

001: Constructing Halving Joints



6219-06 EL3/L1 Construction Skills/Carpentry & Joinery



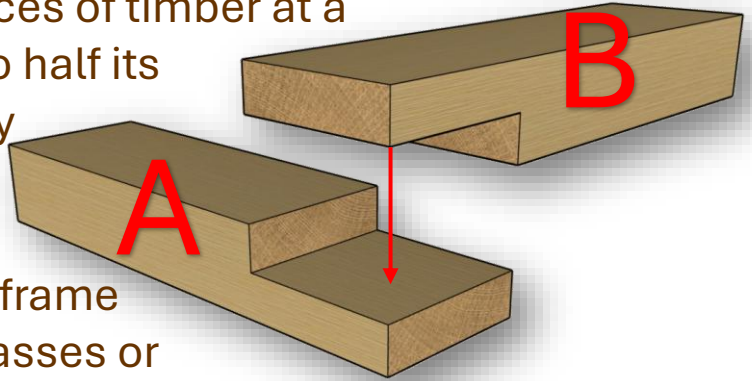
**City &
Guilds**

James Rix

Corner Halving Joint.



A corner halving joint is a basic woodworking technique used to join two pieces of timber at a right angle. Each piece is cut to half its thickness at the corner, so they fit together flush, forming a neat and strong joint. It's commonly used in lightweight frame construction like cabinet carcasses or picture frames, especially when the frame will be covered with sheet material. The joint is quick to make with simple tools and is great for teaching beginners about marking out, cutting, and assembling timber.

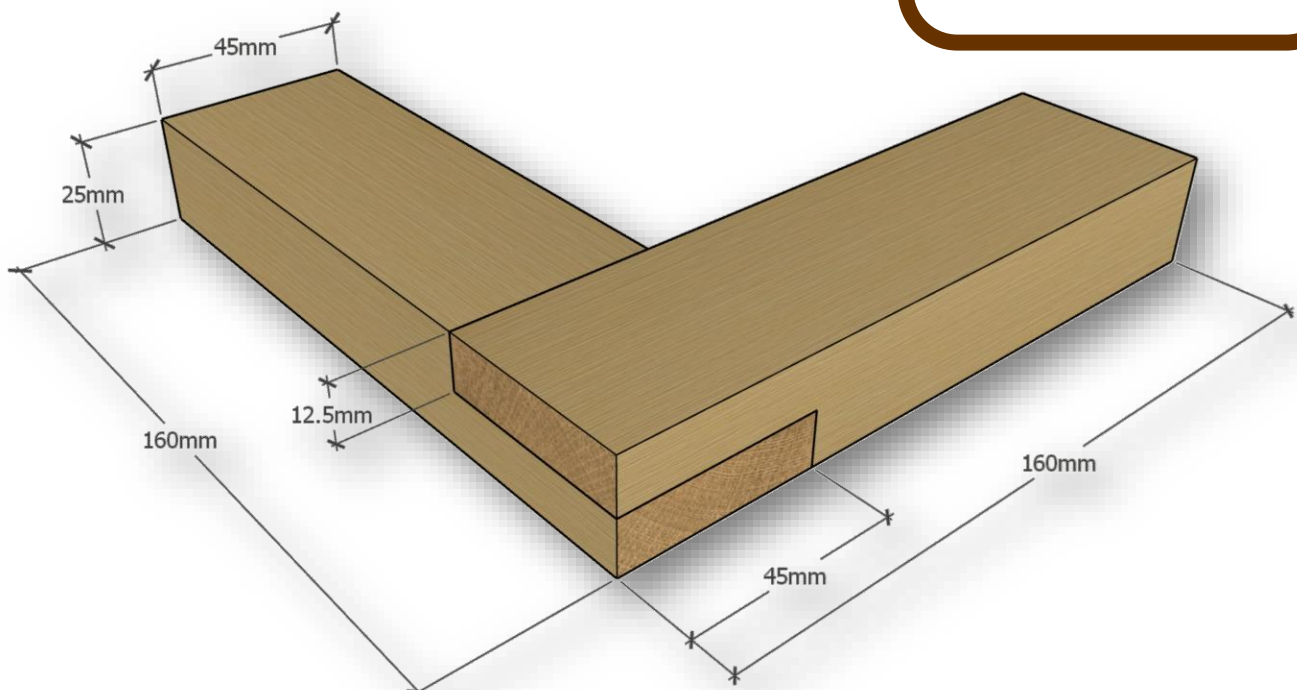


Cutting List.

