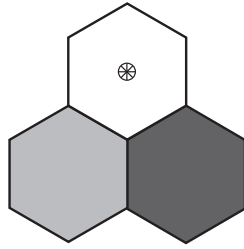




# THE DESOWOOD REPAIR SYSTEM



**DESOFIL**

# A GUIDE TO SPECIFYING THE DESOWOOD REPAIR SYSTEM FOR JOINERY REPAIRS

**A Complete Window Repair system**

February 2024



# THE DESOWOOD REPAIR SYSTEM

## THE COMPANY

DESOFIL (U.K) Ltd – supplies a complete system of products and tools for repairing timber windows affected by wood decay. The Desowood Repair System offers a cost saving alternative to complete window replacement.

As part of the back up support, the company specialises in providing consultancy and advisory service to Architects, Building Surveyors and maintenance professionals in the public and private sector, involved in the repair, maintenance, and conservation of timber joinery. The company is committed and dedicated to helping professionals achieve timber repairs of high quality and durability.

The company's commitment to quality is further extended to providing free practical training to contractors on site and offer training courses and Technical seminars for contractors and specifiers.

The focus is on improving the life of existing windows at a more cost-effective price compared to the traditional methods.

## THE DESOWOOD RANGE OF PRODUCTS

The Desowood range of products has undergone extensive laboratory tests over many years of research and development.

**Desowood SAP-4H** – is a two part product for use as the first “Primer coat” before completing the repair with Desowood RAP-4H.

**Desowood RAP-4H** – is used in conjunction with Desowood SAP-4H for completing all the joinery repairs.

**Desowood DAP** – is an elastic glazing sealant recommended as a durable alternative to traditional linseed oil putty.

## TOOLS

DESOFIL (U.K) Ltd – supplies an extensive range of cutting and finishing tools and ancillary products to allow every type of repair required on timber windows and doors.

## MACHINES

Desowood grinding machine allows fast removal of decayed wood.

Desowood Sander is ideal for thorough initial surface preparation and fast sanding of repairs before finishing.

## SERVICES FOR CONTRACTORS & SPECIFIERS

- ❖ Project Advice
- ❖ Written specifications
- ❖ Training for contractors
- ❖ Comprehensive technical information
- ❖ Before and after care service
- ❖ Practical demonstrations
- ❖ Technical Seminars.

### For further information please contact:

DESOFIL (U.K) Ltd, 3 Woodpecker Way, Sandy, Bedfordshire, SG19 2SQ.

Tel: 01767 682446 Fax: 01767 683898 Email: [sales@desofil-uk.com](mailto:sales@desofil-uk.com)

Web-site: [WWW.DESOFIL-UK.COM](http://WWW.DESOFIL-UK.COM)

# THE DESOWOOD REPAIR SYSTEM

## SPECIFYING JOINERY REPAIRS

- ❖ Before specifying the joinery repairs, an effective window inspection is essential. Please read repair work method - A
- ❖ Contact DESOFIL (U.K) Ltd – Tel: 01767 682446 for a free window inspection service, if necessary, or any other assistance required.
- ❖ Read the ‘General considerations before specifying the joinery Repairs’.
- ❖ Specify in full accordance with the DESOWOOD ‘Standard Specification’
- ❖ It is important to quantify the repairs as part of the specification. Please read repair work method - B
- ❖ Preventative maintenance is essential for long term prevention of wood decay.
- ❖ Do not change the full description of the repair work methods referred to in the ‘Standard Specification’.
- ❖ Details of the DESOWOOD trained contractors can be supplied on request or arrangements can be made to train your nominated or preferred contractor.
- ❖ For further technical advice please feel free to contact DESOFIL (U.K) Ltd.

## GENERAL CONSIDERATIONS BEFORE SPECIFYING JOINERY REPAIRS.

### A. CURATIVE MAINTENANCE.

- ❖ The repair of damaged or decayed wood.
- ❖ Repair or renewal of linseed oil putty, glazing beads etc.
- ❖ The extent of surface preparation, e.g., the removal of existing finish.
- ❖ The repair or renewal of perimeter sealant.
- ❖ To achieve long term durability of joinery repairs PREVENTATIVE measures should be taken as part of the Joinery repair specification.

### WHAT IS PREVENTATIVE maintenance?

Preventative maintenance involves undertaking additional repairs which may not be normally under taken during the joinery repairs.

The preventative measures are designed to achieve four main objectives:

1. To prevent or reduce future incidence of wood decay by preventing moisture Ingress.
2. To stabilise (or reduce the expansion or contraction of timber) the timber movement.
3. To enhance the durability of the protective coating.
4. To help prolong the life of joinery repairs undertaken as part of the CURATIVE maintenance.

The following preventative measures are recommended:

- a). Ensure effective sealing of all horizontal glazing lines.
- b). Introduce conservation joints.
- c). Ensure effective sealing of exposed end – grain.
- d). Round – off all round edges / arriss’.
- e). Ensure thorough surface preparation in full accordance with the repair work methods.

# THE DESOWOOD REPAIR SYSTEM

## SPECIFYING JOINERY REPAIRS USING THE DESOWOOD REPAIR SYSTEM

| Joinery Problem  | Type of Repair Required                                   | DESOFIL Repair Method | Yes | No |
|--|---|-----------------------|-----|----|
| Random inspection  |   | RWM-A                 |     |    |
| Quantify repairs   |   | RWM-B                 |     |    |
| Open joints or sealing of joints                                     | Conservation of joints of existing joinery                | RWM-C                 |     |    |
| Timber affected by wood decay (up to 400 cm <sup>3</sup> )           | Repair of decayed wood with DESOWOOD RAP-4H               | RWM-D                 |     |    |
| Repair of decayed wood (in excess of 400 cm <sup>3</sup> )           | Repair of decayed wood by 'splicing in timber'            | RWM-E                 |     |    |
| Cills are extensively affected by wood decay and require replacement | Replacement of entire cills affected by wood decay        | RWM-F                 |     |    |
| Breakdown of paint/stain on sharp edges                              | Rounding of sharp and weathered edges                     | RWM-G                 |     |    |
| Exposed end-grain or unprotected sides                               | Sealing of end-grain or unprotected sides                 | RWM-H                 |     |    |
| Breakdown of putty, perimeter sealant and glazing beads              | Renewal of putty/mastic on existing wood window and doors | RWM-I                 |     |    |
| Putty and/or glazing beads require replacement                       | Renewal of glazing beads and putty                        | RWM-J                 |     |    |
| Weather boards on doors require repairing or renewing                | Repair and renewal of weather boards on doors             | RWM-K                 |     |    |
| Ingress of moisture through horizontal glazing lines                 | Sealing of internal horizontal glazing lines              | RWM-L                 |     |    |
| Timber Knots   | Repair of Knots   | RWM-M                 |     |    |
| Splits and Cracks  | Repair of Splits and Cracks in timber                     | RWM-N                 |     |    |
| Repairs with timber insert   | Repairs using Resin with timber inserts                   | RWM-O                 |     |    |

Select the **DESOWOOD** Repair work method required.

