



# TRANSLUCENT (STAIN)

# JELD-WEN External Joinery finish Guide – Maintenance, Redecoration for hardwood and oak products

## When should redecoration be carried out?

6 year warranty – Full redecoration should be undertaken as the products near the end of the expected service life in this instance a maximum 6 years from receipt of delivery or sooner if products are in exposed/harsh climates etc. Regular inspection will determine if the local environmental climate has eroded the coating to a level that earlier redecoration is required.

2 year warranty – Full redecoration should be undertaken as the products near the end of the expected service life in this instance a maximum 2 years from receipt of delivery or sooner if products are in exposed/harsh climates etc. Regular inspection will determine if the local environmental climate has eroded the coating to a level that earlier redecoration is required.

Very dark colours are not recommended in areas exposed to prolonged heat. Where used they will require more frequent maintenance – regular inspection of these products will determine the need for redecoration.

We recommend that the more vulnerable areas i.e. sills, bottom beads & other horizontal surfaces are given a light coat of finish every couple of years (even if on inspection the finish is in good condition). A very light sand to clean the surface and an application of suitable finish will increase the service life in those areas which are prone to wear.

If you believe that there is a manufacturing defect with the product (including the finish) within the warranty period you should immediately report this to JELD-WEN Customer Care team email <u>siteservices@jeldwen.com</u>

#### What type of finish is our stain?

- Water based
- Micro porous
- Satin Finish

#### What should I use to redecorate the products?

• Micro porous/breathable wood stains. Example Ronseal 10 Year Woodstain

#### What is the best way to maintain the finish?

• Important

Render/Mortar & Plaster contamination if not removed immediately will cause irreparable damage to the finish and will nullify the warranty

Most modern finishing systems are designed to protect timber from the direct effects of the weather and the resulting small amount of timber movement can be tolerated by the finishing system. However in extremely hot dry weather sufficient moisture vapour maybe removed which on rare occasions may result in splits in the surface coating particularly at joints. Such movement is beyond the control of the manufacturer and therefore outside the warranty.

- Clean down the finish a minimum of every 6 months, do not use harsh cleaning chemicals or pressure washers. This process will be required more regularly in coastal/exposed locations and areas of high pollution etc.
- If there is any breach of protective coating resulting from scuffs, chips, dents, seasonal shrinkage etc. on any faces of the products installed, these must be recoated. We only recommend Micro porous / breathable paints and stains. These can be either acrylic (water) or alkyd (oil based).Waxes, Oils, dyes, polishes, lacquers and Varnish should not be used these will often result in discolouration of the timber.
- After cleaning if the finish to the lower horizontal surfaces (typically bottom beads and sill nosings) look a little flat/dull then lightly sand the areas with a fine sandpaper or sanding pad.



- Clean down and apply a coat of suitable exterior stain (follow the manufacturers recommendations) to refresh the finish. Test the colour match in a small relatively 'hidden' area first to ensure a suitable colour match.
- Suggested Redecoration Cycles these depend on not only the location but also on the climate coastal near industrial areas etc. The more frequently redecoration is carried out the longer the service life that will be achieved. The figures provided in the table below are a minimum requirement. Moderate climate: includes non coastal areas at low altitude, 1 to 2 storey buildings Hard climate: includes an area within 5km of coastline, buildings 3 storeys or above & buildings on a hill side Extreme climate: any area of high altitude or exposed coastal areas. This guide is based on EN927.
- Sheltered Frame protected from direct exposure from the elements, i.e. fitted under a porch.
- Partially sheltered Frame partially sheltered from the elements, i.e. fitted under a deep roof eaves, set well into the opening.
- Unsheltered Frame fitted into an opening where the frame is fully exposed to the elements.

	Translucent finishes						
Construction	Moderate climate	Hard climate	Extreme climate				
Sheltered	6 Years	5 Years	4 Years				
Partly sheltered	5 Years	4 Years	3 Years				
Unsheltered	4 Years	3 Years	2 Years				

• Full redecoration should be undertaken as the products near the end of the expected service life or sooner if products are exposed/harsh climates etc.

# Other Maintenance that should be carried out at the same time as cleaning/inspecting the finish – Hardware

- Should be cleaned and lubricated with grease or neutral oil at least once a year and must not be painted.
- Water displacing products are not recommended as these tend to strip the grease from components.
- Dry lubricants such as silicone spray are also suitable for concealed hardware (window hinges, V/S jamb liners, window and door espags/keeps.

# **CLEANING**

#### Windows and doors must be cleaned and inspected at least twice a year to prolong their life. The following guidelines apply to both interior and exterior surfaces.