Component	Length	Width	Thick
Piece A	160mm	45mm	25mm
Piece B	160mm	45mm	25mm

Tools.

Pencil
Steel Rule/Tape Measure
Try Square
Marking Gauge
Tenon Saw
Bevel Edged Chisel



Corner Halving Joint.

Assessment Marking & Feedback



Dimensional Accuracy.

Any task over the specified tolerance must be repeated.

Achieved

Yes

No

Lengths of piece A & B correct and square (+/- 2mm)

Joint is Square (+/-1mm)

Joint Finish is Flush (+/-0.5mm)

Joint tight with no visible gap (+/- 0.5mm)

Tutor Feedback.

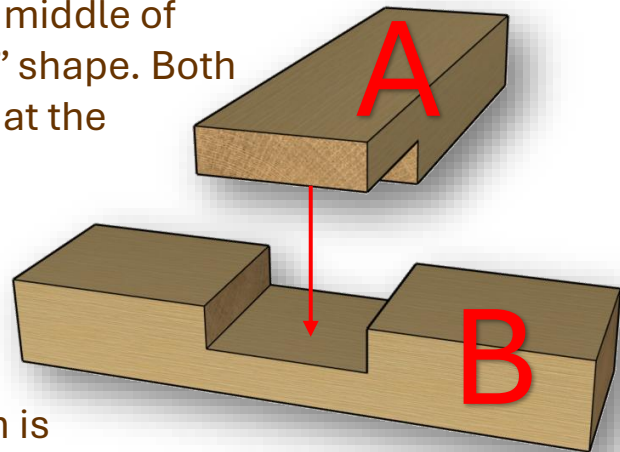
Tutor Signature

Date

T Halving Joint.



A T halving joint is a simple woodworking joint used to connect one piece of timber into the middle of another at a right angle, forming a “T” shape. Both pieces are cut to half their thickness at the intersection, so they fit together flush, creating a stable and neat joint. It’s commonly used in frame construction, shelving, and partitioning where moderate strength is needed and the joint won’t be under heavy load. This joint is quick to make, ideal for beginners, and often used in educational projects or temporary structures where speed and simplicity matter.

