

RYDALE WINDOWS

(Manufacturing) Ltd Windows, Doors & Conservatories www.rydalewindows.co.uk

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2 CONDENSATION

In general climatic conditions water vapour is continually present in the atmosphere. In the home this natural water content is increased by normal living activities that create steam, such as cooking, bathing, washing, boiling a kettle etc., plus the basic activity of breathing.

The water vapour remains undetectable while floating in warm air;



but upon contact with cold surfaces, windows, mirrors, tiles etc., condensation occurs and the vapour turns to water droplets.

Fitting double glazing does not necessarily solve underlying condensation problems.

Traditional house construction allowed the escape of this water vapour through natural ventilation - open flues of coal fires, air bricks and ill-fitting windows and doors.

The drive to conserve energy and reduce heating costs has led to the sealing of homes, resulting in trapped water vapour and the increased problems of condensation.

Ventilation

- Provide natural ventilation whenever possible by:-
- Opening a window. (See Security note below.)
- Fitting a ventilator/extraction unit in the kitchen and bathroom.
- Fitting wall vents to provide air flow.

N.B. Security should be borne in mind when leaving open an easily accessible window.

Heating

Maintain some permanent heat in the house during cold weather. Marginally increase the temperature in areas where condensation is a particular problem.

If possible, fit radiators under windows to maintain the temperature of the inside pane of your double-glazing.

Circulation

Keep internal doors to kitchen and bathroom closed and draught sealed, where possible, to prevent the excessively moist air in these rooms being transferred to other areas of the house.

Bedroom windows should have a night ventilation facility, to provide air movement, and ideally, if bedroom doors are closed, a ventilation grille should be installed in or above the door.

To ensure airflow in the vicinity of windows, curtains should be a minimum of 150mm (6") away from the window, with suitable gaps top and bottom to allow circulation.

Condensation on external glass surfaces

External condensation (dew) can occasionally occur on highly insulated glass units in temperate climates. Such occurrences will only happen on cloud-free nights when there is little or no wind and usually when a warm front follows a dry spell.

The combination of several factors, namely external air temperature, localised microclimate and the thermal transmittance of the glazing itself may all contribute to the formation of external condensation. As a consequence of the variable temperatures and localised conditions, it is possible to experience a situation whereby both clear and 'misted' windows exist at the same time in the same development.

This phenomenon is influenced by the thermal insulation of the glazing. Single glazing offers poor thermal insulation therefore heat escaping from inside a room readily passes through the glass to the outside environment. Consequently, the external surface temperature of a single glazing is generally higher than the 'dew point' temperature of the outside air, thus prohibiting the formation of condensation on that surface.

3 SECURITY

Prevention is better than cure

Your double glazed windows and doors have been specifically designed to include a variety of security features to protect your home and family against intrusion.

However, we recommend taking sensible precautions at all times.

- Never leave a window open when your home is unattended.
- Lock all windows in the closed position and remove the keys, keeping them out of external view, but readily accessible for emergencies.
- When leaving the house unattended, or at night, ensure door handles are fully lifted and that the keys are turned, to throw and lock all deadbolts for security.



Glass Defects

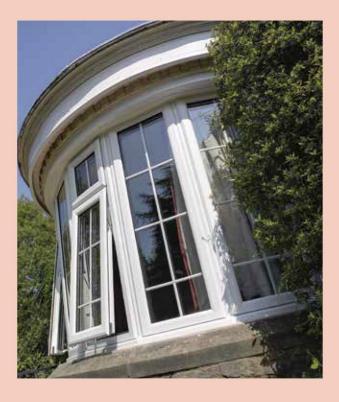
All double glazed units are susceptible to a degree of surface damage during the glass manufacturing process. Certain imperfections in the glass cannot be avoided, even in the most carefully controlled production environment.

Blemishes and imperfections are inherent in all DOUBLE-GLAZING, and are acceptable within the highest standards of the industry.

Rydale uses only the very highest quality float glass available, whether laminated, toughened or annealed, which conforms to the requirements of BS6262.

Patterned Glass

This glass originates in very large sheets and due to spacing repetition, centralisation of any design, in a specific window, cannot be guaranteed.



With conventional double glazing the thermal insulation is improved, but sufficient heat still escapes through the glass so as to warm the external surface of the outermost glass, thereby precluding the formation of condensation in most circumstances.

In common with other low emissivity glasses, Planitherm Total + glass reflects heat back into the room and as such the quantity of heat passing through the glazing is reduced. Consequently the external pane of low emissivity double glazing is not warmed by escaping heat (which is instead retained within the room) and therefore presents a colder surface to the outside environment.

In such cases, and in situations where the external glass surface temperature is lower that the 'dew point' of the air (and when weather conditions are comparable to those mentioned previously) condensation can form on the external glass surface.

However, the combination of these contributing factors is largely unpredictable and therefore it is not possible to quantify the number of occasions when external condensation will occur.

Instances of external condensation are relatively rare and in all cases it will be a transient effect. Upon any one of the climatalogical variables changing, the condensation on the glazing will usually dissipate within a short period of time in much the same way as morning dew.



OPEN-OUT WINDOW

This window may be opened outwards with its friction hinges holding it in any desired position. Locking is achieved by the mushroom cams and/or the shootbolt pins of the locking mechanism, fitted to the opening edge of the window, engaging into the keeps fitted to the outer frame.



