

# King Sheet Piling (KSP®)

## Guidance to Users

### KSP

KSP is a patented sheet piling system (see Patent Coverage below) and can only be designed and constructed with the patent holders' permission which can be obtained by following the steps set out in the [Permit to Use](#), as elaborated in this guidance to users.

### How is KSP made available?

KSP can be used by any party on any project, subject to compliance with the [Permit to Use](#) requirements for **Designer, Client, Contractor** and **Piling Subcontractor**. This leads to one of these parties, usually the Contractor, being required (as the named licensee) to enter into a simple licence agreement and pay a licence fee to permit construction using the KSP patented system.

### How is the licence fee calculated?

The licence fee covers Balfour Beatty's costs in developing, promoting and providing technical support for the KSP system for use by third parties, whilst also providing a return for making the system widely available. The basis of calculation of the fee does depend on the particular application of the system but is normally 30% of the saving in steel cost generated by using KSP. For typical cantilever sheet pile walls, the fee may be simplified where appropriate to a fixed percentage of the cost of the steel used, normally in the range 15% to 20%, again depending on the application.

### What are the benefits for the customer?

- Typically, the customer saves about 25% of the cost of the steel used in a conventional sheet pile wall after paying the KSP licence fee (the actual saving will vary with the application). KSP also generates savings in installation costs (reduced area of steel and easier installation).
- The customer gains the productivity savings, which can be substantial. Safety is also improved.
- The customer gains over 55% reduction in noise disruption where percussive driving is required.
- The customer demonstrably improves sustainability through a substantial reduction in embedded carbon in the retaining walls.

### What are the technical issues for designing a KSP wall?

Designing a KSP wall is straightforward and is little different to designing a conventional sheet pile wall. Technical guidance is available on the [Technical](#) page of our website, where you can access the Technical Guidance Download.

## What permission do I need to design a KSP wall?

The preparation of a design for a KSP wall for construction on a project also requires our permission as part of the overall licensing process. You will have our permission to design a KSP wall provided you:

- Comply with the [Permit to Use](#) procedure to advise us of the project the design is to be part of, the relevant parties involved, and the details of your KSP design (staged submission applies). This allows us to be aware of your project and the requirement for a licence agreement at the appropriate stage.
- Include the following on all drawings of the KSP walls:

**Sections** depicting a KSP wall must display prominently the words “**PATENTED SYSTEM – See Note x**”.

**Note x:** The King Sheet Piling (KSP®) system is covered by one or more patents including GB2463079 and EP2326773. Copyright Balfour Beatty plc 2008. The Contractor installing a KSP wall must comply with the Permit to Use and Terms and Conditions at <http://www.ksp-piling.co.uk>. The Contractor or an alternate Licensee must apply for a licence and pay a licence fee in advance of starting KSP construction. Designers and Piling Subcontractors must **also** comply with the Permit to Use and provide the details requested therein.

For simple steps to follow for the Designer, Contractor, Client and Piling Subcontractor see [Permit to Use](#).

## Patent Coverage

Patents in force cover the UK, Canada, China, Europe (Belgium, France, Germany and the Netherlands), Hong Kong, India and Singapore and the USA. Patents originally granted in Australia and Malaysia are no longer maintained and the invention is no longer protected in these territories.

The system is available for use in the protected countries on any project under a simple licence from Balfour Beatty. Users must follow the steps given in the [Permit to Use](#).

Outside of these territories, any suitably qualified party may use the invention. We would appreciate it however that, if you should do so or commission another party to design and/or install a KSP wall on your behalf, you would:

- a) Let us know about the application just for information so we are aware the system is being taken up elsewhere.
- b) Put a note on the drawings or in any literature about the use of KSP stating that “The King Sheet Piling (KSP) system is protected by patents granted in UK, Canada, China, Europe (Belgium, France, Germany and the Netherlands), Hong Kong, India, Singapore, and the USA.

## Context

This guidance should be read together with the up-to-date material published at <https://www.ksp-piling.co.uk>