

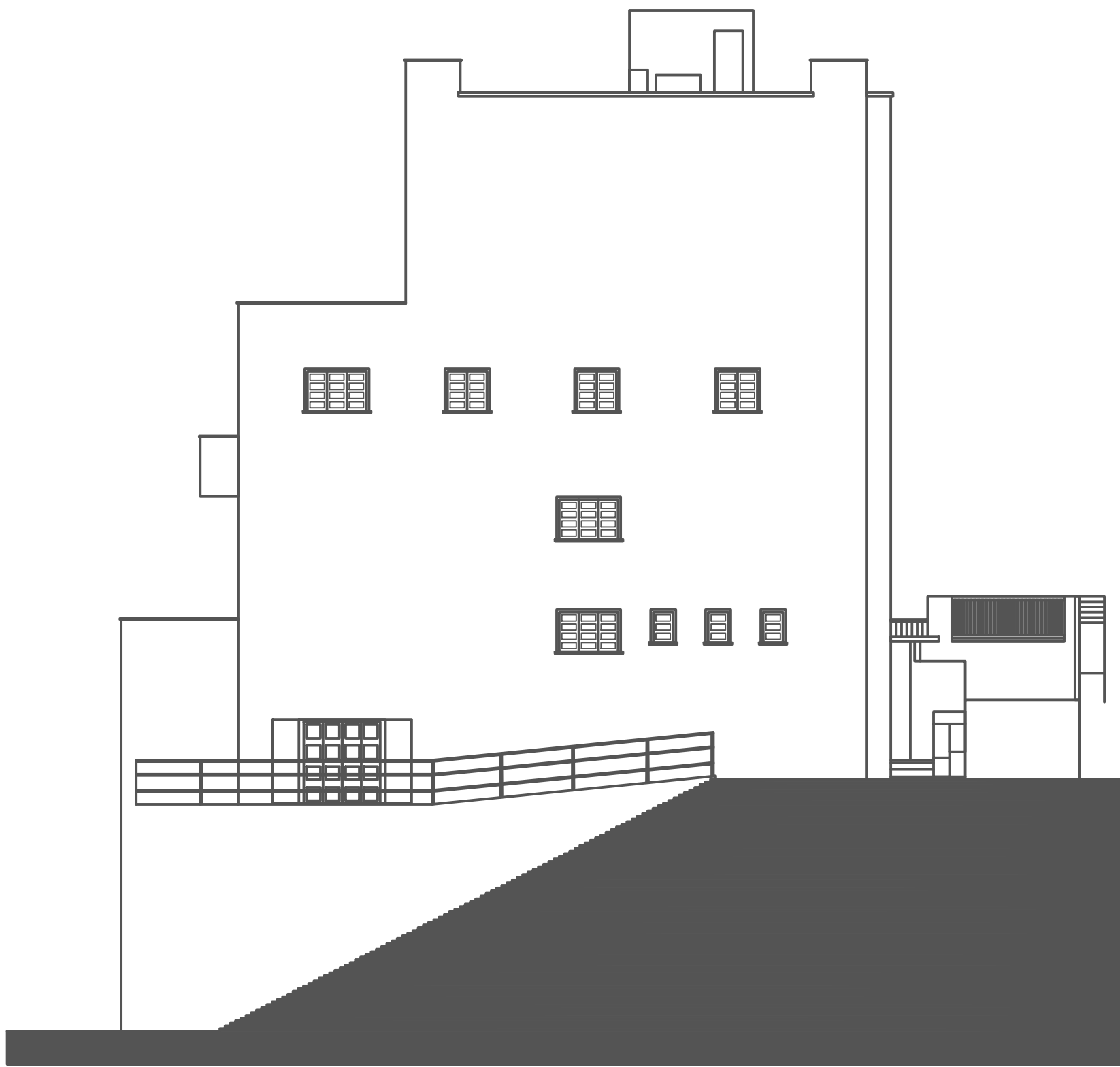
Muller House

Muller House or Villa Muller, located in area of Stresovice, Prague, considered one of the most influential areas of the capital of Czech Republic (wikiarquitectura.com, n.d.) It is a famous modernist villa, designed by Adolf Loos and his associate Karel Lhota (architectuul.com, n.d.); Adolf Loos was an Austrian architect who's planning of private residences strongly influenced European Modernist