- ❖ Delete the **DESOWOOD** Repair work methods which are inapplicable in the 'Standard Specification'.
- ❖ Use the 'Standard' Specification to Specify the **DESOWOOD REPAIR SYSTEM**.
- ❖ Modify the 'Standard' Specification clauses as appropriate.
- ❖ Decide on the number, the type and size of repairs required.
- ❖ For the type of repairs not covered by the 'Standard' Specification contact **DESOFIL (U.K) Ltd, Tel: 01767 682446, Fax: 01767 683898**  
**E-mail: sales@desofil-uk.com**

# THE DESOWOOD REPAIR SYSTEM

## A 'STANDARD' SPECIFICATION OF THE DESOWOOD REPAIR SYSTEM

Specification for the repair of timber joinery affected by wood decay using the DESOWOOD REPAIR SYSTEM.

### Contractor

The contractor shall note that the repair methods specified are to be carried out in full accordance with the DESOWOOD REPAIR SYSTEM.

For all technical information and appropriate Health & Safety Data sheets please contact:

DESOFIL (U.K) Ltd  
3 Woodpecker Way,  
Sandy,  
Bedfordshire,  
SG19 2SQ.  
Tel: 01767 682446  
Fax: 01767 683898  
E-mail: sales@desofil-uk.com

Contractors are strongly advised to contact DESOFIL (U.K) Ltd, who will provide all the necessary on-site training of the operatives and advice on the use of their products and tools before commencing work.

Operatives carrying out the work must familiarise themselves with the health & safety precautions necessary and the appropriate repair work methods before commencing work.

The Desowood Repair System is designed to allow appropriate preventative and curative measures to be taken to enhance the long term durability of joinery repairs.

### Desowood Range of Products

**Desowood SAP-4H** – is a two part products for use as the first “Primer coat” before completing the repair with Desowood RAP-4H.

**Desowood RAP-4H** - is used for completing all the joinery repairs.

**Desowood DAP** – is an elastic glazing sealant recommended as a durable alternative to traditional linseed oil putty.

# THE DESOWOOD REPAIR SYSTEM

## Recommended Tools

Application knives, Perspex strips, high speed sander, moisture meter, mixing cup and brush, disposable brushes, Desowood grinding machine, cutters, dispensing gun RAP-4H, dispensing gun DAP, scraper, mixing plate, Desowood wipes, disposable nitrile gloves, and 'before & after work' hand protection cream.

## Health & Safety

### Personal Protection Equipment

Wear nitrile gloves when handling and applying Desowood range of epoxy resins. Always avoid resin contact with the skin. Change gloves regularly and do not re – use gloves after contact with the resin. Wear eye protection and gloves when mixing and applying Desowood SAP-4H.

Wear eye protection whilst cutting out decayed wood with the grinding machine.

Wear fine dust mask and eye protection during sanding. Avoid 'sanding dust' contact with skin.

Always wear head and eye protection when working above eye level.

### Preparation

1. Remove paint at least 10mm from the vicinity of the repair. Ensure that the timber surface is sanded back to bare shiny wood.
2. Remove all the decayed and 'soft' timber using the Desowood grinding machine and the Round cutter. Avoid leaving a 'feather – edge'; create a 'shoulder' of at least 5 – 10mm.
3. Ensure that the moisture content of the timber is below 18%. Check the moisture content using the moisture meter.
4. If the timber is too wet, it should be allowed to dry naturally or force dry at 60 – 80 degrees centigrade.
5. Sand off any loose fibres. Ensure that the surface is free of any dust, dirt and surface contamination.

### Application

1. Mix component A and B of Desowood SAP-4H in ratio of 1:1 by volume in a mixing cup and stir thoroughly using a brush. Apply the mixed liquid liberally to the affected area. If using a 'Timber Splice' apply Desowood SAP-4H to all contact surfaces and any exposed end-grain.
2. Allow Desowood SAP-4H a minimum of 15 minutes to penetrate and up to 4 hours maximum. Remove any excess liquid using a dry brush.
3. Dispense the required quantity of Desowood RAP-4H using the dispensing gun/RAP-4H. Mix until there are no streaks of Brown or Yellow colour. Spread Desowood RAP-4H thinly on the mixing plate.
4. Work the Desowood RAP-4H well into the surface and complete the repair. Use Perspex strips to achieve a straight edge. Where 'Timber Splicing is involved, ensure that there is a minimum bed of 5mm of Desowood RAP-4H.
5. Create a smooth surface. Remove any excess product.
6. Paint finish: Desofil (U.K) Ltd recommends the Dulux Exterior Weathershield System. The Weathershield preservative primer only needs to be applied to bare timber. Allow a minimum of 24 hours to dry at 20 degrees centigrade. The drying time can vary considerably depending on the temperature. Allow the product to dry completely before sanding and finishing.

### Finishing

1. When the Desowood RAP-4H is completely dry, remove any Perspex strips and sand the affected area to a smooth even finish and to give a 'Key' to the decorative coating.
2. Apply the specified finish. The Weathershield preservative primer should only be applied to the

# THE DESOWOOD REPAIR SYSTEM

## AREAS WHERE JOINERY REPAIRS ARE REQUIRED

All repairs specified below are to be carried out to the defined areas in full accordance with the DESOWOOD REPAIR SYSTEM.

### A. RANDOM INSPECTION

It is advisable to carry out a random inspection prior to commencing work in accordance with DESOWOOD repair work Method RWM-A.

