

National Certificate in Building, Construction and Allied Trades Skills (BCATS)
Teacher Information & Resources

**Demonstrate knowledge of the
interior systems industry within a
BCATS environment**

Unit Standard – 25329

Level 2, Credit 2





Teaching and assessment tips

Intent – The intent of the unit standard is that the learner is able to demonstrate basic knowledge of the carpentry industry including:

- major industry sectors
- industry work processes
- industry clients, supply and inter-trade relationships
- the impact of regulatory and trade bodies on the industry and
- industry jobs and their training requirements.

It is intended that a learner who has an interest in a particular industry can achieve credits for their exploration of that industry by completing the relevant unit.

Unit standard Interpretation

No more than 2 of the Demonstrate Knowledge units that relate to BCATS industries can be incorporated in the qualification.

A worksheet that covers the assessment requirements for this unit standard is included in this document. Also included are model answers for that worksheet.

Assessment



Assessment of this unit standard consists of:

- Completion of the worksheet

Worksheet US 25329

Student Name: _____

1. Tick the correct descriptions in the following table for the manufacturing processes associated with interior systems products.

Product	Manufacturing process	
Plaster board	Large scale <input type="checkbox"/>	Small scale <input type="checkbox"/>
	Hands on <input type="checkbox"/>	Machine produced <input type="checkbox"/>
	Small factories <input type="checkbox"/>	Large factories <input type="checkbox"/>
Fibrous plaster	Large scale <input type="checkbox"/>	Small scale <input type="checkbox"/>
	Hands on <input type="checkbox"/>	Machine produced <input type="checkbox"/>
	Small factories <input type="checkbox"/>	Large factories <input type="checkbox"/>

2. Complete the following and answer the questions that follow:
Within the interior systems industry, some manufacturers supply _____
_____ and others rely on _____ to
sell their product.

Give an example of an interior systems supplier that does NOT supply direct to industry.

Give an example of an interior systems supplier that DOES supply direct to industry.

3. List the 3 roles in the installation of interior systems and what these roles are associated with.

i)



ii)

iii)

4. List 2 other names that are used to describe an interior systems plasterer.

5. Identify and describe at least 3 work processes associated with fibrous plaster manufacturer.

6. Fill-in the blanks below.

Fibrous plaster installers offer the complete _____ service. This entails:

- fixing fibrous plaster sheets to _____ ;
- finishing (plastering) the fibrous plaster to _____ ;
and
- fixing and finishing fibrous plaster _____ and other
- _____ .

7. What are the tasks undertaken by plaster board fixers and finishers?

Plaster board fixers:

Plaster board finishers:

8. Why do plasterers use high-powered lights to shine across the plastered surfaces?

9. List the 2 main fixing tasks performed by fibre cement linings fixers.

10. Why do some fibre cement sheets not require finishing? How are they generally joined together?

11. List at least 3 tasks undertaken by a proprietary partition installer.

12. In general terms, briefly describe the framing for a proprietary partition.

13. What are the 4 tasks of a suspended ceiling installer?

14. What is an access floor and what does it provide?

15. List the 3 main tasks of an access floor installer.

16. Explain what is meant by a subcontracting and a direct-to-client relationship for interior systems client relationships.

Sub contracting:

Direct-to-client:

17. What is a trade account and what benefit does it extend to the tradesperson **AND** the supplier?



18. How are trade discounts generally expressed? Give an example.

19. In general terms, explain what is meant by manufacturer guarantee systems and what two levels of guarantee exist?

20. Why is it common for manufacturers to offer product training?

21. What is meant by an accredited supply network?

22. Complete the following tables about other trade relationships with interior systems contractors.

Before interior systems contractors begin their work

What has to be done by other trades and what are those trades?	
Specialist Interiors	
Interior linings – fixers	

What has to be done by other trades and what are those trades?	
Interior linings – finishers (plasterers)	

After interior systems have completed their work

What has to be done by other trades and what are those trades?	
Interior linings – fixers	
Specialist Interiors Interior linings – finishers (plasterers)	

23. Complete the following table about the industry bodies listed below.

Name of body	How it impacts on interior systems industry
WorkSafe NZ	
Ministry of Business, Innovation and Employment (MBIE)	
Building Consent Authorities	
Standards New Zealand	
AWCINZ	



24. List 4 jobs in the interior systems industry and describe those they work with and what training they need for the job.

