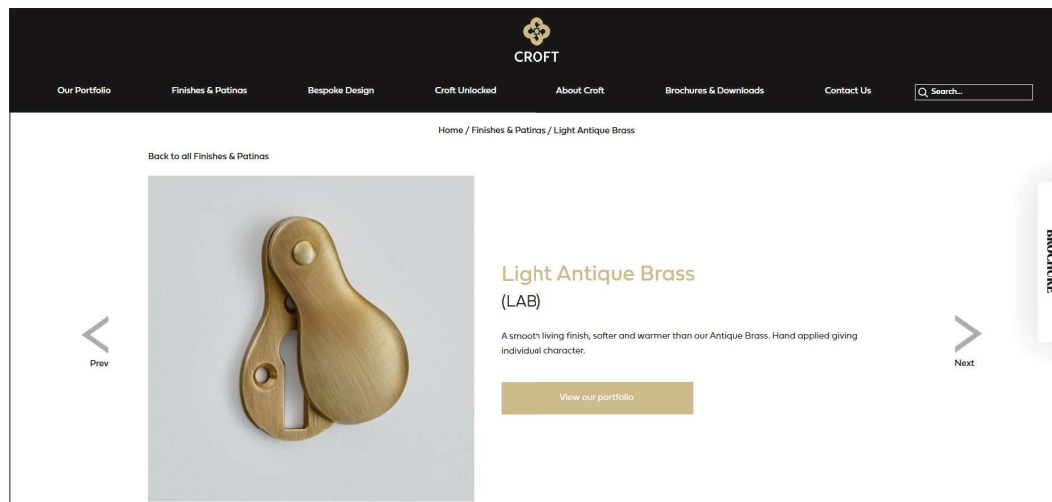
## Interpretation

Early researchers proposed that the K-feldspar megacrysts in the Shap granite are phenocrysts

Sample material of new ironmongery in Light Antique Brass (LAB) supplied by Croft. Products on the inside face of door. No new ironmongery to be applied to external door face.



Photo: Sample of LAB ironmongery finish



## Care of Finishes

### Taking care of the finishing touch

**Living Finishes** (AB, AGD, AUT, DAB, DORB, IBUL, LAB, MBK, ORB, RBMA, SBUL, SMK, TB)

Our living finishes receive a protective wax coating prior to despatch (excluding RBMA). Normal wear and handling will allow the contact areas to reveal the metal below helping to create an aged effect. An occasional application of a good beeswax polish can be applied if required.

**Other Lacquered Finishes** (AN, DAN, DBMA, IBMA, MB, SB)

Regular cleaning with warm soapy water and an application of a good wax polish gently applied, will help to protect the finish. Not recommended for high usage locations. Application of incorrect chemicals can result in advanced deterioration of the lacquer. Do not use solvents, cleaning chemicals, or abrasive products with this finish.

**Atmospheric Conditions**

Sea air and environmental conditions can cause a finish to deteriorate prematurely. Conditions will affect external fittings, and window fittings as they are likely to be exposed to corrosive or damaging elements for periods of time. In these situations regular cleaning will be needed and we recommend the following finishes to be the most suitable:

- Polished Brass Unlacquered (PBUL)
- Polished Chrome (CP)
- Polished Bronze Unlacquered (PGUL)
- Polished Nickel (PN)
- Real Bronze Metal Antique (RBMA)

**Lacquered Brass and Bronze** (PB,PG)

Regular cleaning with warm soapy water will help maintain the general appearance and an occasional application of a good wax polish will help to protect the finish.

The life of the lacquer can be affected by many environmental or atmospheric conditions, including sea air and industrial pollution. If the lacquer does start to break down we recommend that it is removed with paint stripper and the article is kept clean in the traditional way using a metal polish. Not recommended for high usage locations. Application of incorrect chemicals can result in advanced deterioration of the lacquer. Do not use solvents, cleaning chemicals, or abrasive products with this finish.

**Unlacquered Brass and Bronze** (PBUL, PGUL)

Although originally polished, if left untouched the finish will naturally become dull and darken over a length of time. To retain the polished finish regular cleaning with a proprietary brand of metal polish (eg. Autosol or Brasso) will be required.

**Plated Finishes** (BKN, CP, PN, PRL, SCP, SNP)

Regular cleaning with warm soapy water will help to maintain the appearance, if required a proprietary brand of metal polish can be used.

