Timber Tech.

Unit 207

BS1192.

Lecturer: James Rix

Contents:

Introduction:

This activity pack supports learners in understanding the BS1192 standards and the essential drawing tools, projections, hatchings, symbols, and abbreviations used in construction. It is designed to accompany the *Timber Tech – BS1192* presentation and provides a range of interactive, practical tasks that reinforce key knowledge through matching, shading, sketching, and layout-based activities.

Aim:

To develop learners' understanding of BS1192 standards and their ability to recognise, interpret, and apply drawing conventions used in construction.

Learning Objectives

By the end of this activity pack, learners will be able to:

- Identify common drawing tools and equipment
- Recognise BS1192 standards and their purpose
- Interpret and apply drawing projections
- Apply correct hatch patterns for construction materials
- Identify and use common construction symbols and abbreviations
- Understand the purpose and layout of a BS1192-compliant title block

Activity Overview:

This pack contains **four structured activities**:

1. **Drawing Tools & Equipment Matching Cards**
2. **Hatchings Shading Activity**
3. **BS1192 Title Block Completion Task**
4. **Projection Identification & Sketching Task**

Each activity reinforces a different section of the BS1192 presentation and supports both theory and practical drawing skills.

How this activity helps learning:

These activities:

- Reinforce visual recognition of tools, symbols, and hatchings
- Build confidence in reading and producing technical drawings
- Support kinaesthetic learning through hands-on tasks
- Strengthen understanding of industry-standard conventions
- Prepare learners for Level 1–2 construction assessments
- Encourage accuracy, attention to detail, and professional practice

Activity 1: Drawing Tools & Equipment Matching card Game

Student Instructions

Match the **image**, **name**, and **description** of each drawing tool. Tools include:

- Scale rule
- Set squares
- Compass
- Protractor
- French curves
- Templates
- Drawing board
- Graded pencils
- Technical drawing pens
- Eraser shield
- Ratchet pencil

Use the presentation to help you identify each tool.

Lecturer Instructions

- Print and cut the cards (image, name, description).
- Shuffle and distribute to individuals or groups.
- Learners match all three components correctly.
- Encourage discussion about tool uses and differences.

Scaffolding Options

- Provide a reduced set (e.g., only 6 tools).
- Allow learners to use the PDF as reference.
- Provide a word bank of tool names.

Differentiation Strategies

- **SEND:** Provide pre-matched pairs and ask learners to add the third card.
- **Higher ability:** Ask learners to explain when each tool would be used in real construction drawings.

Assessment Opportunities

- Observation of matching accuracy
- Learner explanations of tool functions
- Quick verbal quiz at the end