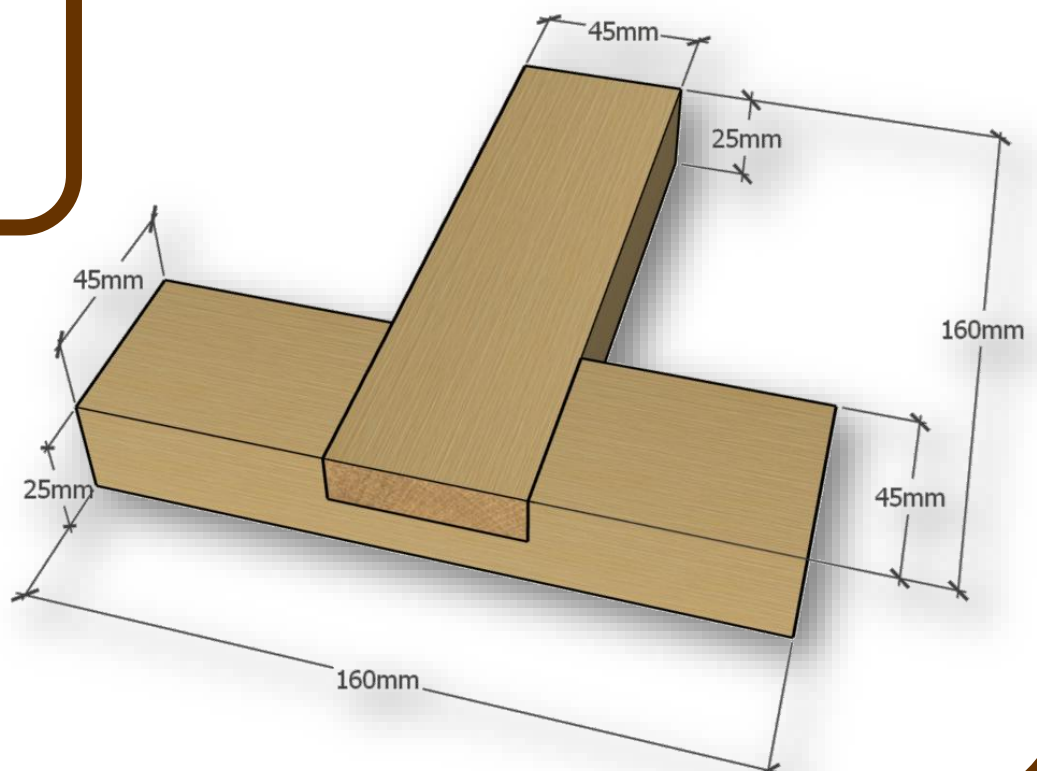


Tools.

- Pencil
- Steel Rule/Tape Measure
- Try Square
- Marking Gauge
- Tenon Saw
- Bevel Edged Chisel

Cutting List.

Component	Length	Width	Thick
Piece A	160mm	45mm	25mm
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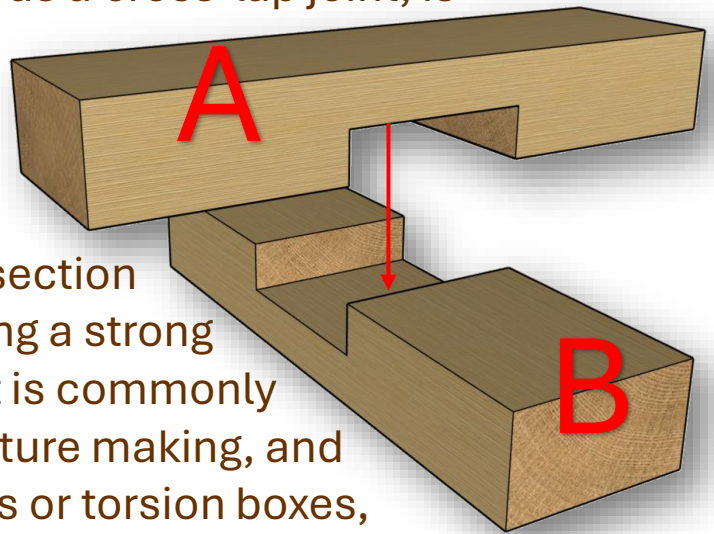


Dimensional Accuracy. Any task over the specified tolerance must be repeated.	Achieved	
	Yes	No
Lengths of piece A & B correct and square (+/- 2mm)		
Joint is Square (+/-1mm)		
Joint Finish is Flush (+/-0.5mm)		
Joint tight with no visible gap (+/- 0.5mm)		
Tutor Feedback.		
Tutor Signature	Date	

Cross Halving Joint.



A cross-halving joint, also known as a cross-lap joint, is used to join two pieces of timber that intersect at right angles, typically, in the middle of each piece. Each timber is cut to half its thickness at the point of intersection so they slot together flush, forming a strong and stable joint. This type of joint is commonly used in frame construction, furniture making, and structural assemblies like trusses or torsion boxes, where a secure connection is needed without adding bulk. It's especially useful in projects requiring a clean, flat surface and is often chosen for its simplicity and strength in non-load-bearing applications.

