Level 3 Advanced Technical Diploma in Plastering (Fibrous) (450)

(7908-30)

Version 1.0

Practice Tasks

Introduction

General information about structure of the practice tasks

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- Completion of tasks
- Tasks

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- Declaration of Authenticity
- Feedback form

Practice Tasks 7908-30

General guidance

This is a formative assessment that you will complete. You will be observed and feedback will be given. You will be marked on the quality and accuracy of your practical performance and any written work you produce. It is therefore important that you carry your work out to the highest standard you can. You should show how well you know and understand the subject and how you are able to use your knowledge and skills together to complete the tasks.

Health and Safety

You must always work safely, in particular while you are carrying out practical tasks.

You must always follow any relevant Health and Safety regulations and codes of practice.

If your tutor sees you working in a way that is unsafe for yourself or others, they will ask you to stop immediately, and tell you why. Your tutor will not be able to reassess you until they are sure you are ready to work safely.

Presentation of work

Presentation of work must be neat and appropriate to the task.

You should make sure that each piece of work is clearly labelled with your name and the task title.

Any electronic files must be given a clear file name that allows your tutor to identify them as your

Completion of tasks

You will be required to read the work scenario and use the candidate instructions for each practice task to produce the end product. You will be required to answer three multiple choice questions related to the tasks.

Your completed piece of work will be marked against the standards set out in the candidate instructions table within each practice task. Your tutor/assessor will mark the multiple choice questions and give you feedback.

Your tutor/assessor will provide constructive feedback, highlighting areas of both good practice and areas requiring development.

Your performance will be observed throughout the task, and any help or guidance provided by your tutor/assessor or peers will be taken into consideration on the marking of your completed work.

Tasks

Task 1 Produce an in-situ running mould, to match an existing cornice

Candidate name	
Date	

Work scenario: You have been asked to produce a zinc template and construct a running mould from the drawings provided, in preparation for running a cornice in situ on site, to exactly match an existing cornice moulding.

Assessment method: This practice task requires you to show case both your practical and knowledge skills, when accurately cutting and filing zinc templates and constructing a running mould.

Scope of content
You will be required to:

- Produce a zinc profile from the drawing
- Construct an in-situ running mould.

No	Candidate instructions	Achieved	
		Yes	No
1	Select the correct tools, materials and equipment		
2	Cut sheet metal to form a profile that is accurate, free from nicks, burs and file marks without error (Figure 1)		
3	Cut timber stock to the correct shape, trimmed back 3 mm from metal profile		
4	Cut timber stock to the correct length, to produce accurate top member along ceiling line detail		
5	Cut slipper to the correct size and fixed square and firmly to stock		
6	Cut and fit braces sections correctly and firmly		
7	Cut/fix muffle or form correctly to zinc profile		
9	Work safely at all times		
10	Housekeeping; • Leave work area clean and tidy • Clean and store away materials correctly (if applicable) • Dispose of waste correctly (if applicable).		

Figure 1- Zinc profile

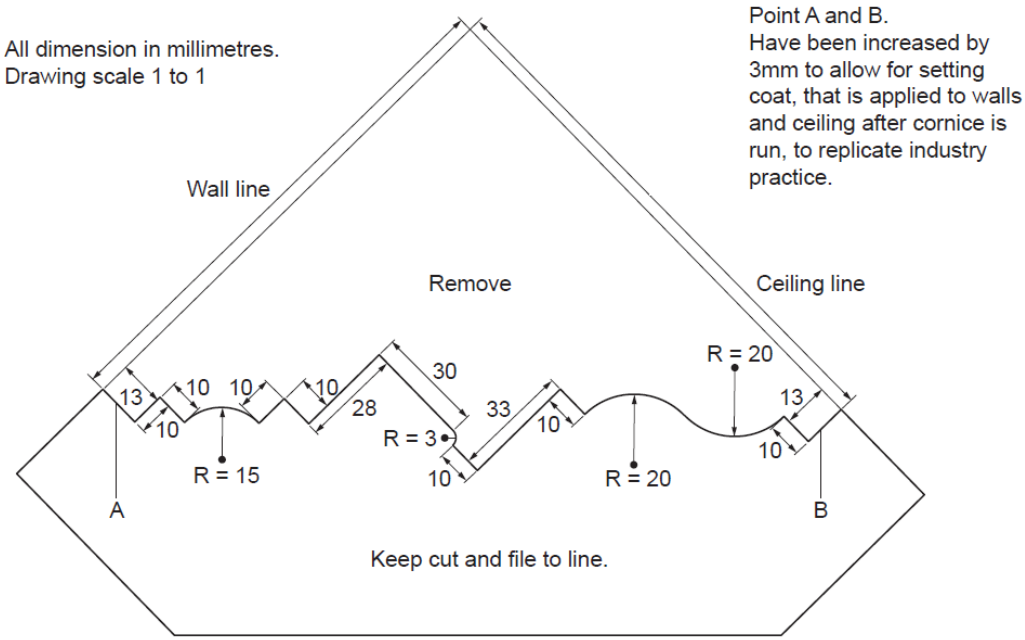
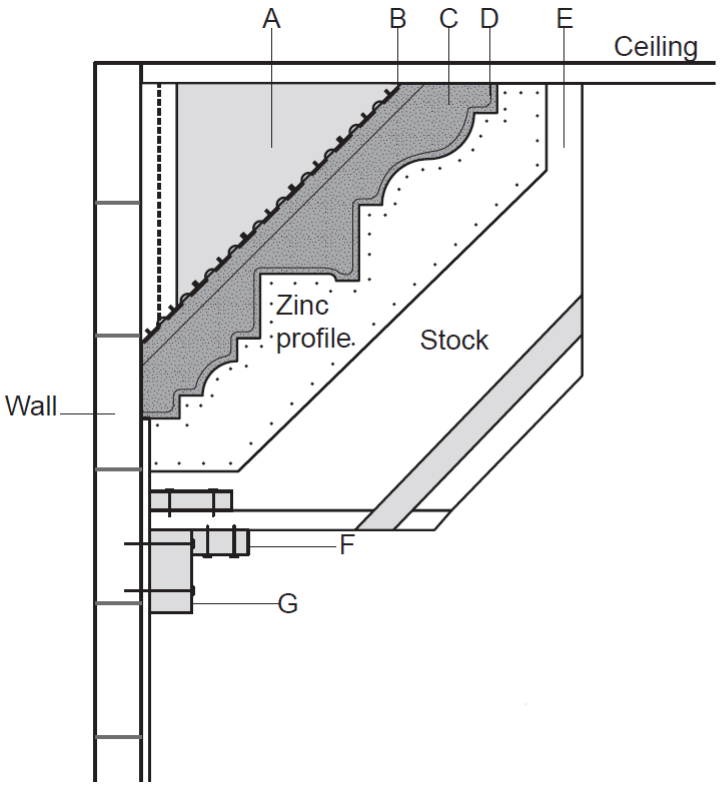


Figure 2 – Section through completed work/completed drawing



Drawing key

A = Keels/timber brackets fixed to the background Hardwood laths or stainless steel EML fixed to keels/ timber brackets
B = Pricking up coat
C = Core coat
D = Finish coat
E = Running mould, consisting of zinc profile, stock, braces and slipper
F = Rabbit fixed to slipper
G = Running rule fixed to background

Cornice projection = 151mm
Cornice depth = 154mm
Must allow for 3mm off set coat to walls and ceiling as in industry.