LCB

BS1192

Image Card

LCB

BS1192

Image Card

LCB

BS1192

Hand Tool Card

LCB

BS1192

Hand Tool Card

LCB

BS1192

Image Card

LCB

BS1192

Image Card

LCB

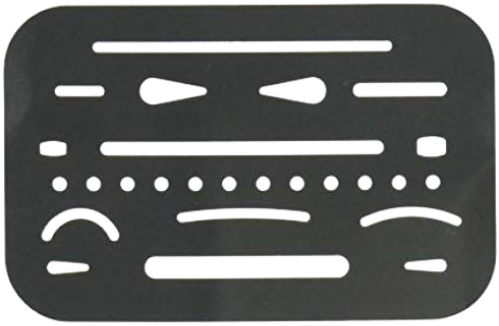
BS1192

Image Card

LCB

BS1192

Image Card



LCB

BS1192

Image Card

LCB

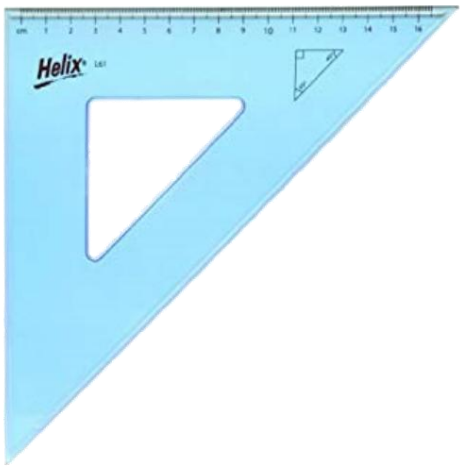
BS1192

Image Card

LCB

BS1192

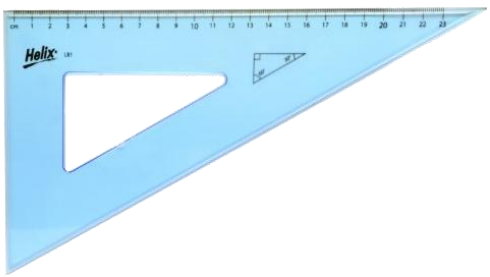
Image Card



LCB

BS1192

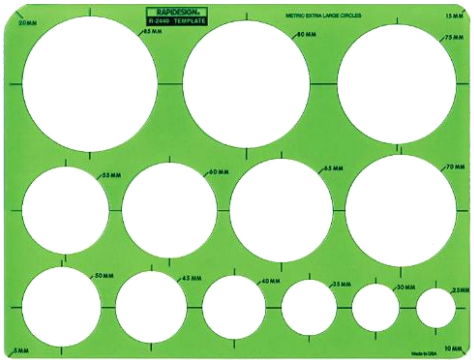
Image Card



LCB

BS1192

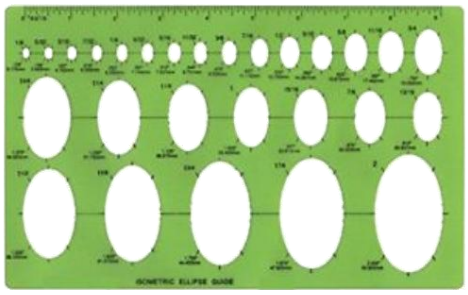
Image Card



LCB

BS1192

Image Card



LCB

BS1192

Image Card

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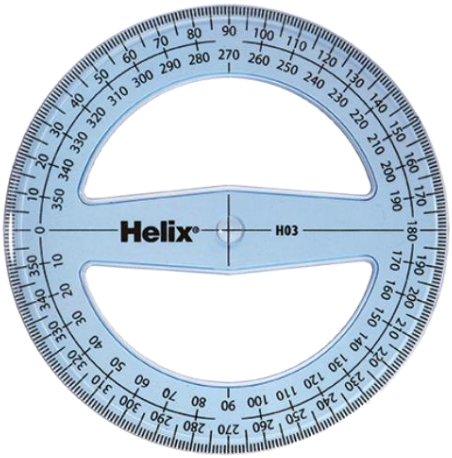


LCB

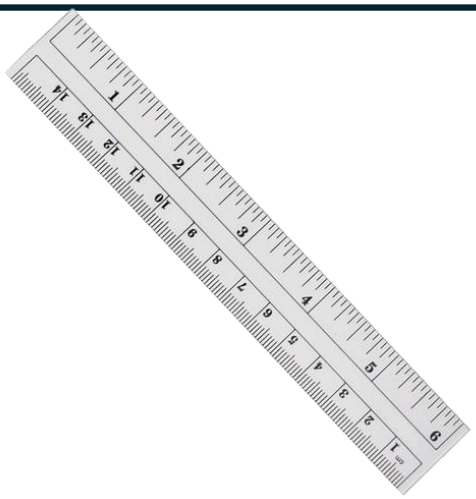
BS1192

Image Card

LCB

BS1192

Image Card



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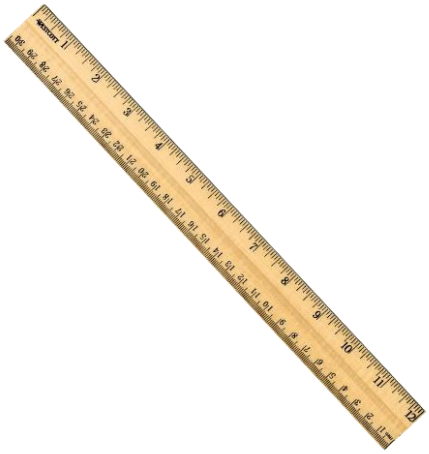
BS1192

Image Card



LCB

BS1192

Image Card

LCB

BS1192

Image Card

LCB

BS1192

Name Card

Drawing Board

LCB

BS1192

Name Card

Drawing Pen

LCB

BS1192

Name Card

Wood Encased Pencil

LCB

BS1192

Name Card

Ratchet Pencil

LCB

BS1192

Name Card

Eraser

LCB

BS1192

Name Card

Ratchet Eraser

LCB

BS1192

Name Card

Eraser Shield

LCB

BS1192

Name Card

Flexible Curve

LCB

BS1192

Name Card

Drop Compass

LCB

BS1192

Name Card

Spring Bow Compass

LCB

BS1192

Name Card

90°/45° Set Square

LCB

BS1192

Name Card

30°/60° Set Square

LCB

BS1192

Name Card

Circle Template

LCB

BS1192

Name Card

Ellipse Template

LCB

BS1192

Name Card

French Curve 1

LCB

BS1192

Name Card

French Curve 2

LCB

BS1192

Name Card

French Curve 3

LCB

BS1192

Name Card

6 inch/150mm Rule

LCB

BS1192

Name Card

12inch/300mm Rule

LCB

BS1192

Name Card

Scale Rule

LCB

BS1192

Name Card

T Square

LCB

BS1192

Name Card

Full Protractor

LCB

BS1192

Name Card

Protractor

LCB

BS1192

Description Card

A flat, stable surface used to support paper when producing technical drawings. Modern versions often include a parallel motion ruler for accurate vertical and horizontal lines.

LCB

BS1192

Description Card

Precision pens available in standardised line thicknesses (e.g., 0.13mm, 0.25mm, 0.5mm). Used to produce consistent line weights in accordance with drawing standards.

LCB

BS1192

Description Card

A drawing instrument made from graphite encased in wood or plastic. Available in a range of grades from hard (H) to soft (B), used for technical drawing, shading, and construction lines.

LCB

BS1192

Description Card

A mechanical pencil that holds a single piece of lead using internal jaws. Pressing the button advances the lead for continuous use.

LCB

BS1192

Description Card

A soft rubber tool used to remove pencil marks from paper without damaging the surface.

LCB

BS1192

Description Card

A precision erasing tool with a thin, retractable eraser stick held inside a mechanical barrel. The ratchet mechanism allows the eraser to extend in small increments, making it ideal for removing fine lines, small details, and marks close to other drawing elements without damaging the paper.

LCB

BS1192

Description Card

A thin metal or plastic sheet with cut-out shapes. Allows precise erasing of small areas without disturbing nearby lines.

LCB

BS1192

Description Card

A bendable drawing tool that can be shaped into custom curves. Used when a specific curve or contour is required

LCB

BS1192

Description Card

A tool with two arms used to draw circles and arcs. The drop compass opens manually.

LCB

BS1192

Description Card

A tool with two arms used to draw circles and arcs. The spring-bow compass uses a central wheel for fine adjustments.

LCB

BS1192

Description Card

Triangular tools used to draw accurate vertical, 45°, 90° angles. Essential for producing orthographic and isometric drawings.

