EXTERNAL CLADDING

External cladding encloses a building and provides protection from the weather. It contributes to the comfort, structural integrity and aesthetics of a building.

Cladding a building with timber has advantages on sites that are subject to high winds, extreme climate, highly reactive soils and subsidence.

Timber's natural resilience and high strength-to-weight ratio enables it to withstand far greater stresses and movement than masonry or other rigid materials.

Timber cladding performs best with wide eaves and verandas. This gives weather protection to the cladding itself, and provides increased comfort for the occupants by reducing heat build-up on the walls.

To minimise the risk of distortion of the timber cladding, a stud spacing of no more than 450mm should be used in the wall frame.

Cladding must be watertight with adequate flashing and sarking in accordance with best industry practice. Special care has to be taken with detailing and protection at ground level and north facing walls.

It is important to single nail all weatherboards and take care when working with sliplap and synthetic boards, not to nail through the weather grooves as this may cause splitting or movement of the board. Nailing by hand is recommended as pneumatic nail guns can cause damage to the surface of the profile.

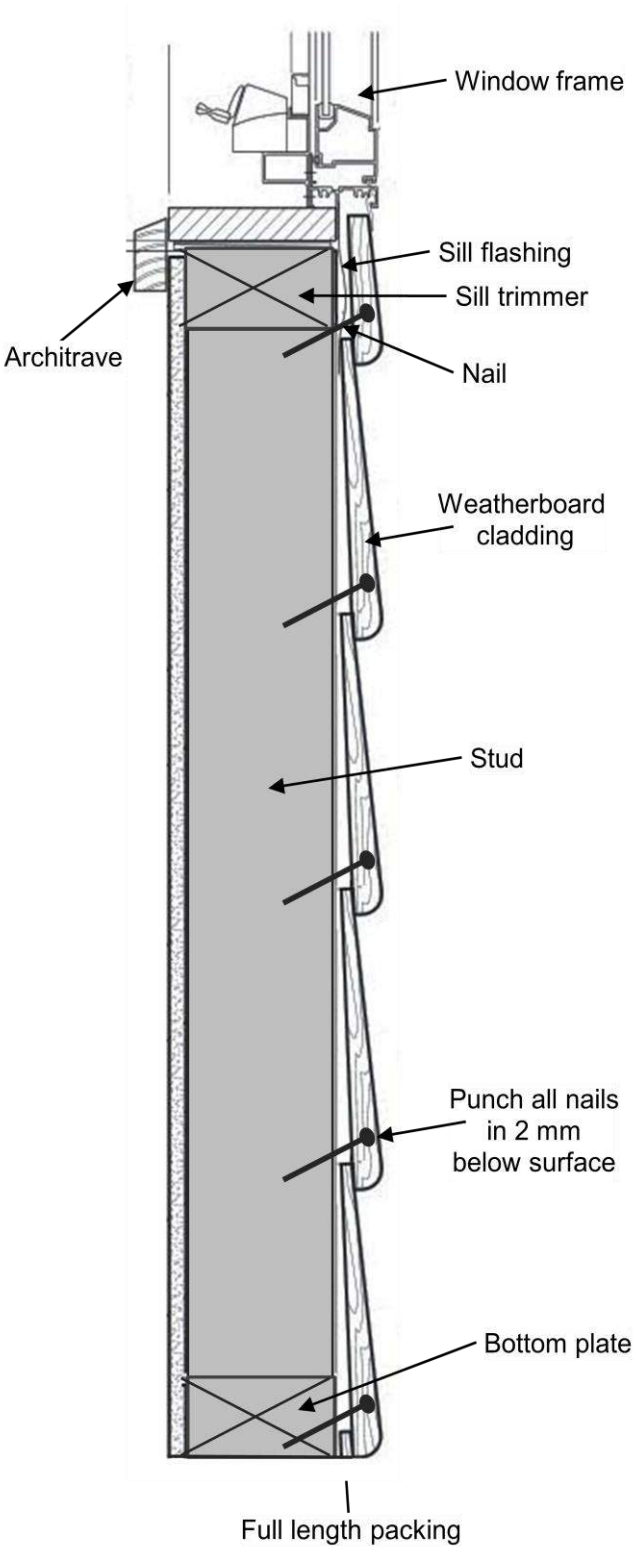
Punch all nails 2mm below the profile surface, fill the holes with exterior grade filler and paint all cut ends and exposed timber with a good exterior one coat paint system.

Timber cladding should never be placed in direct contact with soil or used at a level which may be flooded.

WEATHERBOARDS

A weatherboard is the outside cladding of a house comprising of long, thin timber boards that run vertically or horizontally and either overlap or fit together with a tongue and groove joint.

Weatherboards are made from timbers such as cedar, cypress, baltic pine or hardwood.



