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Visual Communication Design
Teach Yourself Series
Topic 2: Technical Drawing – Industrial (Units 1, 2 & 3)

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CONTENTS

Technical Drawing (Industrial) _____ 3
PACKAGING NETS _____ 3
PERSPECTIVE DRAWING _____ 3
PARALINE DRAWING – ISOMETRIC _____ 5
THIRD ANGLE ORTHOGONAL _____ **Error! Bookmark not defined.**
DIMENSIONING THIRD ANGLE ORTHOGONAL DRAWING ___ **Error! Bookmark not defined.**
LINE STYLES: _____ **Error! Bookmark not defined.**
EXAMPLE OF A COMPLETE AND DIMENSIONED THIRD ANGLE ORTHOGONAL DRAWING: _____ **Error! Bookmark not defined.**
INDUSTRIAL DESIGN TECHNICAL DRAWING REVIEW QUESTIONS __ **Error! Bookmark not defined.**
Solutions to Review Questions _____ **Error! Bookmark not defined.**

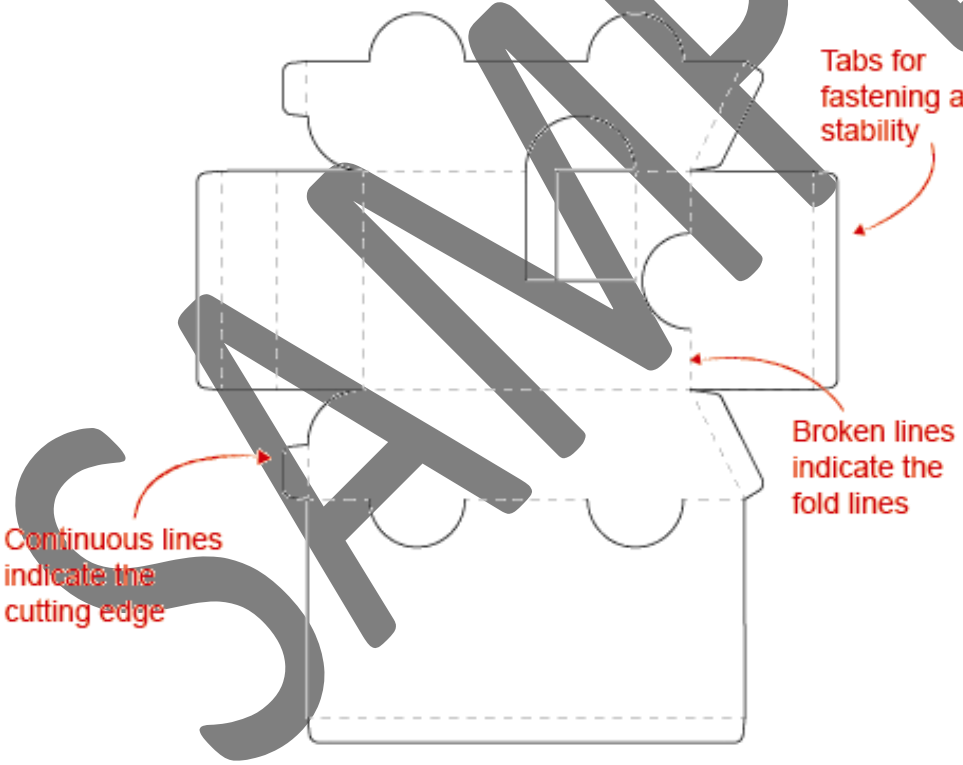
Technical Drawing (Industrial)

There are various forms of drawing methods used in industrial design. These include packaging nets, paraline (isometric and planometric,) third angle orthogonal drawing and perspective drawing systems.

PACKAGING NETS

Packaging nets are used to represent a two-dimensional drawing of an object that will be folded together to create a three-dimensional form. Packaging nets can also be referred to as a development net or a dieline. There are line conventions that must be followed, fold lines indicated by broken lines and cutting edge indicated by a solid outline. You will need be accurate in scaling and dimensioning and may choose to include tabs for stability whilst also ensuring the product folds together accurately.

