High Performance Acoustic Products
for
New Build and Refurbishment

Ab-8 Acoustic Flooring System

Ab-8 Acoustic Flooring System, produced by Kay-Metzeler Ltd (Insulation Division), offers solutions for new build and refurbishment projects.

Product Range

	NEW BUILD		REFURBISHMENT	
Ab-8 System	**CONCRETE FLOORS**	**TIMBER FLOORS**	**CONCRETE FLOORS**	**TIMBER FLOORS**
Ab-8 Overlay Plus	*			*
Ab-8 Battens Deep	*	*		
Ab-8 Battens Shallow	*			
Ab-8 Combi-Deck				*

Ab-8 products are based on the principle of using a layer of heavy material isolated by a resilient layer. This is an excellent method by which to reduce both airborne and impact sound through floors.

Increasing the relative mass of the total floor construction reduces airborne sound, whilst a properly engineered resilient layer, under loading, will reduce impact sounds.

Since impact sounds through floors are a dominant aspect of transmitted sounds, the type and thickness of the resilient layer is key to producing the required result.

Ab-8 resilient layers are engineered to have low resonance properties which minimise low frequently sound and has excellent durability under continued dynamic loading.

It is important that sound transmitted Via flanking paths is reduced, if required performance standards are to be met.

The broad range of **Ab-8** products is suitable for a variety of acoustic flooring applications. It can be used on timber and concrete floors and in both new build and refurbishment projects.

Technical installation guides are available on the website at **www.kay-metzeler.com**

MEETING CURRENT APPROVED DOCUMENT E (2003) (ENGLAND & WALES) REQUIREMENTS

To achieve these requirements two options are available : 1. PRE-COMPLETION TEST or 2. ROBUST DETAILS FOR WHICH NO PCT IS REQUIRED.

For dwelling-houses, flats and rooms for residential purposes , the site acoustics performance requirements are:

SEPERATING FLOORS BETWEEN DWELLINGS	AIRBORNE (DnT,w + Ctr)	IMPACT (L'Nt,W)
New build	45dB min	62dB max
Created by material change of use.	43dB min	64dB max

Robust Details requirements , using laboratory testing over specified structural floors, are:

STRUCTURAL FLOORTYPE	AIRBORNE (ΔRw + Ctr)	IMPACT (Δ Lw)
Concrete (E-FC-1, 2, 7 E-FS-1)	-	17dB min
Timber (E-FT-1, 2. 3)	13dB min	15dB min

(Laboratory tests carried out by UKAS accredited BRE and SRL)

GLOSSARY:
ΔRw = IMPROVEMENT IN AIRBOURNE SOUND Ctr = LOW FREQUENCY CORRECTION FACTOR ΔLw = IMPROVEMENT IN IMPACT SOUND L'Nt,W = IMPACT SOUND INSULATION OF FLOORS DnT,w = AIRBOURNE SOUND INSULATION BETWEEN TWO ROOMS

CONCRETE SUB-FLOORS

Concrete floors, due to their high mass, have a high resistance to airborne sound but still transmit impact sound, therefore the need to reduce impact sound is a main priority.

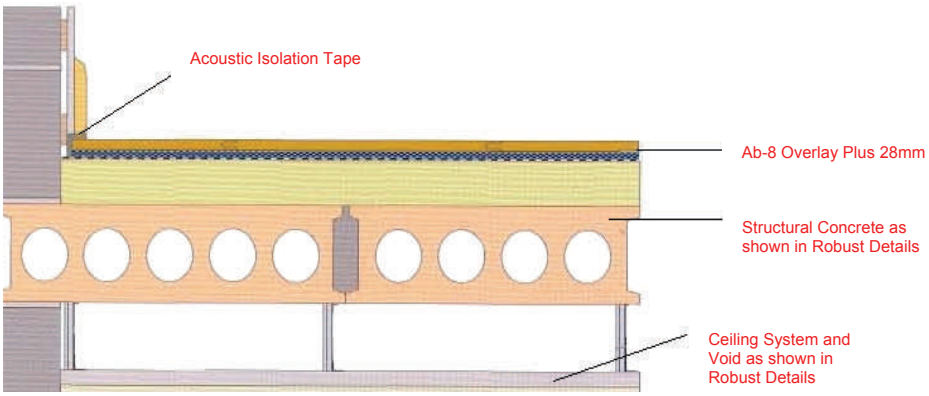
Overlay Plus (FFT5 Compliant for Robust Detail E-FC-1, 2, E-FS-1)