### B. QUANTIFYING JOINERY REPAIRS

Quantifying joinery repairs accurately for pricing purposes is important for achieving quality repairs and should be done in accordance with DESOWOOD repair work method RWM-B.

### C. CONSERVATION OF JOINTS ON EXISTING TIMBER JOINERY REPAIR METHOD RWM-C

Effectively seal all joints using the DESOWOOD grinding machine, a Round cutter, DESOWOOD SAP and DESOWOOD RAP-4H in accordance with RWM-C.

Scope of work:

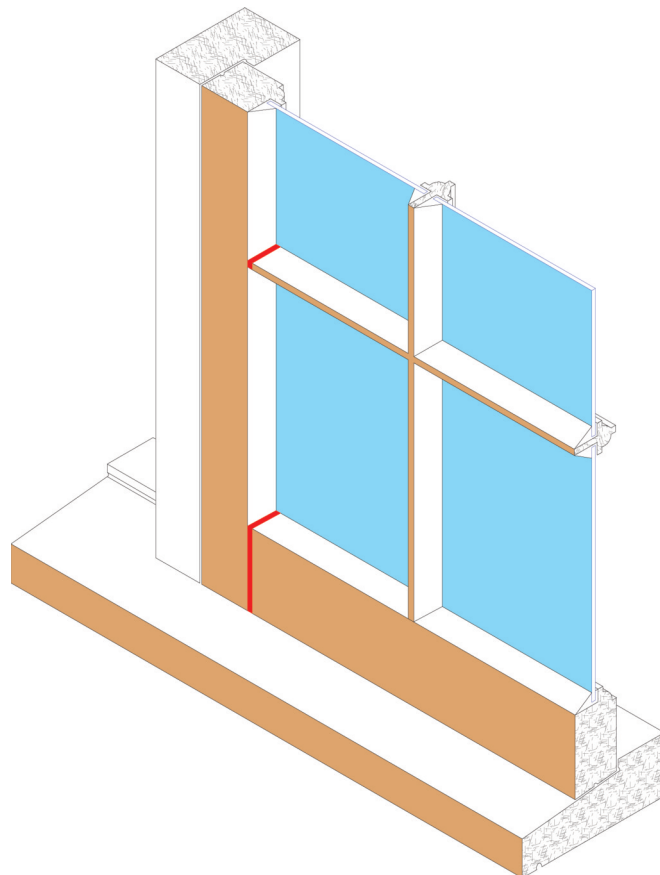
Size of Repair

<50mm

<100mm

<200mm

Total No. of Repairs



# THE DESOWOOD REPAIR SYSTEM

## D. REPAIR OF DECAYED WOOD WITH DESOWOOD RAP-4H REPAIR METHOD RWM-D

Repair all areas affected by wood decay (up to 400 cubic cm) using the DESOWOOD grinding machine, a Round cutter, DESOWOOD SAP-4H – surface adhesion promoter, and DESOWOOD RAP-4H in accordance with RWM-D.

Scope of work:

Size of Repair

<100 cubic cm

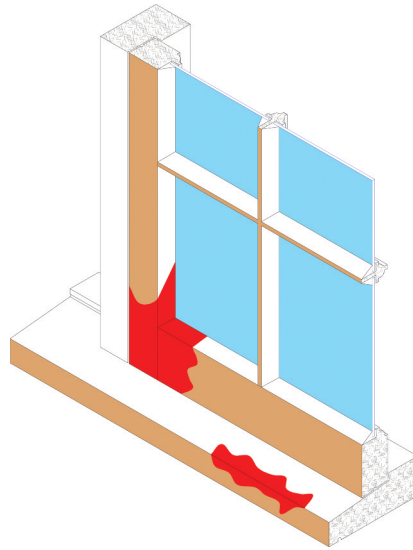
<200 cubic cm

<300 cubic cm

<400 cubic cm

<600 cubic cm

Total No. of Repairs



## E. REPAIR OF DECAYED WOOD BY 'SPLICING IN TIMBER' REPAIR METHOD RWM-E

Areas affected by in-situ wood decay exceeding 400 cubic cm.

Repair all areas using the DESOWOOD grinding machine, a Round cutter, DESOWOOD SAP-4H – surface adhesion promoter, DESOWOOD RAP-4H in accordance with RWM-E

'Splice- in Timber' as appropriate.

The new timber should be vacuum impregnated with a solvent based preservative and allowed time to dry completely. Ensure that the moisture content is below 18%.

Scope of work:

Size of Repair

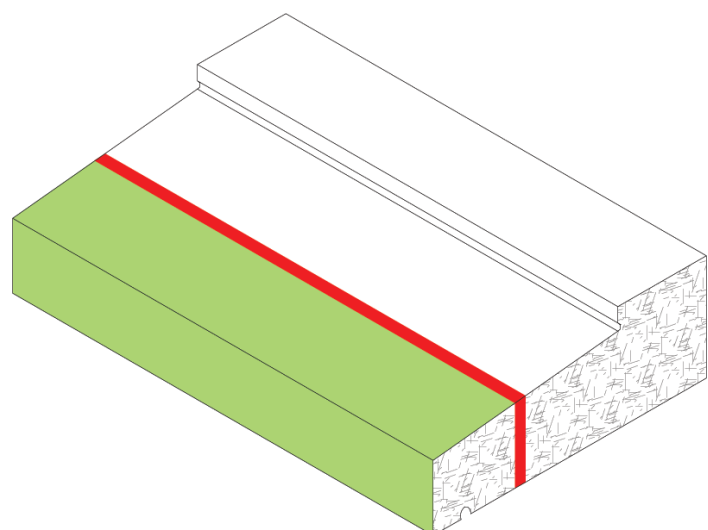
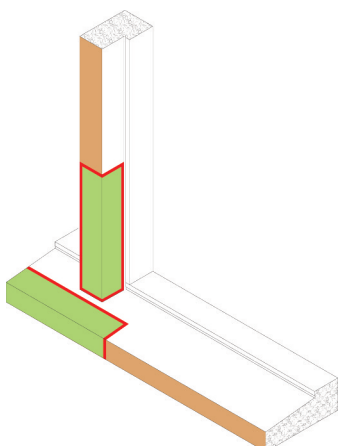
<200mm

