



**Environmental
Management
Services**

Cable Duct Sealing CSD RISE

Summary

We were approached by a major construction company during the construction of a state of the art renewable energy facility. During the construction the need for cable entry sealing had been overlooked and the unsealed cable trench was proving to be a source of water ingress into the control room.

We were able to perform specialist civils works and install numerous rigiducts to split the cables into groups. The ducts could then be effectively sealed providing a "gas tight and water tight" seal and "up to four hours fire protection"*.



A major construction company approached us during the construction of a state of the art renewable energy facility, for which they had not considered the requirement for flood defence works. As the project neared completion it became apparent that the cable trench, housing approximately 50 various sized cables (20mm-75mm), was a source of water ingress into the control room. This water ingress could have caused an electrical fire and so posed a health and safety risk and a risk to the highly valuable equipment inside the building.

The most effective solution was to install CSD RISE, a multi-cable and pipe transit sealing system for cable ducts and building entries. Once installed the system provides a "gas tight and water tight" seal and can provide "up to four hours fire protection"*. To allow the effective installation of these seals specialist civil work had to be conducted. A reinforced wall was constructed with split rigiducts installed through it. This was constructed with concrete and rendered with a water resistant mortar preventing water ingress around the ducts.

Each split duct had cables running through it and a seal was made using FIWA, a high quality silicone based, fire stopping, water repellent sealant. The RISE system is extremely pliable and can be compacted into otherwise inaccessible fail points. It also allows flexibility to remove or add cables at a later date.



*List of manufacturer's testing standards available at <http://csdsealingsystems.co.uk>