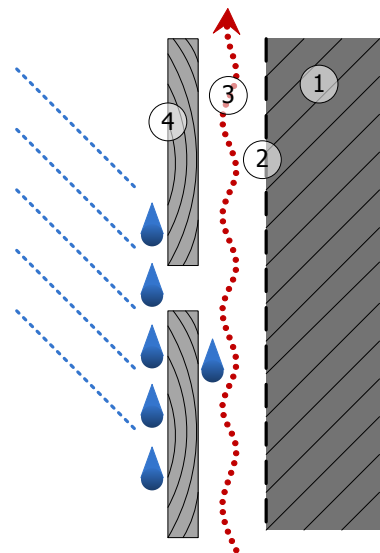




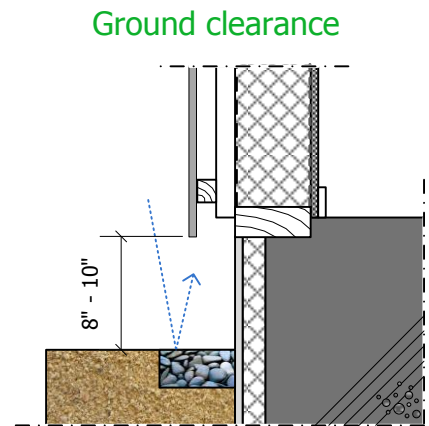
### Ventilated cladding system



- 1 Structural wall
- 2 Breather membrane (house wrap)
- 3 Ventilated cavity
- 4 Accoya® siding boards

#### Do not:

- Mount panels in the splash zone – from ground level to a height of 8" to 10" – because of a reduction in coating service life
- Fit boards flush to masonry or brickwork



#### Important design considerations:

- Allow for sufficient ventilation in- and outlets at top/bottom (at least 0.03 in<sup>2</sup> per ft<sup>2</sup> cladding)
- The ventilated cavity should have a depth of at least 0.6"
- Design for furring strips, flashings and weeps to prevent water intrusion
- If necessary, use additional outdoor caulk or sealant around windows and doors
- The expansion due moisture and temperature changes is 1.5% (oven dry – wet)
- Trim: - extending down to a roof or deck requires a gap of at least 2" to avoid wicking  
- should be at least 6" above grade
- Consider increasing the speed of installing Accoya siding boards by milling a crusher bead into shiplap or tongue and groove profile

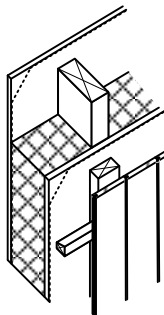
### Joints

In practice, an expansion of 0.8% (65% RH – wet) needs to be considered. Install boards with a mutual distance of at least 0.04" and allow for 0.2" when meeting other construction elements and/or between the lengths of boards.

When joints are left open, use a UV resistant breather membrane and protect timber battens with a suitable weather resistant joint tape. Insert vermin mesh when applicable (joint width > 0.4")