+44 (0)1902 606 493
sales@croft.co.uk
www.croft.co.uk

Ironmongery items supplied by Croft in Light Antique Brass (LAB) include:  
6381L Lockable Knob Slide Action Bolt, 305x38 Action Bolt  
6356, T-bar Pull Handle, 16 x 1”



**Product Code:** 6381L

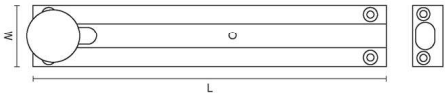
**Product Name:** Lockable Knob Slide Action Bolt

**Description:** A heavier duty lockable sliding bolt in a choice of four sizes to suit.

Shown here in our Imitation Bronze Unlacquered finish.

Product Information

Available in the following sizes: 4"x 1 1/2" 6" x 1 1/2" 8" x 1 1/2" 12" x 1 1/2" Note- 6381 Non Locking version shown in photo



| Sizes        | L   | W  |
|--------------|-----|----|
| 4" x 1 1/2"  | 100 | 38 |
| 6" x 1 1/2"  | 152 | 38 |
| 8" x 1 1/2"  | 203 | 38 |
| 12" x 1 1/2" | 305 | 38 |

Available in all Croft finishes excluding RBMA, TB,



# CROFT



**Product Code:** 6356

**Product Name:** T-bar Pull Handle

**Description:** Our T-Bar Pull Handle available as standard sizes 12 x 1", 16 x 1", 24 x 1", 24 x 1 1/4" and 36 x 1 1/4". Other sizes available on request. Also available in back to back and secret fix versions.

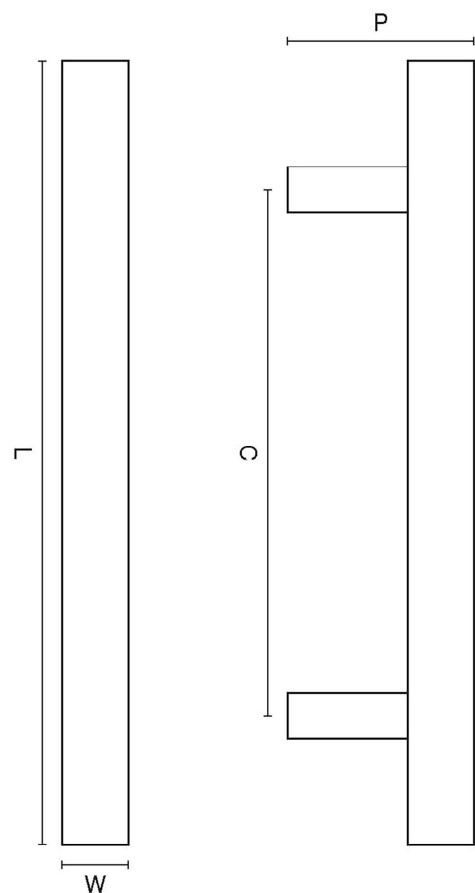
24" & 36" sizes not available in distressed finishes.

Shown here in our Matt Black Bronze finish.

## Product Information

Our T-Bar Pull Handle available as standard sizes 12 x 1", 16 x 1", 24 x 1", 24 x 1 1/4" and 36 x 1 1/4". Other sizes available on request. Also available in back to back and secret fix versions.

24" & 36" sizes not available in distressed finishes.



| Sizes       | L   | W  | P  | C   |
|-------------|-----|----|----|-----|
| 12 x 1"     | 305 | 25 | 80 | 205 |
| 16 x 1"     | 406 | 25 | 80 | 306 |
| 24 x 1 1/4" | 610 | 32 | 83 | 490 |
| 24 x 1"     | 610 | 25 | 80 | 490 |
| 36 x 1 1/4" | 915 | 32 | 83 | 615 |

+44 (0) 1902 606 493

[www.croft.co.uk](http://www.croft.co.uk)

[sales@croft.co.uk](mailto:sales@croft.co.uk)

Available in all Croft finishes excluding RBMA, TB,

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## Garage Bolt 12" Black Steel

Product Code: MSGA059912

£11.90 ea (inc VAT)

**Available Options:**

Size:

12"

**Availability:** 3 In Stock

1

ea

ADD TO BASKET

Add To List

Description

Availability

Delivery

Returns

Reviews (0)

Simple surface mounted bolt often used for bottom fixing of garage doors or field gates. Prepacked with fixings. Supplied with plate & ferrule receiver for setting into concrete.