<500mm

<1000mm

>1000mm

Total No. of Repairs





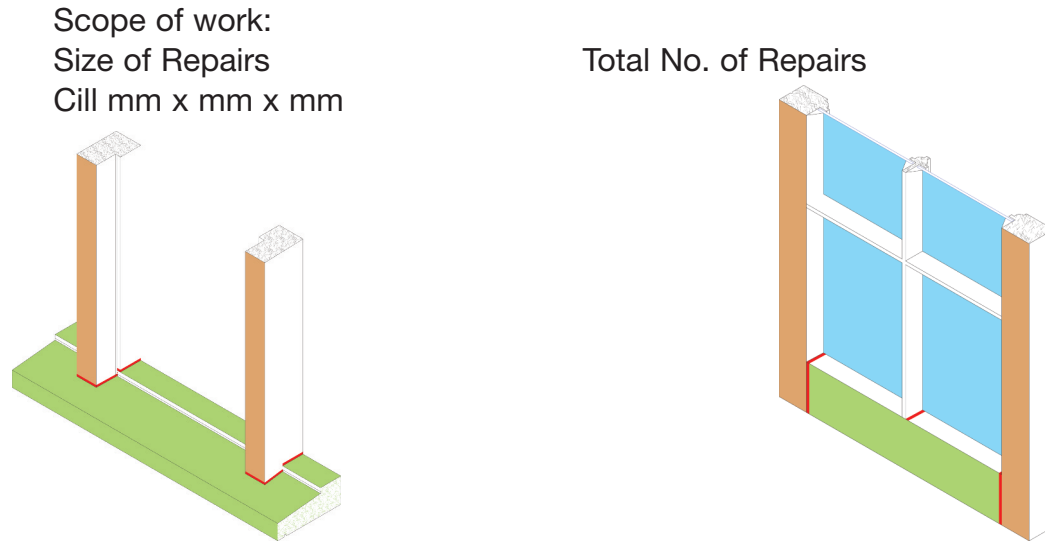


# THE DESOWOOD REPAIR SYSTEM

## F. REPLACEMENT OF ENTIRE CILL AFFECTED BY WOOD DECAY REPAIR METHOD RWM-F

Remove the existing cill completely or as appropriate. Remove any residual wood decay using the DESOWOOD grinding machine, and a Round cutter.

Fix the new cill using DESOWOOD SAP-4H – a surface adhesion promoter and DESOWOOD RAP-4H in full accordance with Repair work method RWM-F.



## G. REPAIR OF SHARP AND WEATHERED EDGES/ARRISS REPAIR METHOD RWM-G

Round off the sharp edges / arriss' on all horizontal cills in accordance with RWM-G

Scope of work:  
Size of Repairs  
Metres

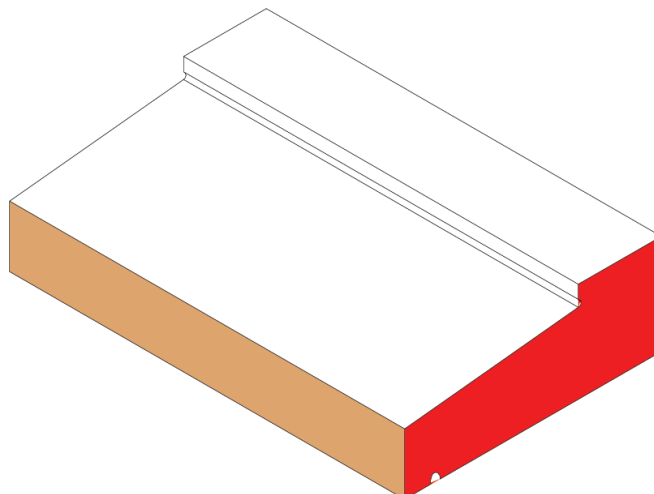
Total No. of Repairs

## H. SEALING OF END-GRAIN AND UNPROTECTED SIDES REPAIR METHOD RWM-H

Seal all exposed end- grain using DESOWOOD SAP-4H and DESOWOOD RAP-4H in full accordance with RWM-H.

Scope of work:  
Size of Repair  
mm x mm

Total No. of Repairs





# THE DESOWOOD REPAIR SYSTEM

## I&J. RENEWAL OF PUTTY / MASTIC / GLAZING BEADS / PERIMETER SEAL REPAIR METHOD RWM-I&J

Remove completely / partially the linseed oil putty / mastic affected by breakdown.

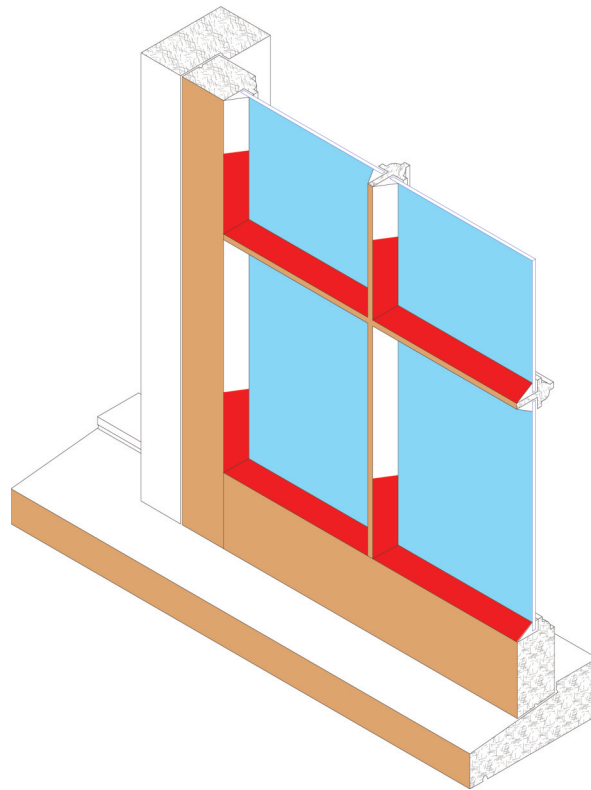
Apply DESOWOOD DAP- an elastic glazing sealant in full accordance with the appropriate section of the RWM-I & RWM-J.

Scope of work:

Size of Repairs

mm x mm x Metres

Total No. of Repairs



## K. FIXING NEW WEATHER BOARDS ON DOORS REPAIR METHOD-RWM-K

Fix new weather boards to exterior doors (as specified) in full accordance with the appropriate section of Repair work method RWM-K.