LCB

BS1192

Description Card

Triangular tools used to draw accurate vertical, 30°, 60° angles. Essential for producing orthographic and isometric drawings

LCB

BS1192

Description Card

Plastic sheets containing pre-cut shapes such as circles. Used to draw consistent, accurate shapes quickly.

LCB

BS1192

Description Card

Plastic sheets containing pre-cut shapes such ellipses. Used to draw consistent, accurate shapes quickly.

LCB

BS1192

Description Card

Curved templates made from plastic, used to draw smooth, irregular curves that cannot be produced with a compass.

LCB

BS1192

Description Card

Curved templates made from plastic, used to draw smooth, irregular curves that cannot be produced with a compass.

LCB

BS1192

Description Card

Curved templates made from plastic, used to draw smooth, irregular curves that cannot be produced with a compass.

LCB

BS1192

Description Card

A straight measuring tool, usually 15cm long, marked with metric and imperial units. Used for measuring distances and drawing straight lines.

LCB

BS1192

Description Card

A straight measuring tool, usually 30cm long, marked with metric and imperial units. Used for measuring distances and drawing straight lines.

LCB

BS1192

Description Card

A triangular rule with multiple fixed ratios (e.g., 1:50, 1:100). Used to measure and transfer scaled dimensions accurately on technical drawings.

LCB

BS1192

Description Card

A long drawing tool with a straight blade fixed at a right angle to a headpiece. It is used on a drawing board to draw accurate horizontal lines and to guide set squares for vertical and angled lines. Traditionally essential for technical drawing before parallel motion rulers became common.

LCB

BS1192

Description Card

A semi-circular or circular tool used to measure and draw angles, typically marked from 0° to 360°.

LCB

BS1192

Description Card

A semi-circular or circular tool used to measure and draw angles, typically marked from 0° to 180°.

Activity 2: Hatchings Shading Activity

Student Instructions

Shade each box using the correct hatch pattern for the material listed.
Materials include:

- Sawn timber
- Planed timber
- Plywood
- Blockboard
- Brickwork
- Stonework
- Concrete
- Metal
- Hardcore
- Insulation
- Topsoil
- Subsoil

Use the hatchings shown in the presentation.

Lecturer Instructions

- Provide worksheet with blank boxes.
- Demonstrate 1–2 hatch patterns on the board.
- Encourage neatness and consistency.

Scaffolding Options

- Provide faint outlines of hatch patterns for tracing.
- Provide fewer materials for lower-ability learners.

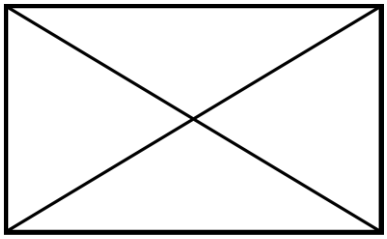
Differentiation Strategies

- **SEND:** Provide visual examples on the worksheet.
- **Higher ability:** Ask learners to label typical uses of each material.

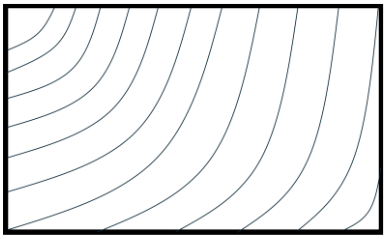
Assessment Opportunities

- Accuracy of hatch patterns
- Neatness and line consistency
- Correct association of material → hatch