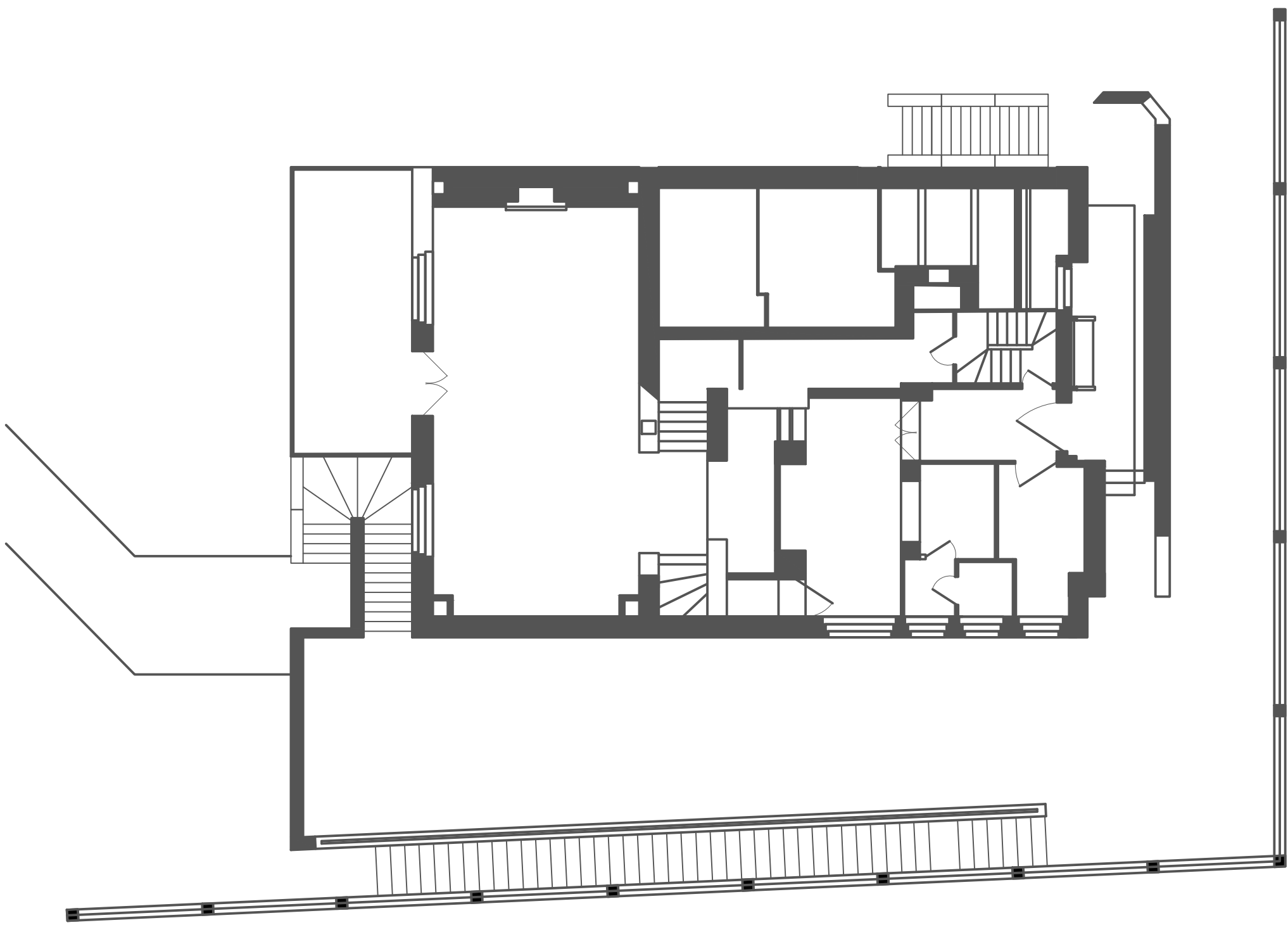
The villa was built a residential home for Mr Frantisek Mulle, who was the co-owner of the Kapsa-Muller construction company. (Prague.eu, n.d.) It is known for its influence on modern architecture, its clean lines and functional design. Construction began in 1928 and was completed in 1930, Muller House would be considered a masterpiece of European modernism.