Here is an example of a packaging net represented in the technical drawing specifications:



These specifications can be found at https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/visualcommunicationdesign/Pages/Index.aspx

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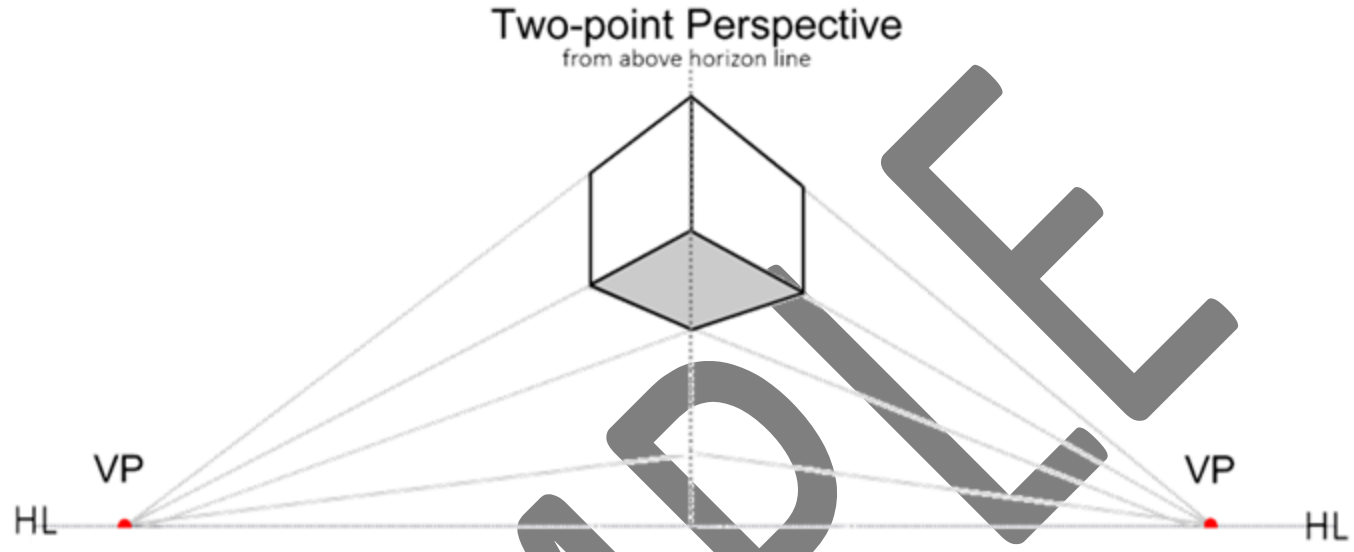
PERSPECTIVE DRAWING

'Perspective' is a system used to depict objects and structures in a naturalistic manner consistent with human vision. Although perspective drawings may appear similar to paraline drawings in the creation of form, perspective drawing has receding lines that **converge** towards the horizon (eye level) rather than remaining

