

# **Aluminium in Infrastructures**

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## **Abstract**

Aluminium alloys are used in infrastructures such as pedestrian bridges or parts of it such as handrail. This paper demonstrates that aluminium alloys are in principle also suited for heavy loaded structures, such as decks of traffic bridges and helicopter landing platforms. Recent developments in fatigue research is discussed and future research, required for full application of aluminium in heavy loaded structures is identified. The paper ends with a number of examples of heavily loaded infrastructures composed of aluminum alloys.

**Keywords:** Aluminium alloy; bridge; fatigue; fracture; helicopter landing platform.