

BREIF

As part of the holistic masterplan for the Climate Innovation District, CITU required students to design a hub for multigenerational and low-carbon living which embodies CITU's non-negotiable principles around talking climate change and increasing human wellbeing.

This development needed to include:

- A co-located two hall primary school
- Care facility
- A mixture of residential units
- A café
- A nursery/childcare facility
- Courtyard and green space

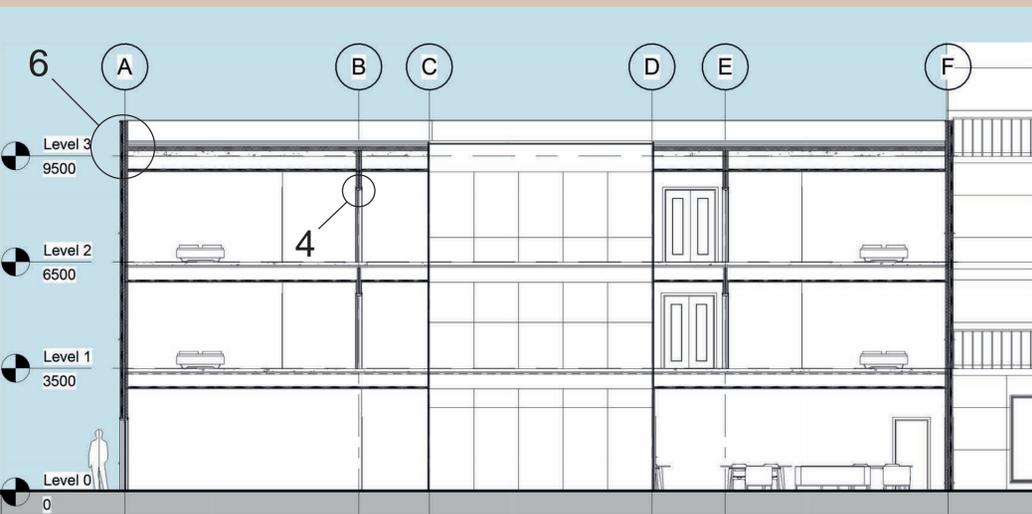
The proposed development will needed to facilitate both the interaction between generations, with the wider community, and with the environment through its proposed courtyard and green space.

DESIGN PROPOSAL

The building focused on for this design proposal was the care home. It contains 70 beds with numerous communal areas and roof terraces for the residents to enjoy. It also houses a central atrium to allow light to flood into the central areas of the building and bring the outdoors in.

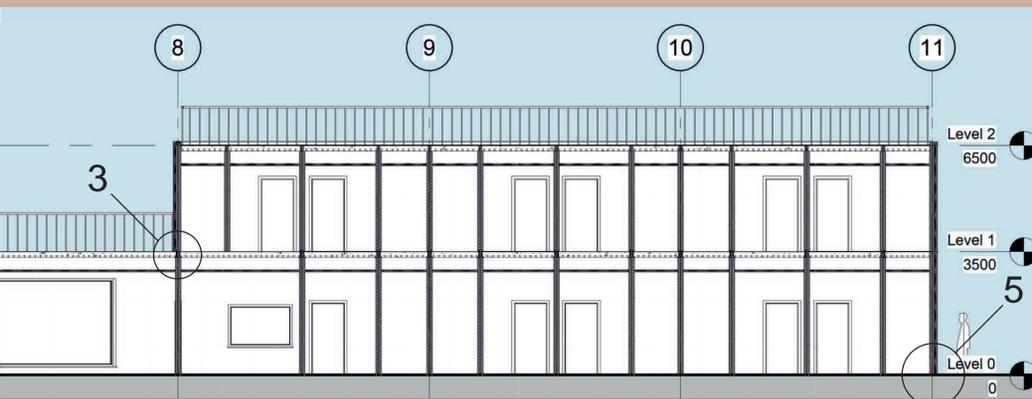
Alongside the other buildings on the site the care home helps to form a central courtyard that doubles as both a playground for the school and also an outdoor area for residents out of hours. Extensive wildflower roofs have been used as to encourage pollinators to the city centre cite. Solar panels are used in conjunction with the green roofs as they provide natural cooling for the panels.

The buildings have been clad using Rockpanel cladding which is durable and provides a high level of fire safety. The cladding forms a gradient effect which helps the building blend into the sky and feel less imposing. The cladding also reflects the existing CITU developments to the east of the proposed site.