**Size:**  
304mm (12")  
Product Code: MSGA059912

[Share](#)

## Timber Door Stain

Sample material of door stain in Protek Royal Exterior Paint in Oak and in Clear (top coat). Products to be applied to timber door, door frame and all existing timber elements. Sample photograph depicts stain on existing timber and new timber to be used to extend door to meet new level threshold.



Photo: Sample of stain on existing and proposed timber

# MATERIAL SAFETY DATA SHEET

## ROYAL WOOD FINISH

Version: 01  
Print date: MAY 2018  
MSDS Number: DOC164

Revision Date:



### NON-HAZARDOUS PRODUCT

This safety data sheet has been supplied in accordance with the requirements of Regulation EC no 1907/2006 (the REACH regulation) and the information herein is displayed in the order prescribed in Annex II to that regulation, as amended 2010. Its purpose is to facilitate the carrying out of a risk assessment.

### 1. IDENTIFICATION OF SUBSTANCE/MIXTURE AND THE COMPANY

Product Name : ROYAL WOOD FINISH, Exterior, Interior and Metallics  
Main Use : Pigmented water-based aqueous solution for the colouring and protection of sheds and timber buildings, by brushing, dipping or spraying. A ready to use solution for domestic household and professional use.

Company : Sun-Europa Ltd. T/A Protek Products  
Crowne Trading Estate  
Shepton Mallet  
BA4 5QQ  
Great Britain

Email : Info@protekproduct.co.uk  
Tel : 01749 344697  
Fax : 01749 345572  
Website : www.protekproduct.co.uk  
www.protekwoodstain.co.uk

### 2. HAZARD IDENTIFICATION

#### 2.1 Classification

This product does not meet the criteria for classification as a hazardous preparation laid down in either EU Directive 1999/45/EC (as amended) or in Regulation (EC) 1272/2008 (CLP).

However, as it the case with all chemical compositions, certain precautionary measures aimed at ensuring the well-being of those who will use this product and at protecting the natural environment against unnecessary pollution must be applied.

#### 2.2 Label Elements

This product has no statutory labelling requirements.

#### 2.3 Other Hazards

This product does not contain any PBT or vPvB substances

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Composition : Aqueous emulsion of acrylic copolymers, wax, colourants and pigments with a film protection containing IPBC (3-iodo-2propynyl butyl carbamate).

| COMPONENT NAME                   |
|----------------------------------|
| 3-iodo-2propynyl butyl carbamate |

| AMOUNT WEIGHT<br>(%W/W) | CAS NO.    | EEC NO.   | EEC SYMBOL<br>LETTER | EEC RISK<br>PHRASES  |
|-------------------------|------------|-----------|----------------------|----------------------|
| <0.1                    | 55406-53-6 | 259-627-5 | Xn, Xi, N            | R20/22<br>R41<br>R50 |

### 4. FIRST-AID MEASURES

EYES : Gently irrigate immediately with clean water for at least 15 minutes. If any irritation persists seek medical attention straight away.

SKIN : Wash skin with plenty of soap and water. If irritation develops seek medical advice.

INGESTION : Give one pint of milk or water as soon as possible. Consult a doctor if any symptoms appear or if you feel unwell

INHALATION : Remove to fresh air, keep at rest and consult a doctor if any symptoms persist.

Sun-Europa Limited, Crowne Trading Estate, Shepton Mallet, Somerset, BA4 5QQ  
Tel: 01749 344697 Email: info@protekproducts.co.uk Fax: 01749 345572

# MATERIAL SAFETY DATA SHEET

## ROYAL WOOD FINISH

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### 5. FIRE FIGHTING MEASURES

|                            |   |                                                                                                         |
|----------------------------|---|---------------------------------------------------------------------------------------------------------|
| EXTINGUISHING MEDIA        | : | Extinguishing media appropriate to the surrounding materials                                            |
| FIRE AND EXPLOSION HAZARDS | : | If involved in a fire toxic fumes may be evolved of SOx                                                 |
| PROTECTIVE MEASURES        | : | Determined by other materials – this material will make no significant contribution to the fire hazard. |
| ADVICE FOR FIRE FIGHTERS   | : | There are no special firefighting procedures given                                                      |

### 6. ACCIDENTAL RELEASE MEASURES (SPILLS)

|                      |   |                                                                                                                                                                                                                            |
|----------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PERSONAL PRECAUTIONS | : | Wear uPVC gloves and goggles                                                                                                                                                                                               |
| ENVIRONMENTAL        | : | Prevent entry into drains, sewers and watercourses. Use suitable absorbent materials for water based products. The product should not be dumped in nature but collected and delivered to agreement with local authorities. |
| RECOVERY             | : | Absorb in sand, earth or man-made absorbent materials and dispose of in a metal lidded container, clearly labelled.                                                                                                        |

