



# ESSENTIAL HARDWARE AND METALS GUIDE

The advice given in this quick guide is designed to provide practical guidance when using Accoya.



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All wood types contain organic acids varying in amount between species, Accoya has a similar level to oak and western cedar which, in moist conditions, may accelerate water induced corrosion in metals.

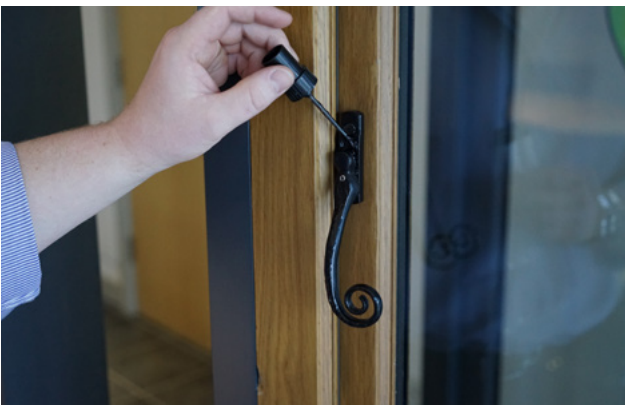
Where stainless steel is mentioned in this guide, the minimum grade should be A2/304, in coastal and harsh environments, A4/316 would be recommended.

## Fixings

Glazing pins used on both sides of external doors and windows should be stainless steel or brass. This also applies to pins used for bolection beads around panels or other mouldings such as T&G boards.

Any screws or bolts exposed to moisture should be stainless steel or high quality brass, this would include screws used for hinges, locks, door handles and other door furniture.

In the absence of a coloured screw not being available to match the furniture colour, use a stainless steel screw and paint the heads.



Screws and other fixings used in dry internal environments do not have to be stainless steel or brass, for example, zinc coated, passivated, or similarly coated fixings may be used.

Through handle bolts ideally should be stainless steel, if not available, apply a coating of PTFE, lithium grease or similar to offer a degree of water repellency. The same applies to handle spindles.

Stainless steel screws for window frame assembly would be preferred but not essential as these fixings are unlikely to get wet in a well-constructed and fitted window. If not using stainless steel, the screw should be countersunk and filled.

Window and door installation screws ideally should be stainless steel; however, coated fixings may be used if they are protected from moisture by good installation. The heads should be countersunk and filled.

Stainless steel decking screws would be preferred although proprietary coated decking screws may be used as a lesser alternative, which, depending on quality, may be prone to corrosion.

All fixings used for cladding should be stainless steel.



## Hinges

Butt or other hinges for windows and doors should be stainless steel or brass, both of which are available in different finishes and colours.

Gate hinges, for example hook & bands or “T” hinges, ideally should be stainless steel. If using galvanised mild steel, create an isolation barrier between the hinge and the wood by incorporating a DPC membrane or coat the back of the hinge or other furniture with epoxy resin.

## Locks

Whilst stainless steel would be preferred, the industry standard is to manufacture locks, window espagnolette bolts and door multi-point bolts from mostly zinc coated mild steel although some may include brass or stainless steel faceplates.

Even when using stainless steel / corrosion resistant locks or locks with a TRICOAT finish (or equivalent), the following precautions should be taken and all are based on creating a barrier between metal and the wood.

- > Cut-outs, such as lock housings, should be fully end grain sealed including spindle and cylinder lock cut-outs. Ideally, the whole length of the euro-groove for espagnolette and shoot bolts should be fully end grain sealed ready for an application of paint.
- > The machined edges of doors and sashes should be fully painted with as much paint behind the lock as on the face.
- > Further protection can be achieved by spraying the lock and mechanism with either PTFE or lithium grease. Proprietary protection kits may be used for example “CoastGard™” or similar.
- > Lock gearbox protection sleeves are available from some manufacturers to protect the lockbox from moisture.



# DOOR AND WINDOW FURNITURE



## External Door Furniture Window Furniture

Stainless steel or brass will clearly perform better in damp or exposed conditions. Should furniture of other metals be used, for example, handles, letter boxes, door knockers, push plates and number plates, the door should be fully painted as the paint will act as an isolation barrier.

Further protection can be achieved by spraying the inside of the handle faceplate with either PTFE or lithium grease.

End grain seal the inside of letter plate cut-outs prior to painting.

Aluminium components, being resilient to corrosion, such as threshold strips and bi-fold track systems, may be used.

## Lead Flashing

Wood, including Accoya may have a corrosive effect on lead. It is therefore advisable to isolate the lead from the wood by creating a barrier using epoxy resin, paint or lead underlay. Further guidance would be to apply patination oil.

Find out more about Accoya at [accoya.com](http://accoya.com)

Useful downloads at [accoya.com/downloads](http://accoya.com/downloads):

- Wood Information Guide, Section 7, 8 & 9
- Essential Coatings Guide
- Transportation Guide
- Care Guide

Most window furniture such as stays, handles, fitch fasteners, finger pulls, restrictors etc. are manufactured from a variety of metals and all are suitable for use as the inside of a building is considered “low risk” to excessive moisture.



Consideration should be taken when supplying products to new build or refurbishment projects as window furniture components may tarnish due to the moisture generated by wet trades.

It would also be advisable to keep windows slightly ajar and the building well ventilated during the build process to reduce moisture levels.