SECTION A - 1:100 @ A1

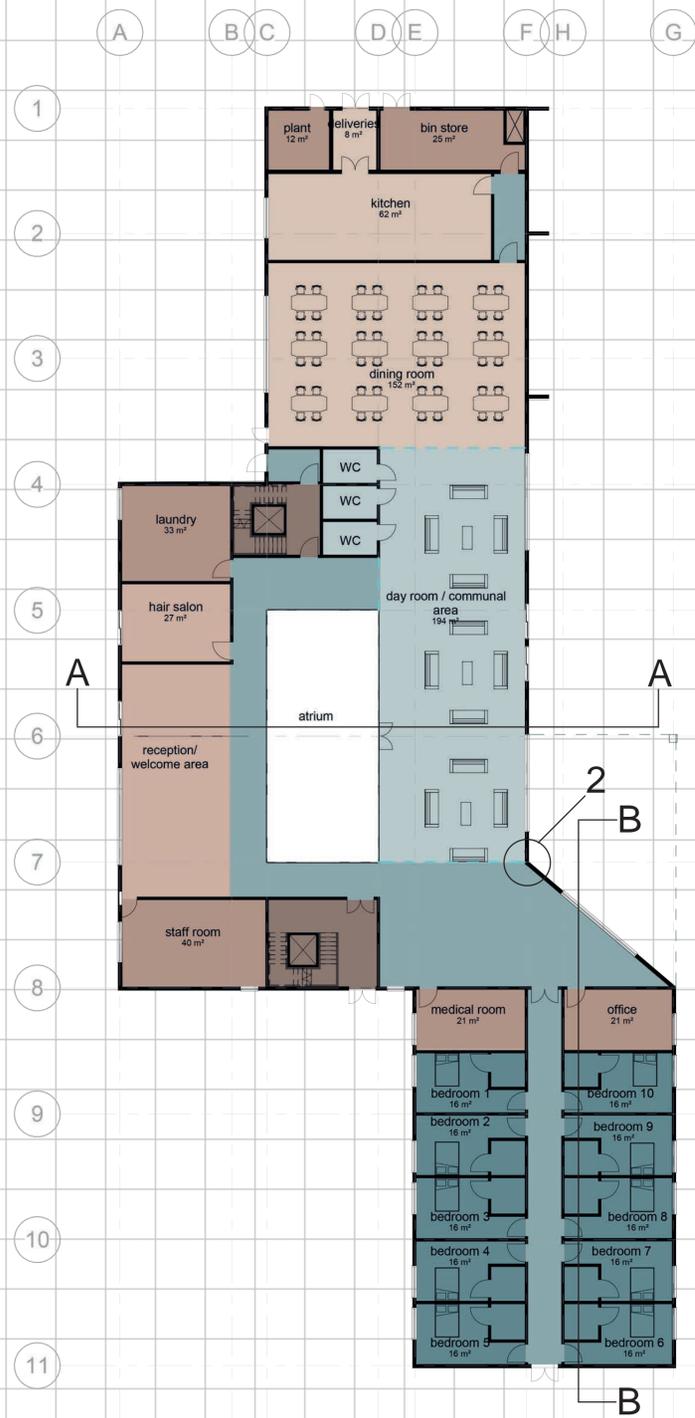
SITE PLAN - 1:500 @ A1



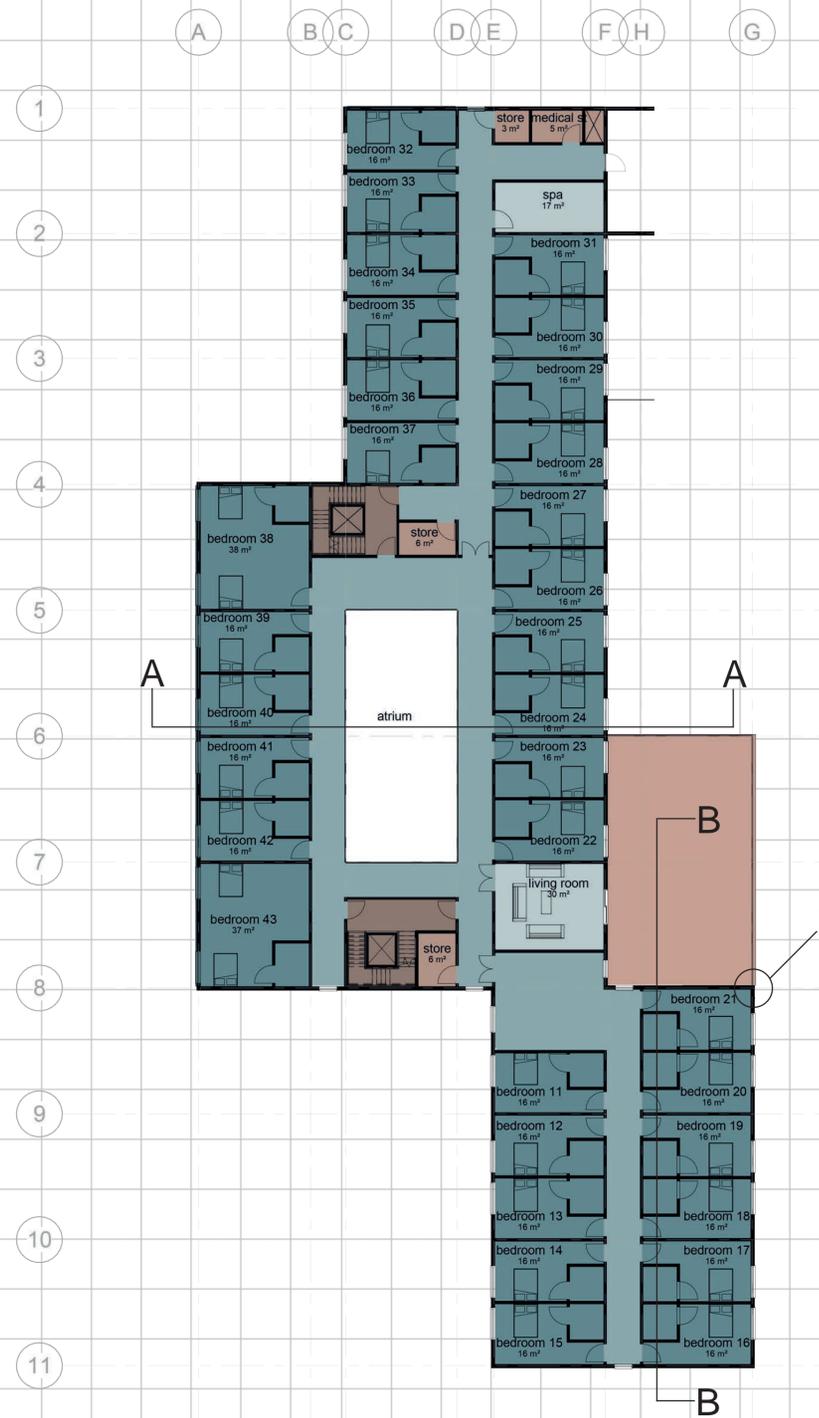