Assessor Sign off:

Assessor name:	RESULT: A = Achieved, N = Not Yet Achieved
Assessor signature: Date:.....	

Model Answers

1. Tick the correct descriptions in the following table for the manufacturing processes associated with interior systems products.

Product	Manufacturing process	
Plaster board	Large scale <input checked="" type="checkbox"/>	Small scale <input type="checkbox"/>
	Hands on <input type="checkbox"/>	Machine produced <input type="checkbox"/> <input checked="" type="checkbox"/>
	Small factories <input type="checkbox"/>	Large factories <input checked="" type="checkbox"/>
Fibrous plaster	Large scale <input type="checkbox"/>	Small scale <input checked="" type="checkbox"/>
	Hands on <input checked="" type="checkbox"/>	Machine produced <input type="checkbox"/>
	Small factories <input checked="" type="checkbox"/>	Large factories <input type="checkbox"/>

2. Complete the following and answer the questions that follow:

Within the interior systems industry, some manufacturers supply direct to the industry and others rely on distributors or suppliers to sell their product

Give an example of an interior systems supplier that does NOT supply direct to industry

Winstones

Give an example of an interior systems supplier that DOES supply direct to industry

USG

3. List the 3 roles in the installation of interior systems and what these roles are associated with.

Installer Associated with specialist interiors work where you “install” a suspended ceiling or proprietary partition or access floor. Also associated with fibrous plaster work where you “install” fibrous plaster products - which covers both fixing and finishing (described below).

Fixer Associated with interior linings where you “fix” the plaster board or fibre cement linings or fibrous plaster.

Finisher Associated with interior linings where you “finish” or “stop” or “plaster” the plaster board or fibre cement linings or fibrous plaster.

4. List 2 other names that are used to describe an interior systems plasterer.

Two from:

Stopper

Finisher

GIB stopper

5. Identify and describe at least 3 work processes associated with fibrous plaster manufacturer.

Casting flat, curved and decorative sheets for use on walls and ceilings

Casting decorative mouldings (such as cornice, centres, domes, fire surrounds, archways and corbels) that are used to adorn interior spaces

Casting ceiling panels and tiles for use in suspended ceilings

Running moulds out of plaster

Making moulds out of plaster, timber, rubber and other substances in which to cast items of fibrous plaster

6. Fill in the blanks below.
Fibrous plaster installers offer the complete fix and finish service. This entails:

- fixing fibrous plaster sheets to interior surfaces;
- finishing (plastering) the fibrous plaster to hide all the joins and fixings; and
- fixing and finishing fibrous plaster cornice and other decorative mouldings.

7. What are the tasks undertaken by plaster board fixers and finishers?
Plaster board fixers:

Fix different types of flat plaster board to interior surfaces.

Form curves and other architectural shapes with plaster board.

Plaster board finishers:

Stop and finish (plaster) the plaster board to hide all the joins and fixings;

Stop and finish internal and external corners (including fixing trim that is bedded in the plaster); and

Fix and finish paper-faced cove between walls and ceilings.

8. Why do plasterers use high-powered lights to shine across the plastered surfaces?

Because the light will show up any imperfections that may not be visible under “normal” lighting conditions.

- 9.** List the 2 main fixing tasks performed by fibre cement linings fixers.

*Fix different types of flat fibre cement linings to interior surfaces; and
Form curves and other architectural shapes with fibre cement linings.*

- 10.** Why do some fibre cement sheets not require finishing? How are they generally joined together?

Because the joins do not require plastering or they already have a pre-finished surface that does not require any further work in which case the sheets are generally joined together with a custom-made pvc jointer

- 11.** List at least 3 tasks undertaken by a proprietary partition installer

Any 3 from:

Constructing the framework for the partitions

Creating the openings in the partitions

Installing the linings onto the frames they have constructed

Installing doors and windows in the openings they have formed

- 12.** In general terms, briefly describe the framing for a proprietary partition.

