

Engineers in Building Projects: Services vs. Expectations

When owners hire engineers for building projects, their expectation is straightforward: a safe, functional, and compliant building delivered with professional guidance throughout the process. Yet in practice, results sometimes fall short. This is not always because engineers lack competence, but often because of a mismatch between what owners expect and what engineers are formally mandated to provide.

The Engineer's Mandate

By law and professional standards, engineers are responsible for producing safe and code-compliant designs, preparing technical drawings and calculations, and securing the necessary statutory approvals. Their duty is to ensure that the structure, as designed, can withstand the intended loads and meet safety requirements.

Depending on the agreement with the client, engineers may also be engaged in supervising construction, checking that the contractor implements the design correctly and safely. However, unless such supervision is explicitly included in their scope, their role often ends with approvals. Owners sometimes assume that once an engineer is hired, every aspect of construction—from design to day-to-day safety practices—falls under their responsibility. This misunderstanding is one of the main sources of disappointment.

A Maldivian Case

In 2018, a tragic accident in Malé brought these issues into sharp focus. A young child was killed by falling debris at a construction site, prompting authorities to suspend work at 17 sites. Investigations revealed that the problem was not with engineering designs, but with poor and irresponsible site practices: unsecured equipment, missing barriers, and careless safety management.

The design engineers involved had completed their statutory role, but they were not engaged in overseeing the contractor's practices. This gap between design responsibility and construction safety highlighted a painful reality: approvals alone do not guarantee safe outcomes. Had engineers been contracted or empowered to supervise site practices, some of these risks might have been identified and addressed before the tragedy occurred.



Bridging the Gap

For owners, the lesson is clear: engaging an engineer solely for design and approvals may not be enough to ensure safety during construction. If supervision and compliance monitoring are expected, these services must be formally included in the engineer's scope.

For engineers, the responsibility is twofold. First, they must clearly explain their mandate and its limitations, making sure owners understand what is covered by law or contract. Second, they should advise when additional services—such as construction supervision—are necessary to safeguard the project. This transparency helps avoid misunderstandings and builds trust.

Conclusion

The Malé case illustrates the consequences of a gap between service and expectation. Owners expect engineers to deliver safe and reliable buildings, while engineers may be engaged only for design and approvals. Closing this gap requires clarity on both sides: owners must know what to expect, and engineers must communicate their responsibilities openly. When these roles are aligned, buildings can be delivered not only with approved designs on paper but also with safe and responsible practices in the field.