SECTION B - 1:100 @ A1



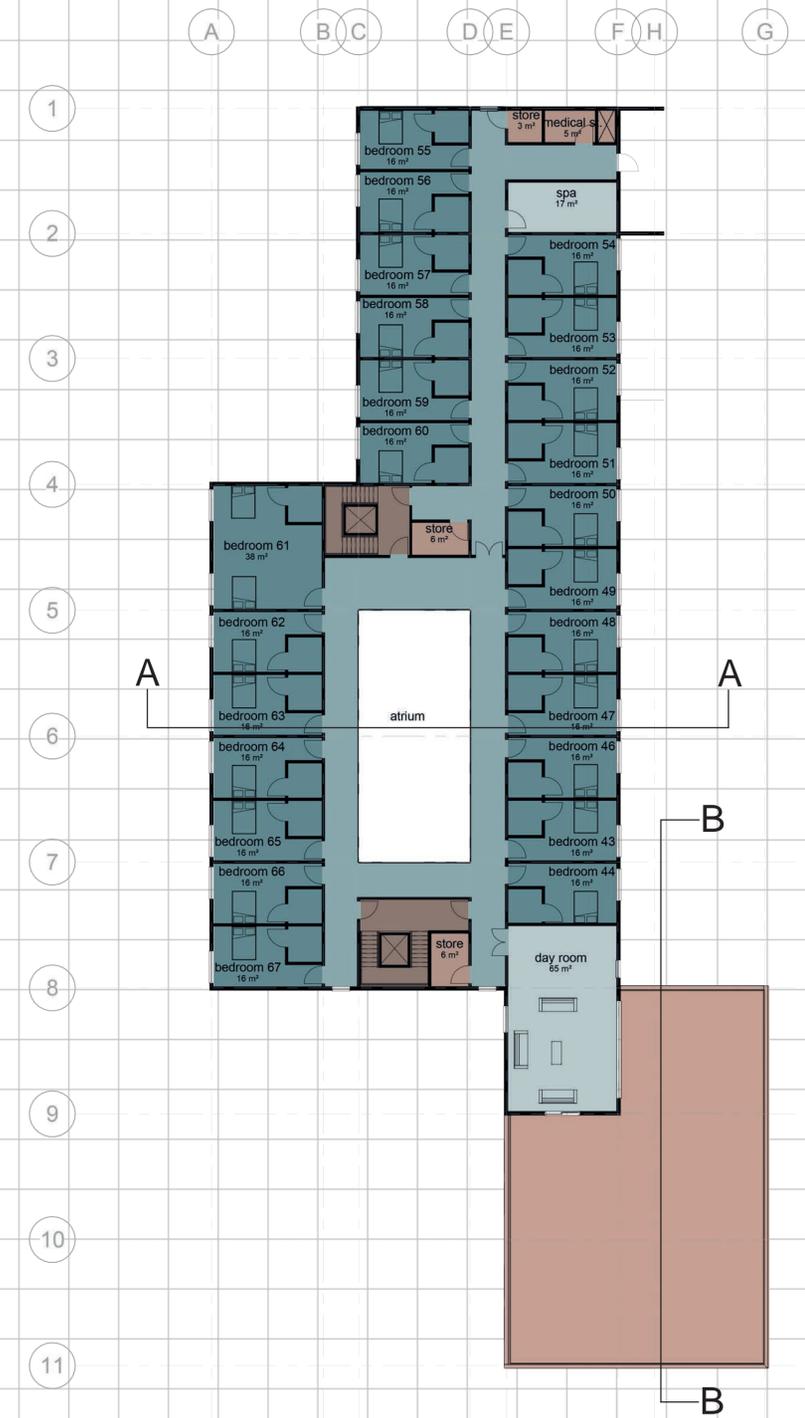
	ATRIUM		POLLINATOR GARDEN
	GREEN ROOF		FOOTPATH
	GRASS		ASPHALT



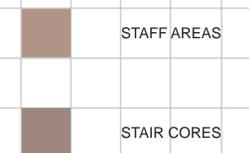
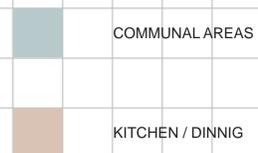
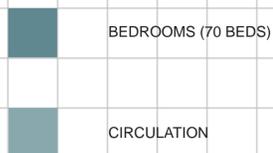
LEVEL 0 - 1:200 @ A1