Knowledge questions

1) Which moulding section would be found within a cornice zinc profile?

   a) Corona.
   b) Astrigal.
   c) Flute.
   d) Bead.

2) Which power tool is used to cut out a stock?

   a) Circular saw.
   b) Reciprocating saw.
   c) Jigsaw.
   d) Chop saw.

3) Which is a benefit of using a scribe?

   a) It produces a more accurate zinc profile.
   b) It eliminates material wastage.
   c) It produces sharper zinc profiles.
   d) It eliminates cutting and filing.

Feedback and action planning form

Candidate name:	
Date:	

Task title:	
Candidate feedback	
Assessor feedback	
Action plan	

Task 2 Running a cornice in-situ, to match an existing moulding using traditional materials

Candidate name	
Date	

Works Scenario: You have been asked to run a cornice in situ, using traditional plastering materials. You are required to prepare the background and apply the materials to re-create the cornice to match the original moulding design.

Assessment method: This practice task requires you to show case both your practical and knowledge skills when setting out, mixing, applying and running plaster mouldings in situ using traditional plastering materials.

Scope of content
You will be required to:

- Prepare a background
- Set out keels/timber brackets
- Set out and fix running rules
- Fix EML or timber lathes to the keels/timber brackets
- Mix and apply a pricking up coat
- Mix and apply a core coat
- Mix, gauge and apply finishing coat.

No	Candidate instructions	Achieved	
		Yes	No
1	Select the correct tools, materials and equipment		
2	Produce timber keels/brackets to correct dimensions to allow for adequate material application		
3	Fix timber keels/brackets securely and to the correct depth and spacing		
4	Either fix EML securely to timber keels/brackets **or** fix timber laths securely and to the correct spacing (between 5 and 8 mm) to form adequate nibs		
5	Mix coarse sand with lime putty or hydraulic lime to the correct ratio of 2.5 sand to 1 lime (include goat/horse hair **optional**)		
6	Mix casting plaster with lime mortar to the correct ratio		
7	Apply gauge lime mortar pricking up coat to EML or timber laths to the correct thickness of 15 mm and create adequate diamond key		
8	Cut and fix running rule securely to background in the correct position free from distortion		
9	Fix rabbit to stock to ensure members are level and square		
10	Gauge, mix and apply core coat to the muffled profile and free from misses		
11	Gauge, mix and apply finish coat to the finished profile and free from any misses, chattering or gathering on		
12	Clean down ceiling and wall lines and remove running rule		

14	Work safely at all times		
15	Housekeeping; • Leave work area clean and tidy • Clean and store away materials correctly (if applicable) • Dispose of waste correctly (if applicable).		

Figure 1 – Front elevation (keels/timber and laths fixed)

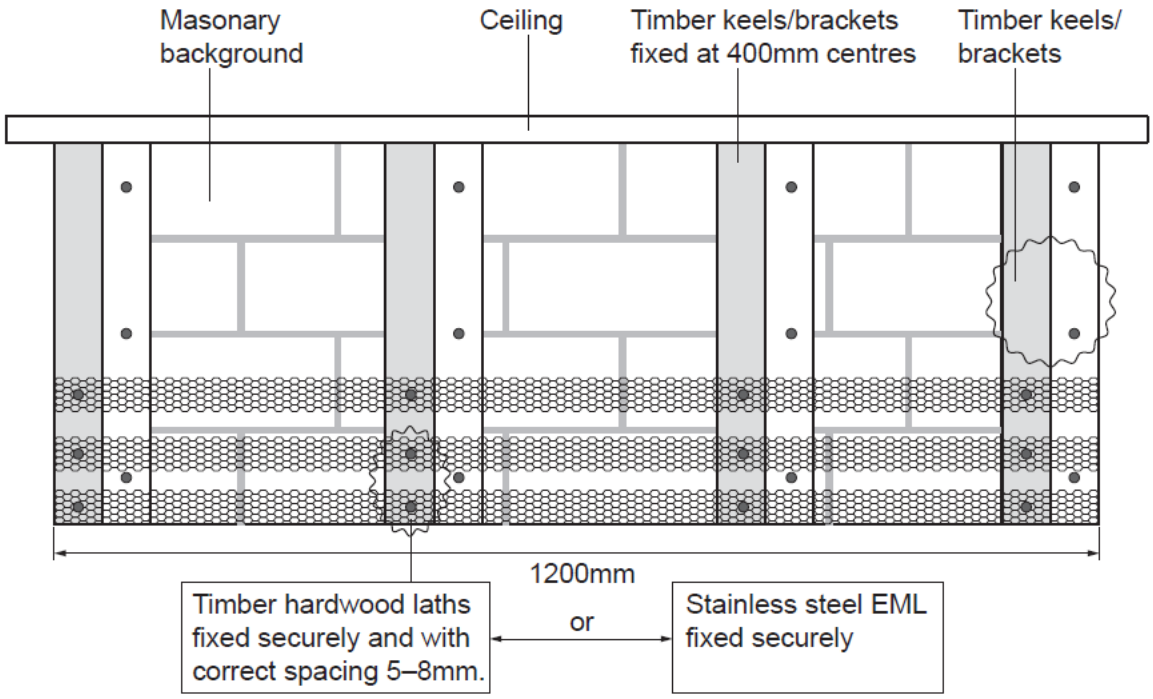
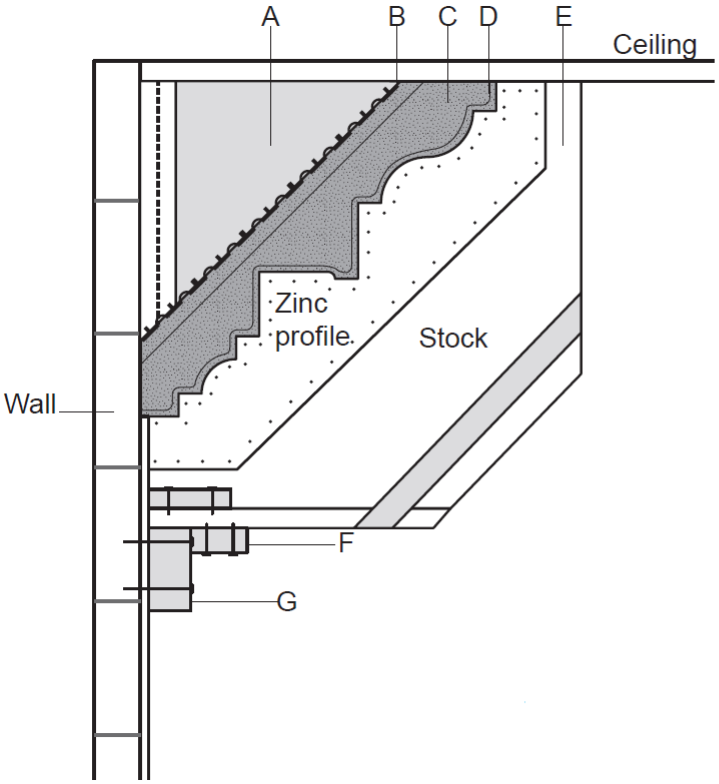