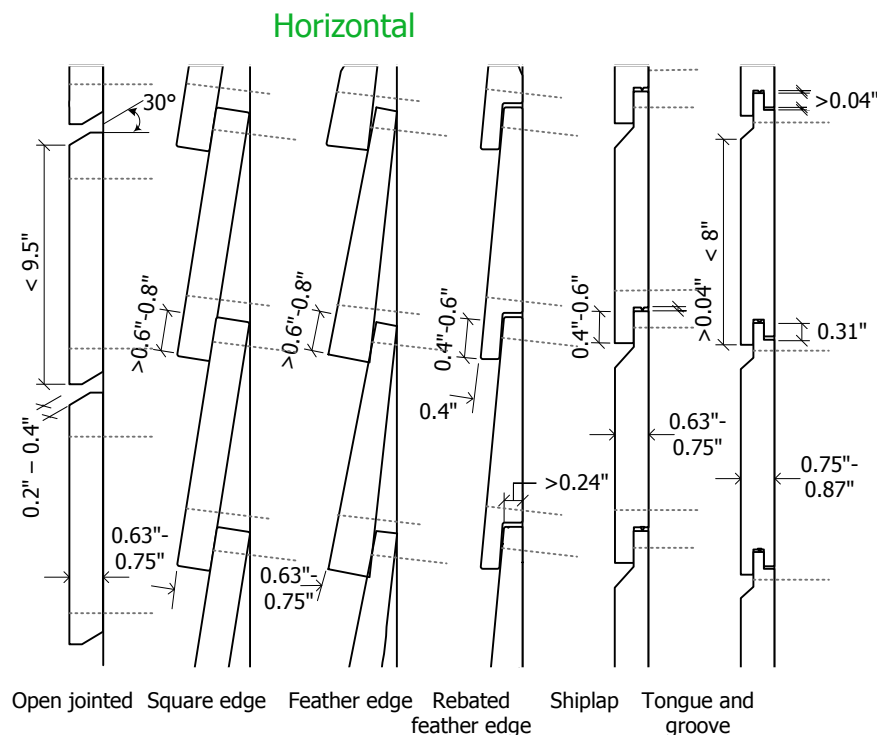
### Sub-frame

- Be aware of the risk of staining Accoya boards when using pressure treated or wood species prone to bleeding. In case of a risk of leaching, apply a barrier between the sub-frame battens and the Accoya siding boards
- Minimum dimensions 0.8" x 1.5" mm when battens are fully supported by a substrate; if not, use battens of at least 1.5" x 1.5"
- Use material of at least durability class 1 or 2
- Maximum sub-frame distance (on center):  
- 24" when applied over wood based sheathing  
- 16" if installed without sheathing
- Always install sub-frame vertically to ensure continuous ventilation
- In case of vertical boards, use vertical counter battens



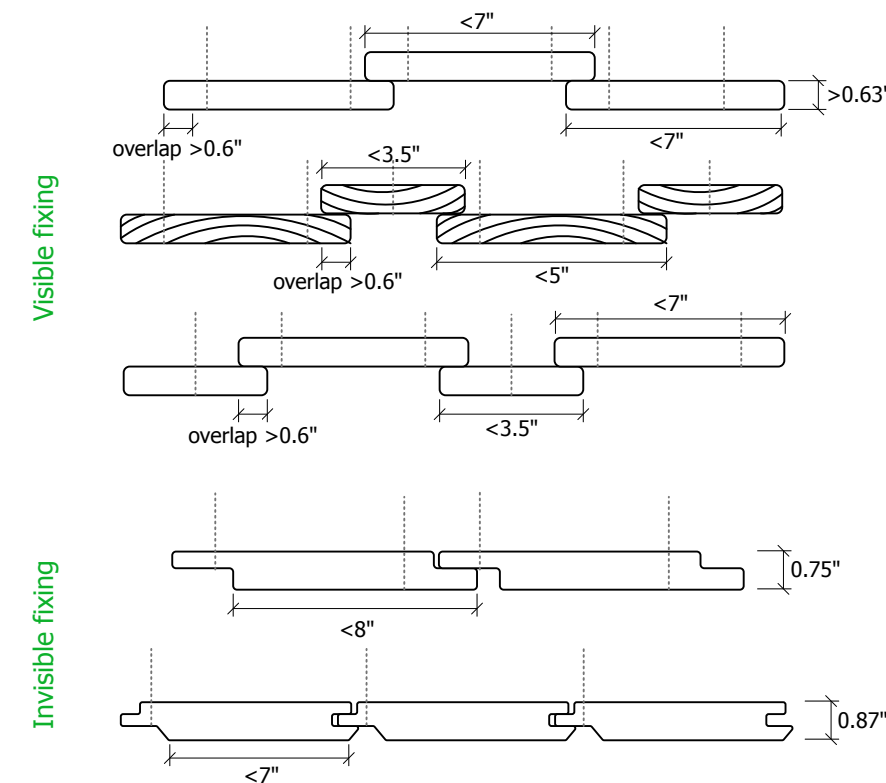
### Siding

- Round edges with a 0.12" radius when a film forming is applied
- Install the boards heart facing outward when left uncoated