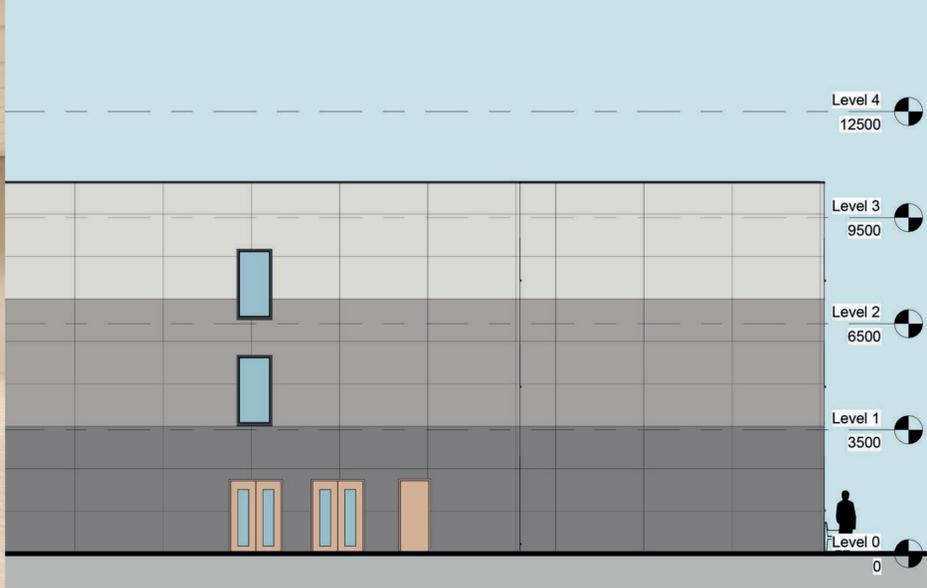


LEVEL 1 - 1:200 @ A1



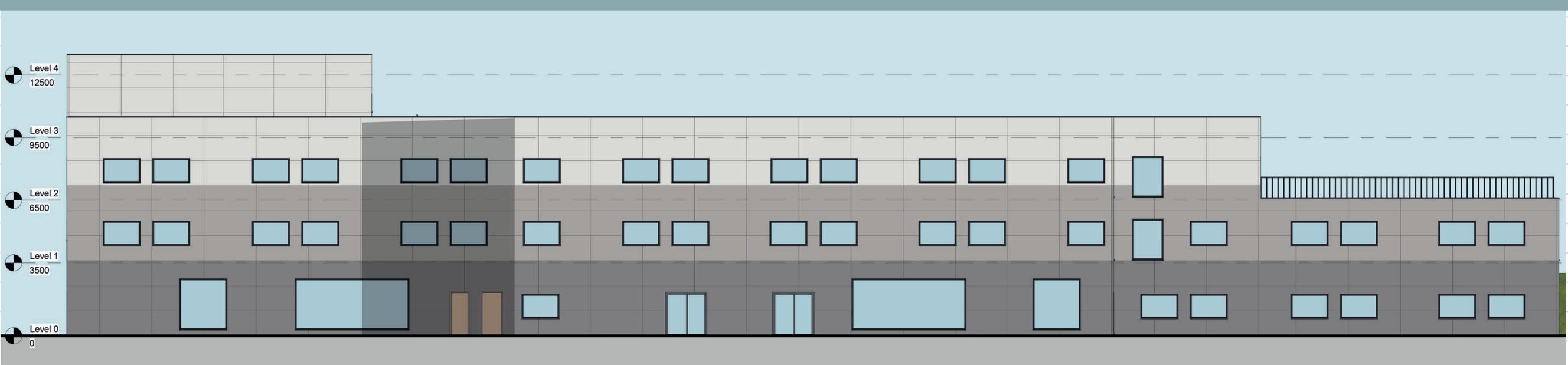
LEVEL 2 - 1:200 @ A1





SOUTH - 1:100 @ A1

NORTH - 1:100 @ A1

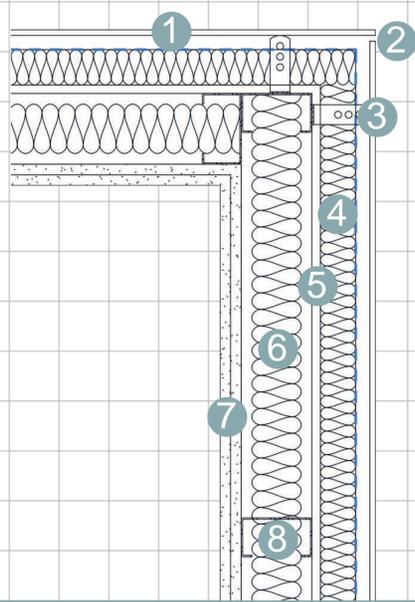


	ROCKPANEL CLADDING IN MINERAL CHALK
	ROCKPANEL CLADDING IN MINERAL SILVER
	ROCKPANEL CLADDING IN MINERAL GRAPHITE
	DOUBLE GLAZED WINDOWS WITH ALUMINIUM FRAME
	GREEN WALL