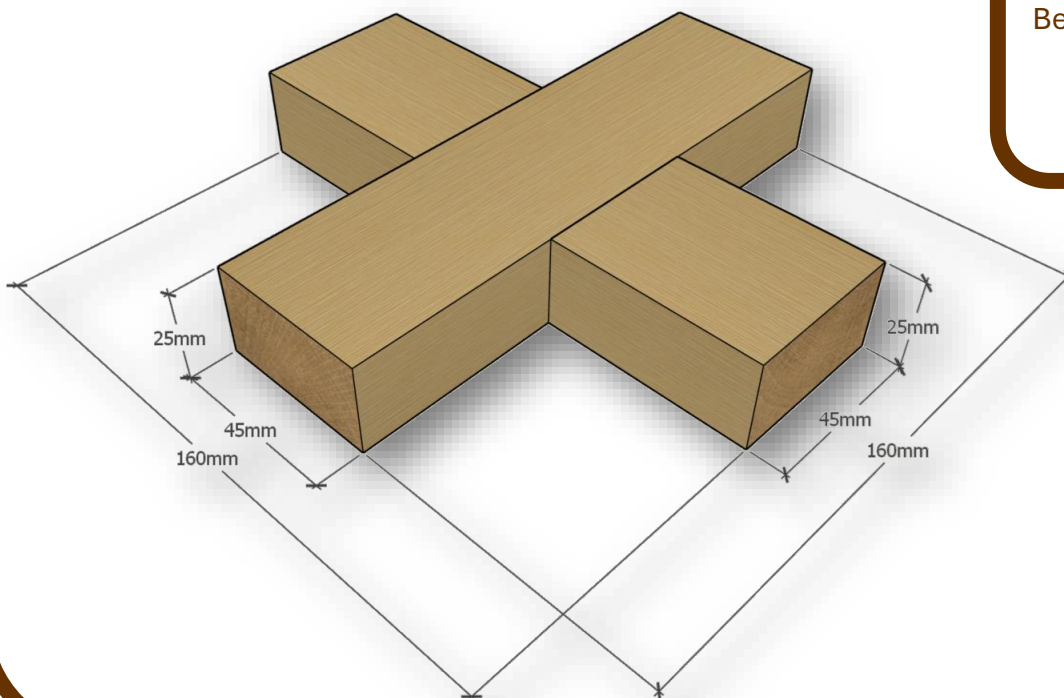


Cutting List.

Component	Length	Width	Thick
Piece A	160mm	45mm	25mm
Piece B	160mm	45mm	25mm

Tools.

- Pencil
- Steel Rule/Tape Measure
- Try Square
- Marking Gauge
- Tenon Saw
- Bevel Edged Chisel



Dimensional Accuracy. Any task over the specified tolerance must be repeated.	Achieved	
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Lengths of piece A & B correct and square (+/- 2mm)		
Joint is Square (+/-1mm)		
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Tutor Feedback.		
Tutor Signature	Date	

001: Constructing Halving Joints

Practical Assessment



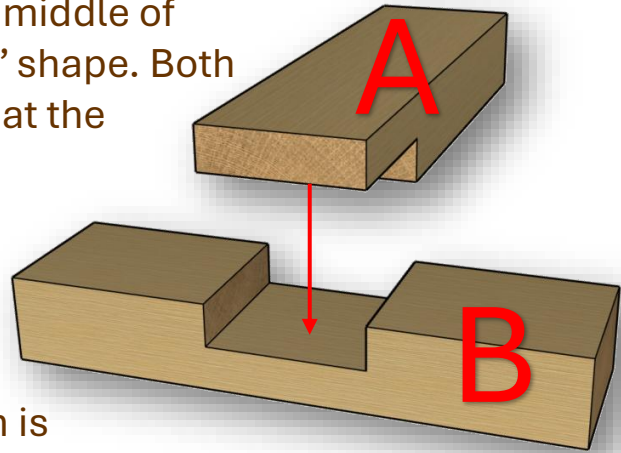
City & Guilds

James Rix

T Halving Joint.



A T halving joint is a simple woodworking joint used to connect one piece of timber into the middle of another at a right angle, forming a “T” shape. Both pieces are cut to half their thickness at the intersection, so they fit together flush, creating a stable and neat joint. It’s commonly used in frame construction, shelving, and partitioning where moderate strength is needed and the joint won’t be under heavy load. This joint is quick to make, ideal for beginners, and often used in educational projects or temporary structures where speed and simplicity matter.

