

NEW
innovative solution
from Mabey



enabling global infrastructure

Leading the future in modular bridging

Introducing our new all-modular all-steel bridging solution



Combining Mabey's best-selling modular steel bridge, the Compact 200™, with Bolt-A-Bin®, an innovative modular steel abutment system, to transform the world of modular bridging...



Leading the future in modular bridging



Showcasing Bolt-A-Bin[®], an innovative, modular, steel abutment solution

Traditionally, modular steel bridging solutions have comprised of concrete Substructure – the abutments – and steel Superstructure – the bridge. However, with the introduction of the steel modular abutment system, Bolt-A-Bin[®], Mabey is able to revolutionise the way it approaches modular bridging projects. We are now able to offer an all-modular, all-steel bridging solution which is transforming modular bridge construction all over the world.

Developed by our partners, Canadian firm AIL, Bolt-A-Bin[®], the innovative lightweight steel bridge abutment and retaining wall solution, consists of a strong, cellular, corrugated steel retaining wall into which a mass of local granular soil can be compacted, resulting in a permanent steel abutment. This eradicates the need for concrete-pouring, substantially reducing project costs on materials, installation and overall programme delivery.

The design is very simple. The 'boxes' of corrugated steel can be configured in a number of standard plan dimensions and heights to incorporate changes in elevation and support a variety of straight or curved installations for differing project applications. The unique design of the product, combined with the strength of the enclosed mass of earth, enables it to withstand ground movements without cracking or bulging, and ensures the weight of a bridge and its load can be carried safely.

Bolt-A-Bin[®] abutments are also lightweight and quick and easy to assemble by hand on-site, delivering outstanding versatility, especially in remote locations, and minimising the impact of on-site works on the environment.

Coupled with Mabey's best-selling Compact 200™ product, the result is a unique all-modular all-steel solution which can be used for both permanent and temporary applications, most recently demonstrated on a project in Liberia; the first solution of its kind in Africa.

Key features and benefits

- **Cost-effective** The use of local granular material saves costs in materials. Concrete-pouring is not required and this expedites the installation time. As a result, the overall project can benefit from significant cost-savings associated with materials, plant and labour.
- **Quick to supply and install** The abutments can be supplied quickly and are fast and easy to install. Unlike concrete which needs time to set, steel abutments can be assembled in a few days. A pre-assembled bridge can be launched immediately, meaning significantly less time is required on site.
- **Lightweight and easy to handle** The lightweight corrugated steel components can be assembled quickly by hand on site.

- **Strong** The combination of strong corrugated steel components and the compacted soil mass provides a sturdy, robust solution which can adjust to minor ground movement without cracking or bulging.
- **Durable** The standard galvanised coating provides many years of service.
- **Versatile** Available in 11 standard depths and numerous heights, the unique design can accommodate a wide range of both permanent and temporary applications.
- **Environmentally-friendly** The solution is 100% recyclable. Minimal on-site equipment and labour is required leading to a smaller and more controlled environmental impact. Temporary installations can be dismantled easily, and the casings can be safely recycled, whilst the granular fill is simply levelled.



Developed by our partners



For more information on how we can help you deliver your project more quickly, safely and efficiently, please contact us:
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