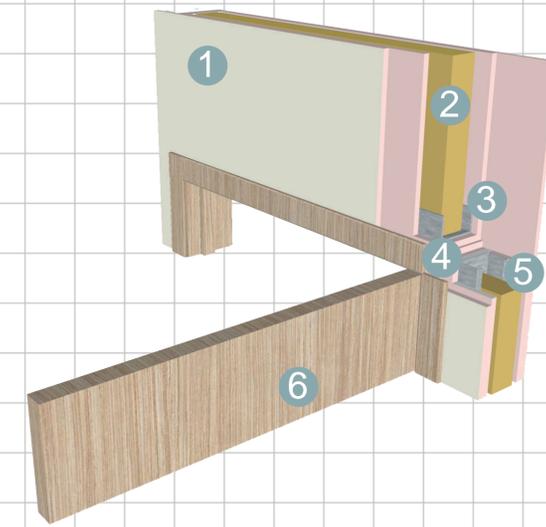
WEST - 1:100 @ A1



EAST - 1:100 @ A1



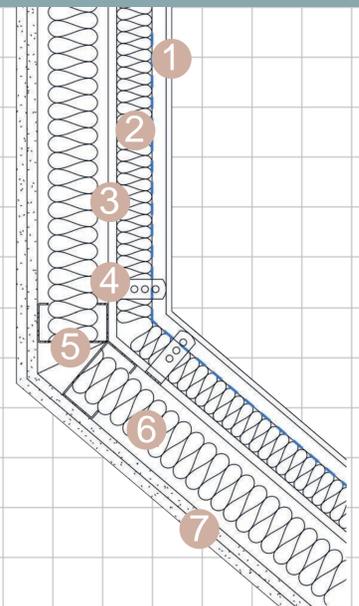
- 1 8mm ROCKPANEL ROCKSTONE CLADDING, MINERAL GRAPHITE, IN COMPLIANCE WITH BS ISO 9001:2008
- 2 8mm EXPANSION JOINT
- 3 PLASTERTRIP ALUMINIUM RIVET FACE FIX SYSTEM AT 1200mm CENTRES IN COMPLIANCE WITH BS EN 485-2:2008
- 4 50mm KINGSPAN KOOLTHERM K15 RAINSCREEN BOARD IN COMPLIANCE WITH BS EN ISO 9001:2015
- 5 12.5mm GLASROC X SHEATHING BOARD WITH BREATHER MEMBRANE IN COMPLIANCE WITH BS EN 15283-1:2008
- 6 100mm METSEC STUDS AT 600mm CENTERS
- 7 70mm ROCKWOOL FLEXI INSULATION IN COMPLIANCE WITH BS EN 13162
- 8 No 2 15mm GYPROC FIRELINE BOARD WITH VAPOUR BARRIER IN COMPLIANCE WITH BS EN 520:2004



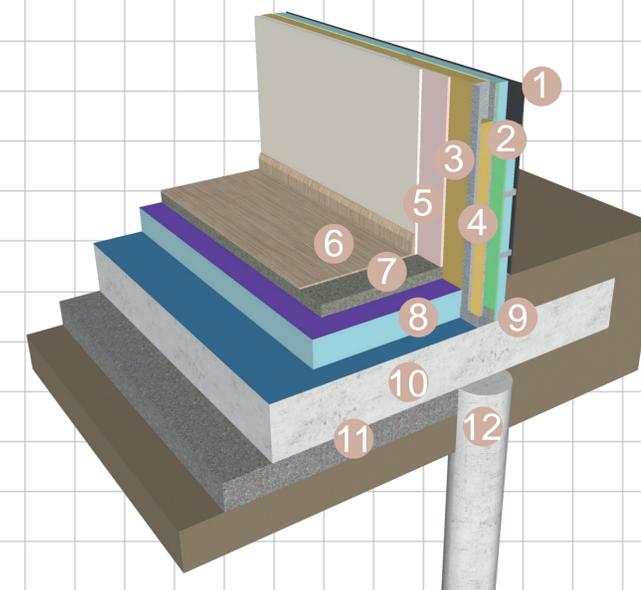
- 1 No 2 15mm GYPROC FIRELINE BOARD IN COMPLIANCE WITH BS EN 520:2004
- 2 70mm ROCKWOOL FLEXI INSULATION IN COMPLIANCE WITH BS EN 13162
- 3 100mm METSEC METFRAME LINTEL MEMBER
- 4 No 2 15mm GYPROC FIRELINE BOARD IN COMPLIANCE WITH BS EN 520:2004
- 5 100mm METSEC METFRAME JAMB MEMBER
- 6 2040 x 926mm SAFELINKS FD60 OAK VENEER DOOR AND ARCHITRAVE WITH INTUMESCENT SEAL IN COMPLIANCE WITH BS 8214