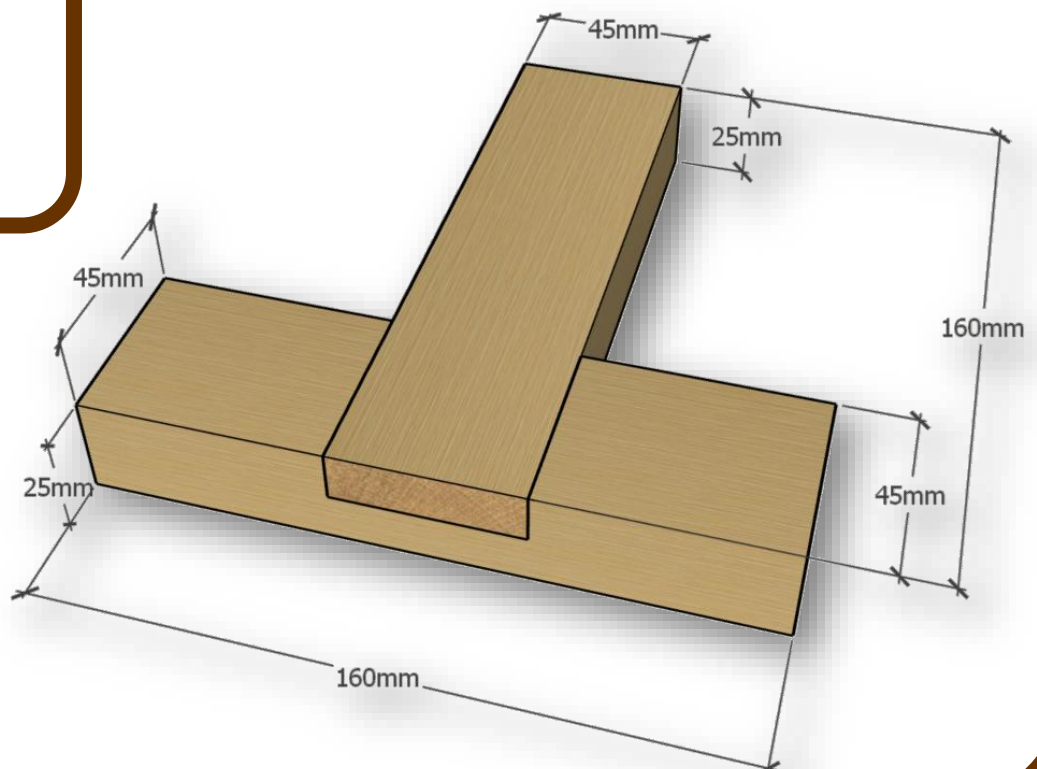


Tools.

- Pencil
- Steel Rule/Tape Measure
- Try Square
- Marking Gauge
- Tenon Saw
- Bevel Edged Chisel

Cutting List.

Component	Length	Width	Thick
Piece A	160mm	45mm	25mm
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Resource checklist

Unit and task number	
Candidate name	

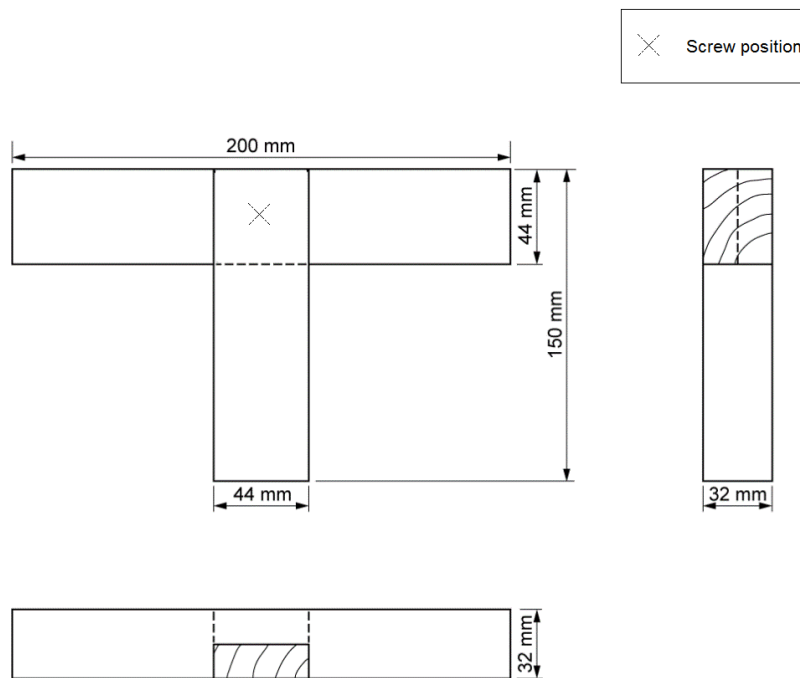
[illegible]

