NA to BS EN 1993-1-10:2005

BSI Standards Publication

National Annex (informative) to Eurocode 3 – Design of steel structures –

Part 1-10: Material toughness and through thickness properties

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Introduction

This National Annex has been prepared by BSI Subcommittee B/525/10, *Bridges*, in consultation with B/525/31, *Structural use of steel*. In the UK it is to be used in conjunction with BS EN 1993-1-10:2005.

NA.1 Scope

This National Annex gives:

a) the UK decisions for the Nationally Determined Parameters described in the following clauses and subclauses of BS EN 1993-1-10:2005:

- **2.2**(5)
- **3.1**(1)

b) references to non-contradictory complementary information.

NA.2 Nationally Determined Parameters

NA.2.1 Procedure [BS EN 1993-1-10:2005, 2.2(5)]

NA.2.1.1 Safety element

NA.2.1.1.1 Factors affecting safety elements

The value of ΔT_R should be obtained from the following equation:

$$\Delta T_R = \Delta T_{RD} + \Delta T_{Rg} + \Delta T_{RT} + \Delta T_{R\sigma} + \Delta T_{Rs}$$

where:

ΔT_{RD} is an adjustment for the detail type (see **NA.2.1.1.2**);

ΔT_{Rg} is an adjustment for the gross stress concentrations (see **NA.2.1.1.3**);

ΔT_{RT} is an adjustment for Charpy test temperature (see **NA.2.1.1.4**);

$\Delta T_{R\sigma}$ is an adjustment for the applied stress level (see **NA.2.1.1.5**);

ΔT_{Rs} is an adjustment for the strength grade (see **NA.2.1.1.6**).

The procedures in **NA.2.1.1.2** to **NA.2.1.1.6** for ΔT_R are consistent with $\Delta T_\sigma = 0$ °C.

Reference to guidance giving recommended maximum permissible values of element thickness t for reference temperatures below –50 °C is given in **NA.3**.