Figure 2 – Section through completed work/completed drawing



Drawing key

A = Keels/timber brackets fixed to the background Hardwood laths or stainless steel EML fixed to keels/ timber brackets
B = Pricking up coat
C = Core coat
D = Finish coat
E = Running mould, consisting of zinc profile, stock, braces and slipper
F = Rabbit fixed to slipper
G = Running rule fixed to background

Cornice projection = 151mm
Cornice depth = 154mm
Must allow for 3mm off set coat to walls and ceiling as in industry.

Knowledge questions

1) Which type of sand should be used to produce lime mortar for in situ run work?

   a) Soft.
   b) Silver.
   c) Coarse grit.
   d) River washed.

2) What is the **recommended** distance when fixing hardwood timber laths to bracketing?

   a) 10 – 12 mm
   b) 8 – 10 mm
   c) 5 – 8 mm
   d) 3 – 5 mm

3) Which material is added to lime putty to create a gauged set?

   a) Roman cement.
   b) Casting plaster.
   c) Hydraulic lime.
   d) Coarse sand.

Feedback and action planning form

Candidate name:	
Date:	

Task title:	
Candidate feedback	
Assessor feedback	
Action plan	

Task 3 Produce a plaster model of a dentil block cornice measuring 1.2 m

Candidate name	
Date	

Works Scenario: An architect requires a bespoke dentil block cornice to be produced. You have been asked to produce a plaster model of the cornice for the architect to view and approve of the design.

Assessment method: This practice task enables you to show case both your practical and knowledge skills when accurately producing a plaster model of an enriched cornice, prior to the manufacture of a rubber case reverse mould, for casting fibrous plaster mouldings.

Scope of content
You will be required to:

- Produce two running moulds.
- Prepare the bench and run off the model and dentil blocks
- Cut the dentil blocks to the required dimensions, and set out and dress the model
- Cut the model square and to the correct dimensions.

No	Candidate instructions	Achieved	
		Yes	No
1	Select the correct tools, materials and equipment		
2	Produce zinc profiles free from any nick, burs or file marks		
3	Construct double slipper and single slipper running moulds correctly including muffle		
4	Set out and prepare the bench ready for running		
5	Select materials and produce an adequate keyed core to allow for final run		
6	Correctly gauge the amount of plaster and mix it to the correct consistency and free from any lumps		
7	Run off the finish for the model so that it is free from any gathering on, chattering, misses or scratches		
8	Run off the dentil block so that it is free from any gathering on, chattering, misses or scratches		
10	Cut and smooth dentil blocks to the correct dimension and square		
11	Dress dentil blocks onto model at correct spacing, working from model centre line		
12	Stop in and make good all dentil blocks so that they are free from any misses		
13	Cut model square to the correct dimension		
14	Work safely at all times		
15	Housekeeping; • Leave work area clean and tidy • Clean and store away materials correctly (if applicable) • Dispose of waste correctly (if applicable).		