# Industrial, heavily polluted areas and particularly those areas within 5km of the coast require a more frequent maintenance cycle. In line with the guidance provided within EN927

Wash the window frame/door with a mild alkaline cleaning solution. On a vertical surface streaking will be minimized if the surface is washed from top to bottom. Superficial surface dirt can be removed by washing with water and a damp cloth. Remove heavier accumulations with a mild solution of household detergent. Always wipe the surface with clean water to remove excess detergent.

- Do not allow abrasive tools, strong detergents, ammonia, bleach or other harsh cleaning chemicals to come into contact with finished surfaces.
- Do not use solvents.
- Avoid leaving detergents and other liquid cleaners on wood substrates to prevent possible absorption.
- Avoid saturating the product.
- Pressure washers must not be used to clean the products.
- Check drainage holes/channels are cleaned and free of blockages.
- Check finish for damage, particularly areas of wear & tear (typically sills and lower horizontal surfaces).
- Sand away cracked and flaking paint and scrape off any resin that may have seeped out of the wood.
- Fill any cracks that may have developed in the corner joints of the frame/casing, or on the windowsill, with exterior quality elastic filler.



- V-joints/ other joints where water ingress is evident should be sanded with 240 grit paper and sealed with exterior quality elastic filler. Apply a small mastic bead in the joint and wipe in to fill the joint as much as possible.
- All exposed end grain should be sanded with 240 grit paper and treated with a generous brush application of exterior basecoat/primer (depending if opaque or translucent system) following instructions on the tin.
- Allow end grain and joint sealer to dry.
- Sand and repaint prime and top coat as necessary, lightly sanding the repaired surface between coats.

#### **Further Information**

- Any surface cut, particularly those exposing end grain must be brush coated with preservative and then coated with at least one full coat of an alkyd or acrylic paint suitable for exterior application before the joinery is in a fixed position.
- If the paint finish film is damaged it must be repaired immediately. Failure to do so will result in reduced durability of the coating system.
- Frames should not be rubbed down with coarse sanding paper.
- Avoid finishing in rain or when the joinery/ timber is damp.
- Avoid finishing in extremes of temperature. Always follow the manufacturers guidance for the finish you are using.

#### **OAK PRODUCTS**

Oak has a high natural tannic acid content which causes the timber to turn black when exposed to moisture. As a result external oak joinery needs more frequent care and maintenance than other hardwoods particularly early in its service life to maintain its appearance. Oak also has a tendency to discolour and split over its lifetime. We do not recommend the use of clear/untinted finishes.

Following this regular maintenance regime, particularly early in the service life of the joinery, will help maintain Oak's decorative appearance and reduce the need for more time-consuming maintenance at a later stage.

Discolouration usually results from moisture ingress either through open joints and gaps or where the timber surface has split, disrupting the protective coating. When this occurs the surface of the underlying timber will turn black as the moisture reacts with the Oak's naturally occurring tannic acid.

The blackening is not rot and does not affect the structural integrity of the timber, but it can be visually unappealing.

Where only localised 'blackening' has occurred, a detailed sander, is often the quickest way to remove the affected layer. Feather back the sanded area into the surrounding unaffected area then reinstate the coating system.

Translucent system repair recommendation for Oak.

#### There are two possible repair systems for the windows fitted:

- A. Maintenance redecoration.
- B. Full redecoration.

Ideally redecoration following the maintenance schedule will provide the least disruptive solution and should be followed depending on the condition of the windows in dry conditions. Finishing should be made with a darker shade than current to allow for an even colour after redecoration.

Any redecoration should be carried out at >10C and dry conditions.

#### Maintenance decoration (Spot Repair)

Assess the finish to decide if the joinery can be repaired or the need for full redecoration including sanding back to the timber.

- 1. All surfaces should be cleaned with a mild detergent and wash with clean fresh water. Allow to dry.
- 2. All exposed end grain should be sanded with 240 grit paper and treated with a generous brush application of end grain sealer.
- 3. All v-joints should be sanded with 240 grit paper and filled with a joint sealer for example Geocel The Works.
- 4. Any other joints where water ingress is evident should be allowed to dry thoroughly before being sealed using joint sealer for example Geocel The Works.

a. Apply a small mastic bead around the joint and wipe in with a plastic applicator to fill the joint as much as possible.

- 5. Allow end grain and joint sealer to dry overnight in good drying conditions.
- 6. Abrade all surfaces using 240 grit paper and apply 1-2 coats of brush exterior grade high build stain or lacquer such as Ronseal high build wood stain.