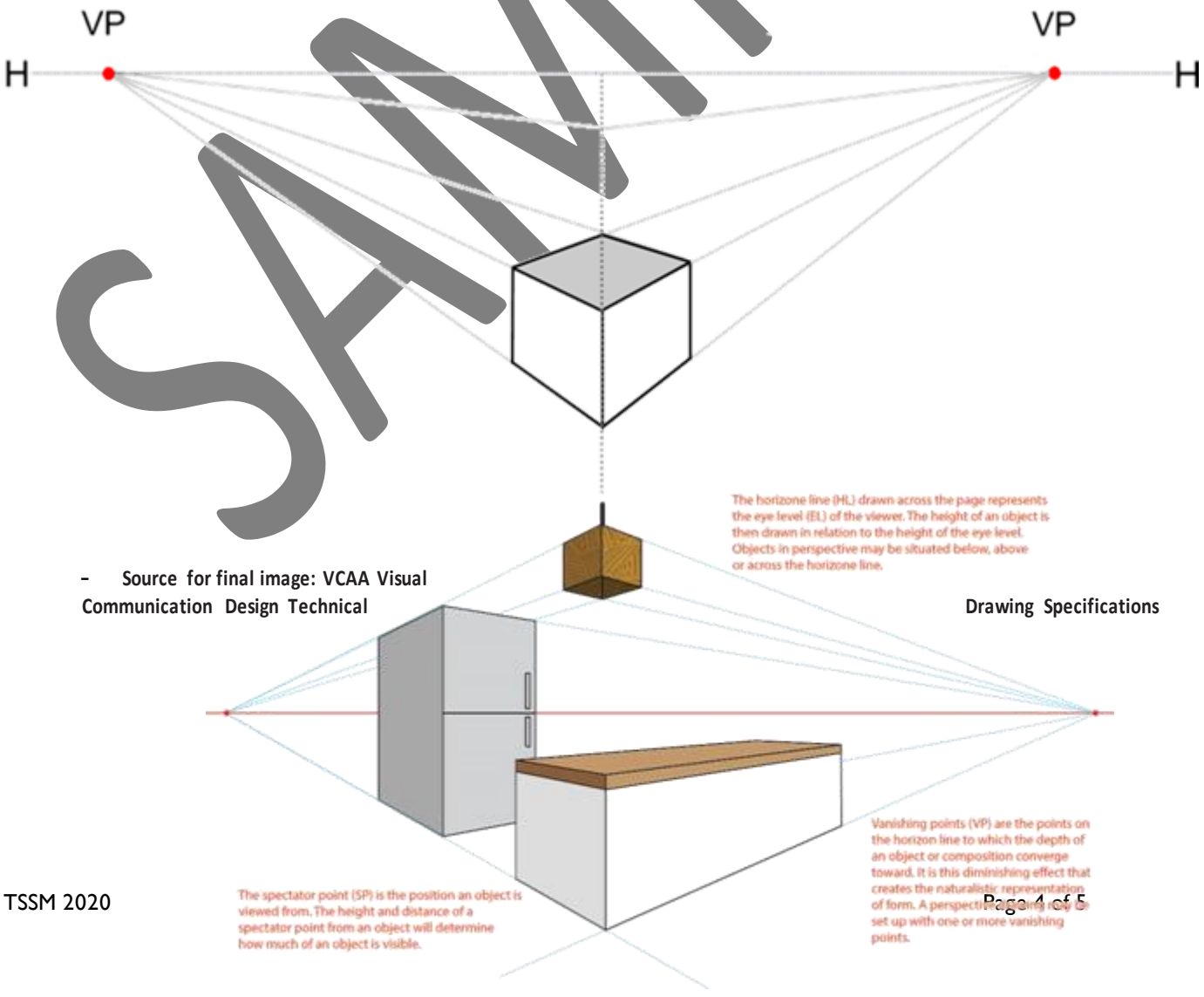
parallel to each other. These points that the lines reside to are called vanishing points. One point perspective has one vanishing point whilst two point perspective has two. The position of the object in relation to the horizon line determines the way we view the object.

- Source VCAA Visual Communication Design Technical Drawing Specifications

For example, if the lines are all sitting above the horizon line, it would look like you were viewing the object from below, an example would look like this:



Whereas if all lines were sitting below the horizon line it would looks like this:



- Source for final image: VCAA Visual Communication Design Technical Drawing Specifications

PARALINE DRAWING – ISOMETRIC

Objects drawn using this method use receding lines remaining **parallel** to each other (hence the term 'para-line' drawing). Paraline drawings are a most convenient way to create dimensionally accurate drawings because true measurements may be made to a consistent scale in each plane. Types of paraline drawings in this study include 'isometric' and 'planometric'.

