

- ### General structural notes:
- The plan is only valid in combination with the structural calculation and the execution plans of the architect.
 - Any differences to the architect's or building services engineer's execution drawings must be submitted by the contractor to the site management for clarification before the start of construction.
 - Necessary, the engineer must be informed.
 - Type and quality of the concrete surfaces according to the architect's execution planning.
 - Electrical conduit planning according to the architect's MEP planning.
 - Underground piping and lightning protection according to the planning of the MEP.
 - Clear and parapet heights are related to the finished ground level.
 - Built-in parts, e.g. for facade anchoring, elevators etc. and other requirements for the technical building equipment according to the technical planning and their plans.
 - The structural verification of formwork and scaffolding is carried out by the contractor. Increased stress on the slab formwork and scaffolding from intersecting structures must be taken into account. The formwork in these areas may only be stripped after sufficient load-bearing capacity of the overall construction.
 - Necessary core drilling must be agreed with the structural engineer before work begins.
 - Dimensions of rising reinforced concrete walls and columns that are not shown must be added to the formwork plan of the storey above.

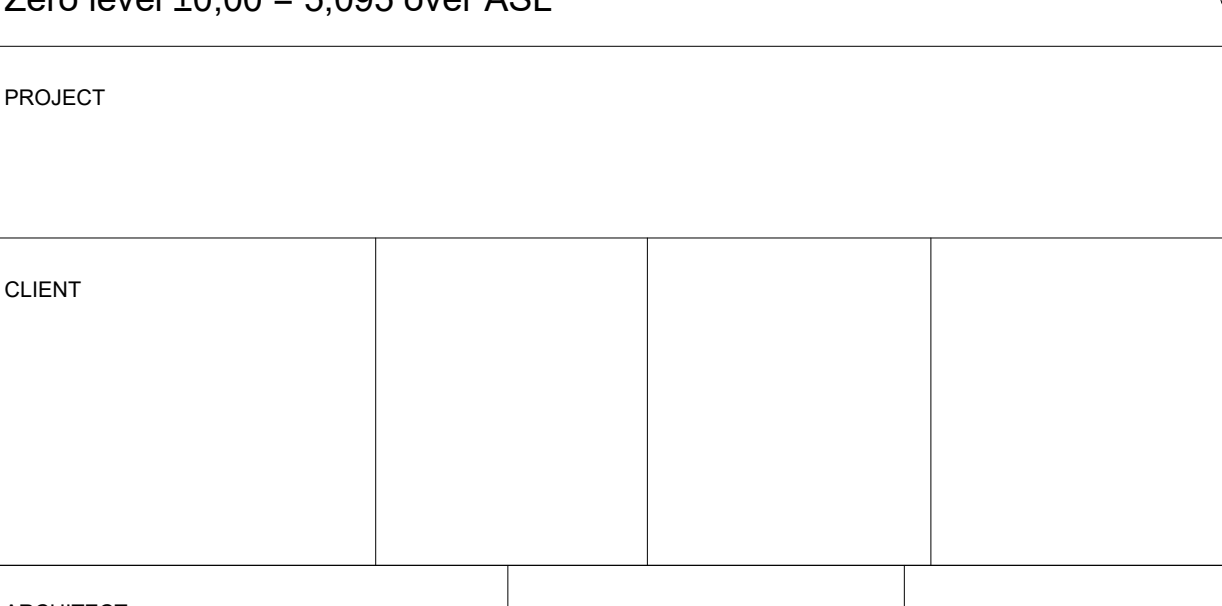
- ### Notes on concrete structure
- Support lengths of hidden beam >25cm, unless otherwise specified.
 - The size of the concrete structure and the design of the construction joints are to be specified in the construction plan or by the contractor's decision.
 - All construction joints that may be required, e.g. between beams and columns, beams and beams or foundations and bases are to be executed at least rough in accordance with BS 8102:2022.
- ### Notes on waterproof structures
- All reinforced concrete structures in contact with the ground must be constructed using the waterproof construction method.
 - Concrete and reinforced concrete work in accordance with BS EN 1992.
 - Waterproof construction in accordance with BS 8102:2022.
 - All base and external wall coverings must be waterproof.
 - Waterproofing components must be secured against prevailing water in accordance with the waterproof designer.
 - The waterproofing of the double cavity walls must be ensured in accordance with the waterproof designer.
- ### Notes on the geotechnical report
- Geotechnical report form.
- ### Notes on the design water level
- According to the foundation report, the design water level is 3.50 m above mean sea level in the final state and 2.50 m above mean sea level in the construction state.