Scope of work:

Size of Repairs

Metres

Total No. Repairs

## L. SEALING OF INTERNAL HORIZONTAL GLAZING LINES REPAIR METHOD RWM-L

Remove the glazing putty and / mastic along the horizontal glazing lines to a depth of 4mm – 8mm, and take it to the vertical, up to 300mm, in full accordance with the DESOWOOD RWM-L.

\* Modification to the DESOWOOD Repair work methods is not recommended.



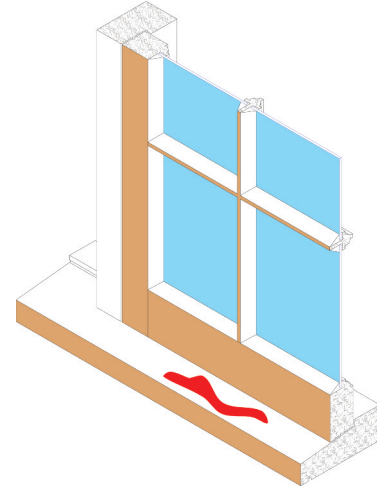


# THE DESOWOOD REPAIR SYSTEM

## M. Repair of Knots in timber. Repair Method RWM-M

Remove the knot completely using the grinding machine and the Round cutter. Check that the moisture content is below 18%. Complete the repair in full accordance with Repair work method – RWM- D

Quantify the number of knots.

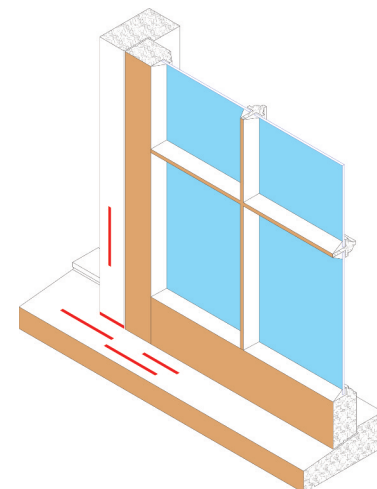


## N. Repair of splits / cracks in timber. Repair Method RWM-N

Cut open the crack using the grinding machines and the round cutter to a depth and width of 10mm. Cut to 10mm from beyond each end of the of the crack.

Complete the repair in full accordance with the Repair work method – RWM- D.

Quantify the length and number of cracks. Price in accordance with RWM – C



## O. Repairs using timber inserts. Repair Method RWM-O

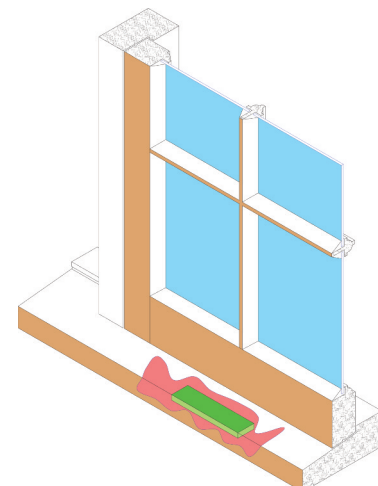
Carry out the preparation of the timber in accordance with RWM – D.

Ensure that all contact surfaces are free of dust, paint and general surface contamination.

Apply Desowood SAP-4H to the affected areas and leave for at least for 15 minutes for Desowood SAP-4H to penetrate.

The insert should be cut in such a way as to allow a minimum of 10 mm bed of Desowood RAP-4H on all sides of the insert.

Apply a thin coat of Desowood RAP-4H to the end –grain of the insert before putting the insert in place.



# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM – A

### Window Inspection

A systematic method of window inspection is the first important step for effective identification of the requirement for curative and preventative maintenance.

For a free window inspection service, please call DESOFIL (U.K) Ltd –Tel: 01767 682446 Fax: 01767 683898 E-mail: sales@desofil-uk.com

The following is important during any window inspection:

1. Check the condition of the existing finish. Does the existing finish require partial or complete removal prior to refinishing? Any special surface treatment required for algal growth, de-natured wood, decayed wood, resin exudation?
1. Check the condition of the glazing. Does the putty or glazing beads require partial or complete replacement?
3. Are there any open joints? Is there any wood decay around the joints? Should all the construction joints be sealed in accordance with the “Conservation Joint” as part of preventative maintenance?
4. Check for the presence of wood decay. Identify the affected areas. Are the affected areas to be repaired with resin only? Are there any larger areas affected by wood decay and requires repairs by “timber splicing with the resin”?
5. Are there any cills which require partial or complete replacement? Are there any weathered cills? Are there any projecting cills with exposed end-grain which require sealing? Does the exposed end-grain on the tops and bottoms of the sashes and casements require sealing?
6. Does the sharp edges / arriss’ require “Rounding- off”
7. Is there a need to repair or replace weather boards on the doors?
8. Do the windows suffer from internal condensation? Is there a need to seal internal horizontal glazing lines?
9. Is there any need for replacement of iron – mongery?
10. Is there any need for easing and adjusting the windows for ease of opening?
11. Is there any need for installing any draught – proofing for windows and doors?
12. What is the finishing specification?
13. Are there any other problems which require attention, e.g. concrete repairs to concrete cills and lintels?
14. Is there any need to improve security on windows and doors?
15. How best can the identified repairs be incorporated into a specification? Refer to “Standard specification” Available from DESOFIL (U.K) Ltd.
16. To work out the projected cost of joinery repairs – please refer to the “Guide for calculating the cost of joinery repairs” available from DESOFIL (U.K) Ltd.
17. A test sample is always advisable to set quality standard before commencing repair work.

# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM – B

### Quantifying Joinery Repairs

Quantifying joinery repairs is an essential part of the specification. The quantities of repairs allows the specifier to accurately estimate the projected cost of joinery repairs before finalising the specification, and before the contract is put out to tender. The quantities of repairs can help control the cost and can assist the contractors to accurately estimate the cost of joinery repairs.

The repairs can be quantified as follows:

#### 1. Conservation Joints

Measure the length of construction joints in mm. Specify the number of joints for each length, e.g. 50mm = 60, 100mm = 40, 150mm = 20

#### 2. Repair of areas affected by wood decay with Resin only repairs

Work out the volume of repair – length x width x depth in cubic centimetres, and specify the total Number of repairs for each size, e.g.

