

TEST Shelter 124dfd

9D BIM Tender Feasibility · Afad Shelter · Hatay · published 2026-09-23 by Konya Metropolitan Authority

Feasibility score	75.1 / 100 — grade B → Proceed
Programme	3,500 m² · 1 storeys · 8 months
Budget	60,000,000 TRY
Soil / isolation	ZD · base isolation yes
Materials	recycled steel
Amenities	shelter, solar

Nine Dimensions

Dimension	Weight	Score	Key metrics
3D Massing	0.08	94	footprint_m2: 3500; height_m: 3.4; aspect: 0.06; efficiency: 94
4D Schedule	0.12	51.4	estimated_months: 15.6; proposed_months: 8; slack_pct: -48.6
5D Cost & Valuation	0.18	89.0	estimated_cost_try: 64260000; budget_try: 60000000.0; budget_ratio: 0.934; cost_per_m2_try: 18360; asset_valuation_try: 73899000; valuation_basis: Regional building-valuation dataset (2026 proxy: unit cost × city premium)
6D Carbon & Sustainability	0.15	88.6	embodied_tco2e: 924; intensity_tco2e_m2: 0.264; material_reduction_pct: 20; operational_tco2e_yr: 67.4; zcc_offset_needed: 369.6; green_bond_eligible: True
7D Lifecycle O&M	0.1	100.0	annual_om_try: 771120; lifecycle_50y_try: 27760320; om_per_m2_yr: 220; bim_fm_ready: False
8D Safety (Seismic / AFAD)	0.2	74.0	pga_g: 0.72; soil_class: ZD; base_isolation: True; demand_capacity: 0.8
9D Lean & Social Value	0.17	43.2	amenity_coverage_pct: 40; jobs_created: 54; city_justice_index: None; imece_coops_in_city: 0; social_weight: 1.2; lean_waste_target_pct: 12

Seismic / AFAD Flags

- Soft soil: liquefaction study + deep foundations mandatory
- AFAD shelter capacity ≈ 1,000 persons (3.5 m²/person) — verify water/sanitation for 72h autonomy

Green Finance

Green-bond eligible	Yes
Embodied carbon	924 tCO2e (0.264 t/m²)
ZCC offset needed	369.6 ZCC
Criteria	EU Taxonomy 7.1, LEED v5 embodied carbon, TS 825 / nZEB-TR

Analyst Narrative (Claude Sonnet 5)

Feasibility Assessment: TEST Shelter 124dfd (Hatay)

This 3,500 m² AFAD shelter project scores 75.1 (Grade B — Proceed), but with real caution points.

The weakest dimension is 4D Schedule (51.4), where the 8-month timeline is 48.6% short of the realistic 15.6-month estimate. This mismatch risks rushed construction quality or contract disputes. Fix: extend to 12–16 months, or phase handover (shell first, fit-out after) to meet urgent shelter needs without compressing critical path work.

Seismically, this is a high-stakes site: PGA 0.72g, soft ZD soil, base isolation specified. AFAD flags mandate a liquefaction study and deep foundations — non-negotiable before permits. Capacity (~1,000 people) needs verified 72-hour water/sanitation autonomy.

Carbon performance is strong (88.6): embodied intensity 0.264 tCO₂e/m², 20% material reduction, and the project is green-bond eligible — a genuine financing advantage.

Social value is thin (43.2): only 40% amenity coverage, zero local mece cooperative involvement despite 54 jobs created. Strengthening community-coop procurement would raise this materially.

Cost sits 6.6% over budget (89.0 score) — manageable but worth tightening.

Citizens can attest, flag, or formally dispute any figure in this assessment directly on the QuantumSpectra ledger record for this tender ID.

Provenance

Tender anchor (SHA-256)	0x31789b8ac4f757a73617baf3170829ef095746593188861c0966c2b95bb5642d
Dispute / attest	Any registered account may file a claim on this anchor at /justice or /tenders