- ### Surface finishing of the foundation slab
- The foundation slab of the cellar must be wing-smoothed and surface-finished.
 - The floor of the underground garage is wing-smoothed and given an OS 8 surface protection with accompanying crack treatment or similar.
 - Rising components such as columns and walls are given a minimum 50 cm high base coating consisting of a surface protection system OS 8 or similar. The DDF 'Kieffer' 'Parking garages and underground garages' must be observed in the latest edition.
- ### Legende
- | | |
|---|------------------------------|
| Cast-in-place reinforced concrete | Lean concrete |
| Semi-precast concrete | Masonry |
| Precast concrete | Slab opening |
| Non-load-bearing concrete | Non-load-bearing |
| Rising reinforced concrete components | Struct. slab offset bottom |
| Rising masonry walls | Struct. slab offset top |
| Expanded metal formwork element with welded-in metal water stop | Construction joint slab |
| Construction joint slab | Changes to previous revision |
- ### In clarification / comments
- | | | | |
|-------|------------------------------------|-----|------------------|
| WO | Wall opening | SJ | Slab joint |
| WR | Wall recess | WJ | Wall joint |
| SR | Slab recess | RSO | Non-load bearing |
| SB | Slab opening | HBM | Hidden beam |
| SB | Slab opening | HBT | Hidden beam |
| BM | Beam | DBM | deep beam |
| HBT | Robotic connection e.g. Haffen HBT | DBM | bearing length |
| TO/UB | Top of Upstand Beam | OE | curse edge |

- ### Punching Rods in accordance with rebar planning
- The planning of the precasted stairs, balconies and parapets is carried out by the manufacturer according to the architect's plans.
 - The technical processing of WTC components, including the planning and detailing of all necessary joints and their system-compatible sealing in accordance with the requirements, is the responsibility of the manufacturer.
 - The information on concrete grades and exposure classes must be checked with the waterproofing planner.

Component	WTC concrete	Exposure classes	Maturity class	Concrete cover			
	XC	XD	XS	XF	XA	XM	Concrete cover
Roof slabs							
Roof terrace 1)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 2)	0	-	2	3	-	-	WF C25/30 15 35
Roof terrace 3)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 4)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 5)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 6)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 7)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 8)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 9)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 10)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 11)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 12)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 13)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 14)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 15)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 16)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 17)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 18)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 19)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 20)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 21)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 22)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 23)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 24)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 25)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 26)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 27)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 28)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 29)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 30)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 31)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 32)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 33)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 34)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 35)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 36)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 37)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 38)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 39)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 40)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 41)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 42)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 43)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 44)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 45)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 46)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 47)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 48)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 49)	0	-	1	3	-	-	WF C25/30 15 35
Roof terrace 50)	0	-	1	3	-	-	WF C25/30 15 35

Project	Component	Account	Category	Floor	Service	Revision
01	18.08.2021	Equipped with certified copy of the architect dated 25/09/2021 and 31/05/2021				NHD
02	19.05.2021	First issue				NHD
Rev.	Date	Description				Product



Plan Name	Formwork Plan
PROJECT	19023
CLIENT	
ARCHITECT	
STRUCTURAL DESIGN (PWA)	
DRAWING TITLE	Basement - House 4 and 9
PROJECT MANAGER	DESIGNED
CHECKED	TS
PAPER SIZE	A4/1000
SCALE	1:25, 1:50
DATE	13.05.2021

Plan Name: Architects plan KHB-01-63300-GR-UJC-A201