Figure 1 – Zinc profile

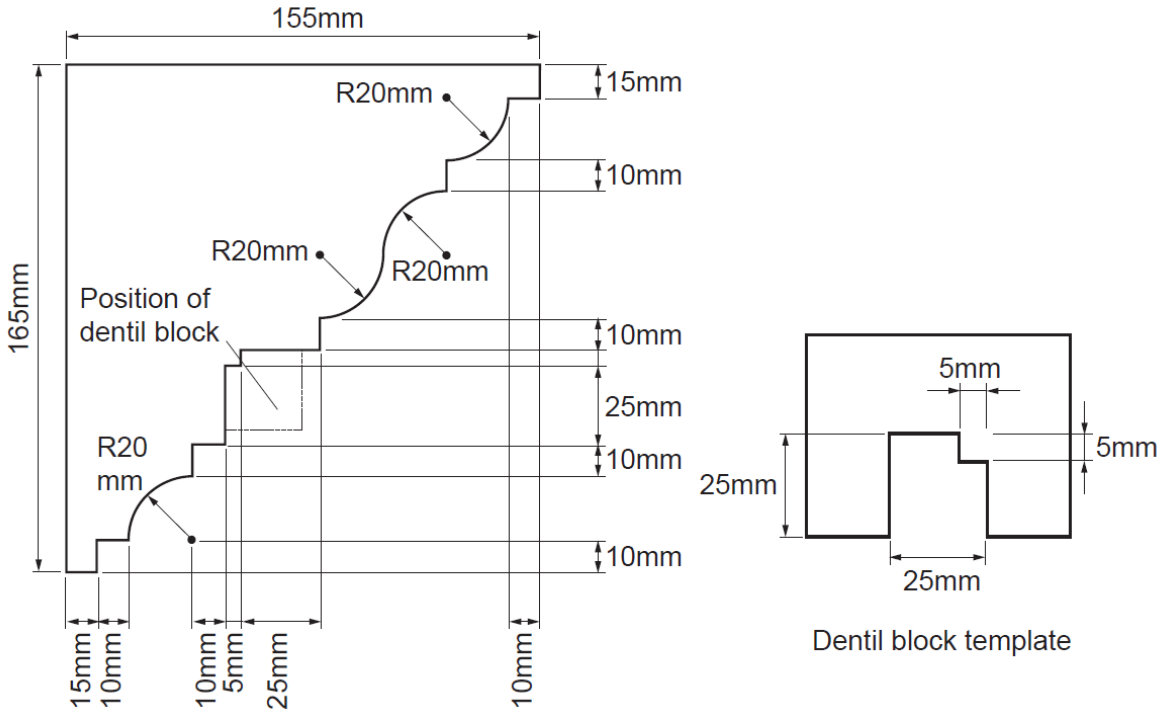


Figure 2 – Double slipper running mould

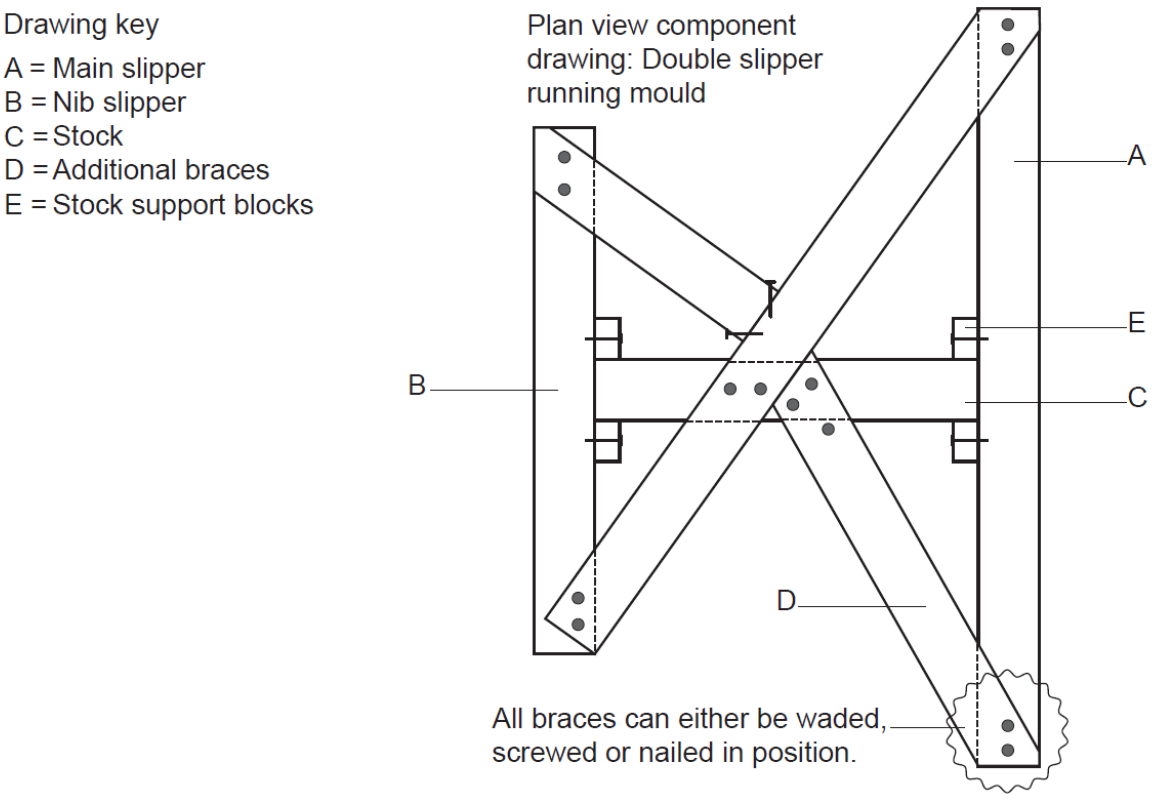


Figure 3 – Component drawing of model

Drawing key

A = Plasterboard core
B = Muffle coat
C = Final run
D = Bench line

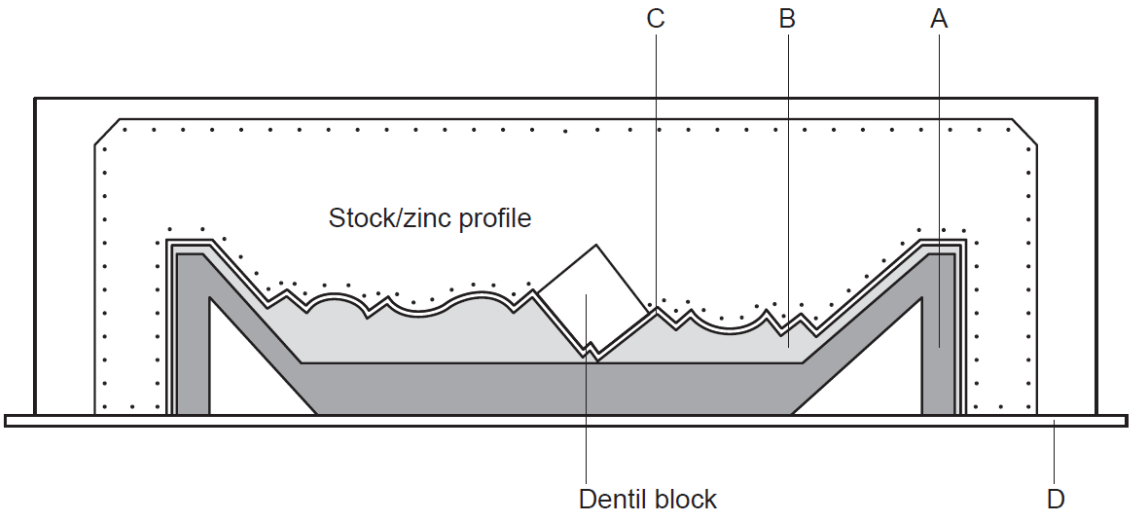
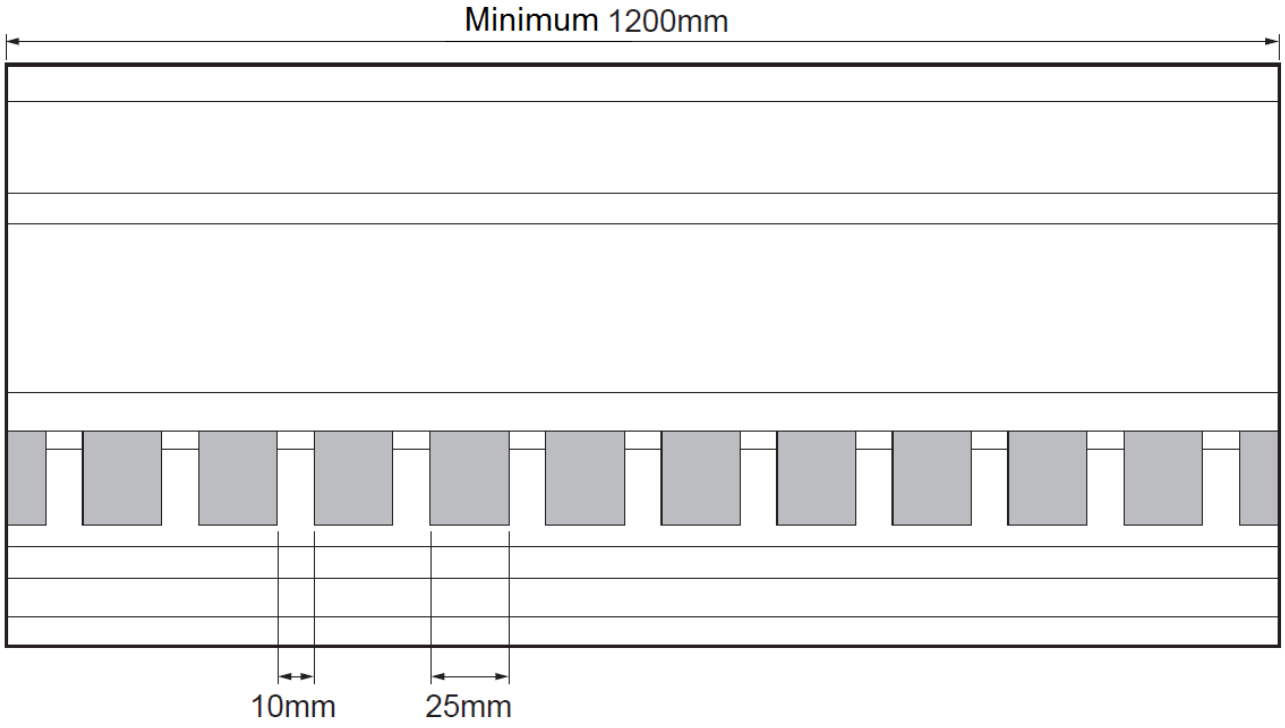


Figure 4 –Drawing of model for positioning the dentil block



Knowledge questions

1) Which is a type of cornice enrichment?

   a) Acanthus leaf.
   b) Cyma recta.
   c) Cavetto.
   d) Scotia.