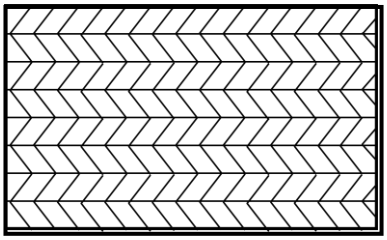
Activity 2: Hatchings Worksheet



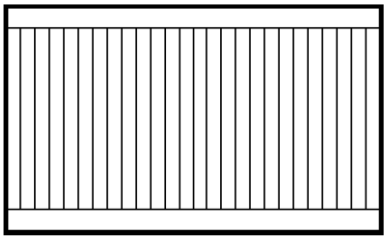
Sawn Timber



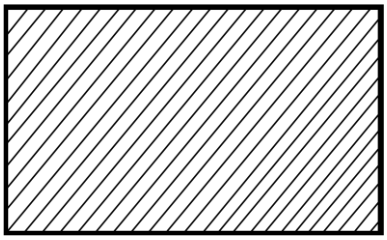
Planed Timber



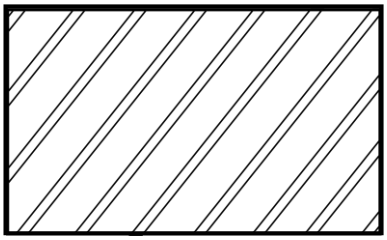
Plywood



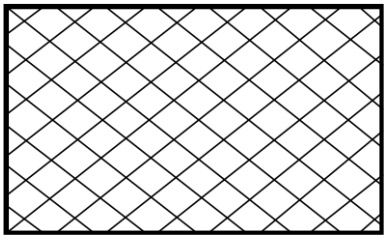
Blockboard



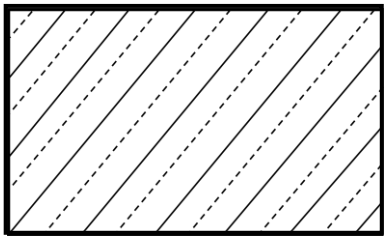
Metal



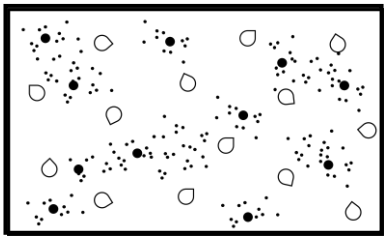
Brickwork



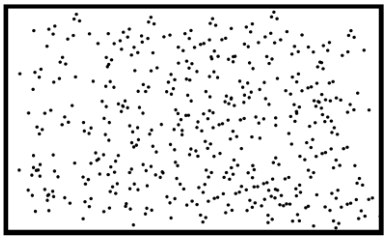
Blockwork



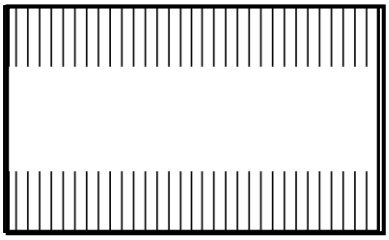
Stonework



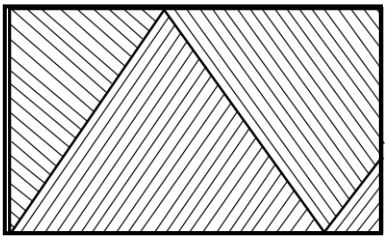
Concrete



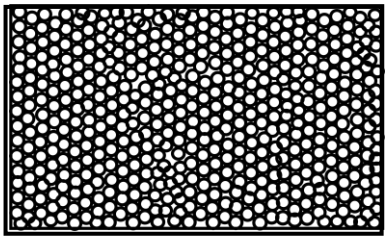
Plaster



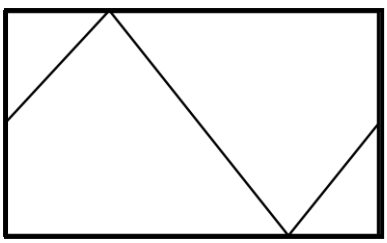
Topsoil



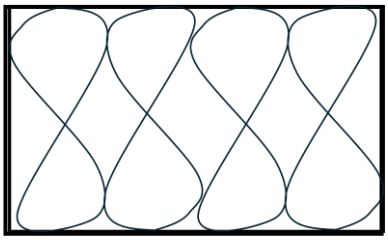
Subsoil



Granular Fill



Hardcore



Insulation

Activity 2: Hatchings Worksheet

Name.	
Number.	

Sawn Timber

Planed Timber

Plywood

Blockboard

Metal

Brickwork

Blockwork

Stonework

Concrete

Plaster

Topsoil

Subsoil

Granular Fill

Hardcore

Insulation

Activity 3: BS1192 Title Block Completion Task.

Student Instructions

You are given a blank A3 sheet layout with margins and a title block. Fill in the following details:

- Drawing title
- Job title
- Client
- Scale
- Drawing number
- Date
- Drawn by
- Projection symbol (first angle)
- Company name

Use the BS1192 guidance from the presentation.

Lecturer Instructions

- Provide blank A3 layout template.
- Show example title blocks from real drawings.
- Emphasise accuracy and professional presentation.

Scaffolding Options

- Provide a partially completed title block.
- Provide a word bank of required fields.