### 7. HANDLING AND STORAGE

|               |   |                                                                                                                                                                                       |
|---------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SAFE HANDLING | : | Observe safe manual handling methods with the 25 litre containers<br>Wear PVC gloves and protective goggles when handling the solution                                                |
| SAFE STORAGE  | : | Keep containers sealed. Store in a cool, dry conditions between 6°C and 35°C.<br>Do not allow the product to freeze<br>Keep strictly separated away from food, drink and animal feed. |
| VENTILATION   | : | The product should be applied in a good ventilated area, natural or mechanical.                                                                                                       |

### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

|                      |   |                                                                  |
|----------------------|---|------------------------------------------------------------------|
| ENGINEERING MEASURES | : | Ensure good ventilation                                          |
| PROTECTIVE EQUIPMENT | : |                                                                  |
| RESPIRATORY          | : | No respiratory equipment necessary in well ventilated work areas |
| HAND                 | : | Wear rubber or PVC gloves                                        |
| EYE                  | : | Wear goggles giving complete eye protection from splashes        |
| OTHER                | : | Wear suitable apron or overalls.                                 |

### 9. PHYSICAL AND CHEMICAL PROPERTIES

|                      |   |                                 |
|----------------------|---|---------------------------------|
| APPEARANCE           | : | Coloured mobile liquid          |
| COLOUR               | : | Various colours available       |
| ODOUR                | : | Very faint characteristic odour |
| SOLUBILITY           | : | Completely soluble in water     |
| pH                   | : | 7 – 9                           |
| EXPLOSIVE PROPERTIES | : | None                            |
| OXIDISING PROPERTIES | : | None                            |
| RELATIVE DENSITY     | : | 1.00                            |
| OTHER INFORMATION    | : | Not relevant                    |

### 10. STABILITY AND REACTIVITY

|                                  |   |                                                                     |
|----------------------------------|---|---------------------------------------------------------------------|
| REACTIVITY                       | : | No specific reactivity hazards associated with this product         |
| CHEMICAL STABILITY               | : | Stable in normal ambient conditions                                 |
| HAZARDOUS REACTIONS              | : | Not relevant                                                        |
| CONDITIONS TO AVOID              | : | Do not allow the product to freeze.                                 |
| MATERIALS TO AVOID               | : | No specific materials are likely to result in a hazardous situation |
| HAZARDOUS DECOMPOSITION PRODUCTS | : | If decomposition does occur, toxic fumes may be evolved of SOx      |

# MATERIAL SAFETY DATA SHEET

## ROYAL WOOD FINISH

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### 11. TOXICOLOGICAL INFORMATION

|                      |   |                                                                                                 |
|----------------------|---|-------------------------------------------------------------------------------------------------|
| INHALATION           | : | Not a normal route of exposure                                                                  |
| INGESTION            | : | Slightly poisonous if swallowed                                                                 |
| SKIN CONTACT         | : | May cause slight irritation                                                                     |
| EYE CONTACT          | : | Causes slight irritation and redness                                                            |
| OTHER HEALTH EFFECTS | : | This substance has no evidence of carcinogenic properties, mutagenic or toxic for reproduction. |

### 12. ECOLOGICAL INFORMATION

|                          |   |                                                           |
|--------------------------|---|-----------------------------------------------------------|
| ECOTOXICITY              | : | Not regarded as dangerous for the environment             |
| ACUTE FISH TOXICITY      | : | No data available. Do not pollute ground or water courses |
| BIODEGRADABILITY         | : | IPBC is readily biodegradable                             |
| BIOACUMULATIVE POTENTIAL | : | No data available                                         |
| MOBILITY IN SOIL         | : | No data available                                         |
| RESULTS OF PBT AND vPvB  | : | This product does not contain any PBT or vPvB substances  |
| ASSESSMENT               | : |                                                           |
| OTHER ADVERSE EFFECTS    | : | None known                                                |

### 13. DISPOSAL CONSIDERATIONS

|                  |   |                                                                                    |
|------------------|---|------------------------------------------------------------------------------------|
| WASTE TREATMENTS | : | Dispose of waste and residues in accordance with local authority.                  |
| METHODS          | : | Do not contaminate ponds, waterways or ditches with this product or its container. |