Acoustic Performance Impact

	Product	Description	Total Thickness	Acoustic Performance ΔLw	Acoustic Requirements ΔLw
FFT 5	Ab-8 Overlay Plus	18mm P5 moisture resistant T&G chip-board with 10mm foam resilient layer	28mm	20dB	17dB min

An overlay system is the simplest way of creating a new hardwearing surface, without significantly increasing floor height. It features a resilient layer to reduce impact sound transmissions.

Ab-8 Overlay Plus with decoupled twin layer high density plasterboard ceiling.



Ab-8 Overlay Plus is a Robust Detail compliant solution.

The overlay is quick and easy to install
with minimal height loss in the room.

Non-load bearing partitions can be built off the finished floor surface.

Panel size:
2400mm x 600mm x 28mm
Panel weight: 19kg

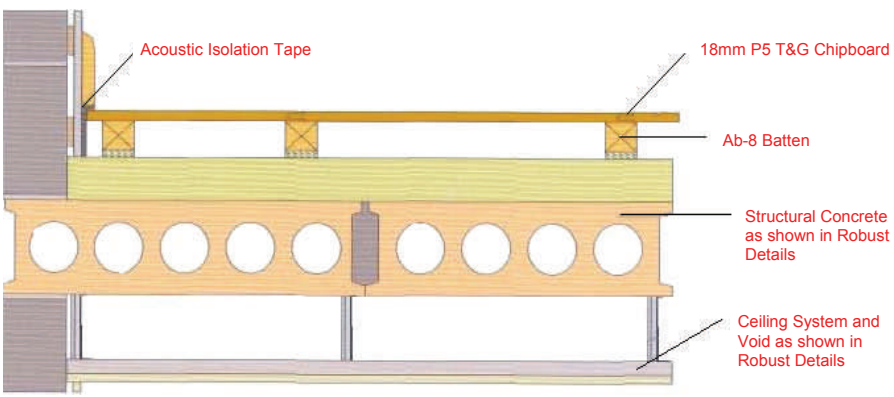
Battens (FFT1Compliant for Robust Detail E-FC-1, 2, 7, E-FS-1)

Acoustic Performance Impact

	Product	Description	Total Thickness (Unloaded)	Acoustic Performance ΔLw	Acoustic Requirements ΔLw
FFT 1	Ab-8 Batten Deep	70mm softwood batten and 8mm re-silient layer	78mm	27dB	17dB min
FFT3	Ab-8 Batten Shallow	45mm softwood batten and 8mm re-silient layer	53mm	27dB	17dB min

A batten system (with the increased mass given by the chipboard) is an excellent method by which to both increase the relative mass and introduce a resilient layer to absorb impact sounds.

Ab-8 Battens Deep and Shallow with decoupled twin layer high density plasterboard ceiling



Ab-8 Battens Deep and Shallow are Robust Detail compliant (FFT I and FFT3respectively) solutions for
a variety of concrete sub-floors.

Battens are easy to install,
Light Weight and allow space for service voids

Non-load bearing partitions can be built off the finished floor.

TIMBER FLOORS

Timber floors with their relatively low mass generally have low resistance to airborne and impact transmitted sounds.

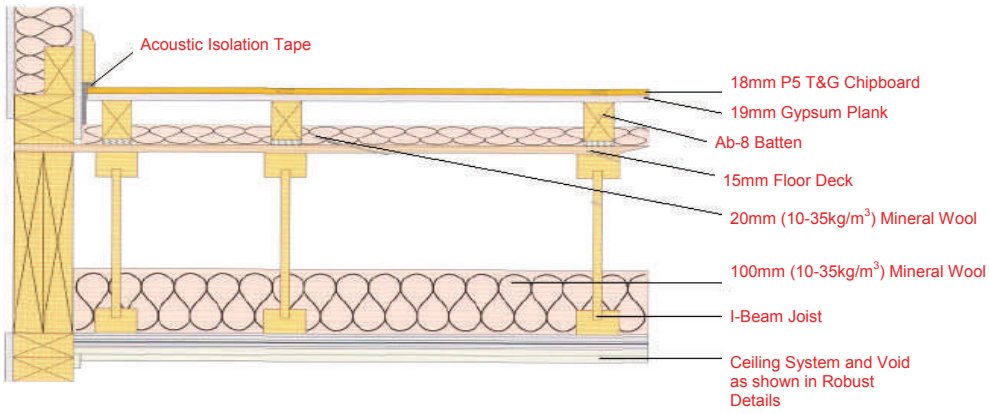
Batten (FFT1 Compliant for Robust Detail E-FT-1, 2, 3)

Acoustic Performance Airborne and Impact

	Product	Description	Total Thickness (Unloaded)	Acoustic Performance ΔLw	Acoustic Performance ΔRw + Ctr	Acoustic Requirements ΔLw	Acoustic Requirements ΔRw + Ctr
FFT 1	Ab-8 Batten Deep	60mm Softwood Batten and 15mm Resilient Layer	75mm	20dB	15dB	15dB min	13dB min

A Batten system (with the increased mass given by the chipboard and gypsum plank) is an excellent method by which to both increase the relative mass and introduce a resilient layer to absorb impact sounds.

Batten Deep with decoupled twin layer high density plasterboard ceiling



Ab-8 Batten Deep is a Robust Detail compliant (FFTI) timber floor solution.

Battens are easy to install, lightweight and allow space for service voids.

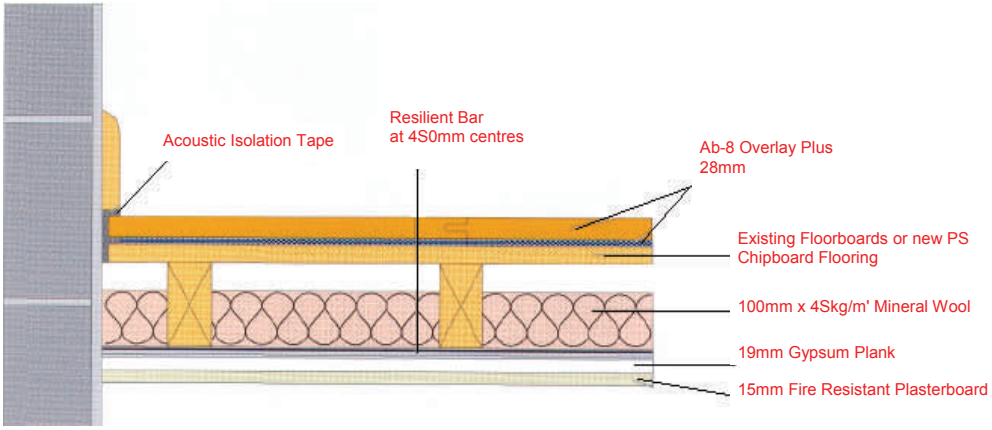
Non-load bearing partitions can be built off the finished floor surface.

Overlay Plus (Acoustic Floating Floor Panels)

Acoustic Performance Airborne and Impact

Product	Description	Total Thickness	Acoustic Performance Airborne DnT,w + Ctr	Acoustic Performance Impact L'nT,w	Acoustic Requirements Material Change of Use DnT,w + Ctr	Acoustic Requirements Material Change of Use L'nT,w
Ab-8 Overlay Plus	18mm P5 moisture resistant T&G board with 10mm foam resilient layer	28mm	50dB	59dB	43dB min	64dB max

Ab-8 Overlay Plus with decoupled twin layer high density plasterboard ceiling



Ab-8 Overlay Plus is quick and easy to install creating a new durable surface and with mini-mal height loss in the room.

It may be covered with a wide range of floor finishes.

Non-load bearing partitions can be built off the finished floor surface.

Panel size: 2400mm x 600mm x 28mm
Panel weight: 19.5kg

TIMBER FLOORS

Timber floors with their relatively low mass generally have low resistance to airborne and impact transmitted sounds.

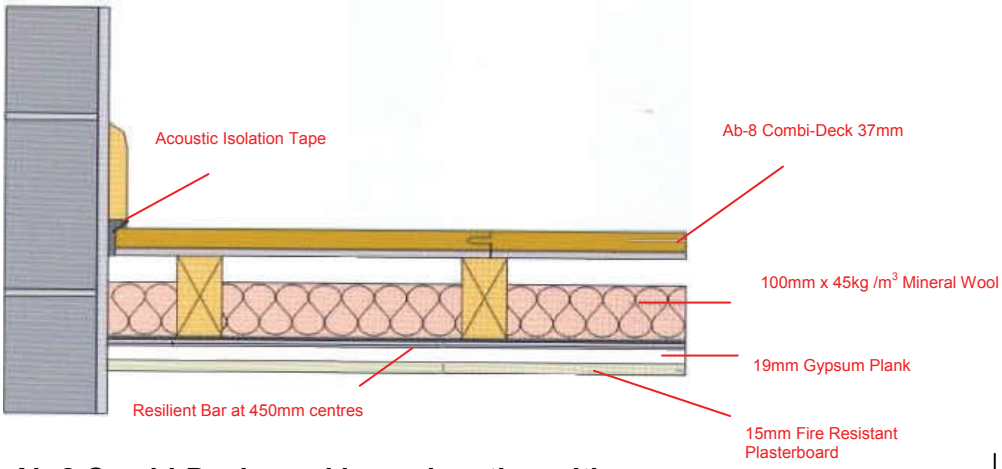
Combi-Deck (Structural Acoustic Floor Panels)

Acoustic Performance Airborne and Impact

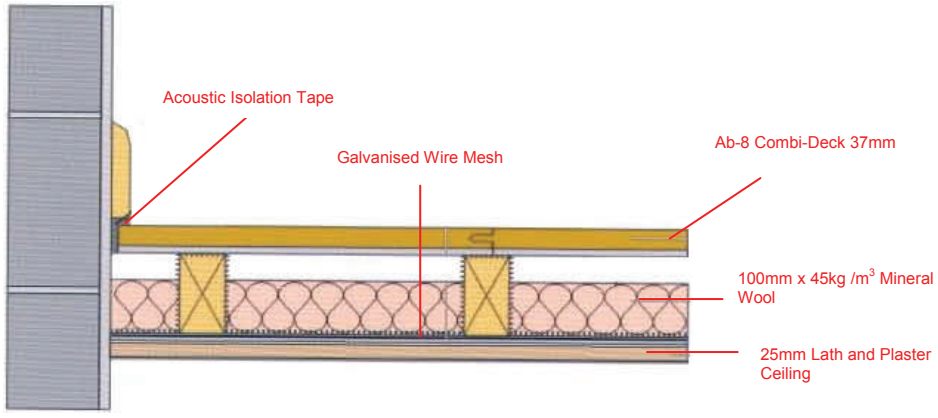
Product	Description / Applications	Total Thickness	Acoustic Performance Airborne DnT,w+Ctr	Acoustic Performance Impact L'nTw	Acoustic Requirements Material Change of Use DnT,w+Ctr	Acoustic Requirement Material Change of Use L'n
Ab-8 Combi-Deck	22mm P5 moisture resistant T&G chipboard with 15mm bi-composite foam resilient layer with a twin high density plaster-board ceiling	37mm	49dB	55dB	43dB min	64dB max
	22mm P5 moisture resistant T&G chipboard with 15mm bi-composite foam resilient layer with a lath and plaster ceiling	37mm	51dB	54dB	43dB min	64dB max

A replacement system is the simplest way of creating a new hardwearing surface, without significantly increasing floor height. An additional benefit can be gained if it includes a resilient layer to reduce impact sound transmissions. Combi-Deck is designed to be a replacement for the original floorboards when used in conjunction with an appropriately insulated floor void.

Ab-8 Combi-Deck with decoupled twin layer high density plasterboard ceiling



Ab-8 Combi-Deck used in conjunction with an existing lath and plaster ceiling



Ab-8 Combi-Deck is both quick and easy to install.