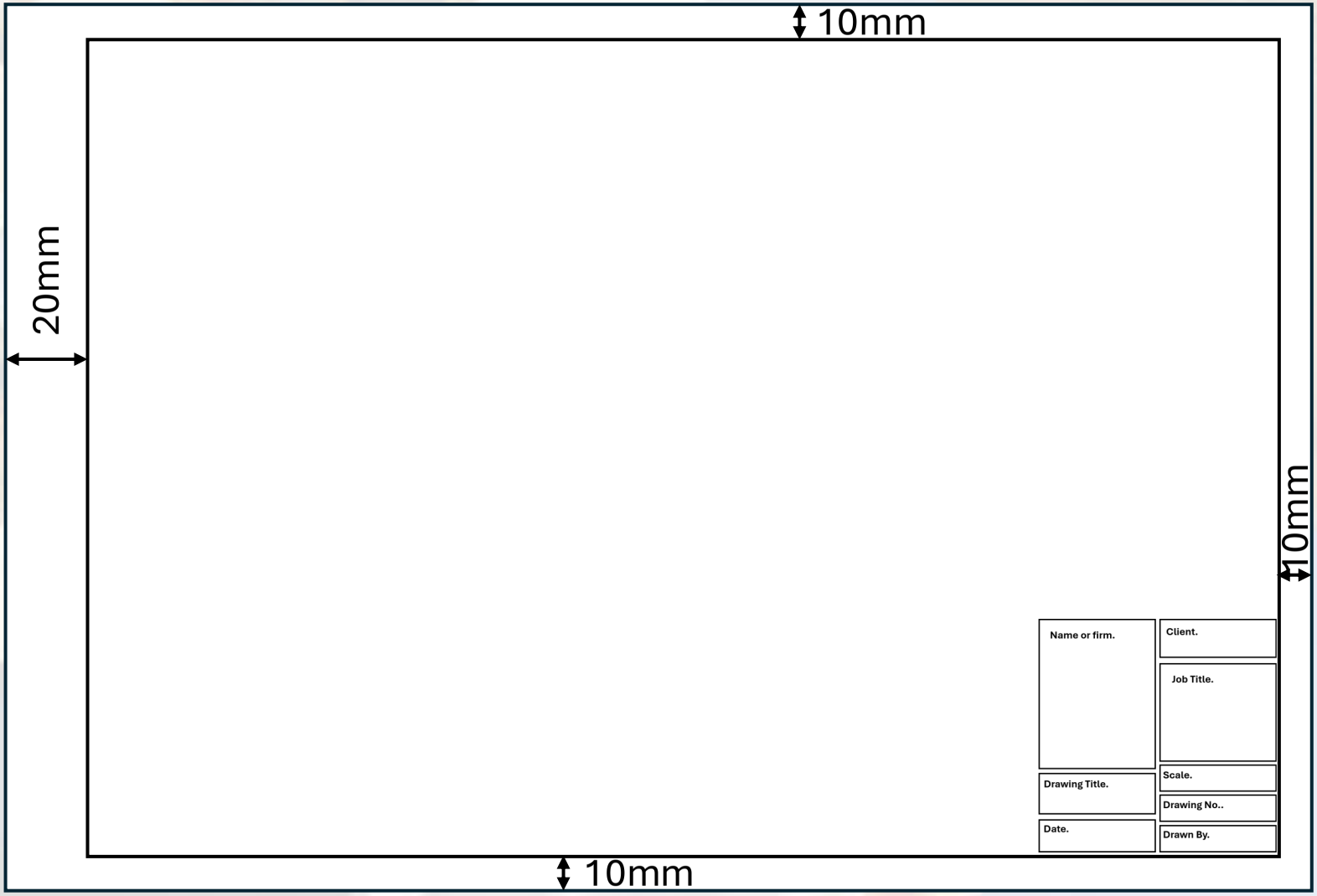
Differentiation Strategies

- **SEND:** Provide a labelled diagram of a title block.
- **Higher ability:** Ask learners to justify their chosen scale and drawing title.

Assessment Opportunities

- Correct completion of all fields
- Accuracy of projection symbol
- Professional layout and spacing

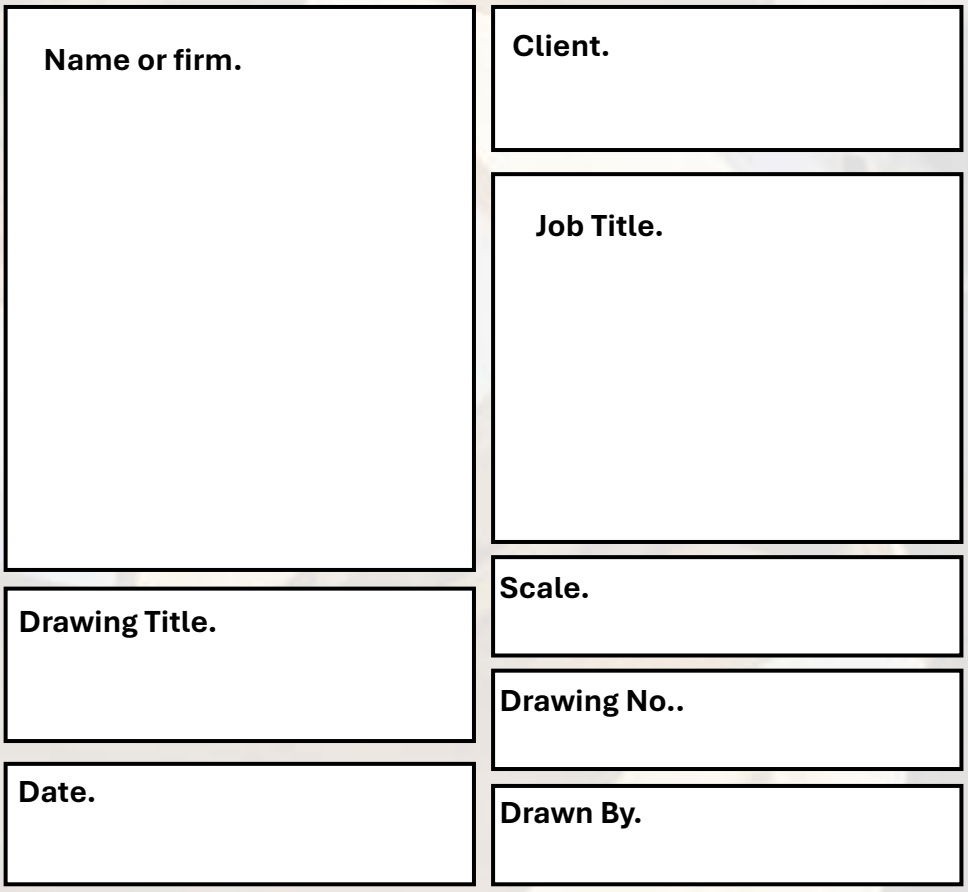
Activity 3: BS1192 Title Block Completion Task.



Activity 3: BS1192 Title Block Completion Task.

The British Standard 1192 sets the following recommendations:
Every drawing must have a title panel, which is normally located in the bottom right-hand corner of each drawing sheet. The information contained in the panel is relevant to that drawing only and contains such information as:

- Drawing title.
- Name and address of issuing firm or practice.
- Description of the drawing.
- Scale.
- Date the drawing was completed.
- Draughtsman's name.
- Company Name.
- Drawing number.
- Client's details.
- Projection type.
- Revisions.



Name or firm.	Client.
	Job Title.
Drawing Title.	Scale.
	Drawing No..
Date.	Drawn By.

Activity 4: Projection Identification & Sketching Task

Student Instructions

You will be shown several small drawings. For each one:

1.Identify the projection type:

1. Orthographic
2. Isometric
3. Axonometric
4. Cavalier
5. Cabinet

2.Re-sketch the object in a different projection (e.g., isometric → orthographic).

Use the examples from the presentation to guide you.

Lecturer Instructions

•Provide worksheet with 6–8 small objects.

•Demonstrate the difference between projection types.

•Encourage learners to use 30°, 45°, and vertical lines correctly.

Scaffolding Options

•Provide grid paper for sketching.

•Provide projection symbols as reminders.

Differentiation Strategies

•**SEND:** Allow learners to identify projection types only.