Villa Muller was constructed using a combination of tradition and modern building techniques. Dr Frantisek's construction company pioneered the use of reinforced concrete and architect Adolf Loos embraced a functionalist approach by using reinforced concrete for the structural framework. This allowed for an open floorplan and large windows, which flood the space with natural light. The exterior is rendered with stucco, showcasing a sleek and timeless aesthetic ad well as weather protection. The sleek white stucco creates a visually striking façade. The layout of Villa Muller is organised around a central hall like living room creating a multi-story home with a sense of spatial continuity.

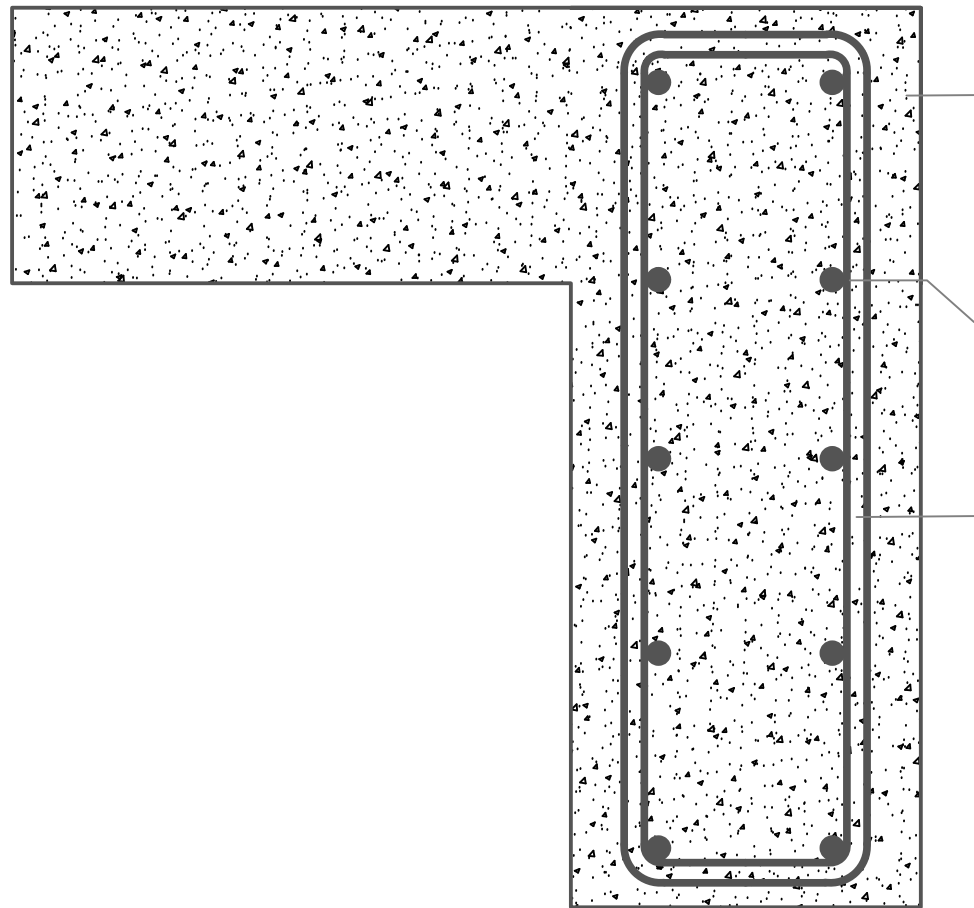
Its construction embodies a balance between traditional craftsmanship and cutting-edge techniques, creating a structure that not only stands as a testament to modernist ideals, but also remains a functional and aesthetically pleasing residence.



Elevation 1:500



Upper Ground Floor



1:10 Detail - Reinforced Concrete Section



Line Type

Line types are important for correctly representing elements within a project drawing; helping to differ between components, materials, utilities, which then enhances the visual clarity.