1. EXTERNAL WALL (PLAN) - 1:5 @ A1

4. DOOR HEAD - NTS



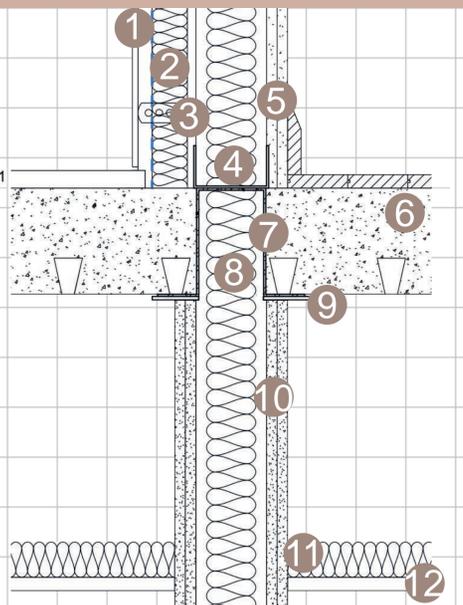
- 1 8mm ROCKPANEL ROCKSTONE CLADDING, MINERAL SILVER, IN COMPLIANCE WITH BS ISO 9001:2008
- 2 50mm KINGSPAN KOOLTHERM K15 RAINSCREEN BOARD IN COMPLIANCE WITH BS EN ISO 9001:2015
- 3 12.5mm GLASROC X SHEATHING BOARD WITH BREATHER MEMBRANE IN COMPLIANCE WITH BS EN 15283-1:2008
- 4 PLASTERTRIP ALUMINIUM RIVET FACE FIX SYSTEM AT 1200mm CENTRES IN COMPLIANCE WITH BS EN 485-2:2008
- 5 100mm METSEC STUDS AT 600mm CENTERS
- 6 70mm ROCKWOOL FLEXI INSULATION IN COMPLIANCE WITH BS EN 13162
- 7 No 2 15mm GYPROC FIRELINE BOARD WITH VAPOUR BARRIER IN COMPLIANCE WITH BS EN 520:2004



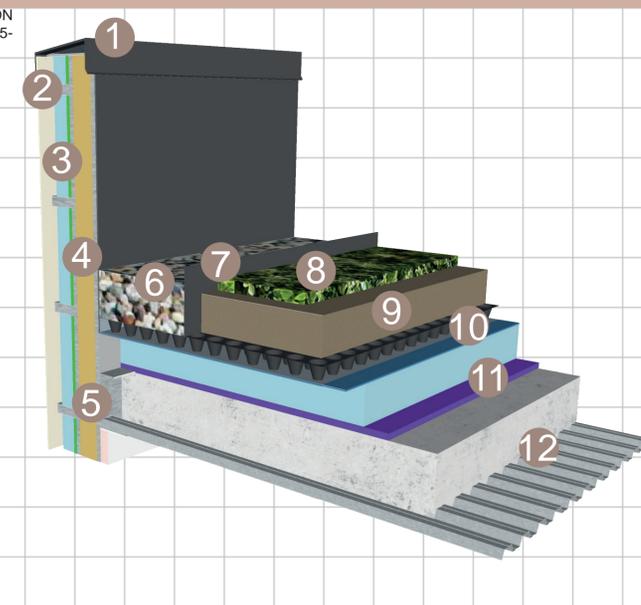
- 1 8mm ROCKPANEL ROCKSTONE CLADDING, MINERAL GRAPHITE, IN COMPLIANCE WITH ISO 9001:2008 ON PLASTERTRIP ALUMINIUM RIVET FACE FIX SYSTEM AT 1200mm CENTRES IN COMPLIANCE WITH BS EN 485-2:2008
- 2 50mm KINGSPAN KOOLTHERM K15 RAINSCREEN BOARD IN COMPLIANCE WITH BS EN ISO 9001:2015 AND 12.5mm GLASROC X SHEATHING BOARD WITH BREATHER MEMBRANE IN COMPLIANCE WITH BS EN 15283-1:2008
- 3 70mm ROCKWOOL FLEXI INSULATION IN COMPLIANCE WITH BS EN 13162
- 4 100mm METSEC STUDS AT 600MM CENTERS
- 5 No 2 15mm GYPROC FIRELINE BOARD IN COMPLIANCE WITH BS EN 520:2004
- 6 10mm ASH ENGINEERED BOARD FLOOR FINISH
- 7 65mm SCREED IN COMPLIANCE WITH BS 8204-1:2003
- 8 150mm KINGSPAN THERMAFLOOR TF70 IN COMPLIANCE WITH BS EN 13501-1:2007 WITH A SEPERATING LAYER ABOVE THE INSULATION
- 9 METSEC METFRAME BASE RAIL FIXED TO SLAB
- 10 DPM IN COMPLIANCE WITH BS 8215:1991 LAID ON TOP OF A 300mm RIENFORECED CONCRETE SLAB IN COMPLIANCE WITH BS EN 1992-1-1:2004
- 11 150mm WELL COMPACTED HARCORE IN COMPLIANCE WITH BS EN 13242:2002
- 12 BORED CONCRETE PILE WITH REINFORCEMENT TIED INTO SLAB