2) Which additive **must** be added to a silicone rubber?

   a) Methylated spirit.
   b) Resin.
   c) Size.
   d) Catalyst.

3) What is the **average** setting time of fine casting plaster?

   a) 10 – 15 minutes.
   b) 12 – 30 minutes.
   c) 15 – 20 minutes.
   d) 20 – 40 minutes.

Feedback and action planning form

Candidate name:	
Date:	

Task title:	
Candidate feedback	
Assessor feedback	
Action plan	

Task 4 Running a loose piece reverse cornice mould

Candidate name	
Date	

Works Scenario: A customer has recently had refurbishment works carried out on their terraced Victorian home. They have supplied you with a section of the cornice moulding, which contains an undercut section.

Assessment method: This practice task enables you to show case both your practical and knowledge skills when accurately producing a loose piece plaster reverse mould, prior to the casting of fibrous plaster mouldings.

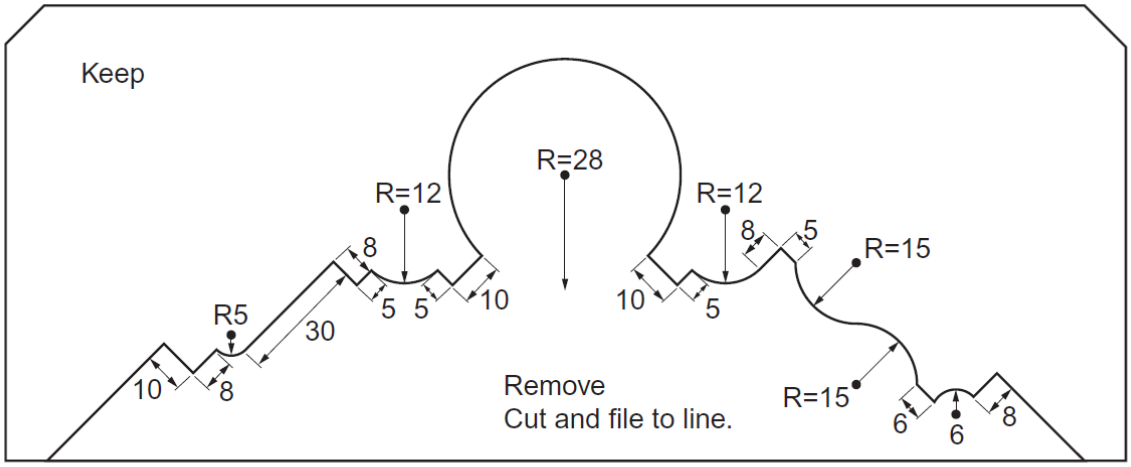
Scope of content
You will be required to:

- Construct a running mould that contains a loose piece zinc profile
- Prepare the bench and run off a loose piece reverse mould
- Prepare the reverse mould so that it is ready for casting.

No	Candidate instructions	Achieved	
		Yes	No
1	Select the correct tools, materials and equipment		
2	Correctly construct a running mould that contains loose piece section plate to zinc profile		
3	Cut muffle to the correct position to accommodate loose piece section		
4	Fix muffle to the correct depth to allow for 6mm final run		
5	Correctly gauge the amount of plaster and mix it to the correct consistency and free from any lumps		
6	Run reverse mould core accurately and provide adequate key where required		
7	Prepare loose piece bed with shellac and release agents without misses		
8	Run off reverse mould and loose piece so that it is free from any gathering on, chattering, misses or scratches		
9	Remove loose piece without damage to either piece or bed of reverse mould		
10	Clean arrises along each edge of bed		
11	Clean off excess plaster burs to loose piece section		
12	Cut reverse mould and loose piece to given dimension		
13	Apply thin even coats of shellac to reverse mould and loose piece without misses or tears		
14	Grease loose piece, bed and mould without misses or grease marks so that it is ready for casting		
15	Work safely at all times		

16	Housekeeping; • Leave work area clean and tidy • Clean and store away materials correctly (if applicable) • Dispose of waste correctly (if applicable).		