To distinguish between materials, different line types can be used, for example, dashed lines, consisting of short, closely spaced strokes, indicates elements hidden or removed from our view and utility lines consisting of relatively long segments separated by a letter indicating the type of utility. (Traylor, 2023).

BIM drawings will often display multiple phases of the construction project, line types such as dashed or dotted lines will be used to depict elements that will be constructed in the future, this aids in the visualisation of the project.

Coloured lines could also be used to represent different elements such as electrical, plumbing and site geography. Adhering to standardised colour coding systems contributes to communication with all the disciplines involved in the project. Adhering to the line conventions ensures consistency across the project; line conventions are important for emphasising details like materials and construction phases.

Line Weight

Line weight helps to distinguish line hierarchy within project drawing; it can give a sense of depth and dimension. Thicker lines can be used for more important elements of a drawing like structural features like load bearing walls, columns, and other major features. Medium lines can be used for secondary elements and thin lines can be used for annotations and dimensions; thinner lines ensure that the details are included within a drawing, but do not distract from main elements. (Traylor, 2023) When line weights are distinguished, this allows for clearer understanding of the drawing.

Hatching

Adhering to industry standards for hatching will help to convey specific information about the materials being used and certain finishes, for example, certain hatching may be used to convey brick work or concrete. Hatching can also be used to help visualise internal finishes like tiling or carpet.

In section drawings, hatching can be used to depict different elements in the structure such as insulation within a wall.

Having this clearly communicated through the drawing allows visual ease and ensures clarity with all parties involved.

Hatching is a versatile tool that can communicate information about physical or functional aspects of a drawing.

Scale

When producing a digital drawing, it is important to draw to scales that it accurately represents the real-world dimensions of the buildings.

Having accuracy in the drawing is imperative for the planning of the construction as well as all the industry professionals involved; having a scale drawing with accurate measurements allows architects, engineers, surveyors, and contractors to clearly understand the proportions and layout which allows them to make informed decisions throughout each phase.

Precision in a drawing is important to ensure that components and elements of the design fit together correctly in the physical build.

Many professional bodies will have their own requirements in respect of digital drawings, for example, planning departments within councils will require plans submitted along with planning applications to be accurately represented in a 1:1250 scale. (Traylor, 2023)

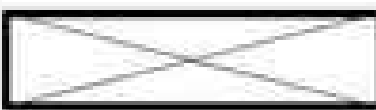
Contractors rely heavily on scaled drawings, if drawings are not to scale this could lead to a risk of errors in the construction phase, risking the overall quality of the building.

Naming Conventions

Naming conventions are important for Building Information Modelling drawings for several reasons; it ensures uniformity across the project, making it easier for individuals working on the project to locate, identify and understand the drawings, thus giving a sense or organisation and streamlining the project.

BIM projects are often a collaborative effort amongst multiple disciplines. As drawing can be shared with external organisations and databases, the naming convention will also allow for data to be exchanged smoothly. (Traylor, 2023)

Clear naming will also allow for effective version control; including a version number in the file name will allow for colleagues to distinguish between different versions of the drawing, which will then lessen the risk of outdated or incorrect drawing being used in a project. Having a consistent naming convention allows for clear and concise communication.

	Aluminum		Membrane layer
	Brick		Plywood
	CMU		Steel
	Concrete		Stone - finish
	Drainage fill		Wood blocking - continuous
	Earth		Wood blocking or shim - discontinuous
	Insulation - batts		Wood - finish
	Insulation - rigid		

(Cadbull, n.d.)

Property Title Muller House	Detail GA Plan and Elevation	Property — Originator — Zone Functional Breakdown — Level Spatial Breakdown — Form — Discipline — Number — Description — Status — Revision										scale 1:500 @ A1	drawn RL	 Prifysgol Cymru Y Drindod Dewi Sant University of Wales Trinity Saint David	(S0) UNCONTROLLED ISSUE NOT TO BE USED AS A REFERENCE DOCUMENT CHECK STATUS BEFORE QUOTING	rev/date/by	
		MH — UWTSD — XX — XX — DR — A — 0001 — Muller House — CR — P01										date 01/07/19	checked GT				
		filepath Y:\<Number>\Student\Drawings\<File name>.dwg														revision	