### 14. TRANSPORT CONSIDERATIONS

|                                |   |                                                                                                                   |
|--------------------------------|---|-------------------------------------------------------------------------------------------------------------------|
| ROAD transport notes           | : | Not Classified                                                                                                    |
| RAIL transport notes           | : | Not Classified                                                                                                    |
| SEA transport notes            | : | Not Classified                                                                                                    |
| UN NUMBER                      | : | This product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID) |
| UN SHIPPING NAME               | : | Not Classified for transportation                                                                                 |
| TRANSPORT AND HAZARD CLASS(ES) | : | Not Classified for transportation                                                                                 |
| PACKAGING GROUP                | : | Not Classified for transportation                                                                                 |
| ENVIRONMENTAL HAZARDS          | : | Not classified as an environmentally hazardous substance<br>Not classified as a marine pollutant                  |

### 15. REGULATORY INFORMATION

#### Safety, health and environmental regulations / legislation specific for the substance or mixture

|                            |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| APPROVED CODE OF PRACTICE  | : | Classification and labelling of substances and preparations dangerous for supply.<br>Safety data sheets for substances and preparations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| GUIDANCE NOTES             | : | Workplace Exposure limits EH40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| EU LEGISLATION             | : | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/769/EEC and Commission Directive 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.<br>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments |
| CHEMICAL SAFETY ASSESSMENT | : | Not applicable. No chemical safety assessment has been carried out.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

# MATERIAL SAFETY DATA SHEET

## ROYAL WOOD FINISH

Version: 01  
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Revision Date:



### 16. OTHER INFORMATION

This product should be stored, handled and used in accordance with good industrial hygiene practice and in conformity with any legal requirements.

The information contained herein is accurate to the best of our knowledge and belief and is intended to describe our products from a view of health and safety requirement within the workplace. It is not therefore to be construed as guaranteeing specific product properties.

#### ***Disclaimer***

The information given above is to the best of the Company's knowledge and belief, accurate and reliable. However no warranty guarantee or representation is made to its accuracy, reliability of completeness. It is the user's responsibility to satisfy him/herself as to the suitability of such information for their own particular use.

**Metalshield Satin in Black** to be used to paint original metalwork at the top of the timber door sitting within the existing opening.  
Finish to be applied to drop bolt added to the back of the door



Photo: Sample of Metalshield Satin



Issued 02/14

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## METALSHIELD SATIN

**Metalshield** Satin from **Dulux Trade** is specially formulated with a quick drying formation that can be over coated within 4-6 hours. It provides protection against corrosion on metal substrates such as railings, garage doors, lift shafts, staircases and emergency exit routes.

\*Applying our straightforward single-pack system: an appropriate **Metalshield** primer from **Dulux Trade** and 2 coats of **Metalshield** Satin from **Dulux Trade** will deliver up to 8 years metal protection.

### KEY BENEFITS

- 8 Year Protection\*
- High Performance Protection for Metal
- For Ferrous & Non-Ferrous Metals

### PRODUCT INFORMATION

#### Typical Use

Suitable for use on interior and exterior ferrous & non-ferrous metals.

#### Pack Size

2.5L and 5L.

#### Colour Range

See appropriate **Dulux Trade** colour literature, or visit [duluxtrade.co.uk](http://duluxtrade.co.uk).

#### Film Thickness

*Film thickness will be dependent on the coverage achieved.*

**Wet:** 80 microns.

**Dry:** 40 microns.

#### Composition (nominal)

**Pigment:** Lightfast Pigments.

**Binder:** Alkyd.

**Solvent:** White Spirit and Low Odour Aliphatic Hydrocarbons.

#### Volume Solids

White: 50% (nominal). Other colours will vary.

### SURFACE PREPARATION

To get the best results, ensure surfaces to be painted are sound, clean and dry (new surfaces particularly must be fully dry) and free from all

defective or poorly adhering material such as dirt, grease or wax.

New or bare surfaces should be primed with an appropriate **Metalshield** primer from **Dulux Trade**. Thoroughly rub down previously painted surfaces, using 'wet flattening' methods where possible, then wipe off with a damp, lint free cloth. Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead.

### SYSTEMS INFORMATION

STIR THOROUGHLY BEFORE USE. Apply 1 coat of the appropriate **Metalshield** primer from **Dulux Trade** followed by 2 coats of **Metalshield** Satin from **Dulux Trade**. Where a special process colour is to be used, or where a strong colour change is required, additional coats will be required (see appropriate **Dulux Trade** colour card).