### Full redecoration (eg Whole sill section)

If on Oak any blackening is present it may need treating with Oxalic acid (refer to manufacturers guidelines):

- 1. Surfaces should be sanded back to timber with 150/180 grit paper.
- 2. The timber should be treated with oxalic acid:
  - Treat affect areas with oxalic acid solution and brush well into the deep grain with a plastic bristle brush enough to clean the stain without damaging the timber (refer to manufacturers recommendations)
- 3. Wash off with plenty of water and allow to dry for 48 hours.
- 4. All exposed end grain should be sanded with 240 grit paper and treated with a generous brush application of end grain sealer.
- 5. All v-joints should be sanded with 240 grit paper and filled with joint sealer for example Geocel The Works.
- 6. Any other joints where water ingress is evident should be allowed to dry thoroughly before being sealed using for example Geocel The Works.
  - Apply a small mastic bead around the joint and wipe in with a plastic applicator to fill the joint as much as possible.
- 7. Allow end grain and joint sealer to dry overnight in good drying conditions.
- 8. Redecorate with minimum 3 coats of brush quality high build stain such as Ronseal high build wood stain. Use 180 grit sand on the timber followed by 240 grit between coats until the desired coverage/colour is achieved. Follow manufacturer's instructions for drying.

Any works carried out sanded back to bare timber should be brought back to standard as above.

#### **Oxalic acid treatment process**

Ensure all areas are dry before redecorating.

If staining is extensive, the black colour can be removed using a solution of Oxalic acid. This will return the surface similar to its original colour. The redecoration can then be carried out after ensuring all end grain and joints are coated as per finishing instructions.

Before treatment remove current coatings usually best done with a detail sander initially with coarse paper finishing with 240 grit paper.

Mix the crystals 4 tablespoons of Oxalic acid crystals to 1 pint of hot water. (any un-dissolved crystals in mix show that the mix is saturated.) Allow the solution to cool to ambient temperature before using.

Apply the solution evenly over all the Oak with a sponge and avoid spot treating which can give a patchy appearance.

Leave the solution for 10-20 minutes then was off with water. If staining is still evident repeat.

Rinse with clean water to remove all traces of the acid solution this may require several rinses.

To fully neutralise the surface apply an alkaline solution made up of 1 tablespoon baking soda in 2 pints of water, leave for 5 mins and then rinse with clean water.

The grain will probably be raised after the above process and the surface must be left to dry overnight before sanding with 240 grit paper.

The redecoration process can now be applied.

NOTE: Oxalic acid is corrosive wear suitable protective equipment after referring to manufacturers instructions

# **REDECORATION**

These guidelines are for the redecoration of JELD-WEN factory finished products. If correctly maintained during service full redecoration will not be required with only additional top coat/coats applied according to the condition of the product.



Whilst care has been taken to prepare these guidelines, manual coating processes in variable conditions can be inconsistent and the applicator should use his or her own professional judgment to ensure best results.

- Where sanding is required, denib the area with 240 grit paper without breaking through the surface.
- All V-Joints should be filled prior to decorating with a suitable joint sealer e.g.Geocel The Works. Apply a small mastic joint sealer bead in the joint and wipe in to fill the joint as much as possible. The sealer should be left to dry minimum of 8 hours before application of any top-coats.
- When decorating on site ensure the end grain of all items including sills, beads, sashes and frame heads are given a generous brush application (i.e. extra 2 coats) to fill these areas.

## **Further Information**

- If the stained finish is damaged it must be repaired immediately. Failure to do so will result in reduced durability of the coating system.
- Frames should not be rubbed down with coarse sanding paper, grit size 240 should be used.
- Never paint in the rain or when the joinery timber is damp. Also avoid painting in direct sunlight and extreme temperatures. The Ideal temperature range is minimum 10 degrees and maximum 30 degrees centigrade.
- An example of a suitable water based exterior translucent top coat is:
  - Ronseal 10 Year Woodstain



# **OPAQUE** (PAINT)

# JELD-WEN External Joinery finish Guide – Maintenance, Redecoration for softwood and hardwood painted products

## When should redecoration be carried out?

10 year warranty – Full redecoration should be undertaken as the products near the end of the expected service life in this instance a maximum 10 years from receipt of delivery or sooner if products are in exposed/harsh climates etc. Regular inspection will determine if the local environmental climate has eroded the coating to a level that earlier redecoration is required.

8 year warranty – Full redecoration should be undertaken as the products near the end of the expected service life in this instance a maximum 8 years from receipt of delivery or sooner if products are in exposed/harsh climates etc. Regular inspection will determine if the local environmental climate has eroded the coating to a level that earlier redecoration is required.

