

FIRETEX® Technical Bulletin

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Microclimates

Experience has shown that the general environmental classification for a building location will typically underestimate the severity of the conditions present within some areas or building types.

ISO12944-2 includes the following text:

“For the estimation of the corrosion stresses, an appreciation of the local environment and the microenvironment is essential. Examples of decisive microenvironments are the underside of a bridge (particularly over water), the roof of an indoor swimming pool, and the sunny and shady sides of a building.”

In the context of passive fire protection, it is not substrate corrosion which is the primary concern, maintenance of the fire protection performance is the first consideration, however both can be directly related to the environmental conditions.

To ensure the fire protection used will be durable in the environment to which it is exposed Designers must give due consideration to the formation of microclimates within their design. Common examples of areas which could generate a microclimate would include:

- Car parking structures or areas
- Plant rooms/plant areas
- Kitchens
- Swimming pools
- Chiller/cold rooms

(This is not an exhaustive list.)

For Sherwin-Williams to provide appropriate specifications it is essential that both the general service environment and any exceptions to this (microclimates) are correctly identified in the project information supplied at the time of the enquiry.

The information herein is subject to revision as a result of additional information or test evidence becoming available, please consult Sherwin-Williams to ensure you have the latest version.