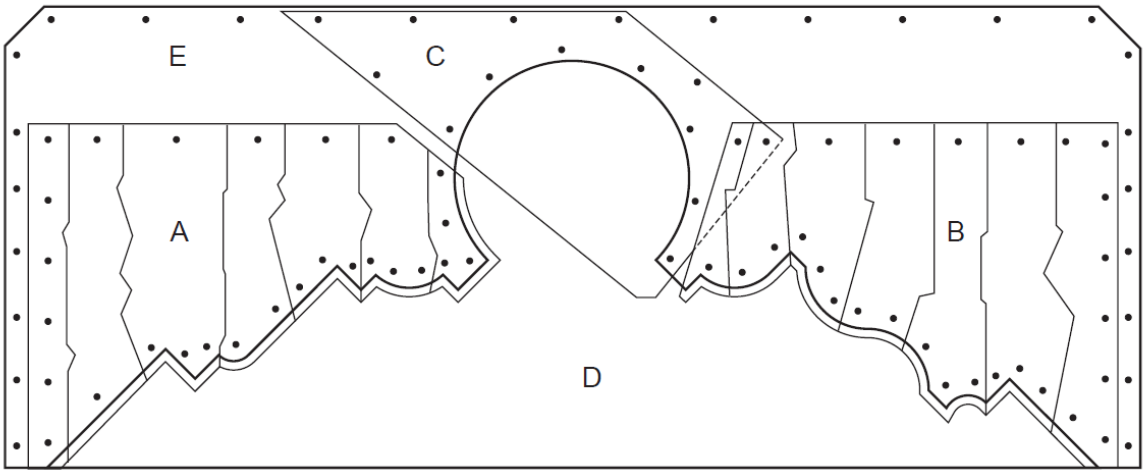
Figure 1 – Zinc profile



*Measurements in mm

Bench line

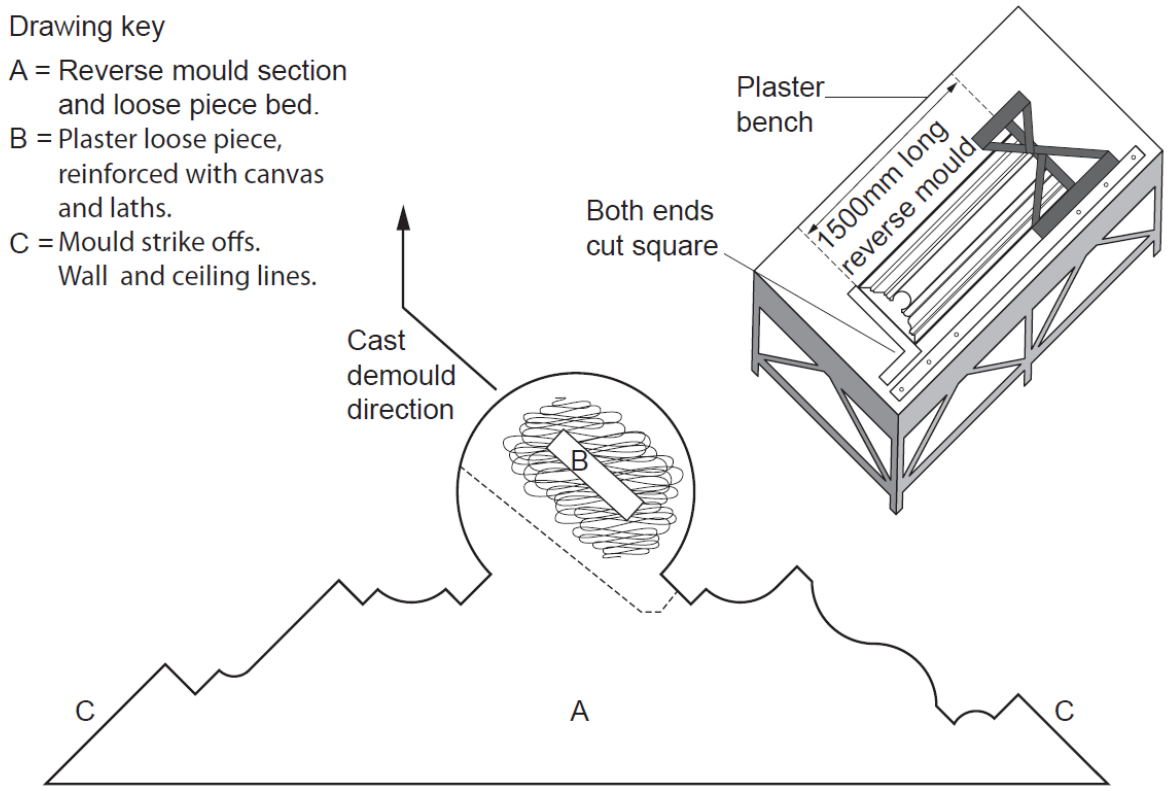
Figure 2 – Stock of running mould



Drawing key

A and B = Muffle plates.
C = Loose piece plate.
D = Core and loose piece bed.
E = Stock of running mould

Figure 3 – Finished reverse mould



Knowledge questions

1) What is the purpose of a loose piece plaster reverse mould?

   a) To reduce the amount of casting plaster when casting.
   b) To enable the cast to be removed from the mould.
   c) To provide a better finish to the face of the cast.
   d) To produce lighter and stronger casts.

2) Which is the correct sequence for preparing a plaster bench?

   a) Make good, apply shellac, fix running rule, grease up.
   b) Fix running rule, apply shellac, make good, grease up.
   c) Make good, grease up, apply shellac, fix running rule.
   d) Apply shellac, make good, grease up, fix running rule.

3) Which additive is mixed with shellac?

   a) Liquid paraffin wax.
   b) Boiled linseed oil.
   c) Methylated spirit.
   d) White spirit.

Feedback and action planning form

Candidate name:	
Date:	

Task title:	
Candidate feedback	
Assessor feedback	
Action plan	

Task 5 Produce casts from a loose piece plaster reverse mould

Candidate name	
Date	

Works Scenario: You have been asked to cast cornice from a loose piece plaster reverse mould, using hessian and two gauge casting methods.

Assessment method: This practice task enables you to show case both your practical and knowledge skills when casting fibrous plaster mouldings.

Scope of content
You will be required to:

- Prepare materials required to produce the casts
- Produce two casts from a loose piece plaster reverse mould
- Remove the casts from the mould and store correctly.

No	Candidate instructions	Achieved	
		Yes	No
1	Select the correct tools, materials and equipment		
2	Cut canvas to the correct length and width, including ropes and laps		
3	Cut all laths to the correct length and soak prior to casting		
4	Mix plaster firstings to the required consistency		
5	Brush and splash firstings with no misses and strike off cleanly		
6	Mix plaster secondings to the required consistency and retard accordingly		
7	Brush canvas in completely, including correctly soaking and positioning ropes, laths and laps		
8	Splash the back of the cast neatly and strike off cast correctly		
9	Remove cast from mould without damage to reverse mould		
10	Check that the face of the cast is free from canvas grinning, cockling, shelling, air bubbles and excessive grease marks		
11	Check that strike offs are flat and set to the correct angle		
12	Correctly store casts		
13	Work safely at all times		
14	Housekeeping; • Leave work area clean and tidy • Clean and store away materials correctly (if applicable) • Dispose of waste correctly. (if applicable)		

Knowledge questions

1) What is the **recommended** distance between brackets/wads on the back of a cast?

   a) 100 mm
   b) 200 mm
   c) 300 mm
   d) 400 mm

2) What defect can be present on the face of a cast?

   a) Cockling.
   b) Crazing.
   c) Sagging.
   d) Tearing.

3) Where are ropes positioned in casts?

   a) Over strike offs.
   b) Beneath laths.
   c) Over the back of laths.
   d) Beneath main canvas.

Feedback and action planning form

Candidate name:	
Date:	

Task title:	
Candidate feedback	
Assessor feedback	
Action plan	

Task 6 Fix and finish a Victorian cornice to a bay window

Candidate name	
Date	

Works Scenario: Your company have asked you to install a plain Victorian cornice to a bay window so that it is ready for decoration.

Assessment methods: This practice task enables you to show case both your practical and knowledge skills when installing a Victorian cornice to a bay window.

Scope of content
You will be required to:

- Set out to wall and ceiling lines
- Measure and cut cornice to the correct length and projection
- Fix and finish the cornice ready for decoration.

No	Candidate instructions	Achieved	
		Yes	No
1	Select the correct tools, materials and equipment		
2	Correctly mark out wall and ceiling lines to bay window		
3	Securely fix timber blocks or nails to wall line		
4	Correctly calculate the cornices projection and depth		
5	Measure and cut cornice to the correct length and correct type of mitre		
6	Mix and apply adhesive correctly without adhesive present to the face of the cast		
7	Correctly position the cast to correct projection and depth with all members line-able		
8	Wall and ceiling lines stopped in correctly, free from any misses and build up, to wall and ceiling surface		
9	All mitres' reinforced correctly and stopped in sharp, members in line, mitre junctions linable and free from any misses, canvas grinning or damage to surrounding cornice		
10	Work safely at all times		
11	Housekeeping; • Leave work area clean and tidy • Clean and store away materials correctly (if applicable) • Dispose of waste correctly (if applicable).		