- 

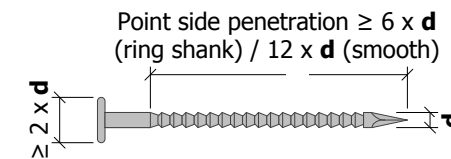
### Vertical & diagonal



**! The system design must be in accordance with all applicable building regulations and standards. Please check your local building codes to verify the requirements in your area. !**

### Fasteners

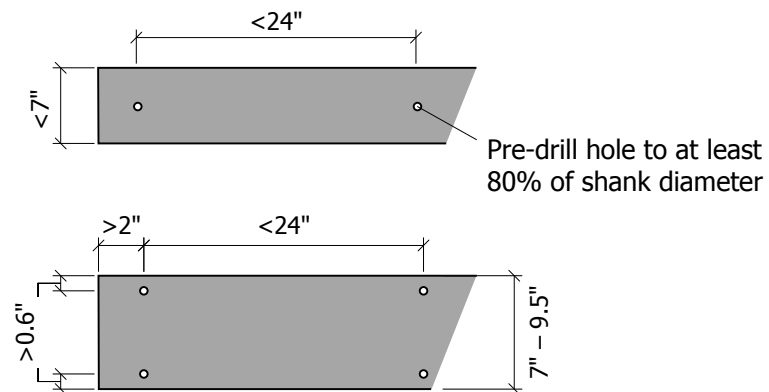
- Use ring shank or other improved nails
- Stainless steel 304 or 316 strongly recommended
- Holes pre-drilled:  
- 0.04" less than nail Ø  
- to 80% of screw shank Ø



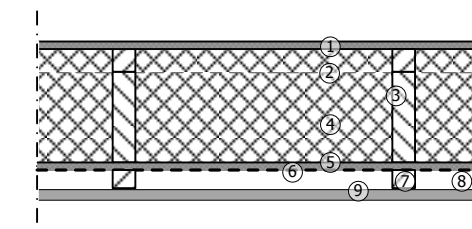
#### Do not:

- Use staples or T-nails
- Drive the nail/screw heads into the board
- Use galvanised or zinc plated fasteners or accessories
- Install siding in direct contact with concrete, stucco, masonry, top soil, mulch patios and/or roofs

### Placing



### Best practice

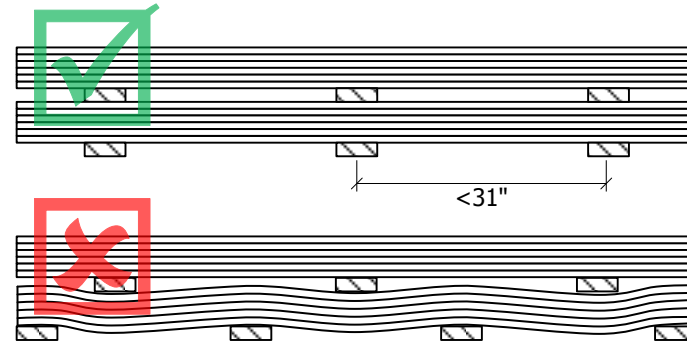


- |                      |                     |
|----------------------|---------------------|
| 1 Interior sheathing | 6 Breather membrane |
| 2 Vapour barrier     | 7 Sub-frame         |
| 3 Stud               | 8 Ventilated cavity |
| 4 Thermal insulation | 9 Accoya® cladding  |
| 5 Exterior sheathing |                     |