The framing for a proprietary partition generally comprises a series of steel (or aluminium) studs that are fitted between a top and bottom track. The top track is generally fixed to the underside of a suspended ceiling and the bottom track fixed to the floor

- 13.** What are the 4 tasks of a suspended ceiling installer?

Constructing a gridded framework into which the ceiling linings are either “placed” or “fixed”;

Forming special details around the perimeter of the ceiling or at the junction between the ceiling and walls, columns or beams;

Placing the tiles into grid and tile ceilings; and

Fixing the ceiling linings where the grid is concealed and a continuous flat surface is required.

- 14.** What is an access floor and what does it provide?

An access floor is a false floor that sits above the original floor. It provides a cavity space in which services such as cables, electrical wiring, air conditioning or water pipes can be concealed.

- 15.** List the 3 main tasks of an access floor installer.

Constructing a gridded framework into which the floor linings are either “placed” or “fixed”;

Forming stairs and ramps to allow access to the newly formed raised floor; and

Placing tiles and other specialist floor panels into grid.

- 16.** Explain what is meant by a subcontracting and a direct-to-client relationship for interior systems client relationships.

Subcontracting - the interior systems tradesperson will take instructions from, is paid by, and is responsible to the main contractor or their on site representative.

Example: similar to that from the Client Base section of the student resource.

Direct to client - The interior systems tradesperson client chooses to manage the building process themselves and engage directly with the trades or professions whose skills they need to hire. In this situation, they are working direct for the client and will take instructions from, be paid by, and be responsible to them.

Example: similar to that from the Client Base section of the student resource.

- 17.** What is a trade account and what benefit does it extend to the tradesperson AND the supplier?

This is where a manufacturer or supplier agrees to sell trade goods to approved customers on the basis that the customer promises to repay on or before a stipulated date in the future (generally the 20th of the month following invoice).

Trade accounts allow contractors requiring materials the ability to get those materials without having the money up-front - therefore benefiting from the credit given to them by the supply company.

From a supplier perspective, they want repeat business and the ability to be able to sell larger quantities than your Jo-average shopper might buy when walking in the door.

- 18.** How are trade discounts generally expressed? Give an example.

Trade discounts are usually expressed as a percentage of the retail price and may vary depending on the type of product and quantity ordered. For example, with a 10% trade discount goods worth \$100 would be reduced to \$90.

- 19.** In general terms, explain what is meant by manufacturer guarantee systems and what two levels of guarantee exist?

Manufacturer guarantee systems are written assurances from manufacturers that their goods or services meet a certain standard of quality and durability.

- *Sometimes the manufacturer guarantees only their products/systems to be manufactured to a specific quality level.*
- *Sometimes the manufacturer also guarantees the use of their products/systems in their installed state by a contractor whose work they are prepared to stand behind.*

- 20.** Why is it common for manufacturers to offer product training?

Because modern construction products and systems have become more complex over time and require specialist knowledge and skills in order to ensure that the finished job meets the required quality standard.

Because manufacturers have a vested interest in ensuring that their products and systems are installed correctly and they know that technical trade literature is often not read as thoroughly as it should be, the larger companies offer technical training (often free) on the use of their products and systems to ensure that they are used the way they were designed to be used.

- 21.** What is meant by an accredited supply network?

Where a manufacturer or supplier of products and systems is prepared to stand by certain contractors work, provided they satisfy the manufacturer's accreditation criteria.