Figure 1 – Calculating the projection and depth of cornice

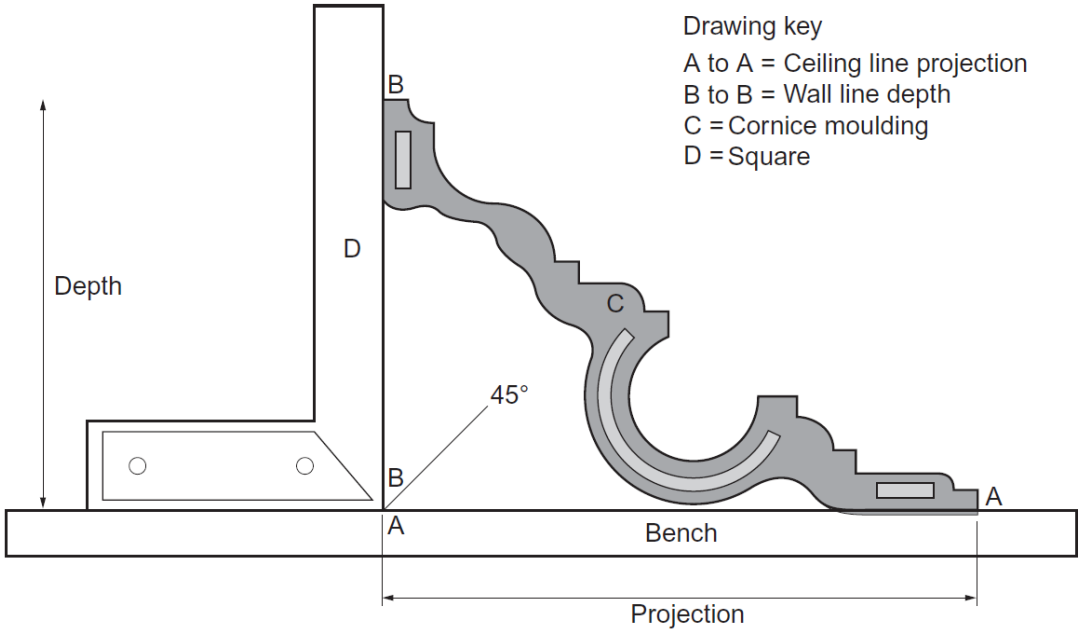


Figure 2 – Setting out to fix the cornice

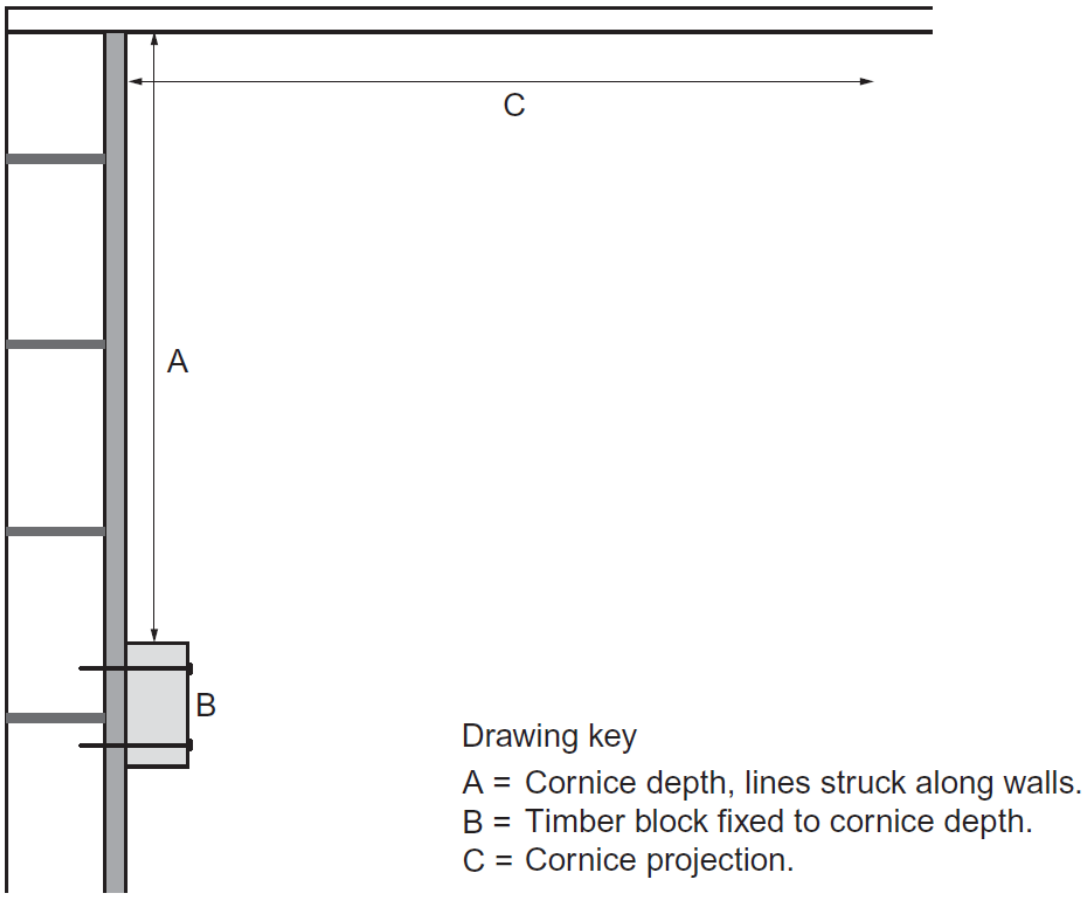
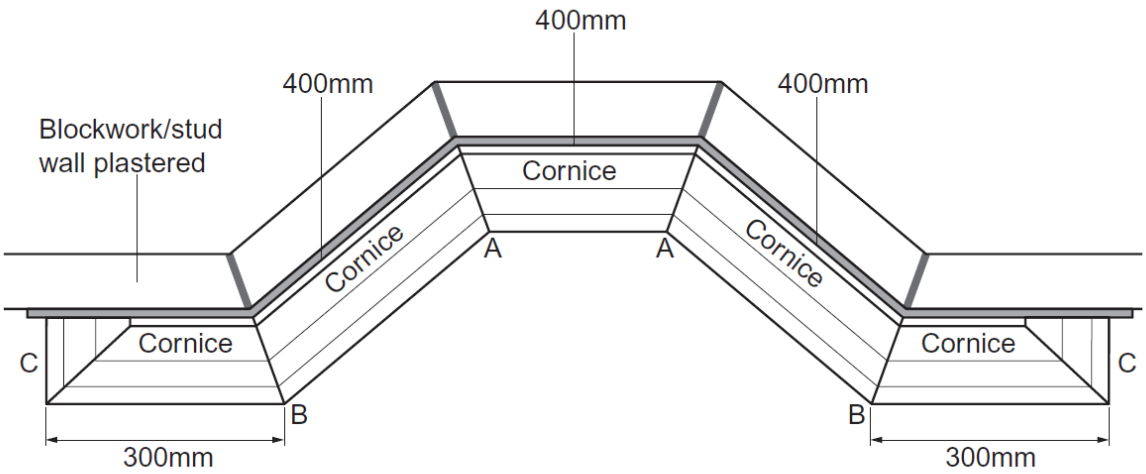


Figure 3 – Fixing and finishing the cornice



Drawing key

A = Internal mitre, to follow internal wall angle.
B = External mitre, to follow external wall angle.
C = Stop end returns to given dimensions

Knowledge questions

1) How should a length of cornice be placed in a mitre box?

a) Cornice facing you, with ceiling line on the bench.
b) Cornice facing you, with wall line on the bench.
c) Cornice facing away from you, with ceiling line on the bench.
d) Cornice facing away from you, with wall line on the bench.