Materials	Quantity	Condition
<i>eg bricks</i>	<i>20</i>	<i>Free from defects</i>

Personal Protective Equipment (PPE)	Quantity	Condition
<i>eg safety harness</i>	<i>1</i>	<i>Free from defects, correct size</i>

Dimensions shown are for guidance only

Figure 1



Specification

Timber should be planed European redwood.

Any suitable dimension of timber (from 50 mm x 25 mm to 50 mm x 50 mm)

Tee halving to be constructed in the centre of the horizontal member.

Tolerances of +/-2mm for both sawing and chiselling

The joint should be glued and screwed.

Candidate name _____

Assessor name _____

Centre name _____

To pass the assignment, candidates are required to complete each task to the minimum standard indicated below.

The candidate has:	Pass	Merit	Distinction
identified and used personal protective equipment (PPE) appropriate to constructing halving joints	☐		
identified and selected materials required to construct halving joints	☐		
successfully marked out and constructed halving joints to a given specification	☐		
identified and selected tools and equipment required to construct halving joints	☐		
demonstrated safe setup of the work area.	☐		
maintained a clean and safe working area following health and safety guidelines	☐		
cleared the work area of surplus materials and debris on completion of the job	☐		
cleaned all tools and equipment ready for re-use	☐		
correctly answered question (refer to Assessor Guide)	☐		

Assignment passed? Yes / No

Assessor signature _____

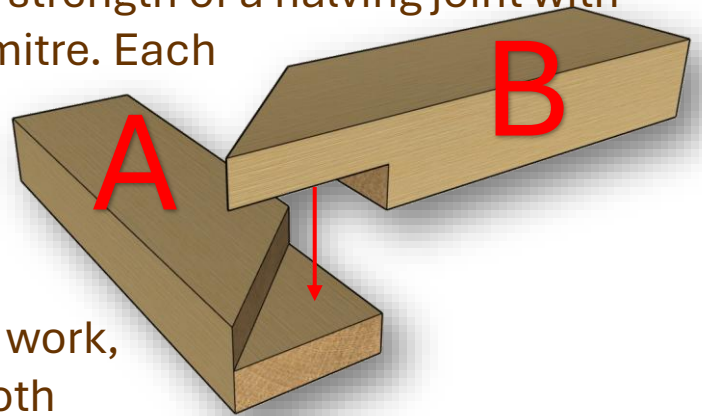
Date _____

Task reference	Unit feedback		
Task reference	Action plan	Target date	Achievement date

Mitred Halving Joint.



A mitred halving joint combines the strength of a halving joint with the clean, angled appearance of a mitre. Each piece of timber is cut to half its thickness at a 45° angle, allowing them to overlap and form a flush, seamless corner. This joint is often used in decorative framing, cabinet work, and furniture construction where both strength and visual appeal are important. It provides a larger gluing surface than a standard mitre, making it more durable while maintaining a refined look—ideal for projects that require both precision and elegance.