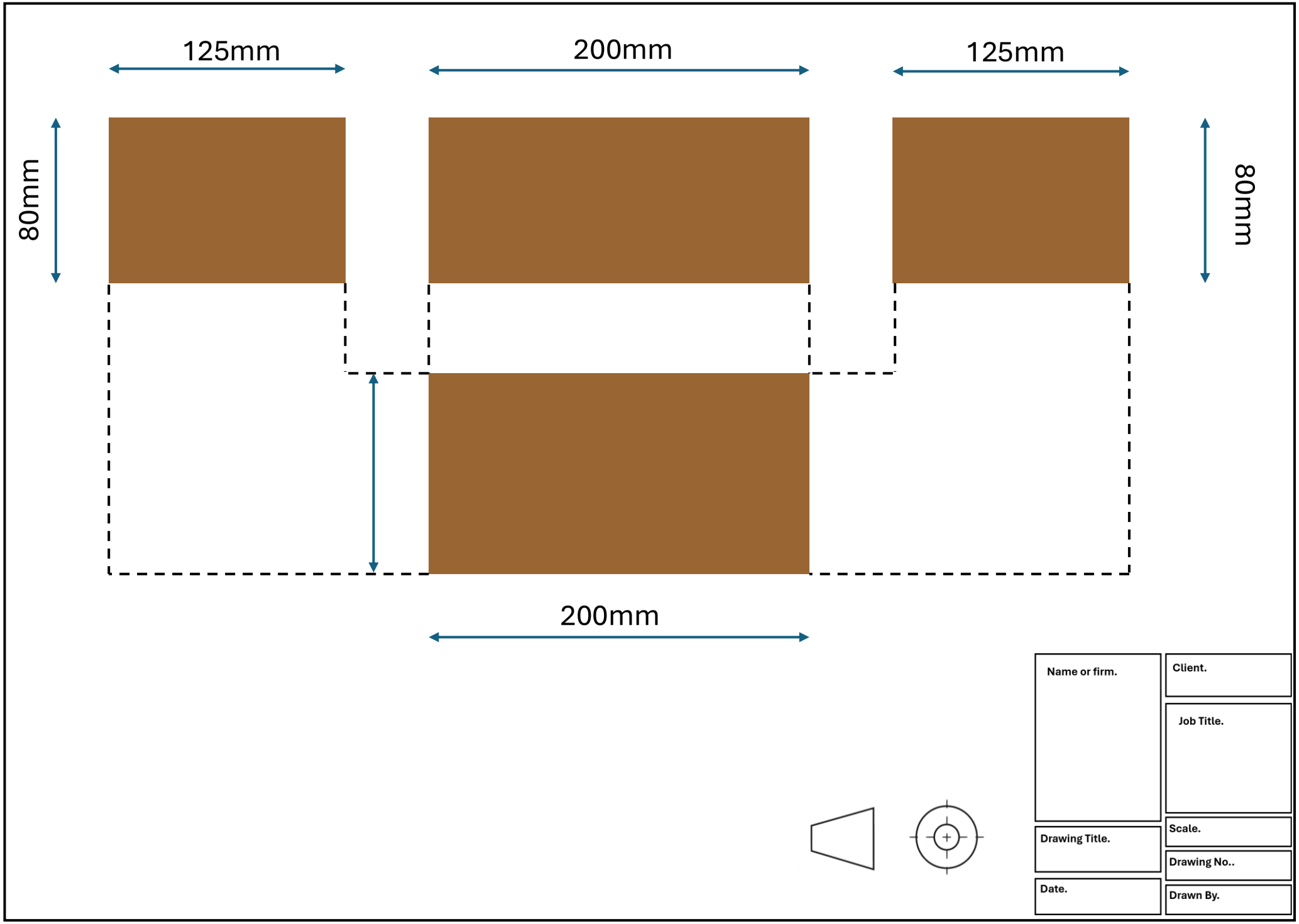
•**Higher ability:** Ask learners to annotate advantages and disadvantages of each projection.