Weatherboards fitted to the outside of a building

MARKING THE STORY ROD

The weatherboards used on the outside of the building are 170mm wide, the manufacturer specifications give a minimum overlap of 25mm, therefore the coverage for each board is 145mm.

The 145mm overlap can be increased, if the cut over openings is too severe.

Steps to marking a story rod:

1. Measure the height of the wall.
2. Divide the height of the wall to be covered by 145.
3. This will give you the number of boards.

NOTE: If the number after the decimal point is less than 0.5 divide the wall height by a number greater than 145. This will increase the overlap and possibly the number of weatherboards, but the last weatherboard will look substantial.

4. This measurement is then transferred to the gauge rod.

NOTE: Ideally change the lap to ensure full boards at the top.

STORY ROD DETAIL

Example – Story rod calculation

Step 1:	Wall height	=	1200mm
	Width of weatherboard minus the overlap		170 – 30
		=	140mm
	Divide the wall height by 145		1200 ÷140
		=	8.57 (9 boards)
Step 2:	Wall height divided by number of boards	=	1200 ÷ 9
		=	133.3
	Therefore effective cover for story rod set out	=	133.3mm

ASSESSMENT 1: TRY WORKING THIS EXAMPLE

Calculate the story rod set out for a 2.1 metre wall.

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SETTING OUT A STORY ROD

ASSESSMENT 2: SET OUT A STORY ROD

Make a Story Rod suitable for the wall that you built in the framing unit.

Obtain a piece of material suitable for your Story Rod.

Use the example above to calculate the overlap and transfer this measurement to the Story Rod.

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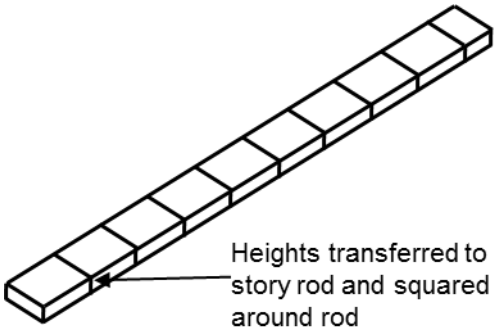

Story rod

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Show the completed work to your instructor, so he can check your work.

Check list	Marking summary	Possible mark	Mark
Overlap	Story rod calculation	5	
Transfer measurements	Height of the story rod	5	
	Transfer of measurements	5	
Squaring lines	Lines all square	5	
	Join at edge	5	
	General finish	5	

Fixing recommendations

For timber cladding, non corrosive hot-dipped galvanized or stainless steel nails are recommended. Generally, nails should have a length of no less than three times the board thickness being fixed.

Fixing western red cedar. With western red cedar, only use stainless steel or silicon bronze nails to ensure no reaction with the timber. Incorrect nails will cause rot to form around the fixing.

Fixing treated pine. With treated pine only use galvanises or preferably chemically treated, treated pine nails or screws. The copper in c**hromated copper arsenate (**CCA) treated timber reacts with incompatible fixings.

Extra care should be taken where nail guns are used to ensure that all components are suitable for the cladding being fastened, that the nails are not driven too deeply and that excess pressure does not distort the boards.

To prevent splitting when nailing less than 50mm from board ends the holes can be pre-drilled. Pre-drill weatherboards slightly smaller in diameter (80%) than the nail

ASSESSMENT 4: INSTALL EXTERNAL CLADDING

Cut, fit and fix external cladding to your wall. You will be assessed on the following assessment criteria: **Mark required for competency 45**

- Preparing appropriate materials for the task
- Selecting appropriate tools and equipment for the task.
- Using appropriate PPE
- Cutting and fitting external cladding to the required standard ensuring safety of self and others.
- Cleaning up and storing tools and equipment appropriately.

Check list	Marking summary	Possible mark	Mark
Prepare appropriate materials for the task	Weatherboards	2	
	Sarking	2	
	Flashing	2	
	Nails	2	
Select appropriate tools and equipment	Appropriate tools and equipment	5	
Use appropriate PPE	Used PPE at all times	5	
	All work carried out in accordance with OHS requirements	5	
Cut and fix external cladding	Sarking installed as per manufacturers recommendations	3	
	Flashing installed as per manufacturer recommendations	3	
	Corner stop cut to length	2	
	Install weatherboards + or – 2mm	5	
	General finish	6	
	All work in accordance with AS1684	6	
Clean up and store tools and equipment	All tools and equipment checked for serviceability and returned to store	5	
	Cleaned work area at the end of the day	5	
		Total	

Student Learning Guide & Record

TASK	PAGE	TASK TITLE	DATE COMPLETED	INSTRUCTOR'S SIGNATURE
Assessment 1	22	Try working this example		
Assessment 2	23	Set out a story rod		
Assessment 3	25	Calculate weatherboard quantity		
Assessment 4	26	Install external cladding		