## Handling & machining

### Storage & handling

- Store boards horizontally, in reasonably dry (well ventilated) conditions and lifted clear of the floor
- Center bearers on 31" max and use at least 3 bearers
- Cover the boards with a breathable barrier / "vapour-open" plastic
- Storage at the building site:
  - should be at least 4" above concrete flooring and 1' above ground
  - additional protection from rain with plastic sheets is recommended
  - sufficient ventilation underneath the sheets is required to prevent mould



### Transport

- In order to prevent damage, especially if coating is to be done on-site, products made of Accoya should be carefully transported
- Protection of joints is especially important

### Cutting & machining

#### General

- Use conventional wood working equipment and tools - Accoya can be compared generally with harder softwood species
- Use carbide-tipped tools or diamond tipped for high(er) volumes
- Make sure that knives are aligned and sharp
- Spindle rotation velocity of 12,000 – 6,000 rpm
- Feed speed 550 – 1,100 yards per hour
- Use rubber out-feed rollers

#### Sawing

- Standard techniques such as using backer boards can be used when very fine results are desired

#### Planing & profiling

- Accoya shavings are fine and may be electrostatically loaded; in case of impression problems, increase the rpm or use anti-friction lubricants

#### Drilling

- Remove debris for deep drilling

#### Bending

- Use techniques similar to other softwoods
- **Do not** impregnate with ammonia to ease bending

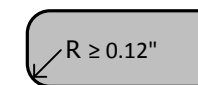
## Coating

### General

- There is no technical need to finish Accoya siding boards
- Uncoated Accoya is susceptible to outdoor weathering
- Mould growth can be avoided by using a suitable outdoor primer addressing mould growth

### Preparation

- The Accoya should be dry - moisture content below 8%
- Surface must be clean, dry and free from dust and grease
- Finish the panels on all sides before mounting them
- Treat the edges of the boards with end-grain sealer
- For best results, any coating should best be applied industrially
- Round off corners with a radius of at least 0.12"



### Changed properties

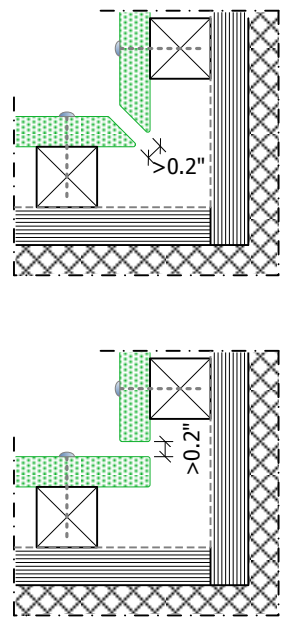
- Due to the hydrophobic nature of Accoya, water-based stains may not penetrate as deep or form as thickly
- The small amount of residual acetic acid may disturb the flow coating process, which can be prevented by adding an alkaline buffer