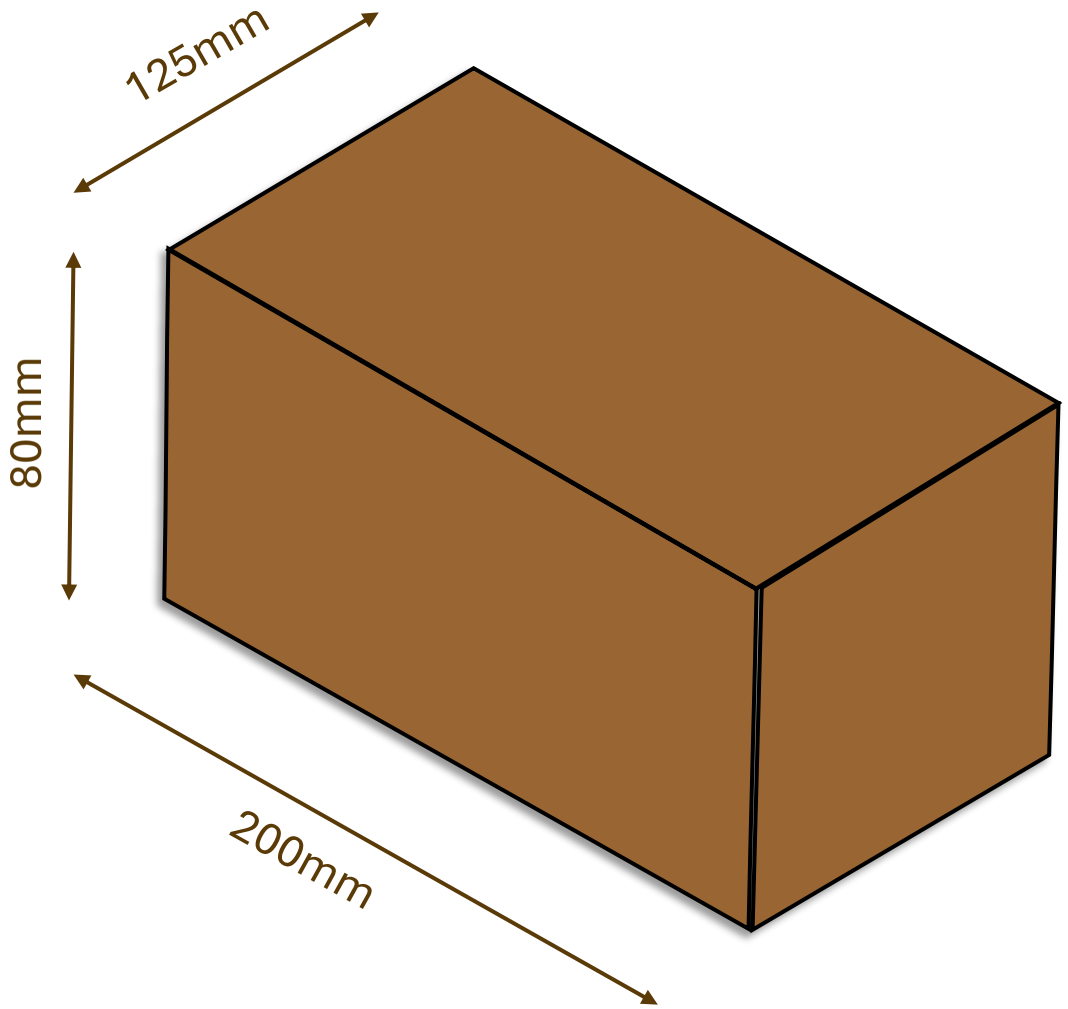
Assessment Opportunities

•Correct identification of projection types

•Accuracy of re-sketched drawings

•Use of correct angles and proportions


125mm
200mm
125mm
80mm
80mm
200mm
Name or firm.
Client.
Job Title.
Drawing Title.
Scale.
Drawing No..
Date.
Drawn By.



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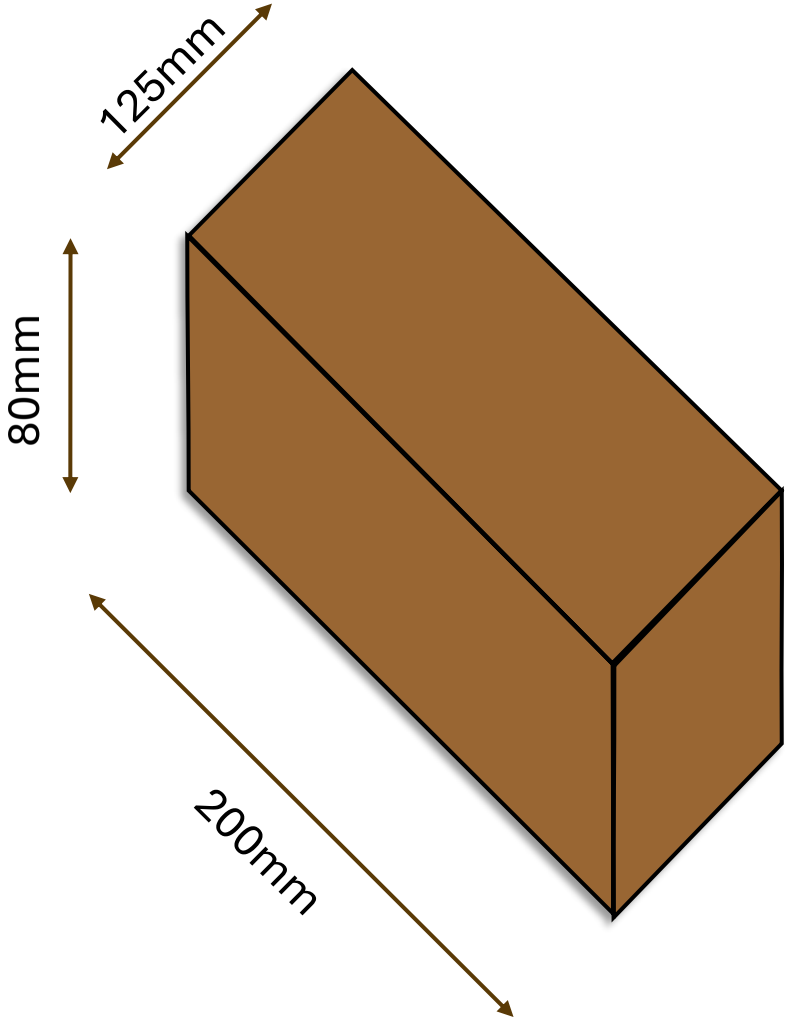