2) Which type of mitre is shown in the image below?

a) Internal mitre.
b) Straight mitre.
c) Raking mitre.
d) External mitre.

3) Which type of counter-sunk screw should be used to fix a cornice?

a) Zinc plated.
b) Galvanised.
c) Stainless steel.
d) Black phosphate.

Feedback and action planning form

Candidate name:	
Date:	

Task title:	
Candidate feedback	
Assessor feedback	
Action plan	

ASSESSOR GUIDANCE

These practice tasks are designed for the candidates to make use of the 'tool kit' of knowledge, understanding and skills they will gain during their teaching and learning during this qualification in order to tackle problems/ tasks/ challenges.

Candidates are provided with a set of tasks, which can be taken in any order. The candidates have to reach into their knowledge and skills to independently select the correct processes, skills, materials, approaches to take etc, drawing on the full range of knowledge and understanding from across the qualification to make good decisions that will achieve an end result that is fit for the specified purpose.

These formative tasks will allow candidates to be supported in learning how to independently use the learning they have covered so far, drawing this together in a similar way, so they are familiar with the format, conditions and expectations of the practical assignment that they will sit at the end of this qualification.

Assessors have the option of asking candidates to complete a risk assessment, method statement or resource checklist, but this is not compulsory. Generic forms for these can be found in the appendix section.

Guidance on tasks

Resources

Centres will have well equipped workshops with compressive range of hand and portable power tools that meet current industry standards. All powered equipment should be well maintained and PAT certified. Centres will have special designated areas within their workshop (cubicles or project area) allowing candidates to practice the requirements of the unit and practice tasks.

Health and safety

Candidates should not be entered for assessment without being clear of the importance of working safely, and practice of doing so. The tutor must immediately stop a task if a candidate works unsafely and give the candidate feedback on why they were stopped.

Where it is appropriate candidates must be supervised when operating machinery.

Observation

Candidates must be observed carrying out these practice tasks and notes must be taken on the quality of performance along with any other aspect of performance that will support giving feedback to the candidate.

Preparation

During the formative practice tasks, tutors should routinely point out good or poor performance during the learning period, and through formative assessment. Candidates should be encouraged to do the best they can and be made aware of the difference between these formative assessments and the summative assessments.

Knowledge Questions answer keys

Task 1 Produce an in-situ running mould to match an existing cornice

Question	Correct key
1	A
2	C
3	D

Task 2 Running a cornice in-situ to match an existing moulding using traditional materials

Question	Correct key
1	C
2	C
3	B

Task 3 Produce a plaster model of a dentil block cornice measuring 1.2 m

Question	Correct key
1	A
2	D
3	B

Task 4 Running a loose piece reverse cornice mould

Question	Correct key
1	B
2	A
3	C

Task 5 Produce casts from a loose piece plaster reverse mould

Question	Correct key
1	D
2	A
3	B

Task 6 Fix and finish a Victorian cornice to a bay window

Question	Correct key
1	A
2	D
3	C

Appendix

Resource checklist

Candidate name		**Date**	
Task title			

Tools and equipment and materials	**Quantity**
eg cold chisel	*1*

Materials	**Quantity**
eg paving slabs	*10*

Personal Protective Equipment (PPE)	Quantity
eg safety harness	*1*

Appendix

Risk assessment form

Candidate Name	**SEVERITY (S):** Degree of harm which may be caused (including numbers affected) 1 = Minor Injury 2 = Major Injury 3 = Fatality	**LIKELIHOOD (L):** Probability that event will occur 1 = Remote 2 = Possible 3 = Likely	**RISK RATING (RR):** Severity x Likelihood 1-2 = Low 3-4 = Medium 6-9 = High

Date	Task title	Hazard	Existing Controls	S (1-3)	L (1-3)	RR (S x L)	Actions needed
18 July 2013	*Apply materials and fix tiles to surfaces*	*Chemical based adhesives*	*PPE*	*1*	*2*	*2*	*Implement sigh off sheet to ensure PPE is worn*

		Likelihood		
		Unlikely	**Possible**	**Very likely**
Severity	**1** **Slight / minor injuries / minor damage**	1	2	3
	2 **Medium injuries / significant damage**	2	4	6
	3 **Major injury / extensive damage**	3	6	9

Likelihood

3 = Very likely

2 = Possible

1 = Unlikely

Severity

3 = Major injury / extensive damage

2 = Medium injury / significant damage

1 = Slight / minor damage

Key:

1 = Low risk, action should be taken to reduce the risk if reasonably practicable

2, 3, 4 = Medium risk, is a significant risk and would require an appropriate level of control measures

6 & 9 = High risk, should not be undertaken without prior agreement

Method statement

Department/ location:		
Risk assessment no.		
Description of the task/ activity:		
Personnel involved:	**Name**	**Role/ trade**
Key plant & tools:		
Key materials:		
Other essential equipment: **(ie access platforms/winches/ladders, etc)**		
Specific identified residual hazards: **(or refer to the task specific risk assessment(s))**		
Specific staff training:		
Sequence of operations: **(include sketches if required)**		

Hazardous substances: (attach MSDS if required) **Applicable:**	 Very toxic	 Harmful/ irritant	 Corrosive	 Dangerous for the environment	 Oxidising	 Highly flammable	 Explosives	

Required Personal Protective Equipment:	 Safety boots	 Hard hats	 Safety gloves	 Hearing protection	 Eye protection	 Respiratory protection	 Hi viz protective clothing

Emergency procedures:			
	**First Aid facilities:**	**Name of on-site First Aider:**	
		First Aid box location:	
		Location of nearest hospital:	
Other information & comments			

Declaration of Authenticity

Candidate name	Candidate number
Centre name	Centre number

Candidate:

I confirm that all work submitted for this synoptic assignment is my own, and that I have acknowledged all sources I have used.

Candidate signature	Date

Tutor:

I confirm that all work was conducted under conditions designed to assure the authenticity of the candidate's work, and am satisfied that, to the best of my knowledge, the work produced is solely that of the candidate.

Tutor signature	Date

Assessment feedback form

Candidate name	Candidate number
Tutor name	Date of assessment

Task / AO	Feedback

Tutor signature and date: