



**DESIGN PRINCIPLES: THE INTEGRATED DESIGN TEAM –
WITH JENNY CHANDELA**



**Allan Corfield
ARCHITECTS**

An Introduction to Self Building

An eBook from **Allan Corfield Architects**

- Based in Swindon & Dunfermline
- Covering the whole of the UK
 - Completed 500+ projects
- Specialists in Low energy residential projects
 - RIBA Chartered Architects
- Energy Performance & Passive House Design
 - Cost Consultancy
 - CDM Principle Designer
 - Structural Engineering
- VR & 3D design



Allan Corfield
ARCHITECTS

- 
- A modern wooden building with a large glass window and a stone patio. The building features light-colored horizontal wood siding on the left and vertical wood siding on the right. A large glass window on the right side offers a view of the interior, which includes a sofa and a framed picture. The foreground is a stone patio, and the background shows a green lawn and distant hills under a blue sky.
- 1. Getting started**
 - 2. The design process**
 - 3. Getting the right help**
 - 4. Building your dream**
 - 5. Top tips**



GETTING STARTED



Finding a plot -

1. Select a location
2. Explore your preferred area
3. Recent planning applications
4. Local estate agents
5. Property auctions
6. Plot search service
7. Get creative!

Plot 1

Plot 2

Plot 3
(SSTC)

Who do I need to work with?

Basic –

1. Architect or Architectural Designer
2. Structural Engineer

Might need –

3. Planning Consultant
4. QS
5. Heating Engineer
6. Project Manager
7. Landscape, lighting or interior designers
8. Principle Designer



Design process overview -

Stages

1. Initial Design
2. Planning Application
3. Building Regulations or Warrant
4. Production Drawings
5. On site
6. CDM

What is critical throughout these stages?

1. Your involvement, **its your home not your design teams**
2. Checking that you can afford it!
3. You must love the design before you proceed through the stages
4. Engage with your neighbors and the planners as soon as you can
5. Communication with your consultants





THE DESIGN PROCESS





The design process starts with YOU.

Allan Corfield Architects
The Self Build Experts

What is a Brief and what is it used for?

PROJECT BRIEF – from client meeting Friday 18 September 2015

1. Your brief sets out all of the important requirements for your project

PRESENT – Keira Proctor (Client – KP)
Alan Proctor (Client – AP)

2. It is created by you prior to engaging with your design team

Architectural Style External - A mixture of old and new features
Use timber, render and stone as main materials
Use soft painting, grey woodwork, aluminium or alu-clad
Built around courtyard
Potential for mono-pitched roof or flat roof
Maybe a curved section of wall
Must work with existing stone garden walls

3. You should use it to obtain accurate fee proposals from your design team

Architectural Style Internal - Contemporary flow of spaces
Use of materials
Sunken living room
Large feature double height entrance atrium
High ceilings and large volumes throughout
Stone floor tiles or hardwood down stairs
Carpet upstairs (not in en-suites)
Large windows and bi-fold out to garden

4. It is an evolving document, throughout the life of project

Ground Floor Accommodation - Linked double garage, with work space
Large utility room, with laundry shoot
Plant room for all of the heating & controls
Large entrance atrium with feature stairs
Sunken living room with fireplace



First Floor Accommodation -

Master suite room, with en-suite bathroom, large his & hers walk-in wardrobe (approx. 3-5m storage each all hangers)
Balcony from master suite
Second living room from master suite
2 additional double bedrooms, sharing 1 en-suite
Family bathroom
Home Office (could be on GF)
Views into walled garden are important
Window seats
Double height volumes (potential down to GF)

Landscaping -

Mixture of hard & soft landscaping
Focused around the existing walled garden
New formal entrance through trees on private access track
Courtyard is key

Systems -

Mains or bottled gas supply
Heating UFH on all of Ground Floor and wet rooms on First Floor
MVHR system
Central Vac system
Whole house control system (through IOS)
Aga in kitchen, if required?

Budget -

Client to confirm?

Timeframe -

Start immediately on designs, start on site 2016. Approx 12-16 month build schedule

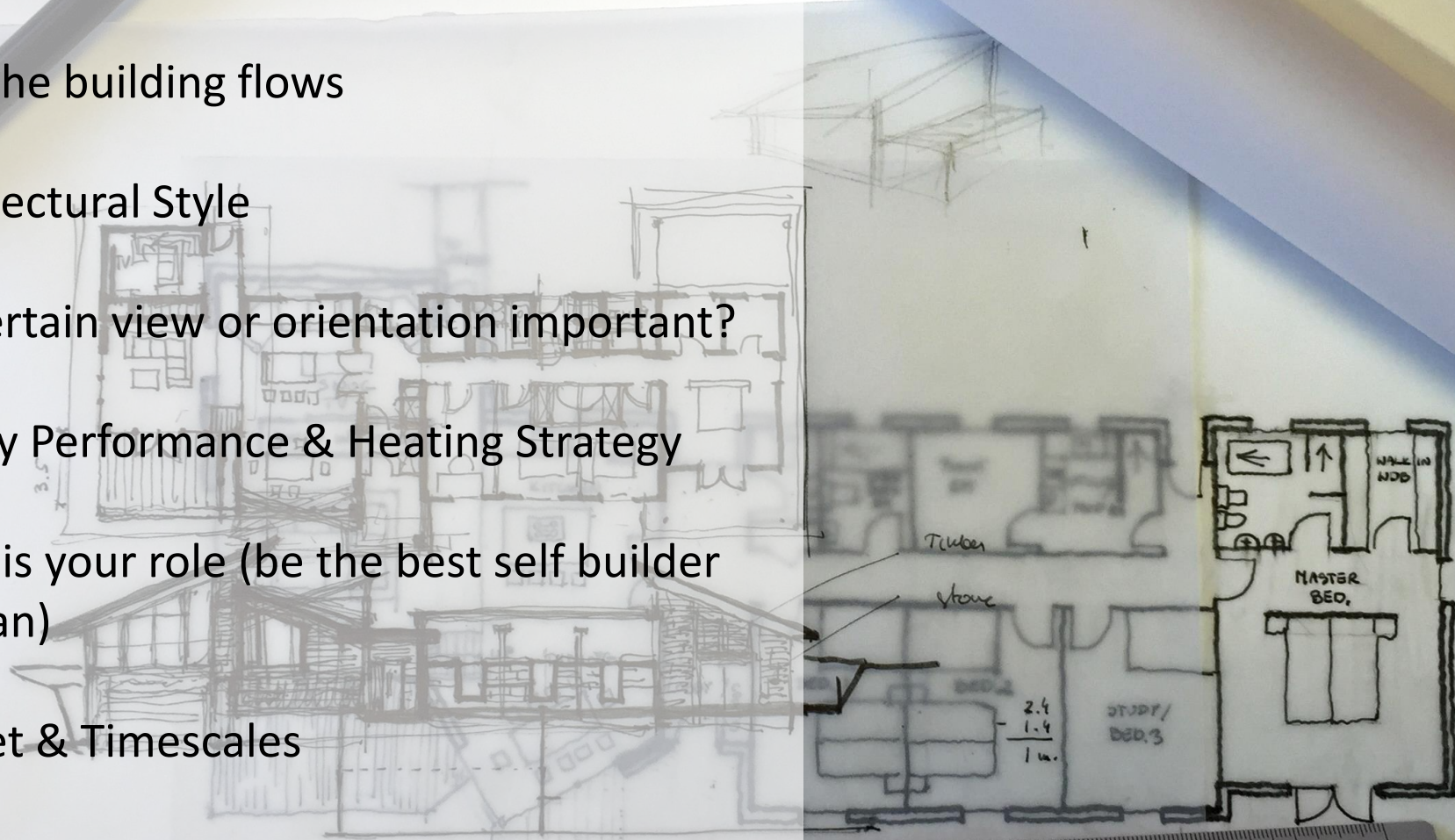
Wishes -

Sunken wine cellar
Trash shoot and laundry shoot



What is included in your Brief?

1. Basic room information & room sizes
2. How the building flows
3. Architectural Style
4. Is a certain view or orientation important?
5. Energy Performance & Heating Strategy
6. What is your role (be the best self builder you can)
7. Budget & Timescales
8. Why





Provide additional information

1. Sketches

2. Sketch-up models

3. Lego or physical models

4. Pinterest Boards



GETTING THE RIGHT HELP



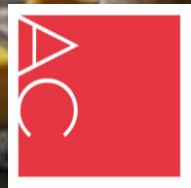


Portfolio of works





Experience





Ability to listen



Chemistry and trust



Ability to visualise



Initial Consultations

AC Structures



Allan Corfield ARCHITECTS

Custom & Self Build Experts

At ACA we take your ideas and aspirations and turn them into a stunning, energy efficient home which you can afford to live in.

- Initial concept design, illustration of key 3D drawings
- Planning & Building Regs application
- Full architectural, structural and landscaping
- Full cost estimates
- Project Management (start to finish)
- Detailed drawings, design and construction
- Full costings and management of the build process

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Virtual Reality with ACA

3D Modelling

Fully Immersive Virtual Reality

INITIAL SERVICE

ADD-ON SERVICE

VR & 3D Modelling



Top tips on appointing your design team

1. Interview each profession required, **ask for references** and look into previous work.
2. Provide your **detailed brief** to anyone you require a quote from.
3. Obtain **written quotes** & ensure they are **fixed fees** – don't go for % of construction cost quotes!
5. Speak to professionals who regularly handle your type of project – **Self Build specialists** can give you the best advice! These professionals will be part of your life for at least 18 months, so **you need a good relationship too!**
6. Don't fight costs down **too much**; you want a good service – they are a business after all!
7. If the relationship turns sour, **be aware of your options for parting ways!**





BUILDING YOUR DREAM



Benefits of early engagement -

1. Site suitability
2. Building orientation/ siting
3. Refinement of brief
4. Consideration of building envelope
5. Integration of systems
6. Developing a relationship



Site suitability -

Architectural

1. Planning potential
2. Legal restrictions
3. Site access
4. Services to site – major connection costs
5. Physical characteristics
6. Ground conditions - including topo, soil investigation & percolation test

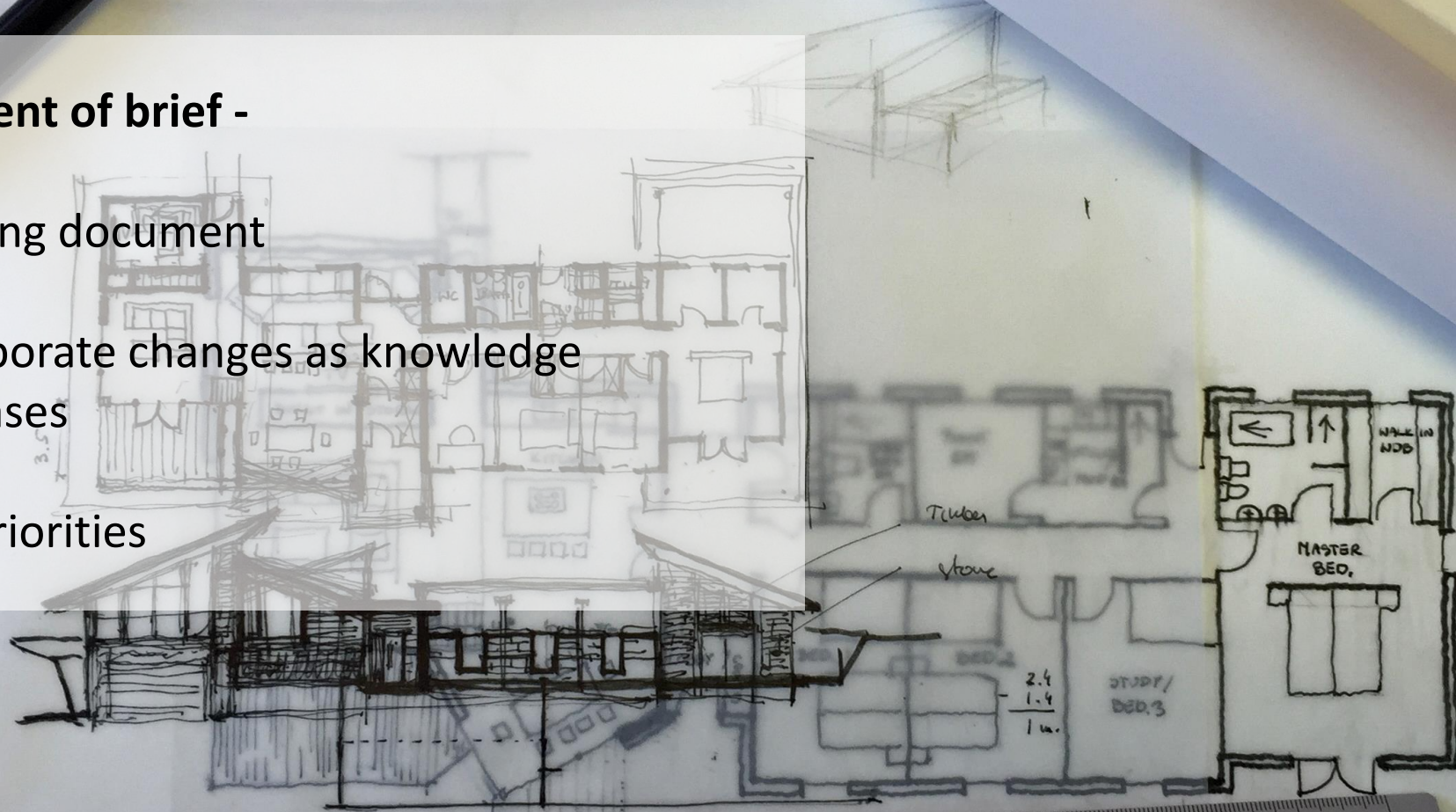


Building siting/ orientation-

1. Assess external landscape features
2. Assess internal landscape features
3. Weather data and sun path analysis

Refinement of brief -

1. Evolving document
2. Incorporate changes as knowledge increases
3. Top priorities



“Is a back to basics approach where you concentrate on the fabric of the building before throwing eco bling, in order to make it work.”

Building a quality envelope



THE KEY ELEMENTS

1. Solar Gain
2. Construction Type
3. Air Tightness
4. Limit Cold Bridging
5. Ventilation Strategy
6. Heating Systems

Initial design & planning stage -

1. Initial design variations - based upon brief, site conditions and programme
2. Review of design variations to agree a final revision – 2D and 3D visualisation
3. Consideration of structural design and other systems to provide economy of layout and form
4. Design with a construction method in mind
5. Work up a full set of initial design drawings to planning level
6. Completion of external rendered images – key to planning success
7. Complete all support documentation required to lodge a planning application

Technical design (regs & production) -

1. Technical review, investigation and documentation of various construction methods

2. Integration of Structural Engineers design information

3. Confirmation of heating requirements, energy performance and SAP calculation resulting in draft EPC

4. Completion of building regulations drawings and submit application

5. Discharge relevant Planning Conditions

6. Guidance on the construction process and procurement routes

7. Development of construction drawings and integration of specialist designs

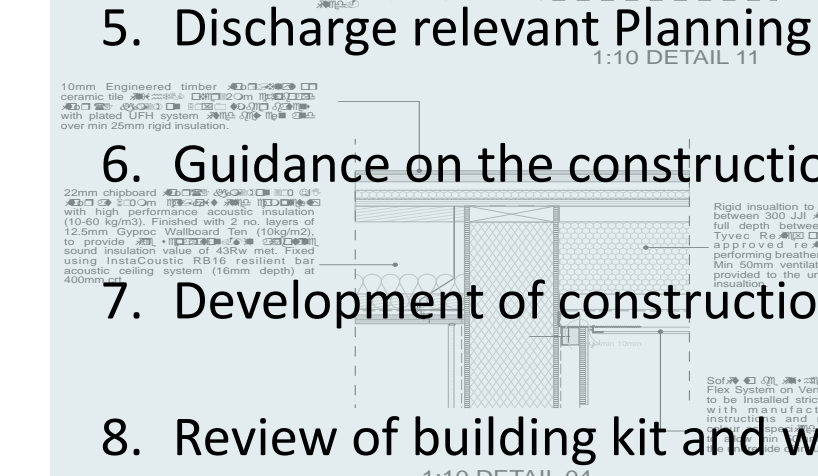
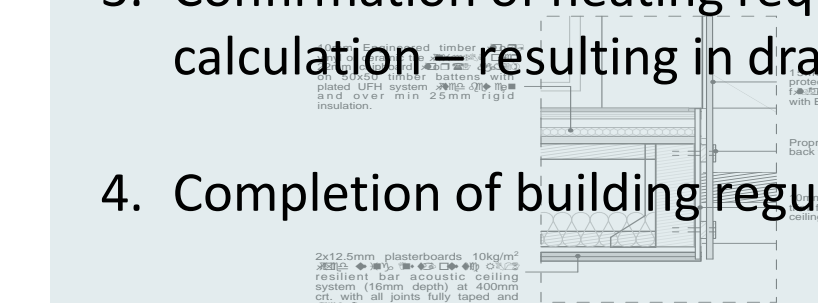
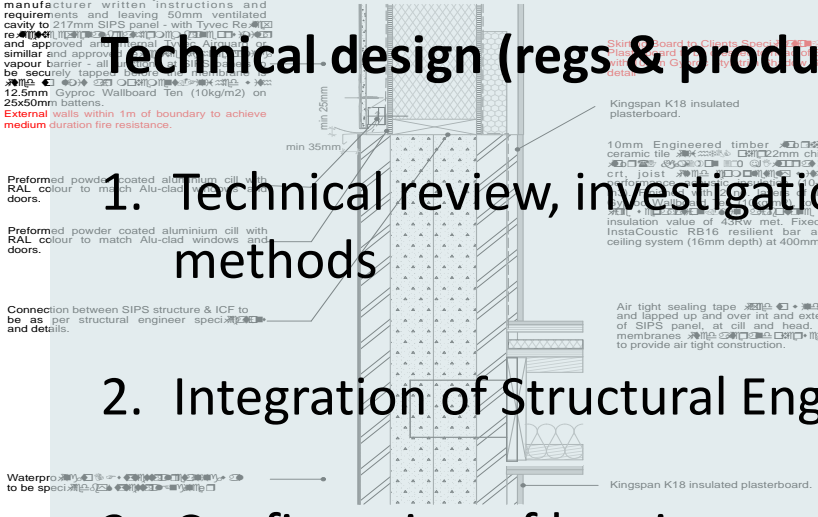
8. Review of building kit and windows/ doors package

Sto Rend Flex System on Ventec Carrier Board & ICF to be installed strictly in accordance with manufacturer written instructions and requirements and leaving 50mm ventilated cavity to 217mm SIPS panel - with Tyvec Re...
 re...
 and approved...
 similar and approved...
 vapour barrier - all
 be securely taped...
 12.5mm Gyproc Wallboard Ten (10kg/m2) on 25x50mm battens.
 External walls within 1m of boundary to achieve medium duration fire resistance.

Preformed powder coated aluminium sill with RAL colour to match Alu-clad doors.
 doors.
 Preformed powder coated aluminium sill with RAL colour to match Alu-clad windows and doors.
 doors.

Connection between SIPS structure & ICF to be as per structural engineer specification and details.

Waterpro...
 to be spec...

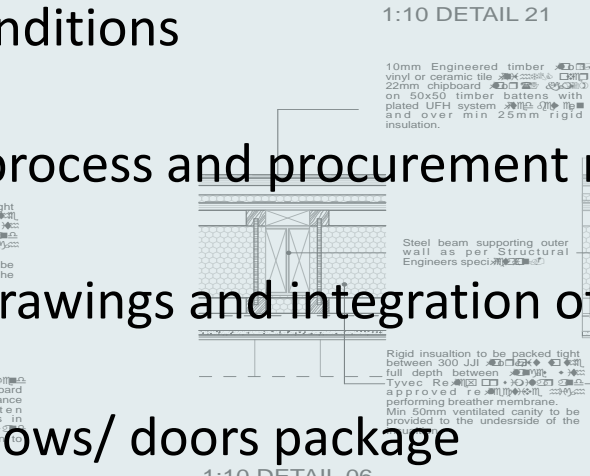
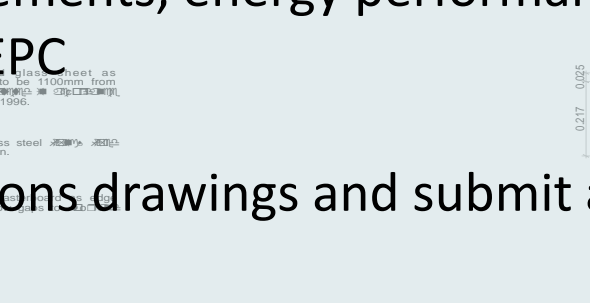
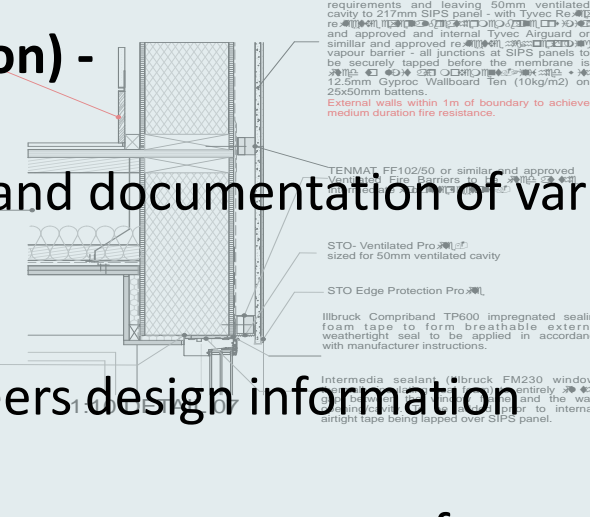


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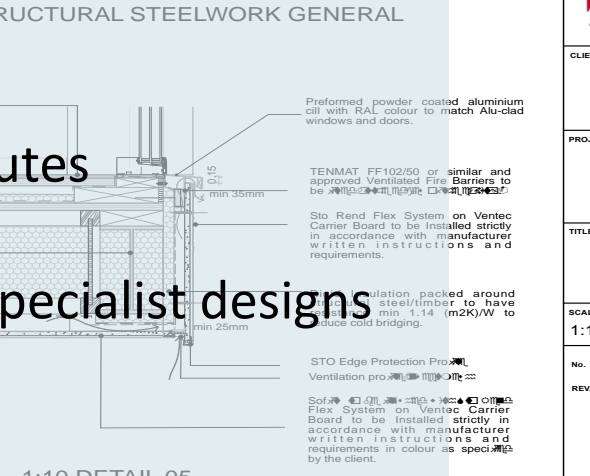
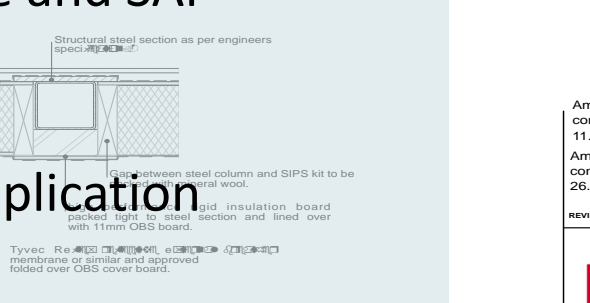
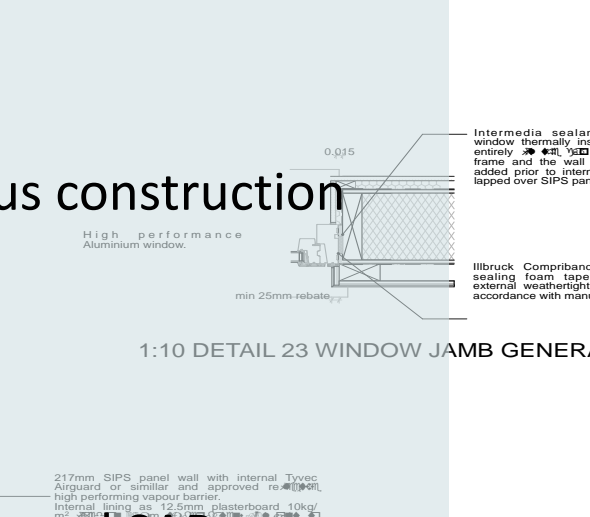


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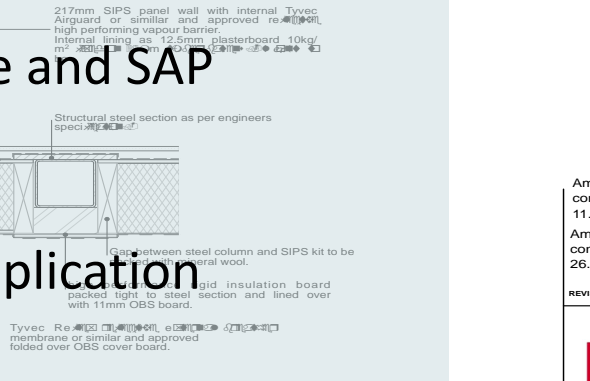
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Waterpro...
 to be spec...



Intermedia sealant (Illbruck FM230 window thermally insulating seal foam) to entirely seal the window frame and the wall opening/cavity. To be added prior to internal airtight tape being lapped over SIPS panel.
 Illbruck Compriband TP600 impregnated sealing foam tape to form breathable external weathertight seal to be applied in accordance with manufacturer instructions.

1:10 DETAIL 23 WINDOW JAMB GENERAL



1:10 DETAIL 21 STRUCTURAL STEELWORK GENERAL

REVISION	INITIAL	DATE	SUFFIX
Amendments per building control report dated 11.05.17	SPH	16.05.17	B
Amendments per building control report dated 26.01.17	SPH	15.03.17	A



CLIENT
KENNETH MCLEAN

PROJECT
BELMONT DRIVE EDINBURGH

TITLE
Details Walls/General
STAGE 3 DETAIL DESIGN DEVELOPMENT

SCALE A2
1:10

DATE
06/12/16

DRAWN
187 - BW 13

CHECKED
B

NO.
187 - BW 13

REV.
B

LEWIS HOUSE, UN HILLEND IND EST FIFE, KY11 9JF
 t - 01383
 e - info@aca
 w - www.aca



On site -

1. Confirmation that all planning and building control conditions have been released.
2. Site Inspections/ Toolbox talks
3. Issue of CML mortgage Certificates to release Mortgage payments
4. Interim through to Completion Certification
5. 1 year inspection to confirm making good of defects.

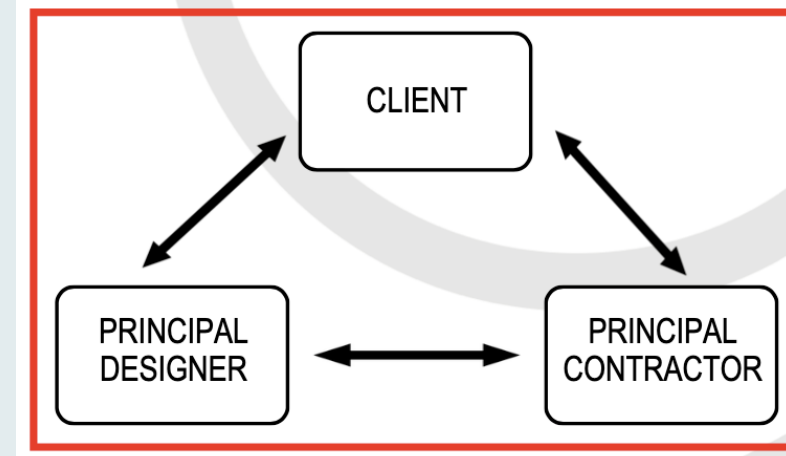


CDM 2015-

The **Client** has overall responsibility for the successful management of the project and is supported by the **Principal Designer** and **Principal Contractor** in different phases of the project.

The Principle Designer will:-

1. Provide pre-construction information to appointed designers and Principal Contractor
2. Assist the client in provision of pre-construction information
3. Gather information for the Health and Safety File
4. Liaise with the Principal Contractor
5. Update to CDM Matrix where design work is carried out after the construction phase has commenced



TOP TIPS

1. Do your research about potential sites.
2. Develop your brief early on and commit to it.
3. Be the best self-builder or client you can be!
4. Prioritise your goals and integrate from the outset.
5. Hire the right team to design in more complicated features.

Allan Corfield Architects presents:
‘How to Self Build Successfully’ Seminar



“An excellent place to start a project – great clear information and educational, great place to network for services. Well worth the cost, even for me travelling 250 miles each way! Would recommend a combined visit with a day in NSBRC exhibits for even more. Well done ACA!”

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2nd December 2023

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This seminar – hosted by Allan Corfield Architects and delivered by top industry leaders – prepares you for your Self Build journey.

The day includes expert advice on key topics ranging from finding land and funding your project to future proofing your design and cost control. There are opportunities for individual consultations and networking throughout the day.

Key Topics:

- Finding and assessing land
- Funding and protecting your project
- Your project team and the design process
- Project Management and cost control
- Future home standards and construction systems
- Renewable heating design
- MVHR design
- Virtual Reality demonstration



For dates offered, more information, speakers bios and to book your place,

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03333 444217.

Time: 8.30 am – 4.30 pm

Location: Build It Theatre, NSBRC, Swindon

Cost: £80 per person