



HOW GUARANTEES AND WARRANTIES CAN INFLUENCE FASTENER SPECIFICATION

Fasteners like all other products must be fit for purpose and must be specified accordingly. Fasteners have to accommodate a wide variety of different demands during their functional life and one of the most arduous demands is the acceptance of different loading conditions and the transfer of those loads into adjoining components and materials.

It is the clearly stated position of the Metal Cladding and Roofing Manufacturers Association (MCRMA) that the best assurance of compliance with the appropriate standards and performance expectation is to source systems and component products from reputable manufacturers who can demonstrate the pedigree of the materials used and support design requirements with job specific data.

Fasteners are offered either as part of a complete system, or as individual components which should be correctly specified for any given internal or external environment. The specifiers and purchasers of fasteners must make their own decisions about whether a fastener type and life expectancy is suitable for their particular application. All applications are different and guidance from MCRMA fastener members or system provider companies should be sought on design and selection.



The technology for fasteners used within metal roofing and cladding has evolved over recent years thanks to advances in materials, design and life expectancies. The table below covers current good practice for life expectancies of fasteners, but does not cover guarantee periods as this is a commercial offering from individual manufacturers and/or system providers.

The table may be used as a general guide; however, it would be prudent for the specifier to check with the supplier on each individual project as there may be specific internal or external environmental conditions present which could affect the fasteners' functional life expectancy and its long term structural and non-structural performance.

Material	External applications	Internal applications
Stainless Steel 316	Up to 50 years	Up to 60 years
Stainless Steel 304	Up to 40 years	Up to 50 years
Carbon Steel	Up to 12 years	Up to 40 years

In aggressive environments consult with your fastener supplier for guidance! Swimming pool halls, for instance, have been the subject of detailed research studies and specific industry guidance and HSE advice is available.

The total connection

The connection is the most critical aspect of the fastener. Without exception, the fasteners should be carefully selected to meet the needs of the application for which they are intended for use; providing durability in terms of life expectancy and structural performance to retain what they are fixing to the structure.

The internal and external environment and the compatibility between component parts of a system or assembly may have an influence on the structural and corrosion performance of the connection.

Life expectancy refers to the fastener material and not necessarily the total connection (that is, the fastened material and the material fastened into). It is therefore strongly advised that the specifier considers the specification of all components within the connection to ensure they meet the required life expectancy for the connection. It is incumbent on the specifier to determine whether the fastener guarantee/warranty includes the connection or NOT!

Guarantee/warranty checklist

When considering a guarantee/warranty the specifier or purchaser will need to take advice from individual manufacturers and/or system providers on the following points:

- Check whether the guarantee is supplied by the manufacturer, system provider or the reseller of the fastener.
- Wherever possible, CE marked fasteners should form part of the specification.
- When purchasing from a reseller check whether there is a manufacturer guarantee/warranty.
- A guarantee/warranty offers comfort to the specifier or client. Performance statements and some 'third party' insurance backed warranties which involve the payment of a premium contain caveats which can be very limited in delivering substance and/or peace of mind.
- In the event of a failure and subsequent claim the specifier will need to check the financial limit of a claim.
- Check whether the guarantee/warranty covers corrosion resistance, structural performance and the total connection.
- Check whether the guarantee/warranty can be assigned.
- If the manufacturer, system provider or the reseller has public and product liability insurance, the specifier will need to establish the limitations of such insurance.
- And finally, check all the terms and conditions.

Manufacturers are best placed to offer advice about their particular products and any variation from their published data during the design or construction process could result in the component or system failing prematurely or not complying with the guarantee or warranty conditions. Any uncertainty about the use or application of a product or system should be referred back to the manufacturer for detailed written advice.

Additional project specific advice for demanding or complex constructions may also be obtained from one of the independent roofing and cladding inspectors featured on the MCRMA web site. The guidance document can be downloaded from the MCRMA web site at www.mcrma.co.uk

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