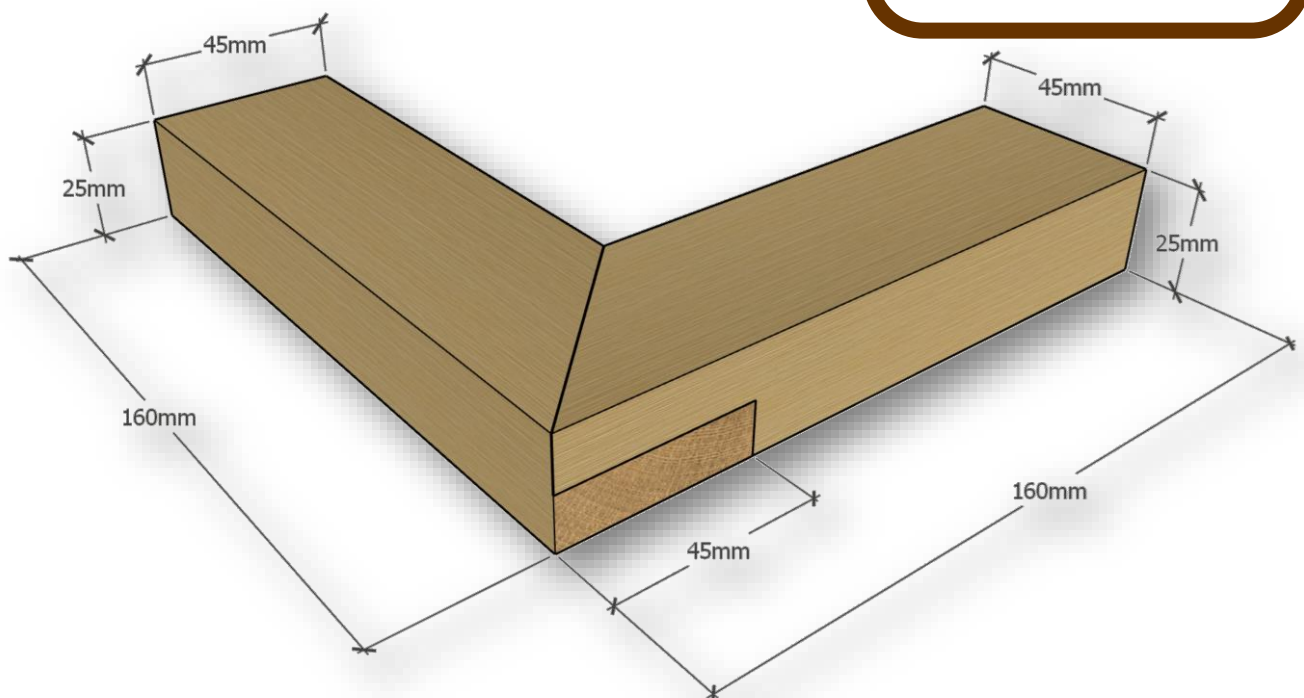


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Bevel Edged Chisel



Mitred Halving Joint.

Assessment Marking & Feedback



Dimensional Accuracy.

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Achieved

Yes

No

Lengths of piece A & B correct and square (+/- 2mm)

Joint is Square (+/-1mm)

Joint Finish is Flush (+/-0.5mm)

Joint tight with no visible gap (+/- 0.5mm)

Tutor Feedback.

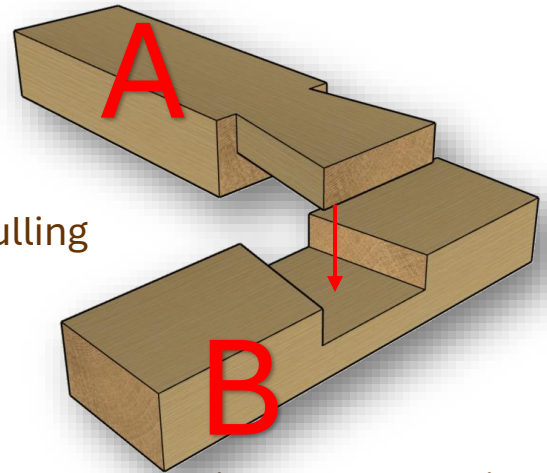
Tutor Signature

Date

Dovetail Halving Joint.



