New and revised codes & standards

From BSI Updates May 2019

BRITISH STANDARDS

BS 7974 and PD 7974 Series Kit

Fire Safety engineering. Application of fire safety engineering principles to the design of buildings No current standard is superseded

NA to BS EN 1992-4:2018

UK National Annex to Eurocode 2: Design of concrete structures. Design of fastenings for use in concrete.

No current standard is superseded

BS EN PUBLICATIONS BS EN ISO 2063-1:2019

Thermal spraying. Zinc, aluminium and their alloys. Design considerations and quality requirements for corrosion protection systems

Supersedes BS EN ISO 2063-1:2017

BS IMPLEMENTATIONSBS ISO 11484:2019

Steel products. Employer's qualification system for non-destructive testing (NDT) personnel *Supersedes BS ISO 11484:2009*

PUBLISHED DOCUMENTS

PD 7974-3:2019

Application of fire safety engineering principles to the design of buildings. Structural response to fire and fire spread beyond the enclosure of origin (Sub-system 3) Supersedes PD 7974-3:2011

BRITISH STANDARDS REVIEWED AND CONFIRMED

BS EN ISO 17641-1:2004

Destructive tests on welds in metallic materials. Hot cracking tests for weldments. Arc welding process. General

BS FN ISO 17642-1:2004

Destructive tests on welds in metallic materials. Cold cracking tests for weldments. Arc welding processes. General

BS EN ISO 17642-2:2005

Destructive tests on welds in metallic materials. Cold cracking tests for weldments. Arc welding processes. Self-restraint tests

BS EN ISO 17642-3:2005

Destructive tests on welds in metallic materials. Cold cracking tests for weldments. Arc welding processes. Externally loaded tests

BRITISH STANDARDS WITHDRAWN

BS 7974:2001

Application of fire safety engineering principles to the design of buildings. Code of practice Superseded by BS 7974:2019

BS EN ISO 2063-1:2017

Thermal spraying. Zinc, aluminium and their alloys. Design considerations and quality requirements for corrosion protection systems

Superseded by BS EN ISO 2063-1:2019

BS ISO 11484:2009

Steel products. Employer's qualification system for non-destructive testing (NDT) personnel Superseded by BS ISO 11484:2019

PD 7974-0:2002

Application of fire safety engineering principles to the design of buildings. Guide to design framework and fire safety engineering procedures Superseded by BS 7974:2019

PD 7974-1:2003

Application of fire safety engineering principles to the design of buildings. Initiation and development of fire within the enclosure of origin (Sub-system 1). Superseded by PD 7974-1:2019

PD 7974-2:2002

Application of fire safety engineering principles to the design of buildings. Spread of smoke and toxic gases within and beyond the enclosure of origin (Sub-system 2) Superseded by PD 7974-2:2019

PD 7974-3:2011

Application of fire safety engineering principles to the design of buildings. Structural response and fire spread beyond the enclosure of origin

Superseded by PD 7974-3:2019

PD 7974-6:2004

The application of fire safety engineering principles to fire safety design of buildings. Human factors. Life safety strategies. Occupant evacuation, behaviour and condition (Sub-system 6)

Superseded by PD 7974-6:2019

PD 7974-7:2003

Application of fire safety engineering principles to the design of buildings. Probabilistic risk assessment Superseded by PD 7974-7:2019

PD 7974-8:2012

Application of fire safety engineering principles to the design of buildings. Property protection, business and mission continuity, and resilience Superseded by BS 7974:2019

NEW WORK STARTED

UK NA+A1:2019 to BS EN 1991-2

National Annex (informative) to BS EN 1991-2:2003, Eurocode 1. Actions on structures - Traffic loads on bridges Will supersede NA to BS EN 1991-2:2003 (R13)

ISO 9712

Non-destructive testing. Qualification and certification of NDT personnel *Will supersede None*

ISO PUBLICATIONS

ISO 2553:2019

Welding and allied processes. Symbolic representation on drawings. Welded joints Will be implemented as an identical British Standard

ISO 8560:2019

Technical drawings. Construction drawings. Representation of modular sizes, lines and grids Will be implemented as an identical British Standard

ISO 11484:2019

Steel products. Employer's qualification system for non-destructive testing (NDT) personnel Will be implemented as an identical British Standard

ISO 14174:2019

Welding consumables. Fluxes for submerged arc welding and electroslag welding. Classification Will be implemented as an identical British Standard

AD 431:

Column web panel strengthening

The purpose of this Advisory Desk note is to draw attention to the contribution that full-depth stiffeners make to the shear resistance of column web panels.

SCI publication P398 covers the design of moment–resisting connections to Eurocode 3 and provides information on types of column strengthening in Table 2.1. Within this table, horizontal stiffeners are not credited with increasing the shear resistance of the web panel.

The special case of full depth stiffeners in both the tension zone and the compression zone is covered by clause 6.2.6.1(4) of BS EN 1993-1-8. This clause allows an additional contribution to the web panel shear resistance, based on the bending resistance of the flanges and the stiffeners which bound the web panel. The stiffeners and flanges can be envisaged as part of a Vierendeel truss, as shown in Figure 1.

If this additional contribution

is to be utilised, the transverse stiffeners should be full depth and approximately the same width and thickness as the column flanges. The welds between the stiffeners and the flanges should be full strength, because the full plastic moment resistance of the stiffeners is assumed in the calculation.

Contact: Richard Henderson
Tel: 01344 636555
Email: advisory@steel-sci.com

