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Resistant the welds

Calculate the resistance of the shear joint

Shear resistance of bolts

Resistance of welds

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Detail of attachment - Steel Beam to Steel Column

Beam-to-column joint

Resistance of the joint

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Trusses and reticulated structures

Example

Design of trusses

Y joint

K joint

T joint

X joint

A gapped K joint

A lowe corner joint in a lattice structure

A T or a Y joint

A X joint

An overlapped K joint

Fire design / protection

Unprotected steel structure

Steelwork insulated by fire protection material

Calculate the resistance of column in fire situation

Hollow section exposed to fire on three sides

Hollow section exposed to fire on two opposite sides

Hollow section exposed to fire on two adjacent sides

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Composite steel concrete ceilings

Lightweight Structures

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- The art of tensegrity
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- Membrane structures
- Table properties of membrane structures
- Force density method
- Mohr circle of stress

Examples