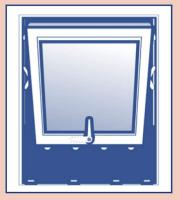
These keeps usually have secondary slots

incorporated within them, which when engaged provide a 'Night Vent' position. This allows the window to be slightly open, providing trickle ventilation.

Accessible windows should not be left in the night vent position when the house is unoccupied.

Operating Instructions

- If fitted, turn key or depress button to unlock the locking handle. Handles with different key/button operating sequences may be fitted.
- Rotate the handle through 90° to disengage locking mechanism and open by pushing outwards.





Friction Hinges

To attain optimum performance, the scissor mechanism of the friction hinges will require periodic lubrication. The pivots, sliding shoe and track should be kept free of dirt and debris.



OIL

Lubrication

- As Required

Oil all pivot points (one drop per pivot is sufficient) and wipe away excess.



Locking Mechanism

Lubrication - As
Required Keep sliding
mechanism free of dirt
and lubricate each slot
with light machine oil.

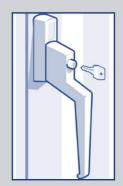


Keeps

Lubricate the slots of the keeps with petroleum jelly as required.



Clean and lightly oil moving parts.



TILT BEFORE TURN WINDOW

These versatile inward opening windows are capable of two modes of operation.

- Tilt mode for ventilation.
- Turn mode for cleaning and emergency exits.

The term 'Tilt Before Turn' refers to the sequence of operation of the window which is designed for increased safety, to initially select the 'Tilt' mode, followed by the 'Turn' mode.

Locking is achieved by a series of cams or espagnolettes, located on a sliding mechanism around the edge of the window. When shut and the handle 'closed' position is selected, the cams engage into keeps fitted around the outer

frame, providing a secure locking system and excellent weathersealing.

Note: These windows can also be supplied in the Turn before Tilt mode, whereby the sequence of operation is reversed. If you are in any doubt as to the sequence of operation please contact your installer.



Operating Instructions

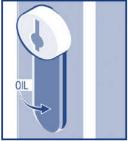
To operate the window, the handle is placed in one of three positions, 'Closed', 'Tilt' or 'Turn'.

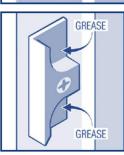




Note: that the opening leaf of the window must always be fully located in its frame aperture before changing the handle position. The operation sequence commences with the window in the 'Closed' position. (Handle vertically downwards.)

- If fitted, turn key to unlock.
- To select 'Tilt' rotate the handle through 90° from vertically downwards to horizontal and pull the window inwards. The bottom remains hinged to the frame, while the top tilts inwards to allow ventilation.
- To select 'Turn' from the 'Tilt' mode, push the opening leaf into the frame aperture and rotate the handle from its horizontal position to vertically upwards and pull the window inwards. The side remains hinged to the frame, while the window may be opened inwards to any desired position.
- To select 'Turn' from the 'Closed' position rotate the handle through 180° from vertically down to vertically up and pull the window inwards.





T.B.T Locking Mechanism

Keep sliding mechanism free of dirt and lubricate each slot with light machine oil as required.

Keeps

Lubricate the faces of the keeps with petroleum jelly as required.

Handles

Clean and lightly oil moving parts.

RESIDENTIAL DOORS

Doors may be fitted with either lever/pad handles that limit outside opening by use of a key, or lever/lever handles allowing external opening by handle movement.

High security locking systems generally comprise multipoint deadbolts of various types, and a latch lock, which engage in keeps fitted to the frame jamb.

The deadbolts are engaged by lifting the handle.





To Lock

- 1. Pull/push the door to the closed position latchlock engages.
- 2. Fully lift the handle or pad to engage the upper and lower deadbolts.
- Insert key and turn to engage centre deadbolt and deadlock the mechanism.

If key will not turn lift handle or pad to maximum position and then turn key

To Unlock

- 1. Insert key and turn to unlock.
- Press handle or pad down to disengage upper and lower deadbolts.
- 3. With lever handle door will open.
- 4. With pad handle, continue to turn key to open.





Locking Mechanism

With the door open, lubricate the deadbolts and latchlock with light machine oil.

Hinges

Clean and lightly oil hinge pins. If hinges are external (Open-out door) lubricate every six months.

Handles

Clean and lightly oil external moving parts.

Lock Cylinder

Do not lubricate (packed with special grease)

Double Doors

A lever/lever handle and lockset can be fitted to the slave door leaf as standard.

Lubrication -As Required

Lightly oil external moving parts.



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IN-LINE PATIO DOOR

This heavy-duty sliding door may be opened as required to provide ventilation or access.

Operating Instructions

To Lock

- Slide door to fully closed position.
- Lift lever behind handle. (Hooks will engage to lock the door.)
- Turn key to deadlock locking mechanism.



Lubrication - As Required

Oil the locking cams of the mechanism.

To Unlock

- Insert the key in cylinder and rotate to unlock the mechanism.
- Depress lever behind handle. (Hooks will disengage.)
- Slide door open.



Lock Cylinder

Do not lubricate (packed with special grease)

Bottom Track

Keep track permanently free of dirt and obstruction.













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