Isometric drawings are constructed with both sides receding from a corner edge at 30 degrees to the horizontal. The isometric drawing provides a comprehensive overall view of the object and is often used in communication and industrial design. See figure 1, as shown in the technical drawing specifications:

- Source VCAA Visual Communication Design Technical Drawing Specifications

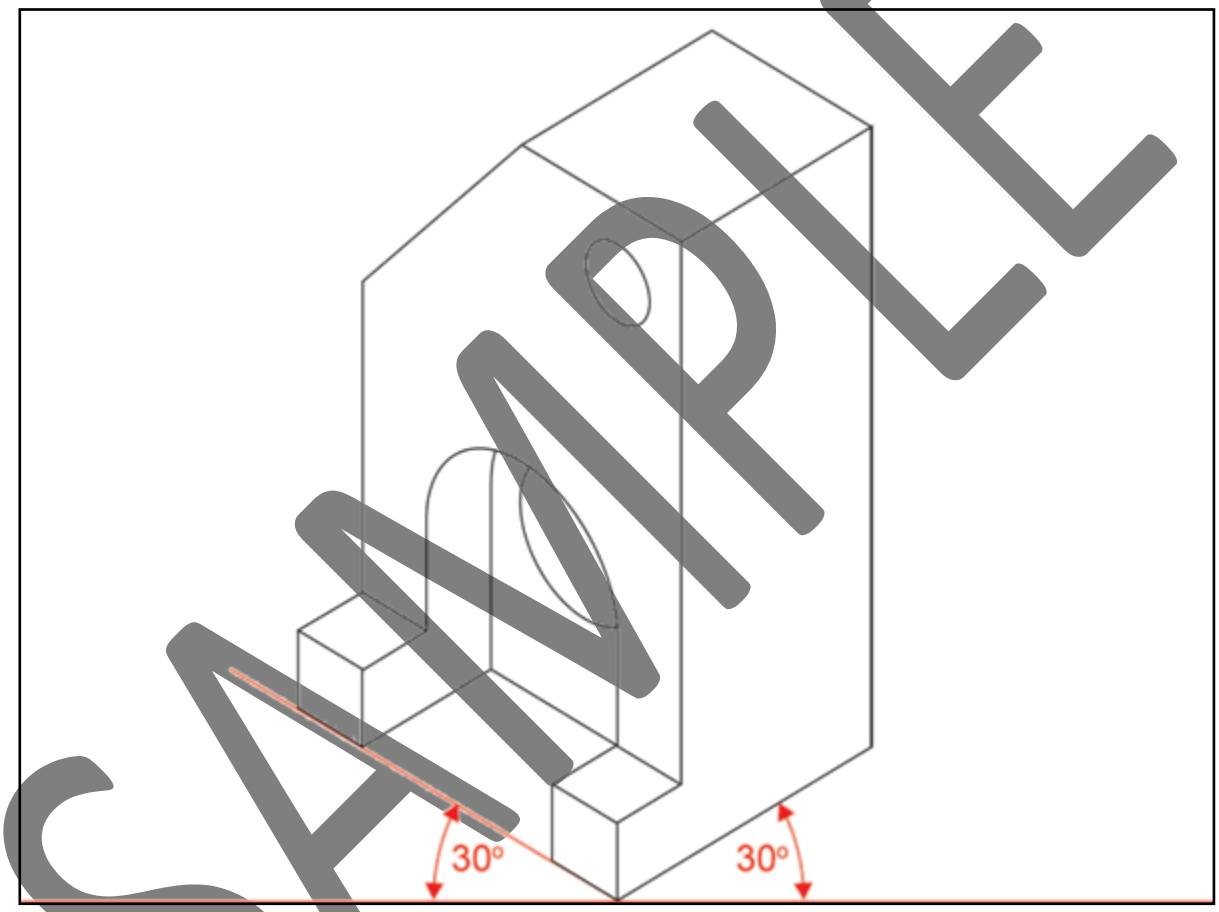


Figure 1

Isometric drawing