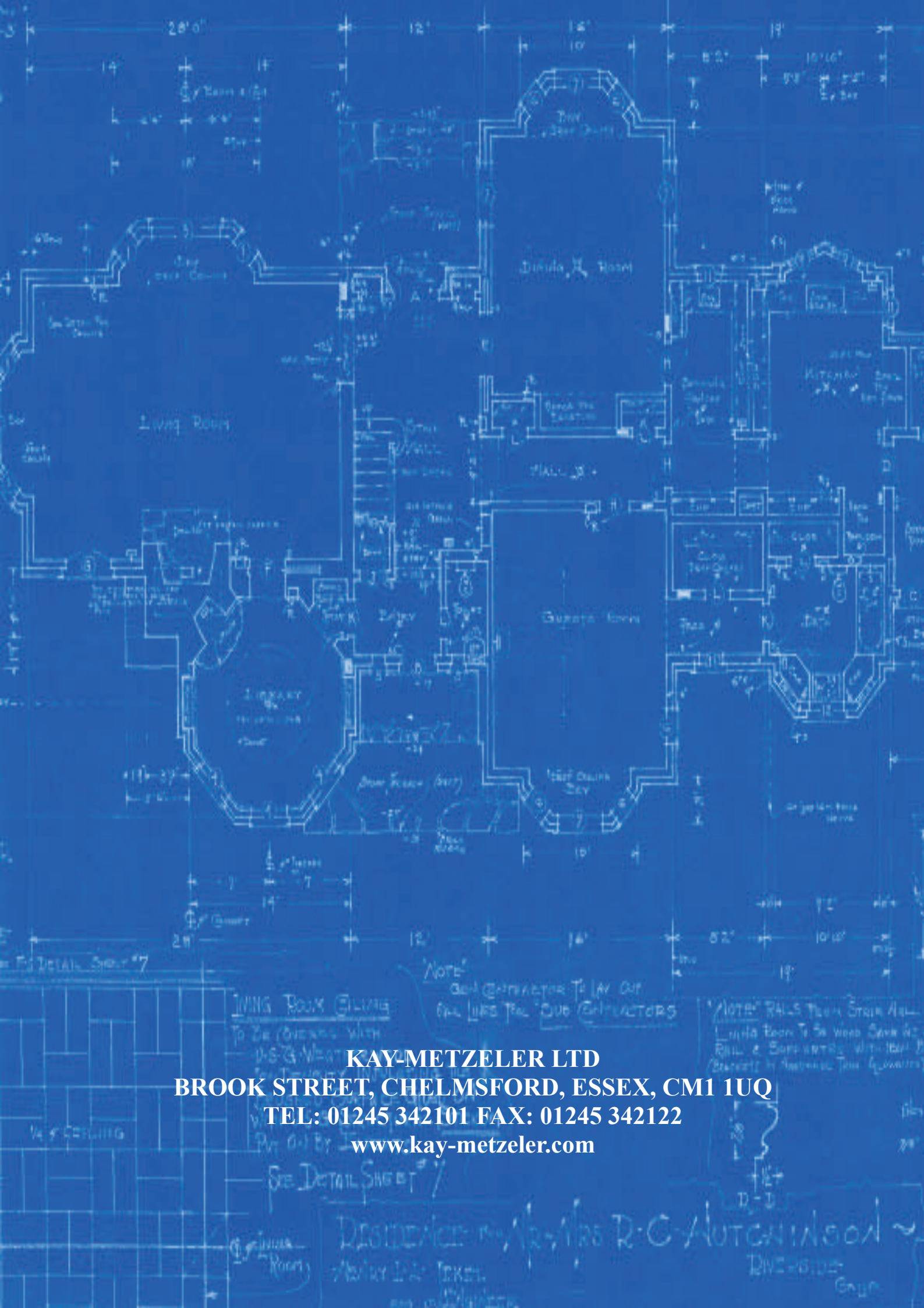
It may be overlaid with a wide range of floor finishes including, but not limited to, carpet and laminates.

Use of 22mm P5 chipboard means Combi-Deck can span 600mm joist centres.

Non-load bearing partitions can be built off the finished floor surface.

Panel size:
2400mm x 600mm x 37mm

Panel weight: 24.5 kg



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