6 year warranty – Full redecoration should be undertaken as the products near the end of the expected service life in this instance a maximum 6 years from receipt of delivery or sooner if products are in exposed/harsh climates etc. Regular inspection will determine if the local environmental climate has eroded the coating to a level that earlier redecoration is required.

Very dark colours are not recommended in areas exposed to prolonged heat. Where used they will require more frequent maintenance – regular inspection of these products will determine the need for redecoration.

We recommend that the more vulnerable areas i.e. sills, bottom beads & other horizontal surfaces are given a light coat of finish every couple of years (even if on inspection the finish is in good condition). A very light sand to clean the surface and an application of suitable finish will increase the service life in those areas which are prone to wear.

If you believe that there is a manufacturing defect with the product (including the finish) within the warranty period you should immediately report this to JELD-WEN Customer Care team email <u>siteservices@jeldwen.com</u>

## What is meant by Dark, Light or Pastel paint colours?

White, Gardinia & Buttermilk are examples of light colours

Pastel Green & Light Ivory are examples of pastel colours

Black, Conservation Green, Dark Red, Pebble Grey, Powder Grey are examples of dark colours

## What type of finish is our paint?

- Water based
- Micro porous
- Satin Finish

# What should I use to redecorate the products?

• Micro porous/breathable exterior paints . Examples are Valspar Exterior Wood and Metal Satin Paint 15 Year Top Coat

# What is the best way to maintain the finish?

• Important

Render/Mortar & Plaster contamination if not removed immediately will cause irreparable damage to the finish and will nullify the warranty

Most modern finishing systems are designed to protect timber from the direct effects of the weather and the resulting small amount of timber movement can be tolerated by the finishing system. However in extremely hot dry weather sufficient moisture vapour maybe removed which on rare occasions may result in splits in the surface coating particularly at joints. Such movement is beyond the control of the manufacturer and therefore outside the warranty.



- Clean down the finish a minimum of every 6 months, do not use harsh cleaning chemicals or pressure washers. This process will be required more regularly in coastal/exposed locations and areas of high pollution etc.
- If there is any breach of protective coating resulting from scuffs, chips, dents, seasonal shrinkage etc. on any faces of the products installed, these must be recoated. We only recommend Micro porous / breathable acrylic (water based ) paints and stains.
- Oils, dyes, polishes, lacquers and Varnish should not be used these will often result in discolouration of the timber.
- After cleaning if the finish to the lower horizontal surfaces (typically bottom beads and sill nosings) look a little flat/dull then lightly sand the areas with a fine sandpaper or sanding pad.
- Clean down and apply a coat of suitable exterior paint (follow the manufacturers recommendations) to refresh the finish. Test the colour match in a small relatively 'hidden' area first to ensure a suitable colour match.
- Suggested Redecoration Cycles these depend on not only the location but also on the climate coastal near industrial areas etc. The more frequently redecoration is carried out the longer the service life that will be achieved. The figures provided are a minimum requirement. **Moderate climate:** includes non coastal areas at low altitude, 1 to 2 storey buildings **Hard climate:** includes an area within 5km of coastline, buildings 3 storeys or above & buildings on a hill side **Extreme climate:** any area of high altitude or exposed coastal areas. This guide is based on EN927.
- Sheltered Frame protected from direct exposure from the elements, i.e. fitted under a porch.
- Partially sheltered Frame partially sheltered from the elements, i.e. fitted under a deep roof eaves, set well into the opening.
- Unsheltered Frame fitted into an opening where the frame is fully exposed to the elements.

	Dark opaque finishes			I	Mid opaque finishes			Light opaque finishes		
Construction	Moderate climate	Hard climate	Extreme climate	Moderate climate	Hard climate	Extreme climate	Moderate climate	Hard climate	Extreme climate	
Sheltered	6 Years	5 Years	4 Years	8 Years	7 Years	5 Years	10 Years	9 Years	7 Years	
Partly sheltered	5 Years	4 Years	3 Years	7 Years	5 Years	4 Years	9 Years	7 Years	6 Years	
Unsheltered	4 Years	3 Years	2 Years	5 Years	4 Years	3 Years	7 Years	6 Years	5 Years	

• Full redecoration should be undertaken as the products near the end of the expected service life or sooner if products are exposed/harsh climates etc.

# CLEANING

Windows and doors must be cleaned and inspected at least twice a year to prolong their life. The following guidelines apply to both interior and exterior surfaces.

# Industrial, heavily polluted areas and particularly those areas within 5km of the coast require a more frequent maintenance cycle. In line with the guidance provided within EN927Z



Wash the window frame/door with a mild alkaline cleaning solution. On a vertical surface streaking will be minimized if the surface is washed from top to bottom. Superficial surface dirt can be removed by washing with water and a damp cloth. Remove heavier accumulations with a mild solution of household detergent. Always wipe the surface with clean water to remove excess detergent.

