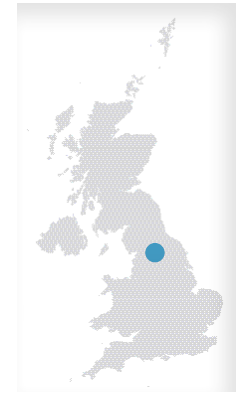






Architecture, Building and Construction

Acoustic Insulation in Building Fasteners



Fabrication process Wire, bar, sheet
Manufacturer Ancon, Sheffield, UK

When the thermal insulation of buildings became common in those parts of the world which are exposed to cold winters, stainless steel was quickly identified as an ideal material to make fasteners for wall ties and other construction items. Its long-term corrosion resistance is critically important for components that are hidden and less accessible for inspection and repair. Compared with other metallic materials, austenitic stainless steel grades also have exceptionally low thermal conductivity and are able to penetrate layers of insulation material without compromising their overall energy-saving effect. Yet another dimension has recently been added to its list of assets: acoustic insulation. A novel series of cavity wall ties and shear load dowels features pre-compressed acoustic insulation elements. Originally designed for recording studios and cinemas, where airborne noise can be a problem, they are increasingly being used in residential buildings. These acoustic insulation components, provide an obvious advantage in multiple occupancy buildings such as apartment blocks or hotels where unwanted noise can be a nuisance.