100 cubic centimetres = 20, 200cubic centimetres = 30 etc

#### 3. Repair of decayed wood by “Splicing in timber”

Work out the size of each splice to allow a minimum bed of 5mm of resin between the old and new Timber. Specify the size of each splice in mm x mm x mm and the total number of splices for each size.

e.g. 75mm x 50mm x 200mm = 12, 25mm x 40mm x 300mm = 25 etc.

#### 4. Replacement of Entire Cills

Work out the size of the cill to allow a minimum bed of 5mm of Resin on all contact surfaces. Specify the size of each cill mm x mm x mm and the total number for each size.

e.g. 75mm x 40mm x 1500mm = 9

#### 5. Repair of sharp and weathered edges / arriss

Quantify in metres

#### 6. Sealing of End-Grain and unprotected sides

Measure each end-grain in mm x mm and specify the total number.

#### 7. Renewal of Putty / mastic / Glazing Beads

For putty, measure the size of the rebate in mm x mm. Specify the total length in metres.

For the glazing beads, specify the size in mm x mm and the total length in metres.

#### 8. Fixing Weather Boards on the Doors

Specify the size in mm x mm and the total length in metres.

#### 9. Sealing of Internal Horizontal glazing lines

Specify the total length in metres

#### 10. Calculating the Cost of joinery repairs

Refer to the “Guide for calculating the cost of joinery repairs” available from DESOFIL (U.K) Ltd  
Tel: 01767 682446

# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM-C

### Conservation of Wooden Joints on Existing Joinery

1. Remove the existing finish around the joint. Ensure that up to a minimum of 10mm from the vicinity of the joint, the timber is sanded back to bare shiny wood.
2. Cut open the existing joint to a width of 10mm and a depth of 10mm with the Desowood grinding machine using a Round Cutter.
3. Sand the “Open Joint” using medium grade abrasive paper and remove the dust/dirt completely.
4. If the moisture content of the wood is above 18%, blow dry the joint using a Hot Air Blower at a temperature of 60-80°C.

Use the Desowood moisture meter to check the moisture content.

5. Mix the required quantity of Desowood SAP-4H – a surface adhesion promoter in the correct ratio.

Apply the Desowood SAP-4H well into the joint using a small brush. Wipe off the excess Desowood SAP-4H

Leave for 15 minutes before sealing the “Open Joint” with Desowood RAP-4H

Work the Desowood RAP-4H into the seam and seal the joint.

Allow the Desowood RAP-4H to dry for at least 24 hours at 20°C

The drying time may take 2-3 days at lower temperatures.

Use the Desowood Scraper to remove to ‘excess’ cured Desowood RAP-4H if necessary.

Sand the sealed joint to a smooth, even finish.

Remove dust/dirt

Apply the decorative/protective paint finish

- ❖ Wooden joints affected by excessive insitu wood decay-Continue to cut out the decayed wood until sound timber is reached.
- ❖ Check that the moisture content of the timber is below 18% before applying the Desowood SAP-4H / Desowood RAP-4H.

A test application is advisable before commencing work.

# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM - D

### Repair of Decayed Wood with DESOWOOD SAP-4H / RAP-4H

1. Desowood SAP-4H / RAP-4H allows insitu repair of timber affected by wood decay. It is advisable to take into account the strength of the construction after repair. For example, in situations where the timber is “load bearing”, it may be appropriate to use timber splice in accordance with Desowood Repair Work Method –RWM - E
2. Remove all decayed wood with the Desowood grinding machine using the Round Cutter. Continue to remove the decayed wood until sound timber is reached.  
The sound timber can be recognised by the high pitch sound of the Desowood grinding machine; it is generally of larger structure of uniform colour.
3. Lightly sand the surface of the timber using a medium grade abrasive paper. Check that the moisture content is below 18% using the Desowood moisture meter.  
Apply hot air using a Hot Air Blower at 60-80°C.  
Avoid burning the timber fibres, this ensures good adhesion of Desowood SAP-4H / RAP-4H
4. Ensure that the adjoining paint system is removed up to 10mm from the vicinity of the repair.
5. Mix the required quantity of Desowood SAP-4H in the correct ratio.  
Apply the Desowood SAP-4H well into the surface using a small brush. Wipe off any excess Desowood SAP-4H.  
Leave for 15 minutes before applying the Desowood RAP-4H.
6. Mix the Desowood RAP-4H thoroughly until a “butter-like” mass of homogeneous colour is achieved.
7. Apply the Desowood RAP-4H using a plastic application knife available from DESOFIL (U.K) Ltd. For more complex repairs use Perspex plates for “shuttering.”
8. Apply hot air to the surface of Desowood RAP-4H for a few minutes. This is optional and is only recommended at times when wet weather can be anticipated or application at low temperatures.  
Ensure that the Desowood RAP-4H is completely dry (normally 4 hours are required at 20 degrees centigrade and longer periods when applied under low temperature conditions).
9. Use the Desowood Scraper to remove ‘excess’ cured Desowood RAP-4H.
10. Sand the repaired areas lightly to achieve an even, smooth surface before painting with an alkyd or water-based paint system.

A test application is advisable before commencing work.

# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM -E

### Repair of Decayed Wood by “Splicing In Timber”

Cut out the decayed wood at an angle of 75° until the sound timber is reached. The decayed timber may be cut using a saw, chisel or Desowood grinding machine.

The strength of the construction after repair should be taken into account. In situations where the timber is “load bearing”, the use of steel reinforced rods may be necessary.

For normal repair by “splicing in timber”, follow the procedure below:

1. Prepare the new timber splice (moisture content < 18%) in such a way that there is a seam/gap of at least 5 mm between the contact areas, use the Desowood moisture meter to measure the moisture content.
2. If the contact areas of the existing wood have a moisture content of over 18%, blow dry the affected area using a hot air blower at a temperature of 60-80°C. Strip the existing paint finish up to at least 10mm from the joint on existing timber.

Ensure that the new timber is left clean and un-primed during the fixing process.

3. Apply Desowood SAP-4H – surface adhesion promoter to the end grain of the existing timber and the new timber splice using a brush. Work the Desowood SAP-4H well into the surface. Leave for about 15 minutes.

Apply Desowood RAP-4H on all areas of contact (already treated with Desowood SAP-4H).

Use a 5 mm “spacer” at the joint and secure the new timber splice in position using a Perspex fixing plate. Fill the “joint” with Desowood RAP-4H and smooth the surface using a plastic application knife.

Avoid any surface irregularities.

4. Allow at least 4 hours drying at 20°C before any surface sanding and subsequent painting.

At lower temperatures allow a longer period of time for Desowood RAP-4H to dry.

The fixing plate can be removed when the Desowood RAP-4H has dried completely.

Use the Desowood Scraper to remove ‘excess’ cured Desowood RAP-4H.

Sand the Desowood RAP-4H lightly. Remove dust/dirt before painting with an alkyd or water-based paint system.

A test application is always advisable before commencing work.



# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM - F

### Replacement of Entire Styles/Sills Affected by Wood Decay

1. Remove the decayed style/sill. Check if the contact areas of the existing wood are affected by wood decay. Remove all the decayed wood using a Desowood grinding machine until sound timber is reached.
2. If the contact areas of the existing wood have a moisture content above 18%, blow dry the surface using a hot air blower at a temperature of 60-80°C, use the Desowood moisture meter to measure the moisture content.
3. Remove the existing paint to at least 10mm from the joint.
4. Cut the new style/sill to a size to allow a 5 mm seam/gap at each contact point. Apply a coat of decorative/protective finish all around before fixing. A dry thickness of 40 microns of the protective finish is recommended.

Ensure that the meeting surfaces of the existing timber and the new timber is left clean and un-primed during the fixing process.

The painting of the end-grain is not necessary in view of the water sealing capacity of Desowood RAP.

5. Wet the contact areas of the existing and the new wood using the Desowood SAP-4H – a surface adhesion promoter with a brush. Work the Desowood SAP-4H well into the surface. Leave for about 15 minutes. Apply Desowood RAP-4H on all areas of contact (already treated with Desowood SAP-4H).
6. Insert the new style/sill using a 5 mm “spacer” at the joint and secure the new timber position using the Perspex fixing plate.  
Fill the “joint” with Desowood RAP-4H and smooth the surface with a plastic application knife. Avoid any surface irregularities.
7. Allow at least 4 hours drying time at 20°C before any surface sanding and subsequent painting. At lower temperatures, allow a longer period of time for Desowood RAP-4H to dry.  
The fixing plates can be removed when the Desowood RAP-4H has dried completely.  
Sand the Desowood RAP-4H lightly. Remove dust/dirt before painting with an alkyd or water based paint system.

Use the Desowood Scraper to remove ‘excess’ cured Desowood RAP-4H.

A test application is always advisable before commencing work.

## THE DESOWOOD REPAIR SYSTEM

### DESOWOOD REPAIR WORK METHOD – RWM - G

#### Rounding of sharp and Weathered Edges

1. Inspect the sides of the styles and sills for sharp and weathered edges.
2. Round the horizontal and vertical edges using the Desowood sander.
3. Take appropriate action to ensure a smooth and round edge is achieved.  
A test application is advisable.
4. After rounding the edges there should not be any grey spots / areas in the wood.
5. If, during the rounding of sharp edges, there are raised wood fibres or holes, this is generally due to the sanding action against the direction of wood grain. Working in the opposite direction will reduce/prevent the problem.
6. If the moisture content of the wood is high, blow dry the timber using a hot air blower before rounding the edges, use the Desowood moisture meter to measure the moisture content.
7. After rounding the edges, sand lightly with a fine abrasive paper. Remove dust/dirt before finishing.

A test application is always advisable before commencing work.

### DESOWOOD REPAIR WORK METHOD –RWM - H

#### Sealing of End-Grain and Unprotected Sides

1. First check the quality of the end-grain/unprotected sides with a mirror (if necessary).  
Check if there is any presence of “soft” wood or decay.
2. If the wood is only grey or cracked, use the Desowood grinding machine with the Round Cutter to remove any decay. Continue to cut until sound timber is reached. Remove dust and dirt.
3. Apply the Desowood SAP-4H with a brush. Work the Desowood SAP-4H well into the surface.  
Leave for 15 minutes before repairing the timber with Desowood RAP-4H.
4. If the extent of damage to the unprotected timber is too severe, it may be necessary to replace the timber.
5. Seal all exposed end-grain using Desowood SAP-4H / Desowood RAP-4H. Ensure that the surface of the end-grain is clean, dry and that the moisture content is below 18%.  
Use the Desowood moisture meter to measure the moisture content.  
If the moisture content is above 18%, blow dry the surface using a hot air blower at a temperature of 60-80°C
6. Allow the Desowood SAP-4H / RAP-4H to dry completely (24 hours at 20°C) before finishing.  
At low temperatures, allow the Desowood SAP-4H / RAP-4H up to 2-3 days drying time before finishing.

A test application is always advisable before commencing work.

# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM - I

### Renewal of Glazing Putty/Mastic on Existing Wooden Windows and Doors

Before commencing work, all timber repairs should be carried out with the appropriate Desowood Repair Work Methods.

The existing putty/mastic should be removed with care to prevent breakage of glass.

#### 1. Face Glazed/Putty Glazed Windows and Doors

##### a) Partial Renewal Of Existing Putty/Mastic

Completely remove the existing putty/mastic affected by the breakdown on the horizontal glazing line and take it 150mm to the vertical. Lightly sand the rebate using a medium/fine grade abrasive paper. Remove dust. Degrease the affected area using cellulose thinner applied with a lint free cloth.

Allow the surface to dry completely. Apply a fast drying primer to the rebate and allow it to dry completely. Apply Desowood DAP – an elastic Glazing Sealant available from DESOFIL (U.K) Ltd

Cut the nozzle of the Desowood DAP tube at 45° angle. Dispense the Desowood DAP with a sealant gun available from DESOFIL (U.K) Ltd.

Use a Desowood DAP applicator to achieve a smooth finish. Remove any excess Desowood DAP.

##### b) For Complete Renewal of Putty/Mastic

Remove the existing putty/mastic completely and follow the procedure outlined in a) above.

#### 2. Bead Glazed Windows and Doors

Bead glazed windows and doors affected by the breakdown of existing putty/mastic.

Rake out the perished putty/mastic to a depth of 4-8mm on the horizontal glazing line and take it 150mm to the vertical. Remove all dust/dirt and degrease the affected area with cellulose thinner.

Allow the degreased area adequate time to dry completely.

Apply the Desowood DAP with a sealant application gun. Work the Desowood DAP well into the joint. Use a Desowood DAP Applicator to achieve a smooth finish.

#### 3. Renewal of Perimeter Sealant

Remove the existing perimeter sealant. Lightly sand the affected area using a medium/fine grade abrasive paper. Remove dust. Degrease the surface using cellulose thinner; allow the surface to dry completely.

Apply the Desowood DAP with a sealant application gun. Use a Desowood DAP applicator to achieve a smooth finish.

In all cases, allow at least 48 hours before painting. Ensure that the moisture content of the timber is below 18% before applying the Desowood DAP. Use the Desowood moisture meter to measure the moisture content.

A test application is always advisable before commencing work.

# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM - J

### Renewal of Glazing Beads and Putty

#### Glazing Beads

The glazing bead should be of the correct size. The width of the glazing bead should be measured to allow a minimum of 2mm gap between the glass and the bead. The design of the bead should be such as to have a good water-shedding profile and rounded edge.

The glazing bead should be constructed from Douglas Fir (if softwood) and vacuum impregnated with an organic solvent bases preservative pre-treatment. The pre-treatment should be allowed to dry completely before finishing.

Apply one coat of the decorative finish all around before fixing.

The glazing bead should be flush in line with the vertical/horizontal rail.

When cross-cutting the bead, treat the end-grain with a fast drying solvent based primer.

Bed the glazing bead in Desowood DAP. Set a distance of 2mm between the glass and the bead.

Place the fixing at the 100mm distance from each end and approximately 150mm there after.

Gun-in the Desowood DAP into the gap between the glass and the bead.

Smooth to an even finish using the Desowood DAP Applicator. Remove any excess Desowood DAP

Ensure that the gap between the rebate and the bottom of the bead is completely sealed as well as the gap between the glass and the bead.

Allow a gap of 5mm between the horizontal and the vertical bead. Fill the gap with Desowood DAP.

Thoroughly remove any surplus Desowood DAP from the surface of the timber and glass.

Allow the Desowood DAP at least 48 hours before finishing.

- ❖ Counter-sink the fixings. Fill the fixing holes with Desowood DAP.
- ❖ Ensure that the moisture content of the timber is below 18% before applying the Desowood DAP. Use the Desowood moisture meter to measure the moisture content.

#### Puttied Windows

Remove the existing putty carefully (without breaking the glass) from the horizontal glazing line and up 150mm to the vertical. Remove the putty from the rebate completely. Sand the rebate with a medium grade abrasive paper. Remove the dust/dirt and degrease the surface by wiping it with a lint free cloth using white spirits or preferably a cellulose thinner. Allow the surface to dry completely before the applying the Desowood DAP.

- ❖ Where possible it is beneficial if the rebate can be primed using a solvent based fast-drying primer prior to glazing with Desowood DAP.

A test application is always advisable before commencing work.

# THE DESOWOOD REPAIR SYSTEM

## DESOWOOD REPAIR WORK METHOD – RWM - K

### Repair and Renewal of Weather Boards on Doors.

#### Doors - Weather Boards

On existing weather boards which are in sound condition, cut open the joint between the weather board and the door to a depth of 10mm and 10 mm wide. Sand the groove with an abrasive paper. Remove dust and dirt.

Fill the gap with Desowood DAP

Allow Desowood DAP 48 hours to dry before refinishing.

When painting ensure that the exposed end-grain of the weather board is treated Desowood SAP / RAP

#### New Weather Boards to Doors

Bed the new weather board onto Desowood DAP. Ensure that the gap between the new weather board and the door is adequately sealed.

Counter-sink the fixings. Fill the fixing-holes with Desowood (in some instances it may be convenient to fill the fixing-holes with Desowood SAP-4H / RAP-4H).

Treat the exposed end-grain with Desowood SAP-4H / RAP-4H

Liberally apply Desowood SAP-4H. After 15 minutes, apply Desowood RAP-4H to a film thickness of 1-3mm to ensure a complete seal against moisture ingress.

Allow 24 hours before finishing. During low temperature conditions the drying period will be longer.

Ensure that the bottoms of the weather boards are adequately painted.

Ensure that the moisture content of the timber is below 18% before applying the Desowood DAP and / or Desowood SAP-4H / RAP-4H. Use the Desowood moisture meter to measure the moisture content.

A test application is always advisable before commencing work.

## DESOWOOD REPAIR WORK METHOD – RWM - L

### Sealing of Internal Horizontal Glazing Lines

Remove the cracked and de-adhered putty and / or mastic in the rebate to a depth of 4mm-8mm and up to 300 mm to the verticals with a sharp scraping knife e.g. Stanley knife or Fein machine with appropriate cutter where possible.

Clean the rebate and check for presence of "soft wood". If present, remove by light sanding.

Check that the wood moisture content is below 18% using the Desowood moisture meter.

Check that there is no presence of wood decay.

The groove and all the contact surfaces must clean and free of old putty, dirt, moisture and loose fibres before applying Desowood DAP.

Carefully clean the glass with a scraper. Sand the rebate and remove any dust thoroughly.

Pre-treat the wooden rebate with a fast drying Alkyd resin primer. Allow the primer to dry.

Apply Desowood DAP to the rebate. Press in Desowood DAP in such a way with the Desowood Applicator that there is a good contact with the glass and the rebate. Inclusion of air must be avoided.

Use the Desowood Applicator, to form a water-shedding profile with Desowood DAP.

Remove any cured Desowood DAP from the glass with a scraper.

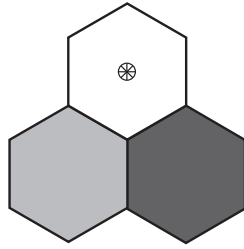
Allow Desowood DAP 48 hours to dry before re-finishing.

Apply the specified paint system.

A test application is always advisable before commencing work.



# THE DESOWOOD REPAIR SYSTEM



# DESOFIL

A COMPLETE SYSTEM FOR JOINERY REPAIRS  
FOR REPAIR, MAINTENANCE AND CONSERVATION OF TIMBER  
JOINERY



Bringing Elastic Technology  to the Surface of Wood Repair