A dovetail halving joint is a variation of the standard halving joint where the overlapping section is shaped like a dovetail—wider at the end than at the base—creating a mechanical interlock that resists pulling apart. One piece is cut with a dovetail-shaped socket, and the other with a matching tail, both to half the thickness of the timber. This joint is used in frame construction and cabinetry where added strength and resistance to tension are needed, especially in applications like drawer frames, carcass assemblies, or decorative timber work. It combines the simplicity of halving joints with the strength and elegance of dovetail geometry, making it ideal for projects requiring both durability and craftsmanship.

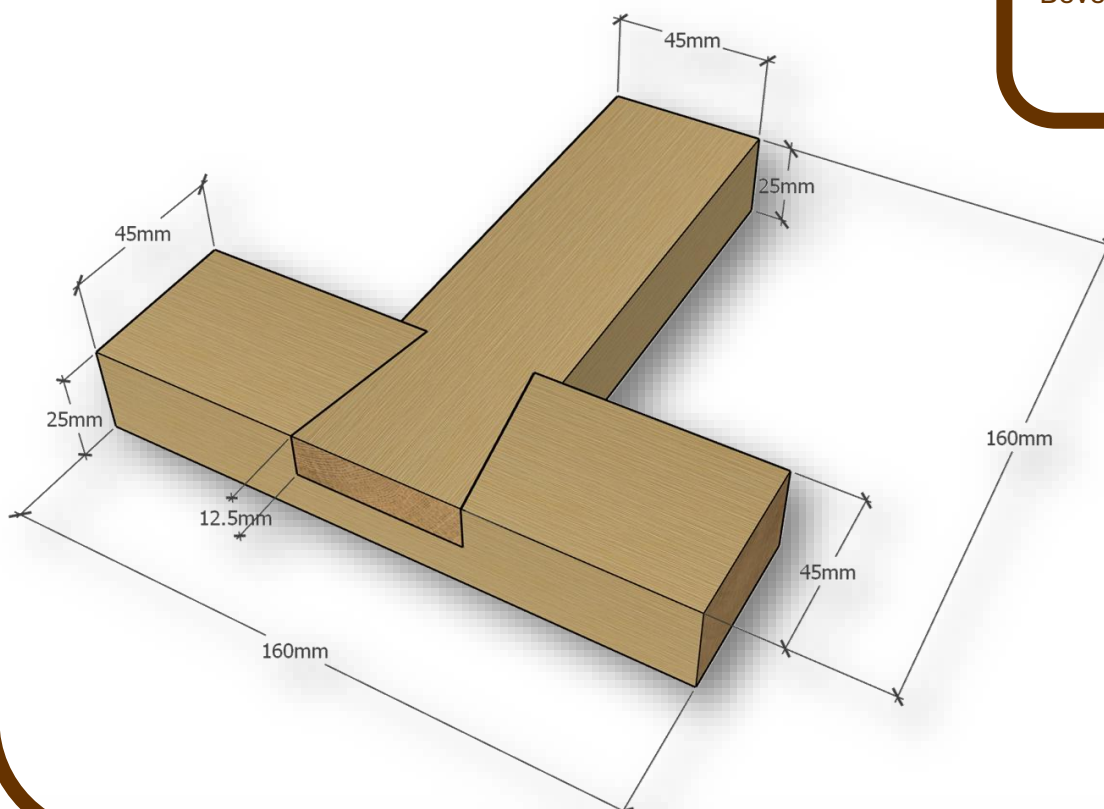


Cutting List.

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Piece B	160mm	45mm	25mm

Tools.

- Pencil
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- Try Square
- Marking Gauge
- Tenon Saw
- Bevel Edged Chisel



Dovetail Halving Joint.

Assessment Marking & Feedback



Dimensional Accuracy. Any task over the specified tolerance must be repeated.	Achieved	
	Yes	No
Lengths of piece A & B correct and square (+/- 2mm)		
Joint is Square (+/-1mm)		
Joint Finish is Flush (+/-0.5mm)		
Joint tight with no visible gap (+/- 0.5mm)		
Tutor Feedback.		
Tutor Signature	Date	