For best colour consistency, purchase sufficient tinted paint for each job including touch-in at one time from the same source.

### APPLICATION METHOD

Brush or roller only. For Health & Safety reasons related to all solvent-based paints, spray application is not recommended.

As with other solvent-based paints, do not apply in temperatures below 5°C (as recommended by British Standard BS 6150).

#### Practical Coverage

A guide to the practical coverage which can be achieved under normal conditions is up to 13m<sup>2</sup> per litre.

#### Spray Recommendations

This product should not be sprayed.

**AkzoNobel**



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## METALSHIELD SATIN

### Drying Times

Single coat at standard thickness:

**Touch Dry:** 1-2 hours.

**Recoat:** 4-6 hours.

### Cleaning Up

After use, remove as much product as possible from equipment before cleaning with brush cleaner.

When this paint container is empty please ask your stockist about recycling. If you have leftover paint, please dispose of it responsibly and consider donating it to **Community RePaint**. Find out more at [duluxtrade.co.uk/pp](http://duluxtrade.co.uk/pp).

### Transportation & Storage

Do not use or store in extremes of temperature and protect from frost. To prevent spillage, please store and transport upright.

### VOC

EU limit value for this product (cat.: A/i): 500g/l (2010). This product contains max. 430g/l VOC. VOC content: High (25-50%).

## FURTHER SUPPORT

If you need further support, please contact the **AkzoNobel** Technical Advice Centre on [0333 222 70 70](tel:0333 222 70 70).

**Always read full Health, Safety & Environmental Information on can before use.**

Safety datasheet (SDS 541) is available free on request by telephoning the **AkzoNobel** Technical Advice Centre or by visiting [duluxtrade.co.uk](http://duluxtrade.co.uk).

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At Dulux Trade, we believe by working with our customers we can reduce waste and do more with the resources we have. Together we can create a better future for our planet. Join us at [duluxtrade.co.uk/pp](http://duluxtrade.co.uk/pp)

**AkzoNobel**

Glass to be attached to internal face of existing door,  
sitting behind the existing metalwork and opening  
Product -Histoglass Hand Drawn Glass.

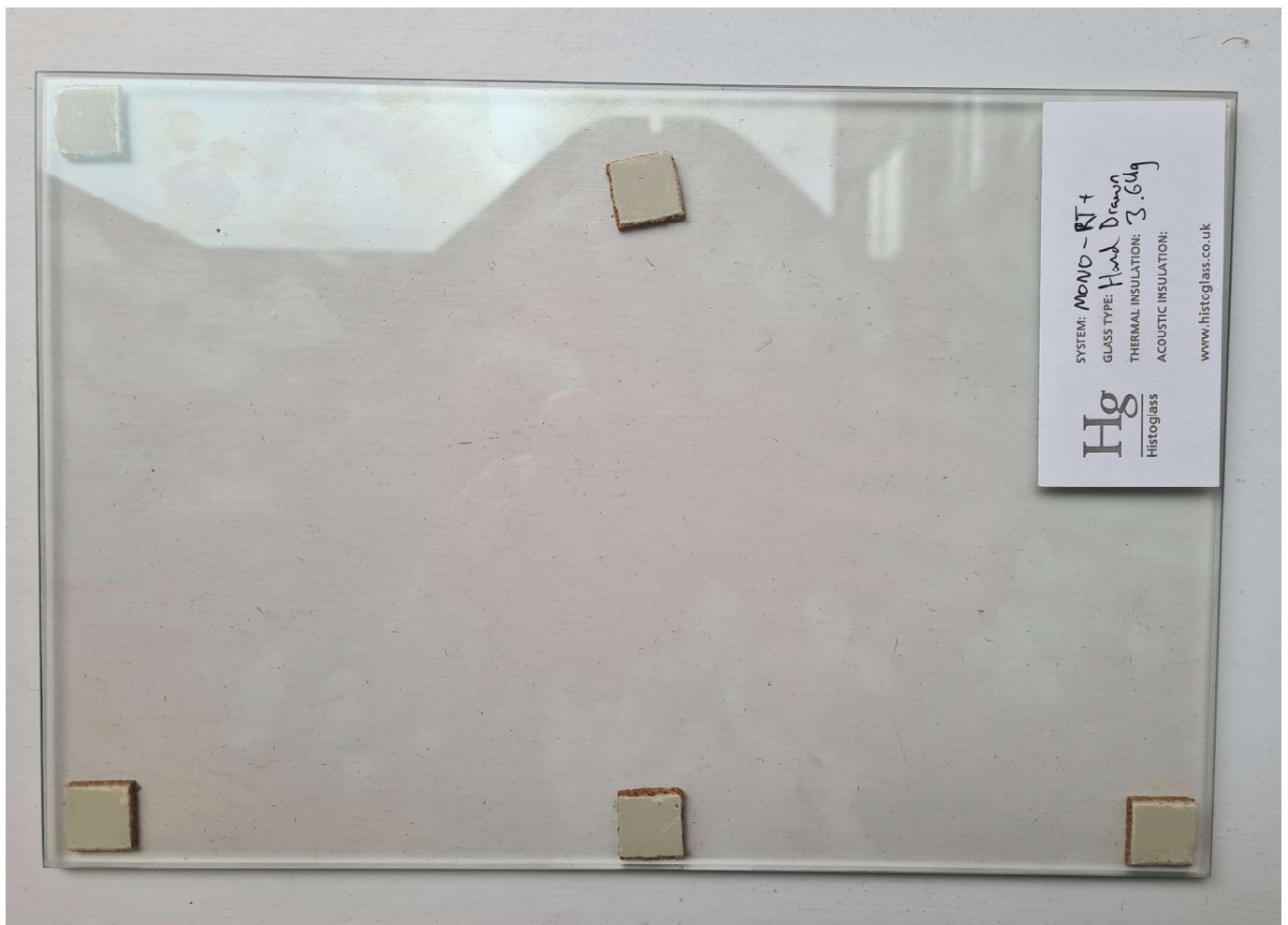


Photo: Sample of Histoglass

## MONO Systems

### MONO Systems

With many years of experience in the manufacture of glazing systems for historic windows, we have developed a product range which addresses the particular difficulties of upgrading the insulation in Georgian windows and other windows with narrow glazing bars: Histoglass MONO Systems. No edge seals and a very similar installation to that of conventional single glazing.

We have 2 versions: MONO Laminate and MONO RT+.

### MONO Laminate

- A laminate system with great acoustic and thermal performance
- Superb safety standards (see table below)
- Can be supplied with Hand Drawn, Cylinder and Float glass.

### MONO RT+

- Single pane 4mm
- Great thermal performance
- Only 4mm thick, so will always fit into the smallest existing rebates and has a similar weight to existing single glazing so existing pulleys and weights won't need adjusting
- Only available in Hand Drawn Glass

### Installation

Care is needed on installation as the high U-value is achieved by a special hardcoat on the room-facing side. This hardcoat can be damaged if it comes into contact with certain materials, specifically metal objects. We would not recommend installation in area where the panes are likely to get scratched like shop-front windows, class rooms, etc. If in doubt, please contact us to discuss your project. The hardcoat surface of the unit should always be installed room-facing.

For MONO Laminate we recommend bedding the units using Kawo Elastokitt. Please make sure to use plastic putty knives or spatulas to reduce the risk of scratching the coating. When decorating, let any spilled drops of paint dry and remove with a plastic spatula and use acetone to clean the pane.

MONO RT+ can be installed using linseed putty if preferred.

### Maintenance

- Total thickness of units starting at 10mm
- The only system of its kind to conform to all 6 parts of BS EN 1279
- Covered by a 7-year manufacturer's warranty
- Available with toughened and laminated glazing (subject to period type)
- To maintain our 7-year warranty, we supply Kawo Elastokitt bedding compound with all our glazing orders. Whilst this can also be used as a putty finish, we recommend linseed putty / glazing bead to achieve a more traditional look and feel.
- The aluminium spacer bar can be coloured in any RAL-colour to match the colour of the frames.

| System               | Standard single glazing      | MONO                                                                                                                                           | MONO RT+                    |
|----------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Thickness            | 3.5 mm                       | 8.9 mm                                                                                                                                         | 4 mm                        |
| Weight               | 7.5 - 12.5 kg/m <sup>2</sup> | 17.5 - 20 kg/m <sup>2</sup>                                                                                                                    | 10 kg/m <sup>2</sup>        |
| U-value              | 5.6 - 5.8                    | 3.6                                                                                                                                            | 3.6                         |
| Acoustic performance | -                            | 34dB                                                                                                                                           | -                           |
| Historic Glass Type  | -                            | Hand Drawn Mouth Blown Cylinder Glass or Float                                                                                                 | Hand Drawn                  |
| Safety glass*        | no                           | Laminated to <ul style="list-style-type: none"> <li>• Safety Pendulum Class 1B1 (BSEN 12600)</li> <li>• Safety P1A - P2A (BSEN 356)</li> </ul> | Can be toughened on request |