### Best practices:

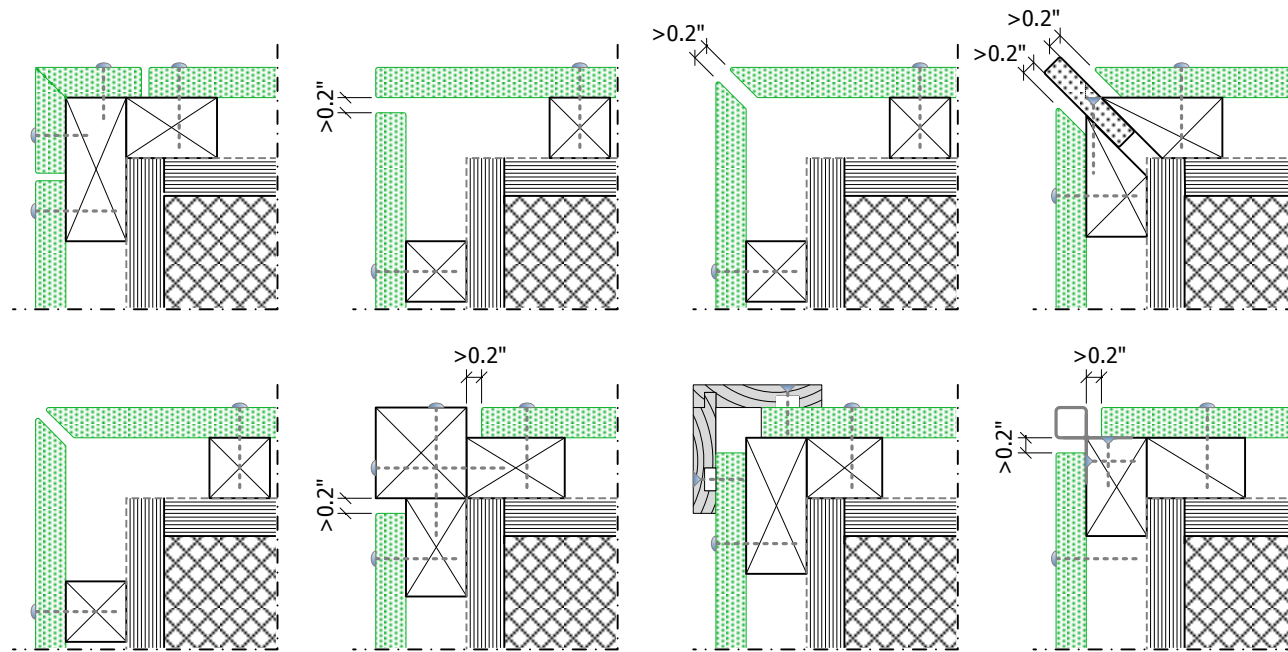
- END SEAL**  
All exposed end grain should be coated with an effective end seal
- ROUNDED CORNERS**  
All Accoya siding boards should be rounded with 0.12" radius corners
- FACTORY COATING**  
Factory application of coatings is recommended to achieve optimum application
- DARK TRANSLUCENT COLORS**  
Can provide longer maintenance intervals than lighter shades
- FOUR SIDES COATED**  
Siding boards should be coated on all 4 sides for superior performance
- LONGLIVELY**  
Film forming coatings provide the longest maintenance intervals
- OPAQUE COATINGS**  
A stain blocker is recommended
- AVOIDING DISCOLORATION**  
Mould can be avoided by using a high quality UV resistant coating

## Corner solutions

### Interior corners



### Exterior corners



Depending on the applicable (National) building code, cavity barriers may be needed at corners

## Fire retardants

If certain building codes call for it, Accoya can meet a higher fire performance than any standard wood product can achieve, by giving it a fire retardant treatment (FRT). This can be done by an impregnation with fire retardant chemicals (e.g. Hoover) or a treatment with a fire retardant (intumescent) primer over which a normal coating can be applied.

Alternatively, design measures can be taken to achieve a sufficient fire resistance of a wooden façade cladding. For more information, please contact our sales office.

## Wood Information Guide

For more and the most current information on – amongst others – wood properties of Accoya we refer to the Accoya Wood Information Guide, that can be downloaded through the download section of our website [www.accoya.com](http://www.accoya.com)

### The Accoya® Wood Information Guide

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- 01 Accoya® Wood Properties
- 02 Transportation and Storage
- 03 Wood Moisture Content
- 04 Processing
- 05 Gluing
- 06 Contact with Metals
- 07 Contact with other products
- 08 Coating
- 09 Sawing, Planing and Profiling
- 10 Sustainability
- 11 Certifications
- 12 Standards and Regulation

Welcome to the Accoya® Wood Information Guide which has been compiled to provide detailed information and recommendations for the handling and use of Accoya® wood.

This Guide has been written for professionals wishing to use Accoya® wood to create beautiful, reliable and highly durable end products. Should you require further information or have any comments about this Guide, please contact us.

This is version 3.2 of the Wood Information Guide, to confirm currency and check for other potentially useful information please check the Download section of [www.accoya.com](http://www.accoya.com)