- Do not allow abrasive tools, strong detergents, ammonia, bleach or other harsh cleaning chemicals to come into contact with finished surfaces.
- Do not use solvents.
- Avoid leaving detergents and other liquid cleaners on wood substrates to prevent possible absorption.
- Avoid saturating the product.
- Pressure washers must not be used to clean the products.
- Check drainage holes/channels are cleaned and free of blockages.
- Check finish for damage, particularly areas of wear & tear (typically sills and lower horizontal surfaces).
- Sand away cracked and flaking paint and scrape off any resin that may have seeped out of the wood.
- Fill any cracks that may have developed in the corner joints of the frame/casing, or on the windowsill, with exterior quality elastic filler.

- V-joints/ other joints where water ingress is evident should be sanded with 240 grit paper and sealed with exterior quality elastic filler. Apply a small mastic bead in the joint and wipe in to fill the joint as much as possible.
- All exposed end grain should be sanded with 240 grit paper and treated with a generous brush application of exterior basecoat/primer (depending if opaque or translucent system) following instructions on the tin.
- Allow end grain and joint sealer to dry.
- Sand and repaint prime and top-coat as necessary, lightly sanding the repaired surface between coats.

#### **Further Information**

- Any surface cut, particularly those exposing end grain must be brush coated with preservative and then coated with at least one full coat of an alkyd or acrylic paint suitable for exterior application before the joinery is in a fixed position.
- If the paint finish film is damaged it must be repaired immediately. Failure to do so will result in reduced durability of the coating system.
- Frames should not be rubbed down with coarse sanding paper.
- Avoid finishing in rain or when the joinery/ timber is damp.
- Avoid finishing in extremes of temperature. Always follow the manufacturers guidance for the finish you are using.

# Other Maintenance that should be carried out at the same time as cleaning/inspecting the finish – Hardware

- Should be cleaned and lubricated with grease or neutral oil at least once a year and must not be painted.
- Water displacing products are not recommended as these tend to strip the grease from components.
- Dry lubricants such as silicone spray are also suitable for concealed hardware (window hinges, V/S jamb liners, window and door espags/keeps.

### REDECORATION

These guidelines are for the redecoration of JELD-WEN factory finished products. If correctly maintained during service full redecoration will not be required with only additional top coat/coats applied according to the condition of the product.

Whilst care has been taken to prepare these guidelines, manual coating processes in variable conditions can be inconsistent and the applicator should use his or her own professional judgment to ensure best results.

- Where sanding is required, denib the area with 240 grit paper without breaking through the surface.
- All V-Joints should be filled prior to decorating with a suitable joint sealer, e.g. Geocel The Works. Apply a small mastic joint sealer bead in the joint and wipe in to fill the joint as much as possible. The sealer should be left to dry minimum of 8 hours before application of any primer/top coats.
- When decorating on site ensure the end grain of all items including sills, beads, sashes and frame heads are given a generous brush application (i.e. extra 2 coats) to fill these areas.
- Ideally 2 coats of exterior top coat should be applied. Allow to dry (following recommendations on the tin) then give a light sand between coats and repaint the entire area of the window frame/door using an acrylic top coat paint, suitable for exterior application.

#### **Further Information**

- Frames should not be rubbed down with coarse sanding paper, grit size 240 should be used.
- Never paint in the rain or when the joinery timber is damp. Also avoid painting in direct sunlight and extreme temperatures. The Ideal temperature range is minimum 10 degrees and maximum 30 degrees centigrade.
- Examples of suitable water based exterior primer and paints are:
  - Valspar Wood Primer and Undercoat White or Grey Interior or Exterior
  - Valspar Exterior Wood and Metal Satin Paint 15 Year Top Coat



#### Disclaimer

The content of this document, including any suggestions as to appropriate products and any proposed application methods, technical details and other product information is provided for general guidance only. It is not intended to amount to advice on which any reader of this document should rely. We do not accept a duty of care to any reader of this document. Although we have made reasonable efforts to ensure the accuracy of this document, we make no representations, warranties or guarantees, whether express or implied, that the content of this document is accurate, complete or up-to-date. To the extent permitted by law, we exclude all conditions, warranties, representations or other terms which may apply to this document, whether express or implied. We will not be liable to any reader or recipient of this document or any extract taken from this document, for any loss or damage, whether in contract, tort (including negligence), breach of statutory duty, or otherwise. Nothing in this document excludes or limits our liability for death or personal injury arising from our negligence, fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by applicable law.