

# **$U_f$ -values for thermal break metal profiles of window systems**

## Guideline to determine the $U_f$ -values of thermal break metal profile sections of window systems

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### **Foreword**

The present **ift** Guideline was prepared in collaboration with the aforementioned partners. The Guideline refers to a series of European standards describing the thermal performance of building elements.

The present Guideline reproduces the current state of research and investigation and is based on the relevant European standards. The Guideline is subject to revision and/or inclusion of additional methods or procedures in the case of amendments to the relevant European standards, and as necessary from the experience gained from practical application of this Guideline.

### **1 Introduction**

Profile systems designed for windows with thermal break metal profiles are characterized by a large number of different frame, casement and glazing bar sections of a wide variety of geometrical shapes but of comparable thermal insulation properties of the thermal insulation zone referred to as thermal break. Consequently, the key parameters of such systems, e.g. material and configuration of the thermal break are comparable and thus based on a uniform design principle.

The great number of individual profiles and possible profile combinations of specific profile systems require a practical approach to identify the  $U_f$ -values of the profile cross sections of such systems.