

StructBOQ — Structural Estimation Report

Projekt-FZK-Haus

DISCLAIMER: Quantities extracted from IFC file. Accuracy depends on IFC data quality. Reinforcement steel quantities are estimated from concrete volume using industry ratios (BS EN 1992 / ACI 318) — not rebar schedule quantities, do not use for procurement. Verify all quantities against project drawings before use in contracts or procurement.

Project:	Projekt-FZK-Haus	Client:	—
Prepared by:	—	Revision:	R0
Generated:	29 May 2026 19:40	Currency:	EUR (€)
Concrete rate:	€120.0/m3	Steel rate:	€1.2/kg
Wall Filter:	Filter active but LoadBearing absent on 13 wall(s) — included by default. Manual review required.		

PROJECT SUMMARY

64	131.669 m3	9,968 kg	€45,807.34
Total Elements	Concrete Volume	Total Steel	Total Cost

FILE DATA CONFIDENCE

Data Source	Elements	Share	Reliability
BaseQuantities (IFC certified)	18	100%	PRIMARY
Pset Properties (authored)	0	0%	—
Partial Pset + Defaults	0	0%	—
Geometry Extraction (3D solid)	0	0%	—
Hardcoded Defaults	0	0%	—
Overall Data Reliability			HIGH

ELEMENT DATA CONFIDENCE

Element Type	Total	BaseQty	Pset	Geo	IFC%	Flagged
Beams	4	1	0	0	100%	0
Slabs	3	3	0	0	100%	2
Footings	1	1	0	0	100%	1
Stairs	1	0	0	0	—	0
Walls	13	13	0	0	100%	0
TOTAL	22	18	0	0	100%	3

COST BREAKDOWN

Cost Component	Amount (€)	% of Total
Material — Concrete	€15,800.23	34.5%
Material — Steel	€11,961.80	26.1%
Waste / Contingency	€2,776.20	6.1%
Labor	€15,269.11	33.3%
TOTAL	€45,807.34	100%

STRUCTURAL QUANTITY SUMMARY

Type	Subtype	Count	Volume (m3)	Rate	Cost (€)	Pricing	Src
Beams	Beam	1	0.20	€120/m3	€89	USE	BQ
Slabs	Floor Slab	1	19.97	€120/m3	€7,512	USE	BQ
	Roof Slab	2	33.02	€120/m3	€11,443	USE	BQ
Footings	Footing	1	24.00	€120/m3	€9,504	USE	BQ
Walls	Wall	13	54.48	€120/m3	€17,260	USE	BQ

Src codes: BQ = BaseQuantities (IFC certified) | P = Pset properties | PD = Partial Pset + defaults | G = Geometry extraction | D = Defaults only | NC = Non-concrete

REINFORCEMENT STEEL SCHEDULE

Steel weight estimated: 9,968.2 kg — derived from concrete volume x industry ratios (BS EN 1992 / ACI 318). No modeled IfcReinforcingBar elements found in IFC file. Do not use for rebar procurement.

MODEL DATA QUALITY FINDINGS

3 elements flagged for review | 0 High severity | 0 Medium | 3 Low | Overall model quality: **ACCEPTABLE FOR ESTIMATION**

Low Severity — 3 Elements (Minor Concern)

Finding 1

Elements: Bodenplatte

Issue: Exported as Slab but detected as Footing via PredefinedType=BASESLAB. Auto-reclassified. Verify type against structural drawings.

Data confidence: 75%

Finding 2 (2 elements)

Elements: Dach-1; Dach-2

Issue: Volume read from IFC BaseQuantities. Missing dimensions estimated using L=6.00m, W=6.00m (industry defaults). Verify element dimensions against drawings.

Data confidence: 85%

High severity items affect quantity accuracy and should be resolved before use in cost estimation. Low severity items are informational — verify against drawings during detailed design stage.

DISCLAIMER: This report is for early-stage structural estimation only. All quantities should be verified against approved structural drawings and engineer's calculations before use in contracts, tenders, or procurement. This report does not constitute a structural engineer's assessment. shabirbim.com

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