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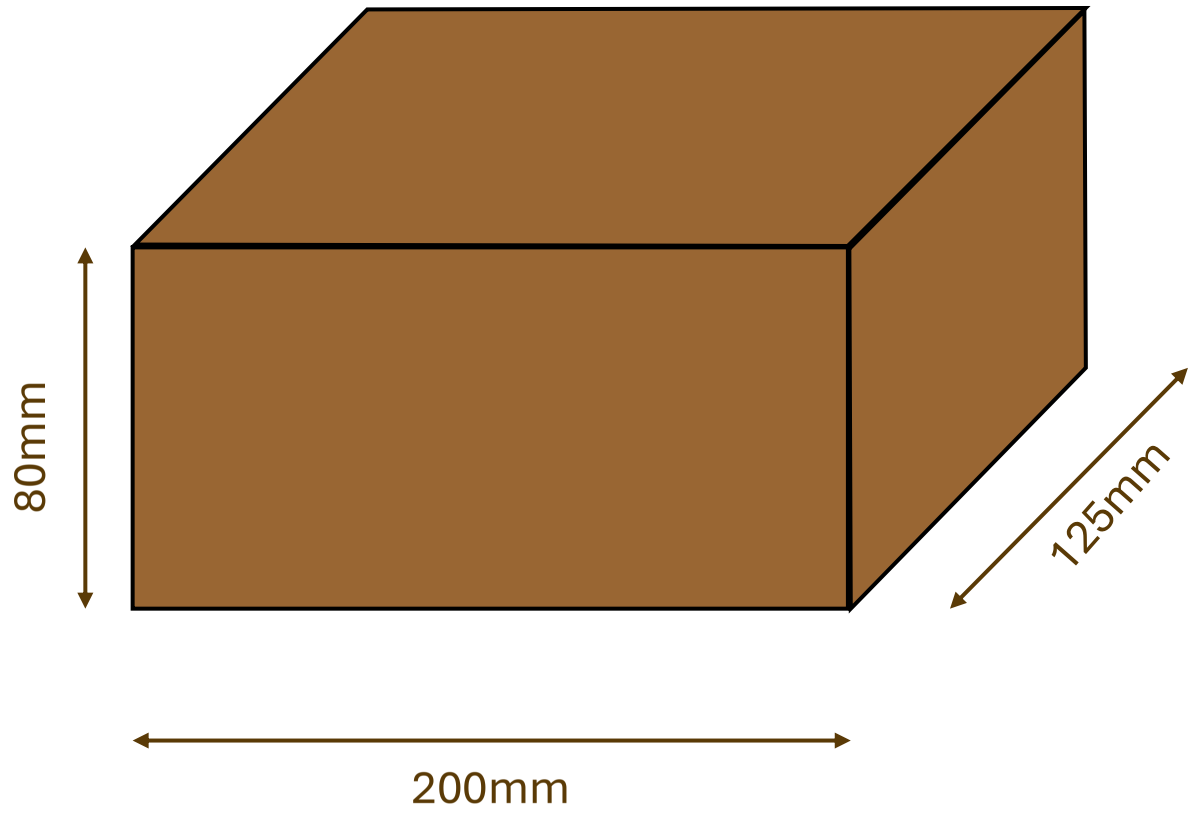
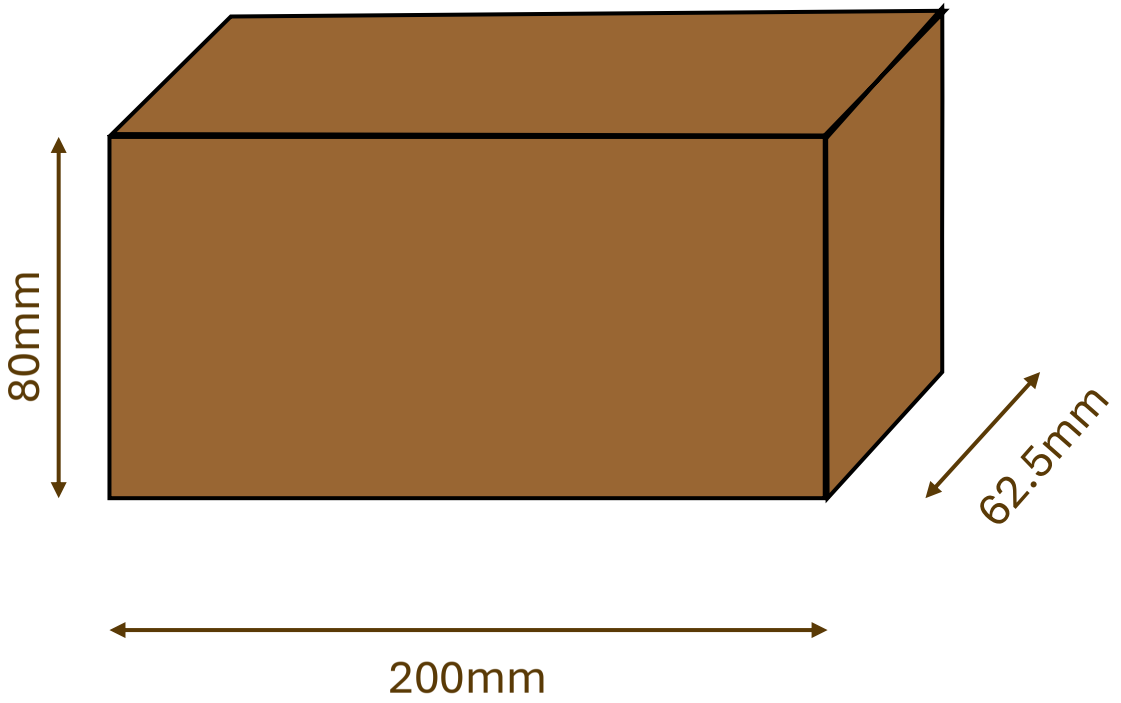
Drawing Title.	Scale.
	Drawing No..
Date.	Drawn By.



Name or firm.	Client.
	Job Title.
Drawing Title.	Scale.
	Drawing No..
Date.	Drawn By.

Half Width at the 45°



Name or firm.	Client.
	Job Title.
Drawing Title.	Scale.
	Drawing No..
Date.	Drawn By.

Thank You.

We would like to say thank you for using this learning material, we hope you found it useful.

If you have any questions regarding this or any other learning material produced by James, or have any suggestions about improvements or ideas please email James Rix at:

jrix@lcb.ac.uk

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