2. EXTERNAL WALL (PLAN) - 1:5 @ A1

5. FOUNDATION - NTS



- 1 8mm ROCKPANEL ROCKSTONE CLADDING, MINERAL SILVER, IN COMPLIANCE WITH ISO 9001:2008 ON PLASTERTRIP ALUMINIUM RIVET FACE FIX SYSTEM AT 1200mm CENTRES IN COMPLIANCE WITH BS EN 485-2:2008
- 2 50mm KINGSPAN KOOLTHERM K15 RAINSCREEN BOARD IN COMPLIANCE WITH BS EN ISO 9001:2015
- 3 12.5mm GLASROC X SHEATHING BOARD WITH BREATHER MEMBRANE IN COMPLIANCE WITH BS EN 15283-1:2008
- 4 100mm METSEC METFRAME BASE RAIL
- 5 No 2 15mm GYPROC FIRELINE BOARD WITH VAPOUR BARRIER IN COMPLIANCE WITH BS EN 520:2004
- 6 150mm RIENFORECED LIGHTWEIGHT CONCRETE IN COMPLIANCE WITH BS 8110: PART 1 CAST IN CITU ON KINGSPAN MULTIDECK MD146 IN COMPLIANCE WITH BS EN 10143
- 7 150mm METFRAME ZED MEMBER
- 8 100mm METSEC STUDS AT 600MM CENTERS WITH 70mm ROCKWOOL FLEXI INSULATION IN COMPLIANCE WITH BS EN 13162
- 9 25mm ROCKWOOL BEAMCLAD FIRE PROTECTION BOARD IN COMPLIANCE WITH EN 133811-4:2013
- 10 GYPCEILING MF SUSPENDED CEILING SYSTEM IN COMPLIANCE WITH BS 476
- 11 50mm ROCKWOOL FLEXI INSULATION IN COMPLIANCE WITH BS EN 13162
- 12 No 2 15mm GYPROC FIRELINE BOARD WITH VAPOUR BARRIER IN COMPLIANCE WITH BS EN 520:2004



- 1 ALUMINIUM PARAPET CAP IN COMPLIANCE WITH BS EN 12206
- 2 8mm ROCKPANEL ROCKSTONE CLADDING, MINERAL SILVER, IN COMPLIANCE WITH ISO 9001:2008 ON PLASTERTRIP ALUMINIUM RIVET FACE FIX SYSTEM AT 1200mm CENTRES IN COMPLIANCE WITH BS EN 485-2:2008
- 3 50mm KINGSPAN KOOLTHERM K15 RAINSCREEN BOARD IN COMPLIANCE WITH BS EN ISO 9001:2015 AND 12.5mm GLASROC X SHEATHING BOARD WITH BREATHER MEMBRANE IN COMPLIANCE WITH BS EN 15283-1:2008
- 4 100mm METSEC STUDS AT 600MM CENTERS WITH 70mm ROCKWOOL FLEXI INSULATION IN COMPLIANCE WITH BS EN 13162
- 5 METSEC METFRAME SLAB SUPPORT BOLTED TO STUDS AT EACH STUD SECTION
- 6 300mm SMOOTH GRAVEL EDGE CHANNEL
- 7 BAUDER AL150 EDGE TRIM
- 8 30mm BAUDER WILDFLOWER BLANKET
- 9 100mm BAUDER BIODIVERSE SUBSTRATE IN COMPLIANCE WITH BS 8616
- 10 40mm BAUDER DSE 40 DRAINAGE LAYER
- 11 4mm BAUDER FSM 600 PROTECTION LAYER ON TOP OF 100mm KINGSPAN THERMAROOF TR27 IN COMPLIANCE WITH BS EN 13165:2012 WITH VAPOUR CONTROL LAYER BELOW THE INSULATION
- 12 150mm RIENFORECED LIGHTWEIGHT CONCRETE IN COMPLIANCE WITH BS 8110: PART 1 CAST IN CITU ON KINGSPAN MULTIDECK MD146 IN COMPLIANCE WITH BS EN 10143

3. LEVEL 1 FLOOR (SECTION) - 1:5 @ A1

6. GREEN ROOF - NTS