22. Complete the following tables about other trade relationships with interior systems contractors.

Before interior systems contractors begin their work

	What has to be done by other trades and what are those trades?
Specialist Interiors	<i>All the services need to be in place before they can put in suspended ceilings and proprietary partitions. That means having a relationship with the air-conditioning contractors, plumbers, electricians, data cable technicians etc. While some services will be completely in place before they arrive on site, others will be installed in tandem (such as wiring and pipes inside any partitions that require them). The specialist interior contractor will also require assistance from the main contractor (the carpenter) to “make ready” for them - which may mean some additional carpentry work needs to be done so that they can do their job</i>
Interior linings – fixers	<i>Walls, partitions and ceilings that have been constructed must be ready for lining - as well as ensuring that all services (plumber, electrical etc) that need to be in place are in their finished position before they cover them up with their linings. Interior lining fixing contractors have an added responsibility in as much as once they accept the surfaces to line, they are agreeing that the framing is up to the standard that is acceptable to line and therefore take responsibility for the lined surface once complete. When lining timber framed buildings, that means that a pre-line inspection must have taken place to ensure that the timber is dry enough to take the linings. It also means that they are checking on the standard of the carpenter’s work as any framing members that “stick out” or are not in the correct position will have an impact on the finished product. This will require assistance from the main contractor (the carpenter) to “make ready” for them - which may mean some additional carpentry work needs to be done so that they can do their job</i>
Interior linings – finishers (plasterers)	<i>The linings must have been fixed correctly (interior linings fixers) so that they can achieve the finished surface specified. Interior lining finishing contractors again have an added responsibility but this time it means that once they have accepted the lined surface as suitable for plastering, they are taking responsibility for its finish</i>

After interior systems have completed their work

	What has to be done by other trades and what are those trades?
Interior linings – fixers	<i>After the fixers come the finishers (plasterers) see table above</i>
Specialist Interiors Interior linings – finishers (plasterers)	<i>The trades that follow the interior systems contractors tend to be those that come before them (such as the plumbers, electricians, air-conditioning technicians etc) to finish off the work that they started and can only complete once the surface is finished. The other trade that follows immediately is the painters and decorators - whom tend to form close relationships with the interior systems contractors as the work of a painter goes hand in hand with the work of a plasterer and lot of plastering contractors do a hand-over with the painter to ensure that the finished surface that they are leaving meets the expectations of the painter (who is the trade that leaves their final stamp on the surface)</i>

23. Complete the following table about the industry bodies listed below.

Name of body	How it impacts on interior systems industry
WorkSafe NZ	<i>The main safety issues that the WorkSafe NZ will look out for in the interior systems industry include:</i> <ul style="list-style-type: none"> • <i>manual material handling (safe lifting);</i> • <i>safe use of plant, equipment and tools;</i> • <i>working at heights (ie above floor level, scaffolds, ladders and stilts);</i> • <i>dust (from cutting sanding); and</i> • <i>noise.</i>
Ministry of Business, Innovation and Employment (MBIE)	<i>MBIE administers the Building Act and Building Code and all work done by interior systems workers must conform to the Building Code.</i>
Building Consent Authorities	<i>While the work of the interior system industry does not require an individual building consent from a BCA, the jobs they do and the specifications they must meet form part of the approved plans and specifications that make up a building consent. Furthermore, their work is often subject to inspection prior to fixing (especially prelining and post lining inspections and is even more common if the interior systems contribute to a buildings bracing).</i>

Standards New Zealand	<i>Standards are agreed specifications for products, processes, services, or performance. New Zealand Standards are used by a range of trades, including that of interior systems, to enhance their products and services, improve safety and quality, and meet industry best practice.</i>
AWCINZ	<i>The Association of Wall and Ceiling Industries of New Zealand Inc is a grouping of building industry organisations, including contractors, tradesmen, trainees, manufacturers and suppliers, established to represent the interests of members and their customers for ceiling, wall and lining sheathing systems and related products.</i>

- 24.** List 4 jobs in the interior systems industry and describe those they work with and what training they need for the job.

Any 4 jobs and training requirements from the Job Roles and Training section of the student resource.

Examples of oral assessment questions

1. What are 3 sub-parts of the interior linings industry?

Plaster board;

Fibre cement linings;

Fibrous plaster; and

2. What are 3 sub-parts of the specialist interiors industry?

Proprietary partitions;

Suspended ceilings; and

Access floors.

3. What are the two sectors of the fibrous plaster trade?

Fibrous plaster manufacturing

Fibrous plaster installation.

4. Name one manufacturer of interior lining products and one manufacturer of specialist interior products.

Interior lining. - Winstones (GIB), James Hardie, others may also be correct

Specialist interior - USG mentioned in resource, others may also be correct

5. What association represents the interior systems industry?

Association of Wall and Ceiling Industries of New Zealand Inc (AWCINZ)