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Technical drawing of a window assembly cross-section. The drawing shows a central vertical mullion with a decorative top and bottom. On either side of the mullion are horizontal glass units. The left glass unit consists of a 4mm Low-E layer and a 4mm Genuine Hand Drawn Glass layer. The right glass unit consists of a 2mm Patented Film layer and a 1.5mm layer. The total height of the glass units is 10mm. The mullion has a top width of 14mm and a bottom width of 4mm. The glass units have a width of 5mm on each side of the mullion. The mullion has a decorative top and bottom with a width of 4mm at the narrowest point.

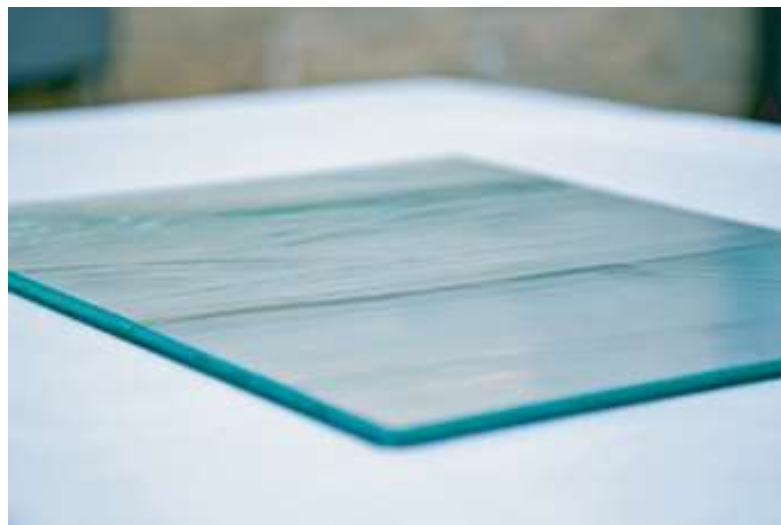
Technical drawing of a glass container, likely a cigarette holder or a small vial, showing dimensions and material specifications.

**Dimensions:**

- Top width: 14
- Top neck width: 4
- Bottom width (left): 5
- Bottom width (center): 4
- Bottom width (right): 5
- Right side height: 1.5
- Right side width: 2mm
- Right side material: Patented Film
- Right side thickness: 7
- Right side material: 8mm

**Material Specifications:**

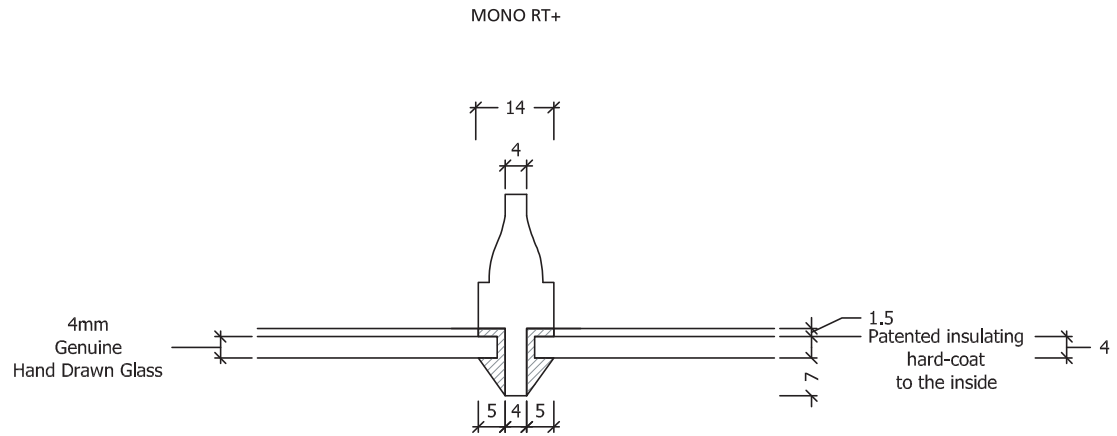
- 4mm Float with hard-coat
- 2mm Genuine Mouth
- Blown Cylinder Glass



Source: Histoglass Brochure - MONO Systems 2020

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# MONO RT+



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Simple, elegant design.